



Symbiosis[©]

The newsletter of the Prairie States Mushroom Club

Volume 30:1

Winter

<http://iowamushroom.org>

Looking Forward

by PSMC President Glen Schwartz

Fellow mushroomers, welcome to a new year with the Prairie States Mushroom Club. It is a cold and wet day in mid February as I write this article, but we are still very concerned about the continuing drought. I have lived in Iowa for 39 years, and have noticed that droughts normally last about two years. 2011 was somewhat dry and 2012 was extremely dry. What will we get in 2013? The weathermen says that the ground is still very dry, and needs 10 inches of rain (or 10 feet of snow) to make it back to normal moisture levels. As we all know, mushrooms need moisture to fruit. Let's hope I am wrong, and we get at least a normal amount of rain this year.

The PSMC bylaws are the same as last year, and our only change of leadership is Barbara Ching taking over the at-large board of director position from Marty. We still need a publicist for the club to help spread the word about forays and other events. Every year, several opportunities arise to present a mushroom program. If you would like to try your hand as a presenter, let us know. We have a few canned power point presentations you could use, or you could come up with your own original material. We are going to try to expand the geographical range of the club this year. This might mean longer trips for some of us, but does provide an opportunity to expand to parts of the state we don't get to very often.

The Prairie States Mushroom Club was founded to enlist the public with help on a morel study. Back then, most thought there were four or five morel species in North America, and that they were the same as the European varieties. After an extensive study, we now know there are at least 19 species, 14 black morels, and 5 yellow morels. Here in Iowa, we mostly find yellow morels or the Half-Free morel. Still, are all of the yellows the same species? Probably not. This year, challenge yourself to determine the actual species of morels that you find. The new key to

North American morels can be found in Michael Kuo's site at <http://www.mushroomexpert.com/morchellaceae.html>



Last fall, I created a 2013 club calendar with help from many club members, and stunning front and back covers designed by Jim Frink. We found a printer that could supply 100 calendars for about \$600. After we received the calendars, we found printing flaws on 15 of them, so the printer gave us another 60 calendars for free. Good thing we had so many, as more than 110 were sold, and 10 were given away. We still have 30 left to sell or give away as promotional items. I plan to create another calendar for 2014, so, once again, I ask you to send your best mushroom pictures to me, glenaschwartz@gmail.com for consideration.

The mushroom club exists to serve you, the PSMC members. Please communicate your needs to us by sending an E-Mail to the club at:

iowamushroom@gmail.com. 

Eating Wild Mushrooms All Year Long

by Dave Layton & Barbara Ching

Dave Layton: This year, for the first time, I made a tasty mushroom soup with seven kinds of wild mushrooms in January. It was a great way to compare how different species react to freezing and drying. The soup contained raw frozen *Grifola* as well as partly sautéed then frozen shaggy manes, blewits, *Hericium* and oyster mushrooms. It also had dried chanterelles, wood ears, *Marasmius oreades* and thin strips of dried *Grifola*. Overall I thought the soup was fine but a little stronger and more preserved tasting than if all mushrooms were fresh.

A few things I noticed were that a few dried chanterelles go a long way giving the soup a noticeable chanterelle overtone – not a bad thing, but I thought they might have been better used in their own recipe. The dried *Grifola* turned out fine though it seemed a little less flavorful than its frozen counterpart. The dried *Marasmius* also added a cute appearance of the small bonnet shaped buttons throughout. Some of those I actually picked in an already dried state. This can be done if they never got waterlogged after emerging.

All the partly sautéed frozen mushrooms were delicious. In fact freezing shaggy manes, *Hericium*, and blewits this way makes them more firm and flavorful. However oyster mushrooms become chewier. I learned this method of mushroom freezing from reading that this is a good way to save morels. You simply cook them in a little butter and olive oil (or your favorite mushroom sauté oil) just to the point where the juices emerge, then dump them in freezer-bags juice and all. Since you want them to flatten out to be only one layer thick, avoid overfilling the bag. Close the bag except for a little gap in the middle, and suck excess air out before sealing. Don't worry about a stray germ from your mouth. These mushrooms will be cooked more later on, anyway. Raw *Grifola* should be thoroughly

cleaned and chopped into serving-size pieces and flattened and vacuum-sealed in bags the same way. This way you can easily stack flattened bags in the freezer and break out only as much as you want for a particular recipe.

To cook: get the pan good and hot with a little more butter and/or oil and put frozen mushrooms directly in the pan to cook a little longer. At that point you can add them to any recipe. Don't pre-thaw. Use this method with raw frozen *Grifola* also, only using as much oil as if they were fresh and cooking as long as you would if they were fresh. I generally cook *Grifola* fresh or frozen till it starts to turn golden brown.

Dried mushrooms I soak in a little water till they soften then add to the sauté pan water and all. My problem has been with ear fungus. Little strips of it in soup are fine and they add a unique texture, but I've never cooked them anywhere as deliciously as when I ate them in "hot-pot" on a visit to China. I've wondered if our local varieties are inferior or I just didn't know what I was doing. Fortunately we now have Barbara Ching to share her insights into harvesting and cooking ear fungus all year long!

Barbara Ching: The short of it is, you just harvest them when you find them, and in my experience, you can find them year round. Even better, their condition—fresh or dry—doesn't much matter, although fresh will save you some time. Keep in mind that anything you find will be relatively fresh; I've never found any in the woods as dry as the packets you can buy.



Here's a picture of mushrooms in my freezer. I'm displaying a bag of sautéed blewits on top and raw *Grifola* on the bottom. Notice how nicely the flattened bags of mushrooms stack. I haven't eaten half of what I originally froze this year yet. I guess I better get on it:) Not a bad haul for such a dry year.

You'll read in Chinese cookbooks that tree ears are used mostly for texture. That's not a dismissal of their importance, though. Texture matters a lot in Chinese food, and the texture



Tree Ear *Auricularia auricular*
Photo by: Jim Frink

(cont. on pg. 8)

Combining Freshly Farmed with Dried Mushrooms

by Mike Krebill

Editor's Note: Dave Layton and Barbara Ching teamed up to write this issue's "Eating Wild Mushrooms All Year." Mark Bittman wrote a related, complementary article that was published in The New York Times magazine November 22, 2012 under the misleading title "Magic Mushrooms." I sought permission to reprint it, but as The New York Times fee for that was out of the question, I will simply provide a link to it for those who want to see it. For those without Internet access, I will endeavor to capture a few of the author's more pertinent points in the following paragraphs. My thanks to PSMC member Peter Hansen for calling the article to my attention. Here's the link to it: http://www.nytimes.com/2012/11/25/magazine/mushroom-magic.html?emc=eta1&_r=0

Let's start with a couple of definitions. By "freshly farmed" mushrooms, picture the commercially grown mushrooms available any time of the year in a supermarket. They may be packaged or loose, sliced or left whole, but they have not been dried. This would encompass the White Button mushrooms and their brown variants – the Cremini or Baby Bellas, and the big Portabellas. It includes the Shiitakes and the Oysters. In contrast, dried mushrooms are typically sliced thin and dehydrated and packaged. The packages allow them to be seen while offering a little bit of protection against crushing. Dried mushrooms may be commercially grown or wild. Commonly encountered dried mushrooms include the Shiitake, the Wood Ear, and the Porcini.



Baby Bella Mushrooms
Agaricus bisporus

Photo by recipes.wikia.com




Porcini Mushrooms
Boletus edulis

Photo by Mike Krebill

In the dishes that you prepare, fresh mushrooms provide texture, and – as Mark Bittman terms it – a “brownability” that dried mushrooms cannot match. Conversely, dried mushrooms have a more concentrated, intense flavor. “Hence,” he writes, “the technique – I learned it from Marcella Hazan’s early cookbooks – of combining fresh and dried mushrooms in the same dish, capturing the best qualities of both.”

Last month, I put his claim to the test, making a crockpot full of beef stew. Besides onions, carrots, potatoes, garlic, and beef, the stew contained reconstituted and sautéed Porcinis and Wood Ears, with sautéed fresh Shiitake caps. I filtered and added the soaking liquid. What a delightful and hearty winter meal! I froze the leftover stew in individual meal containers, and am sad to report that it is all gone. Wish I still had some left for tonight!

Perhaps I could do a stir-fry.... 

Book Review 1 by Mike Krebill

Wild Edible Mushrooms: Tips and Recipes for Every Mushroom Hunter is a book that I plan to buy quantities of and sell at a discount whenever I do presentations. It came out in 2012. Author Hope H. Miller coauthored four other books with “the love of her life,” her late husband, Orson K. Miller, Jr., including **North American Mushrooms**. Their association reminds me of their good friends Alan and Arleen Bessette; like Arleen, she was the creative chef, experimenting with many recipes for their family of five. Both she and Arleen have provided complementary copy for their husband’s books – tested recipes and valuable insights on preparation, cooking, and storage. In fact, that is one of several reasons why I like this book. A hefty part of it (142 pages of the 225) contains recipes for delicious appetizers, salads, and soups, as well as hearty entrees. Main dish suggestions are within categories: beef, pork, lamb, chicken, and seafood, yet she has not forgotten vegetarians and vegans. There is a section for main dishes with eggs and cheese, and another for main dishes with vegetables. A plus for this book is that it integrates many of the best recipes from **Hope’s Mushroom Cookbook**, which is now out of print.

(cont. on pg. 9)

The Nutritional Value of Mushrooms

by Mike Krebill

Mushrooms are being touted as a new “Super Food.” Some of the marketing hype is true, some of it is false, and some of it is deliberately misleading. Let’s start by examining the major point, that mushrooms bring more than flavor and texture to our meals – they add nutritional value.

Less than a decade ago, we heard just the contrary – that mushrooms had no nutritional value. Mushrooms had little substance, it was argued; mushrooms were mainly water and had very few calories. Given a stranded-in-the-wilderness survival setting where calories are critical to provide body heat and energy, the claim has merit. The fact that mushrooms are largely water and have few calories is true. On the other hand, that is a bonus in today’s world where many of us monitor calories yet crave flavor.

The assertion that mushrooms have no nutritional value, however, has proven to be false. Laboratory investigations have documented the nutrients found in fungi. Results for white button mushrooms, portabellas, morels, oysters, shiitakes, maitakes, and chanterelles can be found by searching the enormous national nutrient database. To begin looking, start with this link:

U.S. Department of Agriculture, Agricultural Research Service. 2012. USDA National Nutrient Database for Standard Reference, Release 25. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/ba/bhnr/ndl>

For those of you without Internet access, here is the gist: mushrooms contain dietary fiber, potassium, niacin, folate, and Vitamin B6 as well as lesser amounts of other vitamins and other minerals like calcium and phosphorus. The proportion of potassium exceeds that found in bananas. Morels, for instance, turned out to be 90% water, 3% protein, and a 100-gram sample contained 2.8 grams of fiber, 43 milligrams of calcium, 12.2 mg of iron, 19 mg magnesium, 194 mg of phosphorus, 411 mg of potassium, 21 mg of sodium, and only 2 mg of zinc. In terms of vitamins, the major ones found were the four B vitamins: thiamin (0.07 mg), riboflavin (0.21 mg), niacin (2.25 mg), and vitamin B-6 (0.14 mg.) 5.1 micrograms of Vitamin D (D2 + D3) and 206 IUs of Vitamin D were also recorded, along with about 0.5 g of fatty acids.

| Nutrition Facts | |
|--|---------------------------|
| Serving Size 1 cup, pieces or slices 70g (70 g) | |
| Amount Per Serving | |
| Calories 15 | Calories from Fat 2 |
| % Daily Value* | |
| Total Fat 0g | 0% |
| Saturated Fat 0g | 0% |
| Trans Fat | |
| Cholesterol 0mg | 0% |
| Sodium 4mg | 0% |
| Total Carbohydrate 2g | 1% |
| Dietary Fiber 1g | 3% |
| Sugars 1g | |
| Protein 2g | |
| Vitamin A 0% | Vitamin C 2% |
| Calcium 0% | Iron 2% |
| *Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: | |
| | Calories 2,000 2,500 |
| Total Fat | Less than 65g 80g |
| Sat Fat | Less than 20g 25g |
| Cholesterol | Less than 300mg 300mg |
| Sodium | Less than 2,400mg 2,400mg |
| Total Carbohydrate | 300g 375g |
| Fiber | 25g 30g |
| Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4 | |
| © www.NutritionData.com | |

Nutrition label, White Button Mushrooms, Nutritional data and images courtesy of www.NutritionData.com

can do the same thing with your wild mushrooms by exposing them to two days of sunlight before cooking them. Mushrooms have a Vitamin D precursor that can be activated by light. But then, so does our skin. We can make our own Vitamin D by spending more time outdoors.

You’ll also find a lot of other hype on the package: “Superfood” and “Deliciously Healthy,” for instance. Here are more of the claims that I copied from a package this morning: “Fat free, B Vitamins, Antioxidants, Low Calorie, Low Sodium, No cholesterol, Vitamin C, A good source of antioxidant selenium, Locally grown – nationwide.” The claim to be fat free might as well be true, since the amount of fat (0.2 g/serving – which includes 97.3 mg of Omega-6 fatty acids) is small. The other statements are accurate, although a single serving of mushrooms only furnishes 2% of a person’s daily need for Vitamin C. You’d have to consume 50 servings of raw white button mushrooms to get 100% of your Vitamin C needs, so touting Vitamin C is deliberately misleading the consumer. As to the “locally

The next time you see a package of white button mushrooms (*Agaricus bisporus*) in a store, you’ll likely spot a “High in Vitamin D” label or sticker on the container. A new commercial processing technology has been developed that boosts the vitamin D content of mushrooms up to 700%. It is done with pulses of UVB light, the same kind of light that causes suntans. The neat thing is that the taste is not affected nor the other nutrients. Paul Stamets says that you

(cont. on pg. 9)

FUNgi FOTOgraphy: photography tips

Fungi on Scat

by Linda Scarth

Last October, on a foray to Macbride State Park near North Liberty, there was a large log that occupied much of the afternoon as we found many lovely, or at least interesting, fungi to photograph. Among them were some tiny golden balls on thin, clear, liquid-drop decorated stems. These little beads were growing on what appeared to be raccoon droppings at a branch crotch on top of the log. Raccoons are known to prefer stumps and crotches in trees as toilets.

There was an email discussion among several PSMC members about what they might be. After several false starts, we finally determined that they were *Phycomyces blakesleeanus*. I learned that it is a much-studied fungus, partly because it is known to sense and respond to its environment. As tiny as it is, researchers have determined that wind, gravity, light, chemicals and objects can influence it in a number of ways. There are many abstracts and citations to research articles accessible on the WWW.

I do not usually look for animal feces when hunting fungi to photograph. This find has changed that. I now keep my eye out for other fungi on animal dung. Bob and I made a trip to Botswana in December hoping to photograph many animals and plants, especially endangered African Wild Dogs. We did all of that, but also saw and photographed some mushrooms. Two of which are also shown here.



raccoon

elephant

hippopotamus

The one in the middle is probably a young *Panaeolus africanus*. We saw clusters as well as single mushrooms on elephant dung. The undersides of the caps were brown. Some *Panaeolus* species are thought to be hallucinogenic.

Our guide and tracker, who were generally looking for animals, took it in stride when we asked to stop several times so we could photograph elephant dung. We had to do it from inside the truck because there could have been predators in the bushes.

(cont. on pg. 8)

What you may not know about *Geomyces destructans*

by Mike Krebill

Keokuk held its 29th Annual Bald Eagle Appreciation Days January 19 & 20. One of the session speakers on Saturday was a Western Illinois University mycologist, Dr. Andrea Porras-Alfaro, from the Department of Biological Services. She said that fungal infections are increasing in plants and animals. She described the multi-state research effort that she and her students are conducting on one of them that has rapidly come to the fore: White-Nose Syndrome in bats. First, however, she provided us with the background to understand what is considered to be the causative fungus.

Geomyces destructans was first described in 2009 by US mycologists. Over one million bats have been killed by it. Nine of the 25 species that hibernate in the US have been affected. The fungus produces a lot of spores. It grows slowly, but best at the cold temperatures (35 – 45 degrees Fahrenheit) found in caves where bats hibernate during the winter. The body temperature of the bat drops to the temperature of the cave during hibernation, which is perfect for fungal growth. The fungus grows first on wings before spreading to the nose. Hyphae penetrate the skin and surround, digest, and replace muscle tissue. The bat's wings are crucial in enabling the bat to procure food and maintain body temperature. The action of the fungus causes the bats to become restless and awaken from hibernation too early. They fly out and around, using up their critical reserves of body fat before spring and its insects arrive. This weakens them and hastens their death.

The Little Brown Bat is the most common bat in North America. Projections are that it could disappear in 16 years if White-Nose Syndrome goes unchecked.


Bats are pollinators and insect eaters.

Most of the cases of WNS reported to date have come from the Northeastern United States and down along the Appalachians. There are confirmed cases in southern Indiana, in East Central Missouri, and one suspected case in Iowa to date. So far, Illinois and Southeast Iowa and Northeast Missouri have been free of WNS. She and her team of students have taken advantage of that to quickly gather baseline data on healthy populations of bats. Of great interest is the existing microbiotic community, which

includes species of fungus. Captured bats are swabbed with a cotton swab dipped in a solution of salt water. The swab is then wiped across a Petri dish of Potato Dextrose Agar and a Petri dish of Malt Extract Agar to grow cultures of the existing fungi.

The results are intriguing. Healthy bats carry primarily ascomycetes, but half a dozen or more species of *Geomyces* have been found, as have *Penicillium*, *Cladosporium*, and *Mortierella*. Dr. Porras-Alfaro postulates that these other fungi may serve as biological control agents. She is wary about the ease with which *Geomyces* may morph into new species, however.

Closing caves to the public may not be effective, she states.

She believes continued research is our best hope of saving bats. That seems to be the consensus of opinion at this website and blog – <http://whitenosesyndrome.org/national-plan/disease-management>. 



Geomyces destructans, the causative fungus of White-Nose Syndrome, growing on the wings, ears, and nose of a doomed Little Brown Bat.


Photo credit: US Fish & Wildlife Service

Book Review 2 by Mike Krebill

OK, I confess. I own 273 cookbooks, I watch many of the Food Network shows, I've taken perhaps a dozen classes offered by a local chef and have signed up for another later this month, and I love to experiment with creative ways to fix wild foods. In fact, as an educator, I was famous for teaching 7th graders science research skills as we sought to make consistently good sumac lemonade, bring flavor to puffball pieces, and perfect a recipe for dandelion donuts. The kids had as much fun as I did with our non-textbook approach to learning and applying science.

My latest cookbook acquisition is *The Art of Cooking Morels*, by Ruth Mossok Johnston, with illustrations by her husband David McCall Johnston. (The University of Michigan Press, Ann Arbor, 2012.) Although she makes no claim to being a mushroom expert, Ruth's bio is impressive. She owns "Feed Me Heartfully," a company devoted to healthy food and lifestyles. She is a cookbook author, a culinary consultant, and a food journalist. She was the head of the division of Family and Consumer Sciences for Glencoe/McGraw-Hill, and served as the Editorial Director. A freelance journalist, she has written for Food.com, the American Heart Association, and the *Detroit Free Press*. Graham Kerr is one of her dear friends, and has written a nice tribute that appears as one of six on the back dust jacket.

What I truly love about Ruth's book is summed up well by Paul Saginaw (Co-founder and co-owner of the legendary Zingerman's Delicatessen in Ann Arbor, where I have eaten many times.) He states that she "...hasn't given us the usual butter, heavy cream, and wine. Her recipes are imaginative, adventurous, worldly, and heart healthy as well as practical and accessible to curious cooks." Imaginative indeed! How about a "Savory Morel Cheesecake," "Yorkshire Pudding with Morel and Ale Gravy," "Morel and Black Bean Burgers," "Morel, Ramp, and Fiddlehead Fern Bread Pudding," or a "Purée of Asparagus Soup with Morels?"

Now, if our weather will only cooperate when morel season arrives! 

Book Review 3 by Dean Abel

Tricholomas of North America. A Mushroom Field Guide

Alan E. Bessette, Arleen R. Bessette, William C. Roody and Steven A. Trudell
University of Texas Press, Austin TX, 2013. (\$19.77 from Amazon)

This is the best mushroom book I have seen recently. The publisher has provided a beautiful package for the hard work of these mycologists. Let me say right up front that I know all the authors and I have all their books. Some are more useful than others. What about their latest one?

The genus *Tricholoma* is a generally nondescript collection of medium-size to large brown mushrooms – though some can be colorful – that grow on the ground. They have white spores and lack a universal veil hence they have no volva or annulus. The authors provide an excellent introduction to the details of the genus and a comparison with look-alike genera. Included are a glossary, bibliography, index and list of excluded species.

"More than 100 species of *Tricholoma* have been reported from North America." I counted 71 main entries most accompanied by one or more documentary-style photographs. The descriptions are thorough and accurate; habitat, occurrence and edibility are noted; comments address look-alikes and the meaning of Latin names.

The photographs accompany the descriptions so that never more than a single page flip is necessary to find a picture. A brief color section at the end documents 14 yet unnamed species. The keys are divided first into Eastern and Western groups, and then within each regional group by cap color (white, yellow, gray, brown) and finally narrowed to species by dichotomous couplets. This is an eminently practical key structure like that used by the authors in their must-have *North American Boletes* (but alas, totally lacking in their *Waxcap Mushrooms of Eastern North America*, but that is another story).

Do you need this book? My personal lifelist of 800 species records four *Tricholoma* species of which only two are from the Midwest (and one of them now is listed as a doubtful species). The two most useful Iowa regional books, *A Guide to Kansas Mushrooms* and

(cont. on back cover)

Eating Wild Mushrooms...

(cont. from pg. 2)


that tree ears provide is so important in Chinese cooking that the Chinese cultivate tree ears to ensure themselves a steady and abundant supply. Tree ears add a meaty texture and an umami flavor that many mushrooms add. You can test this for yourself by making two versions of a classic Szechuan dish: Ma Po Tofu

First, though, think about how texture matters in your own likes and dislikes. Okra, anyone? If you don't like it, you might be thinking about slime. I like it steamed and still slimy, with butter, salt, and lemon, but no one else in my house does. They will gladly eat it battered and fried, though. Then okra feels crispy. Bananas are like this for me. I love the way they smell and taste but I hate the thick mushy way they feel. If I slice them and put them on ice cream, they get firmer. If I puree them with yogurt and peanut butter, I can't feel them at all but I can still taste them, and that makes me happy.

I really like Ma Po Tofu. The easiest way to make this dish is to buy a mix from an Asian grocery. The mixes aren't cheap but they save you a lot of chopping and hunting for obscure spices. If you want to make the whole thing from scratch, many of the Chinese cookbooks at your local library will have a recipe for it, and you'll go crazy checking out all the versions you can find on the Internet. It is, like I said, a standard dish, like lemon meringue pie or mac and cheese. Mix or scratch, you'll need a block of firm tofu and a few ounces of ground meat. I use pork. Many of the cookbook recipes will mention tree ears; a lot of the Internet ones won't. The mix, most likely, won't. Try it with and without and you'll see for yourself what tree ears add to a dish.

My way is easier than most directions. Heat some oil in your wok. I'd use less than most recipes say, especially if you are using ground pork, which has some grease of its own in it. After you've fried the ground meat, drop in the tree ears. I give my tree ears a bath in a glass of boiling water. They float to the top while bits of grit and bark sink to the bottom. Then I spoon them out. (If you're using a recipe ignore any directions that say to soak the tree ears for a long time. The recipe is assuming you're using dried tree ears rather than the fresh ones you found yesterday!) Slice up your biggest tree ears. I also cut out the rough edge where they were attached the trees and compost that.


Then, most of the mix instructions have you pour the mix in the wok. Keep the faith at this point: the mix looks like mud that splashes on you when a truck speeds by on a rainy day, but it will be okay once you add the tofu. If you want some vegetables in the dish, now's the time to drop your nicely sliced ones in the wok. (Do this rather than going to the trouble of making a separate vegetable dish.) Tofu comes last, and just let it heat through.

Pour it over your bowl of rice, and it's ready to serve. 

FUNgi FOTography...

(cont. from pg. 5)

In fact, they became used to this and our other "strange" requests. When we pulled ashore on an island in a lagoon while on a mokoro (flat-bottomed canoe) ride, the tracker pointed out the larger brown mushrooms on hippopotamus dung along a hippo highway. We have not found a probable species name for the hippo mushroom. Our guide tried to locate an edible mushroom that grows on termite mounds as the rainy season progresses. It was too early in the season and we did not see any.

One of the good things about photographing fungi and other natural subjects, is what can be learned from just trying to identify the species. It adds to the fun in fungi. The Governor's "Healthy Iowa Initiative" includes the goal of increasing the number of Iowans who are learning or doing something interesting every day. Photographing and learning about fungi certainly falls under that goal. 


Editor's Note: Congratulations are in order for PSMC members Linda and Robert Scarth, two seriously talented photographers. Their wildflower photography has been selected for exhibition in the Show House Corridor of the Greater Des Moines Botanical Garden from March 1 to April 30, 2013. They will be honored at a reception in the Swartz Library, Friday, March 1, from 5 to 7 p.m., where light refreshments will be served. The address of the Botanical Gardens is 909 Robert D. Ray Drive, Des Moines, IA 50316, in the event you can attend.

The Nutritional Value

(cont. from pg. 4)

grown – nationwide” marketing claim, it slanders the concept of locally grown produce. Most of the fresh button mushrooms in Iowa’s supermarkets are shipped here from one of two places: Monterey, California or the Monterey facility in Princeton, Illinois. Neither one is local. In fact, the mushrooms may have been grown anywhere in the US, then shipped to California or Illinois for distribution. (The same thing is true of “California Strawberries,” according to an Ohio grower. She said that greenhouse strawberries were picked green in Ohio, shipped to California, and then redistributed around the United States – including back to Ohio – as California Strawberries, being treated with ethylene gas to “ripen” them just before they went in stores. While they may look attractive, their taste falls far short of the naturally ripened, field-grown strawberries we can pick locally at the optimum time to harvest them. The same thing is true of tomatoes; the “store-bought” and greenhouse-raised aren’t even close to the vine-ripened, garden-grown in flavor.) Scrutinize the label on a package of those mushrooms and it will likely say “distributed by” instead of “produced by.” Which begs the question: where did they

originate? It is certainly possible that they came from the US, although the US is the world’s largest importer of white button mushrooms from China and India. Read the label of a can of Pennsylvania Dutch Button Mushrooms, and you’ll find that it came from China, not Pennsylvania. I have a package of Mariposa Farms dried Shiitake mushrooms. Mariposa Farms is in Grinnell, Iowa, and the hope of locally grown & harvested mushrooms entered my mind. Knowing that Shiitake’s are grown on oak logs, and that we have lots of oak in Iowa, I thought to myself that someday I’d want to visit Mariposa Farms, and take my camera along. Then I noticed, at the side of the bar code on the back of the package, “Product of China.” I also have a package of Mariposa Farms dried Porcini mushrooms, the “Product of Serbia.”

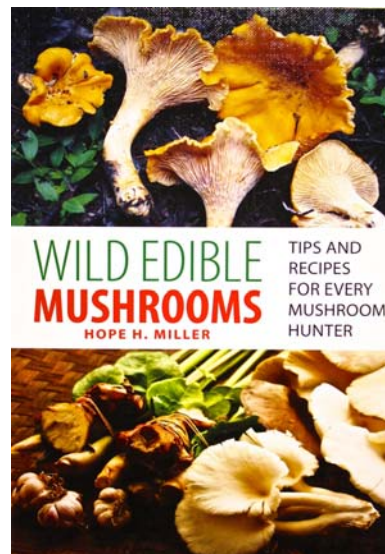
Mushrooms do have nutritional value, even though it is corporate imagination to market them as a super-food. I don’t buy them for their modest nutritional value, I buy them because I enjoy the flavor and texture they add to my meals. 


Book Review 1

(cont. from pg. 3)

Another reason why I like this book is that it reminds me of *Edible Wild Mushrooms of Illinois and Adjacent States*, by McFarland and Mueller. Both books focus on 40 of the commonly found wild edibles. Both books mention lookalikes, although McFarland and Mueller do a better job, as they have a whole chapter on the edible mushroom group, such as puffballs, and have photos and text that help in distinguishing the edible from the sometimes-poisonous lookalike. By comparison, Hope has a short page for the group, and single pages for the members of those groups. After the edible polypores, for example, she has a section for the poisonous polypores. Her book takes first place in its non-technical approach. While she includes a labeled drawing of the parts of a mushroom, and includes a glossary, the descriptions she uses are ones that beginners can comprehend on the first reading. The two-page, six-choice key takes you quickly to one of the eight groupings she has included. Half-page photos of representative members of each group follow it. Well-organized and straightforward, Hope’s book is the leaner of the two. She comes right to the point, without any fluff, and doesn’t insert anecdotal material beyond a

couple of pages in the Introduction. She still covers the essentials for a beginner, encouraging them to find a mushroom club to join through www.namyco.org, advising them to never eat raw morels, and providing sage advice on cleaning and preserving mushrooms. Her recipe section alone is worth the price of the book. In my opinion, this is a great book for a beginner. Those of us who love eating mushrooms will want to try her recipes, too.



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Book Review 3

(cont. from pg. 7)

Mushrooms and Other Fungi of the Midcontinental United States, describe zero and one respectively. Even *Mushrooms Demystified* has only 15 main entries plus matsutake (called therein *Armillaria ponderosa* but now transferred and identified as *Tricholoma magnivelare*).

Besides matsutake the only other highly regarded edible is Man-on-Horseback (*Tricholoma equestre* = *flavovirens*) but it has recently been reported as the cause of fatal poisonings in Europe – perhaps a case of mistaken identity. This is not a genus overflowing with a cornucopia of choice edibles.

This is a book for the specialist although it is written with outreach and accessibility to the amateur. However should I suggest a book for purchase by an Iowa mushroomer, I can think of several other books – some by these very same authors – to consider first. 