



The Fungal Gazette

May 2016

Newsletter of the Central New York Mycological Society



<http://indianapublicmedia.org/eartheats/morel-mushroom-hunting/>

April Recap

Here is the foray report from the Rand Tract from Jean Fahey: "We had a surprisingly large number of people show up for our first foray! About 25 included 3 children, lots of new faces & familiar ones as well! We found Scarlet Cup, Gyromitria, as well as wild flowers; Spring Beauty, Toothwort, May Apple, Trout Lilies, Ramps, Wild Ginger, purple&white Violets, Herb Robert, and Bloodroot. It was a beautiful day & we had a wonderful hike & enjoyed each other's company!"

Many thanks to Danny and Patty who did a fantastic job of getting 2016 off to a good start by sharing their adventures in Bolivia. The meeting was in the small auditorium in Illick to accommodate all the people! It kicked off Earth Week and I believe we got a few new members!

Don't miss **Fun with Fungi** in May with Mark and Benjamin! The May foray will be on the 22nd at **Morgan Hill State Forest**. **Directions:** from I-81S take the Tully Exit and turn left from the exit ramp.

Take the next left onto Route 80. Follow Route 80 east through Tully and Apulia. Just beyond Venture Farms take a right onto Herlihy Road. Follow this to the top of the hill and turn left (before Spruce Pond). Drive another half mile and look for cars parked by the side of the road.

2016 Calendar of Events

Meetings are on the 3rd Monday of the month at **7:30 pm**, room 334 Illick Hall at ESF on the SU campus.

Forays are on Sunday at **1:00 pm** unless otherwise announced. (If there is an all-day pouring rain or another hurricane, the foray will be held the following Sunday. If in doubt, call Jean Fahey to find out when the trip will take place.)

May 16th Meeting at 7:30 pm, Illick Hall. CNYMS is happy (very happy) to host **Mark Griffin and Benjamin Gerardi and Fun with Yeast**. Mark is a wine and mead maker and Benjamin brews beer. Both have used fun ingredients like mushrooms or chaga in their products.

May 22nd Morgan Hill Foray

June 20th Meeting at 7:30 pm, Illick Hall. To continue our travelogue of south-of-the border fungi, our own **Bernie Carr** will do a program on his recent trip to **Costa Rica** and the mushrooms he found there.

Note: The vote on the new T-shirt design will be at this meeting too.

June 26th Nelson Swamp Foray – site TBA

July No meeting in July. Foray is TBA at Wellesley Island at Jean's summer cottage.

August 15th Meeting at 7:30 pm, Illick Hall. **Jean Fahey** will present **Latin 101**. Come learn some helpful hints for remembering, and understanding, the Latin names of mushrooms.

August 28th Palermo Foray

September 19th Meeting at 7:30 pm, Illick Hall.
Program TBA

September 25th VanderKamp Foray

October 9th 8th Annual Vince O'Neil **Mushroom Festival** at Beaver Lake Nature Center. All members are needed to help! More information later.

October 23rd Salmon River Foray

November 6th Mexico Point Foray

Don't Forget!

New T-shirt design wanted!



CNYMS is looking to update its tee-shirt design. If you or someone you know is interested please **send your idea to me before the end of May!** Members will vote at the June meeting.

Could A Mushroom Save The Honeybee?

<http://www.npr.org/sections/thesalt/2015/10/09/446928755/could-a-mushroom-save-the-honeybeeoneybee>

Honeybees need a healthy diet of pollen, nectar and water. But at a bee laboratory in eastern Washington State, Steve Sheppard fills their feeding tubes with murky brown liquid from the forest. His bees are getting a healthy dose of mushroom juice. "If this does what we hope, it will be truly revolutionary," says Sheppard, who heads the Department of Entomology at Washington State University. "Beekeepers are running out of options."

Commercial honeybees, which pollinate \$15 billion worth of crops in the United States annually, have teetered on the brink of collapse for nearly a decade. A third of all bee colonies have died each year since 2006, on average, according to the U.S. Department of Agriculture. Scientists say the mysterious phenomenon, known as colony collapse disorder, may be the result of at least 60 environmental factors that combine to cripple honeybees — including pesticides, disease, malnutrition, loss of habitat and climate change.

Beekeepers, however, say the honeybee's single greatest threat is a virus-carrying parasite called the varroa mite. Sheppard has spent decades breeding western honeybees to better tolerate the mite and its viruses. But he hasn't had much success, he says. Varroa mites have devastated U.S. beehives since the late 1980s, when they arrived here from Asia. In 1996, half of the colonies east of the Mississippi River died due to mite infestations. The reddish-brown pests, which are no bigger than the head of a pin, invade colonies and multiply rapidly. They hide among bee larvae developing in the honeycomb, feed on infant bee blood and lay several eggs each. "It would be like having something the size of a pancake feeding on you," Sheppard says.

Honeybees that emerge from the infected hives typically carry illnesses, like a virus that results in deformed wings that prevent bees from flying. If beekeepers don't intervene, the varroa mite can destroy a colony in less than two years. Meanwhile, the pest reproduces so rapidly, it builds resistance to

chemical pesticides more quickly than solutions can be invented, Sheppard says.

That's why he decided to try an unconventional approach last year, after local mushroom expert Paul Stamets called him with an idea to help arm the honeybee in its fight against the mite. "We've gone to the moon, we've gone to Mars, but we don't know the way of the bee?" says Stamets, who owns the medicinal mushroom company Fungi Perfecti near Olympia, Wash. The self-taught mycologist says he noticed a relationship between honeybees and mushrooms when he observed bees sipping on sugar-rich fungal roots growing in his backyard. "I looked down, and they were sucking on my mycelium," he says. Now he thinks he knows why.



Paul Stamets cultures mycelium at his laboratory near Olympia, Wash

In recent years, his research has shown that rare fungi found in the old-growth forests of western Washington can help fight other viruses and diseases, including tuberculosis, smallpox and bird flu. He wondered if the honeybee would see similar health benefits from wood-rotting mushrooms. "Bees have immune systems, just like we do," he says. "These mushrooms are like miniature pharmaceutical factories." Stamets and Sheppard are feeding liquid extracts of those forest mushrooms to mite-infected honeybees. Initial findings suggest that five species of the wood-rotting fungi can reduce the honeybees' viruses and increase their lifespans. In addition, the scientists are trying to fight honeybee viruses by taking aim at the varroa mite itself. Insect-killing fungi have been used as an alternative to synthetic chemical pesticides for years, and previous studies show that one type of entomopathogenic fungus can weaken varroa mites in beehives.

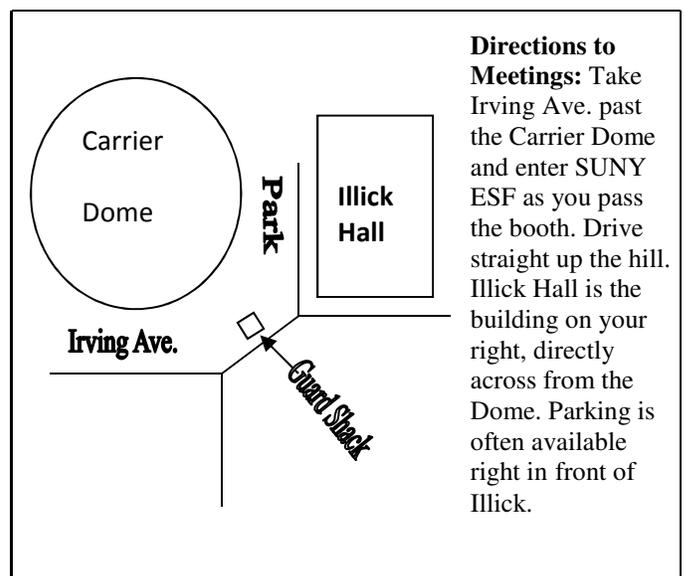
Paul Stamets thinks his version of the fungus will be more effective. So far, the results of the experiments in Sheppard's lab look promising. "The product seems to be killing mites without harming bees," Sheppard says. This fall, the scientists plan to expand both experiments by partnering with commercial beekeepers like Eric Olson, who runs the largest commercial beekeeping operation in Washington. Olson says two-thirds of his beehives died five years ago because of a varroa mite infestation. After several years successfully controlling the pest, he arrived this year in California for almond pollination season and nearly half of his bees had died during the winter. He spent \$770,000 to buy replacement hives, he says. "I was lucky that I had the cash and the connections to recover from that," he says. Olson recently donated about \$50,000 to Sheppard's department to help find a solution to the mite. Looking at the bees in one of his hives, he says, "I'm really concerned about whether these little girls will survive."

After all these years . . . Membership in CNYMS is still only \$10. Membership includes your newsletter - what a bargain! If possible, it's easier and more efficient if members pay for 2 years at once by sending \$20 to: [Rick Colvin, 1848 Whiting Road, Memphis, NY 13112.](mailto:Rick.Colvin@CNYMS.org)

Contact Rick or me if you don't know your membership status so you can keep the news and schedules coming!



The Gazette looks better in color, so send me your email address to get the electronic version.



Spring Pasta with Morels, Leeks and Peas

<http://www.midwestliving.com/recipe/spring-pasta-with-morels-ramps-and-peas>

- 12 ounces fresh morel mushrooms, cleaned and very coarsely chopped*
 - 4 -6 ounces ramps, cleaned and cut into 1/2 inch pieces (or 1 medium leek, cleaned and thinly sliced, plus 1 clove garlic, minced
 - 1 tablespoon butter
 - 1/4 cup diced cooked ham
 - 1/4 cup dry white wine
 - 3/4 cup whipping cream
 - 1/2 cup reduced-sodium chicken stock or broth
 - 1/2 teaspoons snipped fresh thyme
 - Salt and cracked black pepper
 - 10 ounces dried linguine pasta
 - 1/4 cup chopped fresh Italian (flat-leaf) parsley
 - Shaved Parmesan cheese, optional
1. In a very large skillet over medium-high heat cook and stir morels and ramps in hot butter for 4 to 5 minutes until just tender. With a slotted spoon, remove mixture to a bowl.
 2. Add ham to skillet. Cook and stir for 3 to 4 minutes until just starting to brown. Remove skillet from heat. Add white wine to skillet. Return to heat and cook for 1 minute. Add cream and stock. Cook and stir occasionally for 6 to 8 minutes until sauce coats the back of a wooden spoon. Return morels to skillet with peas and thyme. Cook for 3 to 4 minutes or until peas are just tender. Season to taste with salt and pepper.
 3. Meanwhile, in a large pot of salted water cook linguine according to package directions; drain. Return to pot over low heat with sauce and parsley. Toss until well-combined. Transfer to serving bowl. Serve with shaved Parmesan, if you like.

Still not enough forays?

Save the Dates

NEMF: The Northeast Mycological Federation foray will be at Fitchburg State University in Massachusetts this summer from July 28 - 31. The theme is "The Role of Fungi in the Ecosystem." Registration is underway open now at <http://www.nemf.org>

Peck Foray: This year's Peck Foray will be Sept 23-25 at the [Greenkill Retreat Center](#) and YMCA Camp in Huguenot, NY. Hosted by the [New York Mycological Society](#).

NAMA: The North American Mycological Association foray will be held September 8 – 11 in the Blue Ridge Mountains and Shenandoah Valley of Virginia. *Note: NAMA membership is required to attend annual and regional forays.* Registration will open in May.

COMA: The Clark Rogerson Foray will be Sept. 22–Sunday, Sept. 25 at the Berkshire Hills Eisenberg Camp, Copake, New York. Registration info to follow.

Central New York Mycological Society

Julie Siler

1235 Long Road

Homer, NY 13077

Address Correction Requested