



SOMA News

VOLUME 21 ISSUE 1

September 2008

SOMA IS AN EDUCATIONAL ORGANIZATION DEDICATED TO MYCOLOGY.
WE ENCOURAGE ENVIRONMENTAL AWARENESS BY SHARING OUR ENTHUSIASM
THROUGH PUBLIC PARTICIPATION AND GUIDED FORAYS.

2008/2009 SEASON CALENDAR

September

Sept. 18th » Meeting—7pm
Sonoma County Farm Bureau
Speaker: **David Rust**

Foray: Sept. 20th—Salt Point

October

Oct. 16th » Meeting—7pm
Sonoma County Farm Bureau
Speaker: **Dimitar Bochantev**

November

Nov. 20th » Meeting—7pm
Sonoma County Farm Bureau
Speaker: **David Arora or a proxy.**

December

Dec. 12th »
Sonoma County Farm Bureau
The fabled Mid-winter
Mushroom Potluck Feast

Jan. 17th—19th »

The Mushroom event of the year or any
year: **THE 12TH ANNUAL**

SOMA WILD MUSHROOM CAMP



EMERGENCY MUSHROOM POISONING IDENTIFICATION

After seeking medical attention, contact **Darvin DeShazer** for identification at (707) 829-0596. Email your photos to muscaria@pacbell.net. Photos should show all sides of the mushroom. Please **do not** send photos taken with cell phones—the resolution is simply too poor to allow accurate identification.

NOTE: Always be 100% certain of the identification of any and all mushrooms before you eat them!

A free service for hospitals, veterinarians and concerned citizens of Sonoma County.

SPEAKER OF THE MONTH

David Rust

Thursday—9/18—7PM—Farm Bureau

A Mushroomer's Guide to Sudden Oak Death



Sudden Oak Death could change the face of forests in California. This presentation will explore the plant pathogen that causes this devastating disease, its host plants, and range. Learn what can be done by mushroomers and other forest users to prevent its spread.

David Rust has written four articles on Sudden Oak Death for Mushroom the Journal and is a member of the California Oak Mortality Task Force. He helped organize the Mycoblitz forays at Pt. Reyes National Seashore. David is cofounder and webmaster of the Bay Area Mycological Society, as well as webmaster and Region 11 trustee of the North American Mycological Association.

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SOMA's *Amanita muscaria* logo by Ariel Mahon

PRESIDENT'S LETTER

Dispatch from the duff Greetings to all!

As noted in the July newsletter, Bill Hanson passed on the Presidency of SOMA to me. I'm looking forward to this year in that role and will work hard to make the society flourish. To quote the Jack Nicholson character in the film "Five Easy Pieces", "all beginnings are auspicious". I have the same feeling for this opportunity. I enjoy serving the mycological society and our community of interested and interesting people. The Board of Directors has the support of our membership to carry out the purpose and objectives of SOMA. We rely on the membership heavily to help fulfill our mission of mycological education and science. SOMA is solely a volunteer organization and we need your help more than ever this year. Please make full use of your membership and involve yourself in the activities of SOMA. If you have the time or interest, please speak to any board member and I'm sure you'll have the opportunity to participate in the activities of the Culinary Group, Forays, Cultivation, Mushroom Dyes, Papermaking, or the Newsletter. If you're not sure how you can help please ask any member of the board to learn more and, hopefully, find out which group would be best for you.

I hope I will do as good a job as Bill and all the previous Presidents of SOMA have done. There is an excellent tradition of SOMA board members who have thought through and carried out many worthwhile programs that have benefited our members and the community at large. In addition to Bill, Linda Morris and Bill Wolpert also will pass on their responsibilities as Speaker Coordinator and Secretary/Foray Leader. Sincere thanks to both for their dedication, hard work, and always coming through in a timely manner.

A new board member, Karen Kruppa, has accepted the position of Secretary. A reasonably recent arrival from the East Coast, Karen has years of experience in leadership positions in business. We welcome her and promise to help her realize her reasons and the benefits of moving west. We'll show her why this part of the country is kept a secret and such a great place to live.

It appears our favorite gathering and meeting place will be open to SOMA throughout the coming year. Salt Point State Park has escaped the long-armed, claw-fisted debt reducers and their plan as envisioned by the current political leadership in Sacramento. Things could change, so stay tuned. The park fee remains in place and must be met by each visiting automobile. So, this is another year of carpools and high occupancy vehicles, as the term is used. A good alternative may be to join the California State Park Foundation. See their website at www.calparks.org. Unfortunately, the rates for the "Sampler" or "Park Plus" package have changed and the savings benefit was eliminated. The advantage is that the organization is a non-profit advocacy group for the California State Park System. It has been effective in keeping many state parks open for the next fiscal year. We will look into other possible ways to save on entrance fees.

The coming rainy season may be a repeat of last year. Based on a local weather prognosticator, using ocean current data, we may be in for early October rains in 2008 and a dry 2009 spring. I must admit, I hold folks that make predictions on a reasonably scientific basis in high esteem. Usually, they are fun to be with and have great stories of success or non-success to share. Indeed, we shall see, but as always, anticipation of the new season creates a high form of energy and even higher hopes. We'll meet soon.

Best regards,

-Jim Wheeler

FORAY OF THE MONTH

Saturday, September 20th

Meet at the southern end of Fisk Mill Cove in Salt Point State Park at 10 AM.
\$6 daily parking fee per car now at SPSP!

This will be a special foray as SOMA will be participating in the Coast Clean-up planned for the same date. SOMA will provide bags and other materials to assist with the clean-up.

Bring a potluck dish to share; vegetarian dishes are always welcome! Please bring your own glasses, plates and eating utensils. Besides the positive environmental reasons and benefit to the gastronomic experience, it will help minimize the amount of trash to be hauled out. Contact foray leader Ben Schmid at (707) 575-4778 for more information.

Return of the native.....

Not a rain cloud in sight this warm August evening, and still I am in the midst of mushroom dye madness again!

Look for the stainless steel pots for mordanting, and realize I am out of mordants – go online and order alum and cream of tartar from Dharma Trading Co. for next-day delivery... Look for the non-reactive stirrers, cut up pre-mordanted wool yarn for samples – tie 1 knot for alum, and 5 knots for iron ... ah, the routine comes back slowly, and actually delightfully, in anticipation of the hunt.....

And this time the hunt will take me to a new but really an old territory for me..... ALASKA – going home again, but not to Fairbanks, where I was born, but to S.E. Alaska where I spent several months “en utero” while my parents fished salmon out of Sitka, Juneau, Ketchikan – (I cannot even imagine what it must have been like to be pregnant on a fishing troller (– her name was “The Fleetwing”...) My mother, a shy secretary from NY followed her new merchant seaman husband north to Alaska where he had a fishing boat– at least she was not a stranger to cold, snowy weather..... but to make a long fish tale short, my Dad eventually took a position as a radio engineer/meteorologist for the Wein/Pollack Bros. (was to become Alaska Airlines) who operated an airfield for the bush pilots in Alaska, and so I was

born in Fairbanks at 60 below zero (my parents said) rather than Ketchikan..... We left when I was 4, (another long story for another time), and I have never been back... until now.....

Enough of the back story, and that was just a taste, but now all these many years later, I've been invited to teach 2 workshops on mushroom dyes, for goodness sake, in S.E. Alaska – Cordova and Petersburg, at the end of August and in early September. Who knew? I've always wanted to return, and to have it happen in this manner is serendipitous beyond anything I could have imagined!

Get ready for rain, they said. What was your worst January weather in California, they teased – well, that's what the summer has been like up there in the Inside Passage.....so I've packed my Wellies, and am headed north on Horizon Air....

There are several groups of avid natural dyers up there, ecologists knowledgeable about lichen and plant dyes and now eager to try the mushrooms – what will we find? (i.e. - Will there be Dermocybes, she

asked?) A whole new habitat in the Tongass National Forest– Sitka spruce, western hemlock, Alaska cedar, muskeg, what fungi lurk deep in the spongy mosses? New words like “skookum” to learn, new shrubs to identify, new mushrooms to stalk? I can hardly wait!!!



Dorothy Beebee

The Year of the Mushroom Addict...by Anonymous (but U know who U are)

[Latin names on page 8; see how many you know]

September - You know you're addicted when you're delighted to recycle a large shopping bag because deep inside you know it will hold a Chicken of the Woods when your standard mushroom bags are definitely too small.

October - You know you're addicted when you stop and checkout white styrofoam cups in a grassy field, all the time hoping that they are actually young Puffballs in prime condition.

November - You know you're addicted when you see a white, garage sale sign posted on a tree and you do a double take to make sure it's really not a fresh Bear's Head.

December - You know you're addicted when it rains for fifteen days straight and your jaw hurts from smiling so long. The Porcini HAVE to be around here someplace!

January - You know you're addicted when visions of Coccora dance in your dreams. Dancing mushrooms HAVE to be a sign of some mental illness!

February - You know you're addicted when you can taste Hedgehogs and eggs even before you head to Salt Point. You probably know several patches where they litter the ground and you can't walk without stepping on them.

March - You know you're addicted when you think EVERY black hole in the ground is a camouflaged Black Trumpet. You have a real problem when every potential hole has to be investigated!

April - You know you're addicted when you have no fleshy fungi to look at, so you closely observe both the Red Belted Conk and the Artist's Conk to see how they are similar and how they are different. The real clue to your addiction comes when you wonder how to cook them.

May - You know you're addicted when you see conifer cones looking like a Morel and you suspect twenty of them are in plain view, but you still can't spot a single one.



Dorothy Beebee



From December 2006--Patrick is in Mexico again!

We are going to be making Mexican mushroom dishes for the big upcoming SOMA Camp Sunday night dinner on Martin Luther King Weekend in the middle of January so I thought I'd head down to Puerto Vallarta for a quick look-see at local flavors and a re-acquaintance with a nice warm sea. Flying over the northern salt flat coast of the Sea of Cortez right now...looks good at 30,000 feet and I can taste the chips, salsas, guacamole, and margaritas already. See you in PV.

Midday, 89 degrees with 95% humidity (muy tropico—same latitude as Hawaii) and the fabulous frigate birds carve the air currents aloft, brown pelicans below glide just above the gently roily Bahia de Banderas, vendors hawk their goods—some of which is very good—and I gobble utterly delicious lobster tacos beachside at Daquiri Dicks. Ridiculous.

But does this have anything to do with food-on-a-budget planning for Camp? Nah. Sure is fun though. And what—it's happy hour?

I got this laptop for working away from my office and/or home, but golly it is nice to be able to do this "work" while working on the Camp work. Volunteerism at the highest level.

"Sure, I'll take another—"a la rocas y con sal, por favor!"

Cool stuff happens here. The very spiritual Huichol Indians live in small scattered ranchos throughout this state of Jalisco and nearby Nayarit, Durango, and Zacatecas states. These folks are the artists who do those amazing bead and yarn work pieces. There is an "official" store/museum/workshop on the main street ("El Malecon") that goes along the bay. A Huichol gentleman sits there and does beadwork while wearing the typical white gauzy pants and shirt which are decorated with colorful yarns at the cuffs. Good looking man.

There is significance to each of the images replicated in their pieces (e.g., Eye of God, whales, mountain lions, the moon, peyote (they are allowed by the Federal Government to gather and use it ceremoniously), and owls, coyotes, etc.; but there are no mushrooms represented. I do not know why, especially considering that fungi are a part of their shamanic bags of tricks.

"What? Another margarita? No charge?" (Must be the Starbuck's style "buy ten get one free" deal. Urp. Oh boy—looks like two in this most happy hour. Urp urp.)

One can also see, adore, and purchase very typical hand-painted Nahautl Indian coconut shell masks for \$8.00 each. Yep. Just know where to buy and what to want.

Another happening which we don't see at home is paragliding (I will need several more tequilas before this chicken tries that. Is that a good idea—more tequila and paragliding? If I even pose this question I have already answered it).

Last night, while doing even more volunteer research work, I ate at the always excellent Café de Olla and had their most



Mexican Sweet Roasted Garlic, Mushroom, and Tortilla Soup

Serving Size: 4 Preparation Time:0:45

- 1/2 c olive oil
- 1 head garlic—chopped
- 1/4 lb mushrooms, any—chopped
- 5 c stock (vegetable or chicken)
- 2 ea tortillas—cut in 1/8" strips
- 1 ea tomato—cored, seeded, small dice
- 4 ea scallions
- 2 ea eggs—lightly beaten
- 4 ea canned chipotles—thinly sliced

1. Heat the oil in a heavy pan over medium low. Add the garlic

delicious queso fundido con champignons, and their margaritas. (I seem to be on two different information quests here in PV. Unless we are going to serve margaritas at Camp. Hmmm. Could. Might. Hmmm, that would allow me to turn in a travel voucher for this entire adventure's tab. Yes!

Ever wonder where the profits from Camp go? This type of scientific research is supported and that is so appreciated by this researcher.

We will do queso fundido with black chanterelles and freshly toasted and ground coriander seeds with an acidic dip made of cider vinegar, cilantro, garlic, chiles, a touch of sugar for balance and more flavor from Sauce Maggi (a Mexican culinary trick).

Friday and another day for this volunteer and he worked again at lunch by ordering the amazing scallop, lobster, and mushroom enchiladas at La Palapa—one more most excellent dine-at-the-beach place here at my Camp Research Headquarters.

"Cerveza Pacifico con limon, por favor, señor." (Margaritas are for dinner work. Duh.)

We might do enchiladas con hongos. Thinking porcini pieces, strips of chicken breasts grilled with a coating of porcini powder, then some spinach with garlic and dusted with nutmeg to round out the filling which will be a sort of Mexican Béchamel. Can't think of why not.

The Sierra Madre Occidental comes real close behind PV and then some jungle (yes—real jungle) is and then we have the houses on the foothills and then the town and then the Pacific. And there are banana plantations near the airport. Awful nice place for research.

I just ran into some California mushroom/foodie friends on a shopping street near my hotel! They live in San Francisco and do two fungal/food events with me each year on the Sonoma coast. She is a former chef, he works for a restaurant supplier of gourmet produce, and they own a B & B here in PV. Cool. We are now going to have dinner together tonight. Spanish food. Tapas. I will continue my research.

Grilled fish and meats are very big here and all over Mexico. This is my third trip this year and I have seen entres a la parilla every time. We will do something for everyone at Camp. Grilled portobellos a la Charmoon El Mexicano? Why not? How about grilled and stuffed quail too?

Another part of the cool stuff that happens here is Cuban cigars. Cohibas, Montecristos, and all sorts of more. We will not serve them at Camp (even here they are \$15 and up). As far as bringing them home—there is a very simple way to avoid that pesky customs thing and I will tell anyone how to do this, privately.

Time to go back home. Need to get back to my other work.

How about a recipe that requires a little work and gets great results (sort of like my work here in PV):

and cook until very soft—15 minutes. Add the mushrooms and cook for 5 minutes. Strain off the oil and set aside.

2. Transfer the garlic and mushrooms to a medium sauce pan, add the stock, partially cover and simmer for about 30 minutes.

3. Meanwhile, fry the tortilla strips in the same oil and set on paper towels to dry. Set aside.

4. And more meanwhile—brush the scallions with some of the oil and pan grill until lightly browned. Chop and set aside.

4. When the soup is ready taste and season with salt and pepper. Remove from the heat for about 30 seconds and then drizzle in the eggs and stir for a second.

5. Ladle into bowls, add the tortilla strips, scallions, tomato dice, chipotles, and chopped cilantro and queso fresco (if desired).



Lyme Disease Prevention

Spirochete Transmission and Ticks

DEPARTMENT OF
EPIDEMIOLOGY AND
PUBLIC HEALTH YALE
SCHOOL OF MEDICINE

The spirochetal agent of Lyme disease, *Borrelia burgdorferi*, is transmitted to humans through a bite of a nymphal stage deer tick *Ixodes scapularis* (or *Ixodes pacificus* on the West Coast). The duration of tick attachment and feeding is a key factor in transmission. Proper identification of tick species and feeding duration aids in determining the probability of infection and the risk of developing Lyme disease.

Many kinds of ticks will bite people, but only *Ixodes scapularis* (or *I. pacificus*) carries *Borrelia burgdorferi*.

I. Scapularis can be recognized by shape, size, and coloring. Adult stage ticks are about the size of an apple seed.

Nymphs are tiny, about the size of the head of a pin. About 25% are infected and nymphs cause about 95% of the Lyme disease cases.

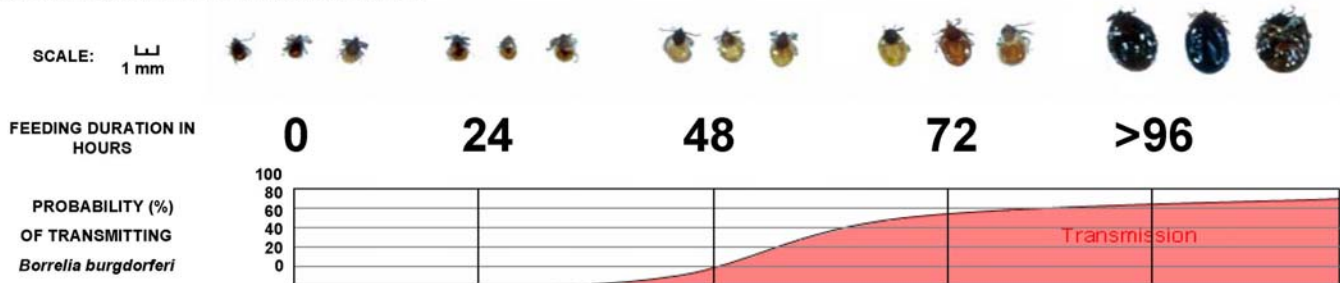


FEMALE

NYMPH

Infected nymphs begin to transmit *Borrelia burgdorferi* 36 hours after attachment. The nymph increases in size as feeding progresses (see below).

Any attached nymph should be promptly removed. Its appearance and size indicates the duration of feeding and probability of *B. burgdorferi* transmission.



NOTE: TICKS APPEAR LARGER THAN ACTUAL SIZE. REFER TO SCALE.

Prepared by Durland Fish, Richard Falco & John Koethe © 2006

FORT BRAGG—DIOXIN CLEANUP WITH MUSHROOMS

The New York Times
April 27, 2008

Saddled With Legacy of Dioxin, Town Considers an Odd Ally: The Mushroom

By ANNIE CORREAL

FORT BRAGG, Calif. -

On a warm April evening, 90 people crowded into the cafeteria of Redwood Elementary School here to meet with representatives of the State Department of Toxic Substances Control.

The substance at issue was dioxin, a pollutant that infests the site of a former lumber mill in this town 130 miles north of San Francisco. And the method of cleanup being proposed was a novel one: mushrooms.

Mushrooms have been used in the cleaning up of oil spills, a process called bioremediation, but they have not been used to treat dioxin.

"I am going to make a heretical suggestion," said Debra Scott, who works at a health food collective and has lived in the area for more than two decades, to whoops and cheers. "We could be the pilot study."

Fort Bragg is in Mendocino County, a stretch of coast known for its grand seascapes, organic wineries and trailblazing politics: the county was the first in the nation to legalize medical marijuana and to ban genetically modified crops and animals.

Fort Bragg, population 7,000, never fit in here. Home to the country's second-largest redwood mill for over a century, it was a working man's town where the only wine tasting was at a row of

smoky taverns. But change has come since the mill closed in 2002.

The town already has a Fair Trade coffee company and a raw food cooking school. The City Council is considering a ban on plastic grocery bags. And with the push for mushrooms, the town seems to have officially exchanged its grit for green.

The mill, owned by Georgia-Pacific, took up 420 acres, a space roughly half the size of Central Park, between downtown Fort Bragg and the Pacific Ocean. Among several toxic hot spots discovered here were five plots of soil with high levels of dioxin that Georgia-Pacific says were ash piles from 2001-2, when the mill burned wood from Bay Area landfills to create power and sell it to Pacific Gas & Electric.

Debate remains about how toxic dioxin is to humans, but the Department of Toxic Substances Control says there is no safe level of exposure.

Kimi Klein, a human health toxicologist with the department, said that although the dioxin on the mill site was not the most toxic dioxin out there, there was "very good evidence" that chronic exposure to dioxin caused cancer and "it is our policy to say if any chemical causes cancer there is no safe level."

Fort Bragg must clean the dioxin-contaminated coastline this year or risk losing a \$4.2 million grant from the California Coastal Conservancy for a coastal trail. Its options: haul the soil in a thousand truckloads to a landfill about 200 miles away, or bury it on site in a plastic-lined, 1.3-acre landfill.

(Continued on page 6)

(Continued from page 5)

Alarmed by the ultimatum, residents called in Paul E. Stamets, author of "Mycelium Running: How Mushrooms Can Help Save the World."

Typically, contaminated soil is hauled off, buried or burned. Using the mushroom method, Mr. Stamets said, it is put in plots, strewn with straw and left alone with mushroom spawn. The spawn release a fine, threadlike web called mycelium that secretes enzymes "like little Pac-Mans that break down molecular bonds," Mr. Stamets said. And presto: toxins fall apart.

In January, Mr. Stamets came down from Fungi Perfecti, his mushroom farm in Olympia, Wash. He walked the three-mile coastline at the site, winding around rocky coves on wind-swept bluffs where grass has grown over an airstrip but barely conceals the ash piles. It was "one of the most beautiful places in the world, hands down," he said.

Quick to caution against easy remedies - "I am not a panacea for all their problems" - he said he had hope for cleaning up dioxin and other hazardous substances on the site. "The less recalcitrant toxins could be broken down within 10 years."

At least two dioxin-degrading species of mushroom indigenous to the Northern California coast could work, he said: turkey tail and oyster mushrooms. Turkey tails have ruffled edges and are made into medicinal tea. Oyster mushrooms have domed tops and are frequently found in Asian food.

Local mushroom enthusiasts envision the site as a global center for the study of bioremediation that could even export fungi to other polluted communities.

"Eventually, it could be covered in mushrooms," said Antonio Wuttke, who lives in neighboring Mendocino and describes his occupation as environmental landscape designer, over a cup of organic Sumatra at the Headlands Coffeehouse.

The proposal is not without critics, however:

"There still needs to be further testing on whether it works on dioxin," said Edgardo R. Giller, a hazardous substances scientist for the State Department of Toxic Substances Control. "There have only been a handful of tests, in labs and field studies on a much smaller scale. I need to see more studies on a larger scale to consider it a viable option."

On April 14, at a packed City Council meeting, an environmental consultant hired by the city voiced skepticism, citing a study finding that mushrooms reduced dioxin by only 50 percent. Jonathan Shepard, a soccer coach, stood up and asked: "Why 'only'? I think we should rephrase that. I think we should give thanks and praise to a merciful God that provided a mushroom that eats the worst possible toxin that man can create."

Jim Tarbell, an author and something of a sociologist of the Mendocino Coast, said the enthusiasm for bioremediation showed a change in the culture at large.

"We are trying to move from the extraction economy to the restoration economy," Mr. Tarbell said. "I think that's a choice that a broad cross-section of the country is going to have to look at."

At the April 14 meeting, Georgia-Pacific promised to finance a pilot project. Roger J. Hilarides, who manages cleanups for the company, offered the city at least one 10-cubic-yard bin of dioxin-laced soil and a 5-year lease on the site's greenhouse and drying sheds for mushroom testing. And the City Council said it would approve the landfill but only if it came with bioremediation experiments.

So, sometime later this year, Mr. Stamets is scheduled to begin testing a dump truck's load of dioxin-laced dirt in Fort Bragg.

"One bin. Ten cubic yards. That's a beginning," said Dave Turner, a Council member. "I have hope - I wouldn't bet my house on it - but I have a hope we can bioremediate this."

MYSTERIOUS BAT DEATHS FROM FUNGUS INFECTION

The mysterious death of bats has continued this summer, but researchers are closing in on a cause

By Beth Daley, Globe Staff | July 28, 2008

After a series of provocative discoveries in recent months, scientists believe bats in the Northeast might be in greater peril from a mysterious sickness than originally thought.

Researchers now think that a fuzzy white fungus found on thousands of dead and dying bats in New England and New York last winter might be the primary cause of the illness. Scientists have learned that the unidentified fungus seems to thrive in the cold temperatures found in caves and mines in winter - when bats are hibernating and most vulnerable.

As worrisome is that many bats continued to die this spring, dashing hopes that they would recuperate when they emerged from hibernation and resumed feeding. Hundreds of animals with scarred wings, both dead and alive, were discovered in Vermont, Massachusetts, and New Hampshire through June. The wing damage can kill bats and likely was caused by the fungus, researchers say.

Biologists are also growing increasingly concerned that the fungus may be spreading to tens of thousands of healthy bats as the animals huddle together while sleeping in their summer roosts.

Humans are not believed to be at risk from the illness, but a large die-off would likely affect people indirectly. The nocturnal mammals eat enormous amounts of crop-infesting and human-biting insects, and scientists say they know so little about bats that their ecological importance may become apparent only once they

disappear.

"We could be at the beginning of something much uglier," said Paul Cryan, a bat specialist with the United States Geological Survey in Colorado. He said researchers are beginning to realize that even if they identify a definite cause, it may be too late for thousands of bats. "What do we do then? We are thinking ahead to the spread of it."

The disease was first seen two winters ago, when thousands of bats died in four New York caves within seven miles of each other. Many of the bats had an unusual white fungus on their bodies. By last winter, 25 caves and mines spread across 135 miles were found to have sick or dying bats in Massachusetts, Vermont, Connecticut, and New York. Pennsylvania bats may also be affected.

Scientists originally dubbed the sickness "white nose syndrome" because of the fungus but believed it to be a secondary problem, one that grew on the bats when they were weakened by something else. That's because fungi are rarely fatal by themselves.

But a meticulous search for another pathogen using cutting edge technology has come up short. While researchers say they are not ruling out other causes, such as something in the environment, a recent discovery that the fungus grows best in cold temperatures is training their attention back to it.

Bats' immune systems appear to shut down when they are in deep hibernation, likely to conserve energy and because the parasites, bacteria, and viruses that would attack them are not normally active in the cold either. If a fungus exists in the caves

(Continued on page 7)

(Continued from page 6)

that thrives in cold conditions, it could overtake the bats before their immune system has a chance to respond.

Scientists' hypothesize that the bats could be waking up in the winter from the fungus - either to jumpstart their immune systems or simply to groom themselves. Under either scenario, the bats would burn up enormous amounts of fat reserves they need to survive the winter. That may be why so many skinny bats were seen dying on cave floors this past winter or flying into and out of mines in a futile search for food.



"The attention has narrowed and focused on the fungus," said Vishnu Chaturvedi, director of the Mycology Laboratory at the New York State Department of Health and part of a team that discovered the cold-loving fungus. He said it will take time before scientists know for sure what is going on - and longer to find a solution - but "we're getting a number of clues."

Some scientists are growing discouraged that they will find the answers in time. Some caves struck hard by the illness have lost 97 percent of their bat populations. A bat researcher monitoring a summer roost in New Hampshire estimates that about 25 percent of his colony is gone, likely from the bat sickness.

Worries intensified this spring when researchers discovered bats with inflexible, scarred wings, likely from the fungus. Wings make up more than 75 percent of a bat's surface area and are critical for flying as well as for blood flow and to enable the animals to

exchange heat, gas, and water with the air. If the wings are too damaged, the animal can die.

"We thought if they made it through the winter they would be good to go, but that does not appear to be the case," said Jon Reichard, a Boston University graduate student who is monitoring two summer bat roosts in Massachusetts and New Hampshire where he has found hundreds of bats with damaged wings.

Scientists are beginning to study whether bats might be harboring dormant fungal spores in summer roosts, increasing the risk of transmission.

This is a frightening scenario: Bats migrate as far as 250 miles from their winter hibernating sites to their summer roosts, where they mix with bats from other far-off caves and mines. In the fall, they will travel back to their hibernation sites to mingle and mate with still other bats. If new bats are infected, the fungus could begin to grow on them as soon as temperatures dip low enough.

"This condition represents a grave threat to (bats in) the north-eastern US," said David Blehert, director of diagnostic microbiology at the US Geological Survey National Wildlife Health Center in Wisconsin.

Beth Daley can be reached at bdaley@globe.com.

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http://www.boston.com/news/science/articles/2008/07/28/wing_damage?mode=PF

SOMA—WHAT'S IN A NAME

Re: [BAMS] Mushroom Art from Mexico

Birthday cakes in the state of Tlaxcala, Mexico are OFTEN in the form of *Amanita muscaria* (subsp. *flavivolvata* if there is any intention to be faithful in reproduction of local fungi). I have a Mexican bread dough sculpture of the Tulloss family that was made with muscarias growing around our (very Mexican-looking) house. My Christmas tree has glass and wood muscaria ornaments from Eastern Europe (mostly Poland). A woven "diploma" presented at the end of an Amanita seminar in Mexico depicts muscaria. I cannot determine the black obsidian mushrooms with which I presented after a pyramid tour in Tlaxcala. I don't think they are amanitas. However, muscaria is very important in the mycoethnology of Mexico. On the Amanita Studies site webpage for subsp. *flavivolvata*, there is a picture of a cistern on el volcán La Malintzi (Malinche) showing that picnickers always throw muscaria in the cistern. [They may not remember what the original reason was for doing this, but the rain god was VERY nasty, maybe muscaria could replace a human heart occasionally (?).] If anyone has met Dra. Adriana Montoya-

Esquivel in Tlaxcala or elsewhere, she might know more about the ethnomycology of muscaria in Mexico. She is the ethnomycologist at the Univ. Autón. de Tlaxcala.

Posted by Dr. Rodham E. Tulloss to the BAMS list; 6/7/2008
ret@eticomm.net



Photo by Alan Rockefeller from Mushroom Observer

Latin names—Year of the Mushroom Addict—from page 3:

September - *Laetiporus* sp.

October - *Calvatia* or *Lycoperdon*

November - *Hericium* sp.

December - *Boletus edulis*

January - *Amanita lanei*

February - *Dentinum repandum* & *Dentinum umbilicatum*

March - *Craterellus cornucopioides*

April - *Fomitopsis pinicola* & *Ganoderma applanatum*

May - *Morchella* sp.

SCORE: 1-3 correct = The mushroom love bug has bitten you.

4-6 correct = Be careful, you have the fever and it's getting worse.

7-8 correct = Your addiction shows to close friends & family.

All 9 correct = Hopelessly addicted and not interested in therapy.

ANNOUNCEMENTS

The Wild About Mushrooms Company has openings available for our 2 upcoming Oregon forays:

Annual 'Oregon Cascades Foray' scheduled for October 12 thru 16, and new 'Oregon Coast Foray' scheduled for the weekend of October 18/19. Both forays are to be led by David Campbell. Educational and enjoyable!

Contact Charmoon Richardson for event information and registration at (707) 829-2063, or charmoon@sonic.net.

An Invitation to Work Together on Mushroom Observer.org (<http://mushroomobserver.org>)

Are you interested in helping to create a worldwide mushroom database? Would you like to participate in a mushroom related website that allows anyone to contribute their own mushroom photos, participate in conversation about those contributions, and search the site for photos and comments?

There are many mushroom related sites out there and even more mushroom related discussion happening on various mailing lists, chats etc.

Unfortunately, mailing lists and their attachments are transitory.

Personal and even amateur group websites are hard to keep track of or search consistently and few allow general participation. Sites hosted on third-party websites like yahoo groups are at risk of getting unplugged or co-opted in some way that may not be in keeping with the original intent of the site or simply falling into the dustbin of neglected websites.

The community supporting the MushroomObserver.org website would like to invite all interested parties to get involved in creating a common on-line meeting ground for mushroom enthusiasts. It makes sense to have one common site to compare photos and get feedback from others.

We would be happy, with your help, to shape MushroomObserver.org towards better achieving that goal. Much of the ground work is already done.

- Anyone can add their own images of mushrooms.
- Anyone can make a comment or suggest a new name for any mushroom observation.
- Anyone can contribute to a shared database of mushroom descriptions.
- Anyone can make species lists for a location, event or any other purpose.
- Anyone can generate a list of fungi found by clicking the check boxes.
- Anyone can compare all photos of the same species.
- Anyone can vote on any species name.
- Anyone can see a location map of where the collection was made.
- Anyone can get the full source code for the website and participate in its development.
- There are no financial hooks.

Conceptually the site is similar to Wikipedia, but with an emphasis on recording individual records of people finding and identifying mushrooms. At the moment (July 2008) there are over 350 registered users and more than 15,000 images from all over the world.

Mushroom Observer is not intended to replace the websites for existing mushroom groups. These serve a very valuable purpose of providing a common place for people in a given area who know each other to organize local events and share their local experience. Mushroom Observer strives to complement such sites by providing a larger context for these groups to share and record their discoveries in a lasting way, and compare their findings with findings from other similar groups. It is a living mushroom field guide on the web which we are all building together.

We hope you can join us!

Darvin DeShazer & Nathan Wilson

Have you ever wanted to read the RAREST of all modern day mushroom books? Only 517 copies made in 1957 and they sell for over \$3,000.

The first mushroom book by R. Gordon Wasson - Mushrooms, Russia & History

A recent pdf file has been made and can be downloaded to your computer for free. It contains both volumes and all of the color plates.

<http://www.newalexandria.org/archive>

A true treasure!

Darv—SOMA Science Advisor

And Patrick Hamilton adds:

I remember that I saw one in Maggie Rogers house maybe 8-10 years ago. Handsome book. Not for sale it was. (For those of you who do not know, Maggie has Fungal Cave Books up in Portland and is a great source for arcane as well as well-known mushroom books, mushroom club old newsletters, and such.)

Multi-Club Salt Point Clean-up Day and Campout: Saturday, October 11, 2008

Spend a relaxing weekend doing good and having fun. Salt Point State Park, in Northern Sonoma County, is home to an amazing bounty of year-round mushrooms. It is also one of the rare areas in California where we can openly collect, within reasonable limits. Come show your civic spirit, and help give back to a park that gives so much to us.

We will meet at Salt Point State Park, Woodside day use parking lot, at 10:00 am. Park personnel will provide us with attractive (?) orange hazard vests and giant trash bags; we must provide our own protective gloves and good attitudes! After a couple of hours combing the park roadsides and paths, we will return to pile high our finds, and share a potluck lunch. This clean-up is sponsored by BAMS and the FFSC, but any mushroom hunter or park appreciator is welcome to join us. For those far-flung friends who wish to participate and for whom camping has lost its charm, there are many places to stay along the Coast, from the Salt Point Lodge to the south to Sea Ranch to the North. But camping (or RVing) is the cheapest and most convivial option. Carpooling strongly encouraged.

For more info, contact Debbie Viess at amanitarita@sbcglobal.net or 510.430.9353

SOMA Membership Application and Renewal Form

Regardless of what others may think of me, I wish to become a member of the Sonoma County Mycological Association, a Non-Profit, 501 (c)(3), Corporation dedicated to the promotion of the knowledge and appreciation of local fungi.



(Please Print) New Member Renewal
Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone(s): Home: _____ Cell: _____
E-mail: _____

I am interested in participating in the following activities (Check):

Culinary Group _____ Mushroom Forays _____ Cultivation _____
Mushroom Dyes _____ Mushroom Papermaking _____ Newsletter _____

Other ideas/comments: _____

SOMA will not share your info!

- Date: _____
- \$25 for family membership (mailed SOMA News, plus website download if desired)
 - \$20 for family membership who do not require a mailed newsletter (**website download only**)
 - \$20 for seniors with mailed newsletter (60 years +) (plus website download if desired)
 - \$20 for seniors—**website download only**, (help SOMA and the environment out!)
 - Check here if website download is desired. **Include your email address!**

Checks to: **SOMA**
P.O. Box 7147
Santa Rosa, CA 95407

www.SOMAmushrooms.org

YOU CAN NOW RENEW/JOIN ONLINE AT THE WEBSITE!

MORE ANNOUNCEMENTS

September 21 to 28, 2008—4th Annual Si-ca-mous and Shu-swap Lake Wild Mushroom and Food Festival Sicamous
<http://www.fungifestival.com/> PO Box 969 Sicamous, B.C. V0E 2V0
Phone: 250 836 2220 Fax 250 836 2278
E-Mail: narrows@sicamous.com

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There will be a 2nd Annual Western Mushroom Club Joint Foray held in Sicamous on Shuswap Lake BC on September 26-28 2008. Sicamous is located between Salmon Arm and Revelstoke on the Trans-Canada Highway #1. This is the weekend following the NAMA foray in Idaho so we hope to also host some enthusiasts from afar. The fourth annual Sicamous Mushroom Festival may be held in conjunction with our event. Watch for further details.

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September 27th and 28th the Glacier Institute in Montana Two day foray & credit course http://www.glacierinstitute.org/glacier/courses/fall_mushroom.html 406.755.1211

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September 29 ~ October 3, 2008 The 6th International Conference on Mushroom Biology and Mushroom Products. Bonn, Federal Republic of Germany
<http://www.worldmushroomsociety.com/> www.WSMBMP-Conference.de

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October 4-5, 2008. 16th Annual Mt. Hood Salmon and Mushroom Festival hosted by the Cascade Geographic Society in Mt. Hood Village.

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Breitenbush Hot Springs Mushroom Weekend: October 23-26: The 2008 Mushroom Conference at Breitenbush Hot Springs Resort near Detroit, Oregon will feature the many uses of mushrooms for humans and the earth. Our expert mycologists will teach you to positively identify the mushrooms and our chefs will demonstrate how to prepare our delectable forest and field fungi. Dr Tom Volk, Paul Stamets and Daniel Winkler will teach and enlighten you about how mushrooms can save the world and the new functions that we have discovered for our fungus friends. Mushroom feasting will be directed by Chef Michael Blackwell at an Interactive Cooking and Tasting event. Paul Kroeger will serve as our conference mycologist and expert identifier of our Pacific Northwest fungi. Mushroom Illustrator and mushrooms for color expert Dorothy Beebe will provide a workshop experience that you will never forget. <http://www.breitenbush.com/>

Deadline for the October 2008 issue of SOMA News is September 21st.

Please send your articles, calendar items, and other information to:

SOMAnewseditor@SOMAmushrooms.org

VOLUNTEER

On July 12th the SOMA Board and all of the volunteers who helped at the mushroom camp or other activities during the year were invited to a 3rd annual volunteer appreciation day picnic. The event was held at the Riverfront Park on Eastside Road between Windsor and Healdsburg. At the park, there is a beautiful redwood grove with a barbecue pit, picnic tables, and space for volley ball and Petanque. The SOMA Board prepared a feast that included raw and barbecued oysters, chicken, sausages, coleslaw, potato salad, baked beans, fruit, make your own sundaes, and of course cheese and beer from the Cheese Dude and Rowbear. Following the food there was a raffle where everyone had the opportunity to win prizes supplied by the SOMA book store. Thanks to the SOMA Board including Bill Hanson, Jim Wheeler, Bill Wolpert, Tom Cruckshank, Linda Morris, Caitlin and Eric Marigold, and a new member to the Board, Karen Kruppa. More importantly, thanks to all of the people that volunteered in the last year. SOMA would not be the organization it is without the help of all of you.

As a solely volunteer run organization we rely heavily on people to keep this group functioning. Please consider volunteering in some capacity this year. You can be of great help at the Mushroom Camp in January or some other type of event. Please contact me or another board member if you want to become more involved.

Julie

Julie Schreiber

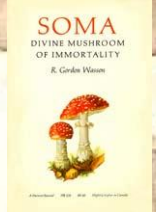
Volunteer coordinator

julieschreiber@hotmail.com

H: 707 473-9766

SOMA News

P.O. Box 7147
Santa Rosa, CA 95407



SOMA Members

The September Issue of
SOMA News has arrived!

SOMA usually meets on the third Thursday of the month throughout the year (September through May), at 7 PM, at the Sonoma County Farm Bureau, 970 Piner Road, Santa Rosa, California.

Fungi are displayed at 7 PM, and speakers begin at 7:45 PM. Bring in your baffling fungi to be identified!

Directions to the Sonoma County Farm Bureau

Coming from the south:

- Go north on Highway 101.
- Past Steele Lane, take the Bicentennial Way exit.
- Go over Highway 101.
- Turn right on Range Ave.
- Turn left on Piner Road.
- At about ¼ mile, turn left into parking lot at 970 Piner Road.

Coming from the north:

- Go south on Highway 101.
- Take the first Santa Rosa exit, Hopper Ave/Mendocino Ave.
- Stay left on the frontage road, (it becomes Cleveland Ave after you cross Industrial Drive).
- Turn right on Piner Road.
- At about ¼ mile, turn left into parking lot at 970 Piner Road.

970 Piner Road is marked by a star on the map at right.

