



Meetings: 2nd Sunday Nov. - April 1:30 p.m.
Morris County Outdoor Education Center,
247 Southern Blvd., Chatham, New Jersey

Editor: Dorothy Smullen

ECHO HILL SURPRISE

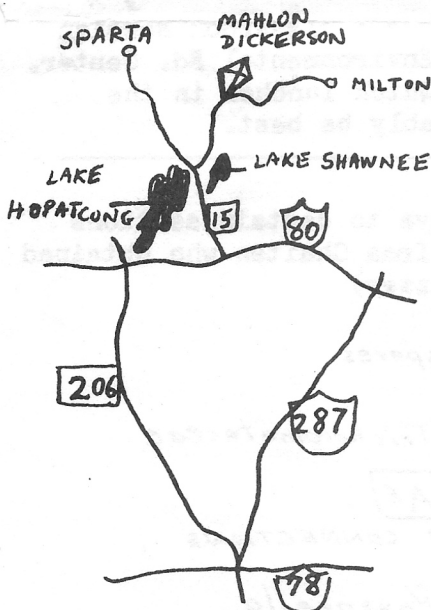
Barbara Peabody had a great idea and followed it through! She organized a covered-dish surprise birthday party for our president Bob at our June 10 foray at Echo Hill. Everything was on the plus side. The humidity and rainfall during the week were good for mushrooms. The day was beautiful. The members present brought a fantastic variety of things to eat and drink -- and thanks to a friend of Jim Richards, there was a super big cake decorated with no less than seven mushrooms of icing.

Our lovely leader Gertrude Espenscheid should be applauded for obtaining Echo Hill again, and for having the foresight to send an article to the local paper. Many nearby residents enjoyed the day with us and plan to become members.

Almost 40 species were identified with 14 others keyed to genera. Many specimens and stages of Amanita flavorubescens were displayed. The stinkhorn with the long, netted veil, Dictyophora duplicata, was also found.

AT HACKLEBARNEY July 24th a small but enthusiastic group collected 35 different specimens identifying most to species with the help of Dave Patterson of N.Y.C. Two rare specimens were found - Hydnum spongiosipes (described in Graham) and Boletus impolitus. The bolete identification is being checked in New York.

Thanks to our leader John Wanelik for a good outing. (Something new at Hacklebarney - - Sat., Sun. and Holidays from Memorial Day Weekend thru Labor Day, there is a \$2.00 parking fee.)



MAHLON DICKERSON — AUG. 28

Leader: Vic Gambino

The reservation is located in the extreme northwest area of Morris County near Lake Shawnee. Take Route 15 and exit at Weldon Road. Follow Weldon Rd. towards Milton (East) for about 4.5 miles.

We will meet in the family picnic area at 10:00 a.m.

STOKES STATE FOREST — SEPT. 11

Leader: Grete Turchick

We will meet at the Kittle Field parking lot. Stokes is located in the extreme Northwest portion of the state. Take 206 North. The entrance to the park is at the Forest Office, about 5 miles from Branchville. Follow the road past the office, make the first right, and then the first left on to Coursen Road for 2 miles. The parking lot is near the ball field. Please be on time.

IN THE NEWS

A full page "Community Life Article" appeared in The Democrat of Flemington, N.J. Thursday, July 21, 1977 on page 25. Gertrude Espenscheid and other local residents were again mushroom hunting at Echo Hill. Rosemary and Ed Kostansek from the Boston Mycological group have moved to Annandale recently and are now members of our N.J. club. Ed has done work for his degree on an Amanita toxin. A hearty welcome to you both. Other good photographs included Nelly Ro and various mushrooms. Diagrams of edible species by Gertrude also adorned the page. - -Great public relations - -

WELCOME NEW MEMBERS

Gerry Breitenbach
Irma Chaiten
Elmer and Mary Johnson
Donald M. Simons
Ed and Rosemary Kostansek

Watchung, N.J.
Springfield, N.J.
Annandale, N.J.
Wilmington, Del. (TOXICOLOGY CHAIRMAN - NAMA)
Annandale, N.J.

NORTHEAST SEPT. FORAY

If you haven't registered for the Northeast Sept. Foray (Sept. 16, 17 and 18) at PEEC you are still in luck. There is still room available. The professional line-up is certainly impressive - - Dr. Martina Gilliam, Dr. Sam Mazzer, Dr. Sam Ristich, Dr. Clark Rogerson and Gary Lincoff.

Registration Fee\$5.00 per person (children under five years of age are free)

Registration fee is not refundable

Food and Lodging\$30.00 per person (1/2 price for children five yrs. old and under)

Make checks payable to: New Jersey Mycological Association

Mail to: Mrs Doreen Schiller

CORRECTION: On the list of specimens collected in June at PEEC, one specimen listed under Myxomycetes - Dasyscyphus should be moved to the Ascomycetes. Thanks Sam Ristich for noticing this.

Don't forget members - - Dr. Ristich will have a classroom session Aug. 14 after the foray at Lord Stirling Park's Environmental Ed. Center. Note also that there are no picnic facilities. Quick lunches in the parking lot or under trees by the road will probably be best.

BRIEF NOTES FROM PEEC: DR. SAM MAZZER'S LECTURE (followed by keys to certain sections gratefully received from Irma Chaiten who obtained them from Dr. Mazzer)

angular, salmon spores

ENTOLOMATACEAE - 2 sub families
from ancestral Tricholomataceae

CLITOPILOIDAE

LACK CLAMP CONNECTIONS

Clitopilus

Rhodocybe

ENTOLOMOIDAE

WITH CLAMP CONNECTIONS

Leptonia

Nolanea

Entoloma

Claudopus






Ancestral Tricholomataceae







Clitopilus - attached decurrent gills; spores with longitudinal ridges  

Rhodocybe -  spores

Claudopus - pileus cuticle with interwoven, anastomosing hyphae; eccentric stems on wood


Entoloma - see key to sections which follows

Leptonia (includes Eccilia) convex or depressed cap    
upright hymeniform layer over disc;
cuticle cells with cytoplasmic pigmentation;
gills attached to decurrent; cystidia fill of oil droplets; spore 
(A new book by David Largent The Genus Leptonia has just been published by Lubrecht and Cramer, Randolph, N.J.)

Nolanea - no tuft over disc cells; cap shaped    
encrusted pigmentation of cuticle hyphae; spores  or 

Pouzarella - no cottony vegetative mycelia at base of stipe but rather threads in all directions.



Abortive basidia with brown sap - a peppered gill;
Some species with large setae and cystidia;
Spores are huge - 20 μ 

Entoloma , Key to Sections

1. Pileus surface a hymeniform layer of inflated hyphal end cells with blue, cytoplasmic pigmentation.....sec. Hymenidermae Mazzer
1. Pileus surface not as above 2 (ined)
 2. Spores small, 6-7.5 x 4-6.5 μm, the angles obscure and sometimes poorly formed; spore print coloration sometimes pale, often little darker than "vinaceous-buff". sec. Turfosi (Kuhner & Romagnesi) em Largent
 2. Spores larger, generally over 7.5 x 6.5 μm, the angles usually distinct and well formed; spore print coloration usually near "vinaceous-cinnamon" 3
3. Pileus surface, as seen in radial section, a gelatinous layer (often 100-150 μm thick) containing a turf of inbedded, narrow (3-6 μm), hyphae which may or may not contain cytoplasmic pigments; the stipe surface often colored like, or at least streaked with, the pileus surface coloration; the spores essentially isodiametric sec. Apriles (Kuhner & Romagnesi) Mazzer (ined.)
3. Pileus surface not gelatinous, or if gelatinous, the gel layer very thin (generally less than 1 or 2 μm) the cuticular hyphae radially arranged, over 6 μm wide, and generally lacking distinct cytoplasmic pigmentation; stipe coloration variable, but generally whitish or ivory colored; spores isodiametric to distinctly longer than broad 4
 4. Pileus opaque or nearly so at all stages, the surface often innately fibrillose-virgate, the cuticular hyphae essentially the same diameter, or even slightly narrower than the tramal hyphae as seen in tangential section; stipe often rather stout and fleshy; spores essentially isodiametric sec. Entoloma (Fr.) Kummer em Donk
 4. Pileus translucent-striate, at least when young, fading in age, the cuticular hyphae larger in diameter than the subcuticular hyphae as seen in tangential section; stipe generally narrower and more delicate than in section Entoloma; spores isodiametric or frequently somewhat longer than broad sec. Nolanidae (Fr.) em Largent

The type specimen of the Section Hymenidermae of the Entoloma group is Entoloma indigoferum (Ellis) Sacc. It is only known from the type locality - in coastal Chaemaecyparis thyoides swamps near Newfield, N.J. where Ellis had his residence. The white cedar is also mixed with poison sumach. E. indigoferum as its species name implies is indigo blue on the cap, the stem is white more or less tinged with blue (5-7.5 cm. long).

The species has not been found in over 50 years. It would be a great find for someone in our club. Perhaps a foray to the area next summer could be planned. July and August are the months to look. The presence of E. indigoferum in Eastern North America is rather surprising as the only other known member of this section occurs in Africa.

Section Apriles (Romagn.) Several of the species appear to be mycorrhizal with Rosaceous trees, shrubs and brambles and fruit during the spring of the year, occurring most frequently at the time the host plants are in flower. Two additional species, E. subcostatum and E. madidum, fruit later in the year and are more likely to be found in forested areas. Type species: Entoloma aprile (Britz.) Sacc.

Key to the Great Lakes Species of Section Apriles

1. Basidiocarps associated with higher plants belonging to the Rosaceae; fruiting period confined to the spring 2
1. Basidiocarps generally in forested regions and fruiting during the months of summer or fall 3
 2. Pileus coloration butterscotch yellow to sepia brown, generally associated with Rubus allegheniensis or Rosa multiflora in our area E. aprile (Britz.) sacc.
 2. Pileus coloration generally horn-gray to cinereous, generally in open woods under Amelanchier, Prunus or Crataegus spp. E. melilotum Mazzer
3. Pileus and stipe grayish in color, hardwood forests and forest edge habitats in the southern Great Lakes region . . . E. subcostatum Atk.
3. Pileus and stipe distinctly blue in color, coniferous and mixed conifer-hardwood forests in the northern Great Lakes region (this species, though rare in Eastern North America, has been recorded from the Lake Superior region and the Great Smokey Mts. It is more common in the conifer forests of the Pacific Northwest) E. madidum (Fr.) Gillet

MEASURING WITH THE MICROSCOPE

When you look through a microscope, there is a circular field of vision. If the eyepiece is calibrated you can see a scale on the field. Each major division is called an ocular unit. There are 10 ocular units per field. When the objective lens is changed, the value of the ocular unit is changed.

	<u>eye x objective lens</u>	<u>value of o.u.</u>
<u>2.54 cm = 1 inch</u>	100x (low power)	150μ per ocular unit
1 cm = 10 mm	450x (high ")	35μ " " "
1 mm = 1,000μ (microns)	900-1000x (oil immersion)	7.2μ " " "
1 μ = 1,000mμ (milli microns)		
1 mμ = 10 A°		

$$\text{MAGNIFICATION} = \frac{\text{SIZE DRAWING}}{\text{SIZE OBJECT}}$$

This species was found in abundance near PEEC during the June weekend foray.

Huge specimens, the size of dinner-plates were found on and under wood chip piles.

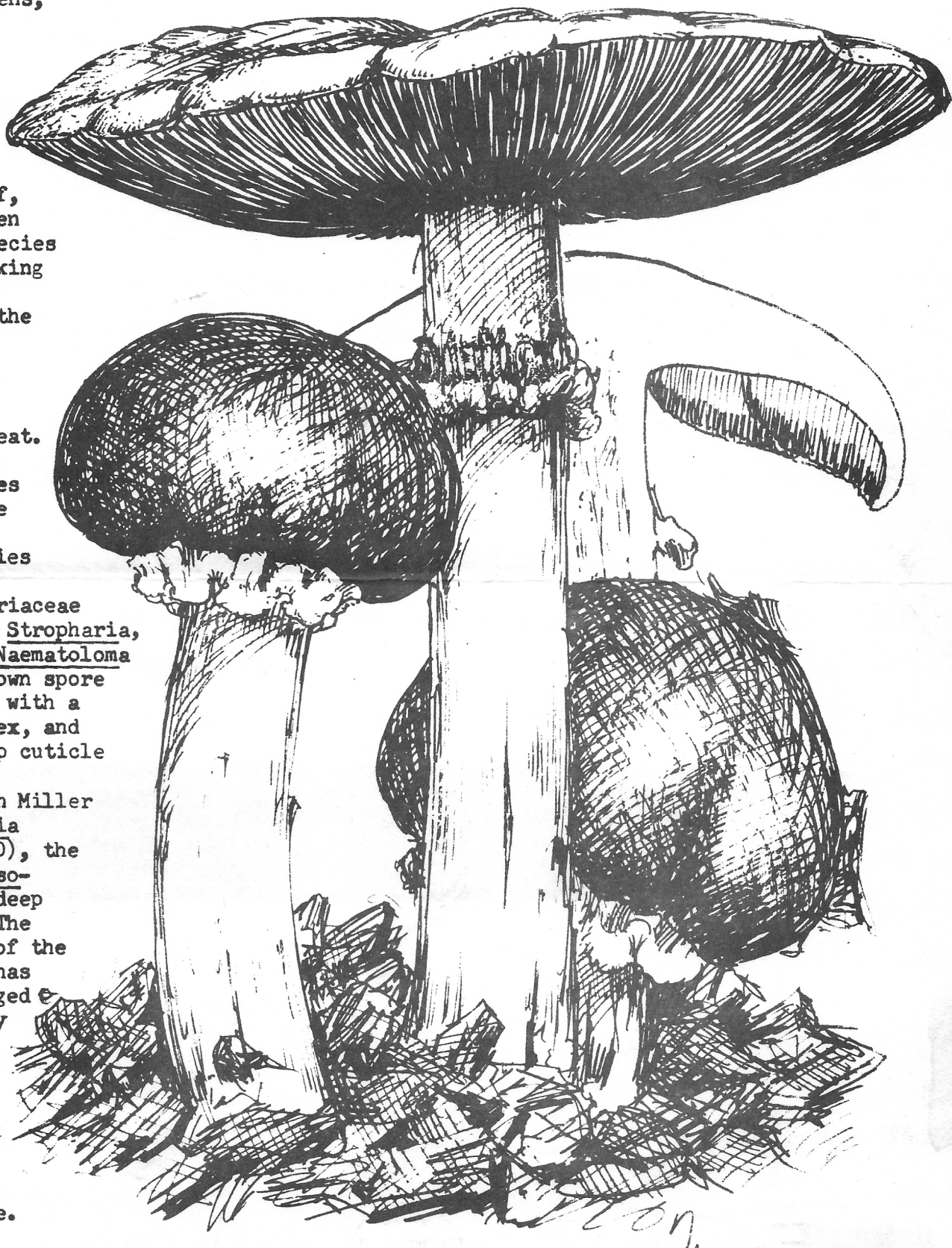
According to Gary Lincoff, people have been eating this species for years thinking it to be an Agaricus. But the gills are not free. It is probably the only safe Stropharia to eat.

Miller states (1972) that the toxins of the poisonous species are not known.

The Strophariaceae which includes Stropharia, Psilocybe and Naematoloma have purple-brown spore prints; spores with a pore at the apex, and filamentous cap cuticle cells.

Described in Miller under Stropharia squamosa (#200), the cap of S. rugosoannulata is a deep maroon - red. The lower surface of the unopened veil has radially arranged yellow, cottony patches. The stalk is thick and equal.

Delicious just sauteed or try your favorite recipe.



Thanks to Neal Macdonald for a beautiful life-size drawing.

Stropharia rugoso-annulata

Mr. Stropharia's Corner

Stropharia rugoseocaulata Varlow

This species was found in
abundance near FERN during
the late weekend forest
walks. The specimens
the size of
dinner-plates
were found
on and under
wood chips
under
decaying
logs. In fact,
people have been
walking into species
for years thinking
it to be an
additional but the
fruiting was not
found. It is
probably the
only one
Stropharia to eat.

Miller notes
(1975) that the
toxin of the
fruiting



New idea

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New idea

SMULLEN

