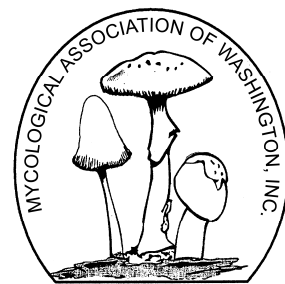


Potomac Sporophore



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Summer Edition

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NOTICE: The MAW Board voted to continue the publication of the Potomac Sporophore as a hard copy mailing.

2011 Scheduled Events

Monthly Meeting Location:

Kensington Public Library

Located at 4201 Knowles Avenue.
phone number 240 773-9515

Monthly meetings are normally held on the first Tuesday of the month.

All monthly meetings start at 7PM and include a brief review by each of the MAW board members and a summary of monthly events and mushroom finds by the President. The program starts at about 8PM.

August 2 ó Program TBD

August 4 - 7 NAMA foray hosted by Western PA Mushroom Club in Clarion, Pennsylvania.

August 11-14 NEMF foray weekend at Paul Smith's College, New York. Registration begins in January on web site <http://nemf.org>.

September 6 ó Program TBD

September 23 - 25 - Annual foray weekend at **Camp Sequanota** in Pennsylvania.

October 2 - The Annual **Mushroom Fair** at Brookside Gardens at the Wheaton Regional Park.

October 4 - Wild Mushroom Culinary Event

Foray Schedule for Summer and Fall of 2011

This is a list of our tentative forays for the rest of the year. If conditions are not very good such as a lack of rain some may be canceled or locations changed. On the other hand if it looks like we may find some things, a few may be added. To be updated with time and location before a foray be sure to send an e-mail to the foray leader (forays@mawdc.org) and request to be added to the notification list. Happy hunting!

July 10

Cosca Regional Park
Clinton, MD

July 23

Black Hills Regional Park,
Boys, MD

August 6

Prince William Forest Park,
Dumfries, VA

August 27

Fountainhead Regional Park,
Woodbridge, VA

September 17

Greenbelt Park
Greenbelt, MD

October 1

Multiple forays for the Annual
Mushroom Fair

October 22

Lake Fairfax Park
Reston, VA

October 30

Scotts Run Nature Preserve,
McLean, VA



From the MAW President

õSpeaking as a new member, I am disappointed that there have been no MAW sponsored forays this month. Looks like morel season is over for

me. I sure hope there will be forays this fall, or I will not renew my membership.õ

Iõve recently received several such emails from members expressing disappointment that more forays havenõ been scheduled since the end of morel season. Well, let me say that I share some of your frustration. The sad truth is that things usually do slow down after mid-May, and this year has been no exception. Sure, thereõ been some chicken-of-the-woods and tree ears, and chanterelles have begun to fruit, but there havenõ been many good wild mushrooms to be had for a while now.

Some would say that we shouldnõ bother with forays unless thereõ a chance of finding decent quantities of good edibles. Others feel that itõ more appropriate to focus on nature study. I tend to align myself with the latter group, but I also accept that reality that thereõ going to be a lot more interest in forays when the good stuff is known to be fruiting and a lot less fruiting when it hasnõ rained in a while. Consequently, I think we ought to try to have a foray at least every other weekend, with adjustments made for weather. But really, folks, if itõ really dry out there, then youõd better be willing to settle for finding nothing more than polypores and other fungi with durable fruiting bodies. This is not to say that forays canõ be held for other purposes such as scouting out new sites or hands-on instruction and identification.

I suspect that the big issue is finding people to lead the additional forays. Having solicited volunteers too many times in the past, Iõm going to suggest a different approach this time: letõ try generating the requisite

leadership by demonstrating the interest in having more frequent forays directly to those organizing them. I think the folks involved will welcome your interest.

The Board members who have been most involved in conducting forays are Mitch Fournet, the Foray Chair, and John Harper, who is the principal organizer of MAWõs web page on Meetup.com and our Treasurer. Our current policy is to post information on the dates and general locations of forays on the MAW website and also on the Meetup webpage, with additional information being provided only to members. If youõd like to see a foray scheduled for a particular date, it would be helpful for you to contact one of them. While youõre at it, copy me on the request so that I know of your interest.

- Ray LaSala

Spring Tasting Goes Wild

About 70 people crowded the basement of the Kensington Public Library to tickle their taste buds by exploring new dishes and learn about wild edibles during the annual Spring Wild Food Tasting held on May 3 2011. People brought in wild mushrooms, and other wild edibles. As usual, Philip Farms of Pennsylvania donated some cultivated mushrooms

At forty five minutes past five p. m, May 3, the volunteers and organizers started to arrive at the Kensington Public library to prepare the basement room for the Wild Food Tasting which was to start at 7 p. m. Connie Durnan and Karen Adams set up tables near the entrance door to give everyone a warm welcome and

make sure that they were all paid up in their dues. At the other desk, Ophelia Barizo also was busy making sure she had all the information to give to the prospective cooks. Bill Drehmann assisted in setting up the cooking tables while Linda Drehmann covered them with colorful table clothes. She also made sure that drinks, snacks and finger were available while the milling crowd waited for the official announcement that they could partake of the wild culinary preparations. Danny Barizo, the culinary chair, hung a new banner with the words "Wild Food Tasting" emblazoned in it.

At around 6.45 p. m. the cooks, with their wild edibles started to trickle in, and took their places at the tables. Bruce Boyer also arrived with the stoves for heating the food. This year's spring event featured not only many wild and commercial mushrooms donated by Philip Farms; it also featured other wild edibles such as bamboo shoots, wild greens, such as dandelions, jewelweed, dock etc, and venison. Christine Ginsburg even had cookies made of mushrooms!

Everyone had fun. First time attendees Melanie Taylor and Victoria commented that they were very pleased with the people and the food. Ray LaSala, MAW president, commented that "we had a wildly popular tasting." At around 8:30 p. m. Terry Pick started distributing ballot papers so that the participants could vote for their favorite dish of the evening. The people's top choice was a dish called "Duck, Duck, and Goose" made of Canada geese, duck, etc., prepared by Colin Core. The second place winner went to Michael Volpe with his delicious recipe

"Porcini Crostini with Sautéed Morels." The third prize went to Jennifer Volpe who prepared a healthy dish of "Tabouli Salad with Dandelion Greens."



The Winning Chefs (L to R) Colin Core (1), Michael Volpe(2) and Jennifer Volpe (3). Photo by Danny Barizo

I hope everyone had a great time and had enough to eat. Thanks, everyone for coming. We hope to see you all at the Fall Tasting in early October.

Special Note on The Fall Tasting:

Unlike the Spring Tasting, the Fall Tasting will feature only dishes with mushroom ingredients. If you do not have any mushroom recipes, you may contact the Culinary Chair for some ideas. Also, mushrooms will be available prior to the tasting for those who want to pre-cook their dishes.

The Culinary Chair will be contacting prospective cooks to encourage them to prepare mushroom delicacies. Mushrooms will be available to those who wish to cook them before or during the event. If anyone would like to prepare mushroom dishes but do not know how to cook them, some members of the Board could provide you with recipes.

Hen of the Woods Harvest

The *Grifolo frondosa* is one of the best edible wild mushrooms of the fall season in Eastern Canada and the Northeastern United States. The common name is "hen of the woods." This article is based on personal experiences concerning the hen of the woods in the Maryland, Virginia and District of Columbia areas

The hen of the woods has an earthy, meaty texture when cooked. There are two other similar edible mushrooms, but they don't taste as good as the hen of the woods. One of them is called the *Meripilus sumstinei*, but field guides usually refer to them as *Meripilus giganteus*; the common name is black-staining polypore. The second similar mushroom is called the *Polyporus umbellatus*, but this mushroom is rare.

The hen of the woods usually grows at the base of large oak trees, particularly those with some dead wood on them. It occasionally grows at the base of elm, maple, beech, honey locust, and black gum trees. It is an excellent medicinal mushroom that enhances the immune system to resist various cancers including breast, colon, and prostate.

The hen of the woods can usually be distinguished by its identifiable features. At maturity, it consists of a clustered mass of grayish brown, soft wavy caps that are 1/2 to 3 inches wide. The underside of the caps consist of creamy stalks that branch from its compound base structure. It usually grows from one to several branched, stem structures around the base of an oak tree. These branched stem structures can weigh over 10 pounds when fully mature. As the

fungus ages, the caps usually become stiffer, and change color to a darker brown. At a stage past maturity the caps turn to a whitish brown color.

The hen of the woods will fruit abundantly when there is a proper combination of habitat, moisture, and temperature, growing off roots at or near the base of trees. As discussed above, these trees are usually oaks with a diameter of greater than 30 inches; generally larger oaks with a diameter of at least 4 feet are more productive. The diameters are measured at a height of about 15 inches above grade. They usually grow near the edge of forests, but they can also be found in forest interiors. However, it is important to remember that they can be found anywhere large diameter oak trees grow, and particularly those with some dead wood.

The hen of the woods usually grows in sandy loam or clay soils. The amount of humidity, rainfall, and sunlight are important growth factors. As is the case with all fungi, moisture is needed for fruiting to occur. The best practice is to go on a foray about 3 or 4 days after a cold rain to look for fruiting hen of the woods.

The season of the hen of the woods is from early October until early November; occasionally the season begins and ends a couple weeks earlier in the year. They are easy to spot because of their relatively large size. They usually emerge when the leaves of oak trees begin to change to their fall color. They are difficult to identify at the end of the season because the leaves have fallen to litter the forest floor and obscure the similarly colored *öhensö*. The season normally ends when there is a hard freeze which can be anywhere from

late October to the middle of November.

Fruiting will usually occur on the same trees every year except during periods of drought; hen of the woods trees can provide good yields in years with abundant rain, but there may be little or no fruiting during major droughts.

Once you've learned how to recognize the right habitat and conditions for the fruiting of the hen of the woods, you will likely start finding them in quantities, particularly as you gain in experience and spend more time hunting. You will be surprised at how many hens of the woods that you will find; an experienced mushroom hunter might easily find twenty five pounds in a single year.

Hen of the woods is a popular and choice edible. Because of their flavor, they can be prepared in many dishes. One good recipe is the following:

- cut hen of the woods into small pieces;
- marinate pieces in oil;
- add cut up onions and chives;
- add a bit of mesquite seasoning;
- add salt and pepper;
- broil the mixture in your oven until done on each side;
- serve as a side dish with a meat of your choice such as chicken.

Hen of the woods keeps well when frozen, but only if they have been blanched or pre-cooked first. When cool, they should be placed in heavy duty plastic bags or containers and frozen for future use. They can also be cut into thin slices and dried with a dehydrator and then stored for future use. They have a good flavor

when rehydrated.

- Larry Goldschmidt



Editorial

Mushrooms with Sherry

The Taste of Mushroom

De gustibus non est disputandum or you can't really argue about someone's taste. Of course we do it all the time: "What does he see in her or vice versa?" Some Bordeaux wines were rated the best in 1855 and are still held in the same very high regard.

When it comes to mushrooms, every guide book rates the taste of mushrooms. The Audubon field guide rates 36 mushrooms as choice, many others are just edible. There is a consensus, but it is difficult to determine to what extent a consensus on taste is formed objectively. We are getting after the Chinese for killing sharks just to make fin soup, but we don't bother with it. Blow fish, anybody?

There are a few mushroom hunters who are not enthusiastic about morels, and some mushroom hunters

who do not like chanterelles and lots who don't like chicken mushrooms or oyster mushrooms, though I haven't met anyone who complains about hen of the woods; at least not yet.

We found a few grey morels this year and also found dryad saddles, which were growing on some bleached and bare boxwood trees. We ate the morels and the dryads and one was as tasty as the other. Now, most people put their nose up at the dryad and I have eaten some that were fairly awful, but this year they were quite edible. I have never been a knock-out fan of morels, though I admit that it's fun to find them; they are one of those mushrooms that you have to find before you can see them.



Gyromitra esculenta
Conifer False Morel

The mushroom that was exciting to find this spring was a controversial mushroom, not so much because of its taste but because its taste leads to danger: the *Gyromitra esculenta*- the delicious *gyromitra* (see picture). I found three large *gyromitras* growing

in a pit which was formed when a large tree was uprooted. I didn't eat the mushrooms, though Europeans love this *gyromitra* and the toxicologist who often speaks at NAMA forays on poisonous mushrooms has said that he has served this *gyromitra* to his friends a thousand times (that's being a generous host, regardless of what is being served).

This *gyromitra* must be a delicious mushroom because it is eaten so often by so many informed people: members of a California mushroom club voted it their third favorite edible mushroom! Apparently it is delicious but it is also a killer; even its cooking fumes are dangerous to one's health.

People who eat *gyromitra* do take the precaution of parboiling it a couple of times, but even this is not always helpful-its toxins accumulate in the body when one consumes it again and again. There is a secret thrill in doing dangerous things, which we have observed recently.

There are lots of amanitas that are edible and tasty; unfortunately, the ones that are more likely to be found in my neighborhood are deadly. I am told that the deadly ones are tasty, and that if you eat them and get to the hospital on time you have a 95% chance of surviving, with normal hospital care. This was said by the same fellow who served his friends the *gyromitra*.

By the way, the *gyromitra* is one of the false morels, though, more than likely it's called that because it grows at the time and place where morels grow. It looks as much like a morel as a Mini Cooper looks like a Humvee

Fungus Notebook



Common Name: King Bolete, Cep (French), Porcino (Italian), Steinpilz (German), White Mushroom

(Russian; pronounced öbelly greebö) ó The reference to regality conveys the notion that this mushroom is the king, as it is widely considered from the Epicurean European perspective, the epitome of the genus *Boletus*. It is described by David Arora in Mushrooms Demystified as 'magnificent - a consummate creation í the one aristocrat the peasantry can eat.ö

Scientific Name: *Boletus edulis* ó Traditionally, the genus name is attributed to the Latin word for mushroom, *boletus*, which is in turn derived from the Greek (originating from , which means -lumpö). However, some philologists believe that there is an association between mushroom names and place names. From this perspective, the genus was named for the town Boletum located in Hispania Tarraconensis, the Roman province comprising northern Spain. Whether this is a toponym, the town being named for the mushroom, or vice versa, will likely never be resolved. The specific *edulis* means 'eatableö in Latin.

King Boletes are among the most prized of edible fungi of Europe, second only to truffles in gustatory appeal. They are characterized by large reddish-brown, smooth caps that are viscid when wet and that have white pores on the underside that become tawny with age. The stalk is probably the most notable feature; it is stout and tends to be bulbous with white reticulations, a webbed or netted pattern of raised striae that extend over the upper portion. They are generally found singly or in small groups under conifer trees, notably spruce and hemlock, and some deciduous trees, notably birch. They are mycorrhizal in their association, providing water and minerals to the tree roots in exchange for the tree's photosynthetic glucose for nutrition.

Identification of the King Bolete is not a trivial matter, as they are quite variable in the coloration and diameter of the cap and in the girth of the stipe or stem. According to Charles McIlvaine, describing the mushroom in the seminal One Thousand American Fungi, "some species appear to have that prize of Fairyland – the Wishing Cap – and by its power be able to take on any form they please." There is some indication that *B. edulis* is actually a group of related species and that the variants found in North America are not the same as those found in Europe, where they were first described. However, they are gathered assiduously for consumption across the globe, a fact that attests to the facility that most people have in identification once some experience with the species is gained. Another factor that allows for some lassitude is that there are no known deadly boletes and the ones that cause adverse reactions, notably gastric

distress, can be readily distinguished by a simple test. The aphorism among mycophagists is that you can eat any bolete except those that have red pores, those that stain blue, or those that taste bitter. This latter feature distinguishes the King Boletes' most common look-alike, the aptly named Bitter Bolete (*Tylopilus felleus*).



Tylopilus felleus
Bitter Bolete

The proliferation of the names for *B. edulis* is distinguished not so much by its global reach as by its rich diversity in etymology. It is the opinion of David Arora that, "it has more common names than there are languages." This suggests that the mushroom was independently identified, consumed and named in separate, disconnected regions with different cultural traditions. It was among the first mushrooms to be described, the French Botanist Pierre Buillard establishing it as a unique plant (fungi were thought to be plants in the Phylum Thallophyta until well into the 20th Century) in 1782. It was the first mushroom of the genus *Boletus* to be named, and is therefore considered the *Boletus* type-species. It was a well-known edible at that time, as Buillard describes it in his Herbier de la France as "très

agreeable au gout, et à l'odorat, on le mange à toute saifse (sic)" (very agreeable to taste and smell, one can eat it in total safety). Given this paean to its gustatory attributes relative to the low risk of adverse effects in one of the first field guide publications, it is not surprising that it was widely consumed and popularly known by different common names.

In Western Europe, the common names of *Boletus edulis* are generally derived from a similarity in appearance between one of the mushroom's attributes and a physical object. In England, it is called the "Penny Bun" due to the rounded shape and brown color of the cap. To the Germans, it is the "Steinpilz" or "stone mushroom" which may refer to either the firmness of the mushroom or to the fact that it looks like a smooth riverbed stone. The French common name "Cep" or "Cepe" has a more labored etymology; "Cep" is the Gascon word for "tree trunk" which comes from the Latin cippus meaning "stake" (and "tombstone" with some unintended irony for a choice edible mushroom). The likely reference is to the bulbous and trunk-like stalk, the mushrooms' most notable feature. The most ubiquitous of the Western European names is "Porcino" which is Italian for "little pig", as this is the name which is most frequently used in the extensive *B. edulis* export market trade; the label "porcini" (plural) is quite frequently seen in the produce sections of food markets. The metaphorical comparison to piglets which is probably both for appearance and taste, reflects the earlier Roman tradition of referring to a bolete-type mushroom as *Suillus*, the word for "swine" (the name survives as the genus *Suillus*, a group of mushrooms with pores instead of gills like those

of the genus *Boletus*).

In Eastern Europe, *Boletus edulis* is afforded a much more honored position in the culinary pantheon, and it is accordingly referred to in terms that reflect its singular munificence. In Poland, it is known as *Prawdziwek*, literally "true mushroom," a designation that has extends to the Balkans as *Pravivrganj* with the same meaning. But it is in Russia that the esteem reaches the pinnacle of the natural cuisine. The or "white mushroom" is considered ambrosial, the name conveying not only the color of the flesh and pore surface, but also the purity of the fungus in comparison to the "black mushroom," considered of inferior quality. According to the noted Russian author Vladimir Nabokov, it has "that special boletic reek which makes a Russian's nostrils dilate to a dark, dank satisfying blend of damp moss, rich earth and rotting leaves." The Russian Wikipedia website lists 20 different regional names that range from the pedestrian "boletus" () to the more anthropomorphic "grandma" (). Traditionally, the white mushroom is collected in autumn and dried or pickled in brine for later consumption.

The King Bolete is highly nutritious, with significant amounts of protein and amino acids, a fact that is generally not at all appreciated by the general public. A 100 gram serving (3.5 ounces) contains over 7 grams of protein with a fat content of less than 2 grams and a total caloric level of only 82 kilocalories (the vernacular calories are really kilocalories). It is also rich in the B vitamins and in important minerals, especially iron and zinc. However, like most

mushrooms, it is comprised primarily of carbohydrates, about 65 percent of the total dry weight, mostly in the form of chitin, a polysaccharide that is not digestible by humans and accordingly passes through the intestinal tract as beneficent dietary fiber. Chitin is the fundamental cellular structure of all mushrooms (plants cells are composed primarily of cellulose) which accounts for their "meat-like" texture. But perhaps the most notable of nutritional attributes of *B. edulis* is its amino acid composition; it contains all eight of the essential amino acids. A good source of protein must have all of these essential amino acids or it must be part of a balanced diet that does; any deficiency in one results in a reduction in the synthesis of the other seven. Shu-Ting Chang and Phillip Miles rank foods according to their essential amino acids in relation to adult dietary requirements in a quantitative index on a scale of 0 to 100 in Mushrooms, Cultivation, Nutritional Value, Medicinal Effect, and Environmental Impact. Mushrooms (98) rank just below meat (100) and above spinach (76).

- William Needham

Mushroom Poisoning Antidote

Madaus Inc, a division of Madaus GmbH (Cologne, Germany), is making its mushroom poisoning antidote Legalon® SIL available for the first time in the USA. The drug will be provided at no charge to treat patients with suspected amatoxin poisoning due to the ingestion of *Amanita phalloides* or other amatoxin containing mushrooms. Madaus Inc

will sponsor a clinical evaluation of Legalon® SIL via an FDA sanctioned Open Treatment IND and physicians can obtain the medication by contacting a 24 hour hotline (toll free # 866-520-4412).

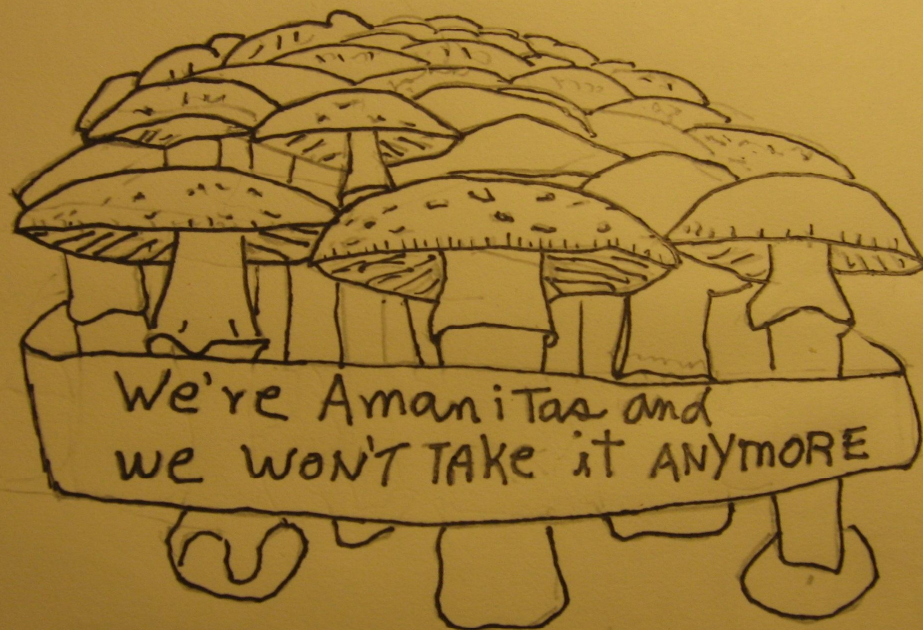
Amatoxin Mushroom Poisoning (AMP)

Amanita phalloides (aka Death Caps) and other amatoxin producing mushrooms (*A. ocreata*, *A. bisporigera*, *A. virosa*, *Galerinas*, *Lepiotas*) are often mistaken for safe edible mushrooms in the wild. They are known to taste very good and initial symptoms are delayed by six hours or more. Within 24 hours of ingestion patients develop a syndrome similar to food poisoning with severe diarrhea and vomiting. Depending on the amount ingested and the degree of dehydration at presentation, fulminant hepatic and renal failure may ensue resulting in death or the need for liver transplantation.

Current Treatments

The approach to AMP includes intensive supportive care with fluid and electrolyte replacement, and activated charcoal to bind toxin in the gut. Measures to address the complications of liver and renal failure may also be required. Several remedies that have little support in the medical literature also continue to be used including intravenous penicillin, high dose steroids, thioctic acid, N-acetylcysteine, cimetidine etc.

Liver transplant may be offered to the sickest patients. The mortality following amatoxin ingestion remains disturbingly high.



we're Amanitas
JIM SHERRY