PNHANEWS

Autumn 2023 Issue 95

Pittwater Natural Heritage Association - thinking locally, acting locally

PNHA Update

Conservation Zones Review

The review of the proposal to change many properties zoned Conservation to Residential is ongoing. We understand some changes have been made, for instance to Foreshore Protection Zones. You can see the latest on the Northern Beaches Council website here:

From that link: "We have reviewed all 935 submissions received in response to the public exhibition of the Conservation Zones Review and Technical Studies.

"The main aim of this exhibition was to seek feedback on a draft methodology for the use of Conservation Zones across the Northern Beaches.

"You can read the Consultation Report which summarises the key issues and Council's response to this feedback. You can also view the redacted submissions received through the public exhibition."

There is more to come before this process is finished and the LEP is completed.



Lizard Rock, Belrose

A petition of over 10 000 signatures was presented to NSW Parliament opposing the development of this and other significant bushland in Belrose. Shortly before the NSW election the outgoing NSW Liberal government undertook to stop the development. We are waiting to see how the new government will deal with the proposal. You can drive through the bush area and past the "Lizard" by turning onto Oxford Falls Rd and up Morgan Rd from Wakehurst Parkway.

Pittwater Natural Heritage Association, PNHA (us) and

Pittwater Environmental Heritage Group, PEHG

What's the difference? Confused? You're not alone. We are negotiating with PNHG to differentiate PNHA publicly from that group.



PNHA is on Facebook Want to get in touch? pnhainfo@gmail.com Follow us on Instagram

Protecting Pittwater's Environment

INSIDE: PNHA Guided Walk Sunday June 25, Tuckeroos a Weed, Thrips — important pollinators, Stick Insects breeding, Canopy Keepers + Trees, Rescued Feathertail Gliders + Action video, Ringtail Possum at home, Eastern Pygmy Possum, Mantis Fly.

PNHA Guided Nature Walks 2023

Our walks are gentle strolls, enjoying and learning about the bush rather than aiming for destinations. Wear enclosed shoes. We welcome interested children over about 8 years old with carers. All Welcome.

The first for 2023:

Sunday June 25 Birdwatching and Bushland along Mullet Creek in Ingleside Chase Reserve

Swamp forest and coastal wetlands are rich habitat for fauna such as Swamp Wallaby and Diamond Python. Over 150 bird species have been recorded for the area. **Red-Browed Finch** is one. Image: Neil Fifer. Bring your binoculars and keep your ears pricked for bird calls. The track is mostly lev-

el, but with an optional steep climb near the Irrawong waterfall.

Meet: 8.30am near 31 Irrawong Rd North Narrabeen. Ends about 10.30.

So we know you're coming please book by emailing: pnhainfo@gmail.com and include your phone number so we can contact you if weather is doubtful.



Tuckeroos Cupaniopsis anacardioides

These trees though native to parts of the east coast are not local to the Pittwater area. They were planted extensively as street trees by Pittwater Council in the early 2000s without investigating its weed potential. Birds have since spread seedlings into most types of bushland, where bush regenerators currently do not recognise them as weeds to be removed.

You may find them coming up in your garden.

We have sent a submission to Northern Beaches Council asking that NBC recognises that Tuckeroo has become a weed in this area and that NBC

- 1. instructs bush regeneration contractors to remove it from bushland
- 2. prohibits its use in landscaping associated with DAs.
 - 3. publicises the problems that Tuckeroo can cause in our bushland and wider land-scape, and discourages the public from planting it.
 - 4. Asks nurseries not to stock it.

Anticlockwise from above: One of many in Park St Mona Vale, Summer berries with 3 seeds each spread by birds, Seedling.

Thrips

Thrips don't have a good reputation among gardeners and other plant growers. They are tiny insects 0.5-15 millimetres in length, with sucking mouthparts in the insect order Thysanoptera. Google offers many tips about how to get rid of them as they damage foliage as they feed.

But the many Thrips species have different lifestyles and habits beyond garden pestiness. Some living right here in the Pittwater area are the main or unique pollinators of some of our local native plants.





Information on Thrips and the illustration (left) from the Australian Museum here and from the CSIRO illustration (right)

<u>here.</u> The word **Thrips** is an odd one. It doesn't have a plural form, so a single one of these insects is a Thrips, not a Thrip.

But Thrips are important insects in our Pittwater environment.

Three shrubs in Toongari Reserve Avalon are pollinated **only** by Thrips: Veiny Wilkiea, *Wilkiea huegeliana* and the Muttonwoods *Myrsine howittiana* and *Myrsine variabilis*, (right, formerly in the Rapanea genus).

Thrips setipennis is their only known pollinator.



Left: Veiny Wilkiea fruit will turn black when ripe. Below: Wilkiea is named for its foliage with obvious veins.



Thrips are also significant pollinators of Breynia, Macrozamia and plants from a number of other plant families, often species growing in rainforest.



Another plant with distant ancestry in Toongari Reserve is Bolwarra, *Eupomatia laurina*. Pollinated only by a beetle, the weevil *Elleschodes hamiltoni*.

Right: Image: Wikipedia.



Our local Cycad, the Burrawang *Macrozamia* communis also relies on Thrips for pollination. There are separate male (right) and female plants. The species *Cycadothrips chadwicki* Mound and also the beetle *Tranes lyterioides* (Pascoe) effect pollination. This is the first



demonstration that specialist pollinators of two different insect orders pollinate a cycad.

Thrips consume some of the pollen when visiting flowers. Though they don't carry much pollen between plants, they occur in large numbers. Scientists consider that thrips possibly were involved in pollen transfer even before the radiation of flowering plants, which began about 200 million years ago.

How lucky are we that we have living examples of those ancient species locally. Both plants and insects have evolved together.

References:

The Flowering of Australia's Rainforest - Geoff Williams & Paul Adam, CSIRO Publishing

Thrips and Weevils as Dual, Specialist Pollinators of the Australian Cycad *Macrozamia communis* (Zamiaceae) <u>here</u>. Thrips the Primeval Pollinators? <u>here</u>

More details: Thrips pollination of Mesozoic gymnosperms here.



Stick Insects making babies

Not twigs fallen from the tree above but mating stick insects or Phasmids, species *Ctenomorpha marginipennis*.

The female is head down on the right, the male is really tiny, seen above the fingers in the image. His head is above the edge of the pot.



Canopy Keepers – local Pittwater people working hard to save our trees

Canopy Keepers was formed in 2020 by local woman Deb Collins in response to her concern about the increasing removal of Pittwater's canopy trees and the consequent impact on the ecology and unique scenic values of our area. Other concerned residents joined Deb and Canopy Keepers was born with the mission to raise community

Canopy Keepers at a Tree Give-Away

distributed together with advice on planting and maintenance as well as broader information about the importance of the local ecology and the role of trees in it. Locals were encouraged to photograph the growth of their gifted trees and share these photos back to Canopy Keepers, to help foster a sense of stewardship by the community for their trees.

Canopy Keepers has also been active in encouraging children to become aware of, and get involved in supporting canopy trees. The Pittwater Primary Schools Art Challenge with the theme of 'the hidden life of trees' was held for local primary schools with selected entries being published in a 2022 calendar.

awareness about the social, environmental and economic importance of trees to our area.

The group is non-political and aims to foster awareness through engagement and education, whilst also lobbying Council and State Government for changes to regulations and practices to protect and enhance Pittwater's canopy.

Canopy Keepers has been active in the community, launching the 100 Trees Project as part of the 2021-2022 Centenary Celebrations for the naming of Avalon. A Council grant was won to supply tubestock plants to residents and over two events more than 100 endemic species canopy trees (such as Spotted Gum, Angophora and Swamp Mahogany) and another 150+ mid-storey and ground cover plants were



Finding the right tree for the right soil and aspect

Canopy Keepers website has a host of information; you can find out more at https://www.canopykeepers.org.au/why-protect-canopy/

Other tree giveaways and information days are planned for this year with support from PNHA committee members in providing advice, so keep an eye out on Canopy Keeper's and PNHA's website for more details.

Leigh McGaghey PNHA Canopy Keepers

Feathertail Glider Rescue

Sydney Wildlife Rescue sent us these photos.

Clockwise from right: The tail is flattened and ledged with bristles to help steer while gliding.

Image:Dr Bryn Linar

Next: Showing the **patagium**, the gliding membrane extending from the animal's elbows to its knees. This enables it to glide more than 20m between trees.

Below: Baby Feathertail Glider being fed.

These vulnerable tiny creatures live in hollows in family groups in bushy areas of Pittwater. Images: Margaret Woods

More Information: Australian Museum

Yet another reason to KEEP CATS INSIDE.









HOME SWEET HOME

A Feathertail Glider in Action

Watch this intriguing <u>video</u> to see a Feathertail Glider at its nest hollow in a Spotted Gum near Bateman's Bay.

It collects eucalypt leaves and holds them in its prehensile tail as it stuffs them into the nest hollow. Will the Lace Monitor eat it for dinner? Watch and see!

(Sorry about a few ads)

Eastern Pygmy Possums in North Head Sanctuary are breeding

These cute tiny possums have <u>been reintroduced there</u> in a joint project of Australian Wildlife Conservancy, Sydney Harbour Federation Trust and NPWS. Read more about that <u>here</u>.

Though Bangalley Head Reserve would be excellent habitat for EPPs, none have been found. This is thought to be because of habitat loss through surrounding urban development, meaning there is no fauna corridor with their habitat needs that can help them to travel through the wider landscape. Predation by cats and foxes is another possible reason.

The gorgeous little creatures live in woodland and heathy areas of Ingleside Chase Reserve and in Katandra Bushland Sanctuary.



On Grey Spider Flower in Ku-ring-gai Chase NP. Image: Jayden Walsh

Heathleafed Banksia *Banksia ericifolia* is one of their essential foodplants and in return they pollinate it.

More information about these tiny vulnerable possums here. KEEP CATS INSIDE AT ALL TIMES.



Mantis Fly Mantis Flies are not true flies; they are lace wings. Females lay several thousand eggs suspended on short stalks. Once the larvae hatch, they either attach themselves to a female spider and enter her egg sac as it is produced, or they search for egg sacs already laid. They mature into adults inside the spider egg sac and become predatory feeders when they emerge.



These two in an Avalon garden help to keep a sort of balance between themselves, spiders and other insects.

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 http://pnha.org.au/join/ or contact us on pnhainfo@gmail.com for one to be sent to you.

Cost \$20 per year, \$10 unwaged.