BUSHLAND NEWS

KATANDRA BUSHLAND SANCTUARY NEWSLETTER
Summer 2022

Best wishes for the New Year.

This wetter than usual summer of has continued, providing ideal conditions for many of the young seedlings growing in response to the controlled burn carried out a few years ago. Flannel flowers also seem to be putting on a spectacular extended show this year.

Rainfall measurements from the Bureau of Meteorology show that, in the last 3 months, Terry Hills has received 53% more rain than during an average summer. It is not surprising then that a wonderful variety of fungi can be seen popping up around the Sanctuary.

It is proposed that our regular maintenance days will again be the 3rd Sunday of each month starting in March this year. Because of the continuing issues relating to the covid pandemic, please email or call in advance if you intend to come along and help to ensure that day is going ahead.

A donation form has been included with this edition of the Bushland News. Any assistance, whether physical or financial, is most gratefully appreciated.

Katandra opens to visitors from the general public in July. We hope that you and your families are able to remain safe and we look forward to seeing you at Katandra in 2022.

David Seymour

Friends of Katandra

PO Box 365 Mona Vale NSW 1660

I / We, ...
(full name)

of .....
(address including postcode) (phone)

Email : (please print clearly).....

☐ would like to join the Friends of Katandra mail list and receive copies of the Bushland News quarterly newsletter

☐ would like to make a donation to assist in caring for the sanctuary. I enclose a cheque / money order made payable to the Katandra Bushland Sanctuary Trust for

☐ $10.00 ☐ $15.00 ☐ other (please specify).....

Alternatively donations can be made by direct deposit into the Katandra Bushland Sanctuary Trust account BSB 082132 Account No. 509347998

Signature..... Date.....

FUNGI

The unusually wet summer has provided ideal conditions in Katandra for the growth of various types of fungi – a wonderful range of size, colour and shape.

Prior to the 1970s, fungi were usually classified as members of the Plant Kingdom. Some of the clear differences between fungi and plants now see fungi classified as a separate Kingdom altogether.

Plants are autotrophs, making their own food from inorganic chemicals through processes such as photosynthesis. Fungi are saprotrophs, obtaining food from decaying organic matter (although some can also be parasitic). On a cellular level, fungi lack the chloroplasts found in plants (necessary for photosynthesis) and have a cell wall containing chitin but no cellulose.

Fungi are found in just about every habitat, more often on land (in soil or on plant material) rather than in water. It has been estimated that there are about 4 million different species of fungi.

There are three major groups of fungi;

1. Single celled microscopic yeasts which multiply by budding a daughter cell off from the original parent cell.
2. Multicellular filamentous moulds, made up of very fine threads called hyphae which grow at the tip and divide repeatedly along their length creating long and branching chains. The hyphae keep growing and intertwining until they form a network of threads called a mycelium. Digestive enzymes, secreted from the hyphal tip, break down organic matter found in soil into smaller molecules which can then be used by the mould as food. Moulds reproduce by spores

which form on, and are released from, some hyphal branches which grow into the air.

3. Macroscopic filamentous fungi also grow by producing a mycelium below ground however they differ from moulds because they produce visible fruiting bodies commonly known as mushrooms or toadstools. These are also made of hyphae, tightly packed together. Typically, the fruiting body has a cap and stem, with gills underneath the cap covered in spores.

It is important to realise that when you look at a mushroom growing out of the ground, you are looking at just part of a fungus - not the whole organism. The rest of the organism (often 90% or more) is underground, consisting of the network of microscopically thin "threads" of hyphae (mycelium) which spread through the soil. The fruiting bodies only grow when conditions are right, however the mycelium continues to grow throughout the year.

The term “mushroom” is used to describe a range of different types of fruiting bodies, not just those of the classic mushroom shape.

Coral fungi, usually found on soil but sometimes on rotting wood, may be simple fleshy clubs or intricately branched coral-like forms in various colours (shown below)

Jelly-fungi look like gelatinous blobs and grow on rotting wood. They are generally quite rubbery in consistency, surprisingly robust and include white, yellow and brown species. They vary in size from a few millimetres to several centimetres in diameter.

Bracket fungi are often semicircular shaped, growing directly on wood, attached by the straight edge

Fungi play an important role in nature, decomposing organic matter and so allowing carbon and other elements to be recycled.
Many fungi form a mycorrhiza (a mutual symbiotic association) with plants, performing important roles in plant nutrition and soil chemistry essential for the plant survival. As an example, every eucalypt tree has its underground mycorrhizal partners.
Fungi can also help remove some dead heartwood in the centre of tree, producing vital nesting hollows for animals.
A relatively small number of fungi can produce disease in plants (eg mildews, rusts and scabs) and animals including humans (eg athletes' foot, ringworm and thrush).
Fungi are regularly used in human society as a food source, in food preparation (cheeses, bread and brewing) and in the production of antibiotics, vitamins and other pharmaceutical drugs.
Note - Many mushroom species are poisonous, potentially causing death. As it is difficult to accurately identify a safe mushroom without proper training and knowledge, it is often advised to assume that a wild mushroom is poisonous and not to consume it.

Angophora costata

One of the more common trees found in Katandra is the **Sydney Red Gum**, ***Angophora costata***. Also known as **Smooth-barked Apple**, it is endemic to Eastern Australia and is easily identified by the striking salmon-pink colour of the trunk revealed after it sheds its older greying bark in the later spring months. Reaching heights of up to 30 metres, older specimens take on a

Many A. costata grow from crevices in rocks like the specimen above which also shows a stain formed from kino oozing from the bark.

wonderfully gnarled appearance as the crooked and twisted branches spread out. A. costata is the only smooth-barked member of the Angophora genus which contains 13 species in total. Angophora, Corymbia and Eucalyptus are the three main genera in the Eucalypteae tribe of the Myrtaceae family. The smooth-barked members of this Eucalypteae tribe are often referred to as "gum trees" because of the dark red kino ("gum") that can be seen exuding from breaks in the bark. Kino is actually not a true gum as it is not soluble in water.
Like some of the other smooth-barked eucalypts, A. costata usually develops some dimple-like depressions in the bark on the trunk and larger branches. Some specimens can be more dimpled than others, as can be seen in the picture below.

Katandra website -
katandrabushlandsanctuary.com

KATANDRA BUSHLAND SANCTUARY

Foley's Hill, Lane Cove Rd, Ingleside NSW
Department of Lands Reserve No 86487
Founder: the late Harold Alfred Seymour
Managed by Katandra Bushland Sanctuary Trust.
Phone: 0431857407

OPEN: Every Sunday: July, August, September, October
HOURS: 10 am — 4 pm
ADMISSION: $3 donation

KATANDRA BUSHLAND SANCTUARY TRUST
PO Box 365 Mona Vale NSW 1660

President: David Seymour
Vice-President: David James
Secretary: (acting) David Seymour
Treasurer: Peter Hammond
Minutes Secretary: Julie Emerson
Bushland News Editor: Marita Macrae

(Cover Design by the late Walter Cunningham)

Enquiries: phone 0431857407 or by email information@katandra.org

Volunteers are needed

If you can assist on maintenance days or with welcoming visitors to Katandra on open days, please phone 0431857407

DIARY DATES 2022

FOUNDER'S DAY (to be confirmed)
Sunday 15th August, 12 noon
Bring your lunch to cook on the wood-burning BBQs. The trust will provide 'dessert', drinks, tea and coffee.

CHRISTMAS PARTY (to be confirmed)
Sunday 5th December, 4.30 pm
Cold meats, drinks and salads are provided, but please feel free to bring along some sweets or savouries to share before or after. Also enter the raffle to win one of Ruth's sort-after Christmas cakes.

SANCTUARY MAINTENANCE 2022
(3rd Sunday March–November)
9 am Sunday 20 March
9 am Sunday 17 April
9 am Sunday 15 May
9 am Sunday 19 June
9 am Sunday 17 July
9 am Sunday 18 September
9 am Sunday 16 October
9 am Sunday 20 November

PUBLIC OPEN DAYS 2022
Each Sunday of July–October
10 am – 4 pm
Picnic tables are available for use should you wish to bring along a picnic lunch to enjoy in the Sanctuary

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