

**TOOTHED** – What's unique about these mushrooms is that they produce spores on their icicle-like spines instead of on veins, wrinkles, pores, or gills.



Hedgehog (*Hydnum*)



Lion's Mane (*Hericium*)

**TOOTHED** – Mushrooms in this group all have teeth on their spore-bearing surface – but that doesn't mean they're closely related. Some can be difficult to identify, but there are a few easy ones that some consider good edibles. Several can be used to make dyes, and others for medical research.

**POLYPORE** – If it's tough, corky, or leathery and growing out of decaying wood, it's probably a polypore. They often have fine pores on the underside, but, unlike those on Boletes, these pores cannot be easily separated from the cap. Some are used for medicinal purposes, but generally they are too tough to attempt eating.



Sulphur Shelf (*Laetiporus*)



Turkey Tail (*Trametes*)



Red-belted Conk (*Fomitopsis*)

**POLYPORE** – Some common species in this woody group are the **Sulphur Shelf (Chicken of the Woods)**, the colourful **Turkey Tail**, with its rows of fans, and the **Red-belted Conk**, a perennial that grows a new pore layer every year. Polypores can be found on living and dead trees, sometimes killing their host.

**OTHER NEAT 'SHROOMS** – This section includes a fascinating variety of mushrooms that have evolved unique mechanisms and shapes to try to spread their spores more widely.



Fairy Fingers (*Clavaria*)



Upright Coral (*Ramaria*)



Carbon Antlers (*Xylaria*)

**CLUBS & CORALS** – Members of these groups typically have erect, simple, or branched fruiting bodies (mushrooms). Some are named for their similarity to marine coral. They can be solitary or in groups, on the ground, on decaying vegetation, or on dead wood. It can be difficult to determine the exact species in this group.



Witch's Butter (*Tremella*)



Gemma Puffball (*Lycoperdon*)



Earthballs (*Scleroderma*)

**PUFFBALLS & SIMILAR** – This group also includes **Earthstars** and **Dead Man's Foot**. All have spores housed in a capsule that grows thin and breaks, releasing the spores. Spores are also released when the mushroom is stepped on or hit by raindrops. The inset photos show where the capsule has opened.



Fluted Bird's Nest (*Cyathus*)

**BIRD'S NEST FUNGI** – Tiny (<2cm wide) and aptly named, members of this group have small cups containing spore cases (peridioles) that look like eggs. Rain hits the spore cases and propels them up to 2m out of the cup to release their spores. Each case can hold up to 50 million spores!



Black Morel (*Morchella*)



Fluted Black Elfin Saddle (*Helvella*)

**MORELS & SIMILAR** – The caps of the mushrooms in this group can be ridged, pitted, saddle-shaped, lobed, or irregular. Some of the prized edible **Morel** species can be found after forest fires and should be cooked well before eating. The **False Morel (Gyromitra)** looks more like brains on a stem and is poisonous.



Orange Peel Fungus (*Aleuria*)

**CUPS** – Species in this group have cup-shaped fruiting bodies that release their spores up and into the wind. Some may expel a cloud of spores just by being warmed in your hand. The carotene-containing **Orange Peel Fungus** is aptly named, and is common in urban areas, in hard-packed soil.



Lobster Crust (*Hypomyces*)

**PARASITIC MUSHROOMS** – The **Lobster Crust**, the colour of cooked lobster, is one example of a parasitic mushroom. It is actually a parasitic mold that grows on, engulfs, and transforms the **Short-stemmed Russula**. While it initially assumes the shape of its host, over time the mushroom becomes misshapen and eventually may not resemble the host at all.

## RESOURCES

### How to Identify Your Mushroom

(use QR code at right for more help)

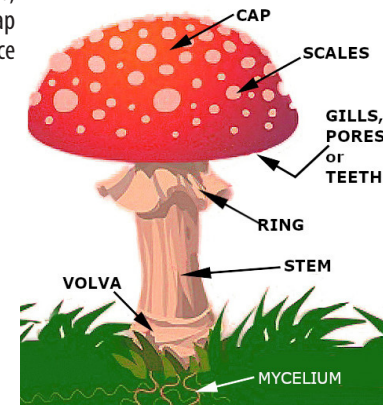
- First: get a good guide book. Refer to QR code for list.
- Take a picture of the mushroom in nature and note the location and what it is growing on (tree, log, grass, etc.).
- Is the base of the stem encased in a volva?
- If you pick a sample, take colour pictures of the top and underside of the cap and a side view of the whole mushroom.
- Describe what the top and underside of the cap and stem look and feel like. Does the stem snap like chalk, or is it hollow and stringy? Does the flesh change colour when broken? Is there a ring present on the stem? Details like these can be important clues.
- Cut it in half lengthwise and take a picture. Look at how the gills are attached to the stem.
- Take note of any odour.
- If you have a mature sample, you can do a spore print to determine the spore colour. Cut off the cap and place it underside down on half black / half white paper (to reveal all spore colours), cover it with a bowl, and leave it overnight. Note the colour. See video in QR code.



TINY.ONE/FUNGI

**SAFETY NOTE:** It is safe to handle mushrooms, but after doing so, always wash your hands with soap and water before touching your face or eating.

### Parts of a Mushroom



### Spore Print



### Fungi Harvesting Rules

It is illegal to pick mushrooms in Delta parks or regional, provincial, or national parks, as well as on private property (unless you have permission). For parks in other municipalities, check their local bylaws. Harvesting may be allowed on Crown land, but some of that is managed by First Nations and you should ask for permission before going on the land.

Photos and text by members of the



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Delta



## Mushrooms in Delta

Mushrooms belong to the kingdom Fungi and come in several types. Decomposers break down plant materials. Symbionts live in close association with plants (mycorrhizal), animals, or other fungi. Parasites live off a host; they may be benign, cause their host disease, or kill it altogether. Predators trap and consume tiny creatures in the soil.

The mushrooms that you see are actually part of a larger underground network of cells called a mycelium, which can resemble a spider's web. The mycelium creates mushrooms to spread its spores, in the same way that an apple tree produces apples to spread its seeds. When spores land in the right environment, they germinate and create a new mycelium. Using water provided by the mycelium, mushrooms can grow from tiny pinheads to giants.

This brochure describes groups or genera of mushrooms with similar characteristics, not necessarily individual species (sp.). This is not an identification guide, as it mentions fewer than 60 of the more than 3,000 species known to grow in BC.



It is common in many cultures to collect mushrooms for various purposes; however, **CONSUMING WILD MUSHROOMS IS STRONGLY DISCOURAGED WITHOUT ABSOLUTE CONFIDENCE OF SPECIES ID AND EDIBILITY.**

Use the iNaturalist app or go to [inaturalist.org](http://inaturalist.org) for help identifying species and recording their locations.

**GILLED** – This large group contains familiar mushrooms such as the Button, Shiitake, and Oyster mushrooms. Under the cap are sheet-like blades called gills from which reproductive cells (spores) are discharged. The spore colour is useful for identification (see back panel).



Short-stemmed Russula



The Sickener



Russula sp.

**RUSSULAS** – Common in forests, this genus of light-spored mushrooms contains many colourful species. The stems of *Russula spp.* are usually shorter than the cap is wide and have no ring. Key features are their brittle flesh and a stem that snaps like chalk. Lab analysis may be required for accurate species identification.



Red Hot Milk Cap (*Lactarius*)



Delicious Milk Cap (*Lactarius*)

**MILK CAPS** – Although in some ways similar to *Russula spp.*, this genus is distinguished by liquid (see inset) that oozes out if the flesh of the cap or gills is damaged. In some species it looks like milk, although it may be other colours. Some in this genus are considered good edibles. All are associated with trees (mycorrhizal).



Witch's Hat (*Hygrocybe*)



Cowboy's Handkerchief (*Hygrophorus*)

**WAXY CAPS** – These members of a light-spored group are lumped together because their gills are shiny and feel greasy, like soft wax. They're usually found in the woods, as they are associated with certain trees. This is a large group, with over 100 species found in BC.



Shaggy Parasol (*Chlorophyllum*)

**SHAGGY PARASOL GROUP** – These common, handsome mushrooms can be easy to recognize. All have at least one ring on the stem, and one species has a double-edged ring. All have brownish scales on the cap (up to 15cm wide), and light spores. They can be found in forests and grassy areas and on roadsides.



White Parasol (*Leucoagaricus*)

**WHITE PARASOL** – This common decomposer, unrelated to the **Shaggy Parasol**, is often found in grassy areas and gardens. The ring may be thick, cottony, and moveable. Another common name is **Ma'am on a Motorcycle**, as the caps of the young can look like motorcycle helmets and the developed ring can look like a skirt.



Fly Agaric



Western Yellow-veiled Amanita



*Amanita vaginata*



Death Cap

**AMANITAS** – This genus includes some of the most beautiful—and most deadly—mushrooms. The **Fly Agaric** is likely the most recognized mushroom in the world. Like all *Amanita spp.*, it is encased in a universal veil when young (like an egg), which can leave scales on the cap as it grows. A ring is present and spores are light. The deadly **Death Cap**, although not common in BC, is becoming more widespread in urban areas.



**Fungi Fun Fact**

Not all mushrooms have a **common name**. Different mushrooms can have the same common name, and some mushrooms have more than one common name. That's why mycologists like to use the complete scientific name, with both a genus and a species—for instance, *Amanita muscaria*, the **Fly Agaric**.



Amethyst Laccaria



Blewit (*Lepista*)

**OTHER LIGHT-SPORED MUSHROOMS** – These 2 species once belonged to the *Clitocybe* genus, but that group is now in flux as DNA analysis moves some species into different genera. This is happening in other groups as well, as scientists analyze mushrooms at the genetic level.



Honey Mushroom (*Armillaria*)

**HONEY MUSHROOM GROUP** – All members of this group are commonly found on decaying material, often fused into tight clusters. The caps are caramel to brown in colour, up to 20cm wide and covered with dark scales. A ring is present, and the spores are white. Beware of similar-looking *Galerina spp.* mushrooms, which are deadly poisonous.



**Fungi Fun Fact**

The mycelium of one **Honey Mushroom** species in Oregon was found to cover over 900 hectares, making it one of the largest living organisms in the world.



Douglas-fir Cone Mushroom (*Strobilurus*)



Fairy Ring Mushroom (*Marasmius*)



Bleeding Mycena

**SMALL DECOMPOSERS** – These small, light-spored mushrooms are often called LBMs (little brown mushrooms). The first is found only on Douglas-fir cones. The **Fairy Ring** is common in fields or lawns and can form rings where it grows. Some in the *Mycena* genus are brightly coloured and decompose the stumps they grow on.



Oyster Mushroom (*Pleurotus*)



Angel Wings (*Pleurocybella*)

**OYSTER & LOOK-ALIKES** – The stems of the mushrooms in this light-spored group can be absent or off-centre. This includes the **Oyster** and **Angel Wings**, both of which are found growing on wood in a shelf-like fashion. Mushrooms in this group are wood-decayers, and some may also snare and eat tiny worms.



**Fungi Fun Fact**

**Oyster Mushrooms** contain enzymes that can be used to help clean up toxic environments, such as oil spills.



Flat-top Agaricus



The Prince

**AGARICUS** – This chocolate-brown-spored genus tends to be large (caps up to 30cm wide) and fleshy. An important feature is the presence of a ring on the stem. The store-bought **Button**, **Cremini**, and **Portobello** mushrooms are in this group, but other *Agaricus spp.* can cause stomach upset. Some, like the **Flat-top Agaricus**, smell like tar, and **The Prince** smells like almonds.



Violet Cort (*Cortinarius*)



*Cortinarius saniosus*

**WEBCAPS** – This rusty-brown-spored genus contains thousands of species worldwide. Webcaps are mycorrhizal ground-dwellers with a cobwebby (see inset), sometimes slimy, veil that covers the gills and then breaks as the mushroom grows, leaving remnants on the cap and stem. As some of the falling spores land on these remnants, the **Violet Cort** becomes even more colourful.



Golden Pholiota



Bristly Pholiota

**PHOLIOTA** – This large and fairly common genus has brown-spored, forest-dwelling mushrooms that are often found clustered on dead or dying trees. Their cap colours range from yellow to rusty brown and the caps are often sticky and scaly. The beautiful clusters can be exciting for photographers to find!



Poison Pax (*Paxillus*)

**ROLL RIMS** – Common in urban areas, this group contains several well-studied species. The caps have in-rolled rims, and are slimy when moist, with yellowish-brown gills running partway down the stem (decurrent). Historical note (1944): **Poison Pax** is the only mushroom to have ever killed a professional mycologist!



Spring Agrocybe

**FIELD CAPS** – Not all mushrooms grow in the Fall, as shown by this Spring mushroom. There are only a few species in this group, and they can be found worldwide. They are partly distinguished by their smooth cap cracking with age. Look for them in gardens, lawns, and wood chips. Agro-cybe means field-cap.



Shaggy Mane (*Coprinus*)



Miça Cap (*Coprinellus*)



Woolly Inky Cap (*Coprinopsis*)

**INKY CAPS** – These dark-spored species belong to related genera that are distinguished by their flesh turning to black goo as they age, in an effort to spread their spores. Common in our area, some grow in large groups on wood and others on roadsides. **Shaggy Manes** are a good edible when young and when found in unpolluted areas.



Sulphur Tuft (*Hypholoma*)

**SULPHUR TUFT** – This common decomposer mushroom often grows on fallen trees in large tight clumps (or tufts) and can be found from spring to late fall. As the name suggests, the caps can be bright yellow or greenish-yellow. They are generally considered poisonous.



Winter Chanterelle (*Craterellus*)



Pacific Golden Chanterelle (*Cantharellus*)

**VEINED** – Although included here with the Gilled mushrooms, species in this group have veins or forking wrinkles, which can run down the stem. This group includes the two edible Chanterelle species featured here — exciting finds for mushroom pickers the world over — as well as several inedible species.

**PORED (BOLETES)** – Instead of gills, these mushrooms have a fleshy pore surface, like a sponge, from which spores are released. Some of the most prized edibles can be found in this group.



King Bolete (*Boletus*)



Zeller's Bolete (*Xerocomellus*)



Slippery Jack (*Suillus*)

**BOLETES & SIMILAR** – A few different groups of pored mushrooms are included here: the edible and choice **King Bolete**; the lovely, often velvety **Zeller's Bolete**, and the **Slippery Jack**, a slightly different variety of Bolete. Many are associated with specific tree species.