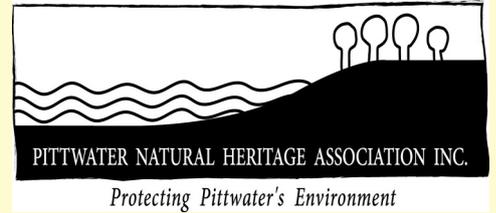


Pittwater Nature

Issue 8 October 2021



News and stories from Bushcarers, Wildlife carers, Community and home gardens

Northern Beaches Council Bushcare will start in November. We're all really looking forward to this. There will be Covid regulations to follow of course, but won't it be great to get back in the bush, dealing with those weeds and enjoying each other's company again, feeling we're doing something valuable for nature. We'll bring you bushcare news stories but we'd love your photos and anything you'd like to share about your bushcare special place.

Bandicoots, Rats and Ticks

Casey Taylor, PhD candidate at University of Sydney, in partnership with Northern Beaches Council, did some research in spring/summer 2019-2020 in Pittwater gardens and elsewhere to discover which animals were carrying ticks and in what sort of habitat.

People often blame Bandicoots for spreading ticks. She found black rats *Rattus rattus* were more common than Bandicoots and though they carried fewer ticks per animal, they were in fact greater tick carriers. Rabbits also carried ticks, she found. Listen [here](#) to her talking with Anne Jones on the ABC Radio nature program Off Track, broadcast in August this year.

You can read more about her research in [Pittwater Online News](#).

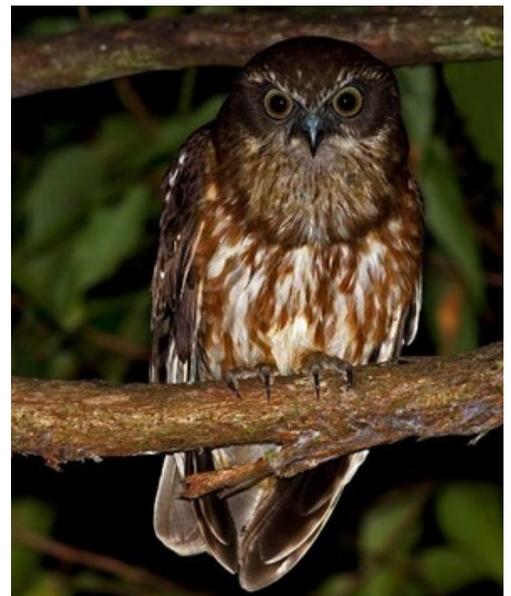
Talking of Rats: Rodenticides kill more than rodents

No-one wants rats or mice around. But think before you buy rat bait. You may kill more animals than you intend.

An owl or other native animal feeding on a rodent poisoned by these can be poisoned in turn and die, as the poison has not been broken down in that mouse or rat. Many Boobook Owls die this way. Boobook Owl Photo Credit: Rod Warnock

Anticoagulant rodenticides can be divided into two classes. **First Generation** Rodenticides containing the active ingredients Warfarin (Ratsak Double Strength) and Coumatetralyl (e.g. in Racumin). First generation rodenticides work more slowly and break down more quickly. Owls and other wildlife are unlikely to die from secondary exposure to Ratsak Double Strength or Racumin.

Second Generation Rodenticides containing the active ingredients Brodifacoum (most Ratsak brands), Bromadiolone (some Ratsak products) and Difenacoum (Talon, Mortein, Ratsak Fast Action, Pestoff Rodent Bait 20R, Klerat). These rodenticides should be avoided!



Southern Boobook

Rod Warnock

This information from: <https://www.natureconservation.org.au/wp-content/uploads/2019/01/Rat-Control-Native-Wildlife-Information-Sheet-Final-2-.pdf>

We noticed another bait now for sale by Yates called **Ratsak Naturals**. The label doesn't list the active ingredient, so we contacted Yates to find out.

The reply: *Ratsak Naturals - Rodenticide Bait Pellets* contains Corn Meal and Sodium Chloride. When used as per label instructions, there is no risk of secondary poisoning to non-target animals. Rodents must feed exclusively on baits for 2 - 5 days and will die 3 - 7 days after this period. This bait kills rats and mice by causing them to dehydrate. Rats and mice have strong stomach sensors that tell them when they are thirsty. When they eat the Ratsak Naturals it turns off the stomach sensors and rodents stop drinking. These stomach sensors are unique to rats and mice.

More information on this product [here](#).

We strongly recommend placing any rodent bait where bandicoots and native rats can't reach it.

Flowering Now: October 2021

Hairy Clerodendrum *Clerodendrum tomentosum* on Palm Beach Dunes. There are quite a few big shrubs east of The Boathouse café.

The seeds will develop spectacularly, seated on the enlarged red fleshy calyx. Not a typical local native plant, is it!



Coastal Spinifex grass

Spinifex sericeus. Plants are either male or female and just now they look quite different. We were interested to see Honey Bees collecting pollen from the male flowers. The female flowers are wind pollinated, not by bees. Their seeds develop in roly poly clusters and when ripe break off the plant and blow around the beach and dune landscape.



Female flowers



Male flowers



Male flowers. Bees just out of sight

Avalon Community Garden

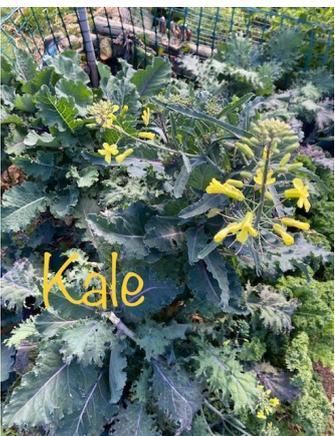


Sunday morning in the garden

Morning Tea time in lovely surroundings. Plants to exchange, vegies to take home, tea and cake, good company.

Fresh young fennel, left.

Colin Minter, right, is a Foundation Member of the community garden. Here he rests from his labours and keeps an eye on the hens who are free-ranging while the gardeners are at work.



Seed Saving Gardener Sophie Melton reports:

At Avalon Community Garden we have been collecting seeds. We are still learning. Once a plant goes to flower and then seed it can become bitter and inedible and takes up space in the garden. It is tempting to pull it out, compost it and plant the next season's crops in its place.

But with patience we can keep the bees happy, and eventually collect seeds to dry and save for the following season.

Some seeds are collected from fruit and vegetables we grow. So far we have managed to save seeds successfully for lettuce, spinach, coriander, daikon, kale, fennel, onions (right), bok choy, rocket, watermelon, rockmelon, pumpkins, marigolds, cucumbers and of course tomatoes. Have a look at our [Instagram](#) page for photos from our garden or come and visit us at the garden on Sunday mornings between 9:30 and 12:30. **Want to join the gardens? [Click here.](https://www.facebook.com/avcomgarden/)**



Pittwater Ferns: an occasional series

Ferns are nonflowering plants whose ancestry long predates flowering plants, maybe the first appearing about 370 million years ago in the Devonian Period.

Instead of reproducing by flowering and setting seed, they propagate themselves by spores. This diagram explains the process, for which moisture is essential. The arrangement of spore cases (sorus) on the undersides of fern fronds is an identifying feature. Some ferns also propagate themselves by creeping rhizomes. **(You will not be required to do exam on this subject!)**

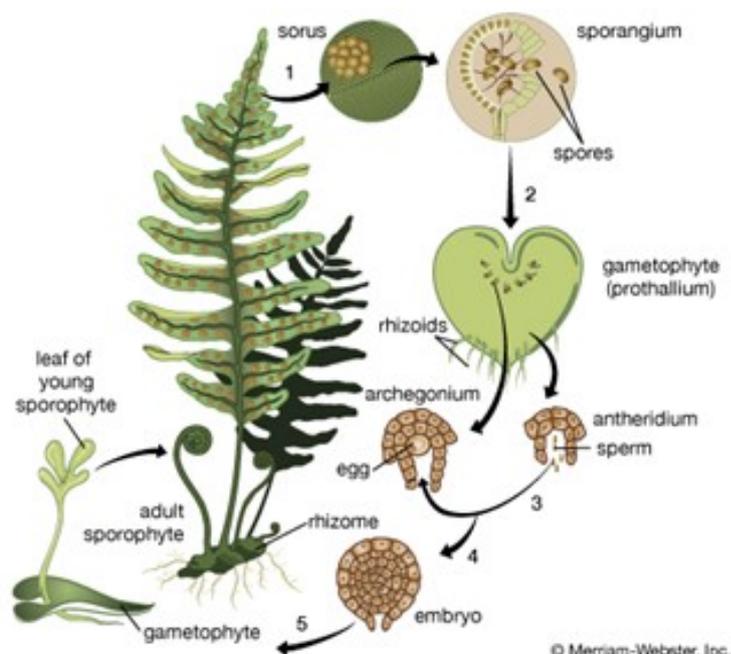


Image: <https://kids.britannica.com/students/assembly/view/190714>

Pittwater has lots of fern species, both native and introduced. We'll look at a few species in this and later issues of Pittwater Nature

Ferns that grow on rocks or other plants:

Birds Nest Fern *Asplenium australasicum*

An easy one to spot. It can grow on shaded rocks or tree branches in moist gullies. Young fronds developing. Brown streaks on this older frond are lines of spore cases, right. The spores readily germinate on damp surfaces.



Hares Foot Fern

Davallia pyxidata. This fern is very hardy, able to tolerate dry conditions once established. It may lose its fronds in winter re-growing new ones in spring. Its long branching rhizomes are covered with furry scales, hence the common name. Right, climbing a Paperbark. A forgiving potplant if you forget to water it. A relation *Davallia fijiensis*, far right, is much smaller and more delicate. We think this one has been planted in the new food-court area of Pittwater Place at Mona Vale.



Birds vs Insects vs Eucalypts

Swamp Mahoganies near Careel Bay have been attacked by a type of leaf miner, not identified yet. We suspect these tiny moth larvae have started off life as leaf miners, then cut out a piece of leaf and hiding inside, set off to feed on the leaf surface between the veins, far right. In the image, right, you can see that the flake of leaf circled in yellow matches the hole circled in red. Some had ventured down the stems to other branches. The trees look terrible, but will recover, helped by small birds when they grow taller.



Ready for your next Scrabble or Trivial Pursuit game?

Crepuscular

1. A type of acne
2. Muscle building tonic
3. Half light around dawn and sunset

Brumation

1. Rumour mongering
2. A French Revolution name for a month
3. Reptile inactivity in cold weather

Nictitating membrane

1. Inner eyelid on some birds and animals
2. Special nicotine patch for smokers
3. Used in purifying water

Larva

1. Type of volcanic eruption
2. Stage in development of an insect
3. A type of pump

Xanthorrhoea

1. Fatal gastric disease
2. Grasstree
3. A South American flightless bird

Raptor

1. Bird that seizes its prey with its claws
2. A rap artist
3. Special Investigator

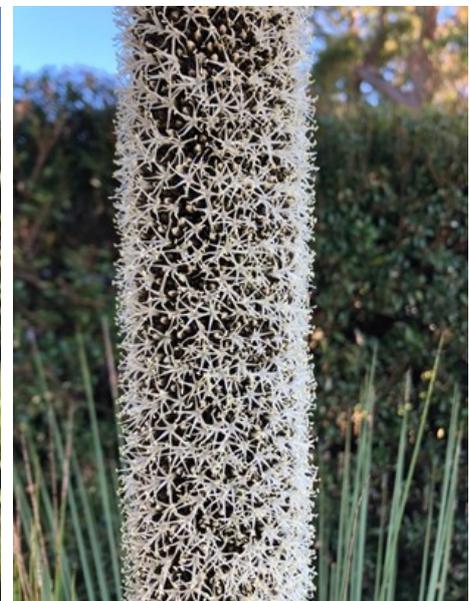
Check your score on page 7

Grass Tree Flowers

How many flowers on a Grass Tree stalk?

Geoff Searl photographed this one in his garden on September 16 and again on September 21. Geoff's native garden.

Honeyeaters and small insectivorous birds love these flowers, if only Noisy Miners would let them come.



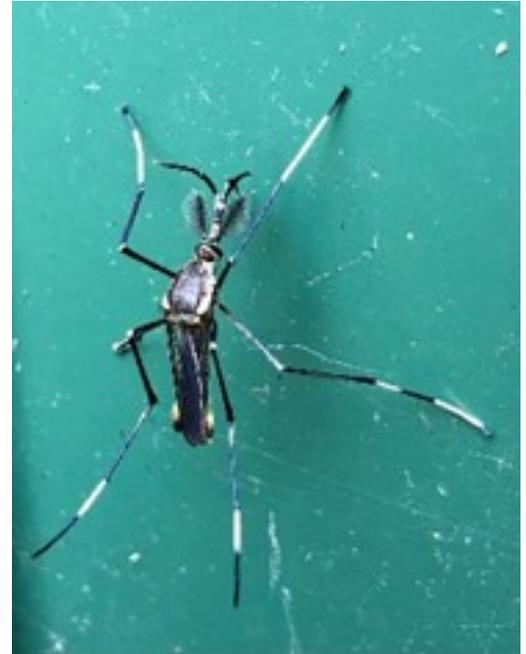
Giant Mozzie?

The Elephant Mosquito looks dangerous but is a welcome visitor. *Toxorhynchites speciosus* is its official name, but it answers to Toxo as we're on familiar terms.

The only elephant – like thing about it is its long curved proboscis or mouth parts. It's much bigger than the more familiar mosquitoes, about 2cm long.

Though big it's not a blood-sucker. When a wriggler in its early life it feeds on the wrigglers of those smaller mosquitoes. So after all that protein it has no need for more from blood to enable it to lay eggs. The feathery antennae on this one means it's a male, enabled to detect the scent of females. See Toxo in action in this video [here](#)

Thanks Kerry Smith for spotting this mozzie.



Topknot Pigeon *Lopholaimus antarcticus*

Have you heard a cracking sound from a nearby cabbage tree palm lately, accompanied by a flurry of wings? Perhaps it was the flock of Topknot Pigeons which has been in the Church Point area recently feeding on the fruit of the cabbage tree palm. Found only in Australia from Queensland to Broken Bay and quite rare in Sydney, they are a large grey pigeon with a distinctive swept back crest that is grey in front and a splendid rusty red behind. The body is grey, the eyes and bill are a vivid red and the tail, which is quite striking, has a pale band across what is otherwise black. This banded tail is often what will identify them for you.

Image: David Ongley



They are frugivores, typically seen feeding high in the canopy on a variety of rainforest fruits, as well as those of introduced species such as Camphor Laurels. They may be seen feeding acrobatically among these fruits, often hanging upside-down to reach them in flocks of up to 30 birds. They form monogamous breeding pairs after an elaborate courtship of bowing and parading. Males also fly very high over the canopy to attract females and their nests are built in the crowns of the trees, from 2 m to 12 m above the ground.

Edna Blanchard



Image: Gary Leavens

Trad Bio-control - Brush Turkey assistant?

We planted some infected stems in dense Trad along Narrabeen Creek in February this year. Hoping to see if the smut had spread, we returned recently to a spot where some Trad was looking sick.

What do we find but a determined Brush Turkey raking masses of trad towards his already quite big mound, made entirely of Trad. What will happen next? Will the trad rot, warming the mound to incubate the eggs? Will all this raking make trad control easier?



Trivial Pursuit—How did you go?

Crepuscular: half light around dawn and sunset

Brumation: reptile inactivity in cold weather

Nictitating membrane: Inner eyelid on some birds and animals

Larva: stage in development of an insect

Xanthorrhoea: grasstree

Raptor: bird that seizes its prey with its claws

Your score?

6 /6 - Congratulations

5 –good

4–quite good

3 – could be better

2 – could be worse

1 – yes, worse

0 /6- – Oh Dear! all the best for next quiz

Silky Hakea *Hakea sericea* is usually white. But recently a friend showed us this unusual pink variety. Though called



silky, it is still fairly prickly like most hakeas. A dense shrub, it grows to about 3m, flowering in late winter-spring. As an understorey plant it will probably deter Noisy Miners while providing shelter from them for smaller birds.

PNHA's Mission Statement:

To promote and facilitate the enhancement and understanding of the natural heritage and ecological systems within the Pittwater area.

The PNHA vision is: *An engaged and aware community working to conserve and enhance its natural heritage.*

Find us: pnha.org.au and Facebook <https://www.facebook.com/PNHAaus/>

