

SPORE PRINTS

BULLETIN OF THE PUGET SOUND MYCOLOGICAL SOCIETY
Monroe Center, 1810 N.W. 65th St., Seattle, WA 98117

June 1986

Number 223

Marasmius oreades



GYROMITRA ESCULENTA, FOOD OR POISON? Pat George [*Mycena News*, May 1986]

Now that the spring mushroom season is again upon us, the *Gyromitra esculenta* controversy will undoubtedly also return. MSSF [Mycological Society of San Francisco] members disagree as to whether it is safe to eat. Well-loved by some members, *G. esculenta*, or the False Morel, contains high levels of monomethylhydrazine (MMH). The same toxic compound is used as rocket fuel. Air Force personnel were poisoned by MMH, leading to research which was picked up by mycologists and led to their knowledge of how *Gyromitra* toxin breaks down into MMH. Toxicity also varies within a species, apparently depending on locality. Europeans have long eaten *G. esculenta* after careful processing. Five hundred gram bags of the dried mushroom are available at mushroom markets in Les Halles, a large market area in Paris, the site of the famous produce market now located away from the center of the city. However, *Gyromitra* poisonings are second in number only to *Amanita* poisonings and are listed in physician's publications as causing serious physical discomfort and problems. Even the cherished practice of boiling the mushroom before eating it can cause illness as MMH is highly volatile with a boiling point of about 87°C.

According to an article in the Michigan Mushroom Hunter's Club newsletter of Winter 1986, a poisoning was reported in the *Ogemaw County Herald*, September 5, 1985. A couple ate *Gyromitra esculenta* for lunch and by evening began vomiting and kept vomiting all night. The man had collected the mushroom and enjoyed it for many years. The couple was taken to a local hospital where customary treatment was unsuccessful. They were transferred to the University of Michigan Hospital in Ann Arbor and continued to weaken to the point that the doctors feared the woman would lapse into a coma. She did not. The use of ingested charcoal in hopes of absorbing the poison caused the wife to develop pneumonia after she vomited and inhaled some of it. She spent nine days in intensive care and five days on a respirator.

Recovery from the poisoning and its side effects was slow and difficult. The couple was transferred to the rehabilitation unit of the hospital. Their sensory nerves were damaged, perhaps irrecoverably. Their autonomic systems were damaged but seem to be healing. They suffered hot and cold sensations and extreme sensitivity to touch. However, they both have regained the ability to feed themselves.

Why the couple reacted the way they did is still a question.

Perhaps there was a link between their paralysis and the antidote they were given since large amounts of vitamin B-6 affect the nervous system, but the toxin in MMH does the same damage as well as affecting the liver, kidneys and blood.

Because no one else has ever reacted in the same way to *Gyromitra esculenta*, only time will tell how completely they will recover.

Other literature about *G. esculenta* relates that different people exhibit different susceptibility to the toxins in the mushroom. Reaction to the toxins can vary even among members of the same family. Also, studies conducted with laboratory animals have shown that there is a narrow boundary between no effect and a lethal dose. Those who indulge themselves with generous helpings of *Gyromitra esculenta* may be walking a fine line between pleasure and something very different.

PACKRATS PREFER

Ellen Trueblood
[*Simian News*]

Once upon a time my husband, Ted, and I were hunting chukar partridges in the Brownlee country of Idaho. Fort hose who have never hunted there, the sagebrush covered slopes are at a 95° angle.

After numerous uphill-and-down draws, we came to a long-abandoned cabin just above a little creek in the bottom of a draw. We could see it hadn't been occupied for a long time. One always has to investigate such a place.

In the corner of the kitchen on the floor was the nest of a packrat. In it, standing upright, were two well-dried mushrooms. One was a *Battarraea* and the other a *Lepiota*.

Unfortunately I was not carrying a camera. One doesn't when hunting the Brownlee country. It's enough to carry a shotgun, and ammunition in your hunting jacket.

I don't know which *Lepiota* it was other than it was about 30 cm tall and the margin of the cap about 10 cm wide. The *Battarraea* was near the same height. It was desert country and not a tree in sight. The season was fall -- either September or October.

DID YOU KNOW THAT?

Simian News

Auricularia auricula, also known as Jew's Ear or Cloud Ear, is truly remarkable in its longevity.

An article published by D.A. Reid and Audrey Thomas in the *Bulletin of the British Mycological Society* revealed that individual fruiting bodies may persist for at least a year or longer despite the rigors of winter weather. After being thawed out for 24 hours, young fruiting bodies that had been frozen solid actually produced a spore print ... BELIEVE IT OR NOT!



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Spore
Prints

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PUGET SOUND MYCOLOGICAL SOCIETY
Monroe Center, 1810 N.W. 65th St., Seattle, WA 98117
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- EDITOR:** Agnes A. Sieger, 15555 14th N.E.,
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Calendar

- June 9 Beginners' class, 6:20 p.m., Monroe Center auditorium
Membership meeting, 7:30 p.m.,
Monroe Center auditorium
- August 18 Board meeting, 7:30 p.m., PSMS library
- August 22 *Spore Prints* deadline
- September 8 Membership meeting, 7:30 p.m., Monroe Center auditorium
- October 18, 19 Annual exhibit, Monroe Center auditorium

Welcome to the following new members:

- | | |
|------------------|----------|
| Jochen Bettag | 774-5071 |
| Kate Blowers | 788-4048 |
| Nance Calderwood | 322-7038 |
| Barbara Correll | 932-5204 |
| Richard Linzer | 932-5204 |



Membership Meeting

Monday, June 9, 1986, at 7:30 p.m. in the Monroe Center auditorium, 1910 N.W. 65th Street, Seattle.

At this meeting we will hear first-hand of president Coleman Leuthy's just-completed trip to New Zealand, Australia, and the Cook Islands and, with Coleman's slides, experience some of the variety of mushrooms available Down Under. Coleman was a member of a group organized by Fungophile, Inc., of Denver and led by Gary H. Lincoff, president of the North American Mycological Association, and Dr. Emanuel Salzman, past president of the Colorado Mycological Society. Coleman spent five weeks between Australia and New Zealand, plus almost a week in the Cook Islands.

Beginners' Orientation Class: The final session of the Beginners' Orientation Class will feature a lecture, illustrated by slides, of the choice edible mushrooms fruiting during the early fall mushroom season.

BOARD NEWS

Betty Hamilton

Denis Benjamin, Edith Godar, and Dr. Ammirati will be working with members of the Poison Control Center to update the PSMS poison pamphlet.

Joy Spurr is moving the PSMS slide collection to the Monroe Center where it will be available for use in classes and for general viewing. The board allocated money to duplicate slides that may not be easily replaced.

Funds were allocated for purchase of a lectern light that will not interfere with slide viewing at general meetings.

The board voted to have Morgan Shaw Design make this year's poster. Exhibit Chairman Dennis Bowman expressed need for volunteers NOW to begin work on the October exhibit.

TWENTY-NINE PINES FIELD TRIP Gilbert Austin May 17th -- originally scheduled for Stafford Creek

This was one of the most beautiful locations and beautiful days of the year. The scenery was absolutely spectacular, and it is certain that all 35 of the members who attended enjoyed the entire experience enormously. Actually, they enjoyed it for mushrooms as well, because virtually everyone found some morels and a few, at least, found morels in great abundance.

Notwithstanding what had been thought to be the case, it was not cold up there, and some hunters went to elevations in excess of 3000 ft and found morels. Mostly, however, they were found close to the Twenty-Nine Pines campground in disturbed forest areas-- areas that had been logged within the last few years. George Rafanelli was the identifier and identified 24 specimens of local mushrooms. Some hunters brought *Boletus edulis* in, but from lower elevations--around Easton and there about. A few coral mushrooms were also found, but overwhelmingly it was a morel day.

Twenty-two people remained for dinner. The hosts were Gilbert Austin, Edith Godar, and Marie Guillas.

DANCE AROUND THE FAIRY RINGS Wendla McGovern
[Mycena News, February 1985]

Since this legendary fungus fruits almost year round, more attention should be paid to it. Attracting quite a following over the centuries, *Marasmius oreades* is known by many names. These colorful nicknames are fairy rings, false mousserons, Scotch Bonnets, and Nelken-Schwindling, which means Clover-Dwindling in German. Its scientific name originates from *marasmus* (shriveled) and *oreades* (mountain nymphs), because this fungus withers in dry weather and revives when moistened, regaining its original size, shape, and continuing to shed spores. The *Marasmius oreades* mycelium grows outward in a circle, fruiting in a ring -- or, if broken, in arcs -- along the circumference. In Britain, mushroom rings were thought to spring up where the fairies had danced during the night, and thus were called fairy rings.

Fairy rings are found most abundantly on lawns, baseball fields, and in parks rather than in pastures during spring, fall, and summer -- whenever it is not too cold and there is sufficient rain. They have long, graceful yet tough stems and golden brown umbonate caps that become darker towards the center. Remember that *M. Oreades* has white spores and white to buff gills that are attached to free. Don't confuse this mushroom with a poisonous *Clitocybe* or *Inocybe*, absolutely identify it before consumption.

Fairy rings have a subtle flavor that has an undertone of almond to it. A versatile fungus, it can be added to soufflés, quiches, soups, sauces, pilafs, cookies and puddings. Sauté in butter or a mild oil (safflower) for 5 minutes before blending into other dishes. Be sure only to use the caps as the stems are too tough to eat. *M. oreades* is a perfect candidate for the dehydrator, as it retains its delectable flavor and reconstitutes well. You can even make an all purpose mushroom powder from the caps.

So next time you discover a fairy ring arc, dance around it with joy and don't forget the spot!



SWAUK CREEK FIELD TRIP Gilbert Austin

Approximately 30 people checked in at one time or another at Swauk on May 10 for perhaps the coldest, and certainly the most blustery, hunt of the season so far. No morels were found in the area of Swauk, although several people who overnighted reported finding plenty of *Gyromitra gigas* right in the campground. Jack Orth pinch hit as identifier. About 28 specimens were brought in for identification. Most people found some morels but all at elevations lower than Swauk Campground. The fireplace did yeoman service that day in the covered shelter at Swauk, and everyone immensely enjoyed the (as usual) delicious pot luck. Henry and Corinne Cato hosted along with Darlene and Larry Baxter.

MY EDUCATIONAL MUSHROOM EXHIBIT Helen Lashway

The Cherry Gardens Horticulture Club of Duvall invited me to provide an educational display on mushrooms for their annual flower show, which was held in conjunction with the Duvall Days' Country Living Festival, May 17th and 18th.

Because I was short of time, I decided to rely on photographs or other methods of showing the fungi. I didn't think I would be able to find enough specimens in the available time. And, I was concerned about identification, being a relatively new member, although Dennis Bowman was sure he could find an identifier for me if I found the mushrooms.

I borrowed some of our club's give-away sheets, the banner Margaret Dilly used for a program she had put on, the club's color photographs, some photographs of my own, some of my own typed descriptions of my photographs, my mushroom identification books, a poster from a prior show, and, last but not least, the original water color I won in the raffle last year. I wound up with a fairly large, very colorful display that won for me a blue ribbon!

Hardly a person passed my display without stopping to chat and ask questions or point out the mushrooms THEY ate. About three-fourths of all who stopped had eaten at least one variety of wild mushroom.

Most interesting to talk with were people from other countries who wanted to tell me what they ate in their homeland. One lady described what could only be truffles, and she said her mother used them to flavor potato soup! One lady even brought me some mushrooms the second day, so I had some to display after all. I thought they were probably *Amanita virosa*, so I had a good specimen to show people what to avoid, pointing out the cup at the base of the stipe.

I told people about the PSMS exhibit to be held in October and discussed with them the problem of over-picking by commercial pickers. I passed out the free literature provided by the PSMS and gave out the mushroom name tags on which I stamped the PSMS club name and written our telephone number on the back.

I enjoyed putting on my one-man (one-woman that is) educational mushroom exhibit. And, I enjoyed winning my blue ribbon.



MUSHROOM DOGS

Agnes Sieger

I've always wanted a morel dog, something on the order of a truffle dog which would romp through a forest clearing and home in on a morel as surely as a champion bird dog on a pheasant. After observing our new puppy, Wizard, and talking to Phil and Judy Roger, former PSMS members who now live in Oregon and race Siberian Huskies, I'm starting to suspect there might be a lot of morel dogs around, but not in the way I envisioned.

It all started when we found our first morel this spring in a campground. We shoved it under the puppy's nose, made a big fuss, and left it on the picnic table while we scouted around for some more. When we came back, the morel was gone, and a little sniffing revealed the puppy had morel breath.

It happened again last weekend. We had left the dog alone in the back of the pickup, along with camping gear, food, and several collections of mushrooms. When we got back, all that remained of the packet of morels was a few wisps of waxed paper. At least he hadn't touched the unknown *Lepiota* destined for Dr. Sundberg, or Dick would have killed him, if the *Lepiota* hadn't done it first.

When we mentioned this incident to Judy later that weekend, she just nodded. It seems her old lead dog Bonnie had been eating mushrooms for years. Once she ate a whole jar full of dried morels that the lid was loose on. She also loved fresh morels and *Gyromitra gigas*, which she used to find in the exercise pen.

All 30 of her dogs love *Boletus zelleri*, Judy went on. In the fall they go grazing for it. If Judy bends over to pick one up, three dogs swoop in to get it first. They also love *Geopora cooperi* and *Tuber gibbosum*, which they manage to dig up even though they are kept in dog houses on 6 foot chains. She can always tell when they've found some, Judy said, because the holes are small and neat and sometimes littered with a few mushroom crumbs.

Later, turning from Judy, I stopped over a fat morel. With mixed feelings, I called, "Here, Wizard. Morel, morel!" Wizard came galloping, stuck down his nose. Snap. One morel stem.

I wonder if this is how truffle pigs got started.

OBITUARIES

PSMS member **Donald Ross** Sunday, May 4th, of a heart attack. He and his wife, Bessie, joined PSMS in 1971. Although they lived in Tacoma, they always made it up to the Christmas social. You may remember him from the Crystal Springs field trip as the little man in his 80s who wore a Scottish cap.

Morel mycologist **Ron Ower** murdered in San Francisco. Originally a sign painter, he became interested in mushroom cultivation after joining the San Francisco Mycological Society, and went on to get his M.S. on the life cycle of morels from San Francisco State in the late '70s under Dr. Harry Thiers. At his death, he was part of a large project at Michigan State University which is trying to fruit morels in commercial quantities (so far, they are up to 36 morels in 30 days in an 18 in. tray).

LAKE WENATCHEE PARK FIELD TRIP

H. Hendrickson

Michelle and Andy Green were hosts, and Hildegard Hendrickson filled in as identifier. Of the more than 20 species identified, most were early, snow-type mushrooms, including *gigas*, *esculenta*, and *Verpa bohemica*. Because of the cold, late spring, even Lake Wenatchee was too high for the the prime morels, which were at about 1800 ft elevation.

Over 30 people stayed to enjoy the excellent pot luck.

NOTICE

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New Cookbook: Joe's Restaurant in Reading, Pennsylvania, famous world-wide for its wild mushroom dishes, now has a cookbook out. Called *Joe's Book of Mushroom Cookery*, by Joe's son Jack Czarnecki, it contains over 300 recipes of the more than 200 different types of mushrooms served at Joe's since it opened in 1916. The cost is \$20.95 plus a \$2.50 handling charge (\$18.85 for additional copies; autographed first editions are available to NAMA members). See Judi Boa in book sales or order direct from Joes's Restaurant, 450 South Seventh Street, Reading PA 19602.

Foray: Dr. Joe Ammirati will be the mycologist at the 10th Anniversary Foray of the Southern Idaho Mycological Association to be held June 13-15, 1986, at Donnelly, Idaho. No pre-registration is necessary. SIMA members \$5.00, guests \$8.00, dinner \$6.00 (free if you pot-luck too). Contact Don Anderson (208) 376-3023.

Classes: The Herbfarm in Fall City has dozens of classes this summer, ranging from mushroom cookery to gardening to how to buy a llama. For information call 7840-2222 in Seattle.

Volunteers Needed: Both Dennis Bowman and the Boas still need help. Like Helen Lashway, take this opportunity to get more out of YOUR Society.

Congratulations to PSMS member David Kunz, who will be graduated from Harvard on June 5th.

CARIBOU MOSS

Lee Hancock

[The Alaskan Camp Cook]

This recipe is thousands of years old and is still used in Alaska. It is the only known method of eating caribou moss successfully, and is guaranteed to prevent scurvy.

Kill a caribou, leave the first stomach alone for three days, then open it, take out the contents and use it like sauerkraut. Stomach content may be used when caribou is first killed, but is not as good.

[Caribou moss is the common name for *Cladonia alpestris* and *Cladonia rangiferina*, lichens. Both are found in Washington as are caribou. Please check with the Washington State Department of Game before preparing this dish! Note that "not as good" is a relative term.]

SEE YOU NEXT FALL!