Fungi by Kevn Griffiths

Wildflower Society WA – Armadale Branch
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Kevn began his talk by informing the group that his interest in fungi started when his daughter Donna, a gifted artist, was asked to do a book on fungi, but she had no time to do so and that he took on the project for her. He knew absolutely nothing about fungi at that time and he soon found himself on a steep learning curve.

Fungi in Australia are virtually unnamed, but Dr Neale Bougher, a Western Australian fungi expert, renamed and reclassified many fungi that had been previously documented here in WA.

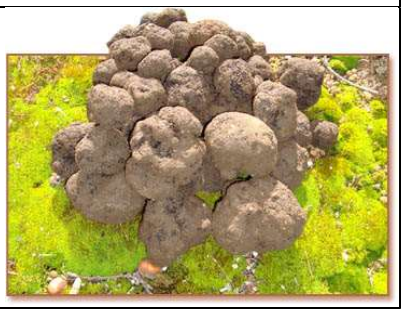
There are three groups involved in the fungi family:

- Fungi – mushrooms, mildews, rusts, yeasts
- Monera – bacteria, blue/green algae
- Protists – algae, slime moulds, protozoa, amoeba

In the ground there are literally millions of white threads known as mycelium made up of hyphae which join up to become mycelium and these mycelia branch out and out covering huge areas underground. They lie in the ground until they need to reproduce and when conditions are right they grow to whatever type of fungus they will eventually become in order that they can spread their spores and reproduce to ensure their survival. Conditions under which fungi grow must be right and so the climate must be perfect i.e. moist and warm in order that the fungus can grow. The spores are produced on the gills which are under the cap and when they mature they fall from the gills and are carried away on the breeze. The purpose of the stalk is to allow the spores to grow and mature as high above the ground as possible in order that they can be successfully transported away by the breeze and not impeded by grass, rocks or twigs.

There are many different fungi found in a woodland and their main role is composting. A mycorrhiza is a symbiotic relationship between a fungus and the roots of a vascular plant such as a tree. The fungi help the tree by clinging to the roots where they get sugar and the tree gets nutrients far from the base of the tree because of the way that fungi attach and spread from tree roots. Fungi also breakdown leaves to compost and small animals such as Woylies eat fungus and disperse the spores far from the parent fungi.

There are many different types of fungi which include:

		
Bracket fungi	Jelly fungi	Luminous fungi which are mainly found at the bottom of dead trees
		
Mycenas or pixie caps	Puff Balls or Earth Balls which are patterned inside and have an opening so that the spores can come out	Truffles which come in all different colours from off white through to yellow. WA has lots of different species of truffles
		
Bird's nest fungi	Earth stars which are a form of puff balls	Cap fungi – black/red/yellow and orange

Military fungus – minute 0.5 cm star-like fungi which are known to shoot spores out up to half a metre.

There are famous mushrooms such as:

	
Morchella are a group of edible mushrooms which are used in Europe where they are stuffed and eaten	Amanita which is a group containing some of the deadliest fungi
	
Parasol fungus or Lawyer's wig	Chanterelles collected by gypsies in France

There are two main groups of fungi which are defined by the way the spores are presented:

- Spores are produced on basidia which are microscopic club-shaped spore-bearing structures produced by certain fungi;
- Spores are produced on the inside of the cup.

To look for mushrooms you need to look in a variety of places such as on the ground or on or beneath trees where you will often find fungi such as bracket and skin fungi. Some fungi are tree rotters but many others are beneficial. You will need a magnifying glass to see the fantastic detail in fungi such as the chimney pots, maze and honeycombs. Other tools needed are a camera, sketch book to draw and ID the fungus, a mirror and a ruler to determine the size