

The Potomac

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Mycophilia in the time of COVID-19

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Annie Greene
Newsletter Editor

These are strange times. The novel coronavirus that causes the syndrome COVID-19 has upturned many of our daily routines and activities amid stay-at-home orders in the region. A simple trip to the grocery store requires a face mask, vigilance to keep a safe distance from others, and constant self-reminders not to touch our faces. Since it's risky to gather in large groups of people, MAWDC has moved our monthly meetings online and our group forays have been canceled for the time being.

Yet, despite the current state of affairs, *mycophilia* (Latin word meaning "affinity for fungi") remains a perfectly viable hobby. Luckily, many outdoor parks and

natural areas remain open to the public. It's fairly easy to maintain a safe distance from others while foraging. Popular parks may be too crowded for comfort, but more remote spots can offer a refreshing respite from pandemic-related stress. To immerse yourself in the sights and sounds of nature is to give yourself the chance to focus on the vibrancy of spring, rather than the tragic casualties and discourse resulting from this pandemic. We humans may be in an extraordinary moment, but nature marches forward, business as usual.

Many mycophiles found this Spring to be an impressive banner year for morel mushrooms. Personally, I went on several fruitful forays, and enjoyed my morels sautéed, in creamy pasta sauce, and on a

pizza. How do I know that others had a banner year, too? I stay connected to other fungi fanatics by following a handful of local mushroom-oriented groups on Facebook: "Maryland Mushrooms and Mycology" and "Virginia Mushroom Hunters". Many people shared pictures of their impressive hauls and veteran foragers noted that this spring's season was extraordinary. I hope your morel season was bountiful, too. Maybe the success of this year's morel season bodes well for the rest of the year. See page 7 for some guidance on other mushrooms to look out for in the coming months.

In addition to foraging, some mushroom-related activities can easily be done at home.

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Lichens: Part Two

William Needham
MAW President

Editor's Note: This article is Part Two in a series of articles about lichens that will appear in Sporophore this year. Part One can be found in the previous issue.

The biological diversity of lichens is reflected in their variegated chemistry that consists of over 200 unique compounds that have been extracted for a wide range of practical applications, including dyes, perfumes, medicines and poisons. Lichen dyes fall into two categories: boiling water dyes and fermentation dyes. The former are made by boiling the alternating layers

of lichens and fiber for several hours necessary to effect the color transfer. The lichens used for this process, notably those from the genus *Parmelia*, are called crottle, which means kernel or rind in Gaelic; the crottle lichens were the source for the brown and yellow dyes used in the Scottish Harris Tweed fabrics. The fermentation dyes produced a much brighter red to purple hue, but only after the lichen was mixed with a source of ammonia, which, before the advent of chemical formulation, was urine collected for that purpose, and the fiber was fermented in the mixture for several weeks. Litmus paper, which is used to indicate pH (blue is basic or pH > 7 and



Above: Various lichens. Photo: William Needham.

pink is acidic, pH < 7), is made with lichens containing depside that dye the paper according to the acidity of the measured solution. In the perfume industry, lichens have been used for years due to their surfactant characteristics which serve to affix a

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Mushrooms

Continued from Page 1

There are several ways you can keep your love for the fungal kingdom alive while staying safer at home, which I'll outline here.

At-home cultivation

Growing mushrooms at home is easier than you may think, and most of the materials you'd need are available from local suppliers. There are a few different ways to go about at-home cultivation, and the best method will depend on your skill level and how much time you want to invest in the project.

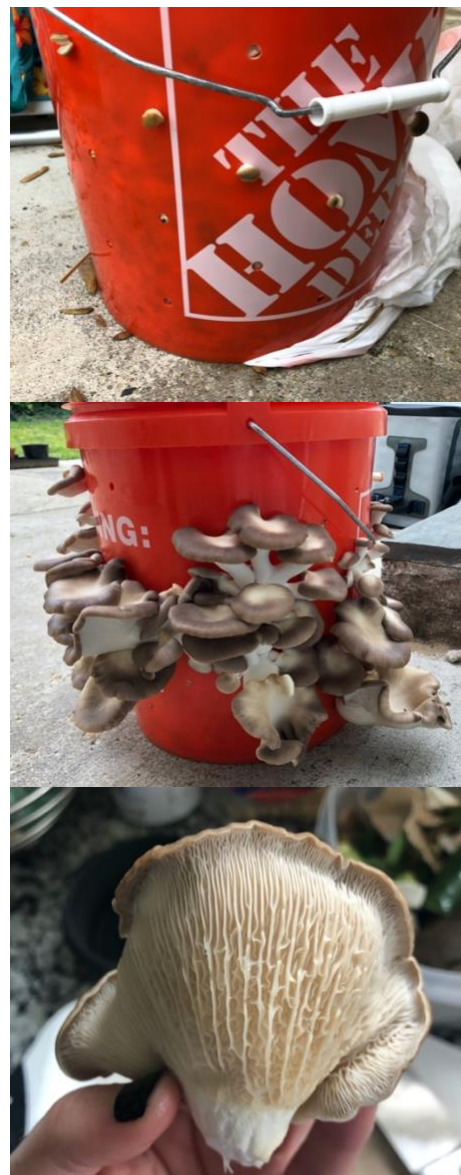
A fairly foolproof method that's perfect for beginners is to buy a mushroom growing kit. These kits are usually bags or boxes of growing medium that's already been mixed with fungal mycelium for you. Each specific kit will likely come with instructions on how to facilitate mushroom fruiting, and it's usually as simple as cutting a few slits in the bag or poking a few holes in the box, then keeping the kit moist by spritzing it with water. You can usually have mushrooms ready to eat within a few weeks. Oyster mushrooms and Lion's Mane are particularly popular options for grow kits.

A few local mushroom farms that offer grow kits are Sharondale Mushroom Farm in Keswick, VA (sharondalefarm.com) and Backbone Food Farm in Oakland, MD (backbonefarm.com). A reputable Maine-based company that sells kits is North Spore Mushrooms (<https://northspore.com/pages/growkits>). You may also be able to find kits at your local farmer's market or supermarket. It's a great way to get your feet wet with at-home cultivation.

There are ways to make home cultivation a more involved process, too. By sourcing the raw materials and mushroom spawn yourself, you can tinker with the method to your liking. Of course, this comes with greater risk of failure than a kit, but is generally gets you more bang for your buck. One simple way to grow Oyster mushrooms at home is in five-gallon buckets. I've

recently embarked on growing Oysters this way with great success so far. You'll need a clean five-gallon bucket with a lid, a drill, the substrate of your choice, and grain spawn (mycelium). First, drill holes in your bucket using a ¼- to ½-inch bit. Holes should be 2-3 inches apart. Then, prepare your substrate. Possible substrates for this method include straw or hardwood chips or pellets. Some people add coffee grounds as a nitrogen supplement, too. I used a combination of "Master's Mix" Pellets (50/50 oak and soy hull pellets), straw, and coconut coir. All these materials are available online. I pasteurized the substrate in a plastic tub using boiling water and let it soak overnight. This hydrates the substrate and kills off most harmful microbes. Then, I layered my substrate and grain spawn (my spawn was from North Spore Mushrooms, <https://northspore.com/collections/grain-spawn>) inside the bucket, pressing down between each layer, until it was full. I set the bucket in my humid garage to let the mycelium colonize. This is a "set it and forget it" type of project until you start noticing mushroom pins peeking out from the holes in the bucket (see top picture to the right). Then, just mist the buckets with water to keep the mushrooms hydrated. Slice mushroom clusters off when the caps start to turn upward. You should get several flushes before the substrate is spent. A very fruitful project, literally! I based my method on information from FreshCap Mushrooms (<https://blog.freshcapmushrooms.com/learn/bucket-grow/>). This website is a valuable resource for growing mushrooms at home.

It's also possible to grow shiitake mushrooms at home using hardwood logs, a drill, a hammer, "plug" spawn, and food-grade wax. Setting up your shiitake logs now should yield you mushrooms next spring. For more information about setting up shiitake logs, visit <https://www.growveg.com/guides/growing-shiitake-mushrooms-on-logs/>. You can also grow shiitakes on sawdust blocks for quicker results. FreshCap



Top: Oyster (*Pleurotus pulmonarius*) mushroom pins emerging from holes in a 5-gallon bucket. Middle: Mushrooms ready to harvest a few days after pins appeared. Bottom: Gorgeous gills of home-grown oyster mushrooms. Photos: Annie Greene.

Mushrooms' website has more information on how to grow shiitakes on sawdust (<https://blog.freshcapmushrooms.com/learn/growing-shiitake-mushrooms/>).

Species such as button mushrooms, Lion's Mane, King Oysters, and Reishi, among others, can all be grown at home, requiring varying degrees of time and skill. There's a wealth of information available online about how to cultivate various species, so if it's something you're interested in, I encourage you to give at-home cultivation a try. When possible, source

local materials for your cultivation projects to support small businesses.

Recommended Books & Videos

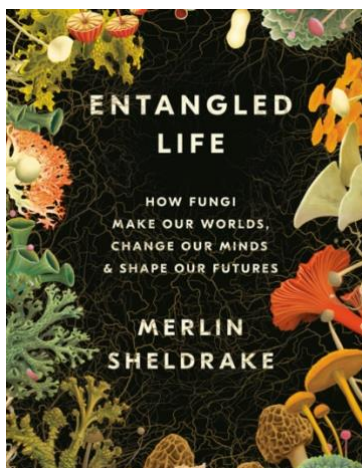
Author Merlin Sheldrake has recently published a book called “Entangled Life: How Fungi Make Our Worlds, Change Our Minds & Shape Our Futures”. It’s available only in Hardcover for now. Sheldrake, who has a PhD in tropical ecology and has done research on underground fungal networks, uses this book to describe the world from a fungal point of view. Seasoned science writers have praised this book, saying it offers a unique perspective and is an entertaining read. “Entangled Life” can be purchased from the DC Bookstore Politics & Prose (<https://www.politics-prose.com/book/9780525510314>) or can be purchased online as an E-book.

For a more practical read, consider “Amanitas of North America” by Britt A. Bunyard and Jay Justice. This book becomes available on June 1, and is rich with information about 120 species of *Amanita*, including mushroom physiology, toxicology, and history, plus color photos and illustrations. The book can be purchased at this website: <https://www.fungimag.com/store.htm>.

The movie “Fantastic Fungi” by director Louie Schwartzberg is now available for rent or purchase online. This movie uses expert interviews (Paul Stamets, and others), storytelling, and impressive cinematography to convey the importance of fungi in Earth’s ecosystems. You’re sure to be left with a sense of wonder and appreciation for fungi after watching this film. There’s also a book of the same name that accompanies the film. Learn more at <https://fantasticfungi.com/>.

Several YouTube channels offer free videos containing useful information for mushroom hunters. One such channel is called “Learn Your Land” by Adam Haritan (<https://www.youtube.com/channel/UCcbf8wnyVJl63iLAmAbo7nw>). Haritan produces high-quality educational

videos about identifying mushrooms, trees, and edible plants, as well as the health benefits of consuming mushrooms and wild plants. Haritan is currently scheduled to attend our Sequanota retreat this September, though the event remains tentative due to the pandemic.



Above: Book cover of “Entangled Life: How Fungi Make Our Worlds, Change Our Minds & Shape Our Futures”, a recently released book by Martin Sheldrake, PhD. Below: Poster for “Fantastic Fungi”, a movie by Louie Schwartzberg.



Another great YouTube resource is the FreshCap Mushrooms channel (<https://www.youtube.com/channel/UCkzY4M9kg2VmQJ2nNcNM8hw>), whose videos are useful for learning about cultivation techniques.

Mushroom Art Projects

For the artistically inclined, you can create mushroom-related art at home. Find a mushroom in the woods? Try sketching it while staying as faithful to the fungus’ true form as you can. This

would be a great way to get to know a species of mushroom, and it could help you hone your ID skills. Plus, you’ll have some nice sketches to admire afterward.

If you’re looking for a way to entertain your kids, you can make some mushroom “stamps” using acrylic paint and some past-their-prime mushrooms. This project would work particularly well with portabella, shiitake, or any relatively flat mushroom you might find outside. Cut the mushrooms’ stems off so you’re left with just the cap. Paint the underside of the mushroom with any color of acrylic paint. Then, lightly press the painted side of the mushroom onto a piece of paper. This will leave you with an imprint of your mushroom. Repeat if desired and use different colors if you have multiple mushrooms. This would be a great way to visualize the differences between mushrooms with gills and those with pores.

Stay connected online

Though online interactions are not a perfect substitution for connecting with other mycophiles in person, the internet offers many spaces to stay plugged into the mushroom-enthusiast community. For example, on the MAWDC Facebook page, we share myco-oriented articles and invite followers of the page to post interesting mushroom photos each week. If you have a Facebook account, consider Liking our page called “Mycological Association of Washington, DC” so you can stay connected with the MAW community.

Hopefully these activities will help keep you occupied safely at home until the next time we can gather for a monthly meeting or foray. If you try any of these suggested activities out, let us know by emailing newsletter@mawdc.org. Send us a picture of your home-grown mushrooms or your mushroom art! Maybe the fruits of your labor will be featured in a future *Sporophore* issue. 🍄

Mushrooms

Lichens (Continued)

Continued from Page 1

fragrance to a surface; some lichens add a pleasant aroma of their own, a noted property of some esters which are the basis of their chemistry.

Lichens have been used for medicinal purposes for millennia. Their general vulnerary characteristics led to their use in treatment of wounds and other antibiotic applications. During the 14th Century, the doctrine of signatures became popular and the list of lichen medicines grew according to their appearance. The belief among herbalists that was popularized by Paracelsus was that God provided a signature to man as to the use of a plant according to its structure and color. Thus, yellow lichens would be good for the treatment of a jaundiced liver and lichens shaped like a lung could be used to treat tuberculosis. Lichens of the genus *Usnea*, which are typically hair-like in appearance, were used to treat baldness. Surprisingly, some of the time the doctrine of signatures was correct, as the lichen known as the tree lungwort does, in fact, have a palliative

effect for people suffering from lung diseases, and the lichens of the genus *Usnea* do have medicinal properties (that have nothing to do with baldness). Usnic acid has antibiotic properties and has been collected and used to make antibiotic creams and ointments in Europe since the 1950's. It has fallen out of favor in recent years owing to the allergen reaction in some people that results in a serious skin rash. However, usnic acid from lichens has been used to treat gynecological problems for centuries by cultures as diverse as the Chinese and the Ancient Greeks.

Lichens are very sensitive to the environment, as they derive almost all of their moisture from the air and they are long-lived with a slow growth rate. These two factors make them valuable as biological monitors of air quality and as biological clocks to date geological events. Lichens are particularly sensitive to sulfur dioxide, one of the primary constituents of acid rain, and, since some are more sensitive than others, a survey of lichens in a given area over time has been used to map pollution levels, notably in the British Isles. Since lichens absorb other



Above: A variety of lichens. Photo: Alexey Melechin.

pollutants much more efficiently than plants, they have also been collected and analyzed in the laboratory to detect for PCBs and the radioactive fallout from the Chernobyl reactor accident. Lichenometry is the "measurement of lichens" which uses the known growth rate of the lichen to measure the age of a surface. This process has been used to date earthquakes by determining the age of the lichens that grew on the newly exposed surface and to date anthropomorphic stone objects like the (450-year-old) iconic Easter Island (Rapa Nui) moai statues.

Recent revelations about the origins of life on earth based on the fossil record have drawn attention to the humble lichen as a possible if not probable key link between the marine bacteria and algae of the Achaean Eon and their terrestrial successors of the Proterozoic Eon. According to the current prevailing theory, the earth was formed about 4.5 billion years ago (bya) by the accretion of matter in the orbit of the newly formed solar disk. The inferno of moldering magma that lasted for about 800 million years was named the Hadean Eon for the Greek god of the underworld. As the earth cooled, water condensed to form the oceans in the Archaean Eon, which lasted about 1.2 billion years. It was during this time that the fossil record of marine sediments posits the origin of life in the form of bacteria-like microbes called Archaeobacteria; their recent discovery in the thermal vents of the separating mid-ocean tectonic plates further supports their provenance in the primordial oceans. The methane given

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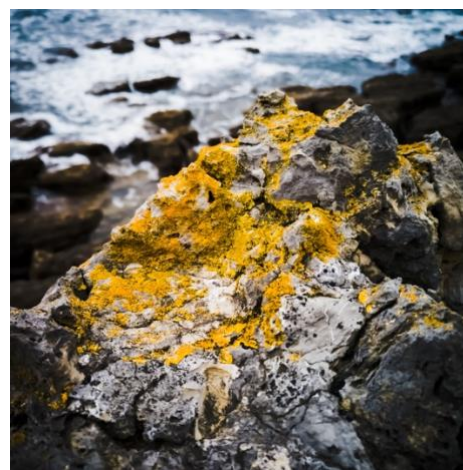
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off by the Archaeobacteria and other early forms of bacteria gradually accumulated to form the first atmosphere. About 2.5 bya, things settled down into the Proterozoic, the longest of the four eons; it lasted about 2 billion years of which the central billion years are known as "the boring billion" because according to the fossil record, nothing happened. It ended with the so-called Cambrian explosion first postulated with the discovery of the Burgess Shale that marked the beginning of the current Phanerozoic Eon when complex eukaryote animal life first appeared about 543 million years ago. It may be that the Proterozoic Eon was long and boring to provide the necessary and sufficient chemical environment for complex life to form, and it is in this context that lichens may have played a critical role.

During the Archaean, archaeobacteria first appeared, evolving into other forms of bacteria including the cyanobacteria. One of the more plausible theories for the evolution of plants and animals is that the chloroplasts that are the energy producers of plant cells and the mitochondria that are the energy

producers of animal cells were bacteria that were absorbed by another type of bacterial cell and gradually became adapted to survive as occlusions; their combination resulting in cells with nuclei and other inclusions that characterize eukaryotic kingdoms. The fungi first appear in the fossil record early in the Proterozoic, as do the photosynthetic green algae which proliferated to produce oxygen, eventually oxidizing all of the available metals until there was enough to build up in the atmosphere, leading to the "Great Oxidation Event" that marked the onset of the Proterozoic Eon. It is oxygen that drives the energy generation necessary for the mobility of animals. Everything was ready for complex life except one key component, phosphorus. The Proterozoic is also defined by the accretion of the larger land masses to form continents. The life that began in the sea surged onto the emerging continents, and, over millions of years, settled into a sustainable configuration. Thus, the fungi in need of a source of energy found itself in the company of algae in need of water, minerals and physical support. In combining, they produced the self-

sustaining lichen. The lichens of the Proterozoic like the lichens of today, accelerate the weathering of the rocks of their crustal habitat. Weathering released the phosphates that were then transported to the oceans. At some point, the combination of carbon, oxygen and nitrogen from the atmosphere and the phosphates and other minerals of the land masses combined in the ocean to provide the building blocks for the proto-proteins. It took a while, maybe a boring billion years, but in the end, lichens may have been our chemical progenitors. 🍄



Above: Lichens on an oceanside rock in Spain. Photo: Landsil.

YOUR (MUSHROOM-RELATED) AD HERE

Did you know that MAW DC members can advertise fungal-related activities and products in the newsletter for free?

Email newsletter@mawdc.org for more information.

Upcoming Events

The events listed below may change, so read MAW emails and check our website at <http://mawdc.org> for up-to-date information on events.

Upcoming Scheduled Programs

- June 2 **Monthly Meeting** featuring Christopher Smith on Marine Mycology. Fungi in focus: *Syzygites megalocarpus*, a fungus that parasitizes other mushrooms.
- July 7 **Monthly Meeting** featuring Shannon Nix, our club's former Science Advisor. Topic to be announced.
- Aug 4 **Monthly Meeting** featuring Megan Romberg, our club's new Science Advisor, on molds, mildew, and smut fungi.

Save the Date

Sept 18-20 **Sequanota Retreat** in Laurel Highlands, PA (tentative)

For the time being, monthly meetings will be held on the first Tuesday of the month at 7:00 PM online via Zoom (www.zoom.us). Attendees are encouraged to bring mushrooms for virtual identification. Members of the public are welcome to attend.

Fungi in the News

Annie Greene
Newsletter Editor

Editor's Note: This article contains summaries of notable fungus-related news from February 2020 through May 2020. Visit the URL following each topic below for a closer look.

Yeast shortage due to at-home baking boom

Amid the COVID-19 crisis, many people have begun to bake and cook at home more often to save money and cut down on trips to the grocery store. The increased demand for baker's yeast has resulted in a shortage, making this ingredient difficult to find in some areas. Baker's yeast packets contain pellets of *Saccharomyces cerevisiae*, which are single-celled fungi. These yeast cells help bread rise as they consume sugars in the dough and emit carbon dioxide gas. Rather than settle for unleavened bread during the yeast shortage, many people are making their own sourdough starter cultures at home. Sourdough cultures can be made from mixing dried fruit, water, and flour. The resulting cultures contain a variety of yeast and bacteria species that help bread rise while imparting a tangy flavor. See Page 7 for a recipe to start your own sourdough mycological experiment at home. Read more at: <https://www.washingtonpost.com/opinions/2020/04/05/think-youre-out-bakers-yeast-think-again/>

Melanin-rich fungi "eat" radiation

In the 1990's, scientists studying the aftermath of the Chernobyl nuclear reactor explosion noticed that the soil surrounding the reactor was dark in color due to an abundance of fungi that contain melanin, the same brown pigment in human skin and hair. The Dadachova Lab at the University of Saskatchewan has been studying these fungi for the past 15 years.

Recent studies from the Dadachova Lab show that these hardy fungi, such as *Wangiella dermatitidis* and *Cryptococcus neoformans*, not only tolerate radioactivity, but they even grow faster when exposed to the types of radiation emitted during the Chernobyl explosion. Interestingly, these fungal species sense radiation using the melanin in their cells and can harness radioactivity for energy. Understanding the molecular processes these fungi use may aid the development of technologies that protect people and equipment from radiation exposure, and may inspire new methods for cleaning up radioactive contamination. Read more at:

<https://news.usask.ca/articles/research/2020/usask-researchers-training-fungi-to-sense-radiation-and-potentially-help-clean-up-nuclear-waste.php>


Bat-killing fungus found in Texas for the first time

When bats are infected with the fungus *Pseudogymnoascus destructans*, they contract "white-nose syndrome," in which their faces and wings become irritated and they wake up prematurely from hibernation. Though humans are not susceptible to this fungus, it can be deadly for bats. The fungus thrives in cold conditions, and within the U.S., cases have mostly been confined to northern states since it was first identified in 2007. This March, a handful of bats in Central Texas were confirmed to have died from *P. destructans* infection. Researchers are working to determine if these cases were isolated incidents or if the deadly fungus is now widespread in the region. Since bats tend to produce only one offspring per year, their populations are fragile. Bats are crucial members of ecosystems, acting as pollinators and insect predators. Read more at: <https://www.statesman.com/news/2020/03/05/deadly-white-nose-syndrome-confirmed-in-texas-bat-for-first-time>

German start-up commercializes Chicken of the Woods

A new Germany-based company called Walding is cultivating Chicken of the Woods mushrooms (*Laetiporus* spp.) and preparing them as healthy, sustainable meat substitutes. In recent years, the popularity of meat substitutes has increased as many consumers aim to reduce their meat consumption for ethical, health, or environmental reasons. Rather than create a highly processed product, Walding capitalizes on Chicken of the Woods' natural chicken-like texture. They cultivate the fungi using environment-friendly materials like by-products from other industries, then sell mushroom preparations that are simply breaded, chopped, or marinated. Chicken of the Woods mushrooms are high in protein and Vitamin D. Walding's products are only available in Germany for now. Read more at: <https://www.foodnavigator.com/Article/2019/07/04/Start-up-champions-new-mushroom-protein-for-unprocessed-meat-substitute>

DC voters may weigh in on decriminalizing psychedelic fungi this November

This November, voters in the District may decide whether psychedelic fungi and plants should be effectively decriminalized within DC's borders. Initiative 81, also known as the "Entheogenic Plant and Fungus Policy Act of 2020," has similar stipulations as legislature that was recently passed in California and Colorado, which doesn't technically legalize plant-based drugs, but moves their possession and personal cultivation to a low priority for law enforcement. Now, if 30,000 DC voters sign a petition to include Initiative 81 on the ballot, constituents will be able to vote on this in November. Read more or sign the petition at: <https://decrimnaturedc.org/> 

Upcoming Edible Mushrooms

Annie Greene
Newsletter Editor

Keep an eye out for the following choice edible mushrooms in the coming months. Much of the information below comes from Thomas Roehl’s blog, *Fungus Fact Friday*. Remember: mushrooms must be cooked thoroughly before consumption. Always consult your local field guide and be 100% sure of a mushroom’s identity before eating.

Chicken of the Woods

Chicken of the Woods, also known as Sulfur Shelf Mushroom, is notable for its vibrant orange and yellow coloring, its shelf or rosette growing habit, and its

chicken-like texture. There are actually a handful of different Chicken of the Woods species, all of which fall under the genus *Laetiporus*. You can find these mushrooms from late spring to early fall on dead trees that are still upright or on downed logs. Look for the distinctive coloration and small pores that are white, yellow, or salmon pink.

Golden Chanterelles

These trumpet-shaped beauties fruit from summer to fall in the DMV area. They’re found emerging from the ground near trees in areas that are moist yet have good drainage.

For detailed information about Chanterelle identification and how to avoid harvesting lookalikes, read “Golden Harvest”, an article written by MAW members Ray LaSala and Larry Goldschmidt, under the “Resources” section of the MAW website.



Above: Chicken of the Woods mushroom. Source: Wikipedia. CC BY 2.5. Below: A basket of Golden Chanterelles. Source: Wikipedia, CC BY 3.0



Sourdough Starter from Scratch

A method for capturing wild bacteria and yeast to create your own sourdough starter culture for baking.

Editor’s Note: This recipe is from Sudeep Agarwala, and it was originally published in The Washington Post.

Ingredients

- 1 Tbsp Dried fruit (raisins, apricots, dates, cherries)
- 3-4 Tbsp Drinking water
- 4-5 Tbsp White flour (wheat or rye flour produce more vigorous results)

Directions

1. Combine fruit and water in a jar or bowl. Stir to release yeast from the fruit’s surface. Mixture may become cloudy.
2. Add flour to the mixture and stir to create a thick paste.
3. Cover the container loosely and store in a warm area (i.e. on top of the refrigerator or in the oven with the light on).
4. Small bubbles should form in the first 12 hours. Allow the mixture to sit for 24-48 hours.
5. Take ½ teaspoon of the bubbly mixture and add it to a new container with roughly 4 Tbsp water and 4 Tbsp flour. You don’t need to transfer any of the fruit.
6. Repeat step five 3-4 times and then your culture is ready for use in any recipe that calls for sourdough starter.

Note: a pink or orange tint in your starter may indicate bad bacteria. Discard and start over if you see any off colors or mold.

Starter Maintenance


- If you bake often and want your starter to always be ready for use, store it on your kitchen counter at room temperature. You’ll need to “feed” your starter (step 5 above) twice per day.
- If you only bake occasionally, you can store your starter in the refrigerator and “feed” it once per week.

The King Arthur Flour website (www.kingarthurflour.com) has some great sourdough recipes and guidance for maintaining your starter. Best wishes for a successful countertop mycological experiment!


TALES OF THE FUN GUY

by Loretta E. Chi

**FUN GUY'S
GUIDE TO
LIVING WITH
COVID-19**



**BOOST YOUR IMMUNITY
MAKE MUSHROOM TEA**



**PRACTICE PHYSICAL DISTANCING
WATCH FOR OTHER MUSHROOM
HUNTERS**



BUT MAINTAIN SOCIAL CONTACTS

The stipes need to show annuli




**CATCH UP ON CHORES
ALPHABETIZE YOUR INVENTORY**



PEARICUS	AURICULA	BOLETUS	CANTHAR
AGARICUS	GYMNOPIA	HYDNUM	LENTINU
MARASMI	PLEUROTU	SUILLUS	XEROCOMU

**RELAX
CURL UP WITH A GOOD BOOK**

They've really made a mess of the genus *coprinus*



chi
4/1/2020