Exploring oak woodland

Focusing on fungi

Dr Sarah Watkinson:
What we're looking at here are the leaves that have fallen on the floor of a deciduous woodland and we're seeing some very important processes going on, because without these processes carried out by fungi these leaves would simply remain here and pile up indefinitely.

Just here, attached to this leaf, there's what looks like a fairly inconspicuous little bit of cotton-wool, but these are cords of hyphae stuck together, and it's these cords which are able to grow all the time as a perennial mycelium in the leaf litter and from these branch out hyphae which are actually going to break down the leaf. And if I lift up this leaf a little bit you can see how the fungal mycelium has grown into the leaf and it's connecting this leaf to another little bit of leaf and if I turn the whole thing over, you'll see how it's enabling the fungus to grow from one lump of decomposing litter to another.

Some fungi attack the leaf litter by bleaching it in a similar way to household bleach, a kind of oxidative attack. Ultimately you can see leaves are broken down almost completely and you can see how this one's been skeletonised. Twigs are attacked as well, and here's a leaf that has been broken down by a fungus that started off as a parasite, it's tar spot on sycamore leaves. So a whole lot of different fungi all breaking down the leaf litter together here.