Fungi

Introduction

Fungi are neither plants nor animals but are placed in a kingdom of their own. It includes mushrooms, toadstools, bracket fungi, puffballs, moulds and many other forms. More than ten thousand species have been recorded in Britain, including nearly 3,500 in Norfolk.

Unlike green plants, fungi cannot harvest the sun's energy to make food from simple substances so, like animals, they must feed on existing organic material. Relatively few species are parasites that attack living plants; the majority decompose dead plant remains and are nature's recyclers. Some of these tap into the roots of trees, 'stealing' some of the sugars but repaying the debt more than generously by supplying minerals to their host. Almost all trees benefit from such mycorrhizal associations.

Virtually all fungi are composed of a branching network of incredibly fine threads that penetrate what they are growing on to break down material into nutrients which are absorbed by the fungus. Only when the fungus reproduces is an identifiable structure - a 'fruiting body' - formed. This bears and releases spores which, although minute, serve the same function as seeds. They are blown by the wind and can germinate if they reach a suitable habitat for that species.

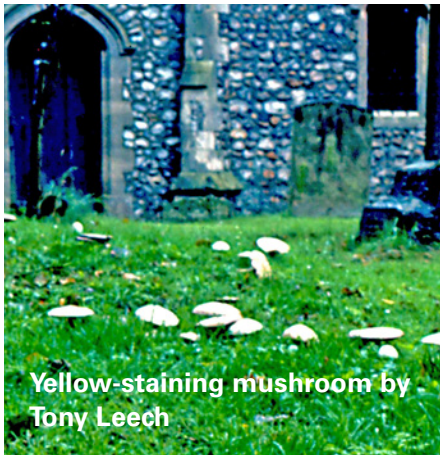
Common puffball by Martin Hinstringe

Spangle waxcap by Tony Leech

The importance of churchyards for fungi

Churchyards provide a variety of habitats, each of which will be suitable for different fungal species. Three, however, are particularly important:

- **Mown grass:** fungi are often thought of as being woodland organisms but a significant number only occur in grassland. Many of these are uncommon and of conservation interest. Churchyards are often rich in these species because they are regularly mown, have undisturbed soil and have not been treated with fertiliser.
- **Short vegetation under trees:** this gives an opportunity for mycorrhizal species, which will be present anyway, to 'fruit'.
- **Old trees (especially in the boundary):** as trees age they accumulate dead wood, both within the trunk and in branches. This is decomposed by specialist fungi, some of which will be of conservation interest.



Yellow-staining mushroom by Tony Leech

Fungi to look out for


Scarlet waxcap by Les Fisher

The most obvious of the grassland specialists are the waxcaps. These are mostly quite small mushrooms, but many are brilliantly coloured: red, orange, yellow, even green and pink. More than 30 species have been recorded in Norfolk.


Chicken-of-the-woods by Garth Inman

On old trees look for the brilliant yellow-orange brackets of chicken-of-the woods, especially on oaks and occasionally yews. Also on oak, and on sweet chestnut, the fleshy tongue-shaped (and coloured) beefsteak fungus can often be seen.


Giant puffball by Elizabeth Dack

Scrubby areas may also be good for fungal species, including football-sized giant puffballs and the much rarer earthstars.


Milkcap by Gail Hampshire

Many of the mycorrhizal fungi under trees are somewhat larger. They include the often strongly-coloured brittlegills and the more drab milkcaps. The latter get their name because their broken flesh exudes droplets of white 'milk'. Most of these fungi are specific to a particular group of tree species.

How to help

Keep some areas of grass regularly mown – short if possible.

Do not use fertilisers. Waxcaps, spindle fungi and earthtongues are particularly sensitive to mineral enrichment.

Mow under trees; tall vegetation prevents fungi from 'fruiting'. Leave piles of dead wood, especially thick branches, where possible.

Leave standing dead wood on trees where it is safe to do this. This will benefit insects too.

A word of caution about fungus

Although some fungi can be safely eaten, identification can be tricky so eat only those you are absolutely certain you can identify as harmless. In particular, the mushroom most commonly found in churchyards is the yellow-staining mushroom, a poisonous species!

For further information please visit the NWT website or contact:

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Crimson waxcap by Tony Leech