

CATCHMENT VEGETATION REVIVAL WORKSHOP

Kinlochewe Village Hall, 26th April, 2023

Discussion Notes

Group 1: Mycorrhiza group

As a follow on from James Merryweather's talk, this group, comprising some woodland experts, discussed mycorrhizal fungi and its importance to trees.



- At what point after adding nutrients does the habitat take off on its own? Is a tipping point (of adding nutrients) reached?
- How far will fungi travel to pick up nutrients? Do you need to spread fertiliser evenly?
- Adding phosphorous to certain plant groups depletes mycorrhizal fungi
- A complex level of disease resistance is inhibited by mycorrhizal fungi
- Every tree is different – some trees do not need fertiliser to help them start to grow – a lot of this depends on soil conditions
- Trees generally thrive on dryer ground, minerals from rock breakdown
- Collect fruiting bodies of trees, mix with slurry, and spread the mixture
- Dual mycorrhizal fungi on birch – not just ecto but also arbuscular fungi. Juvenile oaks around mummy oak rooting into the mother tree's mycorrhiza – still a lot of research to be done
- Rizhocal – collects mycorrhizal fungi and replicates them but use only weed mycorrhizal fungi which might give plants a start; someone from Kew only saw a difference when he had aerated the soil round the old tree sites; replication of fungus – difficult to cultivate apart from some that are very easy to cultivate

- If there are no mycorrhizal fungi present, what can be done? Are mycorrhizal fungi specific to countries? No, they are all over the world; Sitka spruce attracts mycorrhiza at the drop of a hat
- When trees get chopped down the mycorrhizal fungi have no way of sequestering carbon
- Some species of mycorrhizal fungi are very hard to dispose of – machinery, cultivation, abuse yet newly planted trees in a nursery (roots) were covered with mycorrhizal fungi after a year
- The woodland trust has two big tree planting projects where they are going to experiment with fertiliser/no fertiliser, willow/no willow, cultivation/no cultivation; results of this will be very interesting and the data will be very valuable
- Is peat completely devoid of mycorrhiza? Ericoid mycorrhizal fungi only which allows heather, etc. to grow
- Can you grow trees on peat? Sometimes they can grow on peat but very slowly and probably stunted; trees on peat bogs release carbon so you probably do not want them in your peat
- There is so much we do not know about mycorrhiza and we cannot be confident; everything in the natural world is extremely complex; no single solution can be applied to all areas/issues
- What we want is trees to grow and fix the system for themselves
- Less time should be spent on planting new forestry blocks, more time should be spent on looking after mature trees to open up spaces to allow the rhythms of the natural world to take over, people just want to plant trees instead

[thank you to Kirsty Williams for taking notes]