

Important Features to Observe in the Field

This handout is provided as a pdf file so that you can print it out and use it in the field until you become more familiar with what is important to observe about wild mushrooms.

As you begin to learn about mushrooms, one of the things you will want to do is go outside where you can observe how and where they grow: in the woods, in some parks, and even in your own yard. If possible, join a local mushroom club so that you can go on forays with more experienced people who will help you ID your mushrooms. Then take them home and use this handout to observe their features, if you didn't already do this while in the field.

Most of the features used in this handout are easy to understand, but there are some that might be unfamiliar to you. I have tried to use words that are self-describing or defined the word in the handout. An example is the use of "Surface Ornamentation" of the cap where I list many descriptions of what this phase means, such as the cap is smooth, cracked, wrinkled, has warts, etc. Another one is "Latex Present?" This is the liquid that appears when you cut or injure the gills of some mushrooms, especially in the genus *Lactarius*. There can be different colors that appear and they can even change to another color in time, some quickly and some more slowly.

Learn the parts of a mushroom that are provided on this website. This will make words such as "partial or universal veil" more understandable, or what is a "volva or a ring?" I have provided pictures on parts of a mushroom, gill attachments, and the many cap shapes. You can also learn how to make a spore print. This is one of the most important features needed to correctly ID many mushrooms.

The "Spore-bearing Surface" is usually where the gills, teeth, ridges, or pores are located on some mushrooms, but there are also mushrooms that have their spores develop elsewhere. As you continue to use this website you will become more and more familiar with the terms used. The flash cards are a beginning to understanding the description of mushrooms. As this site develops there will be even more information for you to explore.

Important Features to Observe in the Field

Elevation: _____

Date: _____

Topography: ridge upper slope mid slope lower slope valley low place roadside trailside other _____

General Habitat: dominant trees: _____ shrubs: _____ herbs: _____ wood debris: _____

Age of Mushroom: immature mature old mixed ages

Species: _____

Cap Characteristics of Gilled Mushrooms

Width of Cap: _____ **Surface Texture:** dry greasy sticky slimy waxy other _____

Color of Cap when Young: _____ **Color of Cap when Mature:** _____

Cap Shape: rounded flat irregular centrally depressed cone-shaped navel-shaped funnel-shaped central bump
bell-shaped other _____

Margin Shape: even irregular uplifted curved backwards curved upwards rolled inwards wavy veil tissue hanging
other _____

Cap Has: spots streaks bruising/staining reactions changes with age **Color of Bruising or Staining:** _____

Surface Ornamentation: smooth finely hairy cracked wrinkled scaly granular velvety silky matted hairs fibers
fibers arranged radially glittering veil remnants warty other _____

Flesh Consistency: fleshy brittle spongy tough breaks like chalk other _____

Hygrophanous: does it change appearance when wet or drying out? N Y **Hygrophanous Location:** margin of cap center of cap

Latex Present: Y N **Color of Latex:** _____ **Does Latex Change Colors?** Y N **What Color?** _____

Veil Characteristics of Gilled Mushrooms

Any Veil or Veil Remnant Present on Cap: N Y **Location of Veil Remnant(s):** _____

Partial Veil Structure Covering Gills: persistent sparse fibers slimy other _____

Universal Veil: N Y **Universal Veil Structure:** thin & pliable slimy thin cottony fibers

Volva Shape: sack-shaped collared sheath-like concentric zones or circles

Gill Characteristics

Color of Spore Deposit: white/creamy brown rusty-brown chocolate-brown pink black

Attachment to Stalk: free attached notched descends stalk other _____

Gill Edge Shape: even scalloped wavy saw toothed eroded other _____

Number of Short Gills between Complete Gills: _____ **Spacing of Gills:** crowded close distant

Color of Bruising or Staining: _____

Stalk Characteristics of Gilled Mushrooms

Length of Stalk:

Height of Entire Mushroom:

Stalk Shape: equal in width middle fattest tapered at top tapered at base club-shaped bulbous rooted twisted other _____

Surface Texture: viscid sticky dry polished smooth fibers tiny scales/spots

Surface Ornamentation: lightly powdered scaly fibers netted coarsely netted smooth other _____

Color of Ornamentation: _____

Location of the Net-like System, if Present: top only top _ of stalk entire stalk other _____

Stalk Consistency: rigid & snaps fibrous breaks like chalk **Stalk Interior:** solid stuffed hollow other _____

Ring Present: N Y **Ring Color:** _____

Ring Structure: thin & pliable fibers cottony-cortina slimy **Ring Type:** single double

General Position of Ring on Stalk: near the top central near the bottom

Color of Bruising or Staining: _____

Miscellaneous

Odor: mild strong pleasant unpleasant mealy/of flour fragrant other _____

Taste (don't swallow): mild strong bitter pleasant unpleasant peppery/hot sweet other _____

Habitat Characteristics of Gilled Mushrooms

Growth Habit: solitary scattered stalks grow close together grow in irregular groups-not joined in rings

Substrate: on Duff: pine cones leaves needles twig litter on Another Fungus: Y N on Wood: conifer hardwood

on Soil: on humus in moss

on an Insect: Y N

Non-gilled Mushrooms - General Characteristics

Type: morel elfin saddles cup earthstar puffball bolete tongue crust coral jelly polypore truffle-like veined

Height of Entire Mushroom:

Width of Entire Mushroom unless there is a Stalk:

Width of Cap, if Present:

Length of Stalk, if Present:

Overall Shape: cup disk cushion rabbit-ear end looks cut off club-like spatula-like saddle-shape stalk-like brain-like
pitted other _____

Cap Characteristics of Non-gilled Mushrooms:

Type of Spore-bearing Surface: spines/teeth pores smooth other _____ **Color of Spore-bearing Surface:** _____

Color of Cap when Young:

Color of Cap when Mature:

Color of Bruising or Staining:

Cap Shape: rounded flat irregular centrally depressed funnel-shaped other _____

Surface Ornamentation: smooth finely hairy cracked wrinkled granular velvety silky matted hairs fibers
warty other _____

Surface Texture: dry greasy sticky slimy other _____

Margin Shape: even irregular curved backwards curved upwards rolled inwards wavy other _____

Flesh Consistency (in cross section): gelatinous fleshy brittle tough rubbery spongy other _____

Stalk Characteristics of Non-gilled Mushrooms:

Stalk Shape: equal in width middle fattest tapered at top tapered at base club-shaped bulbous rooted twisted other _____

Surface Texture: viscid sticky dry polished smooth fibers tiny scales/spots

Surface Ornamentation: glandular dotted lightly powdered scabers scaly fibers netted coarsely netted smooth other _____

Color of Ornamentation: _____ **Color of Bruising or Staining:** _____

Location of the Net-like System, if Present: top only top _ of stalk entire stalk other _____

Stalk Consistency: rigid & snaps fibrous other: _____ **Stalk Interior:** solid stuffed hollow other _____

Miscellaneous:

Odor: mild strong pleasant unpleasant mealy/of flour fragrant other _____

Taste (don't swallow): mild strong bitter pleasant unpleasant peppery/hot sweet other _____