

# 8 . Wonderful Waxcaps and Other Fungi



***This sheet gives information about waxcaps and other fungi and guidelines on how to manage a burial site to benefit fungi.***

Waxcaps are mostly brightly coloured fungi and many of the different types of waxcap are found in old, undisturbed grassland which has not been ploughed, reseeded or treated with chemicals. Burial sites are particularly good for finding waxcaps because they thrive in short, regularly mown, old grassland.

**The waxcap is a flagship species of Caring for God's Acre.**

## KNOW YOUR WAXCAPS

Waxcaps are perhaps the most distinctive fungi of old grasslands and can be quite easy to identify. With names like ballerina, blushing, goblet, spangle and parrot they are fun to look for and appear in autumn like jewels scattered across the grass.

Before the development of the microscope in the 18th century, fungi were a puzzle, appearing overnight and sometimes taken to be the work of 'dark powers'. Actually the visible part of the fungus is the 'fruit', filled with tiny spores. The rest of the fungus is below ground and consists of tiny hair-like filaments called 'hyphae' which develop into a mesh, growing through the material from which they take their food. This mesh is called the 'mycelium'.

## Grassland fungi

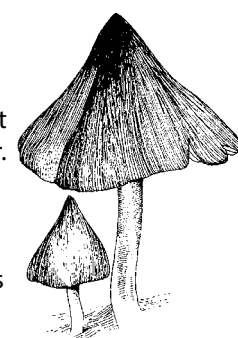
Waxcaps and many other grassland fungi form a mycelium around the roots of plants growing in grassland which has not been disturbed, ploughed or sprayed. In other words 'unimproved grassland' (see sheet A2, Caring for Grassland). They are part of the complicated structure of this habitat and most are decomposers and recyclers. They break down dead vegetation, returning its nutrients to the soil and are a vital part of life. Sites rich in fungi, and waxcaps in particular, are now rare in the UK and burial grounds form a crucial network of these sites across the country.

Other distinctive fungi of grasslands are fairy clubs, earth tongues and fairy rings.

## Helping waxcaps

Waxcaps need short, regularly mown or grazed grass. When you are planning grass management (see sheet A2, Caring for Grassland), look out for waxcaps in autumn. If you have an area where they are abundant then consider keeping the grass short mown during

the autumn when the waxcaps are likely to be fruiting. If this is within an area that you are managing for long grass in the summer, then try to give it a second cut and raking in September. When waxcaps appear, stop cutting the grass for a few weeks so that they can fruit and people can see them. As with all of the grassland, remove grass cuttings and do not use any lawn feeds, fertilisers or moss killers.



*Hygrophorus*

You can try to identify waxcaps and make sure to photograph them. These photographs can then be sent to a fungi expert (a mycologist) who may well be able to identify them for you.

Let people know about waxcaps growing in your burial ground; how special and pretty they are. Please send your records to Caring for Gods Acre (see sheet B10 Surveying and recording plants and animals).

## FUNGI AND TREES

This is another amazing and complex relationship. Trees and fungi have evolved together and are necessary to each other. A range of fungi live in and around tree roots helping to absorb water and nutrients from the soil. Fungi break down deadwood and old leaves during the life of the tree and then, finally, they kill the tree and help to break it down, recycling the nutrients back into the soil.



*Waxcap*

Ancient yews, and other veteran trees, are hollowed out by fungi.

This was once thought to make the tree more likely to collapse but is now seen as a survival mechanism which makes the tree stronger. Look out for the bright yellow 'chicken of the woods' growing on yew trees.

## More about fungi and trees

Fungi and trees help each other by transferring nutrients between the fungal hyphae and the tree roots. Trees take up water and nutrients from the soil through fine roots and root hairs. Trees are able to suck up sufficient water but are poor at taking in enough nutrients to supply the entire tree; the fungus can help with this. The fungus absorbs nutrients throughout its entire web of hyphae which are then transported to the tree roots where there is a dense web of hyphae wrapped around tree roots allowing nutrients to pass into the root. In exchange the tree supplies the fungus

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with sugars which have been produced in the leaves by photosynthesis.

Fungi can take up to a quarter of the food that the tree makes but this is still beneficial for the tree; so much so that seedlings in tree nurseries are 'inoculated' with appropriate fungi. This causes them to grow roughly twice as fast as un-inoculated young trees.

Fungi can break down all sorts of material including wood, leaves, bone, horn, feathers and fur. There are also fungi which break down creosote and oil including diesel and jet fuel! Some are general in what they feed on; others very specific such as *Arthroderma curreyi* which rots down feathers and also tennis balls, or *Marasmius buxi* which solely decomposes the leaves of box.

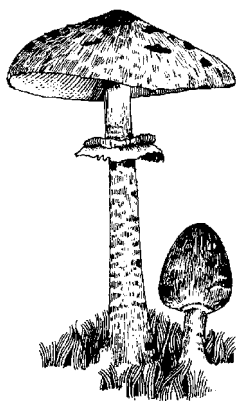
#### How to help

- Leave deadwood within a tree unless your arborist or tree surgeon says it is unsafe.
- Have a deadwood pile for any prunings or fallen tree limbs. This can be stacked neatly out of the way and will benefit many fungi which live on deadwood as well as a great many animals and birds.

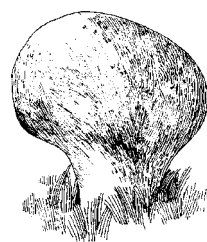
Fungi are a vital part of both living and dead plants. Very few are poisonous and they are interesting to learn about. Do not damage or remove them and consider asking a mycologist to visit your site or to run a fungal foray in your area. **Fungus Conservation Trust** and local wildlife trust may be able to help you do this.



*Geoglossum*



*Parasol*



*Puffball*

#### Useful contacts

Fungus Conservation Trust, [www.abfg.org](http://www.abfg.org)

British Mycological Society, [www.britmycolsoc.org.uk](http://www.britmycolsoc.org.uk)

Caring for God's Acre, [www.caringforgodsacre.org.uk](http://www.caringforgodsacre.org.uk)

#### Useful reading

Collins Complete Guide to British Mushrooms and Toadstools – Paul Sterry & Barry Hughes

Fungi Name Trail – Field Studies Council fold-out identification chart

Waxcap Website – [www.aber.ac.uk/waxcap](http://www.aber.ac.uk/waxcap)