

Slime moulds on the Findhorn Hinterland

As many people may have noticed, it's been a great year for fungi – the best I can remember for a long time. Less well-known than fungi are the rather unfortunately-named slime moulds (myxomycetes). Originally considered to be fungi, they are now classed as a separate Kingdom of life, recognising the fact that they are as different from fungi as plants, animals and bacteria (some of the other Kingdoms of life).



Slime mould (*Arcyria ferruginea*) on a pine log



Slime mould (*Stemonitis fusca*) fruiting on dead wood in the Edible Woodland Garden

Slime moulds are remarkable organisms that spend most of their time as single-celled amoeba-like forms in the soil or dead wood. At a certain point these come together and merge to form a plasmodium, which is a fluid structure that feeds on organic matter and can flow across the soil, wood or even up plants. Out of it develop fruiting bodies or sporocarps - the remarkable shapes in the photos here - which release the spores for reproduction.

Slime moulds come in a wide variety of colours and forms, and although they are mostly very small, they are organisms of great beauty. They fulfil a vital role in ecosystems as part of the detritivore community that breaks down and digests dead organic matter, especially dead wood plant material. Autumn is the time to see many species, and this usually requires careful searching of logs, tree stumps or even the moss on the forest floor.



Slime mould (*Tubifera ferruginosa*) on a tree stump on the Hinterland.



Slime mould (*Fuligo muscorum*) on moss & pine needles in Wilkie's Wood

Although they have no brain or central nervous system, experiments in Japan have shown that slime moulds are intelligent, and that they also possess a memory function. So, if you're out for a walk in Wilkie's Wood keep your eyes open for these remarkable organisms – they are some of the natural wonders on our doorsteps!

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