

MEET IMPORTANT LOCALS – a few notes from some of our walks...

(for the sake of the environment, we encourage you not to print this document)

JUNE 10 2023

We walked in Boomers Reserve which protects areas of high quality indigenous vegetation. Sticking to the tracks as we always do to ensure small plants, fungi and others are not trampled, we were able to see an impressive diversity of fungi and lichen growing among grasses, orchids, on relatively bare patches, on fallen logs, from beneath the edges of rocks and on their surfaces.

We have noticed that the greater the diversity and health of the local bush, the greater the diversity and abundance of fungi.

Leaf litter and fallen timber in various stages of decay are incredibly valuable on site.

Some animals eat some fungi, and we wonder how rich their knowledge is!

Never eat a mushroom (or anything) if you are not sure whether it is edible or not. Many edible mushrooms look very similar to types that are highly toxic. Deaths and severe illness do occur.

We are not mycologists, and fungi are rather complex.... So we are not sure of the names of all the species we saw. Tom May... if you'd like to help, we'd be thrilled!



Russula cleandii



Amanita type



Mycena (possibly *clarkeana*)



Above: Green Skin-head, *Cortinarius austrovenetus*
Below: Flame Coral, *Clavaria* (?)
Bottom: Slimy Yellow Cortinar, *Cortinarius sinapicolor*



Above: Yellow Club Coral

Below: Type of Yellow Disc or Earth Button



Right: Probably *Cortinarius rotundisporus*,
Elegant Blue Webcap



APRIL 30 2022

KEY POINTS...

Features used to identify Eucalyptus species in Boomers Reserve, Nillumbik:

Bark and adult leaf features are the main morphological parts Michael Smith uses to assist in Eucalyptus plant identification within a conservation zone/reserve. However, there are many more plant features, which may be used to differentiate between two very similar Eucalyptus species.

Trees identified – Red box, Red Stringy-bark, Yellow Box, Red Ironbark, Long-leaf box.

Red box – Rough/tight bark, round adult leaves.

Stringy-bark – Bark peeling in thick chunks near the base of large trees. Long leaves.

Yellow Box – A yellowness to patches of bark in large specimens. Much smaller elongated leaves relative to Long-leaf Box.

Ironbark. Deep furrowed bark. Red tinge to the bark in parts, and almost black.

Step 1: Find a list of Eucalypt species indigenous to the area. This will narrow down what species the Eucalyptus tree could be. Try searching for an indigenous tree document from your local shire. Albeit it could be a non-indigenous Eucalyptus tree if planted in a parkland or backyard.

Step 2 – Identify the type of bark the Eucalyptus species is displaying – furrowed/Corrugations, tight/rough, colour, stringy-bark. Please note, there are other bark features used to assist in identification. However, the above features were used on the walk to identify Eucalyptus species in Boomers Reserve. Furthermore, young specimens may not display the classic bark features of an adult specimen. When starting your identification day/journey it is advised to begin with larger Eucalyptus.

Step 3 – Shape and colour of Adult Eucalyptus leaves – Round, Elongated, dark green, bluesish tinge. Worth noting that there are other leaf features used to assist in Eucalyptus plant identification.

MARCH 6 2022

We savoured the smell of recent rain. It was windy, which meant many insects were sheltering out of view. Nevertheless, with keen eyes and patience, we observed:

Blue Banded Bees

Concealer moth

Lagoon Fly (initially identified as a bee-fly)

White-banded Grass-dart Butterfly

Splendid Ochre (Skipper Butterfly) – searching for lomandra leaf blades to lay eggs

Grape-vine Moth – the moth was flying around the wetland area, but it rarely settled, so we did not see it feeding on flowers.

Common Grass Blue butterfly

Painted Lady butterfly

Case moth

Damsel fly

Dragon fly

Yellow-banded Dart

The slant-nose grasshopper appeared again – perhaps the same one as last time? It was in the same area, similar size, but didn't tell us its name.

We saw another false praying mantid – green and much smaller than the salmon coloured one we saw during our February walk. Being a False Garden Mantid, it too had a distinct dark mark on the inner side of each forearm.

A beautifully shaped egg sac in a web – a tiny hole in it suggested the spiderlings had been born

A robberfly eating ...?

A native wasp – possibly one of the Spider eating

Scientific/conservation terms used on the day

Complexity – the combination of plant species, vegetation layers, spent vegetation parts (old grass flower stalks for example), logs, leaf litter and twigs within a defined space. Diverse textures, shapes, and sizes. The space could be small (your backyard) or defined as an entire ecosystem.

Layers – plants that grow in a specific section of an ecosystem. Layers may include herbaceous plants, grasses, prostrate plants, shrubs, tall trees and canopy trees. More images coming soon...

The brilliance of Purple Loosestrife

Attracts a wide range of insects including Blue Banded bees, Cuckoo bees, Leaf-cutter and Resin bees, Meadow Argus butterfly, Splendid Ochre butterfly, dragon and damsel flies, various beetles. Bees are attracted to ultra violet colour of Purple Loosestrife.

It is worth noting that many sources state that Purple Loosestrife is native to Australia, while some others disagree. It is wise to consider possibilities when planting in certain areas where it might spread and dominate other vegetation.

Creating/promoting habitat

When regenerating/creating wildlife habitat, the scale does not necessarily have to be large. Larger habitats are ideal though! Instead, think about what plants an insect may like in a small plot and see whether these plants could fit into your front/back yard. In the example below, Sweet Bursaria, Lomandra longifolia and Poa species are happily surviving in a 3 x 2 meter area. Perhaps this type of habitat is something you could replicate in your yard to attract butterflies and other insects. Butterflies often feed on Sweet Bursaria flowers and lay their eggs/rest on grass and lomandra leaf blades. Insects are an important source of food for other animals from skinks and birds to phascogales and echidnas.

Wetland plants such as Lythrum Salicaria (Purple Loosestrife), Lycopus australis (Gypsywort) and Persicaria decipiens (SLENDER KNOTWEED) flower in late summer. These plants become particularly important food sources, at a time of the year when many terrestrial plants have finished flowering.

Goodenia ovata (Hop goodenia) is another plant that provides important food at this time of year... more info on the diverse qualities of goodenia another time!



A revegetation site in Hurstbridge providing excellent habitat for butterflies and other arthropods. In terms of bang for your buck – lomandra Longifolia, Indigneous Poa species and Sweet Bursaria are hard to beat in the Nillumbik Shire.

Poa Species

Sweet Bursaria

Lomandra longifolia

FEBRUARY 20 2022

What a terrific afternoon we had for our first walk! Here are some of the creatures we saw:

False Garden Mantid
Splendid Ochre Skipper butterfly
Grass Dart butterfly
Unidentified skipper butterfly
Blue-banded Bee
Small cuckoo wasp (green, metallic sheen) Family CHRYSIDIDAE
Small unidentifiable wasps looking for homes in the Manna gum tree
Garden Skink looking for insects on a Manna Gum
Common Grass Blue butterfly
Sawfly (not sure of the species)
Salt and Pepper Moth
Longhorn Moth. Not sure of the species
Small pintail beetles
Unidentifiable spider (looking for insects on a Sweet Bursaria specimen).
A colourful shield bug ?
Slant-faced grasshopper
A moth in the *Taxeotis* genus

Surveying technique for insects

Stand three to four meters from a flowering specimen. Use your binoculars to survey the plant for insects or use your naked eye to spot flashes of colour or movement. Gradually move a little closer after 5 minutes or so. The more you train your eyes, the more you will see. Try carrying a magnifying glass too – if you get close enough to an insect you will discover a great deal! Be careful on extremely sunny days.

At all times, we urge you to avoid stepping on vegetation, and stick to paths. Please consider other 'Protected not Impacted' Guidelines here www.nillumbio.wixsite.com/home/resources

Scientific/conservation terms used on the day

Richness – refers to the amount of species in a given area. For example – you may count 6 species of insects on a Bursaria tree.

Ecosystem services – the 'services' provided by a relationship in an ecosystem. For example birds or insects pollinating a plant species. These help an ecosystem become self-sustaining over time.

Diversity – A combination of both *richness* and *abundance* of each species. Richness may be high but if you only have one or two individuals of each species, then populations might not be viable and therefore ecosystem services might not be provided.

Arthropods – insects plus spiders

The brilliance of Sweet Bursaria

- Flowers in early – late summer when many other terrestrial plants are not flowering (therefore providing a good source of food)
- Attracts a high diversity and abundance of insects
- These insects in-turn become food for predatory arthropods, birds and reptiles
- Seeds have a purse shape and often has spikes but not always. Plants can be quite variable – for example, the leaves of some Bursaria plants are more than double the size of other bursaria plants, and some have very few prickles while others much more.
- Can grow to the height of a tree. But is generally considered a tall shrub. They can grow into wonderfully sculptural forms.
- Hardy species that can handle a range of different conditions

Creating/promoting habitat

When attempting to attract certain animals to your backyard/conservation area – think about different lifecycle stages. For example the Splendid Ochre Skipper lays its eggs on lomandra leaves but as an adult feeds on Sweet Bursaria.

Leave dead and 'wild' looking habitat – it is likely to still be providing shelter and food for wildlife. For example holes in trees bored by moth and beetle larvae can in-turn become homes for indigenous bees and wasp larvae.

Native bees are especially attracted to ultraviolet colours (pink, blue, purples) and yellow. However they will go to other coloured flowers. White flowering plants attract a high richness of insects.

When managing weeds or other vegetation in the understory please consider leaving mosaic patches if you must mow. Grass stalks and leaves provide resting spots and substrates for butterflies to lay eggs.