LONG ISLAND MYCOLOGICAL CLUB

L.I. SPOREPRINT

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VOLUME 20, NUMBER 2, SUMMER, 2012

FINDINGS AFIELD

Although we always encounter previously uncollected species during the season, most of them are usually seen during the major fruiting period for gilled mushrooms, Autumn. So when early this June Peggy espied a group of white mushrooms under the White Pines of Southaven County Park, I was ready to write them off as *Pluteus petasatus*, which is known to

Melanoleuca verrucipes

occur during the Spring, and of which we had recently seen several collections. But these did not have the characteristic scaly cap of that species, and indeed was unlike any other gilled mushroom I can recall in that the stipe was covered with dark scales that closely resembled the scabers that all *Leccinum* species bear.

We had never collected this species before, and I was somewhat at a loss to consign it to a genus, but I thought that the scabers were so distinctive that, rather than start from scratch (with a sporeprint) I instead took a shortcut and did a search in Matchmaker for a gilled white mushroom with scabers on the stalk. Bingo! The program spat out *Melanoleuca*

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LIVING WITH AMBIGUITY

In the May 2012 issue of Mycena News, the newsletter of the San Francisco Mycological Society, Else Vellinga, world renowned fungal taxonomist, authored an article entitled, "Mushroom names are not always what they seem". She pointed out that of the 10 most frequently encountered species in Point Reyes Park, CA (including some of our own common mushrooms such as *Pluteus cervinus* and *Armillaria mellea*) the only names that were correct were those that had been named based on local specimens: *Laccaria amethysteo-occidentalis* and *Suillus pungens*. *Pluteus cervinus* turned out to be three related but unnamed species. Others, such as *Russsula amoenolens* and *Helvella lacunosa,* were found to be misapplied names of European species. This knowledge was only possible because DNA sequence data had been obtained and compared with foreign specimens. She states that **"neither descriptions nor photos would have been sufficient to decide this."**

There is no reason to believe that the situation on the East Coast differs significantly. (Indeed, it has recently been demonstrated, and many of our avid collectors are aware, that we must now call the former *Megacollybia plattyphyla* by a new name *Megacollybia rodmani,* to differentiate it from the European relative which was its namesake.) Accordingly, we may have a greater degree of confidence for those North American species that were described as new species when initially collected and not based on European types. This would include all the new species of Peck, Kauffman, Coker, AH Smith, LR Hesler, etc., which number in the thousands, but which constitute an unknown percentage of our total species numbers. In addition to this historical record, all novel modern descriptions by NA authors such as Guzman, Petersen, Bessette, Tulloss, Trappe and innumerable others, are unlikely to need revision.

But for the time being, we must continue to rely upon European names, in those cases where no alternative is yet available. Hopefully, this will not always be the case. Serious proposals are underway to construct a new mycoflora for North America, the existing "North American Flora" which lists all the species known at the time of publication, now being over 100 years old and taxo—

(Continued on page 6)

PRESIDENT'S MESSAGE

Hello to all. So far, this year has not been a very fruitful one for me. I had a lot of things to do on Saturdays so I missed most forays that were held. If the weather gets a bit cooler I will definitely show up. I need my 'shrooms!

Sometimes someone asks me how I got into amateur mycology so this time around I'll mention people who I met in the early days of my joining LIMC.

Joel was the one to see the ad in the NY TIMES about a mushroom show at Planting Fields. Since I always loved the way mushrooms looked and ate some wild ones in my childhood, we went to the show.

Tables had been set out for display. I never knew so many existed and Fall, 1991 was dry. The first person I saw was Jean Paul Latil, the co-founder and president of LIMC. There he was: a tall, stately looking man engrossed in studying a field guide. "I must have a field guide," I thought. Looking over the display, I saw a thing that couldn't be a fungus. It didn't have a stem or a cap! A very nice man behind the table was talking to us novices about the different forms that mushrooms take. He told me you could eat this thing. It was a *Grifola frondosa* aka hen-of the woods. He gave me a piece to take home which I thought was quite generous as there was only this lone specimen. I was hooked! That person was Dom Laudato who led many great walks over the years and always was good natured and patient answering questions from newbies like me. (Dom became the third president of the club.) Dom keeps in touch these days when he finds something new or a good find. Next time I'll mention some others who made an great impression on me.

EDITOR'S NOTE

"Trees calm me", to quote the arborist Lord Packenham, and most of can agree with that sentiment, having experienced what he calls "the magical quality of the forest." Many cultures revere this feeling of communion, and it has not escaped researchers, who determined that patients exposed to the sight of trees from their hospital windows healed quicker than those who were deprived of such views.

Packenham related in an interview that he walks among the thousands of trees on his estate in Ireland two or three times a day, and while we are not all so privileged, there are thousands of acres of public lands on Long Island that we can access as often as we would like, or as we need to. While this immersion will perhaps not heal our physical selves, it is sure to refresh us psychologically and even spiritually.

When the familiar company of mushrooms is absent due to adverse conditions, we still have the sight and sound of arbor and canopy to remind us that their constant companions must still be present and in attendance. Although invisible, they continue to perform their appointed task of nourishing their more ancient brethren. At what they deem the proper time, they will attend to their own needs, and burst forth with enchanting splendor.

MATERIAL FOR THE AUTUMN, 2012 EDITION SHOULD REACH THE EDITOR BY AUGUST 31

(Submissions may be forwarded by email in any format or typed.)

 (All unsigned articles authored by editor.)

To Serve or Not to Serve

By: Bob Sommers
from Mycena News, April, 2012
(by permission of the author)

Those of us who collect wild mushrooms for the table face difficult decisions when it comes to preparing dishes for guests. As hosts we are cognizant of the consequences of faulty identification and assess risks accordingly. It seems morally acceptable for us to operate under a "forager beware" ethic when it comes toeating what we find in the forest and carry home. But can the same be said for our dinner guests? Is it morallycorrect to subject non-mycophiles to risks that we are willing to assume for ourselves? It's true they see us healthy and smiling, obviously having survived previous mushroom dinners. This provides some reassurance that they will survive too and probably enjoy this dinner apart from lingering suspicions that everyone makes mistakes some time, and of course they can sue if something goes terribly wrong. This is a litigious society and suing friends (What are friends for?) is part of modern life. The latter realization feeds our "host be cautious" ethic.

Should we check with a lawyer before issuing dinner invitations when wild mushrooms are to be served? That would be expensive and probably unproductive, as the risks vary according to mushroom variety, quantity consumed, guest physiology, and psychological proclivities. Serving a small mushroom garnish to an overweight guest, particularly one who is both rotund and jolly, is unlikely to result in serious harm but preparing a main course containing wild mushrooms to be consumed by a thin nervous person is much riskier.

Very few lawyers are familiar with the intricacies of mycophagy, and those who are, might suggest that guests be required to sign a release of the sort mushroom societies demand of foray participants. Whether signing a release would reduce the guest's enjoyment of the meal should be considered.

Another possibility parallels the situation of meals prepared for guests with strong dietary preferences (very common in California). We poll prospective dinner guests on food inclinations in advance. Some may be plain vegetarians while others are ovo-lacto vegetarians. A few will eat white-fleshed but not red-fleshed meat, and if you invite Michael Pollan to dinner, he may insist on foods you have killed with your bare hands. One can avoid any taboo items altogether or prepare duplicate dishes with and without whatever the visitor avoids. This requires additional labor in the kitchen plus clear and understandable labeling in the guest's preferred language.

Further complicating menu choice is the possibility of hysterical responses to safe dishes. A large amount of one's response to foods is psychological, which is why food companies spend money on research into packaging, food names, and advertising campaigns. Some folks are apprehensive about the idea of eating any wild foods including berries, miner's lettuce, or fiddleheads growing along the trail. When they see us picking mushrooms in the woods, they warn us to be careful, not certain if we are suicidal or homicidal. These are the same people who send us clippings whenever there has been a mushroom poisoning anywhere in the world. If you have dinner guests like this, the prudentcourse is to keep all foraged foods off the menu, Michael Pollan notwithstanding.

This raises the question of a suitable menu when the psychological proclivities of dinner guests, perhaps new neighbors or coworkers, are unknown. Fortunately there are personality tests for risk-taking, such as the Zuckerman-Kuhlman Personality Questionaire or ZKPQ which measures a person's desire for novel and exciting experience. Instead of requiring prospective guests to sign a release in advance of the meal, you can ask them to complete the short-form of the ZKPQ and screen out all low risk-takers. If you are a low risk-taking host, you can demand both the signed release and completion of the ZKPQ. Measuring testosterone levels, which have been found to correlate with risk-taking, of prospective guests would be onerous, but maybe no more so than consulting a lawyer.

If these caveats leave you confused, check with the Human Subjects Committee of the your mushroom club.

(About the Author:

Bob Sommers is a retired professor from UC Davis. He writes the "Easy Edibles" column for Mushroom the Journal and is the co-author with Mike Davis and John Menge, of the forthcoming Field Guide to Mushrooms of Western North America to be published by the University of California Press. His mushroom watercolors also appear on the MSSF website.)

DIFFERENT VIEWS OF A FORAY:

I was happy to hunt without inhibition. No identifying mushrooms, just gathering for the table. When I search was a group with people who are new to mushroom hunting, I rein in my impulses. I try to be polite and carry on conversation while walking, but I really prefer to be silent. I try to have eye contact when they talk to me, but it is hard to keep from glancing to the forest floor. I try to stick with the group, but I'm restless to move on. Hunting mushrooms seems like a solo sport but is not. It is deeply participatory, just not with other people. Instead the hunter experiences the company of trees and mushrooms and birds. It's a communion with the woods and the grand mosaic of nature.

From "Mycophilia-Revelations from the Weird World of Mushrooms" by Eugenia Bone, Rodale Books, 2011, ISBN 978-1-60529-407-0

On a good day for mushroom hunting my basket is full to the brim with specimens as I come out of the woods. If I am lucky I may have found a few good edibles - a large clump of honey mushrooms *(Armillaria mellea),* a few chanterelles (*Cantharellus cibarius),* or some horns-of-plenty *(Craterellus fallax).* Most of my finds are likely to be common to the area and easily identified, some others require detailed work. In any case I never seem to be disappointed. Even if I bring home nothing for the table, I feel I have been rewarded by the pleasurable sight of mushrooms adorning the forest with a variety of shapes and colors. There is always something- old or new- to hold my attention.

From "In the Company of Mushrooms- a Biologist's Tale" by Elio Schaechter, Harvard University Press, 1997, ISBN 0-674-44554-6

Just a thought: A foray is no guarantee .
A wild mushroom "field trip, hunt, foray, walk, tour" or whatever one calls it, is not:
A guarantee, by the leader or host, that mushrooms will be found!
It is also not:
An effort to gather an abundance of any species, beyond one's personal needs.
It should be:
Considered a visit to an environment which is expected to produce mushrooms in the proper season, which provides an opportunity to observe them in their natural habitat, and to leaRN to identify them by actual "hands-on" methods, with help from other members of the group, and references to appropriate keys and books.
It should also be:
An enjoyable social event and a time of good fellowship with people who share a common interest in a specific feature of the outdoors.

From the website of the Colorado Mycological Society

FINDINGS AFIELD ***(Continued from page 1)***

verrucipes and while the photo provided left little doubt that this was almost certainly correct, I then went on to ascertain that all the other characteristics matched.

Microscopically, the spores were amyloid, with surface only slightly roughened by small warts, ellipsoid to pill shaped, measuring about 8 X 5 microns. Pleurocystidea of the "stinging hair" type were present and characteristic of this species- not as dramatic as the harpoon-like cystidea of its congenor *Melanoleuca melaleuca;* no cheilocystidea seen. These findings confirmed that the putative identity was the correct one.

This species is based on a European description, where it is considered rare, but it is also widespread in the NA (reported from WA and eastern Candada) where its frequency is uncertain. No popular US guidebook includes it. Considering the continuing differentiation of European and North American species based on DNA analysis, it would not be surprising to hear of a species split in the future.

Gleanings

■ **CANDY CAP AROMA:** *Lactarius fragilis* is a west coast species with an odor of maple syrup that is much sought after there, where it is referred to as the Candy Cap and used to flavor cookies and cakes. Recent research has identified the chemical causing the odor, quabalactone III, which is present only in the dried mushroom, the fresh ones being relatively odorless. Strangely enough, actual maple syrup does not contain this chemical, the characteristic odor being produced otherwise. Here on the east coast, *Lactarius camphoratus* has a similar odor which intensifies upon drying, but opinion on its edibility differs. *(The maple syrup odour of the "candy cap" mushroom, Lactarius fragilis var. rubidus, William F. Wood Biochemical Systematics and Ecology 43 (2012) 51–53)*

■ **A MOREL BY ANY OTHER NAME...**A preliminary version of a morel study that was published online in *Mycologia* compared 244 North American collections based on morphological, ecological, molecular and distributional data concluded that of the 19 endemic N.A. species, none were present in Eurasia. The black morel that we have been calling by the European name *Morchella elata* will henceforth have to be referred to as *Morchella angusticeps* Peck, originally based on an Albany, NY specimen, but which has been retypified, i.e., new type material has been provided. The east coast yellow morel has been named *Morchella esculentoides,* in recognition of its close resemblance to the European species. A key to N.A. species of morel is provided. (*Taxonomic revision of true morels (Morchella) in Canada and the U.S., Kuo et al, In Press at Mycologia, preliminary version published on April 11, 2012 as doi:10.3852/11-375)*

■ **IT'S ALL IN THE GENES:** The flavor of truffles has long been attributed to environmental factors like soil quality, regional geology, rainfall, associated tree species, etc, akin to the *terroir* influences that bestow differing qualities to wine. However, that idea has now been repudiated by an extensive study of *Tuber aestivum,* which grows throughout Europe, comparing over 200 from 7 countries. It was found that different concentrations of the volatile chemicals which cause the aroma and taste of this truffle were associated with particular genetic profiles, and not the region where they were grown. This is the first study that clearly linked volatiles and genetics. (*Intraspecific genotypic variability determines concentrations of key truffle volatiles,New Phytologist Volume 194, Issue 3, pages 823–835, May 2012)*

■ **FUNGI ARE US:** That commensal bacteria, perhaps 100 trillion strong, reside in the human gut, and influence fundamental processes and disease has been previously demonstrated. A new, three year study has now identified hundreds of fungal species in mammalian guts including mice, rabbits, dogs and humans, many of them new. Furthermore, fungal interaction with the immune system was demonstrated. Mice lacking a gene that codes for dectin-1, a cellular component that detects and tags fungal cells for immune system recognition, developed a colitis like inflammation. People suffering from ulcerative colitis were also found to have mutations affecting dectin-1. This is all strong evidence for a "mycobiota" a fungal microbiome in the gut linked to the immune system that we have only begun to understand.(*Interactions Between Commensal Fungi and the C-Type Lectin Receptor Dectin-1 Influence Colitis, Iliyan D. Iliev et al,Science 336, 1314, 2012)*

■ **DEATH MECHANISM DISPUTE:** In the Autumn 2010 issue we retold the results of a 5 year investigation in China of an epidemic of rural deaths that had been traced to a then nameless little white mushroom, a *Clitocybe*-like *Trogia* that caused death by cardiac arrest, a previously unknown fungal effect. Now further investigation into the chemistry isolated two novel unsaturated amino acids, which caused the death of test mice, but apparently not by lethal cardiac involvement. Instead, the compounds are said to cause profound hypoglycemia and perhaps also cause a "depressed capacity of the heart to use fats as energy". While not all researchers accept this explanation, there is no doubt that the newly named *Trogia venenata* caused the deaths, which have ceased since villagers stopped eating it. *(SCIENCE VOL 335 16 MARCH 2012)*

■ **IS THAT A MUSHROOM I SMELL?** A study used 20-30 year olds to rate the odors of variously aged men and women (using armpit pads that they had worn overnight) as to pleasantness & intensity. The odors of elderly men (75-95 years old) were rated the most pleasant and described positively as "earthy". So the next time you sniff a mushroom in the field, be aware of who might be standing next to you! *(The Smell of Age: Perception and Discrimination of Body Odors of Different AgesPLoS ONE 7(5): e38110. doi:10.1371/journal.pone.0038110)*

(Compiled & annotated by editor from indicated sources.)

PEGGY'S CULINARY CORNER

COCONUT SULPHUR SHELF MUSHROOM SOUP

1 Tbs. olive oil
1/4 c. diced shallots or mild onion
3 cloves garlic, minced
2 1/2 c. 3/4" cubed sulphur shelf mushroom
2 1/2 c. 3/4" cubed potato
1 can chicken or vegetable broth
1 can coconut milk (unsweetened)
1 c. spinach julienned
1/4 c. chopped cilantro
lime wedges

1. Heat the oil over medium heat and add the shallots/ onions, cooking until translucent. Add the garlic and cook 1 minute longer.
2. Add the cubed mushroom, and cook until the liquids are evaporated.
3. Add the cubed potato, chicken/vegetable broth, and cook for 6 minutes, or until the potato is tender.
4. Add the coconut milk, 3/4 the spinach and half the cilantro. If the broth is too thick, add up to 1/2 c. water. Cook 2 more minute. Remove the soup from the heat.
5. Serve the soup with lime wedges, along with rest of chopped cilantro and spinach. Salt to taste.

Serves 2 as main dish or 4 sides.

(Note: The above recipe has been adapted from the 3foragers blogspot)

HARJIT BHATTI'S CHICKEN KORMA

Marinade:
8 oz. plain yogurt
2 tsp. curry powder
1 tsp. ground coriander
1 tsp. mince fresh ginger
4 cloves garlic, minced
1/2 tsp. cayenne pepper
1/2 tsp. lemon juice
3 cups chopped sulfur shelf mushrooms
2 Tbsp. vegetable oil
1 medium onion, chopped
1 large tomato, chopped (or can of same)
2 bay leaves

Mix marinade. Add sulfur shelf mushrooms coat, cover and let stand at room temp for 1/2 hour (can prepare ahead and refrigerate also). Warm oil in large skillet or wok. Cook onion until brown. Add tomato and bay leaves, cook 5 minutes. Add sulfur shelf mushroos and marinade, mix well. Cover and simmer for 15 - 20 minutes or until mushrooms are cooked. Remove bay leaves. Serve over hot rice.
4 + servings.
(From the website of Missouri Mycological Society)

The Season's Bounty ***(Continued from page 1)***

nomically outdated. At this year's annual meeting, the Mycological Society of America will host a workshop to organize this effort, which will of necessity include both professionals and amateur societies in the collection, documentation and vouchering of specimens. We look forward to participating in this grand effort.

(For further details of this proposed project, access:

Bruns T. 2011. President's corner. Working toward a North American Mycobiota for macrofungi – what's stopping us? Inoculum 62 (4): 13 http://msafungi.org/wp-content/up- loads/Inoculum/62(4).pdf

or

Bruns TD, Beug MW. 2012. Working toward a North American Mycoflora for Macrofungi. McIlvainea 21. http://www.namyco.org/publications/mcilvainea/v21/To- ward_NA_Mycoflora.html)

FORAY RESULTS SUMMARY

APRIL 21 & APRIL 28, WELWYN: The rule of thumb is that we never have two good years in a row, relative to a particular species. This held true in spades this year, when our Morel season was a complete bust, with nary a single Morel making an appearance in our traditional spot, so that both these forays were cancelled. This is in marked contrast to last year when good numbers of the black morel were in evidence in both forays, and yellow morels appeared elsewhere on LI. This spring's drought (which led to extensive forest fires in the pine barrens) no doubt bears much of the blame.

MAY 5, PLANTING FIELDS: After about an inch of rain, conditions improved enough for a fair showing of the usual springtime species: Agrocybe praecox and A. putaminum, Coprinus micaceus and C. lagopus, Pluteus cervinus (if that name can be trusted),etc. The Psilocybe whose identity we have been speculating about appears to be *P. ovoideocystidea,* a recently described species from Pennsylvania.

Psilocybe ovoideocystidea

MAY 12, BETHPAGE S.P: Our traditional Spring Oyster foray produced barely enough for the participants, but this was supplemented by some pristine ones collected in the Rocky Pt. Preserve. Only a few other species were found, including *Peziza badioconfusa* and a partial specimen that may have been *Agrocybe firma.*

MAY 19, PLANTING FIELDS: A dozen species was about par for this date, with a good amount of Wine Caps. There were 3 species of *Agrocybe, (pediades, praecox, and putaminum)* with the latter being most populous. A barely discernible horde of tiny forms growing on beechnut turned out to be *Dasyschyphus virgineus* (see photo left) the Stalked Hairy Fairy Cup.

Dasyscyphus virgineus

JUNE 2, MUTTONTOWN EQUESTRIAN: Quite slow, with only a handful of species; notable only for the early appearance of *Boletus chrysenteron.*

JUNE 16, CHRISTIE: Less than a dozen species, mostly polypores and other wood dwellers, plus a few early *Russulas.* One intriguing *Gymnopilus* that stained green has yet to be identified.

!TICK ALERT!

The Cary Institute of Ecological Studies in Millbrook, NY is predicting a surge in Lyme disease for the NE US based on failure of the acorn crop last Autumn. As a result the white-footed mouse population, the preferred host for deer ticks, has crashed. Therefore, the larval ticks that last year fed on white-footed mice (and 30% of which became infected) will now as nymphs be seeking another host, and not finding the requisite number of mice, will seek other mammals– like us.

Thankfully, a noticeable increase in tick numbers in Long Island's pine barrens has not yet occurred.

WELCOME NEW MEMBERS

SEAN & MARK BAXTER

MICHAEL FEDER

KIRA TREYVUS & BRIAN KONOSKI

NANCY & KEN HARMS

IN THIS ISSUE

For those, like children, with eyes open wide, rarities can abound.

Carol Kaesok Yoon NY Times April 23 2012

LONG ISLAND MYCOLOGICAL CLUB
11 RAMBLEWOOD RD.
RIDGE, NY 11961