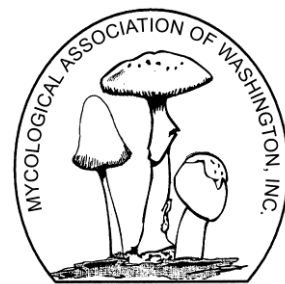


Potomac Sporophore



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2012 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.

January 3 - Monthly Meeting TBD

February 7 - Monthly Meeting TBD

March 6 - Wild Mushroom Culinary
Event

April 3 - Monthly Meeting TBD

May 1 - Monthly Meeting TBD

MAW Board Notes

Based on a discussion and vote at the
last MAW board meeting, the
following notice is promulgated:

Protocol for offering wild

mushrooms for distribution to others
at meetings: Policy will be that one,
and preferably two, club identifiers
verify the identification before
mushrooms are made publically
available. Individuals may swap
mushrooms with other individuals on
their own certainly, but we prefer that
be done away from the meeting site
with each individual being
responsible for identification and
safety.

From the (former) MAW President

This could be the most important
(and certainly the most controversial)
President's column I've ever written.
The ironic thing is, I won't even be
the President of MAW by the time it
reaches you. What I'd like to do on
the eve of my departure is to tell you
about not what I've accomplished
during my tenure of five years but
rather what I haven't. Putting things
in a more positive light, I'd like to
propose some agenda for the 2012
and future Boards to consider.

Culinary

The purpose of the Tasting Meetings
is to educate members on the tastes of
mushrooms and to socialize.
Unfortunately, I don't think much
education, particularly on the tastes
of wild mushrooms, is happening. At
the same time, I recognize that

everyone has a great time at the Tasting Meetings. However, they have become crowded and hectic, and I suspect that between the crowds and the on-site cooking, the Fire Marshall would not approve of them as they are. I recommend that we limit attendance to no more than 75 individuals including those who provide dishes or help run the meeting and that we not seek a larger venue for the event. The team approach should be maintained, but the team leaders need to provide stronger oversight over what is prepared, which means no “pot luck” dishes and no formation of teams at the door. In order to streamline the event, on-site cooking should not be allowed, just final assembly and reheating of dishes.

The Culinary Chair should be responsible for oversight of all MAW activities involving food, including not just the Tasting Meetings but also cooking demonstrations, hospitality, and mushroom dishes brought into monthly meetings, especially anything containing hand-picked wild mushrooms.

Forays

What is the purpose of the forays? Is it to learn about mushrooms and how to find them, or is it to collect mushrooms for the table, particularly for individual consumption. I maintain that the principal purpose of MAW forays should be to learn about mushrooms, but I don't think this is happening very much. I suspect most people, especially newcomers, are going so that they can come away with mushrooms that have been identified as being edible by MAW.

MAW should establish a series of forays especially for newcomers where the focus is on learning how to

find and identify mushrooms whether they be edible or not. Restrict attendance to a reasonable number on a first-come, first-served basis. Make the non-member participation fee applicable to MAW membership dues (except for dues at discounted rates later in the year)

Furthermore, I find it very unsettling that MAW should be leading large groups of people armed with collecting baskets and bags into areas where collecting mushrooms is prohibited. This puts MAW in the position of organizing and conducting illegal activities that put people on those forays (and MAW itself) in legal jeopardy. Sooner or later someone is going to get arrested, and park authorities are likely to clamp down on harvesting under any circumstances, leading to entire areas being closed off even to people who have quietly gathered there for years. Forays at places where there is an established policy of no picking should honor that policy and not allow harvesting.

The foray announcement system is fragmented and sometimes incomplete, with information not being directly posted on the MAW or MAWDC (Meetup) websites.

I'd also like to see education be given more emphasis at forays.

Planning, Budgeting, and Reporting

I've consistently recommended that the Board of Directors take seriously the preparation of an annual operating budget, that a pro forma budget be prepared by the organizer of each event and submitted to the Board for approval prior to the event, and that a report on the event, including a comparison of the planned and actual revenues and expenses, be prepared for each

Tasting Meeting and budget special event such as the Mushroom Fair and the Camp Sequanota weekend foray in order to maintain financial accountability and provide a basis for future organizers to plan. The President and the Treasurer should be responsible for ensuring that this is done, but it's up to the organizers of individual events to cooperate by preparing the required pro forma budgets, adhering to them as much as possible, and providing event reports to be filed by the Secretary.

Social Networking

Over the past year a new dimension has been added to MAW, the MAWDC Meetup group. Meetup has powerful capabilities for broadcasting information about events and about MAW itself, but it is currently operating in a way that promotes formation of a separate group apart from MAW. The dues-paying members of MAW pay for it, but the non dues-paying members of the MAWDC Meetup group get the benefits (every but the newsletter, admission to the Tasting Meetings, and free admission to forays) because it is available to the general public at no cost. This doesn't seem right to me.

Membership MAW should be a prerequisite for membership in the Meetup group. The Meetup group should be administered by the relevant MAW chairs (forays, programs, etc.).

MAW does not currently have a Facebook page, but I suspect it should, even if it's just a very static one. Not being on Facebook myself, that's about all I can say about this.

NAMA and NEMF

The membership is missing a

wonderful opportunity because we are not doing an adequate job of publicizing the annual foray of NEMF, the North East Mycological Federation, or keeping the membership aware of NAMA regional forays and other goings-on.

Programs

There ought to be a good program presented at the December meeting. Programs need to be planned months in advance so that there are more speakers. The outgoing Program Chair should present the incoming Chair with at least six months of programs and speakers already lined up, which is the way it was being done when I was Program Chair.

Board Meetings

Four per year is not enough. There should be at least six Board meetings scheduled per year.

Website, Newsletter, and Outreach

I'd like to see a "media czar" be responsible both for the content of both newsletter and the website and for other forms of communication such as publicity and outreach. Since this is a big job with diverse skills (editing, website creation, media contact), it probably would be necessary for this person to be assisted by others with specific technical skills. There's no reason to expect one person to want to or for that matter be able to handle it all—it should be done by several people. But there should be one person responsible for the Big Picture and voting representation on the Board. Given our current Board structure, that person would be the Newsletter Editor, but the name should probably be changed at some point to something more representative of the augmented position.

The Mushroom Fair has become an important event and a big success, drawing upwards of 500 people. However, it lacks oversight by a specific member of the Board of Directors. Since it is essentially an outreach activity, I recommend also putting under the oversight of the "media czar."

Venue

We met for many years at the Chevy Chase Library before moving to the Davis Library and currently the Kensington Park Library in Montgomery County. While the meeting rooms in those locations have been satisfactory for the most part, it would be nice to find a meeting location that is both Metro-accessible, affordable, and consistent with our needs. We also have to bear in mind that the terms of our lease from Montgomery County forbids cooking, which has important implications for the Tasting Meetings. If we keep holding big, noisy, overcrowded events with lots of aromatic cooking over open flames, we're going to get in trouble sooner or later. Until we find such space, we should limit the size of our activities consistent with what we have.

Having spoken my peace, I'd like to thank the Board and the general membership for all the support I got over my term in office, and I wish the best for the incoming 2012 Board.

Ray LaSala

Honeys to Stinkhorns:

MAW Members Cook Up a Storm

Members of the Mycological Association of Washington stepped

up to the plate and came in record numbers to participate in the annual Fall Mushroom Tasting event held on October 4 at the Kensington Public Library at 7 p. m. Recipes ranged from strange dishes such as Bruce Boyer's fried Stinkhorn eggs to delicacies such as Ray LaSala's morel cream. Due to the plentiful harvest of Hen-of-the-Woods, it was the most widely used wild mushroom at the Tasting. Most of the cultivated mushrooms used were donated by Philips Mushroom Farms, in Kenneth Square, Pennsylvania.



The Flavorens Deliciosa Team - Sheri Kayam, Ben Kaplan, Mike Volpe, Jennifer Volpe and Tovi Lehman

Breaking from past practices, the cooks were dividing into 6 competing teams each with 4 to 7 members. The six teams and their leaders were the following: The Fungals lead by Linda Nunes-Schrag; The Fun Guys lead by Raymond LaSala; Flavorens Deliciosa lead by Mike Volpe; Play the Fungal Music led by Eric Malcolm; Excelsior led by Jon Ellifritz; Bruce Boyer's team did not have any name. Mike Volpe's Flavorens Deliciosa was voted as the best over-all team. His team prepared the following: Mushroom quiche- Mike Volpe; porcini crackers with portabella cream-Jen Volpe; Potato Leek with mushroom soup-Tovi Lehman; Buffalo chicken-of-the-woods, Hen-of-the-woods

Risotto, Maitake Okomiyaki-Sheri Kayam and Ben Kaplan. Jane Lanning's Mushroom Casserole won first prize in the individual category followed by Mitch Fournet's Mushroom Stroganoff and Luke Olson's Hen-of-the-woods Brochette. The most unique dish award went to Colin Gore for his dish called Bone Appétit.

The evening was a delightful and enjoyable event: Leon Carrier wrote: This was a great tasting... They said it wasn't a dinner, but I doubt that any one went away hungry. Cooks did a great job. Well organized. Rimas, a MAW member since 2010 said the Tasting was "total awesomeness". Jonas said: This tasting was surely a bargain. If I dined in a restaurant that served a similar fare, assuming there was one, I would certainly have paid a fortune

Daniel Barizo, the culinary chair, would like to thank everyone who participated and helped make this event a great occasion!



Individual Winners Colin Gore, Luke Olson, Mitch Fournet, and Jane Lanning.

- Daniel Barizo

Editorial Mushrooms with Sherry

The Season

There was so much rain that basements were wet and bank checks felt damp. Those people who are bothered by humidity were constantly feeling distressed. The paper reported that by the end of September the rain was ahead of its yearly fall by 12 inches. It certainly portended a great autumn for hen of the wood-and, indeed, people were reporting its appearance. One go-getter had already found 37 pounds of hen (*Grifola frondosa*) before the start of October. We found half of that and were tired of the cleaning and drying-even half-heartedly hoping we wouldn't see anymore.

Lots of other mushrooms were out there, too, though not necessarily the ones you wanted. There were plenty of poisonous amanitas, and elegant stinkhorns (*Mutinus elegans*), and the corals *Ramaria* and *Clavaria* and the most reliable and ubiquitous of them all the Violet-toothed Polypore (*Trichaptum biformis*) which seems always to lose its beautiful violet color before it is found. And for those people who will eat almost any edible mushroom there was the Slippery Jack (*Sulius luteus*) and after an absence of eight years the controversial blewit (*Clitocybe nuda*) returned to our yard, which we cooked a bit of, but it seemed slimy, and then later in the month we found its cousin, *C. irina*, which also has been absent from our yard for eight years. Both were growing among the leaves that were gathered last year.

What really pleased me was that one particular scarlet oak tree was awakened again to produce some

hen. Eight years ago this tree had gathered around itself eighteen hen, none terribly big- most, the size usually found and then, for the last three years there was hardly any hen at this tree. Then, bingo, this year, there were fourteen hen around the tree. This find satisfied all the feelings that one might have about mushrooms, including greed and a sense that things are going right.

This particular scarlet oak has always produced hen with a light brown color. In contrast, the scarlet oak in our back yard, which has developed at least one hen for all the years that I have known it, which is ten, except for one year, always has hens which are dark brown-black. Both trees are partially exposed to a southeast sun.

I don't want to disparage the great variety of non-edible mushrooms that the fall rain brought. There are many MAW members who take great delight in any and all mushrooms, even those that have no status in culinary circles. Some find pleasure in the beauty of a mushroom and like to spend time tracking down the identity of every mushroom they find. And there are others who are only interested in those mushrooms that are tasty and find it a bit tedious to bother with the unsavory ones.

I talked with some MAW members at the annual fair, which was a great success, despite the weather, about the mushroom season as a whole. There was some consensus that the yellow mushrooms were not there-not much chicken and no abundance of chanterelles. I wondered all season where the chicken mushroom was because for the past two years I saw plenty from the car, but this year I found only two.

And what about the *Pleurotus!*

Where is it? I haven't seen much of it for four years. I suppose it's because the tulip poplar hasn't fallen. Despite all the talk about big winds and rain, I haven't found many downed trees. We need a big wind or I will have to talk about the fabulous four, not five, because one of the criteria of the "fabs," in addition to "choice" and "easy to recognize," is "availability." But one has to be careful of what one wishes for because our house is surrounded by tulip poplars and we have enough to do to cope with yearly outages as it is.

- Jim Sherry

Mycological Survey of Woodlawn Plantation

Last year, the Mycological Association of Washington was asked to conduct a survey of the Woodlawn Plantation property at the request of the Arcadia Center for Sustainable Food & Agriculture in order to evaluate the viability of the site for cultivating mushrooms. The evaluation was conducted in consideration of five prominent edible mushroom groupings indigenous to the region and their respective preferential habitats:

1) Morels - several species in the genus *Morchella*, usually found in the vicinity of tulip poplars, ash trees, dead or dying elms, and old apple orchards, although not limited to those types of trees. In the immediate Washington area, morel season is essentially the latter half of April, occasionally a bit earlier or later.

2) Chanterelles - several species in the genera *Cantharellus* and *Craterellus*. These tend to be associated primarily with oak woods,

sometimes with beech trees, and often near watercourses, usually small streams, but even in shallow gullies or depressions which channel runoff during rainstorms. They're generally found in quantities from early July to late August, or even into September.

3) Hen of the Woods - *Grifola frondosa* - a sometimes quite large polypore which grows at the feet of living or dead oak trees (a mild parasite on sick roots), even in residential areas. It is a choice edible as well as an esteemed medicinal mushroom, and usually is found from late September to late October. It is occasionally found in early November.

4) Chicken of the Woods/Sulphur Shelf - Two species of these polypores grow as shelf-like fungi on wood. *Laetiporus sulphureus* is orange above and bright yellow beneath, and tends to grow on fallen logs or standing sick or dead trees or stumps. *Laetiporus cincinnatus* is peach-colored to salmon pink above and almost white beneath, and grows in rosettes on the ground, from buried wood or roots. (A few people are sensitive to a substance found in these species, but individual sensitivities are something anybody consuming wild mushrooms of any kind should take into consideration.) Normally this mushroom can be found any time after a cooling rain (where the temperature drops about 10 to 20 degrees) from late April thru early October.

5) Oyster Mushrooms - The common species in our area is probably *Pleurotus ostreatus*, and can be found any month of the year on wood, usually fallen logs or stumps, but also from wounds on living trees.

This fungus, like hen of the woods, is cultivated by some of the Pennsylvania mushroom farms, among their "exotic" mushroom types.

It was noted by the MAW survey team that the Woodlawn Plantation site had large populations of white oak, willow oak, tulip poplar, white ash, maple, American holly, sycamore, sweet gum, wild cherry, apple, and pine trees. The survey team identified honey mushrooms (*Armillariella mellea*) and oyster mushrooms (*Pleurotus ostreatus*) on the property.

The feasibility of growing wild mushrooms was addressed in terms of practicality. It was noted that the cultivation of mycorrhizal fungi, in the few instances where it has succeeded, has taken 10 years or more and far more expense and effort than generally warranted by the results. Cultivated mushrooms were considered feasible if some effort were undertaken to establish the appropriated growing conditions. This would require the procurement and installation of a medium on which to grow the mushrooms. Various reference books provide basic guidelines which consist of an initial medium of agar to start the growth followed by a secondary medium of grain, sawdust, wood chips, or shredded newspaper. The initial growth is transferred to the growing media which become fully colonized by the mycelium; the fruiting bodies emerge and are eventually harvested for the table. Cultivation references such as "Growing Gourmet and Medicinal Mushrooms" and "The Mushroom Cultivator-A Practical Guide to Growing Mushrooms at Home" by Paul Stamets should be consulted.

However, given the expense and complexity of the cultivation operation described above, a more practical method was preferred. The “simple” method is to use dead trees, ground up or chipped sawdust and then to prepare a large bed of wood mulch. Spores can then be obtained directly from existing growths and hydrated. The spore-water admixture is then poured in the mulch bed to germinate, replicating the process that occurs naturally. However, it should be noted that there is no guarantee that mushrooms will grow, as the germination of fungi is not the same as (and is much more complicated) the germination of plants.

- Larry Goldschmidt

Fungus Notebook



Common Name: Turkey Tail, Yun zhi (China), Karawatake (Japan) – The concentric multicolored rings are similar in pattern and coloration to the feathers comprising the tail of the wild turkey (*Meleagris gallopavo*).

Scientific Name: *Trametes versicolor* – A trama is a fungal structure comprised of loosely woven hyphal tissue (i.e. consisting of bundles of individual hyphae, which are the filamentous growth extensions of the fungus) that makes up the sterile tissue at the center of

the fruiting body cap that extends into the spore-bearing pores. The Greek word trama means the woof or weft of a fabric (from trahere – to pull) and refers here to the fabric-like weaving of the hyphae. In the *Trametes* fungi, the central trama is accentuated by radiating rings. *Versicolor* means multi-colored. *Coriolus versicolor*, *Polyporus versicolor* and *Polystictus versicolor* are alternative scientific names that have been used in the past and are found in some references.

The turkey tail is one of the most recognizable and certainly among the most aesthetic of all forest fungi. It has the delicate tan, brown and cinnamon concentric gradations that grace the tail feathers of its avian namesake. With a modicum of imagination, one can envision a massed flock of turkeys compressed onto the surface of its primary habitat: the fallen log of a dead deciduous, hard wood tree. The notoriety of the turkey tail is global, its unique appearance having attracted human interest for millennia, most notably in Asia, where it is prized as a medicine of substantial benefit. Turkey tail identification is not without challenge, as there are at least two fungi that are quite similar in appearance when viewed from the top, which would be the normal stance of the observer. The first is actually called the False Turkey Tail due to this resemblance.



False Turkey Tail – *Stereum ostrea*

A member of the Stereaceae or Parchment Fungus Family, which are in general thin and leathery polypore fungi, False Turkey Tail or more properly *Stereum ostrea* is sometimes also known as *Stereum versicolor* in acknowledgement of its own multi-colored cap surface. The key identification feature that can be used to distinguish a Turkey Tail from a False Turkey Tail is the underside of the cap. The former has visible, though minute, pores on the bottom while the latter is smooth. The photo above shows the top of *S. ostrea* on the right and the smooth bottom on the left.

The other Turkey Tail doppelganger is one of the more unusual polypore fungi, the multi-colored gill polypore, *Lenzites betulina*.



Multi-colored Gill Polypore – *Lenzites betulina*

Fungi in the family Polyporaceae are commonly known as polypores, as they have many (poly) pores, which are actually the openings for the spore-bearing tubes that extend from the underside of the cap. The multi-colored gill polypore, as the common name suggests, has what appear to be gills on the underside of the cap (like the ubiquitous gilled mushroom). However, the gills are not the same as the true gills of a normal mushroom in that the spore bearing basidia are not connected directly to the sides of the gill surface. Rather the “gills” of *L. betulina* are in reality a radial arrangement of tubes and pores. Inspection reveals that the “gills” are very tough and leathery,

like the polypore to which they adhere. The real Turkey Tail can thus be fairly easily identified in the field. One need only find a polypore with limbate, concentric rings and turn it over. If it has pores, it is a Turkey Tail.

And if it is a Turkey Tail, then you can eat it, though the tough hyphae woven trama is not likely to be palatable to the average mycophagist. Those who have tried it characterize the taste and texture, once satisfactorily moistened and masticated, as fungus flavored chewing gum, hardly a palatable experience to most. Assuming that someone was inclined not only to chew a Turkey Tail, but also to swallow and digest it, the experience, though not high cuisine, would be of significant nutritional value. P. Stamets in *Mycelium Running* provides that a 100 gram serving has 369 kilocalories (which we usually refer to as simply calories), 10.97 grams of protein, 77.96 grams of carbohydrates, 71.3 grams of dietary fiber, 8.7 milligrams of iron, and 570 milligrams of potassium. Though this nutritional content is not all that exceptional in comparison to many of the myriad other edible fungi, it is hard to believe that the scabrous turkey tail is that wholesome – you could make a tolerably salubrious breakfast meal out of it. However, it is much more likely that the casual wild food aficionado would gather the “tails” and make a ptisan (tea) of them, taking advantage of the well documented and scientifically established medicinal properties of *Trametes versicolor*.

The Turkey Tail (more correctly Yung zhi in China and Karawatake in Japan since most of the research is conducted in Asia) is likely the most

well documented of all the fungi from the standpoint of medicinal applications. It has notable and measurable effects on tumorous carcinogenic growths with some organoleptic specificity. The trials have included in vitro (outside the body in an artificial environment), in vivo (live animal) and human clinical evaluations. The non-human trials have demonstrated that the chemical components extracted from the Turkey Tail have potential in adjuvant cancer therapy, which is to say that they enhance the effect of other drugs in shrinking tumors when taken in concert with the primary drug. This ameliorative effect is also referred to as a biological response modifier, or BRM; the additive component (in this case a derivative of the fungus) acts as a modulator of the immune system in improving the host body’s tumor response. As an example, a meta-analysis of eight separate controlled and randomized trials which included 8,009 patients that was conducted in Kyoto, Japan in 2007 revealed that the use of adjuvant therapy with extracts from Turkey Tail fungi “improves the survival of patients after curative gastric cancer resection.” Other trials have demonstrated similar statistically significant effects on prostate, esophageal, colorectal, breast and lung cancers.

The compounds that are extracted from Turkey Tail are polysaccharides, long carbohydrate molecules that break down when hydrolyzed into monosaccharides like glucose. Polysaccharide – Kureha, simplified to PSK, is the predominant fungal compound used for medicinal applications; it is sold commercially as Krestin. PSK has been an approved cancer drug in Japan since 1977 where annual sales are

estimated at over half a billion dollars, about 25 percent of the total Japanese expenditure for cancer-related drugs. A second polysaccharide that has more recently been extracted from Turkey Tail is polysaccharide peptide, or PSP. It differs chemically from PSK in its constituent monosaccharides; PSK yields rhamnose and arbinose and PSP yields fucose. The more important functional difference, however, is in the modulating effect of PSP on the immune system. Trials have indicated potential as an agent against HIV replication. The enzymatic efficacy of *T. versicolor* also makes it a strong candidate for mycoremediation, the use of fungi to remove harmful materials from the environment. This has been demonstrated in numerous studies of a variety of contaminants including organophosphates and mercury. As Turkey Tail is a white rot fungus, which means that it can decompose both wood cellulose and lignin, it has great potential for other industrial processes, notably the bleaching of wood pulp.

-William Needham





There's NOTHING HERE, NOTHING.

JIM SHERRY