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Fantastic Fungi

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Fantastic Fungi

Earlier in the semester, amidst the usual madness that is the Exco Fair, I ran into Christin Anderson, a 4th year biology major, and was pleasantly surprised to find out that she was teaching a Mycology Exco. Mycology, in case you were wondering, is the scientific study of fungi. So far, the Exco has been a success. We meet once a week, and currently we are working on growing our own oyster mushrooms to eat. I decided to sit down with Christin and find out more about her interest in fungi.

How did you first get interested in mushrooms and fungi?

My parents are national park rangers so I grew up in a family of biologists, so I always have had a good basic understanding of biology. When I was at the library one time, I saw a book called *Mushrooms and Toadstools*, and it was full of all these really cool [mushroom] pictures. The library ended up letting me keep the book. After that, I started collecting and reading books about mushrooms- I would even ask for them for my birthday. All kids go through phases and this one just stuck!

You once told me “Fungi could save the world.” Why should people care about fungi?

I did say that fungi are going to save the world — but I am not actually sure how. It’s something that I hope to learn about in the class. Paul Stamets wrote a book called *Mycelium Running*. He has written a lot about mycoremediation — that’s when mycelium are used to clean polluted soil.

What are mycelium?

The mycelium is the fungus, the mushrooms we see above ground are fruiting bodies, analogous to apples on a tree. The mycelium is a microscopic net of thread-like cells. They’re basically everywhere — in wood, soil, all over the place. Anyway, in terms of Myco-remediation, [mycelium] can get rid of toxic chemicals from soils. They even degrade petroleum products.

What inspired you to teach Myco Exco?

That’s an easy one — the Biology department currently doesn’t offer a class. This is frustrating because we’re missing out on a whole kingdom! The Exco was extremely popular. I got around 75 applicants, many from the biology department.

What advice would you give to other aspiring Mycologists?



If you’re an amateur starting out, you should go out, get a field guide, and try to “key things out.” It’s the same thing with other natural sciences; learning in the field is the best. You just have to try things out.

There are lots of different topics to study within mycology. Most people study mushroom identification for foraging. But there’s also bioremediation, mushroom cultivation, medicine, art. I would tell people interested in studying mushrooms to diversify and get familiar with all of the different aspects of mycology because there are so many!

Can you tell me a little bit about the fungal flora of Northeastern Ohio?

There is a huge diversity of mushrooms in Ohio. There are lots of edibles: Inky Caps, Shaggy *Lepiota*, giant puffballs, and the orange peel cup. I’ve heard there are morels but I’ve never actually seen one. There are also lots of pathogens — fungi that we don’t seek out — Dutch elm disease for example. It’s a big problem.

Where is the best place to look for mushrooms around Oberlin?

Chance Creek — people should go there more often. The fall is really the best time for mushrooming. The Arb is also a good place.

What is your favorite thing about fungi?

We have much more in common with fungi than most people would think. We’re both heterotrophs, meaning that we don’t make our own food but get it from our environment, get food from outside. Fungi and animals also share a similar set of proteins. All fungi have cell walls

of chitin, which is not found in plants. As well as being heterotrophs, we both store energy in the form of glycogen. And we share most of our ribosomal RNA (80-85%), which contributes to the difficulty humans have in fighting off fungal infection. And we’re both fleshy.

What is your favorite mushroom?

Rhodotus palmatus. It has a veined, kind of wrinkly cap. It sort of looks like a peach.

As a kid I also went through a phase of mushroom fascination. The appeal was in their mystery—where did they come from? Why didn’t they have visible roots? I used to take photos of the mushrooms growing in my yard with a disposable camera everyday in hopes that I could create a time-lapse movie like the ones on TV. Unfortunately, this phase faded following a fourth grade Career Day report on being a mycologist, but mushrooms have retained a hold on my imagination. Christin’s Exco has illuminated many of the strange qualities of mushrooms and also brought to light some of the potential for the application of mushrooms in solving environmental problems. One of the first things I did upon arriving back to Oberlin was to check a jar of coffee grounds that had been sitting in my closed for two weeks after being inoculated with the mycelium of an Oyster mushroom. Sure enough, some mysterious white specks had appeared in the jar, making visible the hidden world of mushrooms—the network of mycelium that permeate the earth beneath our feet. ●

Interview by Zoe Lye