

SUMMER MUSHROOMS



TEXT AND PHOTOGRAPHS BY DAVE BRUMFIELD
DESIGNED AND ILLUSTRATED BY DANETTE RUSHBOLDT

INTRODUCTION

For much of the year, any walk through the woods reveals an assortment of fascinating mushrooms, each playing an important role in the forest ecosystem.

This guide serves as a reference for some of the mushrooms you may encounter while hiking in the Metro Parks. It is arranged in three sections: mushrooms with gills, mushrooms with pores, and others. Each mushroom is identified by its common and scientific name, a brief description, where and when it grows, and some fun facts.

As you venture into the woods this summer, take a closer look at the mushrooms around you. Our hope is that this guide will help you to identify them, develop a better understanding of the role they play in nature, and inspire you to further explore the world of mushrooms.

Remember, mushrooms can be very tricky to identify – it's best to avoid eating any found in the wild, as many varieties are dangerous or even deadly to consume.

Happy Mushrooming!

NATURALIST DAVE BRUMFIELD

* Due to recent DNA studies and current taxonomic uncertainty, some scientific names may have changed.

GLOSSARY OF TERMS

FRUITING BODY The reproductive structure of a fungus; typically known as a mushroom.

FRUITING The reproductive stage of a fungus when a mushroom is formed.

FUNGUS A group of organisms that includes mushrooms and molds.

HYPHAE Thread-like filaments that grow out from a germinated spore.

MYCORRHIZAL Having a symbiotic relationship between a plant root and fungal hyphae.

PARASITE Fungus that grows by taking nourishment from other living organisms.

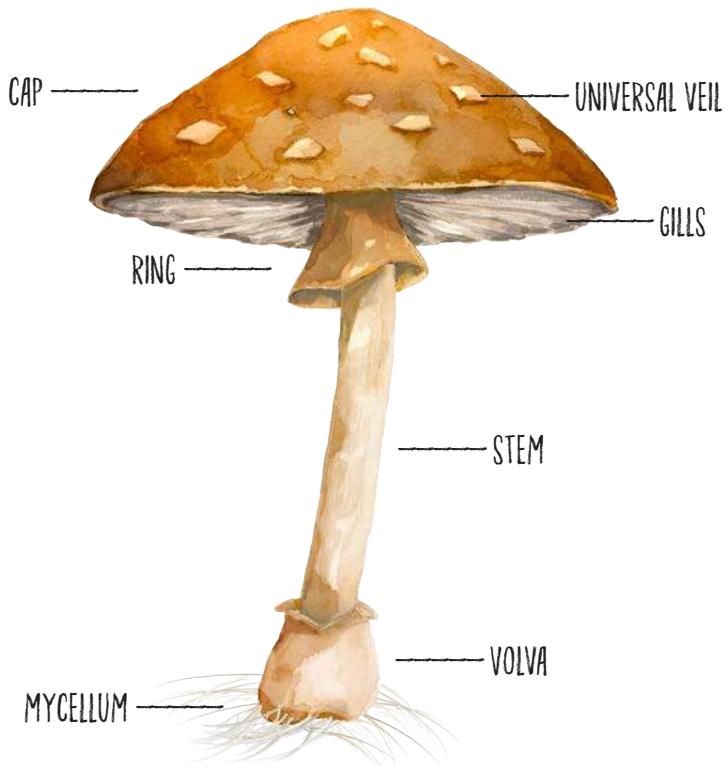
POLYPORE A group of fungi that form fruiting bodies with pores or tubes on the underside through which spores are released.

SAPROPHYTE A fungus that grows by taking nourishment from dead organisms.

SPINES Small “teeth” hanging down from the underside of the cap of a mushroom.

SPORE A microscopic, reproductive unit of a fungus, similar to a seed in an apple.

STRUCTURE OF A MUSHROOM



CAP Supports and protects the gills; color and shape depend on stage of growth and species.

GILLS The lower surface of the cap, composed of blade-like layers stacked side by side. Spores are produced and released by the gills; other mushrooms have pores, teeth-like structures or some other means of spore dispersal.

MYCELIUM The mass of thread-like hyphae found in soil and other substrates; it absorbs nutrients from the substrate. When conditions are right, mushrooms develop as the fruiting body of the mycelium.

RING As a mushroom matures, a partial skin covers the edge of the cap to the stem. The ring is what is left when the mushroom cap grows and stretches the skin to breaking.

STEM The structure that holds the cap above ground; not all mushrooms have a stem.

UNIVERSAL VEIL A tissue surrounding the developing mushroom button (it is like the shell covering an egg).

VOLVA If the mushroom has a universal veil, what is left at the bottom of the stem when the veil is broken is the volva; common in Amanita species.

TABLE OF CONTENTS

GILLED MUSHROOMS

AMETHYST DECEIVER (<i>Laccaria amethystina</i>)	1
BLUSHER (<i>Amanita rubescens</i>)	2
CORRUGATED MILKY CAP (<i>Lactarius corrugis</i>)	3
DESTROYING ANGEL (<i>Amanita bisporigera</i>)	4
MEADOW MUSHROOM (<i>Agaricus campestris</i>)	5
ORANGE MYCENA (<i>Mycena leaiana</i>)	6
PARROT MUSHROOM (<i>Gliophorus psittacinus</i>)	7

POLYPORES

CHICKEN OF THE WOODS (<i>Laetiporus sulphureus</i>)	8
TWO-COLORED BOLETE (<i>Boletus bicolor</i>)	9

OTHERS

BEARDED TOOTH (<i>Hericium erinaceus</i>)	10
CHANTERELLE (<i>Cantharellus flavus</i>)	11
COMMON SPLIT GILL (<i>Schizophyllum commune</i>)	12
EYELASH CUP (<i>Scutellinia scutellata</i>)	13
FALSE TURKEY TAIL (<i>Stereum ostrea</i>)	14
GEM-STUDDED PUFFBALL (<i>Lycoperdon perlatum</i>)	15
VIOLET CORAL (<i>Clavaria zollingeri</i>)	16
HOW TO MAKE A SPORE PRINT	17

AMETHYST DECEIVER (*Laccaria amethystina*)



Photo taken at Furnace Run Metro Park

DAZZLING!



It's easy to SEE how
this mushroom got
its COMMON name.

WHERE DOES IT GROW?

- Fruits on the ground in hardwood forests, especially under oak and beech trees; mycorrhizal

HOW TO IDENTIFY IT

- Cap is purple, convex with a central depression
- Gills are waxy and deep purple, attached and thick, interspersed with short gills
- Stem is light purple, up to 3 inches tall

FUN FACTS

- It is vividly purple when young, but loses the bright color as it ages, making it more difficult to identify and thus is a "deceiver."



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

BLUSHER (*Amanita rubescens*)



WELL, THIS IS
EMBARASSING



Amanita rubescens
gets its COMMON
name, BLUSHER,
because its
flesh reddens
or "BLUSHES"
when touched.

WHERE DOES IT GROW?

- Fruiting body grows on the ground in oak woods and under white pines; grows alone, scattered or in groups; mycorrhizal

HOW TO IDENTIFY IT

- Cap is a dull and brassy reddish-brown, 2 to 6 inches across; convex to flat; covered with wart-like patches (sometimes washed off with rain) spread over the cap
- Stem is 3 to 8 inches tall; whitish, becoming a dirty red and hollowing with age; has a prominent ring
- Gills are close; free from the stem or slightly attached

FUN FACTS

- Some mushrooms are poisonous no matter how appealing they look.
NEVER eat a wild mushroom unless you are certain of its identity.



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

CORRUGATED MILKY CAP (*Lactarius corrugis*)



Photo taken at O'Neil Woods Metro Park

GOT MILK?

Gills are ATTACHED, close together and BUFF in color; they change to orange and finally YELLOW.

WHERE DOES IT GROW?

- Fruiting body grows on the ground, mycorrhizal with oak and other hardwoods

HOW TO IDENTIFY IT

- Cap is reddish-brown to rusty brown; convex then becoming sunken; 2 to 8 inches across; velvety, dry and sometimes wrinkled at the margins
- Latex is white, and stains brown when bruised

FUN FACTS

- This mushroom belongs to a group of mushrooms that exudes white latex when bruised or broken, thus the name "milky cap."



Gills can become WAVY with age.

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

DESTROYING ANGEL (*Amanita bisporigera*)



Photo taken at Furnace Run Metro Park

POISONOUS



Most mushroom **FATALITIES** in North America result from **EATING** this deadly beauty.

WHERE DOES IT GROW?

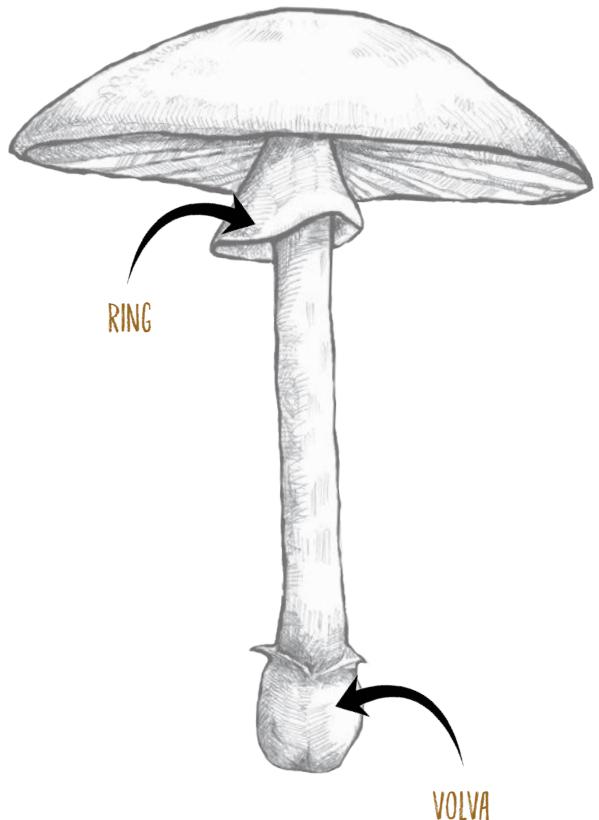
- Fruits on the ground in the woods; mycorrhizal with oaks

HOW TO IDENTIFY IT

- Cap is smooth, convex to flat; white and 2 to 5 inches across
- Stem is white, 3 to 8 inches tall; small membranous ring near the top; white volva encompasses the base (usually buried)

FUN FACTS

- “If an animal can eat it, I can eat it.” This is not true! Squirrels and rabbits can eat Amanita mushrooms, but they are poisonous to people.



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

MEADOW MUSHROOM (*Agaricus campestris*)



Meadow MUSHROOM
SPORE prints
are BROWN.

WHERE DOES IT GROW?

- Fruits in lawns, meadows, pastures and grassy areas; solitary or in groups, sometimes in fairy rings; saprophytic

HOW TO IDENTIFY IT

- Cap is smooth and white, 2 to 4 inches across; begins convex and flattens out as it matures
- Stem is 1 to 3 inches tall, with a thin ring that may disappear as the mushroom matures
- Gills are crowded and free, starting pink and progressing to dark brown

FUN FACTS

- The meadow mushroom is closely related to the white mushroom (*Agaricus bisporus*) found in grocery stores.



These mushrooms
are a FAVORITE
FOOD for eastern
box TURTLES.

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

ORANGE MYCENA (*Mycena leaiana*)



Photo taken at F.A. Seiberling Nature Realm



The STEM of orange mycena sometimes exudes an orange "JUICE" when squeezed.

"ORANGE" YOU DELIGHTFUL!

WHERE DOES IT GROW?

- Fruits on dead, deciduous wood (particularly beech); usually in clusters; saprophytic

HOW TO IDENTIFY IT

- Cap is a bright orange (fades as it matures), a half-inch to 2 inches wide
- Stem is orange and 1 to 2.5 inches tall
- Gills are orange and attached; spore print is white

FUN FACTS

- *Mycena leaiana* was named after Thomas Gibson Lea (1785-1844), a mushroom collector from Cincinnati, Ohio.



Orange mycena is a FAVORITE food of the PLEASING BEETLE.

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

PARROT MUSHROOM (*Gliophorus psittacinus*)



Photo taken at F.A. Seiberling Nature Realm



EARLY STAGE



END STAGE

WHERE DOES IT GROW?

- Fruits on the ground in hardwood and coniferous forests

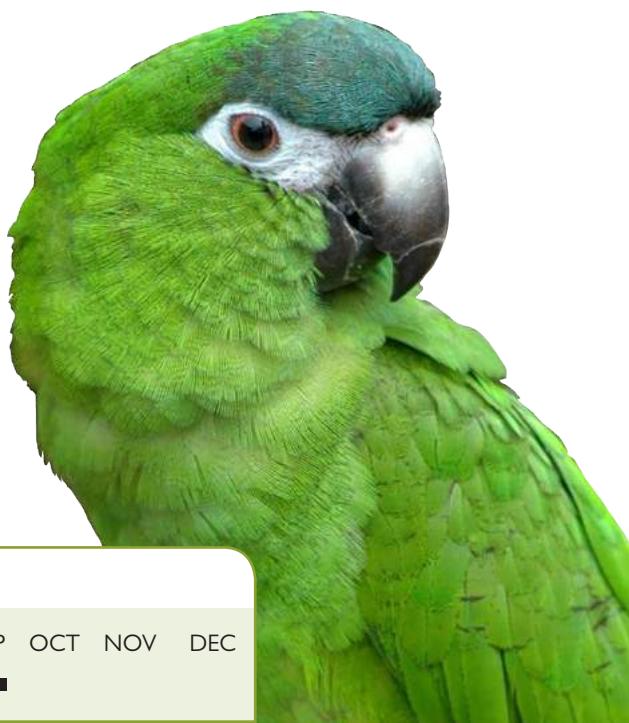
HOW TO IDENTIFY IT

- Cap is conical to bell-shaped; green when young, quickly fading to orangish-yellow; often slimy
- Stem is 1 to 3 inches tall, greenish to yellowish
- Gills are attached; greenish to yellowish

FUN FACTS

- The parrot mushroom belongs to a group of mushrooms known as waxy caps because they all have thick, waxy gills.

GREEN WITH
ENVY!



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

CHICKEN OF THE WOODS (*Laetiporus sulphureus*)



SAME, BUT
DIFFERENT



Laetiporus cincinnatus

WHERE DOES IT GROW?

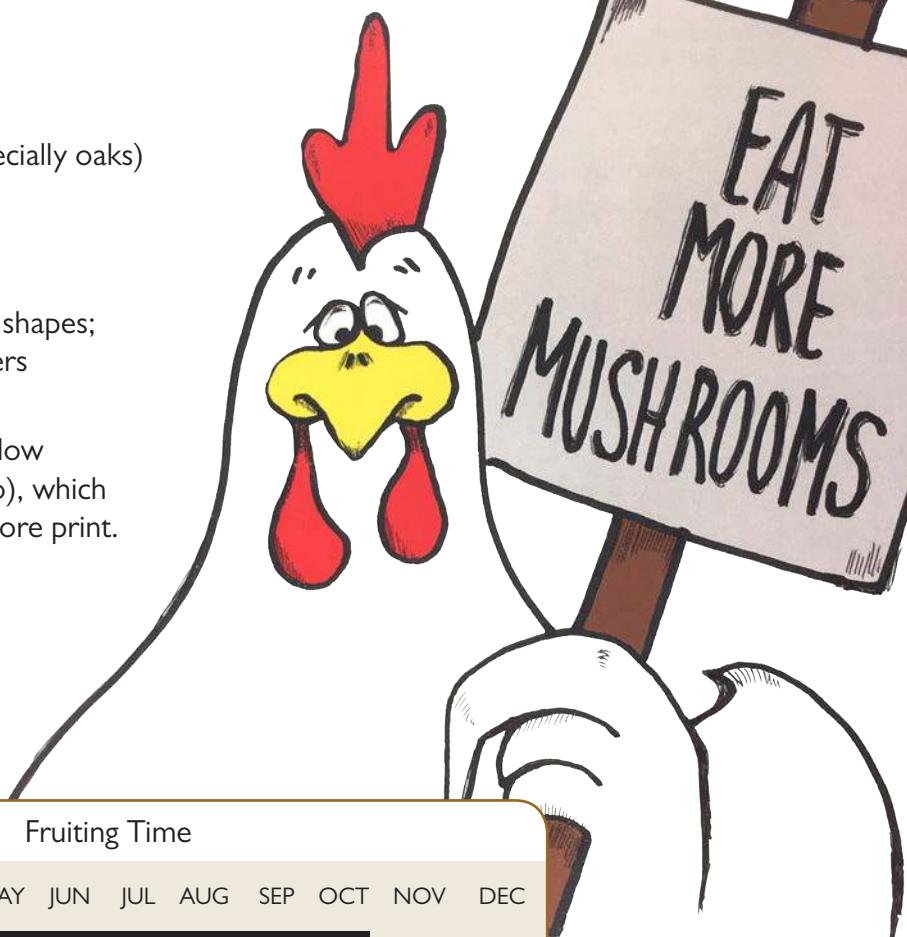
- Fruits on living and dead hardwood trees (especially oaks)

HOW TO IDENTIFY IT

- Caps are yellowish-orange and fan to irregular shapes; 2 to 16 inches wide, often in overlapping clusters or rosettes
- Pore surface on the underside of the cap is yellow compared to *Laetiporus cincinnatus* (right photo), which has a white pore surface. Both have a white spore print.

FUN FACTS

- Chicken of the Woods is one of the most recognizable fungi in North America.



JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TWO-COLORED BOLETE (*Boletus bicolor*)



SHHH...
IT'S A SECRET!

This VELVETY, rosy capped mushroom has a SECRET. Its bright YELLOW pore surface slowly bruises BLUE when the pores are INJURED, making it easy to carve into.

WHERE DOES IT GROW?

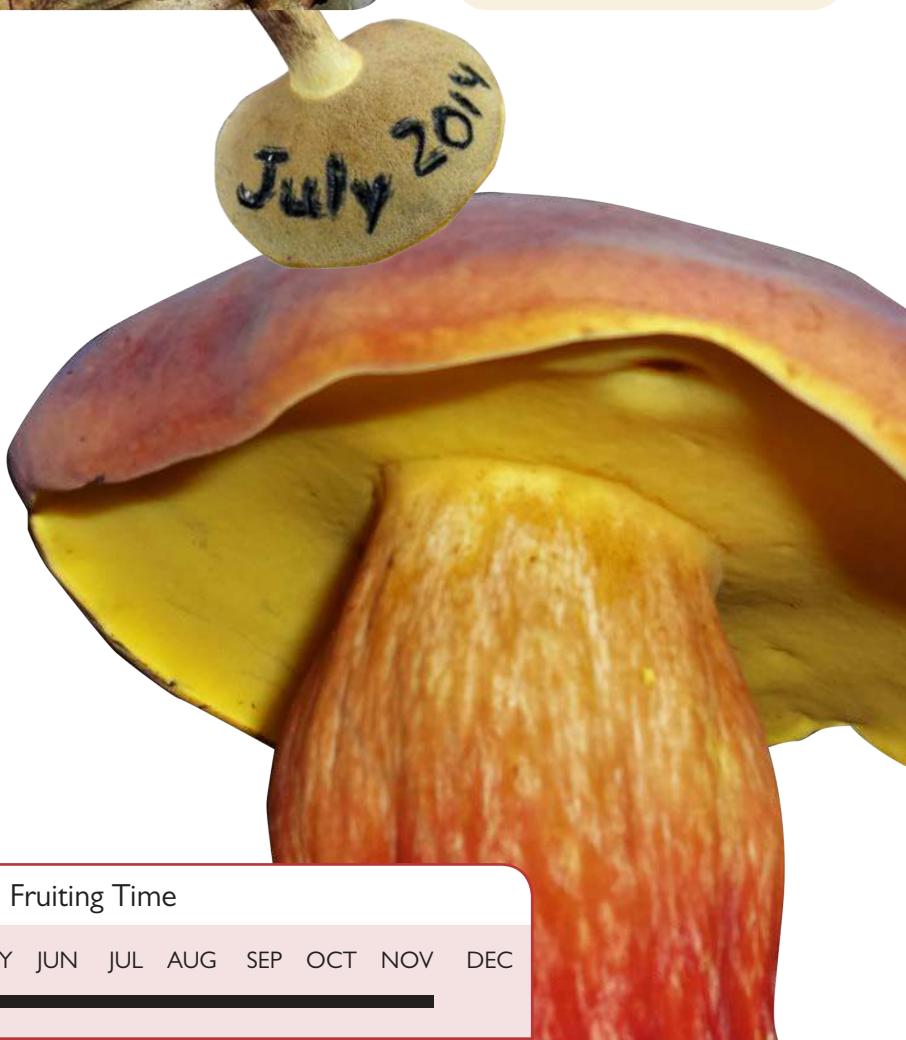
- Grows on the ground in the woods, especially near oaks; mycorrhizal

HOW TO IDENTIFY IT

- Rosy-red cap, 2 to 6 inches wide
- Stem is red, 2 to 4 inches tall

FUN FACTS

- The beautiful red cap and contrasting yellow underside give the two-colored bolete its name



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

BEARDED TOOTH (*Hericium erinaceus*)



Photo taken at F.A. Seiberling Nature Realm

The PURPOSE of these TEETH is to manufacture and release SPORES.



WHERE DOES IT GROW?

- Often fruits high on living tree trunks (parasitic); also on dead or dying trees (saprophyte), especially beech and oak

HOW TO IDENTIFY IT

- Fruiting body is a roundish clump with long, hanging spines (teeth); white in color, becoming yellowish with age. The clump can grow 4 to 10 inches wide and high with the spines 2 to 3 inches long.

FUN FACTS

- This species of tooth fungus has many other common names including Pom-pom and Icicle mushroom.



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

CHANTERELLE (*Cantharellus flavus*)



Photo taken at Sand Run Metro Park



SEE THE RESEMBLANCE?

WHERE DOES IT GROW?

- Fruiting body grows on the ground; mycorrhizal with hardwood trees, especially oaks; grows singly or in small groups

HOW TO IDENTIFY IT

- Cap is yellow to yellow-orange with wavy margins, somewhat funnel-shaped at maturity, and up to 5 inches wide
- Underside of cap has thick ridges that descend the stem
- Stem is 4 to 5 inches tall; color is similar to the cap

FUN FACTS

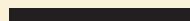
- As with all chanterelles, these mushrooms have “false gills.” They are not sharp and blade-like, but rather well developed ridges.



ENLARGED RIDGES

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



COMMON SPLIT GILL (*Schizophyllum commune*)



FUZZY WUZZY!



MR. POPULAR

Split gill is the most **WIDESPREAD** mushroom on the **PLANET**.

WHERE DOES IT GROW?

- Fruits on dead wood, logs and branches; solitary, scattered or in overlapping clusters; saprophytic

HOW TO IDENTIFY IT

- Cap is fan-shaped, covered with white hairs; no stem; a half-inch to 1.5 inches across
- Gill-like folds on the underside are deeply grooved and split lengthwise; whitish-gray to pink in color; spore print is white

FUN FACTS

- Shrivels up during dry weather, then rehydrates and revives during times of wet weather; found year-round

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



EYELASH CUP (*Scutellinia scutellata*)



Photo taken at F.A. Seiberling Nature Realm

THE "EYES"
HAVE IT!



CLOSE-UP VIEW

WHERE DOES IT GROW?

- Fruits on wet, well decayed wood (logs and stumps); saprophytic

HOW TO IDENTIFY IT

- Fruiting body is cup-shaped and orange-red in color; surrounded by short, dark hairs around the outer rim; grows in clusters, $\frac{1}{8}$ to $\frac{3}{4}$ inch across

FUN FACTS

- When you get a close look at these tiny mushrooms, dark hairs on the cups' edges look like eyelashes.

SEE THE RESEMBLANCE?



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

FALSE TURKEY TAIL (*Stereum ostrea*)



WHO ARE YOU
CALLING TURKEY?

The FALSE turkey tail mushroom has a **SIMILAR** banding pattern as the turkey tail mushroom, but **NO** visible pores.



UNDERSIDE of a FALSE turkey tail mushroom.

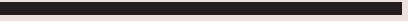


UNDERSIDE of a TURKEY tail mushroom.

(See the pores?)

Fruiting Time

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



GEM-STUDDED PUFFBALL (*Lycoperdon perlatum*)



Photo taken at Sand Run Metro Park



Spore MASS inside
is white and
solid when young.
As it matures, the
SPORES go from
white to yellow
to brown and
become POWDERY.

WHERE DOES IT GROW?

- Grows on the ground, both in the woods and open areas where it decomposes organic material; saprophytic

HOW TO IDENTIFY IT

- Small, pear-shaped mushroom covered in short, spiny bumps; white when young and becomes brown with age; 1 to 2 inches across; 1 to 3 inches tall.



FUN FACTS

- Looking like a medieval weapon of warfare, you need not fear: The tiny spikes surrounding this mushroom break off easily when handled.

IT ONLY LOOKS PAINFUL!

Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

VIOLET CORAL (*Clavaria zollingeri*)



DON'T BE FOOLED!

Violet coral
MUSHROOMS only look
like they belong in
the OCEAN.



WHERE DOES IT GROW?

- Fruiting bodies grow on the ground in mixed hardwood forests; saprophytic

HOW TO IDENTIFY IT

- Tubular, upright branches grow from a common base; up to 4 inches tall
- Branches are purple to pinkish-violet

FUN FACTS

- This species of mushroom was named after Swiss botanist Heinrich Zollinger, who specialized in the study of the genus *Clavaria*. Why a botanist? Up until 1969, mushrooms were classified as plants.



Fruiting Time

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

HOW TO MAKE A SPORE PRINT

One **METHOD** that helps in the identification of mushrooms is to make a spore print. Some mushrooms look very **SIMILAR** but differ in the **COLOR** of their spores.

To make a spore **PRINT**,

1. Remove the **CAP** from a mature, fresh specimen. Be sure it is dry.
2. Turn it **GILL** side down on a piece of white paper (some people recommend both black and white paper since the spores can be dark or light).
3. Cover the cap with a plastic cup or glass to **PROTECT** it and let it sit undisturbed for 24 hours or overnight.
4. **LIFT** up the cap carefully to reveal the pattern of spores left on the paper. Compare your results with descriptions given in field guides.

