VOLUME 27:7 March 2015

SPEAKER OF THE MONTH: Michael Beug

"For the Love of Western Ascomycetes"

-- March 19th, 7:00 PM, at Sonoma County Farm Bureau, Santa Rosa, CA.

"In this talk, I illustrate the spectacular and diverse world of Ascomycete fungi in the west. You will learn about edibles from morels to truffles, fungal habitats and fungal lifestyles. I describe what Ascomycetes are. You will learn about unusual fungi, some with medicinal applications, some with industrial uses, some that cause plant diseases, some that cure plant diseases, and some that control insects. I describe how I came to write the book Ascomycete Fungi of North America with coauthors Alan and Arleen Bessette, the first color–illustrated book to cover North American Ascomycetes."

Alan Michael Beug is Professor Emeritus of The Evergreen State College in Olympia, Washington where he taught chemistry, mycology and



College in Olympia, Washington where he taught chemistry, mycology and organic farming for 32 years. His first book, Ascomycete Fungi of North America, with coauthors Alan and Arleen Bessette, was published in March 2014 by the University of Texas Press. The 488 page hard-back book covers over 600 species and contains 843 color photographs. Michael regularly lectures to mushroom enthusiasts and loves to teach beginners workshops.

His mushroom photographs have appeared in over 50 books and articles on mushrooms. He is a member of the North American Mycological Association (NAMA) where he served for six years as Editor of the Journal McIlvainea.

Michael is currently Vice President and has served four terms as President of The Pacific Northwest Key Council, a group dedicated to writing macroscopic keys for the identification of fungi. His specialties are the genus Ramaria, all toxic and hallucinogenic mushrooms, and Ascomycetes. He is also doing research on oak-associated fungi of the Columbia River Gorge, especially Cortinarius species. He is coauthor of MatchMaker, a free mushroom identification program covering 4,092 taxa with over 5,000 images of 1,984 illustrated taxa.

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EMERGENCY MUSHROOM POISONING ID: After seeking medical attention, contact Darvin DeShazer for identification at (707) 829-0596. Email photos to: muscaria@pacbell.net and be sure to photograph all sides, cap and of the mushroom. Please do not send photos taken with older cell phones - the resolution is simply too poor to allow accurate identification.

NOTE: Always be 100% sure of the identification of any mushroom before you eat it!

THE SONOMA COUNTY MYCOLOGICAL ASSOCIATION (SOMA) IS A NON-PROFIT (501C) EDUCATIONAL ORGANIZATION DEDICATED TO MYCOLOGY. WE ENCOURAGE **ENVIRONMENTAL AWARENESS** BY SHARING OUR ENTHUSIASM THROUGH PUBLIC PARTICIPATION IN MEETINGS AND IN GUIDED FORAYS.

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President's Letter

DISPATCH FROM THE DUFF:

The SOMA General Meeting in February featured Alan Rockefeller as the guest speaker. As most of you know, Alan has presented at many SOMA Camps and is a long time supporter of the group. He is a mycologist and has studied wild mushrooms of North America for 15 years. His current focus is on taxonomy and photography of mushrooms of California and Mexico. When he is not photographing mushrooms, he is busy sequencing fungal DNA, photographing the microscopic features of mushrooms and keeping many mushroomers alert to changes in fungi taxonomy.

Alan's talk was based on a recent four month trip to Mexico and featured over 300 of his favorite wild mushroom photographs. His group traveled and collected edible, poisonous, and hallucinogenic specimens in the states of Jalisco, Michoacan, Puebla and Oaxaca. Alan took time to visit Wild Mushroom Fairs in Oaxaca and Michoacan and photographed the large diversity of fungi disp layed at the fairs. He noted, as an example, the Boletus genus has more than 100 species in Mexico compared to 20 species

in California.

During the trip his group encountered many other folks while traveling on back roads. Frequently, they were members of Armed Forces of Mexico on training programs. Alan and his companions quickly learned that many soldiers enjoyed eating wild mushrooms. That turned out to be a very good ice breaker and conversation opener.

He noted that his favorite mushroom is, lepiota trichroma. First sighted in 2005 by Montoya and Bandala in the "Gulf of Mexico Area", but it is not a common find for most people. The mushroom changes colors from yellow to red to green if bruised or damaged.

It was an excellent, enjoyable evening for all with Alan's presentation of his favorite mushroom photographs and a traveler's tales through an interesting part of the world. After the talk Alan

motored back to the Bay Area where he now lives.

SOMA participated in the Healdsburg and Sonoma County Science Fairs in February and March. Rachel Zierdt leads the Scholarship effort and will publish the list of those young scientists selected for recognition. It was suggested SOMA donate an annual amount to each of the groups responsible for organizing and presenting the two Science Fairs held in Sonoma County. The Board will discuss this and make a decision in March.

The SOMA Board authorized a "Bookstore Clearance Sale" at the Thursday night meeting in May. So, save your discretionary cash cache and come prepared to take home those items you have

wanted so badly.

The Volunteer Appreciation Picnic will be on July 26, 2015 at Riverfront Regional Park on Eastside Road. While a theme hasn't been selected yet, please mark your calendars and keep the date open.

Best regards, Iim Wheeler

Science Fair Update: Sonoma County

By Rachel Zierdt

Late February and early March for the past five years have not always been promising in hunting mushrooms. However, this time frame has found our SOMA team from our scholarship committee busy searching for winners at science fairs in Sonoma County.

This year we started by viewing projects submitted to the Sonoma County Science Fair held at Sonoma State University. Patrick Hamilton, Lee McCarthy-Smith, Jim Wheeler, and Rachel Zierdt had the pleasure of joining other teams of judges to assess work done by 7th-12th

graders from around the county.

Using a 150 point rubric, students were judged on such criteria as the project display, creativity, originality, skill level, scientific thought, rigor, and thoroughness. In addition, each student was interviewed by a team of 2-3 judges to help explain and defend their project, answering questions that the judges posed.

There were well over 120 projects with each team of judges reviewing about 10 projects in great detail. Of the forty projects that SOMA judges reviewed, the team felt that four were worthy of recognition. Each student received \$100 and their teachers were awarded like amounts to help with expenses in teaching science at their school.

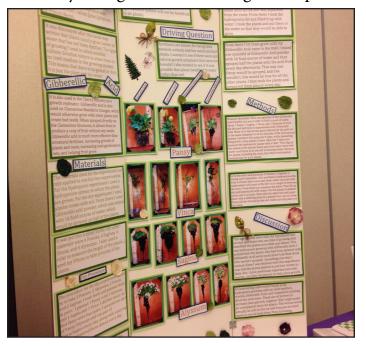
Our youngest award winner was Jessica Gonzalez from Roseland Collegiate Prep. Patrick singled her out for her creativity and perseverance. She studied the effect of several grow-

ing conditions on wildflowers.

Lee was simply amazed by one of the 8th graders she judged. Noah Kovacs from Presentation School decided to invent an inexpensive fully functioning prosthetic hand. Noah was inspired by a TV show where he heard that there were vets who could not afford prosthetics. In building this prototype, he tested three different materials before he found that high density styrofoam worked. Using a heat gun he molded the hand, bought a motor and built the apparatus that attached onto muscles. He taught himself how to write a computer program (Java) that would actually move the hand. In the end, he contacted the VA to find a veteran to test it.

Zachary Miller from Technology High School is an 11th grader interested in discovering non-toxic fertilizers to enhance growth of plants. Using 4 different types of plants each growing either hydroponically or in soil, he used Gibberellic Acid to see how it affected the growth of these plants. His discovery showed plants that were grown hydroponically using the acid actually grew the lushest. Additionally he found that the soil that was used by some plants wound up containing worms. He said his next step would be to try to combine hydrophonic growing with an inert medium (to protect the worms), worms and Gibberellic Acid to see what an effect all those positive forces would have on growing plants.

Our last award winner was Katherine Baney, also in 11th grade at Technology High School. She tested for *P. ramorum* (an oomycete water mold) fungus that causes Sudden Oak Death using infrared light and noting if there were any changes when the fungus was present.



This fungus is spread through contaminated water to infest California Bay Laurel Trees. Normal testing for this pathogen can take over two weeks to get results, so her discovery that the infrared camera could reveal a fungal heat signature will allow for faster identification of P.ramorum.

Although all of our projects were of differing complexity, and the students come from diverse backgrounds with varied amounts of financial and adult assistance, the judges all agreed that these young scholars are creative, critical thinkers who deserve our admiration and recognition. We thank all camp attendees who help make these awards possible.

Science Fair Update: Healdsburg By Rachel Zierdt

The SOMA team of Jim Wheeler, Lee McCarthy-Smith and Rachel Zierdt appeared as judges at the Healdsburg Science Fair. The projects here differ a bit from the ones sponsored by the Sonoma County Science Fair: These exhibits spanned Kindergarten through 12th grade, we were not part of the formal assessment of the projects (we were only representing SOMA), and we did not meet and discuss the projects with the students. Unlike the Sonoma County Fair where we only judged 9-11 projects, the three SOMA judges reviewed all the entries in life sciences (roughly 60). After each judge independently reviewed all the projects, we met as a team and remarkably found we agreed on four winners immediately.

We commended 'Logan Jones, a first grader, for his project finding out how long it took for mold to grown on bananas and kiwis

Molding Fruit.

When an Research Read

Sind on Soundards Bread

Sind on Moral Bread

Sind on Moral Bread

Record Research Read

Record Record

using different types of bread. Ian Stuart's winning project discovered that mold grew best in wet, warm and dark environments. Brooke O'Connor used three different types of containers to test which type of container, baggie, plastic container, or green plastic bags would prevent mold from forming on fruit. The green bags which block the formation of ethylene gas-

es worked the best. Each student received \$50 and their teachers received a like amount. All of the above winners were from St. John's Academy.

We did have two winners who each received \$100 along with their teachers for outstanding science projects. Lucas Huang from The Healdsburg School did a beautifully executed experiment comparing the sweetness of several sweetners. His collection and depiction of the data was truly amazing. Our final winner, Sofia Sarshar, also attending St. John's, did a wonderful job with a very original project. She was testing to see if memory was enhanced with the use of scents. She had 20 objects each associated with a unique smell. Two hours later, she asked people to recall the 20 objects. If they failed to recall an object, she had them smell the odor that was associated with it, and amazingly, the forgotten object was invariably recalled.

We appreciate the opportunity to be judges in both science fairs, and consider it an honor to represent SOMA. As part of the scholarship committee, it is wonderful to recognize excellence and hope that our continued participation in such events will continue to foster the love of science in students of all ages.



Photos by Rachel Zierdt

Photo of the Month

By Cathleen Carter

SOMA Camp has more workshops, sessions, forays, speakers, wine tastings and other events than even the attendees would believe possible in one weekend! Among the most popular of the workshops has been dye mushroom arts, which have expanded substantially over the last two years. Here is a shot of two proud artists with their dye wares at SOMA CAMP 2015.



Credit: Cathleen Carter

The Forager's Report:

March 2015

"Wine and Mushrooms"

By Patrick Hamilton

This mushroom year is again plagued not by Biblical locusts nor Bubonic pandemic, not by even too many pickers poaching your patches, but just by the fact that we can do nothing about the weather. Ever the weather will be beyond the grasp of our understandings. (Except maybe global warming and I turn to Congress for greater insights there.)

In Sonoma County we had the December deluge of 15" after 4" total in October/November and then less than 1" in January. The poor myceliums waited for a fine wetting and instead got a bellyfull all too at once. Too much, too intense to appease the underground threads to produce nicely: spurted, then stopped.

Confusements were in order even for keen private pickers of many years experience. And the commercial harvesters had a real bad time with the timing of the rains and drying winds and just a sort of precipitation chaos in the woods.

So when I was approached by Benziger Winery to do an event which was to involve a foray/tour for wine club members of their 85 acres over in Glen Ellen I asked to do a preview walk and the affable Chris Benziger and I did just that. We looked over the bay tree and valley and live and poison oak gullies and ravines and hillsides and meadows and found, um, *Cuphopyhllus pratensis* (http://www.mykoweb.com/CAF/species/Cuphophyllus_pratensis.html) and that was about it.

What to do, what to do?

"Out to the Sonoma Coast where a lonely stand of pines could offer some fungi for the fete and it did not disappoint..." What we go for and what we find is always a big fun part of the hunt and as I scanned the pine duff for *repandums* and chanterelles I couldn't avoid my viewing screen being cluttered with the fun-named *Laccaria amethysteo-occidentalis*, nicknamed "LAO's (http://www.mykoweb.com/CAF/species/Laccaria_a-o.html_). They were standing up tall to be noticed, I felt, so I picked them. Plucked lots of those puppies, enough for a chef demo and tasting at the winery for 20 folks (about 3 pounds).

I did not really remember what they tasted like but had recently heard "I like them" and "they're pretty good but the stems are tough" and other somewhat positive comments so for a preview I sautéed the caps plain (no aromatics) in grape seed oil so I could really fire up the heat. They came out good. So I sliced the stems much like cutting scallions thinly and cooked them too. Not bad: crunchy, a bit chewy,



Laccaria amethysteo-occidentalis Credit: Darvin DeShazer

but not darn bad at all (Maldon sea salt does help most anything).

To the winery I brought these plus I'd asked (SOMA's own) Connie Green's business to drop off 3 pounds each of belly buttons and yellow feet at a kitchen where the catering chefs were prepping.

The winery grounds are stunning the same way Disneyland might be for an alien child. Or bridesmaids looking for a hoot after a rehearsal (there were at least two parties of gown-bedecked such), or plain folk from Iowa seeking out Wine Country opulence, and instead seeing me. Heck--"goes with the territory sort of thing" my friends said.

What was made for the demos started with those LAO's in that grape seed oil, caps only, and it was served in little plates with crunchy French bread (not sourdough), black pepper in grinder and sea salt. Afterwards a guy came up and told me he loved them so I gave him a container of the sliced stems to take home.

Most folks never, repeat n-e-v-e-r, get a chance to try wild mushrooms not seen on the market and it is a thrill for them that I consistently remind myself of.

Last the hedgehogs and yellow feet were both cooked, separately as follows:

The hedgehogs were small so they were not chopped or sliced and were put in hot butter and sautéed with shallots and alder-smoked sea salt. Benziger Chardonnay was added and reduced, then heavy cream, then toasted pine nuts, black pepper, and garnished with chives.

The yellow feet were sautéed in butter with leeks and fennel both sliced very thin. Then added was their Sauvignon blanc, reduced au sec, sea salt and black pepper, and served with a wild fennel frond garnish.

They were each one of those "voilas!" and a good time was had by all.

(Served at SOMA Camp 2015!)

Slow Cooked Pork Stew -- with Tomatillos, Mushrooms and Potatoes

Poblano chiles 4 to 6

White onion 2 to 3

Cloves of Garlic 4 to 6

Small Yukon Gold Potatoes – cut in ½ 1 lb

5 lbs Boneless Country style Pork Ribs

Fresh Epazote (dried if you can't find fresh)

3 lbs **Tomatillos**

Dried Porcini 4 07.

1 ½ lbs Trumpet Royale Mushrooms

Chicken Broth ½ Gal

Roast the poblano chiles over an open flame or in a 450F oven, turning regularly until blistered and blackened all over. Put in a container and cover. Let them cool until you can handle them. Rub the



blackened skin off the chiles and pull out the stem and seed pot. Cut into ½ inch pieces.

Soak the dried porcini in hot water for at least 30 minutes. When mushrooms are softened remove them from the water. Reserve the liquid. Chop the mushrooms coarsely.

Take the slices of white onion, garlic cloves, and tomatillos and roast in the oven until they are soft.

Cut the trumpet royale mushrooms into bite size pieces, toss in oil with salt and pepper, and roast until you get some golden brown color.

Brown the meat in the pot you will cool the stew in. Top with the roasted tomatillo mixture, roasted poblano chiles, and mushrooms. Add mushroom liquid, chicken broth, and epazote. Bring to a simmer and cook until the meat is tender. When the meat is about half way done, add the potatoes. Season with salt, pepper and lime juice.

If you want more heat, add serrano chiles to the tomatillo mixture and roast with the onions, garlic, and tomatillos.

JOIN SOMA! Head to http://somamushrooms.org/membership

Membership in the Sonoma County Mycological Association, or SOMA, is a great way to meet and interact with other mushroom enthusiasts, learn more about identifying fungi, and share interests such as cooking and cultivating mushrooms. Sure, most of what SOMA does is open to the public, but wouldn't you rather join SOMA and get all the goodies?

Head to http://somamushrooms.org/membership and sign up!

SOMA CAMP 2016: Documents Director Needed

Attend SOMA Camp for free...well almost. SOMA is looking for a member to take over the Camp document preparation duties. The person performing this task will complete their volunteer hours prior to Camp and will be able to attend without further requirement.

The ideal person to take over this task will be computer oriented and hopefully have good to excellent experience with MS Excel, Word and perhaps Publisher. Experience with the Adobe suite is helpful, but not necessary. SOMA will provide the latest software if needed. The task starts in the fall leading up to Camp and ends with the last doc. Although there are quite a few documents to produce, it is a fun task that will increase your skills with the software utilized. The first year of this task you will learn the ropes as you will be assisting the current doc maven, Tom Cruckshank. He will teach you and coach you with the process and will be available in future years as advisor.

If you think this may be for you, please email Tom at: tacenator@gmail.com, email the editor, or talk with any Board Member.

Thank you!

SOMA Calendar 2014

SOMA Monthly Meeting March 19th at 7:00 PM. Speaker Michael Beug; at the Sonoma County Farm Bureau (see map that follows).

March 21st SOMA Foray -- 10 AM @ Salt Point State Park.

SOMA Board Meeting April 1st (no fooling!) at 6:30.

SOMA MAP & DIRECTIONS

SOMA usually meets on the third Thursday of the month throughout the year (September through May), at the Sonoma County Farm Bureau, 970 Piner Road, Santa Rosa, California, 94931. Fungi are displayed at 7 PM, and speakers begin around 7:30 PM. Bring in your baffling fungi to be identified!

Directions to the Sonoma County Farm Bureau From the south:

- Go north on Hwy 101
- Pass the Steel Lane exit then take the Bicentennial Way exit
- Go over Hwy 101 (heading west) and then right on Range Ave
- Turn left on Piner Rd and go about 1/4 mile
- Turn left into Farm Bureau parking lot at 970 Piner Road

From the north:

- Go south on Hwy 101
- Take the first Santa Rosa exit for Hopper Ave/ Mendocino Ave
- Stay left on the frontage road (it becomes Cleveland Ave)
- Turn right on Piner Rd and go about 1/4 mile
- Turn left into Farm Bureau parking lot at 970 Piner!

