

Tips for Taking Mushroom Photos for Identification

Casey Bowlin - M.A. Applied Environmental and Sustainability Studies

Megan Buland and Ellen Crocker - Forestry and Natural Resources, University of Kentucky



Chicken of the woods, *Laetiporus sulphureus*

Identifying mushrooms can be a challenge. Different features are important for determining what species a given mushroom might be. But given their ephemeral nature, studying physical mushroom specimens can be far from straightforward. Taking photos of mushrooms can help you document the mushrooms you encounter, learn more about what you are finding, and share information with others for additional guidance. It is important that your photos are high quality and capture the key information necessary for identification.

This guide provides several general tips and guidance on taking photos of mushrooms to better enable their identification. While the resources in this guide are here to help you better identify mushrooms you might encounter, please keep the following in mind: The ability to identify mushrooms from photos is inherently limited. More precise identification may require physical samples, microscopy, or even DNA-based techniques. However, improving your mushroom photography is a great way to learn more about these interesting species.



Visit our website to find more resources and learn more about mushrooms and the roles that fungi play in forest ecosystems.

[FORESTRY.CA.UKY.EDU/MUSHROOMS](https://forestry.ca.uky.edu/mushrooms)



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Lion's mane, *Hericium erinaceus*

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Shiny cap of the hemlock varnish shelf mushroom, *Ganoderma tsugae*

TAKE IN-FOCUS, HIGH-RESOLUTION PHOTOS

Different species of fungi can, at times, bear striking resemblances to each other, and the defining characteristics that distinguish one species from another can be easy to miss. Take high quality photos (in-focus and high-resolution) to improve your ability to detect these key features. In general, photos are better than video since they are typically higher resolution and easier to zoom in on.

When reaching out to other resources for identification assistance, it is important only to submit photos you have taken of the mushroom you are wanting to identify. Do not use images found online that resemble the mushroom you wish to identify; although they might look alike, this may be an entirely different species.

WHERE IS IT GROWING?

Take a picture of the fruiting body in its natural environment. Be sure to include an additional object as a measurement reference (e.g. ruler, water bottle, phone, or even just your hand with fingers extended). If the mushroom is growing near plants or from wood, try to include these. If you can identify what species it is growing from, this can also be useful information for identification.



Geometric pores on the underside of caps of the hexagonal-pored polypore, *Neofavolus alveolaris*, growing on dead wood

THE ENTIRE MUSHROOM

Take a clear, focused photo of the entire mushroom including the stem and base. Some mushrooms have distinctive features along the stem (e.g. rings, scales) or base (e.g. sack-like membrane, swelling) important in mushroom identification.



Seeing the entire mushroom might require looking under the leaf litter, like for this *Amanita*

TOP OF THE CAP

Take a photo of the cap or top of the mushroom. Most mushroom caps have some defining characteristics including texture, color, the presence or absence of scales and patches, color changes or cracking with age, or zonation.



Scales, left over from the universal veil, on the cap of an *Amanita* mushroom



Remnants of the partial veil on the underside of the cap of this destroying angel mushroom, *Amanita bisporigera*

UNDERSIDE OF THE CAP

Don't forget to take a photo of the underside of the cap. This area typically features gills, pores, or teeth. Mushroom spores also are produced under the cap, and the area is an essential feature for most mushroom identification. Not all mushrooms have a clearly defined cap (for example, morels, puffballs, and stinkhorns do not fit this form). But for most, this area provides important information to help you make an accurate identification.

CROSS-SECTION OF THE MUSHROOM

If possible, taking a photo of a cross-section of a mushroom that has been cut in half can be useful. Many mushrooms tend to bruise, bleed, or exhibit changes in coloration when the flesh is cut. This information can be useful in narrowing down species identification.



Cutting the cap reveals dark staining of this *Boletus* mushroom