**Notes from Roz Hart re Fungi talk to 2026 Trainee Guides**

Some basic facts about fungi to use when Guiding:

*Fungi are classified in their own kingdom, they are neither plants nor animals.
While there are roughly 14,000 plant species in WA alone there are probably ten times that number of fungi species, still relatively underexplored.

*We only see the fruiting body of the fungus, which releases spores; the rest of the organism is an extensive microscopic thread-like network or mycelium, spread throughout the organic matter on which it feeds. Rather like an apple tree, the fungus is there all year round, but the fruiting bodies only appear in season (for Perth, usually after rain in June-July, which is the best time to go looking).

*Fungi are a vital part of our ecosystem and are active all year round but we only see their fruiting bodies in the Fungus season which here in Perth, follows rains in autumn.
Looks like it's starting early this year rather than late as in the previous 5 very dry years.

Fungi have three essential roles they fulfill in the environment:

The recyclers: '**decomposer**' fungi recycle nutrients from organic matter like mulch, twigs, leaves, dead wood, dead animal material, really anything organic. Sometimes called **Rotters**

**Mates: mycorrhizal** fungi
Many native plant species like acacias, eucalypts and orchids (but not banksias) rely on symbiotic partnerships with **mycorrhizal** fungi in their root systems, which enhance water and mineral uptake by the plant while the fungus benefits from sugars produced by the plants in return

**Killers** some fungi are **pathogenic**, attacking and killing trees, insects and even other fungi. You will see Armillaria at the base of our very large Tuart trees on the Tuart lawn in June and often right through the Botanic gardens. It varies from year to year how much there is.
Armillaria is a very attractive fungus but it's a killer. It's a native WA Fungus which is out of control because of all the clearing done in SW WA over the last 100 years or so.

Biodiversity. Fungi are an essential part of all ecosystems.
Flora Fauna and Fungi support each other

Fungi provide food and habitat for insects and other animals like native snails, many insects and animals like bandicoots. Fungi soften wood so birds can peck out nest hollows.
There are many stories you can learn, to share with visitors.
Bandicoots which are now established in the park. Bandicoots and other small native mammals are very important in Australian bushlands as they consume Australian native truffles. This spreads the spores through bushlands where they germinate and partner with plants to form mycorrhizal relationships.
Another example is the importance of mulch where Pink Fairy orchids now thrive in the Botanic Garden. Fungi in the mulch nurture any tiny dust like terrestrial orchid seeds which have blown in from the bushland. When fungi in the mulch come into contact with these tiny

seeds, those fungi supply the tiny seeds with nutrients as the seed has no food resources itself and relies on fungi to grow the seed. Later on when the orchid has grown to a size when it has chlorophyll and can photosynthesize, it reciprocates and feeds the fungus.

NEVER mention eating any fungi other than those you buy in the supermarket: we know too little about our fungi. Many contain liver-destroying chemicals, it's not like Europe where people have been trying and dying over thousands of years so they have a better idea what's edible.

You are never expected to know the names of any fungi that you point out, but for those who are interested and want to learn a bit more Roz has provided an information sheet of just eight common species which are appropriate fungi to learn for our winter walks:

**Most important to tell visitors**

Biodiversity in the bushland

Partnerships between all components of the bushland
Flora Fauna and Fungi

The 3 roles fungi play

Learn and tell stories of the Biodiversity Harmony, such as
Orchids and fungi
Bandicoots spreading fungi and creating more resilient bushland
Over time you will hear and learn more as there as so many of these stories- certain ones with grab you and be part of your guiding stories

**ATTACHED.**

**Eight Common fungi of Kings Park that are easy for guides to learn and recognise**

Golden wood Fungus (decomposer)

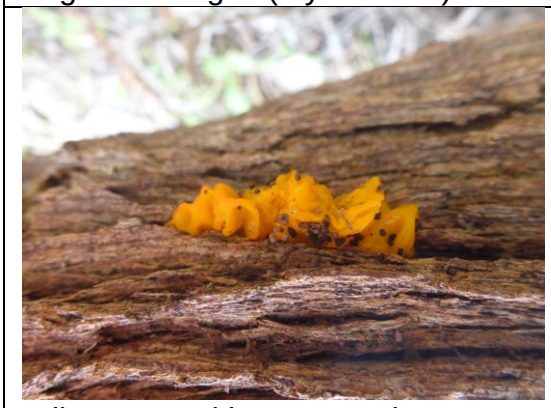
Common Rosegill (decomposer)

Scarlet Bracket Fungus (decomposer)

Ghost Fungus (decomposer)

Dog Poo Fungus (mycorrhizal)

Earthball, Scleroderma sp. (mycorrhizal)



Jelly Fungus (decomposer)

Armillaria (pathogen)