

Bushland *Newsletter* **SPRING 19**



On the go with Dan

Welcome to spring and all the lovely things it brings: warmer mornings, fragrant flowers and longer days. In this issue we recap recent field trips, learn about suitable eucalypts for the home garden, go forest bathing and learn about an unusual looking fungus. Now that the weather is warming up we hope you're feeling inspired to get outdoors whether it be in the garden, at bushcare or somewhere along our magnificent coastline. Happy reading!

**Dan Randwick City Council
Bushcare Officer**

Eco Living Expo

Randwick's Eco Living Expo is the biggest free community and sustainability-focused festival in the Eastern Suburbs, promoting innovative green living in a fun, family-friendly way. It's held in September each year at the Randwick Community Centre. This year's Eco Living Expo is being held on Sunday 22 September from 10am to 4pm.

The Eco Living Expo is jam-packed with interactive workshops, talks, demonstrations, live performances, market stalls, sustainable and organic food, fun family entertainment, and the latest ideas and information on living cleaner, greener and more sustainably. The bushland team will have a stall so if you're a familiar face or want to meet the team feel free to pop in.



Randwick City Council Nursery Open Day

The nursery is open to the public from 9am until 3pm weekdays. Four times a year the nursery also opens on a Saturday. The next nursery open day will be Saturday 7 September from 9am until 4pm. Randwick City Nursery stocks a large range of indigenous and native plants perfect for our sandy soils and coastal conditions. Horticultural staff will be on hand to assist you with plant selection, provide tips on sustainable and habitat gardening practices and answer any questions.



Forest Bathing

Forest bathing is about immersing yourself in the natural world.

The Japanese practice of shinrin-yoku literally translates as forest bathing. It is about immersing yourself in the natural world, connecting with nature through the senses.

Shinrin-yoku had its origins in the 1980s in another Japanese phenomenon, *karoshi*, or death from overwork, and the practice has since spread around the world.

Forest bathing is similar to bushwalking but is much slower and more meditative.

Scientific studies have shown that spending time in nature can reduce blood pressure and stress, increase energy levels, improve mood, focus and clarity and even hasten recovery from injury and illness.

Dr Qing Li, the author of *Forest Bathing: How Trees Can Help You Find Health and Happiness*, writes: 'The key to unlocking the power of the forest is in the five senses.

'Listen to the birds singing and the breeze rustling in the leaves of the trees. Look at the different greens of the trees and the sunlight filtering through the branches. Smell the fragrance of the forest. Taste the freshness of the air as you take deep breaths. Place your hands on the trunk of a tree. Dip your fingers or toes in a stream. Lie on the ground. Drink in the flavour of the forest and release your sense of joy and calm. This is your sixth sense, a state of mind.'

You can forest bathe with or without a guide and Dr Qing says that once you have learned how to forest bathe you don't even need a forest. 'Once you

have learned how to do it, you can do shinrin-yoku anywhere - in a nearby park or in your garden. Look for a place where there are trees, and off you go!'

There are numerous books, audio books and videos that explain the basics of forest bathing and guided walks are available in and around Sydney. Centennial Park will host a forest walk on Thursday 19 September, 24 October and 21 November. Budderoo National Park, south-west of Sydney, hosts walks on Saturday 5 October, and Sunday 6 October.

Reference: Qing Li, *Forest Bathing: How Trees Can Help You Find Health and Happiness*, Penguin Books, Great Britain, 2018.



Stunning views of the rugged cliff line looking northward from North Head.

North Head Field Trip

A great place to give forest bathing a go is North Head Sanctuary. In June Randwick Council bushcare volunteers went on an excursion to view and learn about the Critically Endangered plant community known as Eastern Suburbs Banksia Scrub (ESBS) that occurs there. Local botanist Danny Hirschfeld led the tour on what was an absolutely stunning winter's day.

We began at the North Fort before stopping for stunning views and whale watching overlooking the harbour. Afterwards we continued past the Old Cemetery, had lunch near the old army barracks and parade ground, then continued on towards our final destination at the Shelly Beach car park. An array of interesting natives were in flower and there should be many more now that spring has arrived.

If you haven't been already we highly recommend a visit.



Flowering *Xanthorrhoea resinosa* (Grass Tree).



Starting off at North Fort. *Woolisia pungens* (Snow Wreath) flowering in foreground.



The prettiest cemetery in Sydney? Lovely views of the harbour and South Head.

North Sydney Visit

Back in May we were lucky to have some volunteers from North Sydney Council lend a hand at our Maroubra Dunes bushcare group in the war against *Acetosa sagittata* (Turkey Rhubarb). The start of August saw our volunteers conduct a reciprocal visit to join North Sydney Volunteers in Waverton Park. This time the war was waged against *Ehrharta erecta* (Panic Veldtgrass), *Tradescantia fluminensis* (Tradescantia)



Volunteers hard at work

and *Anredera cordifolia* (Madeira Vine). It was a good test of identification skills as *Ehrharta erecta* is easily confused with the native *Microlaena stipoides* (Weeping Grass). After a bit of planting it was hard to drag the volunteers away for lunch!



Coal loader platform

The afternoon included a tour of the coal loader platform that was used up until the 1990s as a transfer depot from bulk carriers to small coal-fired vessels. Today it has been transformed into one of Sydney's largest publicly accessible green roof spaces. It showcases sustainability features including community gardens, water recycling, solar panels and an outdoor classroom. The day was rounded out with a walk through part of Balls Head Reserve, perfectly situated on the foreshore of Sydney Harbour.



Beautiful *Angophora costata* (Sydney Red Gum) in Balls Head Reserve, Waverton.

Meet the Mallee

While you might not know the name mallee, you would probably recognise its typical multi-trunked form. And because the mallees rarely grow to more than 10 metres high it is a good tree for the suburban gardener to know.

Mallees are a form of eucalypt, closely related to the angophoras and corymbias. They are multi-trunked trees or shrubs, with the multiple stems or branches that give it its characteristic form growing from a woody structure known as a lignotuber.

Like many Australian plants, eucalypts have special adaptations to give them a better chance of surviving bushfire. Mallee seedlings develop the lignotuber, also called a mallee root, near the base of the stem, which swells as the plant grows. The lignotuber contains dormant buds and food reserves that enable the plant to regenerate quickly after fire, even if all the above-ground parts have been destroyed.

The native plant experts John Wrigley and Murray Fagg say that the number of stems or branches might be influenced in nature by the frequency of bushfires or soil type. Similarly, their height is usually determined by soil nutrients.

Mallees are slow growing but tough, drought tolerant and bird- and insect-attracting. They are usually found in drier areas but can also occur near the coast.

Below is a list of mallees that will grow in Sydney.



The pink blossom of *Eucalyptus caesia*, Silver Princess.

***Eucalyptus caesia*, Silver Princess:**

One of the best-known mallees, with arching stems of 4-10m. The common name refers to the white powder that covers the branches and flower buds. The red 'minniritch' bark peels in narrow, curling strips to reveal a pale under-surface. The flower buds hang on the tree for months, opening between May and September. The flowers range in colour from pink to bright red.

***Eucalyptus diversifolia*, Coastal Mallee:**

Small tree or large shrub of 3-7m with a bushy habit and dense crown and white flowers in winter and spring. The bud caps are red and cone-shaped. Great for screening and difficult coastal sites.



The *Angophora hispida*, Dwarf Apple flower, Royal National Park, Sydney.

***Eucalyptus grossa*, Coarse-Leaved Mallee:**

Shrub or small tree of 1-3m with thick leathery leaves and reddish flower buds opening to bright yellow-green flowers in winter and spring. Grow as a windbreak, hedge or in a pot.

***Eucalyptus lehmanniana*, Yellow-topped Mallee Ash:**

Small tree of 3-7m with dense foliage that can hang right to the ground and white flowers in winter and spring. The reddish-brown bark sheds in strips. Grow in full sun to light shade in a wide range of soils. Tolerates coastal conditions.

***Eucalyptus obstans*, Port Jackson Mallee:**

Indigenous mallee, growing to 3-4m with smooth bark shedding in ribbons and creamy-white flowers in spring and summer. Great for small and habitat gardens. The Narrow-Leaved Mallee Ash, *Eucalyptus apiculata*, is closely related.

***Eucalyptus preissiana*, Bell-Fruited Mallee:**

Shrub or small tree to 1-3.5m with bright yellow flowers, up to 3cm across, in late winter and spring followed by large, bell-shaped fruit. Can be grown in a large container. Tolerates coastal conditions.

***Eucalyptus saxatilis*, Suggan Buggan Mallee:**

Tree of 4-8m with smooth pale grey to pale yellow-orange bark shedding in long strips, grey-green leaves and white flowers in autumn and winter. The flower buds and fruit are waxy white.

***Eucalyptus sepulcralis*, Weeping Mallee:**

Thin-stemmed tree of 5-8m with shedding bark, wispy, drooping branches and cream to pale yellow flowers in late spring and summer, followed by large fruit. Can be grown in a pot.

About a quarter of all eucalypts can exhibit a mallee-like form in some situations.

Other attractive small eucalypts include *Eucalyptus gregsoniana*, the Dwarf Snow Gum, a shrub or small tree of 2-4m with smooth, pale-coloured bark and white flowers in spring and summer, and *Angophora hispida*, the Dwarf Apple, a tree up to 3m with attractive peeling bark and large cream-coloured flowers in late spring and early summer.

When is a mallee not a mallee?

A marlock is a small Western Australian eucalypt with a single trunk, mostly without lignotubers, but with spreading leafy branches close to the ground. The Moort, *Eucalyptus platypus*, is a marlock that tolerates coastal conditions and is often grown as a screen for salt-laden winds.



Brown cracked peeling 'minniritch' bark of the *Eucalyptus caesia*.

Working bee calendar

BUSHCARE

GROUP	LOCATION	DAY	TIME	SEPT	OCT	NOV
Clovelly Bay	Designated car parking spaces opposite 8 Eastbourne Ave, Clovelly	Friday	9am-11am	13	11	8
Fred Hollows Reserve	Bligh Place entrance, Randwick	Wednesday	9am-1pm	11	19	13
Gordons Bay	Access via UNSW Cliffbrook Campus Grounds, 45 Beach Street, Coogee	Sunday	9am-1pm	8	13	10
Grant Reserve	Vehicular entry to Coogee Surf Life Saving Club	Wednesday	8am-10am	18	16	20
Ladies Pool	Mclvers Rock Baths, Grant Reserve, Coogee	Sunday and Thursday	9am-11am	1 and 19	6 and 17	3 and 21
Lake Malabar	End of Manwaring Avenue, Maroubra	Wednesday	12pm-3pm	18	16	20
Long Bay Foreshore	Corner of Howe Street and Bay Parade, Malabar	Saturday	9am-1pm	7	5	2
Maroubra Dunes	South Maroubra SLSC car park	Thursday	9am-1pm	5	3	7
Prince Henry	Alternate between opposite 2 Millard Drive and the corner of Jennifer and Harvey Street, Little Bay	Saturday	9am-1pm	14	12	9
Randwick Environment Park	Corner of Dooligah Avenue and Burragulung Street, Randwick	Wednesday and Saturday	9am-12pm	4 and 21	2 and 19	6 and 16
Wylies Baths	At the picnic tables above Wylies Baths, Neptune Street, Coogee	Tuesday	9.30am-11.30am	10 and 24	8 and 22	12 and 26
Little Bay Landcare	Between 119 and 121 Bilga Cresnet, Malabar. Contact Kerry Gordon on (02) 9311 7647 for more information.	Saturday	8am-12pm	7	5	2
Magic Point (Malabar Headland)*	Contact Claire Bettington on (02) 9344 8589 for the meeting place.	Thursday	9am-1pm	12, 19, 26	10, 17, 24, 31	14, 21, 28
Malabar Headland West*	Contact Don Kerr on (02) 9311 2665 for the meeting place.	Sunday	9am-1pm	1, 8, 15, 22, 29	6, 13, 20, 27	3, 10, 17, 24

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

PARKCARE

GROUP	LOCATION	DAY	TIME	SEPT	OCT	NOV
Alison Road	Corner of Alison Road and Beach Street, Coogee	Wednesday	8am-10am	25	23	27
Clyde Street	Clyde Street Reserve, Randwick	Saturday	1pm-3pm	21	19	16
Old Tramline	Dudley Street entrance, Randwick	Thursday	8am-10am	13	11	8



Acanthorhynchus tenuirostris (Eastern Spinebill)

Identification: The Eastern Spinebill is most easily recognised by its very long, fine, down-curved beak and energetic flight, during which its white outer tail feathers are prominent. Males have a grey-black crown which extends in a black line on either side of the breast. The breast and throat are white, with a rufous or reddish-brown patch in the centre of the throat. The wings and lower back are dark grey and the underparts and upper back are buff. Females are similar to males but have less distinct markings.

Habitat: The Eastern Spinebill prefers heath, forest and woodland.

Distribution: The Eastern Spinebill's range is generally east of the Great Dividing Range from Cooktown in Queensland to the Flinders Range in South Australia.

Seasonality: Largely sedentary, but undergoes some local movements, especially away from higher elevations in autumn/winter.

Feeding and diet: The Eastern Spinebill feeds on insects and nectar while perched or hovering. Nectar is obtained from a wide array of flowers, including grevilleas, but its beak is particularly well-suited to extracting nectar from tubular flowers such as epacrids.

Communication: Short, repeated, high-pitched piping.

Breeding behaviours: The Eastern Spinebill's nest is a small cup of twigs, grass and bark, combined with hair and spider's web, built in a tree fork, generally between 1 and 5 metres from

the ground. Only the female builds the nest and incubates the eggs, but both parents feed the young when they hatch.

- Breeding season: August to January
- Clutch size: 2
- Incubation: 14 days
- Time in nest: 14 days

In the home garden: The Eastern Spinebill sometimes visits urban gardens that are well-vegetated, and will feed from both native and exotic flowers, including fuchsias.

Information sourced from www.birdsinbackyards.net

Jumping Spiders

Because these spiders are daylight hunters and do not rely on silk snares to capture prey, nature has endowed them with great mobility and keen eyesight. Their eyes are positioned so as to give the spider a 360 degree scope of vision. They move about the foliage, with a trail of silk always anchored behind. This safety-line serves as a lifeline, should the spider mis-time a leap.

Description: Their short stout legs, large median eyes and comparatively large mouthparts, along with their jumping action, make these spiders the easiest of all families to recognise.

There are 252 described species of Jumping Spider and most of these are small when compared with the majority of spiders, as 12mm in body length is considered large. Most species found in the temperate and cooler regions are generally brown or grey coloured.

Jumping Spiders are the only spiders that can actually jump from a flat surface. Observational studies have shown that they can recognise motionless insect prey from a distance of 20cm. On a flat surface, some of the larger species can leap a distance of up to 18cm. This jumping power is supplied by specialised muscles connecting the joints of the legs. Jumping Spiders also have pads of adhesive hairs between their claws called scopula which allow them to climb smooth, vertical surfaces with ease. These spiders vaguely resemble

a miniature monkey, with their hairy limbs and their antics of dancing about and seemingly showing off.

Toxicity: Interestingly enough, Jumping Spiders rarely evoke negative reactions or a sense of fear in people, even in those who are normally terrified of spiders. These little spiders appear to move about with a confident fearlessness in broad daylight and seem to take an interest in people watching their antics. At times these spiders even appear to perform a little dance specially for the onlooker before suddenly jumping away out of sight.

Habitat: Jumping Spiders are found throughout the bushland, often sitting in sunlit spots on leaves, rocks, logs and the trunks of trees.

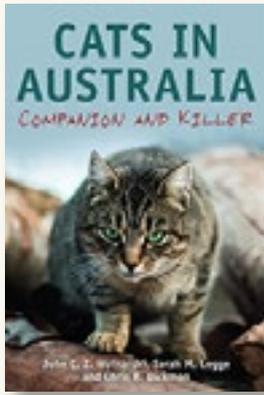
Diet: Having keen eyesight, they stealthily stalk insects and, once within jumping range, they pounce upon their prey, sinking their fangs into their captives. Superb timing, along with agility and sharp vision, make Jumping Spiders highly successful hunters.

Distribution: The Jumping Spiders are widely distributed throughout Australia with particularly high concentrations found in the tropical regions of Queensland.

Courting: The courting male Jumping Spider must dance, often for hours, before his mistress accepts his advances. Many of the males have frills, plumes and resplendent colours, all of which enhance their presentation during the dance routine.

Reference: Brunet Bert, *The Silken Web: A Natural History of Australian Spiders*, Reed New Holland, Australia, 1998.





Cats in Australia – Companion and Killer

John Woinarski, Sarah Legge, Chris Dickman

A discussion of the impact of cats, their relationship with people, and their management.

Across the world, cats are loved as pets or are kept or tolerated for their role in controlling some animal pests. But cats, both pets and feral, also kill many native animals and this toll can be enormous. Cats have been remarkably successful in Australia, spreading pervasively across the continent and many islands, occurring in all environments, and proving to be adept and adaptable hunters. A large proportion of Australia's distinctive fauna is threatened and recent research highlights the significant role that cats play in the decline and extinction of native species.

Cats in Australia brings this research together, documenting the extent to which cats have subverted, and are continuing to subvert, Australia's biodiversity. But the book does much more than spotlight the impacts of cats on Australian nature. It describes the origins of cats and their global spread, their longstanding and varying relationship with people, their global impacts and their ecology. It also seeks to describe the challenge of managing cats, and the options available to constrain their impacts.

Information sourced from CSIRO publishing.

Fuligo septica (Dog Vomit Fungus/Flowers of Tan)

Fruit body: Yellow to orange, sometimes white or pink, irregular, fragile, cushion-shaped mass, to 20cm wide by 3cm thick, though occasionally recorded as being much larger. May be very variable.

Fertile surface: Is in the interior, when immature is the same colour as the outside, then violet-black as spores mature.

Habitat: Various habitats from garden beds to forests.

Substrate: Decaying wood, bark, litter, wood chip, garden mulch, soil and wet grass.

Habit: Gregarious mass.

Season: When suitable moist conditions prevail.

Comments: Cosmopolitan. Widespread. One of the most common and easily recognised slime moulds. In 1727 Jean Marchant, a French botanist, first described this species, referring to it as 'flowers of tan'. This common name is linked to its prolific growth on the spent wattle bark used in tanning. *F. septica* is reported to tolerate extremely high levels of zinc due to its yellow pigment, which will change metals to inactive forms.

Reference: Moore Skye and O'Sullivan Pam, *A Guide to the Common Fungi of coastal New South Wales*, Department of Primary Industries, Australia, 2016.



Psilotum nudum (Skeleton Fork-fern)

A plant with brittle, leafless, much-forked stems 10-50cm long. Widespread but rather uncommon, in crevices in wet, sandstone cliff faces (some can be seen on the rock face at the Sydney Opera House forecourt). One commentator described it as 'a little bushy evergreen herbaceous plant of no beauty' with 'no merit except as an object of curiosity...'

Reference: Robinson Les, *Field Guide to the Native Plants of Sydney*, Simon and Schuster, Australia, 2003.



Growing out of the rock face at the Sydney Opera House.