



# Symbiosis<sup>©</sup>

The newsletter of the Prairie States Mushroom Club

Volume 36:2

Summer

<http://iowamushroom.org>

## From the Editor

### Two Apologies

First, I apologize for not getting a Summer issue of *Symbiosis* out in July. It appears that life happened while I was making other plans as John Lennon famously predicted. Not only did life get in the way of my plans. The lives of other regular contributors got very involved also. If anyone reading this enjoys writing about mushrooms, please consider being a contributor and contacting me through the PSMC email: [iowamushroom@gmail.com](mailto:iowamushroom@gmail.com). Thanks.

### My second apology is more serious

In the last issue of *Symbiosis* I wrote a “humorous” article about trespassing. I made light of trespassing and didn’t consider that it brought back the pain that one of our members felt when she found her wildflowers trampled by trespassers. She let me know in no uncertain terms how violated she felt. She ended with a simple emphatic message: No Trespassing Means Stay Out!!! I told her that I understood and would make sure the readers understand also in this written apology. Again I apologize for this flippancy and arrogance.



As long as I’m eating humble pie, I confess that there have been incidences where I thought I knew more about certain mushrooms than I really did. It’s resulted in my eating some fungi that would turn any dish into yuck. One such mushroom I ate was *Lepiota aspera*, or freckled dapperling. I was convinced that their weird smell disappeared with cooking. Their weird flavor didn’t

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## PSMC to the Rescue!

by Mike Krebill

Wet years, like 2018 and 2019, often produce a plethora of mushrooms in urban settings. In 2010, the whole East Coast of the US was affected. Several immigrants put themselves at death’s door by consuming poisonous amanitas, which to them, looked remarkably similar to edible and delicious species they had eaten in their homeland.

Fortunately, an MD was aware that an extract of milk thistle had been used successfully in Europe for 30 years. As an antidote, it is remarkable in reversing liver damage caused by the amatoxins. Our FDA (Food and Drug Administration) had not yet approved it for use here, but the MD successfully petitioned to allow its use with the signatures of those afflicted. They all survived and recovered.

Who better to identify the unknown mushrooms than those of us with reference books? Who else has mushroom club friends we can ask for confirmation? So when this year’s crop of mushrooms fills yards and pops up in parks, submit a photo and a caption for your local newspaper. Let people know what they are, and describe the characteristics that distinguish them. Reveal what is known about edibility. Mention our club’s website and invite people to join PSMC to learn more. You can do it. We can do it.

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# Update on Golden Oysters in Iowa

by Mike Krebill

On a log not far up the trail from the Eden Valley Nature Center, Glen Schwartz and Roger Heidt took photos of a mushroom new to them and to the Prairie States Mushroom Club. The date: August 21, 2010. At a picnic table outside the nature center, Dean Abel and Dave Layton consulted reference books to identify the mushroom, carefully noting its characteristics. On the foray report, they listed the species as *Pleurotus citrinopileatus*, and commented “escaped cultivar?” The golden or yellow oyster is native to Japan, China, and Russia, and has been popular to cultivate in mushroom kits by people who like to grow their own at home. One theory is that its aggressive spores have been carried in the wind to nearby woods from homes. I believe that in many locations, it was intentionally introduced to woodlands by people who subscribed to the philosophy of “farming the woods.” I recall reading about it on Facebook, and know that books were written about the technique, which seemed to me to be unethical, especially when the woods weren’t owned by the perpetrator.

At any rate, it didn’t take long before *P. c.* was becoming more commonly found in Northern and Eastern Iowa. Here, my foraging friend Andy Benson happily poses by an awesome log of “perfect” yellow oysters he discovered near Dubuque.



The question that now arises is where in Iowa are yellow oysters currently being found? How far have they spread in nine years?

During a two-day wild foods program near Webster City in June, I asked instructor Ben Hoksch that very question. Ben lives in Ames, and actively gathers and eats mushrooms and edible wild plants he collects in Iowa. Ben reported that he had no difficulty finding yellow oyster mushrooms in Central and Southern Iowa.

I have contacts in Western Iowa, but haven’t asked them this question yet. It would be interesting to know. Check the next issue of *Symbiosis* for a follow-up answer.

Editor’s note: *In addition to elms I have now found yellow oysters on dead cherry, mulberry and this year, for the first time on one of my precious willows on Willow Island. These trees have been an abundant source of white oysters, wild enoke, hericium, silky volvaria and more for many years. I fear how those mushrooms will be affected by this new invader.* - DL



# Peppers and Chicken of the Woods Pasta

This recipe was provided to us by Virginia De Swarte. Here is what she says about it:

I do this recipe often and especially when I haven't planned dinner because it comes together in less than 1/2 hour. I usually have a bags of cooked chicken mushrooms and peppers in the freezer. It is really, really good as a cold pasta salad too. Hope you can use it.

Virginia De Swarte

2 tablespoons extra-virgin olive oil, divided  
1-2 cloves of garlic, minced  
2 cups sliced and cooked chicken of the woods mushrooms  
1 ½ cups red bell peppers, sliced lengthwise  
¼ cup sliced green olives, Spanish or Manzanilla work fine  
1-2 teaspoons drained capers  
¼ cup dry white wine  
1-2 cups rotini or other short pasta  
Shredded Parmesan cheese

Boil pasta according to package directions. At the same time, heat oil in a large frying pan and sauté peppers until soft, then add olives, garlic, capers and chicken mushrooms. When mixture is heated through, add white wine and allow to reduce while scraping any fond off the pan. When pasta is done, drain but reserve 1/8 to 1/4 cup of cooking water depending on how much of a “sauce” you want. Add pasta and reserved water to vegetable/chicken mix, remove from heat and let stand a minute or two. Serve with shredded cheese and olive oil.

Serves 2-3 people and is equally good served cold the next day.



## From our President – Dean Abel

Note: Dean has decided to forgo dire warnings about ticks etc. in order to bring us some culture – in the form of poetry penned by his friend Mike Lewis-Beck

### Hunting Mushrooms

You learn  
if you are lucky.

You learn from a friend  
or from a location.  
Then you forget.



### Spring Mushrooms

Dwarf caps, lover heads, sea creatures  
rise up from the green timber.

Joined to May apples I sever you,  
split you in half.

Morels cut, next to a floor of violets.

French butter to the pan,  
mushrooms to simmer.  
Morel flesh, flesh.

A mushrooming kiss.

■ M. Lewis-Beck

Mike Lewis-Beck works and writes in Iowa City. He has pieces in *American Journal of Poetry*, *Alexandria Quarterly*, *Apalachee Review*, *Big Windows Review*, *Cortland Review*, *Taos Journal of International Poetry and Art*, *Writers' Café* and *Wapsipinicon Almanac*, among other venues. He has a book of poems, *Rural Routes*, recently published by Alexandria Quarterly Press. His essay, "My Cherry Orchard in Iowa," was recognized as one of the 'Notable Essays' in *Best American Essays of 2011*.

## PSMC How Beatrix Potter Has Affected Me

by Dave Layton

Let's start at the beginning: sitting on the lap of my grandpa while he read from a little book about Peter Rabbit. I never really got to know my grandpa. He was gone way too soon, but I did get to know Peter Rabbit pretty well. I was amazed that he looked just as real as the rabbits my dad brought home from hunting – except for the goofy pants Peter wore. Dad promised to not shoot any rabbits in pants when I mentioned it to him. I spent many days during my pre-reading years looking at the incredible pictures. Sometimes after the story was read to me I had scary dreams about being a rabbit. Looking back I understand how the mixture of realism and fantasy were so compelling to a child. It wasn't until I was an adult that I understood the incredible skill and hard work that went into making those illustrations.

I never thought much more about Beatrix Potter until the early 2000s when I came across the book *Les Champignons: Beatrix Potter*, which is a compilation of some of her fungi drawings. I thumbed through her amazing watercolors until I stopped and stared in awe at a strange but familiar looking mushroom.



She titled it *Lepiota friesii*, a name I wasn't familiar with, but I knew I'd seen that mushroom. Then I remembered. Several years earlier I found a large wavy mushroom that I thought was an amanita until I actually picked it and smelled it. It had the unmistakable odor of a freckled dapperling, which I knew at that time as *L. aquetesquamosa*. I found these regularly. I even occasionally ate them for some unknown reason, but usually they were smaller, thinner, more brick colored and

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# PSMC How Beatrix Potter...

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often in clusters or groups. I spent some time admiring the large flowing cap, tightly packed gills, stylish skirt and pointy warts on the mushroom I found. Now I was admiring all of these same features in a watercolor that somehow enhanced all of them without losing any reality – amazing! I could almost smell it. I soon learned that both Latin names were 2 of about 20 synonyms for the freckled dapperling. I believe *L. aspera* is the most common. The mushroom paintings in the book are realistic and impressive, but *L. friesii* captured my imagination just as Peter Rabbit had over a half century earlier.

Over the years I'd read a couple short articles about Potter's love of mushrooms and science. I read somewhere that she contributed to the study of symbiotic relationships of fungi and algae in lichens, but I'd lost the details. I admired Beatrix and I identified with some of her interests, but like her, I had a variety of interests and I didn't think much about her.

Fast forward to 2019 when Sally brought home the book *Beatrix Potter: A Life in Nature* by Linda Lear from the library. This book described her as a brilliant amateur mycologist whose advanced microscope drawings and forward thinking theories on how some lichens are actually a symbiotic mixture of fungi and algae were far ahead of her time. Her contributions would have been vital if she were not ignored by a paternalistic scientific community who thought that, as a woman, she should stick to children's books and painting for other scientists. Of course we now know that lichens are indeed comprised of a relationship between fungi and algae. It was just one of many examples of how Beatrix challenged the science status quo. Her independence, business acumen and role in the creation of the Lake District Hilltop National Trust as told in Lear's book firmed up my image of her as a hero.

Beatrix remains a hero. But, like all heroes, accounts of her deeds may have been larger than life. So it was with Lear's account of Potter's breakthrough work with lichens. While searching images of her watercolor of *L. friesii*, I landed on an article that kind of knocked the wind out of my hero worship sails. It was *Beatrix Potter: Pioneering Scientist or Passionate Amateur* on the

website *BBC-Earth*. In the article, Lear admits that she reached the wrong conclusion of Potter's theory and that she was actually on the wrong side of the lichen debate. Here's a bit from the article:

One mycologist, Nicholas Money of Miami University, concluded that Potter thought lichens were formed by fungi that could generate their own chlorophyll. "Potter was being very egotistical in her dealings with Murray and Thistleton-Dyer," Money said. "I'm guessing that they were a bit contemptuous towards her because by the time she was doing this work, a great deal of evidence had been brought forward that lichens were partnerships between fungi and photosynthetic partners – and she was batting on the wrong side."

So there you have it. Beatrix Potter could be egotistical and wrong – go figure. I gazed once more at her *L. friesii* watercolor and realized that whatever else she may have been wrong about, that painting was still perfect. 

## From the Editor

(cont from cover)

however. I never thought they were much to look at either – that is until I saw a most amazing mushroom drawing of that species by Beatrix Potter. In this issue I talk about how Potter's Peter Rabbit images informed my dreams as a young child, how she became something of mycological hero to me and how she still sparks controversy today.

Also in this issue, Mike Krebill gives an update on the Golden Oyster invasion and encourages members to help inform the public about large fruitings of mushrooms (some, of which, may be dangerously poisonous) that often occur in our urban areas.

Finally, we'll treat you to a little poetry a good Chicken of the Woods recipe and photos of unusual white wood ears. So please enjoy this issue and trust me when I say I'll do better next time. 



# Mycoflora Project Update

We are now beyond our original goal of 100 species sampled with 110 sampled and documented as of this writing. Thanks, in large part, to the efforts of Sarah Delong-Duhon we can keep on going! We would love for more people to be involved. The process is pretty streamlined, especially if you have a device with iNaturalist on it. Just contact us at the PSMC email: [iowamushroom@gmail.com](mailto:iowamushroom@gmail.com) if you are interested.

Currently Sarah and Roger Heidt have done most of the sampling. I do a few too – if they’re unusual enough – such as the white wood ears I write about in this issue and the bizarre fungus I found two days ago: *Bulgaria inquinans*. It’s a macabre combination of a cup, a jelly and chimney soot. Michael Kou describes it as, “— what Uncle Fester would produce if he were CEO of the Gummi factory.”

More importantly *Bulgaria* and many other sampled species will now be archived and available for future research at the Ada Hayden Herbarium.



Young *Bulgaria* cups



Older gelatinous at bottom



Showing gelatinous interior



# Rare White Wood Ear

by Mike Krebill

While harvesting fresh wood ear off of old box elder trees I ran across lots of white Tremella (jelly fungus) so I didn't pay attention to these mushrooms until I harvested some wood ear on the same log. That's when I realized that these are wood ears only white! I'd never seen them before and after searching the internet I realized apparently no one else in North America has seen them either. All websites showing white tree ear are from Europe or Asia and they give it the name *Auricularia auricula-judae* var. *lacteal*. I found it interesting that they kept *judae* in their Latin name. I harvested only enough to do a sample for the herbarium and MycoFlora project and to taste. Their flavor could be called wood ear lite – but definitely wood ear. The first 3 pics were taken on June 21st – prime time for harvesting wood ears.



This last picture was taken on August 21<sup>st</sup>. The other wood ear was too far gone to harvest but white wood ear seemed to still be coming out fresh. This gives me hope that I'll see more of it in that woods.

The last picture shows why I'm so interested in wood ear to begin with – Yum!



# 2019 PSMC Forays Past and Future

We had great forays at some new places this year including Discovery Park in Muscatine on May 4<sup>th</sup> where both kids and adults were finding little morels like an Easter egg hunt. Another new foray location was Swiss Valley near Dubuque on June 29<sup>th</sup> where a large turnout of folks enjoyed beautiful scenery and amazing fungi and insect interactions. Check out pictures of these and other forays on the PSMC website: <http://www.iowamushroom.org/forays.php>



Mom and daughter displaying morels at Discovery Park



Folks arriving for Swiss Valley Foray

## Following are PSMC's remaining forays:

Saturday, Sept. 7<sup>th</sup> at 10:00 a.m.

Rodger's Park in Benton County

2113 57<sup>th</sup> Street Trail, Vinton, IA 52349.

Take Hwy. 218 north out of Vinton. Turn right on V 61 and right again on 57<sup>th</sup> St. Trail. We will meet at the grilling garden near the entrance of the park.

Sunday, October 6<sup>th</sup> at 1:00 p.m. - 3:00 p.m.

Celebration Barn

4045 245<sup>th</sup> St NE, Solon, IA 52333

We'll explore Johnson County's new acquisition of timber next to the barn. It should be an interesting foray

In addition to these forays, Sarah Delong-Duhon is doing an educational series on mushrooms through Iowa City Parks and Recreation. General attendance is \$12 but PSMC members are invited to volunteer. The remaining events of this series are

September 14<sup>th</sup>: Big Grove Preserve

September 28<sup>th</sup>: Ryerson's Woods

October 12<sup>th</sup>: Turkey Creek Preserve

October 26<sup>th</sup>: Terry Trueblood Recreation Area - Pergola

## Annual Meeting Postponed

This year's annual meeting will be postponed to allow some of the officers time to work through health and family issues. We'll let PSMC members know well in advance of the next business meeting. Please note that most of the current board members are 60+ years old. More younger people need to take leadership roles if this club is to remain vibrant.



# Hen of the Wood Jerky

original recipe created by the 3-Foragers in 2013

Marinade Ingredients (Makes about 2 cups marinade, enough for a large hen.)

- 1 c. sweet apple cider
- 3/4 c. low sodium soy sauce, or tamari
- 2 – 4 cloves of garlic, chopped
- 1/2 tsp. ground white pepper
- 1/2 tsp. ground fennel [Alternative: finely chop 1/2 tsp. fennel seeds – Mike Krebill]
- 5 Tbsp. maple syrup
- 1/2 – 1 Tbsp. Sriracha chili-garlic sauce

1. Place all marinade ingredients in a blender, and puree for a minute. Pour the marinade in a glass or non-reactive shallow pan, preferable one with a cover.
2. Clean the hen of the woods mushroom, making 1/8" thick slices of the core and the larger fronds. All parts can be used, but they will dehydrate at different rates and shrink up quite small.
3. Boil the mushroom for 10 minutes, and drain completely. Place the boiled hen pieces in the marinade while still hot, and refrigerate for 4 – 6 hours.
4. Remove the pieces of hen from the marinade and drain the excess liquid off before arranging on dehydrator trays. If drying in the oven, use wire racks placed on a sheet pan. Arrange the marinated mushroom on the trays and dehydrate at 120° – 130° F for 6 – 12 hours, until dried and leathery. The time will vary depending on the thickness and sizes of the pieces, so check it often.
5. Store in an airtight jar or vacuum pack.



We often have more mushroom pieces than the dehydrator can handle at once, so we use the marinade one more time to flavor another batch, the second batch getting soaked a bit longer, until we use up all the hen.

<http://the3foragers.blogspot.com/2018/09/the-original-mushroom-jerky-hen-of.html>



Prairie States Mushroom Club  
c/o Roger Heidt  
125 Timber Ln.  
Robins, IA 52328-9632

PSMC Web Site:  
<http://iowamushroom.org>



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## PSMC to the Rescue!

(cont. from cover)



Part of a fairy ring of *Chlorophyllum molybdites* in Webster City’s cemetery. The cap can become as large as a dinner plate and often has patches of brown tissue on its top. The gills under the cap start out light colored and eventually darken to a greenish brown. The spore print is olive green like the penicillin mold that grows on oranges. The stem has a ring around it. This mushroom is responsible for more poisonings in the US every year than all the other poisonings from *Amanita* mushrooms combined. To learn more about mushrooms, consider joining the Prairie States Mushroom Club. The website is [iowamushroom.org](http://iowamushroom.org).

