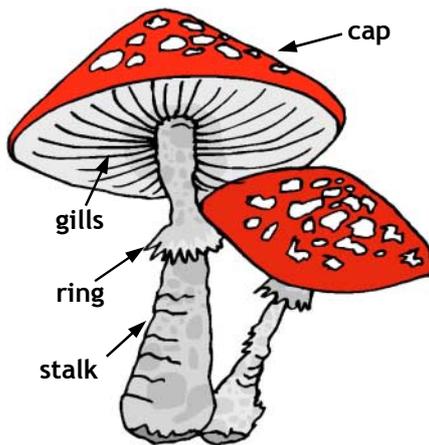


# Mushrooms & Fungi

by Jenna Poole

Mushrooms and toadstools are types of fungi. They are the fruiting bodies of much more complex organisms. These organisms are made up of hidden networks of hair-like strands (called **hyphae**), which send up the more obvious fruiting bodies when reproducing.

All fungi lack the chlorophyll that makes plants and trees green, and they reproduce by spores, instead of pollen-fertilised ovules, which become seeds. Once called non-flowering plants, fungi now have their own Kingdom (in the same way as animals and plants do). As well as mushrooms and toadstools, this Kingdom also includes yeasts and moulds. Fungi actually have a very important role within most ecosystems. They break down organic matter such as leaf litter and dead wood, which helps create fertile and healthy soils. Man uses a number of fungi species to make medicines, most famously penicillin, which Sir Alexander Flemming discovered in 1928.



## Hunting for Mushrooms!

Excursions to look for mushrooms are known as a "Fungal Forays". Most of our large mushrooms and toadstools emerge in late summer and autumn and can be found in woodlands and unimproved grasslands (those without too much fertiliser or pesticide applied). Species are identified by the presence of gills or pores, the size and colour, and even the smell!

**Mushrooms should never be collected without help from a knowledgeable fungus expert, as many species can be DEADLY POISONOUS!**



## The Spore-droppers

In the most basic way, fungi can be divided into two distinct groups. The first group are the **Basidiomycetes**. These are species that drop their spores and rely on the wind to distribute them. This group includes the easily recognised mushrooms and toadstools, as well as some lesser-known forms.

The **toadstool-type fungi** are further divided into those with gills (like those found on mushrooms you buy in supermarkets) and those with pores (many tiny holes under the cap instead of gills).



**Bracket fungi** are like toadstools only they tend to be crescent-shaped and attached to the trunks of trees or dead logs instead of having their own stalks.

**Puffballs** are solid and often round fungi of varying sizes. The spores often escape from a hole at the top.



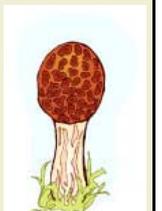
**Coral and club fungi** are simply fungi shaped either like marine coral or clumps of tiny clubs.

**Jelly fungi** have an almost transparent appearance and flexible texture, such as the Jelly Ear, so called because it really does look like a human ear!

## The Spore-shooters

This group is known as the **Ascomycetes**, and they produce spores in sacks just below their surface. When ripe, these spores are released by hydraulic pressure and move faster than a speeding bullet! This group contains some of the stranger looking species of fungi, with some of the most interesting names. There are morels and cup-fungi, saddle and ear fungi, disc fungi and Dead Man's Fingers!

The tasty species of truffle (one of which is featured on the Up-close page 12) are also in this group, as are the spot and crust fungi.



Morel