# PNHANEWS

Issue 85

Pittwater Natural Heritage Association - thinking locally, acting locally

**Breaking News:** Bayview Golf Club's proposal for a big Seniors Living development refused September 1. This was intended for land on Cabbage Tree Rd, Bayview. Sydney North Planning Panel refused to provide a Site Compatibility Certificate. This area is home for Powerful Owls and other fauna. PNHA had joined huge opposition to this environmental destruction. **Details of proposal and reasons for refusal**: https://www.planningportal.nsw.gov.au/site-compatibility-certificates/bayview-golf-course-52-cabbage-tree-road-and-1825-pittwater-road

#### **PNHA UPDATE**

## **Grant funded projects**

**Mona Vale Dunes.** We have engaged a different contractor now that initial clearing has mostly been done. The site is so degraded with dense weeds that it's more a matter of bush restoration rather than regeneration. As our finish

date is now the end of June 2021, the plan is now to spray persistent weeds such as Asparagus Fern and continue to clear Lantana and Green Cestrum and get the site ready for planting in May 2021. Autumn offers more chance of rain and mild weather so the plants can settle in over winter.

**Avalon Golf Course bushland project** continues with regeneration contractors steadily removing weeds. **Flannel Flowers** love it here.

**Bahai Temple Bushcare:** This is has been suspended due to COVID-19. The grounds are closed to bushcare until further notice. Robert Leslie from GSLLS has requested that we work



at an alternative *G.caleyi* site with the ABR contractors until the Bahai Temple allows us back there. He is currently seeking landholder permission for us to work in Mallawa Rd behind Terrey Hills Golf Course.



PNHA is on Facebook Want to get in touch?

Protecting Pittwater's Environment

INSIDE: 2: Ingleside land release, Weed Management Plan 3: Land at 62 Hillside Rd Newport, EPBC Act Review 4: PNHA Activities 5: E-Zones Review, Crown Land Reserves 6: Yellow-tailed T Black Cockatoo, Coast Banksias 7: Chiltern Track art 8: Owls 10: Mosquitoes

#### Ingleside Land release – the latest:

#### PNHA is represented on the Ingleside Community Reference Group and just received this letter:

#### **Ingleside Bushfire Evacuation Study Update**

I am writing to provide an update on the Ingleside Bushfire Evacuation Study. Unfortunately, the Department will need to postpone the briefing to the Ingleside Community Reference Group, scheduled for next Wednesday, 2 September, 2020.

The Ingleside Bushfire Evacuation Study has now been completed. As you are aware, the findings of this study will guide the Department's planning for future development in Ingleside.

We have been working closely with Northern Beaches Council, NSW Police and the Rural Fire Service (RFS), each playing a vital role in community safety. The bushfire evacuation study is now with the Rural Fire Service for endorsement. This feedback is essential to ensure that future planning for Ingleside puts the safety of current and future residents at the forefront.

Once we receive feedback from the Rural Fire Service, the bushfire evacuation study will be shared on the Department's website after any required changes have been incorporated. We will then also be in a position to reschedule a briefing for the community reference group.

The Department is working to finalise a draft Place Strategy for Ingleside for exhibition later this year. This strategy will include new planning controls and identify infrastructure upgrades needed to support growth in the Ingleside area.

You will have the opportunity to provide feedback on this Place Strategy once it is shared on the Department's website.

Thank you for your continued interest in the Ingleside Precinct.

Yours sincerely

Malcolm McDonald
Executive Director, Eastern Harbour City
Greater Sydney, Place and Infrastructure
Department of Planning, Industry and Environment

# Where is the Council's Weed Management Plan?

**NB Council has told us** for some time that this plan will soon be out for public comment, but the latest news is that it will be part of the **Bushland and Biodiversity Policy.** This is now in draft form and hard to find on the Council website (where?). It's expected to be finalised later in September. Until there is a plan for weeds Council staff are limited in what authority they have to deal with weeds on private land.

We can forward you a copy of the draft **Bushland and Biodiversity Policy** on request.

#### PNHA comment:

- 1. It says all the right things.
- 2. Action is louder than words.



No prize for naming our worst weed

We will have a document that then can develop actions which will need financial commitment from staff and real funding. We will be able to compare what happens in our bushland and with our biodiversity with the document.

For it to have real strength and legal force it will need to be incorporated into the Local Environment Plan. (LEP).

The Policy and putting it into effect is of vital importance to our natural environment.

## Littoral Rainforest Land at 62 Hillside Rd Newport

When we tried to have our first bushcare day there in November last year we were amazed to find temporary construction fences around the land and signs forbidding entry.

Our latest information is that the land is still not yet under Council control and management. The hand over from the Department of Planning is hoped to be completed by the end of the year.

Littoral Rainforest and Coastal Vine
Thickets of Eastern Australia is a critically endangered ecological community listed under the Australian Government's EPBC Act. The ecological community provides habitat for over 70 threatened plants and animals and it provides an important buffer to coastal erosion and wind damage. More: https://www.environment.gov.au/system/files/resources/19747170-3fd3-4930-9ca5-6ca89508b571/files/littoral-rainforest.pdf

## **EPBC ACT 1999 review – interim report**

In PNHA Newsletter 84 p. 2 we supported revision of the Environmental Protection and Biodiversity Conservation Act.

The Interim Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) has been released by Professor Graham Samuels AC. This Interim Report sets out Professor Samuel's preliminary views on the fundamental inadequacies of the EPBC Act and proposes key reform directions to address them. Interested parties can provide feedback on the Interim Report via a survey.

Read the Report here: <a href="https://epbcactreview.environment.gov.au/">https://epbcactreview.environment.gov.au/</a> resources/interim-report

Over the next 12 months the review is keen to hear your views and insights on the EPBC Act, how it has operated, the challenges ahead it should address, and your ideas for the future. All Australians are invited to participate. Go to: https://epbcactreview.environment.gov.au/get-involved#have-your-say

The Australian Conservation Foundation report on The Extinction Crisis in Australia's Cities and Towns here: https://

d3n8a8pro7vhmx.cloudfront.net/auscon/pages/17703/attachments/original/1596500683/Extinction\_crisis\_in\_cities\_and\_towns.pdf? 1596500683



Eastern Pygmy Possum at Lovett Bay. Listed as vulnerable to extinction in NSW, this species is threatened by loss of habitat and predation by cats. Image: L.Stevens.

Conservation organisations such as the Australian Conservation Foundation, Birdlife Australia, the Nature Conservation Council, the Wilderness Society and others are concerned that the Federal Government is not going to properly follow the Interim Report recommendations.

Keep a close eye on what is happening. We must conserve and improve habitat for ALL our wildlife, flora and fauna.

#### **PNHA Activities**

## Reports:

#### Warriewood Wetland Birdwatching 28th June

On a cold and overcast morning 20 intrepid people gathered at Warriewood Wetlands for our first nature walk since Covid-19 Restrictions were in place.

After completing the necessary health declaration paperwork we divided into three groups, each with a bird guide. Despite the cool weather and threatening rain we were pleasantly surprised to see more than 30 species of birds, although we 'dipped' on the elusive Rose Robin. Our highlights were two unusual sightings: a fierce battle between Swamphens taking place just below us on the boardwalk, and a close sighting of a Yellow-Tailed Black Cockatoo ripping large chunks out of a tree trunk with its powerful bill. (Why? See page 6 below)

As light rain began to fall we made our way back to Katoa Close via the Grey-Headed Flying-Fox colony. Winter birdwatching was made pleasant by such good company.

## **Chiltern Track Ingleside August 30**

Originally planned for Bangalley Head, we opted instead for the Chiltern Track where it was easy for COVID social distancing, in beautiful weather.

As expected the flowers were amazing. Highlights: Pink Spider flower, Ledum Boronia *Boronia ledifolia*, Prickly Moses Wattle, carnivorous plant *Drosera spatulate* flowering and a butterfly feeding on *Pimelia*, 17 participants. Three children full of questions and curiosity were most welcome. **Right**: seedpods of Sunshine Wattle *Acacia terminalis* Image: Yulia Mochalova

Thanks to Kerry Smith and Russell Beardmore for guiding us on both these outings.



## **Upcoming Sunday Activities:**

**September 27 9.30 Chiltern Track** again. There will be different flowers.

October 18 PNHA AGM and Guest Speaker Helen Smith, Australian Museum arachnologist. Because of COVID we can have 38 guests suitably spaced in the Newport Community Centre. Right: Speckled Huntsman, Heteropoda juglans, living in an Avalon garage. Helen identified this for us. A stealthy hunter of insects.

October 25 Dundundra Falls.

For more details and to book, please email <a href="mailto:pnhainfo@gmail.com">pnhainfo@gmail.com</a>



#### Environmental Zones review – towards the new LEP

PNHA will have input into this review, to be conducted by Northern Beaches Council (NBC).

"As part of Planning our Sustainable Future, we are undertaking a review of existing land use zones used in the four current Local Environment Plans (LEPs).

We know our community is passionate about protecting the environment, so we would like your involvement in the review of Environmental Zones (also known as E Zones).

The Environmental Zones Review will help us establish which land areas are included in, or excluded from, Environmental Zones. It will also identify criteria, proposed land uses and include mapping of proposed zones."

What are NSW Environmental Zones? As part of the new LEP there are four: E1 – National Parks and Nature Reserves, E2 – Environmental Conservation, E3 – Environmental Management, E4 – Environmental Living. Different land uses are allowed in the various zones.

This will be an important contribution to the new LEP which offers legal protection for the way our area is managed.

# **Crown Land Reserve Categorisation**

**NBC** is proposing land categories for 35 Crown reserves as part of an obligation under the Crown Land Management (CLM) Act 2016. The CLM Act legislates that Council is required to manage Crown land in the same manner as Community land, in accordance with the Local Government Act 1993.

This is an initial land categorisation process and only relates to current/existing use. It does not propose any change of use for the subject Crown reserves or indicate desired future use.

Following this process, Council can then prepare new or updated Plans of Management (PoM) for the affected reserves. The relevant community engagement requirements and process will be followed at that time.

You can see more at: https://yoursay.northernbeaches.nsw.gov.au/crown-reserve-land-categorisation.

Of interest to PNHA is bushland at 18 Walter Road Ingleside. We have already found the endangered Angus Onion Orchid *Microtis angusii* beside the track on this site, and will investigate further. We need to ensure it is protected and managed as bushland. Right: this Donkey Orchid *Diuris aurea* was also growing on the site in October 2015.



## Correction PNHA News 84 page 7: Searching for Bauer's Midge Orchid

Wendy Grimm reminds us: Chloropid flies pollinate both *C. fimbriata* and *G. baueri*. *G. baueri* is Endangered, not critically endangered.

#### Yellow-tailed Black Cockatoo



The cockatoos seen at Warriewood Wetland (page 4 above) were not just tree vandals. Unlike other cockatoos, a large proportion of the yellow-tailed black cockatoo's diet is made up of wood-boring grubs; they also eat seeds. These birds can hear grubs under tree bark and use their huge beaks to extract a high value protein meal.

While the tree can look a mess after that, the grub eating it has been removed, so in the long run the Cockatoo is doing the tree a service. We saw a family of these birds on dead Coastal Wattles on Mona Vale Dunes a few years ago. Perhaps useless and unsightly to humans, dead wood can be a resource for wildlife.

More: https://en.wikipedia.org/wiki/Yellow-tailed\_black\_cockatoo

**Left: Pink eye ring** shows this is a male. Image: David Cook Wildlife Photography - originally posted to Flickr as Yellowtailed Black-Cockatoo *Calyptorhynchus funereus*. Also named *Zanda funereus*.

#### Coast Banksia Banksia integrifolia

Unlike many other banksia species, Coast Banksias don't need fire to release their seed. For many Australian species, the woody Banksia fruits remain solid and sealed, and it's only when fire comes through that they burn, dry, crack open and release their seed. Right: Coast Banksia on Bangalley Headland Reserve

This can happen with *B. integrifolia* too, but in a garden setting the fruits will mature, dry and crack open and release the seeds, which germinate readily. This makes propagating coastal banksia easy work. Perhaps one of the more important, but less obvious, attributes of *B. integrifolia* are



its roots. These are a special type of root possessed by members of the Proteaceae family.

The roots form a dense, branched cluster, a bit like the head of a toothbrush, that can be 2-5cm across. They greatly increase the absorbing surface area of the roots, as each root possesses thousands of very fine root hairs.

Proteoid roots can be very handy in sandy and other poor soils, where water drains quickly and nutrients are scarce.

These roots, also described as cluster roots, are often visible in a garden bed just at the interface of the soil with

the humus or mulch layer above it. They're very light brown, almost white, in colour. *B. integrifolia*, like other banksias, also has the ability to take in nitrogen and enrich the soil, which can be very handy in soils low in nitrogen. It's like a natural living and decorative fertiliser.

Reference: <a href="https://theconversation.com/the-coastal-banksia-has-its-roots-in-ancient-gondwana-138434">https://theconversation.com/the-coastal-banksia-has-its-roots-in-ancient-gondwana-138434</a>

Why *integrifolia?* The juvenile leaves of this species are toothed but unlike other banksias, the adult leaves have smooth edges.

Right: **Proteoid roots** on a tubestock *Banksia integrifolia* are dense and white. They are very effective in collecting scarce phosphorus from the soil; native plant fertilisers are low in phosphorus to avoid killing with kindness — too much is poisonous.





#### **Tree and Lawns**

**Be careful mowing near trees.** Mowers and whipper-snippers can damage bark, cutting off the tree's sap supply and create wounds through which fungus and bacteria can infect the tree.

Careless mowing has often occurred in council reserves and again recently near the young Coast Banksias planted recently near Avalon Surf Club. Report to NB Council if you see this happening.

We are paying rates to have thousands of trees planted. They have to be properly cared for.

#### **Chiltern Track Art**

Keira and her friend Vincent enjoyed our walk on August 30.



Keira later drew plants she had seen.

Prickly Moses Wattle, Pink Spider Flower, Native Iris, Sundew—*Drosera spatulata* (red insectivorous plant) and more.

Thanks Keira!





#### **OWLS**

This Powerful Owl has recently been seen on numerous occasions in Katandra, even giving us a good look at his / her eyelids. (see "The eyes have it!" below).

This sighting is encouraging considering the recent report in the Pittwater On-line News about a Powerful owl nest being abandoned due to poor land management (PON 5-18 July 2020 – Pittwater Powerful Owl Nesting Site Razed: Chicks No Longer Present). This report states that there are 30 registered with Council Powerful owl nesting sites on the Northern Beaches and that this season the Powerful Owl Project has already recorded three Powerful owl families having moved away from nest trees.

We have been unaware of any Powerful owl nests within Katandra in recent years. Maybe a family has found a new home.





#### The eyes have it!

Owl eyes are huge. The eyes of some smaller species can account for up to 3% of their entire body weight. (Eyes account for about 0.03% of a human's body weight.)

Most birds have two eyelids, an outer one for sleeping and an inner eyelid for cleaning the eye. Owls have three eyelids. A lower one for sleeping, an inner one for cleaning and an upper eyelid just for blinking (as seen in the picture, left). The eyes of an owl are not true "eyeballs", they are more tube shaped. This shape means that the eyes are completely

immobile and cannot move or roll relative to the skull. They are held rigidly in place by "sclerotic rings", rings of bone in the skull acting as eye-sockets.







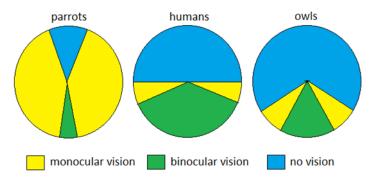
The shape of an owl eye (left and centre) compared to that of a spherical human eye

This inability to move their eyes is compensated for by the owl's ability to rotate their necks 270 degrees. Their very flexible necks have 14 cervical vertebrae and allow them to see more than a full circle of vision without moving their shoulders. A blood-pooling system collects blood to power their brains and eyes when neck movement cuts off circulation. This neck movement also compensates for the owls rather narrow field of vision.

Many birds with eyes on the side of their head such as parrots and pigeons have primarily monocular vision (each eye focused on different objects), but they have a field of view of about 300 degrees and so can see things almost behind them.

Because the eyes in an owl are forward-facing, they have binocular vision similar to humans, meaning they can see an object with both eyes at the same time. This gives owls a great ability to judge height, weight and distance. However, while humans have a 180-degree field of view with about 140 degrees of it being binocular, owls only have a 110 degree field of view with about 70 degrees of binocular vision.

Approximate relative field of monocular and binocular vision of parrots, humans and owls.

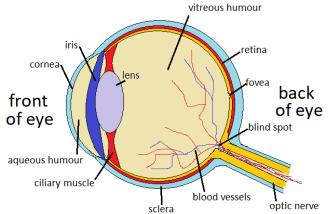


Lack of eye movement contributes to the fact that owls are quite far-sighted (they cannot focus well on objects close-up). Small hair-like feathers on the owl's beaks and feet, called filoplumes, help them feel out their caught prey to help cope with this far-sightedness.

The retina is the light sensitive layer at the back of the eye containing the light detecting vision cells called cones and rods. Cones function best in bright light and are responsible for colour vision. Rods are much more sensitive and function best in dim lights.

While hawks, eagles and falcons have exceptional daytime vision, they cannot see as well at night. Owls large eyes with a wide opening iris and large number of densely packed rods (above five times per square millimetre more than human eyes) allows them to see exceptionally well at night.

Owls can see quite well in the daytime, although they don't see colours well. Their pupils don't get as small as ours in bright light, so to block out the extra light, they often close their eyes half-way or more. They may look sleepy or even half asleep when really they are wide awake and alert.

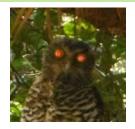


Birds and primates (including humans) have a special area in the retina called the fovea where these vision cells are especially concentrated. In hawks and owls, the fovea is on the upper part of the retina, so things below the owl appear exceptionally clear. This helps them hunt on the ground. When owls close their eyes half-way, they block out the sky and some of the sunlight, but can still see the ground below perfectly well.

The structure of a human eye showing the fovea almost directly in the middle of the retina behind the lens

Owls and other animals with excellent night vision have a reflective surface behind the retina known as the *tapetum lucidum* (humans don't). This thin layer allows light to reflect back through the animal's eye after it's already passed through the retina, giving the animal two chances to collect an adequate amount of light. This reflection is directly back along the light path serving to match the original and reflected light, thus maintaining the sharpness and contrast of the image on the retina.

When light shines into the eye of an animal having a tapetum lucidum, the pupil appears to glow. This "eyeshine" can occur in a wide variety of colours including white, blue, green, yellow and red. As the eyeshine is a type of iridescence produced by thin-film interference, the colour varies with the angle at which it is seen and the minerals which make up the reflective tapetum lucidum crystals.







Eyeshine can appear in different colours (from left a Powerful owl, possum, domestic cat)

Owls don't only use their eyesight to detect prey, they also have exceptional hearing. The facial disk helps collect sounds by funnelling them to ears hidden beneath the feathers in the disk.

Some owls have ear tufts—soft feathers that stick up and look like ears. Owl's ears are asymmetrical in shape, size, and placement. One ear is higher than the other so it can hear noises from above; the other is lower to hear noises from below. This placement allows the owl to pinpoint the direction and location of sounds. Owls can hunt by sound alone, easily locating prey under leaf litter or snow.

Owl article excerpt and Owl photos kindly contributed by David Seymour, from Katandra Bushland Sanctuary News, Spring 2020

# Summer's coming and so are Mosquitoes

Warmer weather means more insect activity including mosquitoes. This one was soaking up the sun on a cool morning recently.

This article is worth a look: https://theconversation.com/ hidden-housemates-themosquitoes-that-battle-forour-backyards-59072





If you have those popular Bromeliads in your garden,

check for mosquito wrigglers in the centre of the rosette of leaves.

**Pittwater Nature Bulletin 2** will be published early October. We'd love to have your contributions by September 25. You can email these to us at pnhainfo@gmail.com or ring Marita on 0420 817 574 to discuss.

Membership of **Pittwater Natural Heritage Association Landcare Group** is open to all who share our aims of caring for the natural environment of the Pittwater area and working to enhance and protect it. You can find a Membership Application form on our website <a href="http://pnha.org.au/join/">http://pnha.org.au/join/</a> or contact us on pnhainfo@gmail.com for one to be sent to you. Cost \$20 per year, \$10 unwaged.