

September EcoQuest: Mushrooms

This September, we're opening the EcoQuest to the entire kingdom of fungi. Fungi are an endlessly fascinating and mysterious kingdom. Mushrooms come in a glorious diversity of shapes, sizes and colors—from the classic red-capped amanita to the bizarre bird's nest fungi and alien-like earthstars.

Mycologists will say, "No fungi, no forests." Fungi are crucial to the health of forests and many other habitats. As decomposers, fungi act as nature's recyclers, breaking down dead plants and animals to return nutrients to the soil. They form symbiotic relationships with plants, with some plants even relying on fungi to germinate. Fungal mycelium connects plants underground, facilitating the transfer of water and nutrients across the forest floor.

Despite their vital roles in ecosystems, fungi are often overlooked and understudied. There are countless species yet to be described to science, and many ecological relationships waiting to be understood.

To contribute to our understanding of these fascinating organisms, let's document Denver's mushrooms on iNaturalist. Mushrooms, which are the fruiting body of the fungus, tend to pop up in the spring and fall, so September is a great time to make observations.

Here are some tips for capturing great mushroom photos:

- 1. Photograph from All Angles:** Take pictures of mushrooms from above, below and the sides. Getting a clear shot of the underside is crucial to see if it has gills, pores, or teeth, and to note their characteristics.
- 2. Observe and Note Characteristics:** Pay attention to details like smell, texture and color changes. Try marking the mushroom to see if it stains or changes color when bruised. Add these descriptions to your post!
- 3. Make a Spore Print:** Remove the cap and place it gill-side down on a piece of paper, cover it with a glass and let it sit for a day. The color of the spore print can be a key identifier. Upload a photo of the spore print alongside your other photos!

As you explore Colorado's rich fungal diversity this fall, share your findings on [iNaturalist](#). Your observations will contribute to the growing body of knowledge about these important and intriguing organisms.

Below are some common species to observe this month in Denver:

- dune stinkhorn (*Phallus hadriani*)
- shaggy mane (*Coprinus comatus*)
- shaggy parasol (*Chlorophyllum rhacodes*)



Shaggy Mane (*Coprinus comatus*), [fungalfireman](#), some rights reserved, CC BY-NC



Deceiver (*Laccaria laccata*), [catastropheelngood](#), some rights reserved, CC BY-NC



Fly Agaric (*Amanita muscaria*), [stepheatyerface](#), some rights reserved, CC BY-NC

- meadow mushroom (*Agaricus campestris*)
- common puffball (*Lycoperdon perlatum*)
- fairy ring marasmius (*Marasmius oreades*)
- fly agaric (*Amanita muscaria*)
- Dyad's saddle (*Cerioporus squamosus*)

What is an EcoQuest?

EcoQuests, part of the Denver EcoFlora project, challenge citizens to become citizen scientists and observe, study and conserve the native plants of the City via iNaturalist, an easy-to-use mobile app.

How Do I Get Started?

1. Download the iNaturalist app or register online at [iNaturalist.org](#).
2. Take photos of the plants in bloom that you find on your daily neighborhood walk. It is ok if they are weeds! But avoid taking photos of cultivated plants in gardens or in your home.

3. If you are concerned about revealing the location of sensitive organisms or observations at your own house, you can hide the exact location from the public by changing the "geoprivacy" of the observation to "obscured."
4. Post your findings on iNaturalist via the app.
5. Your observations will automatically be added to the [Denver EcoFlora Project](#).
6. You can add an identification to your photo when you post your findings on iNaturalist, or leave it blank for others to identify.

What is the Goal?

The EcoFlora project is designed to meaningfully connect citizens with biodiversity, and to assemble novel observations and data on the metro area's flora to better inform policy decisions and conservation strategies.



Photo by Scott Dressel-Martin