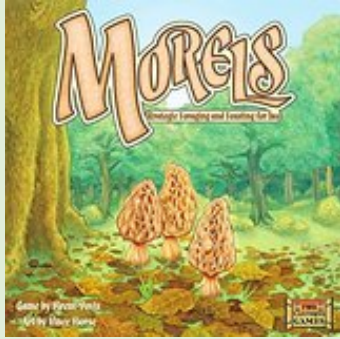




Newsletter for Wild Mushrooms PNW ❖ [www.wildmushroomspnw.com](http://www.wildmushroomspnw.com)

## Morels by Two Lanterns Games

Brent Povis is a game designer who developed a game that feels like hiking in the woods and foraging for mushrooms. The game features 10 mushrooms in varying quantities as well as some cards that perform various actions such as



butter, pans, baskets, moons, etc. The mushrooms are: Honey Fungus, Tree Ear, Lawyer's Wig, Shiitake, Fairy Ring, Hen of the Woods, Porcini, Chanterelle, Morel, and the deadly Destroying Angel. Your strategy evolves during each game and from game to game. It gets mushroom people into games and game people into mushrooms. There are positive reviews at [www.amazon.com/gp/product/B00CS41TQ0/](http://www.amazon.com/gp/product/B00CS41TQ0/).

Morel can be learned in about 10 minutes, plays in 30 minutes, is for 2 players, and is designed for both adults and kids. You will make fun and tactical decisions while playing. It's relatively light fare and moves at a nice rate.

## Commercial Mushroom Foragers Banned from Montana National Forest

The U.S. Forest Service is only issuing personal-use permits in Montana's national forests. When it comes to burn morels scientists don't fully understand why morels pop up in areas affected by fires. Some think it's because there's less competition from other plants. Others think fire fixes the soil or it has to do with temperature. A recent study concluded that forest fires in Yosemite National Park could produce more than a million morels per year.

Usually the U.S. Forest Service decided not to issue any pick in burn zones in problem isn't over-show up to pick. And been issues with litter. including crews of Mexico. There were trying to pay off



Service offers a special license to pick use in burn zones. But this year they commercial licenses. In fact, it is illegal to any of Montana's national forests. The picking, it's the hordes of people who they leave behind a huge mess. There have Pickers come from all over the country migrant pickers from Cambodia, Laos, and rumors that some of the pickers were gambling debts with mushroom money.

Things got dangerously territorial in the back country. Some were using firearms to say, "This is my area, nobody can go into it."

This season the personal-use permits are limiting a picker to 60 gallons for the entire season. It also requires pickers to cut their mushrooms in half so they can't sell them. Of course, some pickers are so dependent on the money from selling their mushrooms that they continue to break the law. Facebook is becoming something like a mushroom black market for many of these illegal sellers.

## Mushrooms in a Sour Cream Sauce – A Good Addition to Your Thanksgiving Menu

This recipe is easy and makes a flavorful side dish that pairs well with mashed potatoes.

1 Lb. mixed wild and domestic mushrooms, sliced

1 medium onion, finely chopped

2 Tbsp. olive oil, or more as needed

3 Tbsp. sour cream

Salt and pepper to taste

Chopped green onion, optional for garnish

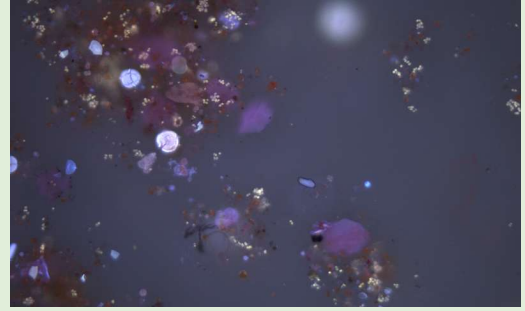
In a large pan sauté onions in 1-2 Tbsp. olive oil until golden. Set aside.

Sauté sliced mushrooms in 1-2 Tbsp. olive oil until tender, leaving behind a small amount of juice.

Return onions to pan. Add 3 Tbsp. sour cream and sprinkle with salt and pepper to taste. Garnish with green onion.

## Underwater Mushrooms

There are about 100,000 described species of mushrooms in contrast to the 1.5-3 million assumed to exist on the Earth. Of these, barely 3,000 fungi belong to aquatic habitats. In fact, freshwater fungi have been researched very little. Now, an international research team is providing the first lake-wide fungal diversity estimate in the open access journal *MycoKeys*. Scientists concluded that every type of habitat: sediments, biofilms, and submerged plants, has a specific fungal community that varies more than initially expected. Of these, lake biofilms, representing a group of microorganisms, whose cells stick to each other, and cling together to a surface, turned out to be the hotspots for aquatic fungi.



## Polypores Can Be Fascinating

Polypores are often ignored by most people because of their typical inedibility, commonly small size, unfamiliar habitat and general obscurity. They are worth observing and learning to ID. With practice, a great many species can be learned just by their macroscopic features. Unlike fleshy mushrooms, most polypores can be found even during dry weather or in the winter, since many are tough or perennial and many others are found beneath the surface of logs lying on the forest floor where they remain most of the year.

Their features are: hard exterior, non-mushroom shape, and their usual growth on wood as wood decomposers. Polypores are important in natural ecosystems as decomposers of wood, recycling the nutrients and minerals in the wood and releasing them over a long period – sometimes several hundred years from a single large downed tree where they can be used by other forest organisms. Many species can also act as mild to severe pathogens of living forest trees. In addition, some can be eaten such as *Laetiporus conifericola* on conifers (Chicken of the Woods). Others can be used as natural dyes for wool such as *Phaeolus schweinitzii* (Butt Rot). Still others are used in herbal medicine, mostly in tea-like extracts, including *Ganoderma lucidum* (Reishi). From left to right photographers are: M. Beug, S. Weintraub, and A. Moore



*Laetiporus conifericola*



*Phaeolus Schweinitzii*



*Ganoderma lucidum*

## Ghostly Mushrooms Delight in Rare Glow-In-The-Dark Light Show

It's one of nature's most secretive light shows, but these glow-in-the-dark fungi only perform for a few weeks a year. It is easy to see why *Omphalotus nidiformis* is nicknamed the 'Ghost Mushroom' and why Aboriginal tribes in South Australia's south-east believe they carry a certain power. The fungi sprout a fan-shaped mushroom that gently glows a spectral green at night due to a chemical reaction between fungal enzymes and oxygen. The window of opportunity is short-lived – only a few weeks a year.

The best time is mid-fall when the weather turns cooler and rain tempts the fungi to sprout into mushrooms. This mushroom is a creamy-white color in the day time. It spreads across the forest floor, around the remains of dead pine



tree stumps, and feeds on them. But in the early hours of the morning you can be rewarded with a truly remarkable sight. The whole area is aglow.

This *Omphalotus* was first officially documented by Scottish naturalist James Drummond near Perth in 1842, even though early settlers and indigenous tribes were well-aware of the glowing ground-dwelling fungi. Early settlers were often terrified of them and sometimes even the horses would spook at the sight of them. The Aboriginal people called it “Chinga” which means spirit, and believed the mushroom to have special powers and was regarded as a fearful spirit.

It is thought that the glow is a form of natural attraction, inviting insects to feed and spread the fungi’s spores further afield. The fungi’s lifespan is quite long, but it remains underground for 99% of the time. At certain times of the year when there is enough moisture, it fruits, and then produces the light show. (from ABC News, Australia, 05/25/2016)

### Safe Mushrooms Cause Most Poisoning Cases

A study at a European hospital found most mushroom poisoning cases involved people consuming “edible” mushrooms, not toxic ones. Unsafe collection methods and storage of mushrooms considered safe to eat caused most of the illnesses. Edible mushrooms can become contaminated with toxic microorganisms if they aren’t stored properly or consumed soon after picking. Fragments of decaying mushrooms may remain in the stomach for 3 days, causing GI symptoms. These

Symptoms such as wild mushrooms 5% of cases. Edible with poisonous by patients and Of patients them more than 2 bags. Harvesting plastic bags for toxicity. Fewer America are Mycological



*Wall Street Journal*, by Ann Lukits, July 2015) Photo by B. Newhouse

symptoms may be due to low levels of intestinal enzymes. nausea and vomiting occurred up to 4 hours after ingesting and lasted 1-3 days. Hospitalization was required in about mushrooms were responsible for 87.5% of the illnesses mushrooms accounting for the rest. Most were gathered some were purchased at markets or from other collectors. sickened by edible mushrooms, close to 1/3 consumed days old and about 25% stored the mushrooms in plastic mushrooms at 77 degrees or higher and carrying them in more than 3 hours in hot weather contributed to their than 1% of the estimated 10,000 mushrooms species in N. poisonous according to NAMA (North American Association). The study didn’t include children. (from *The*

### Give Bees a Chance



In 2015 Colony Collapse Disorder (CCD) affected 41% of managed bee colonies nationwide. Some estimate that all managed bee colonies could face total decimation by CCD within 5 years. In 2014 Paul Stamets, Steve Sheppard (WSU), and the Washington State Beekeepers Association teamed up in a research initiative called **BeeFriendly** to help reverse devastating declines in the global bee population that are critically threatening the world’s food security. Last year 300 sets of bees consumed **Host Defense** made from Chaga and Reishi extracts via their feed water. The extracts showed substantial benefit to

honeybees, including extended longevity and reduction of their viral burden by more than 75%. The goal is to help solve CCD and the results look promising. To learn more or to donate visit [beefriendlyinitiative.org](http://beefriendlyinitiative.org).

### Tasty or Toxic Roulette

The **NEW** “Tasty or Toxic” roulette is up and running on this website. Sometimes there isn’t a clear-cut line between what’s poisonous and what isn’t. The presentation is a comparison of look-alike mushrooms where one is more likely to be toxic for most people and the other one is edible, or can be made edible for most people. There are also slides that compare mushrooms that are somewhere in between these two extremes. Of course, it is never wise to eat a wild mushroom from just comparing it to a picture or because a friend is serving it to you. Educate yourself about all the details of that mushrooms and collect it several times so that you are 100% sure of its ID before eating it.

Check out “Tasty or Toxic” roulette and see how many you get right. Make your mistakes on the website flash cards rather than out in the field. **Remember, when in doubt of your ID, just don’t eat it!**