

# URBAN ANTICS



## A SAUCERFUL OF SECRETS

Mushrooms... not places where you train Siberian huskies, but rather, little, flat or round-capped beings that are neither plants nor animals, where gnomes and fairies might dwell.

A mushroom is any of a variety of fleshy, umbrella-shaped fruiting bodies of fungi that spring up from the ground after a night of heavy rain. They occur in either wooded or grassed areas, usually in late autumn and onwards. They are regarded as the fifth kingdom (fungi) of living things and differ from the green plant kingdom (plantae) in that they lack chlorophyll, the green substance that is used to make food. Instead, mushrooms survive mainly by absorbing food material from surrounding living and decaying plants or animals.

Although there are hundreds of species of fungi throughout the south-west of the State, many have not yet been named or described. They vary in shape, size, colour and texture. Mushrooms and toadstools are the best known fungi, but the brackets and jellies on wood, puffballs in the back lawn, stinkhorns, yeast and common moulds on bread are also fungi (see *LANDSCOPE*, Vol. 18, Spring 2002).

While some species of mushrooms are tasty and safe to eat, others have a bad taste and some are poisonous. A few of the poisonous types, such as species of *Amanita*, can be fatal if eaten. In legend and fairytales, mushrooms that are poisonous or have a bad taste are often referred to as toadstools.

Since the emergence of humans, it was very likely that mushrooms were part of our diet, as they were very easy to gather and, as we know today, a source of phyto-nutrients—rich in Vitamin B and containing minerals such as potassium, phosphorus and iron.

And so it was, when this little 'Neanderthal' was taken on picnics, a long time ago, to the mushroom Mecca of WA; my auntie Poll's poopy little cow paddock right in the town of Gingin. Following the first decent rains of every autumn, my dad would think nothing of dragging us kids through a minefield of fresh pats to gather our delicious, delectable, saucer-sized 'mushies'. Fried in butter with salt and pepper, then served on toast they were, and still are, absolutely to die for... well, not quite.

Most mycologists (scientists who study fungi) list mushrooms as either agarics or boletes. Agaric mushrooms have gills under their caps, and boletes have tubes. When the mushroom is ripe, the gills or tubes release millions of minute spores that scatter with the wind. After reaching a place with ideal food and moisture, a spore sends out a microscopic, thread-like filament called a hypha. The hypha lengthens from its tip and branches out into a root-like system called a mycelium. On various parts of the mycelium, pinhead-size buttons appear and, as they mature, tiny caps and stalks become recognisable. With the onset of enough moisture, such as a rainstorm, the cells of the underground fruit wildly expand, shooting the stalk upwards, the cap unfolding like an umbrella. Within two days, a field mushroom matures, as the gills go from pink to brown and

the spores begin to shed. The fruit withers and dies, but the mycelium in the soil continues its spread, along with the new spore germination, to produce for many years to come.

The local common whitish-coloured field mushroom, with its chocolate brown gills, and the smaller table mushroom, found in most supermarkets, are close relatives. However, the cultivated, and usually undeveloped and insipid, imposter is not a patch on its cousin for flavour.

A word of warning: all mushrooms absorb heavy and toxic chemicals. Even edible field mushrooms found in cities and near drains can be toxic! You would be better to stick to a healthy little sheep paddock somewhere. Now, that's even better habitat than cow pasture.

BY JOHN HUNTER

### DID YOU KNOW?

- *Mushrooms are an important food source for insects and many small animals. They also cause decay of the materials on which they live, in turn releasing important minerals back into the soil.*
- *The 2000-year-old book, Shen Nong's Herbal Classic, describes some species of mushrooms as having strong medicinal value. Today's scientists have discovered compounds in mushrooms that stimulate human immune systems, combat tumours and prevent blood platelet adhesion that is responsible for coronary artery disease and strokes.*
- *The word mushroom is from the French mousseron, a derivative of the word 'moss' on which some species grow.*

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# LANDSCOPE



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*Cane toads are poisonous, prolific breeders and are getting closer to the WA border. Hop to page 10.*

*Once thought to be extinct, Gilbert's potoroo has overcome many obstacles. What is being done to improve its chances of survival? See page 28.*



*The tuart once typified the coastal strip north and south of Perth. Why should we cherish this majestic tree? See page 16.*



*Discover some of the prehistoric megafauna that once roamed the State in 'Walking with WA giants' on page 23.*



*Lichens decorate Lake Muir, near Manjimup, with varying colours and shapes. Turn to page 43 to learn more about these fascinating life forms.*

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## C O V E R

*Royal hakea rises above the surrounding heath, straight and column-like. When sunlit from above or below, its unusual large variegated leaves appear to glow like lanterns, so the shrub is also known as the Chinese lantern bush. Among the birds that obtain nectar from its flowers (hidden at the base of the leaves) is the western spinebill.*

*Royal hakea grows almost exclusively in Fitzgerald River National Park, an area that was reserved on the recommendation of then Government Botanist Charles Gardner (see 'Botanic Guardian' on page 36).*

*Cover illustration by Philippa Nikulinsky*

