

PNHA NEWS

Summer 2018 Issue 78

Pittwater Natural Heritage Association – thinking locally, acting locally

**MERRY CHRISTMAS TO OUR PNHA MEMBERS AND FRIENDS
WITH BEST WISHES FOR A HAPPY HOLIDAY SEASON**



Ingleside Land Release

After little movement on the Ingleside Land Release since the Precinct plan was released in 2016, we were surprised by the recent announcement by Planning Minister Anthony Roberts that the proposal for 3500 houses would be significantly reduced.

Concern about bushfire risk has caused the release plans to be sent back for a redesign. The danger of a catastrophic fire, the risk of ember attack and difficulty of evacuation were all taken into account in the report prepared for the Department of Planning and Environment.

The report's recommendations were based on new bushfire protection guidelines which are replacing guidelines developed in 2006, and evidence from recent bushfires including the Tathra fires which occurred this year. The data showed that all of the release area is surrounded by hazard and all evacuation routes except for Powderworks Road are affected by bushfire risk and would not cope with the amount of traffic exiting the precinct in an emergency.

At the moment further studies are being undertaken to determine whether there could be any further development in the precinct, and if so where. The findings of these studies are expected to be released in the first half of 2019.

We hear that Mirvac are holding onto land within the precinct that they control so this would indicate that we can expect some form of residential development within the Ingleside precinct.



Ingleside is surrounded by bushland that poses a constant threat of bushfire

2b Tasman Rd Avalon: Community Planting Day May 2009 and site in October 2018



Objection to Proposed lease of 2B Tasman Rd Avalon to the Montessori School

We objected to this 5 year lease as it would lead to clearing and fencing of an area of native vegetation that was planted by volunteers in May 2009, part of the revegetation of Careel Creek and establishment of a link for flora and fauna between Avalon Dunes and Careel Bay. This public land would then be for the exclusive use of the school.

Submission on Draft Urban Tree Canopy Plan A few of our comments: We strongly supported the intentions of the Plan as urban tree canopy is a vital aspect of the Northern Beaches and particularly the Pittwater area. We agreed that a first step to maintaining and improving the canopy is to audit and collate data on existing urban trees on public and private land. If this continues it will give a measure of progress.

While individual trees are often a concern, we suggested taking a landscape and urban forest focus, for instance to identify and celebrate streets and localities with significant urban forest of remnant native trees. We required all tree planting to be of local native species, as these are of more value to wildlife and help replace trees lost over many years. We contributed a list of local trees to plant, to avoid reliance on too many Watergums, which have taken over from Tuckeroos in popularity.

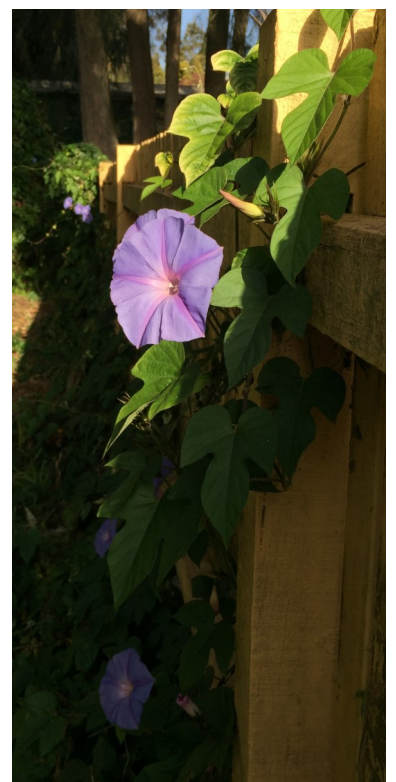


PNHA at Avalon Market Day November 18

As expected our weed display attracted much attention. As far as we know, this is the only place in Pittwater that people can get easy information about many weeds and actually talk to someone about what to do about them.

We warmly thank our helpers on Market Day. It's hard work but worthwhile as we speak to lots of people. We handed our new PNHA brochure and the booklet **Problem Climbing Plants of Sydney's Northern Beaches** (see Grant Report below: Careel Creek Vine Weeds)

Right: a beautiful weed - Morning Glory



Saving *Grevillea caleyi*: New Grant for Baha'i Temple Project and visit by Federal Minister

Greater Sydney Local Landcare Service has awarded funding to Pittwater Natural Heritage Association to enable us to continue our Baha'i Temple bushcare project for another five years. We have been promised \$50,000 each year, indicating the confidence that GLLS has in our ability to deliver the outcomes needed to protect this rare species.

The success of the project is aided by the volunteers who turn up for each session to work under the direction of skilled bush regen contractors. It is gratifying to see the amazing growth of naturally germinating seedlings that has occurred since the project started five years ago.

On Friday 30 November Marita Macrae and David Palmer represented PNHA at the Baha'i Temple for a launch of the Federal Government's \$450 million Regional Land Partnerships Program (of which saving *Grevillea caleyi* is part). Federal Environment Minister Melissa Price launched the program, with local member Jason Falinski.



Two volunteers from Pittwater YHA enjoyed a new experience at the Bahai Temple. Backdrop is a large Grevillea.

At the Bahai Temple bushcare site

Grevillea caleyi has a very limited distribution; only a few thousand plants exist and only in part of the Ingleside –Terrey Hills area. This link includes a video made recently at the Bahai Temple, with information about the work to save it and interviews with scientists and volunteers.

<https://www.environment.nsw.gov.au/news/grevillea-caleyi>



Careel Creek Vine Weeds Project

Grant funds from GLLS to PNHA of \$23 867 plus Council support of about \$28 500 means that Careel Creek along much of its length has received bush regeneration with a focus on vine weeds that were overwhelming trees and shrubs.

PNHA undertook to produce a leaflet about vine weeds but this morphed into a booklet, **Problem Vines of Sydney's Northern Beaches**, now available as a PDF on our website under the Publications tab. [http://pnha.org.au/whatsinside/uploads/2018/11/CC-Vine-WEEDS-PUBLISHER-Copy-with-front-page.pub .pdf](http://pnha.org.au/whatsinside/uploads/2018/11/CC-Vine-WEEDS-PUBLISHER-Copy-with-front-page.pub.pdf)

Illustrated are 14 weedy vines, with control techniques. Some local native vines for the garden are suggested. A hard copy is available on request.



Local Land
Services
Greater Sydney

A Weedy Passionfruit

This lovely flower is a species of Passionfruit (*Passiflora caerulea*) used as hardy rootstock for the edible Passionfruit. It doesn't produce worthwhile fruit, but instead grows more vigorously than the fruiting vine grafted on to it. It repeatedly suckers from underground roots to become a real nuisance. Leaves have many fingers, quite different from edible Passionfruit. **Memo:** when buying a Passionfruit vine, buy a **seedling** which has its own roots. It may not live very long but won't become a garden and bushland invader.





PNHA's Sydney Freshwater Wetlands grant project, Careel Bay

Thanks to this grant of \$3451.00 to PNHA from Greater Sydney Local Land Services and additional funds from Northern Beaches Council, contractors have been engaged to do the first heavy work of preparing the site for planting.

Left: Community planting days with the Careel Creek Bushcare group have planted tubestock which will transform the area.

You can see this site along Barrenjoey Rd beside the Hitchcock Park soccer fields.



Mona Vale Basin Stronger Communities \$12 000 Grant project

This has supported and encouraged the Mona Vale Basin bushcare group by paying for extra contract bush regeneration, in addition to that provided by Northern Beaches Council. The final report will be submitted in January 2019.

Left: weeds cleared, ready to plant and regenerate, 10.8.17

Right: planted and groundcover regeneration, 3.10.18



Wildlife in the 'burbs

This Swamp Wallaby lives in Ku-ring-gai NP at Ingleside. The species has teeth adapted for browsing, eating shrubs rather than grass, as do kangaroos. For a change it decided to taste-test an orange. Image: David Palmer.



One of two Powerful Owlets hatched this spring in Avalon. It doesn't yet have the chevron patterned breast feathers of the adult.

We need to keep planting Eucalypts so that in about 100 years there will be nesting hollows in the trees for this little owl's great-great-great-great nestlings. Image: Emma Griffin

Powerful by name, and powerful by nature - the Powerful Owl *Ninox strenua* is Australia's largest owl with an impressive wingspan of 135cm. It occurs from eastern and south-eastern Australia (east of the Great Dividing Range), from south-eastern Queensland to South Australia, mostly in large continuous forest. Despite being classified as threatened in all Australian states across its range, Powerful Owls can survive within cities. They are found throughout the suburbs of Sydney, Melbourne and Brisbane, particularly where bushland remnants are close by. However, increasing urbanisation is likely to impact the long-term persistence of the Powerful Owl.

Reference: The Powerful Owl website: <https://www.birdlife.org.au/projects/powerful-owl-project>



Up, up and away! This adult Powerful Owl was taken to Taronga Zoo from Bilgola with a damaged wing. The zoo held it in captivity until the wing had repaired. It was banded by the Zoo. Early in April this year I was asked to release the owl at Bilgola. It was released about 8 pm on the edge of the Bilgola primary school grounds. Many parents kept a look out for it but it has not been seen since. Hopefully it has survived and bred in May to October this year.

Jacqui Marlow, The Powerful Owl Project

Off-leash Dogs: Station Beach trial proposed

Submissions to a proposal for a 12 month trial allowing time-limited use of this beach for unleashed dogs closes 28 February next year, after Council updates the 2008 Review of Environmental Factors and does baseline monitoring of seagrasses. What do you think about this idea? Go to:

<https://yoursay.northernbeaches.nsw.gov.au/stationbeachtrial>

Our concerns are that the time limits and use of the beach will need strict enforcement. It is not clear how dogs will be prevented from running out onto seagrass exposed at low tide. We already see little ranger presence to apprehend dogs on the mudflats at Careel Bay, a valuable wildlife protected area, so are not optimistic about Council's willingness or ability to manage dogs on this beach as is proposed, during the trial or after, if it goes ahead.

Right: Station Beach at low tide.



Does a Butterfly or a Moth remember being a caterpillar?

We have caterpillars at home. I would like to know whether they will remember being caterpillars when they are butterflies ?asked Evan, age 5, Bristol, UK - a Curious Kids question on The Conversation recently.

Replied Dr Michael Braby, Associate Professor and entomologist at ANU:

Dear Evan,

I think it is highly unlikely that a butterfly or moth remembers being a caterpillar. However, it may well remember some experiences it learned as a caterpillar.

That fact in itself is especially amazing because inside the pupa (or chrysalis), the caterpillar actually turns to liquid as it transforms into a butterfly or moth (the adult stage).

The transformation from the pupa to the adult is the most dramatic change in the life cycle of a butterfly, and scientists refer to this change as metamorphosis.

During metamorphosis, the body tissues of the caterpillar are completely reorganised to produce the beautiful adult butterfly that emerges from the pupa.

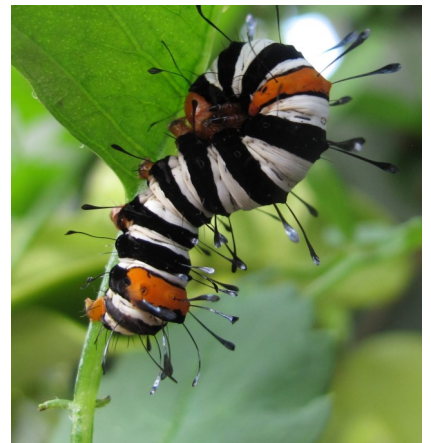
Scientists have known for a long time that caterpillars can learn and remember things when they are caterpillars, and adult butterflies can do the same when they are butterflies.

However, because of metamorphosis, we were not sure if an adult butterfly could remember things it learned as a caterpillar.

This ability to remember caterpillar experiences as an adult was tested in a study by a team of scientists at Georgetown University in the US.

They did this by giving the caterpillars little electric shocks every time they smelled ethyl acetate, the chemical often found in nail polish remover. Soon, these caterpillars were trained to avoid that smell because it reminded them of the electric shock.

They let the caterpillars transform into adult moths, and then tested the moths again to see if they still remembered to stay away from the ethyl acetate smell. And guess what? Most of them did! The scientists had shown that the memories of avoiding the bad smell experienced as a caterpillar had been carried **continued p. 7** over into the moth stage.



Top: The local Joseph's Coat moth caterpillar feeds on Native Grape. Middle: just before pupating. Above: Adult moth. Images: M.Macrae & G. Harris

Does a Butterfly or a Moth remember being a caterpillar?

Continued from p 6:



The study showed that memory, and therefore the nervous system, stays during the complex transformation from the caterpillar to the adult moth. So while a moth or butterfly may not remember being a caterpillar, it can remember experiences it learned as a caterpillar.

Read more about this:

Do Butterflies remember being caterpillars?

[https://theconversation.com/curious-kids-do-butterflies-remember-being-caterpillars-99508?](https://theconversation.com/curious-kids-do-butterflies-remember-being-caterpillars-99508?utm_medium=email&utm_campaign=Beating%20Around%20the%20Bush%20-%20107779582%20copy%202&utm_content=Beating%20Around%20the%20Bush%20-%20107779582%20copy%202+CID_46c9293fcd8124131280f97a5182bf2&utm_source=campaign_monitor&utm_term=do%20butterflies%20remember%20being%20caterpillars)

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A spectacular season for stamens

So many white flowered native shrubs and trees are flowering. Many members of the Myrtaceae plant family have flowers with five tiny petals but lots of stamens, the pollen-bearing parts of the flower. This family includes Eucalypts, Bottlebrushes and more.

Spot the difference:

Snow in Summer *Me-
laleuca linarifolia*, left,
has five bundles of
stamens per flower.

In Rough Barked Ap-
ple *Angophora flori-
bunda*, right, stamens
are separate. Can you
spot two beetles
heads down in the
flowers?



Membership Application

I would like to join Pittwater Natural Heritage Association. I agree with the PNHA's aims: raising awareness of and preserving our unique Pittwater natural environment.

Name:

Signed:

Address: P/Code

Email:

Ph:

Date:

Newsletters are emailed to members and posted on our webpage. Membership fee: \$20 or \$10 pensioner/student. To pay your membership, you can deposit electronically into our account at the Commonwealth Bank: BSB 062 208, account no.10168467. **Type your surname in the reference box so we know who the membership is for.** Alternatively make cheque payable to: **Pittwater Natural Heritage Association** or **PNHA**. Post cheque payable to **Pittwater Natural Heritage Association** to PNHA, PO Box 187, Avalon Beach NSW 2107.

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