

GRASSLAND FUNGI AND THEIR IMPORTANCE AS ECOSYSTEM INDICATORS

We are all familiar with the array of fungi that appear in our woodlands in the autumn but if we take the time to look closer at our grasslands in the autumn, we may be surprised by the colourful variety of fungi on display here too. Wales is a good place to view these grassland fungi because they favour the undisturbed pastures that are grazed short by sheep.

The grassland fungi are made up of lots of types of fungi including pink gills, earthtongues, club and coral fungi. In addition are the exciting waxcap fungi which get their name from the shiny, waxy looking caps that come in many colours creating a mosaic of jewels across the grassland.



Image 1. Waxcap fungi



Image 2. Small club fungi in grassland

The autumn is the best time to see them, but their season is relatively long with some species becoming visible in August and others much later into November and December.

Waxcap fungi form partnerships with the other plant species that they live alongside. They exchange nutrients with the roots of the host plants which benefit them both. They require soils that are low in nutrients and have not been disturbed by ploughing or cultivations. Many of them are small so they need short cropped grasslands and are often found living in pastures with a high moss content. These conditions will sound very typical of many of the upland pastures in Wales.



Image 3. Red waxcaps



Image 4. Small green waxcap

Grassland fungi tell us much about the condition of the pasture where they are found and their presence in high numbers and a great variety of species are indicative of;

- Grasslands with high levels of biodiversity.
- A functioning healthy ecosystem.
- Ancient grasslands that have not been improved.
- Grasslands that have good carbon stores because they have not been recently disturbed.

Looking for waxcap fungi and other grassland fungi is easy because their vibrant colours make them easy to see. It is harder to see the smaller earthtongues and club fungi but you may be lucky to spot some if the grass is cropped short. There are mobile phone apps to help record sightings of these fungi including the Survey123 app which is being used by the charity, Plantlife, to record waxcap grasslands. The more colours you see means you are seeing a range of species and you do not need to identify the fungi's species. Knowing that you have lots of colours across your field is a great indication that you have good species diversity.



Image 5. White waxcaps in longer grass

Image 6. An earthtongue fungus

It is important to maintain these waxcap grasslands for the future. This can be done by;

- Keeping them well grazed.
- Not using fertilisers or pesticides.
- Not ploughing or cultivating them.
- Avoiding activities that cause compaction such as stock feeding with ring feeders in the same patch.

It is also important that we know where waxcap grasslands are so that we do not accidentally change the use of these grasslands to something else. For example, if you are considering where you can plant trees on your farm, it is important that you understand the full range of habitats that you have on the farm so that precious habitats are not destroyed.

Grassland fungi, including the waxcaps, are a beautiful indication of a healthy, biodiverse grassland that is likely to be host to many wild plants. These grasslands are the product of traditional grazing practices and need to be conserved. If you see waxcap fungi on your farm please record them using iRecord or the Survey123 app as this will help to build the picture of how important Wales and its farming practices are for maintaining these precious grasslands.



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