

**November 2021 Gardener's Corner**  
By Cate White, SJ County Master Gardener

**FUNGI**

After our recent massive rainstorm, it is easy to think that the drought is over. Unfortunately, we need many more storms to refill our reservoirs and for the drought to be officially over. So, we will hold good thoughts for a wet winter (but of course not *too* wet). In the meantime, it's important to continue being water-conscious.

One result of the recent rains we are likely to see is the appearance of mushrooms since they thrive in moist conditions. It is fun to go mushroom hunting after a rain and to see how diverse they are. Of course, unless you are truly an expert, wild mushrooms are strictly for observing and not for eating. Mushroom poisonings occur every year, causing severe illness and even death, and it can be very difficult to tell poisonous ones from edible ones. For this reason, you may want to hand pick and discard any mushrooms in your yard to keep both children and pets from coming into contact with them.

Mushrooms are the visible parts of vast networks of underground fungal growth. When conditions are right, fungi produce mushrooms, their fruiting bodies. As mushrooms mature, they release thousands of tiny spores, which spread through the air and produce new fungi where they land. Fungi are essential to life on earth; they decompose plant and animal waste matter, turning it into the rich humus and nutrients that plants thrive on. They grow as individual very thin filaments called hyphae, forming tangled underground networks collectively called mycelium, present throughout the soil. You may find these mycelial mats of tangled white threads when turning over a shovelful of soil. Special networks of Mycorrhizal fungi connect plants to one another by interacting with plant roots, making soil nutrients and moisture available to them. In fact, without these beneficial fungi, plants could not survive. This is one reason that a no-till strategy is now recommended as best practice for building fertile soil. Research on the intricate relationships between fungi and plants is ongoing, and we are only beginning to understand their importance.

There are many beneficial types of fungi. Some can even break down toxic chemicals and other waste materials, rendering them harmless. A few fungi can be harmful, attacking living plant tissue. Blights, rust and powdery mildew are examples of these and can usually be controlled with fungicides such as neem oil. Be aware that damaged parts of the plant can't be restored, so controls are best used as a preventative, or as soon as damage is observed. *Armillaria mellea* is a fungus that attacks the bases of trees or shrubs and produces crowded clumps of honey-colored mushroom. This is a sign that the trunk is rotting, and the plant is dying.

The variety of fungi is almost limitless. Several are pictured, including the above mentioned Armillaria. Also shown is the common but poisonous puffball, which often grows in lawns. One of the most interesting varieties I've found in my yard recently is Bird's Nest fungus, which produces small cups that hold little spheres that look like eggs. The spheres contain fungal spores. These are small structures that often occur in groups and are not known to be harmful or poisonous. If you are interested in learning more about fungi, there is a fascinating new book out called *Entangled Life*, by Merlin Sheldrake. I found it absolutely enthralling, and highly recommend it.



***Armillaria fungus***



*Puffball Mushrooms with cutaway showing black spores inside*



*Bird's Nest fungus*

Information and pictures in this article were taken from the University of California Agriculture and Natural Resources Pest Note # 74100, Mushrooms and Other Fungi in Lawns, and from the book *Entangled Life* by Merlin Sheldrake

### **November Garden Check List**

- Continue planting trees and shrubs until nighttime temperatures drop below freezing.
- Plant spring bulbs and winter annuals such as pansies, violas, stock, Iceland poppies and decorative kale
- There's still time to plant starts of winter vegetables including lettuce, kale, Swiss chard and parsley.
- Cover frost sensitive plants when temperatures drop below freezing.
- Manage snails, slugs, earwigs and ants using baits. Sticky barriers on tree trunks will keep off ants.
- Adjust your watering schedule taking into account dry windy weather, cold and rainfall.
- Strip any "mummies" (dried, shrunken or rotten fruits) from fruit trees.
- Trim citrus 6 inches above the ground to prevent transfer of fungus spores.