

Fabulous Fungi at Bog Meadows







M1 Motorway











3,000 steps



Easy Terrain



Introduction

In a kingdom all of their own, fungi are neither plant nor animal. Their diversity is incredible, from microscopic to some of the world's largest organisms, life as we know it would not exist without

fungi.

They were some of the first life on earth and are credited with helping create the conditions needed for land plants to develop. By breaking down dead material, fungi release nutrients into the soil and in doing so create conditions for new life. Fungi can be grouped into several types;

- Parasitic damages the host
- Decomposers breaks down dead material
- Symbiotic creates links with other organisms to benefit both

Bog Meadows is home to a wide range of fungi, lichen and even the occasional slime mould.

Admire any fungi you find today, but please only take pictures. Some fungi can be incredibly dangerous if consumed.



1. Turkey tail

Found growing in tiered layers mostly on dead hardwood such as beech and oak.

Turkey tail is a common and colourful fungus best seen in autumn. Turkey tail comes in a variety of colours from brown and yellow to purple and green but will always have a cream or white margin. Due to its beautiful colouration, turkey tail was once a popular table and hat decoration! In Southeast Asian countries, turkey tail has been used to treat various health issues since 2nd century BC, while worldwide it has been used as a medicinal supplement and is being explored for its potential use in cancer therapy.



2. Candlesnuff

Candlesnuff is a small, erect fungus that can be found growing on dead or rotting wood, and the stumps and branches of all sorts of trees.

Sometimes called "Stags Horn", it looks like tiny antlers with its black, hairy base, and powdery white tip. Candlesnuff fungus is bioluminescent, producing a continuous glow, however, this can only be seen in complete darkness and with a long photo exposure.

Candlesnuff is currently being studied for potential medical treatments as it contains compounds that may be active against some cancers and antiviral properties.



3. Sulphur tuft

A common sight in autumn, sulphur tuft grows in conspicuous clusters on the stumps, dead branches, and buried roots of trees. A mix of yellow, orange, and green on the cap with a yellow, brownish stalk, great care should be taken when identifying this species as it is highly toxic. When at the end of its spore producing stage, sulphur tuft dissolves into a sloppy mess that smells like rotting flesh and becomes covered in maggots.



4. Waxcaps

Waxcaps are sometimes described as the orchids of the fungi world due to their bright and varied colouration.

There are pink, yellow, brown, red and white varieties.

Especially abundant in undisturbed grasslands, up to 30 different species of waxcap can grow in a one-hectare area. The presence of waxcaps is an excellent indicator of ancient, unfertilized grassland as this species is very sensitive to artificial fertilisers.

Look out for them in your garden in late summer or autumn.



5. Scarlet elf cup

Mystical and cheery, the scarlet elf cup grows on decaying sticks and branches in damp spots and beneath leaf litter on the woodland floor, between December and March.

Their bright pops of colour brighten up even the darkest winter day. It favours areas with high rainfall and can be seen on decaying sticks and branches – especially in damp areas of the woodland floor – and on ditch sides and stream banks.

In European folklore, it was said that wood elves drank morning dew from the cups. In past times, elf cups were also

made into arrangements with moss and leaves and sold as table decorations.



6. Shaggy inkcap

The shaggy inkcap is tall, white and has a shaggy cap – for this reason it is also known as lawyer's wig and shaggy mane.

Shaggy inkcaps are a common, seen on roadside verges, parkland, grassland, and gardens, growing in small groups.

The cap gradually opens out to a bell shape. The gills are very crowded; they are white at first, then turn pink and eventually black, dissolving from the margin of the cap until it is almost entirely gone. Ink from the liquid was used in the past for historical documents to prevent forgery. Shaggy inkcap have been found to be a bioaccumulator of heavy metals, absorbing metals from the soil and concentrating them into the fruiting body – the part we see, the "mushroom".



7. Lichen

Lichens are actually two organisms living together – fungi and algae.

The fungi provide shelter, and the algae provide food through sun, water and air, this is known as a symbiotic relationship. There are currently 20,000 known species of lichen which come in 3 different types – Crusty, Leafy and Scaly.

Lichens grow very slowly, some less than 1mm per year and can take many years to establish in new locations. Some estimates suggest that lichens cover 6-8% of the world's land, growing anywhere there is a stable surface and adequate sunlight.

In 2005, Lichens were sent to space – despite being exposed to intense temperatures, UV and radiation, the lichen survived.

Many species of lichen are very sensitive to air pollution, making them good indicator species.

Uses of lichens throughout history include dyes, and for packing in Egyptian mummies.



8. Slime Moulds

Discovered suspicious white stuff that looks like dog sick in your back garden, but not got a dog?

It could be the dog sick slime mould which can turn up on grass overnight and is most common in September. It doesn't stick around though. After one night it will turn black, and it will have disappeared in a couple of days, especially if it's rained.

The many-headed slime mould is a great puzzle solver, able to find the shortest route to two different food sources.

Slime moulds were once thought to be fungi; however, they are now classified in a completely different kingdom. Slime moulds begin life as tiny amoeba-like organisms that hunt and feed on bacteria, they then mate to produce plasmodia which can grow to a large size feeding on microorganisms. When food wanes, the plasmodia migrate to the surface and produces fruiting bodies – the fungi like structures we see.



9. Collared earthstar

Collared earthstar is a widespread, common species, found in woods with deciduous trees, particularly those with lots of leaf litter. Usually containing between five and seven rays, which crack as they arch.

Appearing between August and November, the earthstar looks like a small brown bulb partially or completely buried in the ground.

Some Native Americans called them Kaka-toos meaning "fallen stars" and believed them to be indicators of supernatural events.



10. Wood wide web

All the fungi we have seen and talked about are what we see when we find a fruiting body, the typical mushroom that pops up, this releases spores so the fungi can reproduce. Most of the life of fungi are hidden either as tiny organisms such as the bloom on grapes or as thin strands underground or within whatever they are feeding on e.g., bread mould. This is the mycelium, a dense network of tiny tubes. It has been found that some of these tubes connect with tree roots combining to be called mycorrhiza so both organism's benefit. This can spread throughout the forest forming a wood wide web.

The web connects trees and they can also obtain nutrients from the fungi. This remarkable phenomenon has led to the study of many new theories E.G. trees communicating with each other when attacked by insects. Ancient woodland and established meadow are more than just the plants we can see, there is a sophisticated, fascinating, and little understood world below consisting a huge mycelium web. There can be up to 2Km of web in a single Kg of soil.



Do spend some time looking closer now to see the dazzling variety of fungus, lichens and moulds living right under our feet.

Once you leave Bog Meadows today think about the fungi surrounding you in your everyday life. Without fungi we wouldn't foods such as bread, cheese, chocolate or any beer and wine. Important medicines require fungi such as antibiotics.

We really are completely entangled with those fungal mycelia.

Enjoyed this self-led walk of Bog Meadows Nature Reserve?

You can help protect this special haven for wildlife by becoming a member of Ulster Wildlife today.

www.ulsterwildlife.org/join



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