

Garden Update  
Week of October 11, 2021  
Kathleen Cue, Nebraska Extension in Dodge County

## Fall's Fungi

This is the time of year when fungi become the topic of conversation. What most people find alarming is the speed with which conks, mushrooms, and puffballs develop. In some cases, it is literally overnight. What is visible are the sporulating structures—the part of fungi that produces the next generation. A good way to think of this is plants make seeds to produce the next generation, fungi produce spores. These spore-producing structures are varied and fascinating, and most people who ask about them are wanting to eat them.

Perhaps it is the tastiness of morels that have people wondering if other fungi taste as good. As mycologist and Master Gardener Dr. Tom likes to say, “There is no antidote when a poisonous mushroom is eaten. The sum of what medical staff can do is to treat the symptoms and hope you survive.” This is a sobering thought indeed when contemplating eating something found in the landscape and emphasizes the need to identify anything before it is eaten.

Mycologists use several characteristics of fungi to identify them. First, the outward appearance is analyzed as to shape, color, and size. This alone is not necessarily enough to ID mushrooms; in which case a spore print is necessary. Spore prints are created by laying a mushroom's cap, gill side down, on a sheet of white paper. (Dark paper is used for spores expected to be white.) A bowl is inverted over everything to keep out drafts and then left in place overnight. The next day the bowl and mushroom is removed to reveal the color and pattern the spores have left on the paper. When coupled with the physical characteristics of an unidentified mushroom, a spore pattern is an excellent tool for identification.

Most fungi are saprophytic, meaning they take in their nutritional needs by decomposing dead organic matter such as leaf litter and wood. Saprophytes are important nutrient recyclers in an ecosystem and keep us from being buried up to our chins in organic material. Some fungi are plant pathogens, killing the plant they are growing in and on. Still others are beneficial to trees (known as mycorrhizae), extending a tree's root system to aid in water and nutrient uptake in return for sugars produced by the tree.

When submitting fungi for identification to your local Extension Office, place them in a paper bag and leave them unrefrigerated until they are dropped off. Plastic bags and chilling speed the decay process, making identification more difficult. Wear gloves to protect your hands or wash hands soon after collection is completed.

A good source for more information about mushrooms is found here:  
[https://www.fs.fed.us/nrs/pubs/gtr/gtr\\_nrs79.pdf](https://www.fs.fed.us/nrs/pubs/gtr/gtr_nrs79.pdf) .