http://limyco.org



VOLUME 17, NUMBER 1, SPRING, 2010

# FINDINGS AFIELD

*grocybe* is not a large genus, with perhaps 100 species worldwide, but can be cryptic, similar species residing in the same habitat and almost indistinguishable in the field. I was alerted to the presence of this species by its late seasonal appearance on December 8<sup>th</sup> of last year, when few



Agrocybe vervacti

mushrooms were to be seen, particularly in grassy fields. So my antennae began to vibrate when a partial fairy ring of what were apparently Agrocybe pediades entered my field of vision. In fact, there was nothing to distinguish them from A. pediades which they strongly resembled in all physical aspects including size (to 2+ cm.), color, hemispherical cap shape, and stipe. Gill attachment, adnate or with a decurrent tooth, and fimbriate edge was also reflective of that species. (See photo above.) Only the lack of taste and odor contrasted with its sister species, which tends to be farinaceous.

# THE SEASON'S BOUNTY

rom all indications 2009 was an atypical collecting year in the Northeast, despite above average rainfall which amounted to about 54 inched in New York City, and throughout Long Island, which is 6 inches above normal. However, both August and September were below normal, and perhaps as a result, the Bolete season was almost non-existent, with normally dependable species such as *Boletus bicolor* scarcely evident. Morels made their seasonal appearance in normal numbers after April's five-plus inches of rain. And the Spring Oyster (Pleurotus populinus) filled collecting bags in mid-May. But such summer favorites as Lactarius hygrophoroides and L. volemus were much diminished in number, as were yellow Chanterelles on L.I., although they were plentiful in Maine and Vermont. Black Trumpets did favor us with their appearance. Although Wine Caps were not plentiful in their usual haunts, some new spots found by ceaseless foragers produced prodigious amounts shared by all, and this harvest continued longer than usual.



Shaggy Manes at Edgewood

While the arrival of Autumn did bring us several species of Honeys in good numbers, most foragers reported diminished numbers of *Grifola frondosa* (Hen-of-the-Woods) and *Laetiporus sulfurous (*Sulfphur Shelf). Wood Blewits (*Lepista nuda*) made their expected appearance, but in somewhat reduced numbers while Shaggy Manes (*Coprinus comatus*) arrived at the usual time at their Edgewood locus in good, but not overwhelming, numbers. This and other

(Continued on page 3)

(Continued on page 4)

## PRESIDENT'S MESSAGE

Spring greetings to all! The month of March had rainfalls of between 10 to 15 inches on Long Island. Is this a good thing and should we even talk about it lest we jinx ourselves? Things do look good, though. The mosses and lichens look really nice in the woods right now and *Tuberia furacea* has appeared on chips as has *Tremella messenterica* on twigs. What a delight to see mushrooms after all the snow and cold we had.

If you'd like to see Morels, Auriclaria auricula (tree ears), Lepista saeva (blue legs) and Oyster mushrooms, head to Whole Foods. That's where we found them the other day. The Morels were from Oregon, \$40 dollars a pound, very small and not quite fresh enough. Tree ears were really fresh from an unnamed location at \$13. Lepistas were from France and also looked none too fresh at \$29. The Oysters were small, really small and were also \$13. Even though most were not prime, it is nice to see them nonetheless. Also on display were dried boletes and shiitake. When you see the prices, you'll be glad you can find your own Boletes to dry, and to grow your own shiitakes. BTW, they also sell Kombucha drinks. This is probably a very safe way to have this fungus/lactobacillus mixture. (Not for me!)

We had our first board meeting of the year and are quite happy that Bob Cresko is joining us. (Rita Blinderman's term is ended and I want to thank her very much for her time served and for always being a wonderful hostess when the meetings were at her home. Plus I'm sure all members will join me in wishing Rita a recent belated Happy 90th Birthday.)

Congratulations to Bruce Eberle, who has recently been appointed Executive Secretary to NAMA.

Sharpen your knives and get out there!

## EDITOR'S NOTE

"Use it or lose it". This old saw, coupled with the currently faddish notion of the 10,000 hour rule, which claims that this amount of time is what it takes to become expert in a field, should drive us all to our guide books in our efforts to prime our fungal memory pumps before the season begins. We cannot all become experts, but some application is necessary to be a competent field mycologist. To this end, it would benefit us all, myself included, to revisit our website and consult the list of common spring mushrooms, making sure we can visualize each species clearly, and consulting our references if they remain unclear. Since there are species that we may see rarely, perhaps once a year or less, it behooves us all to take these steps, which is something that even experts must do, running just to stay in place. It is necessary to exercise the mind, as well as the body, to keep from getting flabby.

With the rapid changes in taxonomy, just keeping up with the name changes is a chore, although no one will be confused if a species is referred to by a recently outdated name. To aid the transition to the new phylogeny, the chart on page 6 should be of help and reading Gary Lincoff's associated article (follow the link) will be a revelation.

Material for the Summer, 2010 edition should reach the editor by June 1st

(Submissions may be forwarded by email in any format or typed.) <u>LI Sporeprint is published quarterly. Material herein may be freely copied by</u> <u>any non-profit organization if appropriate acknowledgements are made and a</u> <u>copy supplied to the editor.</u> (All unsigned articles authored by editor)

## LONG ISLAND MYCOLOGICAL CLUB

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### SPRING, 2010

NEWLONG	ISLAND SPECIES 2009

NEW ECHO 19E/	
Agrocybe vervacti Albatrellus subrubescens–I.D. Suggested by Aaron Amanita microlepis Boletus auriflammeus Boletus miniato-pallescens Cortinarius argenteopileatus/subargentatus – I.D.'d by Aaron Cortinarius pulchrifolius Cortinarius scandens Entoloma commune Galerina subcerina Gomphidius glutinosus – I.D.'d by Dom Helvella corium Helvella griseoalba Hygrophorus amygdalinus Inocybe albodisca Inocybe intricata	Inocybe ventricosa Lactarius oculatus Lyophyllum loricatum Marasmiellus nigripes – I.D.'d by Aaron Mycena vulgaris Nolanea/Eccilia watsonii Paxillus involutus Peziza badia Phaeomarasmius erinaceus Psathyrella distantifolia Psathyrella pseudocorrugata Russula densifolia Russula densifolia Russula elaeodes – I.D. Suggested by Aaron Russula nigriscentipes Scleroderma meridionale Suillus hirtellus – I.D.'d by Aaron Tricholoma fumosoluteum Volvariella surrecta
Inocybe intricata	Volvariella surrecta
Inocybe subexilis	

### FINDINGS AFIELD (Continued from page 1)

Microscopically, many differences were immediately evident, starting with the spore size and shape. While A. pediades has a largish spore which averages about 11-15 X 8-11µm, this specimen had spores that were much smaller, averaging 6-8 (9.5) X 4.5-5.5 µm. Moreover, while the *A. pediades* spore is decidedly truncate, with a large and conspicuous apical pore, the mystery Agrocybe was ellipsoid without a visible pore. Further differences emerged when viewing the cheilocystidea, protective sterile cells on the edges of the gills (see photo). These were abundant, lageniform (gourd shaped), with an elongated neck, capitate to subcapitate, averaging about 20-50 X 5-12, while those of A. pediades are smaller and more varied and irregular in shape. Pleurocystidea absent.



Cheilocystidea & spores.

There are a limited number of small spored Agrocybes without annulus that grow in grasses, in fact only two, and one of these *A. pusiola* (=*A.pusilla*) is, as its name suggests, very tiny, not exceeding 15 mm in cap diameter; so on that basis alone, the only contender for our mystery species is Agrocybe vervacti (Fr.) Singer. In addition, the gills of our specimen were subdistant, about 30 plus reaching the stipe, while A. pusiola has distant gills, no more than 17 in number. Lastly, all the microscopic characteristics enumerated above are more congruent with A. vervacti than A. pusiola, which does have pleurocystidea and whose cheilocystidea can be adorned with crystals or a gelatinous cap, not in evidence in our specimen. So we reach this determination by a preponderance of the evidence, rather than an Aha! moment based on a dramatic difference.

Agrocybe vervacti is a European species, and not found on any US website collections (e.g., NEMF, NY Botanical Garden, US Dept of Agric., etc) or in any US guidebooks. Nevertheless, it has no doubt been overlooked because of its diminutive status, unprepossessing appearance and close resemblance to its sister species. It is considered rare in the Netherlands and infrequent in western Europe. It will now be an addition to our checklist of LI mushrooms.

<u>Ref's:</u> Noordeloos, Flora Agaricina Neerlandica, V.6, Bolbitiaceae; M. Jordan, Encycl. of Fungi of Britain & Europe; M. Bon, Mushrooms& Toadstools of Britain & NW Europe; R. Watling, British Fungus Flora, V.3, Bolbitiaceae.

#### LI SPOREPRINT

pine barrens locales continued to produce their favored edibles such as *Tricholoma flavovirens*, *T. neviepes*, *Hygophorus hypothejus*, *H. ponderatus*, and *Cantherellula umbonata*. *Leccinum aurantiacum* (which also made a Spring appearance) and *Rozites caperata* numbers were down. The last foray of the year produced copious amounts of oysters, both *Pleurotus ostreatus* & *Panellus stipticus*, for the handful of attendees.

The number of new species collected was thirty plus, a bit on the low side, with one new genus, *Phaeomarasmius*. Of the new species, two are substitutions rather than additions, having been misidentified in the past: *Albatrellus subrubescens* will take the place of *A. ovinus*, and *Hygrophorus amygdalinus* will switch places with *H. agathosmos*. Of the new species, *Inocybe* leads with 6, followed by 3 *Cortinarius, 2 Boletes, 2 Russulas* and 2 *Helvellas*. The complete list can be seen on Page 3. Perhaps the most surprising appearance was *Tricholoma fumosoluteum*, which some of us saw on the Cape Cod NEMF foray, and which then materialized here in profusion after heavy rains. All the other finds were rather evenly spread among the gilled species, except 2 *Helvellas* and a *Scleroderma*. It was particularly gratifying to encounter *Cortinarius pulchrifolius* in Wading River, where Peck's type specimen originated

Thanks are due to Aaron Norarevian, whose expertise was invaluable in many identifications, and I have noted those species on the list, although there were probably some that I missed; to our former president, Dom Laudato, who also added several new species. And to those collectors who were alert enough to bring species they found to my attention, particularly Anna Warasila. With the new additions, our Long Island checklist now stands at about 860 species. If we continue at the current rate, we should reach 1,000 in 3 -4 years. Keep your eyes open!



Cortinarius argenteopileatus (subargentatus)



Lyophyllum loricatum



Cortinarius pulchrifolius



Inocybe intricata



Psathyrella pseudocorrugata



Gomphidius glutinosus



Entoloma commune

# Gleanings

THE HOUSE THAT MYCELIA BUILT: Several companies, the foremost being Ecovative in Green Island, NY are producing building and packing products from mycelia. Using organic wastes such as seed husks as a base, mycelia are grown in molds of the desired shape and then rendered biologically inert. Engineering tests prove that densely packed mycelium is strong enough to be used in place of wooden beams. In California,

Philip Ross of Far West Fungi has built what is believed to be the first structure made of mushroom, an archway 6 feet high, of *Ganoderma lucidum*. The Ecovative company will market a green alternative to Styrofoam this Spring and will market Greensulate, a home insulation, next year. *(Time, Feb. 8, 2010)* 

YEAST WARMS PLANT: Spanish researchers have found that a winter flowering plant known as dungwort (*Helleborus foetidus*) is inhabited by a yeast that produces enough heat so that the nectar and air space within the flower is as much as 7°C warmer than the surroundings. Since other foul smelling plants produce temperature spikes to release aromas in order to attract pollinators, it is speculated that this process is also at work here to attract the local bumblebees, which also spread the yeast as well. (Nectar yeasts warm the flowers of a winter-blooming plant, Carlos M. Herrera & María I. Pozo, Proc R Soc B, Feb 10, 2010)

RUST AIDS ORCHIDS: For the first time, a member of the "rusts", basidiomycetes which are parasitic plant disease organisms, has been demonstrated to have a mycorrhizal association with orchids growing in the mountains of southern Ecuador. They were identified by DNA sequencing, and shown to be Atractiellomycetes, members of the rust lineage Pucciniomycotina. They are the most basal living basidiomycetes involved in mycorrhizal associations of land plants. (Atractiellomycetes etc., Kottke et al, Proc R Soc B, Vol 277, #1685, April 2010, published online Feb.)

(Compiled by editor from indicated sources.)

[CORRIGENDUM: An item in the Autumn 2009 edition mistakenly claimed that a study had documented the presence of creatinine kinase in several genera of commonly consumed mushrooms; it should have read that the chemical was found in the blood of experimental animals that had consumed the mushrooms. *Ed.*]

## MOREL MADNESS WEEKEND

The Western PA Mushroom Club is again hosting their public morel foray on May 1st & 2nd , rain or shine, in Mingo Creek Park, located in the southwest corner of PA near the Ohio and WV borders. The event is open to non-members for a fee of **\$5; \$10 if you wish to camp there for the next day's** hunt. One must pre-register with the Park, even if not camping: Call Christine (724-228-6867).

Check-in and registration will be from 11 AM to 12 at roadside near the "Henry House", and after an instructional talk and slide show, morel hunting will commence at 1 PM, on your own or with a group leader. Collection show-time and I.D. at 4 PM and evening slide show at 8:30 PM. On May 2nd, morning morel hunt at 9 AM.

LIMC members are welcome. For driving directions, access their website at

http://www.wpamushroomclub.org/directions

### NAMA 2010 50th ANNIVERSERY FORAY AUGUST 12-15, WINTER PARK, COLORADO

The foray, hosted by the Colorado Mycological Society, will be held at the YMCA of the Rockies Snow Mountain Ranch, on the western slope of the continental divide at 8,700 feet. The chief mycologists post will be shared by Cathy Cripps and Vera Evenson. Other faculty members include such well known names as Roy Halling, Rick Kerrigan, Brandon Matheny, Tom Volk and Nancy Weber.

The foray fee is \$150; room & board at the YMCA ranges from \$124 pp for 3 days (6 per room), to \$297 for one in a room. These rates are available until June 15, after which there is also a late charge. An all day, pre-foray workshop is offered on Thursday by Michael Kuo on documenting specimens for scientific study at a fee of \$50.

For further information and to download a registration form, access

http://www.namyco.org/events/index2010.html

### LI SPOREPRINT

http://www.mykoweb.com/articles/Homobasidiomycete\_chart.html

## 2010 NEMF SAMUEL RISTICH FORAY Sept. 23-26, Soyuzivka Ukrainian Cultural Center, Kerhonkson, NY

LIMC is one of 4 participating NEMF clubs in this Shawangunk Ridge area foray, which is almost sold out. As of mid-March, all of the single and double occupancy rooms are reserved and registrants will be offered a queue number. There are 45 dorm beds available, with 5 beds to a room. Additionally, 25 commuter places are available, which entails arranging for a domicile (motel, etc.) nearby and having your meals at the center.

For detailed information and to download a reservation form, access the NEMF website at:

http://nemf.org/files/2010/2010.html

If you do not have computer access and would like to receive a reservation form, contact Joel or Peggy.

Molecular (genetic) analysis has in recent decades dramatically refigured our picture of the phylogeny of the fungi, revealing that tradi- tional groups based on Friesian forms such as gilled, toothed, or crust fungi, etc., were not necessarily closely related but rather the result of convergent evolution. That is, they developed independently many times during the course of evolutionary history. In the above chart, all the species in a column are what is referred to as a "clade" meaning they are all directly related, having descended from a common ances- tor. To view images of these species, and the informative associated article by Gary Lincoff and Michael wood, access the Mykoweb site at		Gasteroid Secotioid	Parchment Crust	Chanterelioid	CoraHold	Teeth	Pores	Gills	
	Bovista Catvatia Crucibulium Cyathus Lycoperdon Nivatogastrium	Chondrostereum	Cantharellula	Clavaria Clavulinopsis Macrotyphula Physalacria	Deflexula	Dictyopanus Fistulina Favolaschia Poromycena	Agaricus Amanita Cilitocybe Cortinarius Stropharia Tricholoma	Eugarics Clade	
	Astraeus Calostoma Melanogaster Pisolithus Rhizopogon Scleroderma	Coniophora Serpula	Hygrophoropsis		Hydnomerulius	Boletus Gyrodon Leccinum Strobilomyces Suillus Suillus Tylopilus	Chroogomphus Gomphidius Paxillus Phylioporus Tapineta	Bolete Clade	
	Arcangeáella Gymnomyces Macowanties Zelleromyces	Stereum		Clavicorona	Auriscalpium Hericium	Albatrelius Bondarzewia Heterobasidion	Lactarius Lentinellus Russula	Russuloid Clade	
		Thelephora Tomentella	Polyozelius	Scytinopogon	Bankera Hydnellum Pheliodon Sarcodon	Boletopsis	Horakia Lenzilopsis	Thelephoroid Clade	
		Phlebia Pulchemicium	Faerberia	Sparassis	Climacodon Irpex	Fornitopsis Ganoderma Laetiporus Phaeolus Polyporus Tyromyces	Lentinus Lenzites Panus	Polyporoid Clade	
		Hymenochaeta	Cotylidia	Alloclavaria	Hydnochaete	Coltricia Inonotus Phelinus	Rickenelia	Hymenochaetoid Clade	
		Bolryobasidium Sistotrema Tulasnella	Craterellus	Clavulina Mutliclavula	Hydnum Sistotrema		Cantharellus	Cantharelloid Clade	
	Gautieria Geastrum Hysterangium Mutinus Phallus Sphaerobolus	Kavinla	Gomphus	Ramania Clavariadelphus	Beenakia		Gloeocantharellus	Gomphoid - Phal Clade	

**Clade/Morphology Chart** 

alloid

Balance from 2007			\$2754.2
Membership Dues	1215.00		
Interest	.34		
Raffle	18.00		
Sub-Total		1233.34	\$3987.5
<u>Disbursements</u>			
NEMF Sam Ristich	60.00		
Newsletter expenses	575.05		
(includes printing, mailing, supplies,			
& misc. notices)			
Treasurer's expenses( raffle, postage, supp	lies,		
sale items)	89.79		
Luncheon ,Picnic & Mushroom Day	<u>217.77</u>		
Sub-Total		<u>-932.61</u>	
Balance as of Dec. 31, 2009			\$3054.9
			Respectfully subn
			Margaret Horma

## WELCOME NEW MEMBERS

DAVID & JOAN EPSTEIN

**TERESA & ROBERT JEZEWSKI** 

IRINA PRYADKO & GRIGORY ROYTBERG

**EVE & CHRIS KAPI AN-WAI BRECHT** 

EVAN ROSENTHAL

KATHLEEN & LAWRENCE KLEINMAN

# A REMINDER ABOUT OUR FORAYS

Inasmuch as mushroom fruiting patterns are unpredictable, *our Foray Schedule must be considered flexible: tentative & subject to change.* Last year, 5 forays were cancelled for lack of fungi, and although an **improvement from 2008's 10 cancellations, some cancellations are likely this year.** Some forays were moved to a more likely spot, based on reports from the assigned walk leaders.

For these reasons, it is important to check your email on the Friday before a foray for notification of any changes. <u>Only in the event of change will an email be sent</u>. Those members who do not have email access should telephone someone of their acquaintance who does, the walk leader or us. (Our membership list contains telephone numbers and email for all members.)

Assigned leaders are reminded to try to reconnoiter the area and report back to us regarding conditions. We depend upon these reports to decide whether or not to hold a foray. No forays are scheduled for May 5, May 29, and June 12, usually slow times, and for Sept. 25, the date of the NEMF foray. However, if anyone comes across a good May or June fruiting, let us know and we can get the word out and schedule an impromptu foray.

Our annual picnic, always a great success, is scheduled for Sept. 18, to avoid the summer heat. All participants are asked to bring a dish to share; LIMC will provide a hero lunch, as well as beverages and snacks.

If you need to reach us on foray mornings, call our cell phones at 631-681-3229 or 631-355-2856.



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*"There are virtues associated with smallness. It is the realm of elegance and grace. It is also the realm of perfection."* 

Steven Millhauser, NY Times Book Review, Oct. 5, 2008



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