



Relationship #6



One usually thinks of mushrooms as organisms as decomposers living on dead and decaying plant matter. However up to a quarter of the mushrooms you see while walking through the woods actually make their living through a relationship with the trees in the forest. A mushroom is just the reproductive structure of a far more extensive organism consisting of a highly intertwined mass of fine white threads called a mycelium. The mass of the mycelium of the fungus envelopes the roots of the tree in effect greatly increasing the soil area covered by the tree root system. The fungus aids the tree in absorbing water from the soil, increases the stability of the root system, and protects the roots from drying out and the effects of heavy metals. In return the tree provides sugars and starches to the fungus that the fungus uses in its metabolism.

The relationship between fungi and trees can be general with one fungus species entering into a relationship with several tree species. In other cases some tree and fungal species have highly specific relationship between one tree species and one fungus species. It's possible trees and forest, as we know them today could not exist without the mycorrhizal relationships between trees and fungi.