



Inspecting the underside of a Julimar Forest fungus specimen using a mirror..

## The good, the bad and the fungi

### Julimar Conservation and Forest Alliance

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WITH its numerous intact plant communities and vast water catchment systems, Julimar Forest provides a perfect host for a healthy fungi community.

However, that may not be the case in the future.

As part of our goal to have a better understanding of the Julimar Forest, the Julimar Conservation and Forest Alliance members recently organised a Julimar Forest Fungi Foray.

A healthy forest is a union of ecosystems, and one very important yet often overlooked system is that of the fungi.

Fungi are neither plants nor animals and form their own part of the living kingdom.

Fungi also play a role in the production of medicines (*fungi penicillium*) for curing various health issues.

In the forest underground the Mycorrhizal fungi has a beneficial mutual relationship with plant root systems, increasing water and nutrient uptake of larger plants, especially trees.

Fungi can also provide a food source for native animals.

Underground fungi, for example, form a large part of the diet of the woylie (*Bettongia penicillata*) which forages in Julimar at night.

Some fungi are decomposers, recycling wood and leaf litter for use by other organisms, contributing to the health of the soil matrix, and enabling future healthy plant growth and renewal.

It turns out people are quite interested in fungi.

We had more than 30 people attend on the day, many of whom drove up from Perth to help us on our foray.

We set off in small groups, meandering slowly in different directions from a central point around Munyerring Springs Road, busily photographing all sorts of different mushrooms, the fruiting body of fungi.

We noted colour, size, odour and whether it had gills or spores underneath, using mirrors so as not to disturb the organism.

We found at least 30 different types of fungi visible above the ground, including specimens of coral and cup fungi, earth balls and orange bracket fungi growing on fallen trees.

We weren't able to explore those fungi which were totally underground.

A future expedition will do that.

A forest with healthy fungi is a healthy forest – but while many fungi are beneficial, one well-known species in WA poses a significant threat to our forests.

Dieback (*Phytophthora cinnamomi*) is a soil-based organism which was introduced to our woodlands in the 1900s.

It spreads by movement of contaminated soil between locations.

Dieback may affect jarrah woodlands, grass trees and banksia, all of which are found in Julimar.

A tree affected by dieback will progressively die from tips of twigs through to its major branches, thus reducing species diversity in plant communities and causing loss of habitat for native fauna.

Currently Julimar is thought to be free of dieback, except perhaps in some small pockets.

However that relatively clean bill of health is under threat.

In a number of places there is evidence of feral pig activity.

Not only can these creatures spread this disease, but they also degrade the forest floor and compete with native animals in foraging for nutrition.

Feral pigs appear to be moving between local farmland and the forest, potentially spreading the disease and having a negative impact on local agriculture.

Any movement of vehicles and machinery can spread dieback.

Mining exploration has to adhere to strict standards by washing down vehicles prior to entering the forest.

There are currently signs for vehicle wash-down stations on frequently used access roads within Julimar.

Individually we can all make a difference and reduce the risk to Julimar from dieback.

Simply instigating washing down of your own personal vehicles and footwear before and after visiting a forest reduces the chance of spread and will help prevent us taking it back to our own gardens.

Should Julimar Forest be designated as a National Park more resources could be directed to maintaining the forest's health for the future.

If you would like to know more please contact [julimarforest@gmail.com](mailto:julimarforest@gmail.com).