

# Mushroom Basics

## By Dan Gill, Ethno-Gastronomist

Photos compliments of “Wildman” Steve Brill  
<http://www.wildmanstevebrill.com>



***The Good***  
*White Morel*  
*Morchella deliciosa*

*I was working in the woods on a fine spring day several years ago, when I thought I smelled mushrooms. Looking around the mixed hardwood stand dominated by Tulip Poplars, I noticed a lot of Sweetgum balls. When I looked closer, I realized that many were actually morel mushrooms in camouflage. Once my eyes and brain adapted to the difference, I realized that I was surrounded by a stealthy delicacy, some six inches high. I ran for some brown paper bags and picked several pounds.*

Though I have found edible mushrooms in every month of the year, the season really begins, at least psychologically, in early spring with the emergence of morels, or “merkles” as they are known by many mushroomers. Start looking around apple blossom time when wild asparagus and May Apples are up and oak leaves are the size of squirrel’s ears, or about mid April. Morels are sometimes found in unusual places, such as mulch piles and lawns (especially near elm trees), but they often inhabit old apple orchards, Tulip Poplar stands and burned over woodlands. If you find more than you can use right away, call me – I will even help you pick them! Otherwise dry them. Morel flavor actually intensifies with drying.

There are many excellent edibles, besides morels, that grow in abundance throughout Virginia and are easily identified, once you know what to look for. The differences and points of distinction are characteristic and quite obvious: Is the cap of a certain color, texture or feel? Does it have gills, pores or spikes underneath? What color are the gills and spore print? Does it grow on the ground or on trees, in the woods or on lawns? Once you have seen, touched, smelled and tasted a specific mushroom, it is like telling the difference between an apple and a tomato. *[To make a spore print, place your mushroom, gills down on white paper. Cover with a glass or saucer to block drafts, and leave for several hours. The pattern and color of the resulting print is indicative of the genus.]*

Mushrooming can be a rewarding hobby, but there is one cardinal rule: be absolutely sure of the identity of each mushroom before you eat it. Start by getting a couple of good field guides. I recommend North American Mushrooms, A Field Guide to Edible and Inedible Fungi by Orson K. and Hope H. Miller. The late Dr. Orson Miller was a professor at Virginia Tech for over thirty years. Hope has also authored an excellent mushroom cookbook titled, interestingly enough, Hope’s Mushroom Cookbook. Another classic guide is Mushrooms Demystified by

David Arora. Both of these field guides have keys, pictures and descriptions to make mushroom identification easy and safe. Consult with other mushroomers. They will help you identify your finds, tell you about the kinds of mushrooms that they collect and generally where and when they find them – but don't expect them to show you their secret spots.

Become familiar with the terminology. Mushroomers tend to speak in Latin, but are not showing off. Common names can be confusing and imprecise, so to be sure we are talking about the same mushroom, we often use scientific names as well as common names.

First learn to identify and avoid the really dangerous mushrooms, especially Amanitas. Most of the mushrooms classified as “poisonous” will just give you an upset stomach or flu-like symptoms but a handful, notably some Amanitas, are deadly – and I *do* mean deadly! You will get sick initially then think that you are recovering, but *Amatoxins* are slowly destroying your liver and kidneys. Death is slow, painful and (usually) inevitable. Amanitas can be beautiful, abundant and deceiving. Though there are some excellent edibles in the Amanita family, there are also a lot of variants and look-alikes; therefore it is a good idea just to avoid them completely. Look for white gills with a white spore print and some evidence that the mushroom came from an egg-like sack or “universal veil”. Use a stick or knife to unearth any suspected Amanitas and look for the remnants of a cup at the base.



### ***The Bad***

*Fly Agaric, Yellow Variant*  
*Amanita muscaria*

*The Amanita family includes the famous “Fly Agaric”, or A. muscaria. This beautiful (typically) red mushroom with white warts (remnants of the universal veil) is commonly depicted in jewelry and illustrations. It is the magic mushroom that sent Alice on her drug-induced adventures to Wonderland and is thought by some to be the “Soma” of antiquity. It is a popular hallucinogen in Europe, especially in Siberia. After ingestion the active ingredient, muscimol, is concentrated in urine, which is sometimes recycled by Siberians. Reindeer are also very fond of muscimol and can smell it for miles. The story (accredited to R. Gordon Wasson in SOMA: The Divine Mushroom of Immortality) goes that Siberian males must be vigilant if they go outside to relieve themselves lest they get stampeded. Yellowish variations grow here in Virginia, fruiting in late summer and fall, but the American variants are considered to be poisonous.*

Once you have found some mushrooms that you want to collect or test, put them in paper bags or a basket, keeping unknown mushrooms separated from known edibles with waxed paper or individual bags. Never keep fresh mushrooms in plastic, as they need to breathe. Moisture

collects on the plastic, hastening decomposition. It is even a good idea to remove store-bought mushrooms from plastic wrapping before storing them in the refrigerator.

After a new mushroom has been identified as safe to eat, you should still go through a testing procedure. Some people have individual reactions to some wild mushrooms. Taste a small portion on the first day and a small serving on the second day. If there is no adverse reaction, you should then be able to eat all that you want. With a few exceptions, such as “Pink Bottoms” and some of the “inky caps”, wild mushrooms should be cooked before being eaten. The best way to test a new mushroom and evaluate its flavor is simply to sprinkle lightly with garlic salt and sauté in a little butter or olive oil.

Mushrooms worth knowing:

The wild Oyster Mushroom (*Pluerotus ostreatus*) is one of my favorites and can be found any month of the year, but is most common in late summer and fall. They grow from dead or sick trees and are often found on downed Tulip Poplars.

The Meadow Mushroom or “Pink Bottom” (*Agaricus campestrous*) is closely related to the commercial button mushroom (*Agaricus bisporus*) but it tastes much better. As the name implies, the gills are pink on young specimens, turning a dark brown as they age. Be sure to check each one as small Amanitas sometimes grow in the same areas. Pink Bottoms are often abundant in lawns and pastures in late summer following a rainy spell. If you pick more than you can eat, make Duxelles with the rest and use it to flavor soups, gravies, sauces and egg dishes.



***The Ugly***  
*Old Man of the Woods*  
(*Strobilomyces floccopus*)  
A member of the Bolete family

*Puffballs grow at the same time and in the same places as Pink Bottoms. They are safe and edible, but I find them rather flavorless and don't waste my time. The same is true of boletes, various mushrooms with pores that grow on the ground and are plentiful in the fall. The legendary Cèpe or King Bolete (*Boletus edulis*) is supposed to grow in Virginia. I have tested a number of boletes over the years, and have found none growing around here that I thought worth the effort.*

The brightly colored Sulfur Shelf (*Laetiporus sulphureus*) is one of the “foolproof four”. It grows on injured trees or stumps in the fall and has bright bands of yellow and orange on top and pores underneath. Trim off the tender margins to eat and it will grow more. It is meaty and tastes like lobster to me – sauté in butter and serve with eggs.

Other mushrooms of interest that I have found and eaten include the Blewitt, Hen-of-the-Woods, Honey Mushrooms, Chanterelles, Lion's Mane, Beefsteak, toothed mushrooms, coral mushrooms and various Lactarius species.

#### Recipes:

Mushrooms have a natural affinity for rich, earthy flavors, such as onion and garlic, and lots of butter and cream. Do not substitute! If you are worried about it, cut back on something else. We are allowed only so many sins in this life, so be selective and make the most of your indulgences.

Duxelles: Simply chop up a bunch of mushrooms fairly fine (I pulse in a food processor). Let's say a pound is about right for the average (#8 to #10) cast iron skillet. Melt some butter – about 3 Tablespoons. Add a couple of tablespoons of finely minced onion, a clove of garlic, a good sprinkling (1 to 2 Tablespoons) of chopped parsley and a pinch of nutmeg. Cook down until all of the water is evaporated. Heat slowly at first to release the water, then increase heat to brown at the end, but be careful not to burn. Duxelles can be used as a flavor base for just about anything: soups, sauces, gravies, omelets, or whatever. They will last for a couple of weeks in the refrigerator, or freeze them in ice cube trays then transfer to *Zip-Locks* and keep in the freezer for later use. Simply thaw a couple of the cubes and use to top steak, or mix with hamburger, or scramble with eggs.

Cream of Mushroom Soup! At the store, we use Duxelles made from commercial mushrooms for the flavor base and cut up Shitakes for texture. I use dried Shitakes because they have more flavor than when fresh. Unfortunately, regulations prohibit us from using wild mushrooms; but if you have them, use them. Start with a good stock. I prefer homemade turkey stock, but you can use bullion or canned or whatever. For the average three-gallon stock pot, start with about a gallon of stock. Prepare a pound or so of mushrooms. I would sauté them in a little butter first to bring out the flavors. While you are at it, throw in about a half of an onion (a few shallots would be better) and a couple of cloves of garlic. A rib or two of celery would not be out of place. Cover and sweat until the celery is tender and the onions are clear. At the same time, cook up a light roux – smell it to make sure you are past the raw wheat stage. Whisk the roux into the stock and bring to a low boil to thicken. Add the mushroom mixture and simmer for a while. Deglaze your frying pan with about a cup of white wine – Pinot Grigio is nice. Taste and adjust the seasonings as you please – a little salt and pepper and a pinch or two of nutmeg. I would also add the juice of a lemon, a tablespoon or two of soy sauce and about the same of oyster sauce. When you are happy with the base, reduce the heat and add about 3 pints of milk and cream in any combination of skimmed, half and half and/or heavy whipping cream to result in about 10-15% butterfat. Heat but do not allow to boil. Garnish with chopped chives, parsley or chopped Leek-Flower stems and serve with toast points. Invite me over.