

The Potomac Sporophore

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It's January!
Have you paid
your dues?
New policy on
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Hiker's Notebook: The Gem-Studded Puffball

William Needham
MAW Vice President

Common Name: Gem-Studded Puffball, Common Puffball, Devil's Snuffbox – The spiked protuberances that extend from the outer shell called the peridium are equated to embedded diamond-like studs, an oddly beneficent metaphor as fungi generally have more pejorative nomenclature (like Devil's Snuffbox). The term puffball is descriptive of a round fungus that expels its spores in 'puffs' through a hole that develops in the peridium called an ostiole.

Scientific Name: *Lycoperdon perlatum* – The generic name is perhaps the most bawdy in all of taxonomy. *Lycos* is Greek for wolf and *perdon* is taken from the Greek *perdesthai*,

which, from its derivative Sanskrit, means "to break wind." Literally, then, the notion is that the puffing of the spores is, with scatological metaphor, a 'wolf's fart.' *Perlatum* is Latin for 'common.' It is sometimes also listed as *L. gemmatum*.

Potpourri: The Common or Gem-Studded puffball and its close cousin the Pear-Shaped Puffball (*L. pyriforme*) are ubiquitous in their geographic and geologic habitat, prolific in their reproductive capacity and eye-catching in their globular whiteness against the dark hues of the forest. They are the two most frequently encountered species



William Needham

Lycoperdon perlatum, the Gem-studded Puffball

of 50 or so comprising the *Lycoperdon* genus of the order Lycoperdales, which includes 26 genera and 260 species. All puffballs are members of the series Gasteromycetes, a group of fungi that are distinct from the basidiomycete or mushroom fungi (those with caps, stems and gills with external self-ejecting spores)

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Meeting File: Dec. 1 – Kevin T. Smith, Ph.D. Discusses the Benefits of Fungal Decay in Healthy Forests

Thomas Roehl
Sporophore Editor

Dr. Kevin T. Smith, Supervisory Plant Physiologist with the United States Department of Agriculture's Forest Service in Durham, New Hampshire, introduced members on Dec. 1 to the role disease fungi play in the forest ecosystem. Recognizing that he was talking to a room full of mycophiles, he explained that he was trying to "provide some context for what you're already doing."

He started the talk off with a bang by saying, "I am here to tell you the

meaning of life!" To Smith, the meaning of life is energy capture and energy release. All life relies on energy to carry out essential processes. This energy must be captured from the environment, primarily through the process of photosynthesis. Afterward, this energy can be released, mostly through aerobic respiration, and used to fuel metabolic processes.

Before explaining wood decay, Smith reviewed how plants store energy. In forest systems, most energy

“ I am here to tell you the meaning of life! ... Energy capture and energy release!

—Kevin T. Smith, Ph.D.

is captured by trees and then stored as glucose, which can be converted to starch, cellulose, and hemicellulose. Starch is used to store energy for later. Cellulose, which makes up plant cell walls, is very important because, as Smith explained, it is the "dominant form of stored carbon on Earth." Hemicellulose can be converted into lignin, which gives wood its strength.

All these types of energy storage coevolved with

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Continued from page 1 in that the spores are contained in a stomach-like case (*gaster* is Greek for stomach or belly) from which they must be expelled by an outside force. Along with puffballs, the Gasteromycetes are inclusive of stinkhorns, earthstars, bird's nest fungi and false truffles. According to Bryce Kendrick in *The Fifth Kingdom*, Gasteromycetes are among the oldest fungal forms that "probably evolved so long ago that it is no longer possible to trace their ancestry (to basidiomycetes) with any degree of accuracy."

The *Lycoperdon* common and pear puffballs are diminutive - typically about an inch in diameter, and gregarious - they occur in colonies. The only substantive habitat difference is that the pear puffballs are epigenous on wood, where they will frequently

blanket an entire fallen log, whereas common puffballs are terrestrial, gaining nutrients from plant matter with their extended hyphae. Common Puffballs have spines from which the name Gem-Studded derives; the spines are deciduous, however, falling off with senescence to leave small pits that are not all that discernible. According to David Arora in *Mushrooms Demystified*, they are among the most variable of all puffballs. Pear puffballs are (*mirabile dictu*) pear-shaped; the stem-like sterile base is tapered from the globular body in something like pear proportions - they look like little tan, upside-down pears. Both common and pear puffballs



William Needham

The Pear-shaped puffball (*Lycoperdon pyriforme*) grows on wood, which distinguishes it from the terrestrial Gem-studded puffball.

have a relatively thick outer skin, called a peridium, that protects the interior spore-producing mass, called the gleba, that starts out as a pliable, marshmallow-white interior and gradually turns yellow-brown as the spores mature. The gleba, which is with some irony the Latin word for 'a clod of earth,' is actually composed of a mass of sterile thread-like filaments, called the capillitium, that bears the spores; slime molds have similar physiology. It is the pristine, spongy whiteness of the puffball gleba that is the key to its identification as a safe edible.

Puffballs are edible; in fact, so far as is known, all puffballs are edible. According to Charles McIlvaine (the doyen of mycophagists) in *One Thousand*

American Fungi "No one has yet had reason to doubt the harmlessness of any puffball. There are a few that I have not eaten, but believing that these will be proven edible, descriptions of all species occurring in America are given." As with all mushrooms, however, there are always cautionary notes. *Lycoperdon* puffballs have not one but two doppelgängers. The first is the alliterative Pigskin Poison Puffball (*Scleroderma citrinum*). It has a roughened, warty peridium (pigskin) and it looks like a puffball - round and growing on the ground in clusters. The deception is easily resolved by cutting it into two pieces to reveal a purplish-black spore mass in the center; consumption results in nausea and vomiting. The second "evil twin" is even more insidious; mistaken identity can result in renal failure mortality. Mushrooms of the genus *Amanita* have what is called a universal veil that surrounds the entire mushroom (cap and stem) in what looks initially like an egg (or a puffball) as it emerges from the ground. *Amanita* mushrooms contain amatoxins, among which are the most virulent of the mushroom poisons; the worst is the Destroying Angel (*Amanita bisporigera*). This mushroom earned its sobriquet legitimately, it is angelically white and devilishly deadly; it looks very much like a puffball when it first emerges. The deception can be readily righted by sectioning the fungus lengthwise; a

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William Needham



William Needham

Two puffball lookalikes: the Pigskin Poison Puffball (*Scleroderma citrinum*, top) has a purplish-black center while the Destroying Angel (*Amanita bisporigera*, bottom) displays the developing stalk, cap, and gills in its interior.

consistent, cottony gleba indicates a puffball and an inchoate cap and stem indicates trouble. The bottom line: always section your puffballs (at least one in a cluster) to validate your preliminary identification.

The fact that a fungus is edible does not necessarily mean that it is eatable. While puffballs have their detractors, the general consensus is that they are quite good. Gary Lincoff in *The Audubon Guide to North American Mushrooms* lists both the common and pear puffballs as ‘choice,’ which is a step above edible. However, as with all things fungal, there are caveats. The smaller *Lycoperdon* puffballs are endowed with the same physiology as their larger cousins, the giant puffballs of the genus *Calvatia* (from *calvus*, Latin for ‘bald’). This results in a concentration of flavor that can be quite bitter when even a hint of yellowing is allowed. Again, according to McIlvaine “The flavor of puffballs appears to be issued to them as a ration. It is all there in the little fellow, and in a big one it is simply spread through far

more substance.” If gathered then with caution and sensitivity to senescence, pear and common puffballs are quite tasty, best served after pan frying in olive oil. The fungal gourmand is also rewarded with surprising nutritional benefits; 100 grams of puffball contains 441 calories (actually kcal), 44.9 grams of protein, 42 grams of carbohydrates, and 5.5 milligrams of iron (42% RDA). A meatball should be so good.

The eldritch puffs of what appears to be smoke emanating from unusual, small white orbs that contrast sharply and are alien to their immediate environs have intrigued the scientific, the curious and the aboriginal for eons. The mechanism is facile; as the spores mature and the gleba disintegrates, a small hole called an ostiole forms at the apical point to serve as an exit portal. The scientific question addresses the necessary motive force to expel the spores; ‘how does a puffball puff?’ A logical but incorrect hypothesis is that prevailing winds suck the spores out due to the venturi-effect of velocity lowering the pressure; you can demonstrate this by blowing across the top of the ostiole. However, prevailing natural winds rarely rise to the velocity of that produced orally. This so intrigued a scientist named Gregory in 1949 that he demonstrated in a small wind tunnel that this was the case. His second hypothesis was that a raindrop falling on a puffball would provide a sufficient impulse force; he accordingly demonstrated that pipetted water dropped on the peridium caused the spores to be ejected up to a height of several centimeters. His conclusion was that “Rain-drip from leaves during the fine rain consists of relatively large drops which made the puff-ball ‘smoke’



William Needham

Mature puffballs ready to release their spores

as though on fire.”

The curious are also intrigued by “wolf farts.” As a matter of historical record, on April 3, 1994, a group of adolescents in southeastern Wisconsin snorted puffball spores at a party, presumably to induce some sort of hallucinogenic effect (this is conjectural, but why else would they possibly have done this one might well ask). Three of the teenagers reported nausea within 12 hours and all eight participants developed a variety of symptoms including cough, fever, shortness of breath and fatigue within seven days. Five required hospitalization of whom two had to be intubated and subjected to lung biopsy, which revealed inflammation and fungal growths attributed to *Lycoperdon* spores, a condition known not surprisingly as lycoperdonosis. Nicholas Money in *Mr. Bloomfield’s Orchard* recommended the teens for the “Darwin Award” which was created to “commemorate those who improve our gene pool by removing themselves from it.” However, all of the patients recovered after a month with no apparent side effects and some have probably had children by now, who are likely mycophobic. Puffballs are a canine problem as well. Continued on Page 4

Join the *Sporophore* team!

If you like to like to...

- Write
- Take Photos
- Read
- Design
- Cook

...then the *Potomac Sporophore* would love to have your help!

Contact Thomas Roehl at newsletter@mawdc.org to learn how you can help make the *Sporophore* even better!

Cont'd *L. perlatum*

Continued from Page 3 In a 2009 article in the *Canadian Veterinary Journal*, a golden retriever was reportedly hospitalized after playing in a bed of puffballs to the extent that the cloud of spores masked the dog from view. The resultant clinical evaluation revealed fever and an elevated white blood count and a diagnosis of pneumonitis due to the inhalation of fungal spores. The aboriginal peoples of North America variously incorporated puffballs into their cultures as spiritual, aesthetic, or medicinal according to separate tribal customs. The Blackfoot Indians called them *ka ka toos* meaning 'fallen stars' and used them as incense to ward off evil spirits; a small circle of puffballs was painted at the base of the tepee to protect those within. The most prevalent use was as a styptic, to stanch the bleeding from a wound. The Rappahannock and Mohegan Tribes used the powder to stop bleeding, on occasion mixed with spider web to form a hemostatic dressing. The Dakota called them *hokshi chekpa* meaning 'baby's navel,' using them to seal the umbilical. The use of puffballs to stop bleeding is likely universal; Robert James' 1747 *Pharmacopeia Universalis* provided that "puff-balls, bull-cysts or molly-puffs ... When sprinkled in recent wounds it stops the hæmorrhage, dries inveterate ulcers ... but is thought prejudicial to the eyes." This practice extended to the English colonists, the rural denizens of Pennsylvania kept a string of puffballs near the fireplace for emergencies. 🐾



Puffballs ready to be cooked!

William Needham

2016 Web and Membership Changes

Thomas Roehl
Sporophore Editor

In December, the new MAW Board of Directors voted to adopt Wild Apricot, an online system for membership management. This system will give MAW members greater control over their membership by allowing them to access and update their contact information through a secure website. Wild Apricot also provides hosting services, so MAW's website has been updated with a more modern look and feel. Currently, www.mawdc.org will redirect you to MAW's Wild Apricot site, www.mawdc.wildapricot.org. This is temporary and MAW should return to using its normal domain in the near future.

New Membership Policies

Unfortunately, Wild Apricot cannot handle MAW's current membership policies, which are rather complicated. Under the new system, payment of dues will confer membership for a period of 12 months, regardless of when the dues were paid. So, a new member who joins on August 1, 2016, will remain a member until August 1, 2017. Since membership lasts for 12 months rather than a calendar year, the discounts for paid foray fees and for members joining late in the year will be discontinued.

For current members, this changes very little. Most current members will have paid their dues in January, so they will basically remain on a calendar year cycle. Wild Apricot will automatically email members when it is time for them to renew, making it easy for members to pay dues on a rolling basis.

Benefits of Wild Apricot

The greatest benefit of Wild Apricot for members is that they can access their



The new home page of the MAW website features a "Login" button at the top left.

membership details online. This makes it very easy to pay dues, register for events, and update contact details. To do this, members can log into their account from MAW's website. Wild Apricot allows only one email address per membership household, so families who want to receive MAW emails at

more than one account need to manually forward those emails.

MAW will still accept dues and other fees in person, so people without email addresses can still be members. However, members are encouraged to use Wild Apricot because the system is easy to use and is more reliable than managing multiple membership lists by hand. If anyone needs help creating an account, MAW board members will be more than happy to assist.

Behind the scenes, Wild Apricot simplifies the process of sending emails and other publications. Email communications will be automatically sent to user-supplied addresses. This will decrease time it takes for new members to begin receiving foray emails. Wild Apricot will also make it easier to maintain an accurate list of mailing addresses, thereby ensuring that the *Sporophore* will be mailed out correctly.

Updated Website

Wild Apricot supports hosting interactive websites, which will allow MAW to design a website that is easier to navigate. The website will also display more effectively on mobile devices. Managing events will also be simpler with Wild Apricot integration, thus making it easier to keep information on the website up-to-date.

For more information on membership and website changes, email the Webmaster at info@mawdc.org. 🐾

NAMA 2016 Foray Coming to Virginia

Thomas Roehl
Sporophore Editor

Bruce Boyer
NAMA Trustee

This year, MAW will be partnering with the New River Valley Mushroom Club to host the annual North American Mycological Association (NAMA) foray. This year's event will be the first NAMA foray ever held in Virginia! Please note that only NAMA members may attend the foray. If you have questions about joining NAMA (MAW members can join at a reduced rate), please talk to Bruce Boyer or email him at namatrustee@mawdc.org.

This year, the NAMA foray will be held at the Northern Virginia 4-H Center in Front Royal, VA on Sept. 8-11. Registration will open in the spring. Make sure to register early because spaces fill up fast!

What is the NAMA foray?

Each year, NAMA holds a three-day-long event where amateur and professional mycologists from across the continent and beyond gather to hunt for mushrooms, learn about fungi, share their knowledge, and socialize with other mycophiles.

Forays: The highlights of the event are the numerous forays, where attendees will have the opportunity to collect as many types of mushrooms as humanly possible alongside veteran mushroom hunters. These mushrooms will be brought back to the Foray center, identified, recorded, and preserved. This is an incredible

MAW Library



Have you perused the **MAW Library**? A variety of journals, field guides, and other fungus-related texts are available to be checked out at the monthly meetings.

The suggested loan period for MAW Library materials is **1-2 months**. Please return items that have been checked out for a longer period of time. Returns can be made to the MAW Librarian at the monthly meetings.

opportunity to hone your mushroom finding and identification skills!

Lectures: Over the course of the event, attendees may go to lectures and demonstrations of various topics of mycological interest. These may include: presentations of scientific research, cooking demonstrations, lectures on photography techniques, artistic uses of fungi, etc. The list of presentations has not yet been finalized.

Socials: Of course, there will also be ample opportunity to chat with other attendees at social events throughout the weekend. Food and drink will be provided at these events.

How Can Members Help?

MAW is one of two clubs organizing this event, so volunteers from MAW are essential to making the Foray run smoothly. The following committees are responsible for coordinating the foray and all have volunteer positions available to MAW members:

Foray Chair, Planning: Bruce Boyer.

General supervision, liaise with 4H Center, coordinate welcome package.

Forays: William Needham. Select foray sites, assign foray leaders, and coordinate permits, rides, identification, and display.

Programs: Martin Livezey. Assign rooms, invite presenters, and coordinate workshops.

Logistics: Becky Rader. Acquire supplies, recruit volunteers, arrange transport, arrange communication, and set up rooms.

Publicity: Elizabeth Hargrave (acting). Work with NAMA, select souvenir items, design info materials, and coordinate vendors.

Registration: Connie Durnan. Facilitate registration, check-in, and respond to questions.

Socials Coordinator: Danny Barizo. Organize social events, purchase food and beverages, plan cooking demonstrations, select icebreaker games, and plan the raffle.

Treasurer: Not Confirmed. Maintain financial records for the foray, prepare reports, and monitor income, expenses, and budget.

The Steering Committee would appreciate your help performing any of these tasks. The exact tasks a volunteer will perform will depend on the committee's needs and the volunteer's interests. Contact Bruce Boyer if you are interested in working with one of the groups listed above. ➔

Roasted Hen of the Woods



- 1 lb maitake / hen of the woods
 - 6 sprigs fresh thyme (minced), or 3/4 tsp dried
 - 4-5 tablespoons olive oil
 - sea salt
 - black pepper
1. Put the oven rack in the middle position and preheat the oven to 325 degrees F.

2. Piece the mushrooms into small clusters, then toss with the olive oil, thyme, salt and pepper.
3. Place clusters single layer on a sheet pan and roast until the mushrooms are golden brown and crisp around the edges (45-50 minutes).

Yield: 3-4 servings

Recipe contributed by Corinne Weible, MAW Culinary Chair

Meeting File

December 1 (Continued)

Continued from page 1 the fungi responsible for their decay. Consequently, trees are designed with decay in mind.

For example, the trunk of a tree is made up of two types of wood: sapwood and heartwood. Sapwood makes up the outer cylinder of the trunk and is where growth happens. Heartwood is found in the center of the trunk and is formed when the inner layer of sapwood dies. During this process of controlled death, the cells produce antibiotic compounds to preserve the wood.

However, the weight of the tree is supported by the outer layer of sapwood. As long as the growing edge is viable, heartwood rot does not significantly impact the tree's health. Thanks to this system, trees are able to support a healthy level of disease.

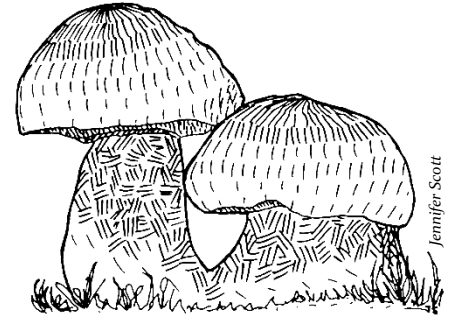
This, according to Smith, is the central idea of forestry: that "all trees die, all wood rots." A good forester must understand death and decay in order to

properly maintain a healthy forest.

Fungi have developed four strategies to access carbon stored by plants: sugar decay, soft rot, brown rot, and white rot. Sugar fungi decay the easily-accessible sugars found on leaf litter. Soft rot fungi are the next to enter the decay process. They primarily decompose slightly more complex sugars in compost. Brown rot and white rot fungi are the last to begin decaying plant material, with brown rot fungi specializing in cellulose and white rot fungi specializing in lignin. Lignin is very hard to break down, so it is usually the last compound to be decomposed.

Smith set the discussion of decay into an historical context by pointing out the key people in the field. Although Aristotle theorized on the origin of mushrooms in the fourth century B.C.E., it took until the 1800's for Anton de Bary and Robert Hartig to discover that fungi cause plant disease and decay.

The next greatest advance in forestry came from Alex L. Shigo in the 20th century. Shigo realized that trees are not passive participants in the decay



relationship but dynamic systems. Trees have a variety of mechanisms designed to resist or prevent decay. Shigo also proposed that trees may actually derive some benefits from decay. These two observations helped revolutionize the field of forestry. Now foresters realize that fungi are more than just something to be avoided at any cost. As Smith reminded those present, "All trees die, all wood rots."

For an example of how decay can be beneficial, Smith went into detail on the process of branch shedding. As a tree grows, lower branches become shaded out, stop being productive, and die. Wood decay fungi then begin to decompose that branch, weakening the wood in the process. Eventually, the branch falls off. This leaves a wound in the side of the tree that the sapwood can easily grow over and seal off.

Sealing off the wound prevents pathogenic fungi from accessing the tree's interior wood and restores sapwood continuity. Contiguous sapwood ensures that the tree's supply of water and food (through xylem and phloem, respectively) is uninterrupted. It also restores the tree's structural integrity.

It would be impossible for the tree to accomplish this by growing all the way around an intact branch, so decay fungi are an essential part of this process.

Trees produce compounds that prevent most wood decay fungi from growing into the trunk, thus limiting decay to the area in which decomposition is useful. Although the fungi sealed inside the tree by sapwood growth may slowly eat away at the heartwood, this does very little harm to the tree. As a result, the tree can live

Upcoming Events:

Feb. 2 – Monthly Meeting

March 1 – Monthly Meeting

April 5 – Monthly Meeting

Spring Tasting (Date and Location TBD)

Unless noted, monthly meetings will be held on the first Tuesday of the month at 7:00 PM in the Davis Library, 6400 Democracy Blvd., Bethesda, MD. Attendees are encouraged to bring mushrooms for sharing and identification. Members of the public are welcome to drop in.

Save the Date:

Sept. 8-11 – NAMA Foray at the NoVA 4-H Center in Front Royal, VA

Sept. 23-25 – MAW weekend foray at Camp Sequanota in Jennerstown, PA

Oct. 9 – MAW Mushroom Fair



with infection for decades. From the tree's point of view, this is a success.

Unfortunately, this strategy can increase the risk to humans. All trees will eventually die and fall, so managing trees in inhabited areas requires assessing the risk those trees pose. This can be a difficult task because, as Smith said, "The mere presence of wood decay is not a reason to remove the tree." There is no hard and fast rule for deciding how much decay corresponds to an acceptable level of risk and the decision must be made on a case-by-case basis.

To close, Smith left the group with his thoughts on the reason for studying life, death, and decay in the forest. "To me," he said, "It enriches the whole activity: to be part of something greater than ourselves." 🐉

January 5 – Jon Ellifritz Offers Identification Tips

Thomas Roehl
Sporophore Editor

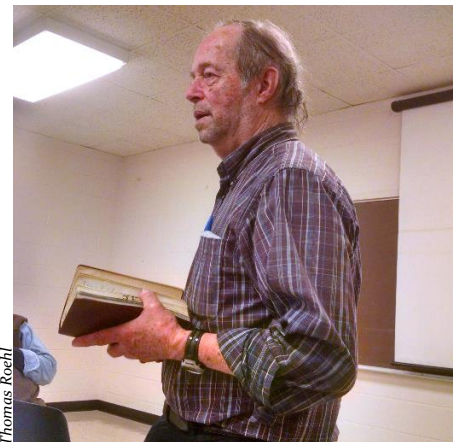
The first meeting of the new year featured MAW Forays Chair Jon Ellifritz, who introduced members to the criteria used for mushroom identification. To identify a mushroom successfully, Jon recommends that people pay close attention to the following features:

- **Time of Year:** during which season was the mushroom collected? Keep in mind that during some years with unusual weather – such as 2015 – mushrooms can fruit earlier or later than normal.
- **Range:** in what part of the country

and in what type of forest was the mushroom found?

- **Visual Cues:** note the mushroom's size, colors, and color changes upon bruising, drying out, and aging. These features (especially size) tend to be highly variable, so do not rely solely upon them for identification.
- **Odor of Hymenium:** what do the gills/pores/teeth/etc. smell like?
- **Taste:** put a tiny piece on your tongue for a few seconds and then spit it out to assess the taste (acrid, bitter, mild, and other simple tastes). Since you do not eat the mushroom piece, you can even assess the taste of poisonous species.
- **Shape:** does the mushroom have gills, a pointy cap, a central stalk, etc.?
- **Partial and Universal Veils:** does the stipe have a ring? Are there patches or warts on the cap and/or a membrane surrounding the base? These features indicate the presence of partial and universal veils, respectively.
- **Texture:** is the mushroom slimy, dry, tacky, etc.? Note that texture can change in wet or dry weather.
- **Chemical Tests:** certain chemicals induce color changes when applied to various mushroom parts. These chemicals include: iodine, ferrous sulfate, and potassium hydroxide.
- **Means of Nutrition:** is the mushroom growing on dead wood (saprobic), living trees (parasitic), or on the ground around certain trees (likely mycorrhizal)?

To demonstrate the features described earlier, Jon presented a slide show consisting of photographs of representative mushrooms. As he explained, certain groups of mush-



Thomas Roehl

Jon Ellifritz looks up information on toxins in his favorite field guide, *The Audubon Guide to North American Mushrooms*.

rooms can be differentiated using certain features. For example, *Amanita* species are easily picked out based on their free gills and the presence of both a partial and universal veil.

After the slide show, Jon opened the talk up to questions from the floor. Members were most interested in the wide variety of toxins that mushrooms produce. With the help of some current and former board members, Jon led the discussion on the major types and effects of common mushroom toxins.

Those present were amazed at the variety of mushrooms brought to the meeting. The recent warm weather coaxed out a number of agarics, including Brick Caps, Oyster Mushrooms, and some large mushrooms belonging to the former genus *Lepiota*. Joining these on the display table were some perennial polypores, the jelly fungus *Exidia glandulosa*, and the Cobalt Crust fungus.

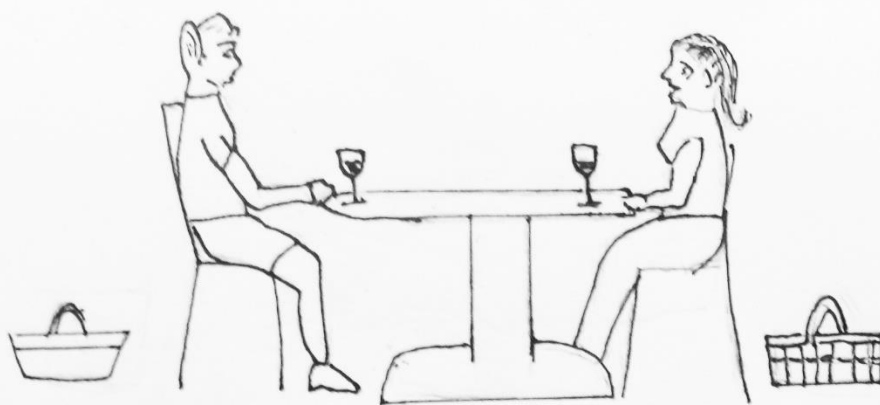
John Harper (MAW Treasurer) shared some homemade Candy Cap Mushroom ice cream. The ice cream delighted its tasters with the strong maple syrup flavor from the Candy Cap pieces. 🐉

Dues Reminder: It's time to pay yearly dues!

Membership dues for 2016 are: \$20 for individuals and \$30 for households. You can pay with a check at a monthly meeting or pay online by logging into your new account at www.mawdc.org. MAW membership entitles you to exclusive forays, special tasting events, and *The Potomac Sporophore*. You can also join NAMA at a reduced rate.

Under the new membership scheme, you will be a member for 12 months starting when you pay your dues.

For more information on membership changes, see page 4.



I CAN UNDERSTAND THAT PEOPLE MIGHT NOT LIKE
MUSHROOMS, BUT THEY SEEM SO SMUG ABOUT IT.

Jim Sherry.