

My Forest Friends

Did you know that friendly fungi help trees absorb nutrients and transport water underground?

Underneath the ground, forests are connected by friendly fungi, called mycorrhizal fungi, that live in a symbiotic relationship with trees. The fungi are interconnected underground with the tree roots and help break down and transport carbon, water and nutrients from the earth, making it easier for the trees to access these elements. In exchange, the trees provide food for the fungi by sharing sugars produced through photosynthesis. Living underground makes it tough to access food produced by sunlight for the fungi, but by making friends with trees, the fungi get all the food they need without popping up for some sunshine!

Life cycle of fungi: When the mycorrhizal stage of fungi get hungry, or lose connections with their tree friends, they need to move so they can access resources and find a new place to live. They create a fruiting body that pops up out of the ground from the mycorrhizae underground. We call these mushrooms! The mushrooms reproduce by creating spores that are released when the mushrooms mature and can spread on the wind. Spores that settle in a happy place where they can make friends with trees will germinate and eventually become interconnected with tree roots underground, spreading their networks as mycelium and eventually maturing into a symbiotic mycorrhizal network with their trees.

Mushroom Hunt: Go on a mushroom hunt!

How many friendly forest fungi can you count? _____

Draw the types of mushrooms that you find. Can you imagine what their mycorrhizal connections to their tree friends underground look like? Can you draw those, too? Use both sides of this page.