MAY 2023

# SP RESAfield

Colorado Mycological Society Newsletter



### **MAY NEWSLETTER** Colorado Mycological Soceity

#### May Speaker Bio & Topic

Learn about this month's speaker and topic for the upcoming meeting on May 8th from 7pm-9pm.

### 2

20

#### Member Profiles

Get to know some of our CMS members, why they joined, and what their favorite mushroom is.

#### Mushroom Recipes

Have dinner plans? Now you do! This month: Hungarian Mushroom Soup from Derek Bell.

#### **Foray Hooray**

Check out the amazing finds submitted by CMS Members. We want YOU to send us what you have found.

#### Spore Spotlight

Get ready for mushroom season and brush up on common Rocky Mountain mushrooms. This month: Fly Agaric.

#### Myco-University

We break down common mycological concepts. Learn the difference between mutualistic, saprobic, and parasitic fungi.

#### It's Time, People!

Read from Derek Bell about the upcoming spring mushroom hunting season.

#### Get Involved

Want to get involved? Stay up to date on our latest events, forays, and meetings.



13



### **MAY MEETING** Alissa Allen



#### MEET THE SPEAKER

is Alissa Allen the founder of Mycopigments. She specializes in teaching regional mushroom and lichen dye palettes to fiber artists and mushroom enthusiasts all over the world. Alissa got her start in the Pacific Northwest and has been sharing her passion for mushrooms for over 20 years. She has written articles for Fungi Magazine and Fibershed. She is also published in Nature's Colorways and Culture of Natural Dyes, Long Thread Media, and True Colors: World Masters of Natural Dyes and Pigments by Keith Recker.

#### **MEETING TOPIC:**

In this talk, Alissa Allen will share her in-depth knowledge of Mycopigments and, how to use wild mushrooms and lichens for dyes. We will be exploring the incredible range of colors found in fungi. Check out our upcoming event on page 13 of the newsletter to learn more about her upcoming workshop at Staunton State Park.

#### **JOIN US**

May 8th, 2023 from 7pm-9pm Sturm Auditorium at the Denver Botanical Gardens



O @ColoMycoSociety



cmsweb.org

### MEMBER PROFILES You're a fun-gi



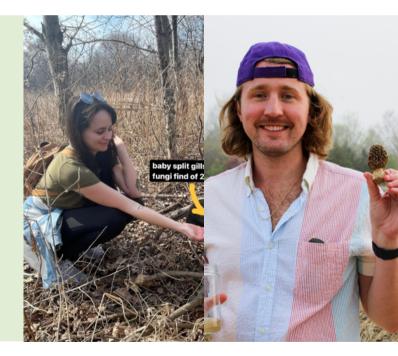
### **Derek Bell**

I was born and raised in Loveland, CO back when it resembled more of a farming community. I have been a self-taught chef by trade for over a decade and a Citizen Mycologist by night. I currently hold the position as the Head Chef at an Addiction Recovery Facility that has a Holistic approach to the bio-medical side of rehabilitation. I have always been fascinated by fungi.

Learn more about Derek in his article, *It's time, people*, on page 10.

### Christina Oddo & Anthony Secord

Christina first got into foraging with the Illinois Mycological Association back in 2019. During the COVID-19 lockdown, wandering around the woods in search of interesting fungi became one of her favorite hobbies (and it still is to this day!). Anthony grew up in Minnesota with a family who readily ate foraged fungi (morels, chicken of the woods) and has always loved the great outdoors. This is their first year as CMS members and they're excited to get to know the fungal landscape of a new state!



#### Ready to be featured?

We would love to hear your story and highlight your involvement in CMS! Please email kevin.freund11@gmail.com your full name, how long you've been a member, why you joined CMS, what you like most about CMS (forays, meetings, workshops?), your favorite mushroom, and 1 high quality photo of yourself

### LET'S GET COOKIN Hungarian Mushroom Soup from Derek Bell

#### Ingredients

- 4 tablespoons unsalted butter
- 2 cups chopped onions
- 16 ounces fresh mushrooms, sliced
- 2 cups chicken broth
- 1 tablespoon soy sauce
- 1 tablespoon paprika
- 2 teaspoons dried dill weed
- 1 cup milk (or cream)
- 3 tablespoons all-purpose flour
- 1/2 cup sour cream
- 1/4 cup chopped fresh parsley
- 2 teaspoons lemon juice
- 1 teaspoon salt
- ground black pepper to taste

#### Recipe

- 1. Melt butter in a large pot over medium heat. Add onions; cook and stir until softened, about 5 minutes. Add mushrooms and saute for 5 more minutes. Stir in broth, soy sauce, paprika, and dill; reduce heat to low, cover, and simmer for 15 minutes.
- 2. Whisk milk and flour together in a separate bowl; stir into soup until blended. Cover and simmer for 15 more minutes, stirring occasionally.
- 3. Add sour cream, parsley, lemon juice, salt, and ground black pepper; stir over low heat until warmed through, about 3 to 5 minutes. Serve immediately.

### Share a recipe with us!

Share your favorite mushroom recipe with your friends at CMS! Please email kevin.freund11@gmail.com with your full name, ingredient list, recipe, and what this recipe means to you. Do you have a picture of the meal? Even better!!

### FORAY HOORAY Lookin good



- Polyporales. Kevin Freund. Hawaii.
  Bird's Nest Fungus. Christina Oddo
  Huge Bolete. Kevin Freund.
- 4. Orange Amanita. Kevin Freund. Rocky Mountains.

Email your pictures to kevin.freund11@gmail.com. Include your full name, the species, and where you found it!

## SPORE SPOTLIGHT Amanita muscaria



#### **FLY AGARIC**

**Family:** Amanitaceae, a family of fungi that includes both the deadly Destroying Angel and Death Cap.

Habitat: A. muscaria is found in Colorado at over 10,000ft, often in the same areas where King Boletes are typically found. It has a mycorhizzal (mutually beneficial) relationship with pines and spruces, and also is occasionally found near hardwoods (primarily birch).

Spore dispersal: Gills Season: July through September

**Toxicity:** Toxic; contains multiple poisonous and psychoactive alkaloids **Edibility:** Not considered edible, but certain cultures have historically consumed them using complex preparation methods that reduce the toxins. **Commonly mistaken for** Because this mushroom is so distinct, it's one of the easiest to confidently identify.

**Fun fact:** Fly agaric has been a popular icon for the Midwinter and Christmas festivities in central Europe for a long time. Our current concept of Santa Claus can be traced back to this mushroom!

Other names: Fly agaric, fly amanita, toadstool

#### **CONTINUED TO PAGE 7**



### SPORE SPOTLIGHT Amanita muscaria

#### **KEY CHARACTERISTICS:**

The cap of this fruiting body is vibrant red (some variations can be orangetinged) with hallmark off-white warts. When young, the cap is oval or round and as the mushroom matures, it opens into a convex shape with white gills on the underside. The stem of this mushroom is 7-18cm long and features a skirt-like ring.





#### **RECOGNIZE IT?**

As arguably the most recognized mushroom in the world, Amanita muscaria or the fly agaric is everywhere. It's the mushroom emoji on your phone, it's featured extensively in video games like Mario, and nine out of ten times, if you're shopping for a cutesy garden knickknack featuring a toad, gnome, or fairy hiding under a mushroom, that mushroom is a fly agaric.



### **MYCO-UNIVERSITY** Learn Something New



#### FRIEND OF THE FOREST

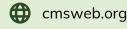
Because they can't produce energy on their own, fungi must pull their "fuel" from other sources. Depending on the type of source that they prefer, fungi fall into one\* of the following categories: mutualistic, saprobic, or parasitic.

#### **MUTUALISTIC FUNGI**

Mutualistic fungi like Amanita muscaria partake in a mutually beneficial give-andtake relationship with certain species of trees. In a mutualistic (also called mycorrhizal) relationship, the mycelium

combines with the tree's tiny rootlets, allowing the tree to have an easier time pulling nutrients and moisture from the soil while simultaneously providing the fungi with access to essential sugars and amino acids. Neither tree nor mushroom is harmed by this association, and both significantly benefit. Interestingly enough, not all trees are interested in this type of arrangement. Pines and oak are eager to partner with mycelium, but other species, such as maple, have never been known to do so.

#### **CONTINUED TO PAGE 9**



### **MYCO-UNIVERSITY** Learn Something New

#### **SAPROBIC FUNGI**

Saprobic fungi are decomposers. These mushrooms use enzymes to break down dead or decaying organic matter- twigs, bark, mulch, leaf litter- and essentially serve as nature's janitors. Of course, this clean-up job comes with a perk: in the process of breaking down detritus, these fungi receive the fuel they need to thrive. Examples of well-known saprobic fungi include turkey tails (Trametes versicolor), ink caps (Coprinus comatus), and stinkhorns (Phallus rubicundus).

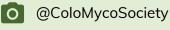


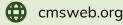


#### **PARASITIC FUNGI**

Parasitic fungi take their energy from other living organisms such as plants, trees, or even other fungi. Some parasitic fungi take this one step further and are pathogenic, causing their host to rot or die. An excellent example of parasitic fungi is Hypomyces lactifluorum, a parasitic fungus that specifically attacks milk caps and brittlegill fungi. The attacked fungi continues to live, but parasitism by H. lactifluorum disfigures it and also turns it a reddish-orange color. The result? A highly-sought after edible better known as the lobster mushroom.

\*Many fungi have been observed occupying more than one of these categories. For example, some fungi- like cauliflower fungus- are both saprobic (growing on dead trees) and parasitic (growing on living trees).





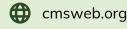


#### THE SEASON IS UPON US

Oh yes, it's here... The spring mushroom hunting season is right around the corner! If you're a fan of all things fungi, then you're in luck, because there are some seriously delicious and nutritious mushrooms to be found out there in our beautiful state of Colorado. Not to mention, the farmer's markets will be popping up in the next couple of weeks so you can get your hands on some amazing locally cultivated varieties.

Before you head out to the woods with your trusty foraging knife and basket, or even downtown to the local Farmer's Market, let's talk about some of the health benefits associated with incorporating mushrooms into your diet. Because let's be real, which of us doesn't love a good excuse to work these into our favorite dishes? I have a saying. "If you don't like mushrooms, you just haven't had the right one yet." Heck, there are so many different varieties with so many flavors and textures to offer. Maybe try something other than Portabellas or the little white button mushrooms from the grocery store. Those are all variations of the same (Agaricus bisporus) species by the way.

#### **CONTINUED TO PAGE 13**



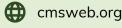
Just to lightly scratch the surface, mushrooms are low in calories and impressively high in many nutrients and antioxidants, which makes them a great addition to any diet. Many varieties contain selenium, potassium, and other trace elements which can help boost your immune system, reduce inflammation, support healthy bone development, and even reduce your risk of certain diseases. Mushrooms are also a good source of prebiotic fiber, protein, and the best non-animal source of vitamin D!

Now, let's talk about some of the varieties that you may be able to find out in those sweet spots this season. It seems proper to start with the elusive Morel mushroom, (Morchella spp.) which is prized for its meaty texture and earthy flavor. They can be a bit tricky to find, but once you do, you'll be hooked. If you know someone that is willing to show you a good spot to find them, keep them around! They are a good friend! Morels have been the centered treasure of many spring forays in the Northern Hemisphere for a long time. They are incredibly difficult to cultivate indoors due to their preferred conditions.

Make sure you show your appreciation to the forest when it decides to reveal them to you by covering where you harvested with the duff that is surrounding to help them continue thriving! You might even be able to steward that spot to provide more for you in future outings in the following years.

I am looking forward to making some salmon over my firepit and accompanying it with some Morels sautéed in butter with wild asparagus, chives from my garden, herbs de Provence, and purple garlic... Oh, yeah. I have found that with a new species of mushroom that you are wanting to try, be simple about it. Just give it a sauté with some butter or olive oil, salt, and pepper.





That way you can really get to know and appreciate the diverse array of textures and flavors that you will experience with your foraged finds. You will also know what dish it might work best with.

Then we have Colorado's most common native Aspen Oyster mushroom (Pleurotus populinus). This one can be found mainly near a couple of tree associates like Aspens or Cottonwoods. They are a saprotrophic species that thrive on or near these dead or decaying trees. You might even be able to find it close to home in a nice little wooded area like I did last spring by my house in Fort Collins.

These mushrooms have what I like to refer to as a "buttery and earthy" taste with a delicate texture that can be quite versatile in so many soup or pasta dishes. One of my favorite soups in the world is this Hungarian Mushroom Soup. For this impressively simple recipe, I combined wild foraged Aspen Oyster along with some Black Pearl King Oysters that I cultivated and used cream instead of milk. You need to try it. It's good for your soul. Seriously.

Now that I mention it, Oyster mushrooms are particularly high in an amino acid called "ergothioneine". This amino acid can aid your body in the process of chelation and help to mitigate the excess of heavy metals! Sounds important, doesn't it?! Maybe you should eat more mushrooms! Get out there and find some! Just be certain that you are 115% sure that you have positively identified your finds by either cross-referencing with one or more of your trusty field guides or checking with your local Mushroom Nerd.

It can be easy to forget how important the connection that we have to our food should be. Life moves fast and it is just too easy to just fall into what's most "convenient".



What better way to create and maintain that connection than getting outside to wander around by yourself, or with your favorite people and appreciate the beauty that is all around us, and sometimes literally stumbling across these gifts that are just waiting to be found. It's all medicinal. And it's out there right now.

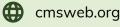
We have only just scratched the surface with this article. The rabbit hole continues to get deeper and deeper! I look forward to continuing to share what I know as we move forward! Next month, I will happily be highlighting more species of mushrooms that continue to show promise within the mycological community and traditional medical community as functional medicine.

#### **ABOUT THE AUTHOR**

My deep dive into mycology started nearly three years ago after I was hit by a car while skating on my longboard. I was injured pretty badly and experienced my first broken neck and TBI. After my recovery that took several months, I went out to Michigan to visit my best friend near the Upper Peninsula. One day, we decided to go foraging at the Leelanau State Park. That is where we found our first wild Bear's head tooth fungus (Hericium americanum). We were able to positively identify it with his region-specific field guide and we cooked it up with our dinner. Later, I came across some of the many studies on this mushroom's medicinal qualities and how it possesses compounds that can really help your brain and nervous system. This absolutely blew my mind and motivated me to learn how to cultivate it so I could work with its medicinal qualities to help my brain get back on track.

-Derek Bell





## **GET INVOLVED** An Intro to Mushroom and Lichen Dyes



#### **MYCOPIGMENTS**

Please join the Colorado Mycological Society in welcoming Alissa Allen of Mycopigments to present on the use of wild mushrooms and lichens for dyes. She will be offering a workshop at lovely Staunton State Park exploring the incredible range of colors found in fungi. This class is open for all skill levels, from complete novices to advanced mushroom hunters and dyers. It will be a fun, educational day making brilliant dyes using wild mushrooms and lichens.

#### WORKSHOP OVERVIEW

In this workshop, we will explore the brilliant range of colors found in fungi. Using 10 species and the latest extraction techniques, we will dye over 20 samples resulting in an extended rainbow of color. We will also explore surface design possibilities on silk using demonstrated resist techniques. This workshop will prepare you to carry on with your own dye experimentation at home. You'll take home samples and the recipes used in class, a compact guidebook that goes through the entire process, a color guide to the best dye species in Colorado, and you'll have an elegant mushroom-dyed silk scarf! Bring containers for taking home dye if you'd like to work with what we have left over.

#### **JOIN US**

May 6th | 9 am-4pm | Staunton State Park Cost: \$180 | Supplies: \$30 includes fungi, samples, silk scarf, and booklet



@ColoMycoSociety



cmsweb.org

### **GET INVOLVED** An Intro to Mushroom and Lichen Dyes



#### MEET THE SPEAKER

Alissa Allen is the founder of Mycopigments. She specializes in teaching about regional mushroom and lichen dye palettes to fiber artists and mushroom enthusiasts all over the world. Alissa got her start in the Pacific Northwest and has been sharing her passion for mushrooms for over 20 years. She has written articles for Fungi Magazine and Nature's Fibershed. is published in Colorways: Conjuring the Chemistry and Culture of Natural Dyes, Long Thread Media, and her work with mushroom dyes is highlighted in True Colors: World Masters of

Natural Dyes and Pigments by Keith Recker, Thrums Publications. In 2015, Alissa created Mushroom and Lichen Dyers United and the Mushroom Dyers Trading Post Facebook groups as a platform to mentor, connect, and facilitate discussion between her students and folks with less access to her classes. These groups along with her prolific workshop offerings, presentations, and informational dye booths have brought together a vibrant community of over 30,000 members. Though her teachings are centered around regional fungal dye palettes, her overall mission is to inspire people to engage more deeply with nature. It is her hope that with engagement, commitment to care for our planet will grow exponentially.



## **GET INVOLVED** Join The Troop



### **Submissions**

We are always looking for contributions to our newsletter! Please email kevin.freundll@gmail.com if you are interested in submitting the following.

- Member Profiles: Include your full name, how long you've been a member, why you joined CMS, what you like most about CMS (forays, meetings, workshops?), your favorite mushroom, and one high-quality photo of yourself
- Photographs or mushroom art
- Becoming a Guest Speaker
- Recipes

### **Upcoming Events**

Join Alissa Allen for a Mycopigments workshop about the use of wild mushrooms and lichens for dyes. pg.13

Check out our social media and future newsletter for a full list of upcoming events!

Let us know if there is a special interest group related to mushrooms that you would like to start. Email kevin.freundll@gmail.com with your ideas!





#### Acknowledgements

Newsletter Director: Kevin Freund Designer: Bethany Balanoff Cover Photo: Gail Firmin Writers: Patricia Quinn, Pam Sher, Christina Oddo

