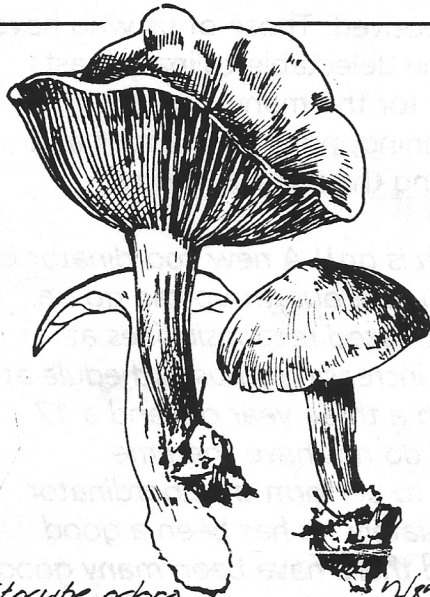


# NJMA news

VOL. 27 #4

JULY-AUGUST 1997

THE OFFICIAL NEWSLETTER OF THE NEW JERSEY MYCOLOGICAL ASSOCIATION



*Clitocybe odora*  
a nice smelling mushroom

OFFICERS:

Herb Pohl, President  
Glenn Freeman, Vice President  
Bob Peabody, Treasurer  
Lee Kudzma, Secretary  
Sue Hopkins,

CIRCULATION:

EDITORS:

Alex Adams & Carol Titus

DEADLINE:

DUES:

10th OF EACH EVEN-NUMBERED MONTH  
CALENDAR YEAR: \$10 EACH OR \$15/FAM  
Mail checks (payable to NJMA)  
TO: Bob Peabody,

\* \* \* \* \*  
**CALENDAR**

**NJMA ACTIVITIES (SEE MAY/JUNE NEWSLETTER FOR DIRECTIONS)**

- |        |   |
|--------|---|
| JUL 13 | Meadow Woods Park, Chester/Mendham, 10 am             |
| AUG 06 | Early Newsletter Deadline (it's vacation season)      |
| AUG 10 | Stephens State Park Foray, 10 am                      |
| SEP 07 | Cheesequake St Pk, 10 am                              |
| SEP 14 | Washington's Crossing St Pk, 10 am                    |
| OCT 05 | Fungus Fest, SCEEC, 11-4                              |
| NOV 30 | Holiday Party - Elections - Photo Contest SCEEC, 2 pm |

**REGIONAL AND FAR-FLUNG (SEE MAY/JUNE NEWSLETTER)**

- |               |  |
|---------------|--|
| JUL 31-AUG 03 | SAM RISTICH (NEMF) Foray, Allentown PA       |
| AUG 05-10     | Fungi-Fiber Symposium, Upstate NY            |
| AUG 14-17     | NAMA Annual Foray, Copper Mtn, Colorado      |
| AUG 21-24     | Telluride 17th annual Conf, Telluride, Colo. |
| AUG 30-SEP 01 | Clark Rogerson Foray, Hebron CT COMA         |
| SEP 14-20     | Homola wkshps, Steuben ME. Ph. 207-546-2821  |
| SEP 26-28     | Charles Horton Peck Foray, Adirondack Pk NY  |
| FEB 13-16     | NAMA Foray 1998, Asilomar St. Pk, California |

## Wild Foods Foray Reveals Nature's Pantry

Bob Peabody was our guide to mother nature's kitchen at the annual wild foods foray and feast at Jenny Jump State Park. Followers made sketches and took copious notes on how to prepare beverages, foods and poultices from the plants we saw from the trails.

The potluck picnic was especially varied and many cooks responded with dishes prepared from the bounty of fields and woods. Two recipes were rescued, food-stained but readable.

### Chilled Nettle Soup

- 1 1/2 cup young nettle leaves  
(use heavy gloves to gather)
- 4 cups chicken stock
- 1/2 teaspoon salt

Combine nettles and stock and bring to a boil. Simmer gently until nettles are tender (about 15 min). Add salt. Puree in blender. Chill at least 2 hours.

by Bob Peabody

### Soguk Domates Corbasi (Cold tomato Soup)

- 1 48 oz can tomato juice
  - 1 pint yogurt
  - 4 Tbsp Olive oil
  - 4 Tbsp lemon juice
  - 4 Tbsp vinegar
  - 1 Tbsp curry powder
  - 1/2 cup wood sorrel, chopped
- by Bob Saunders & Rhoda Sidney  
(recently returned from Turkey)

## NJMA Culinary Group News

### Good news/bad news category

#### BAD NEWS

This note from Maurizio Russi was recently received. Those of us who have enjoyed the delectable culinary feasts thank him for the many hours he has spent planning, providing recipes and coordinating the culinary group.

*The search is on!! A new coordinator is wanted so that our group can go on. Due to increased responsibilities at work and increasingly busy schedule at home with a three year old and a 17 year old, I do not have the time necessary to perform the coordinator role adequately. It has been a good group and there have been many good dinners to remember. I would like to thank all the people that have helped me succeed. I would like to be involved in a lesser role in the future and will gladly assist anybody willing to take over the group. Thanks. Maurice Russi*

#### GOOD NEWS

Rhoda Sidney & Bob Saunders have agreed to be the new coordinators of the culinary group!!! Many of us who have tasted the dishes prepared by these two will vouch for their qualifications as cooks. A schedule for the dinners to begin in the Fall will be included in the next newsletter. If you have any suggestions as to types of cuisine (country, culture, or region), please call them at ( )

**"The Victor Gambino Memorial Foray"****Held annually at the Pocono Environmental Education Center.****Dingmans Ferry, PA**

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For those new to NJMA, the late Victor Gambino, founder of The North East Foray, saw an opportunity to support environmental education while adding to our own advancement at the same time. He did this with the idea of holding an out of state event, in a fashion that could be afforded by the majority of NJMA's members. This event still goes on as PEEC. As the 97 chairperson, I was honored to take hold the reigns and I give all credit to my most praiseworthy volunteers, who did such a great job, they truly gave it their all. Here is what those who attended had for the three day escapade.

At 4:30 pm, Friday the 20<sup>th</sup>, we began to register guest. They received their name tag, cabin number, map & complete schedule of events. Sang & Debora Park cut & washed 16 quarts of freshly picked straw berries for the later to be strawberry social. By 6pm we were all settled in and unpacked ready to enjoy dinner in the cafeteria. Orientation began at 7:30 and all indoor functions were held in a nicely cooled room. Carol Titus told some of her famous stories, gently bringing us into our opening straw berry social event were we get to meet our fellow attendees. Next morning for those early birds Mario Guiducci gave a 7 am Early Bird Hike. And then after our 8am breakfast, we all gathered to make our choice of four forays at 9am. Group leaders were: Alex Adams, Bob Saunders, Bob Peabody & Ray Fatto. We had lunch at 12pm. Identification of our mushrooms started at 1pm. While Ray Fatto, Gene Varney, Dorothy Smullen and those others helping to identify our finds, I began the configuration of the computer hardware to access the Internet. At 2pm Bob Hosh gave an on site talk in the herb garden. We were all allowed 1 hour of indoor pool time at 3pm, which fit just right in the heat of the day. At 4pm, Bob Hosh demonstrated his Mycophagy skills with 2 very delightful pleasantries. We had regular at 5pm. The large screen movie screen Internet followed at 6pm navigated by Richard Addotta who got us in on AOL and then navigated by Bob Peabody who took us all over the world on line. The show was closed by Bob Hosh who also took us to other web sites including his own Magyar Mycology. After the surfing of the world wide web Carol Titus spun an interesting tale of adventure and mystery. Where by then we enjoyed our traditional wine & cheese party, hosted by Grace & Lebo Barbagallo which started at 8 till ? Along with and during we had line dancing with Mario Guiducci. This proved to be a perfect marriage of two overlapping events and went well. The cheese picks were great and there were over a dozen to pick from along with the complementary crackers and fruits. The wines were also done well with over a dozen quart or larger sized choices. Lebo also labeled each one as grace did with the cheeses. Our last day began with breakfast at 8am, a 9am bird walk and concluded by a wonderful talk by Dorothy Smullen on how to use a key to identify trees. At 1pm we are already bidding farewell to the summer event we had most looked forward to all winter. Time flies when you are having fun. I highly recommend, for those who have never taken the opportunity to experience PEEC, "Try It. You Will Like It!"

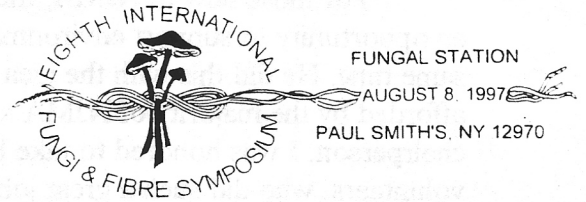
I thank all who helped and attended as well,

*Frank A. Addotta*

ATTENTION, ALL  
MYCOPHILATELISTS!

## STEMS & PIECES

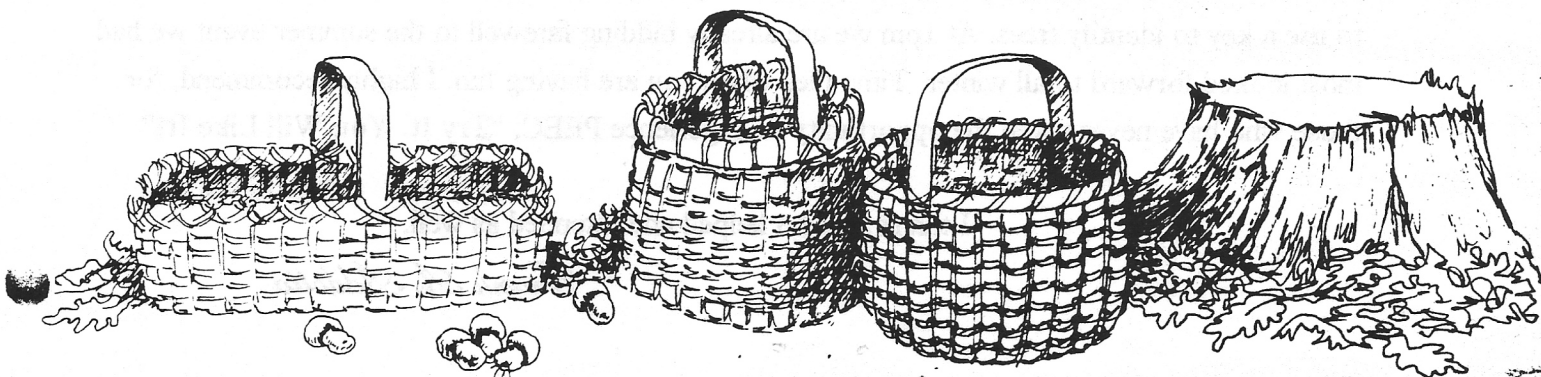
- Vacation schedule prompts an early and firm deadline for the next issue. August 6 or else.
- Was it a weird Spring for you, too? Morels scattered to none, absent in early May, present on the 25th. Same day, *S. rugosoannulata* and a prime sulphureus in the side yard
- Last chance for the Northeast Foray! See registration form in last two issues. Also let Dorothy hear from you with an offer of help; join the many-hands that will make light work of the affair.
- HELP WANTED: want to read other clubs' newsletters and get a wider grip on the fungal scene? You can—here's how: Just volunteer to generate some articles for this one based on what you read in them. We get about 15 of them, and haven't the time to do it all. Please call your humble editors, and we'll put you on the distribution.
- Congratulations to Sue Hopkins on organizing the dyeing symposium. Eleven Swedes will attend both it and the NEMF.
- Fungus Fest '97 will be needing your help before you know it. Think how you can most confidently pitch in, and give Tamara Homer a call today.



A special postmark in honor of the Eighth International Fungi-Fibre Symposium at Paul Smith's College, Paul Smith's, New York, will be in use at the College Post Office on August 8, 1997. The design, shown above, has been officially approved by the post office.

To find out how you can have mailing pieces stamped with this special event design, ask to see the most recent postal bulletin at your local post office. (This postmark will probably be shown in a mid-July issue.) The bulletin, showing pictorial cancellations for special use, will tell you where to send any items you would like to have stamped with the special postmark. Post offices are usually allowed to postmark items requested for up to one month after the event is celebrated.

If you do not see the postal bulletin, you may write directly to Pat Walker, Postmaster, Paul Smith's, New York 12970.



# Mushroom Recipe Scrapbook -

*There is a delightful article in the Missouri Earth Star Examiner June 97 written by Claudia Joyce called the Cutting Edge in which she talks about "volunteerism" and shares the recipes that are at the bottom of this page. She credits Nicky Hellmuth of their club as calling shiitakes that fruit from inoculated logs that haven't been properly processed for production "volunteers" (something for nothing). Thanks to her for the recipes and to the Ohio Mushroom Log Mar/Apr 97 for the dip to the right. The Risotto recipe was found in the Star Journal of an unknown date. I hope you can still find some fresh asparagus.*



## Zucchini and Wild Mushroom Torte

- 3 cups thinly sliced zucchini
- 1 cup thinly sliced portabella, shiitake or other wild mushrooms
- ½ cup thinly sliced onion
- ½ to ¾ cup freshly grated parmesan or asiago cheese
- 1 cup Bisquick or other buttermilk baking mix
- 4 eggs, beaten
- 1 teaspoon fresh parsley
- 1 teaspoon fresh oregano or marjoram
- ½ teaspoon salt
- ¼ teaspoon fresh ground pepper

Preheat oven to 350 degrees. Mix all ingredients in a large bowl until zucchini and mushrooms are evenly coated. Pour into greased, 9-inch cake pan. Bake for 35-45 minutes until torte is golden and baked through. Cool in pan, cut and serve. Excellent at room temperature. Enjoy!

## Hot Mushroom Dip Especial

**T**his recipe is offered again this year for the morel season ahead. It is from Hope's Mushroom Cookbook by Hope Miller.

- 1 lb fresh morels (or other species)
- 6 tsp butter or margarine
- 1 tsp lemon juice
- 2 tsp minced onion
- 1 lb carton sour cream (low-fat is OK)
- 2 tsp chicken bouillon granules (vegetable OK)
- salt and pepper to taste
- 2 tsp soft butter
- 2 tsp flour

Chop 'shrooms quite fine and sauté in pan with butter and lemon juice; let simmer 5-10 minutes. Add onions, sour cream, bouillon, salt and pepper; let simmer for 5-10 minutes more. Make a paste of remaining butter and flour; add to hot mix. Stir until thickened. Serve in chaffing dish with crackers, chips, or fresh veggies.

[Reprinted from AMC Sporadic News]

## Risotto of Asparagus and Shiitake Mushrooms

- 1½ pounds asparagus
- 3 fresh shiitake mushrooms (about ¼ pound)
- 3 cups chicken broth
- Butter
- 1 large clove garlic, or 2 small
- 3 cups Arborio rice
- 1 teaspoon minced rosemary
- ½ cup grated Parmigiano-Reggiano
- Salt

1. Hold spear of asparagus by both ends and bend. Spear will snap at tender spot. Reserve tops and place tough ends in 6-quart saucepan or stockpot with tough mushroom stems and chicken broth. Add water to fill to top and bring to boil.

2. Meanwhile, melt 2 tablespoons butter in large skillet over medium heat. Add garlic and cook until lightly colored, about 5 minutes. While garlic is cooking, cut away tips of asparagus and reserve. Slice remaining asparagus parts in ¼-inch sections. Cut mushrooms in quarters. Add thinly sliced asparagus (not tips) and mushrooms to skillet and cook, stirring, until barely softened, 2 to 3 minutes.

3. Add rice and cook, stirring, until rice begins to "sing" when stirred across bottom of pan, about 1 minute. Ladle 1 cup boiling broth through strainer into rice and stir until completely absorbed by rice. Bottom of pan should be clean when stirred. Continue adding broth, 1 cup at a time, cooking and stirring, until liquid is absorbed.

4. After third cup of stock, add reserved asparagus tips and continue cooking, adding stock 1 cup at a time, until rice is tender. You will need 6½ to 7½ cups of broth. Finish risotto with ½ cup stock, just enough to give barely soupy texture. Remove from heat and vigorously beat in rosemary, 2 tablespoons butter and grated cheese. Remove garlic. Season to taste

## Wild Mushroom Stroganoff for Four

- 1-2 tablespoons olive oil
- 3-4 cups fresh wild mushrooms (a mixture of 2-3 kinds is best) or if desperate use shiitakes, portabella and grocery agaricus
- 1 chopped onion
- 2 minced cloves garlic
- 1½ cups milk
- 2 teaspoons cornstarch
- 1 cup dairy sour cream
- 1 teaspoon dried, crushed thyme, or minced fresh
- ½ teaspoon salt
- fresh parsley
- fresh ground pepper

Saute mushrooms and onion in oil over medium-high until mushrooms are just cooked. In small bowl, dissolve cornstarch in milk and add to skillet. Stir in sour cream, thyme and salt. Cook, stirring constantly, until thickened and bubbly. Serve traditionally over wide egg noodles or be adventurous and try it over brown rice or couscous, top with fresh parsley and a grind of pepper. And as always, enjoy!

**Fungophile, Inc.**  
**PO Box 480503**  
**Denver CO 80248-0503**  
**Tel/FAX 303-296-9359**

June 21, 1997

Dear Friend of Fungophile:

Please publish the following in your club's newsletter:

Gary Lincoff and I have organized an extraordinary mushroom and travel experience -- a Mushroom Study Tour of Turkey, October 30-November 13, 1997. The political situation in Turkey has substantially stabilized since last year when we were compelled to cancel the trip. We hope to learn as soon as possible, through this preliminary announcement the number of persons interested in joining us.

The Tour will focus on Turkey's Black Sea Coast, bordered by mountain ranges where extensive forests still survive. Starting in Istanbul we will travel by bus stopping for one or two days at coastal cities, collecting mushrooms guided by Gary and Professor Mahmet Oner of the Aegean University, visiting archeological monuments and sampling the classic cuisine of Turkey. After nine days we will depart from Trabzon on the Black Sea Coast to fly to Izmir and visit the great ancient city of Ephesus, the best preserved of all the Hellenic cities. We will meet with Dr. Oner in Izmir for a mushroom day -- at the Aegean University and mushroom collecting in the vicinity. In Istanbul prior to departure on November 13, we will visit the greatest historical monuments of Turkey and cruise the Bosphorus.

If you are interested, please contact us as soon as possible at Fungophile, PO Box 480503, Denver, CO 80248-0503 or Tel/FAX 303-296-9359.

Thank you for calling this event to your club membership's attention.

Sincerely,

Emanuel Salzman, M.D.



The Dr. D.H. (Sam) Mitchel  
 Memorial Foray at  
 Copper Mountain Resort  
 in Summit County Colorado  
 August 14 -17

Conference Registration Form	
Name 1:	Address:
Name 2:	City/State/Zip:
Phone:(Day) _____ (Evening) _____	Fax: ( ) _____
Couple: <input type="checkbox"/> Female: <input type="checkbox"/> Male: <input type="checkbox"/>	Local Club Affiliation: _____
Please find me a roommate: <input type="checkbox"/> Smoking <input type="checkbox"/> Non-smoking <input type="checkbox"/>	<b>Deadline for Regular Registration is June 30, 1997</b>

**FORAY: Thursday, Aug. 14, - Sunday, Aug. 17**

<sup>1</sup> Price includes accommodations for three nights, food from Thursday evening through Sunday breakfast. All lectures, forays & workshops are also included.

Double occupancy hotel room with private bath:  
 Single Occupancy: (Limited Availability)

Per Person	Quantity	Extension
\$319 each <sup>1</sup>	_____	\$ _____
\$469 each <sup>1</sup>	_____	\$ _____

**TRUSTEES MEETING: Tues. Aug. 12th & Wed. Aug. 13th**

<sup>2</sup> Price includes all meals on Wednesday & breakfast on Thursday morning.

Double occupancy hotel room on Tues. & Wed. nights.  
 Single occupancy hotel room for trustees meeting:

\$159 each <sup>2</sup>	_____	\$ _____
\$259 each <sup>2</sup>	_____	\$ _____

**T-SHIRTS:** There is a special Colorado CMS/NAMA T-shirt available for \$16 each.

Size(s) Wanted: M \_\_\_\_\_ L \_\_\_\_\_ XL \_\_\_\_\_

**10X HAND LENSES** - 16 mm diameter hand lenses

\$16 each	_____	\$ _____
\$15 each	_____	\$ _____

**Carry your dollar subtotal to the back of this page.**

**SUBTOTAL: \$**

**AIRPORT SHUTTLE** - Regularly scheduled van shuttle service is available to & from the resort. Details will be provided along with your confirmation of registration.

**AIRFARE DISCOUNTS:** The official travel agency of the 1997 *NAMA Conference* is **Camelot Travel Services**. CMS has arranged special *NAMA Conference* contracts with United Airlines and Western Pacific Airlines. **If you make your airline reservation through Camelot Travel, you will receive a 5% discount** off applicable discounted coach fares. **You will also receive \$150,000 free flight insurance** with every ticket, **AND a 2.5% CASH REBATE** on other travel booked through Camelot Travel. Camelot Travel Services is familiar with the unusual airline situation in Colorado and they probably will be able to find a lower airfare than your local travel agent, if your travel plans are flexible. **It is worth a call to find out!** Their phone number is: **(800) 877-5444**. Call toll free from 7 AM to 6:00 PM Monday through Friday. **Be sure to mention your Discount Code: [NAMA]**

**CONTINUED ON THE BACK OF THIS PAGE**

SUBTOTAL: \$ \_\_\_\_\_

**LATE FEE: \$30 (Reservations received after June 30th)**

Late registrations will be accepted on a space available basis. Call to determine availability. -

\$30 each

\$ \_\_\_\_\_

**VISA & MC accepted as well as Checks & Money Orders**

**TOTAL:** \$ \_\_\_\_\_

Check  VISA  MC  Acct. No: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

**CANCELLATION FEE: \$50** CMS will issue refunds, minus the cancellation fee, if we receive notice of cancellation prior to June 30, 1997. No refunds will be made for cancellations received after June 30, 1997.

**AGREEMENT AND ACCEPTANCE OF RESPONSIBILITY, RELEASE AND ACKNOWLEDGMENT OF RISKS.**  
**[All people attending the conference must sign.]**

The undersigned, in consideration of the services of the Colorado Mycological Society, its officers, members and agents, hereinafter referred to as CMS, hereby agree to release and discharge CMS, on behalf of myself, my heirs, assigns, personal representatives and estate as follows:

1) I fully understand and acknowledge that the activities I am going to voluntarily engage in as a participant and/or volunteer bear certain known risks and unanticipated risks which could result in injury, death, illness or disease, physical damage to myself, my property, or other third parties. The following describes some, but not all of those risks.

- A) The acts or omissions, negligence in any degree, of CMS, its officers, members or agents.
- B) Use or operation, by myself or others, of equipment supplied by CMS, its agents or others.
- C) The potential of a participant to act in a negligent manner that contributes to injury to the participant or others.
- D) Condition of roads, trails, or other terrain and accidents connected with their use.
- E) First aid emergency treatment or other medical services rendered.
- F) Consumption of food or drink.
- G) Risks involved in eating wild mushrooms.
- H) Contact with domestic or wild animals.
- H) High altitude.
- I) Severe weather changes.
- J) Hypothermia.
- K) Giardia contracted from mountain water.

I understand that the above list is not exhaustive, and that other risks, known or unknown, identified or unidentified, anticipated or unanticipated may also exist and could result in injury, death, illness or disease, physical damage to myself, my property, or other third parties.

2) I am fully aware that conference activities entail known and unknown risks to myself and a risk of injury to third parties as a result of my actions. I understand and acknowledge that CMS cannot guarantee my safety. Being fully aware of the foregoing, I expressly agree to accept and assume all responsibility and risks of injury, death, illness or disease, or damage to myself or minors accompanying me, to others, or to my property arising from my participation in conference activities.

3) I hereby voluntarily agree to release, forever discharge and agree to hold harmless and indemnify CMS, its officers, members and agents from any and all liability, claims, demands, actions or rights of action which are related to, arise out of or are in any way associated with my participation in conference activities, including specifically, but not limited to the negligent acts or omissions of CMS, its officers, members and agents, in injury, death, illness or disease, physical damage to myself, my property, or other third parties. IN SIGNING THIS DOCUMENT, I FULLY REALIZE THAT IF ANYONE IS HURT OR PROPERTY IS DAMAGED WHILE I AM ENGAGED IN CONFERENCE RELATED ACTIVITY, I WILL HAVE NO RIGHT TO MAKE A CLAIM OR FILE A LAWSUIT AGAINST CMS, ITS OFFICERS, MEMBERS OR AGENTS, EVEN IF THEY OR ANY OF THEM NEGLIGENTLY CAUSED THE BODILY INJURY OR PROPERTY DAMAGE.

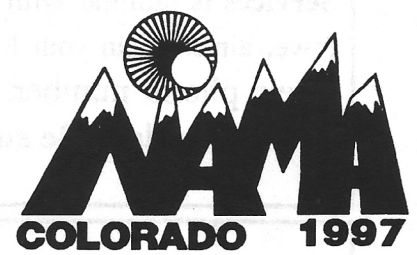
My signature below indicates that I have read this entire document and understand it completely, understand that it affects my legal rights and agree to be bound by its terms.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ Print Name: \_\_\_\_\_

- ➔ **MAKE YOUR CHECKS PAYABLE TO: Colorado Mycological Society**
- ➔ **IF PAYING BY VISA OR MASTERCARD:**  
Be sure to fill in your account information at the top of this page.
- ➔ **BE SURE TO SIGN & DATE THE RELEASE ON THIS PAGE**

**SEND TO: Robert Monks**





# The grass is definitely greener on the fungi side

By Matthew Reilly  
STAR-LEDGER STAFF

Keeping a lawn lush and green can simply be a matter of bad taste. When chinch bugs and stem weevils are ready to order up a load of your grass for dinner, you can almost hear them say, "Hold the fungi."

They don't like the taste of certain fungi, and chinch bugs and stem weevils, like any 6-year-old worth his or her salt, won't eat what they don't like.

While troubling to chinch bug and stem weevil parents ("Eat your fungi or there'll be no fescues"), this is good news to gardeners and greenskeepers. It gives them a natural way to keep grass-eating insects in check without relying on costly and environmentally damaging pesticides.

Rutgers University researchers are working on ways of using naturally occurring fungi that live inside certain types of grass plants to control pest damage. And in doing so, Cook College scientists may be able to cut into the millions of dollars New Jerseyans spend each year keeping their yards and golf courses verdant and healthy.

Fungi are plants without leaves, flowers or green coloring matter, like mushrooms. They grow on other plants or decaying matter. "Endophytic fungi" — the kind they are

studying at Cook — are so named because they actually live within the grass plant, where they produce alkaloids and other chemicals that make the grass less tasty to parasitic worms and larvae that would otherwise be chowing down on the front lawn.

"What we have are some fungi that are endosymbiotic," said James White, professor of plant pathology at Cook. "They live in the grasses, cause no diseases and produce chemical compounds that are making those grasses resistant to insects and fungal diseases. We've even found they give the grasses drought tolerance. They are potentially useful in turf grasses to reduce the chemical and water inputs that are necessary to maintain turf in urban environments."

For larger, grass-eating critters, there are still other fungi that can be used. Certain grasses may be able to dissuade deer or rabbits from munching the deep rough on the 12th fairway.

White said there are endophytes related to a fungus that was commonly known as "ergot fungus," which can be toxic to people.

"It was a real problem in the Middle Ages," he said. "It would get mixed up in rye and people would consume it. It contains alkaloids that are vasoconstrictors, which reduce the flow of blood. LSD is one of these types of alkaloids. People would hallucinate, imagine themselves burning on fire. It was called the 'holy fire.' People believed it was a plague sent from God."

White said there is an endophyte in Mexico and the western United States that produces a chemical related to LSD. It's known popularly as "sleepy grass," White said.

"If an animal gets enough of this grass, it could make it lethargic or sick," he said. "A horse will eat the sleepy grass and sleep for two or three

H 13, 1997

□ \* \* \*

The Star-Ledger

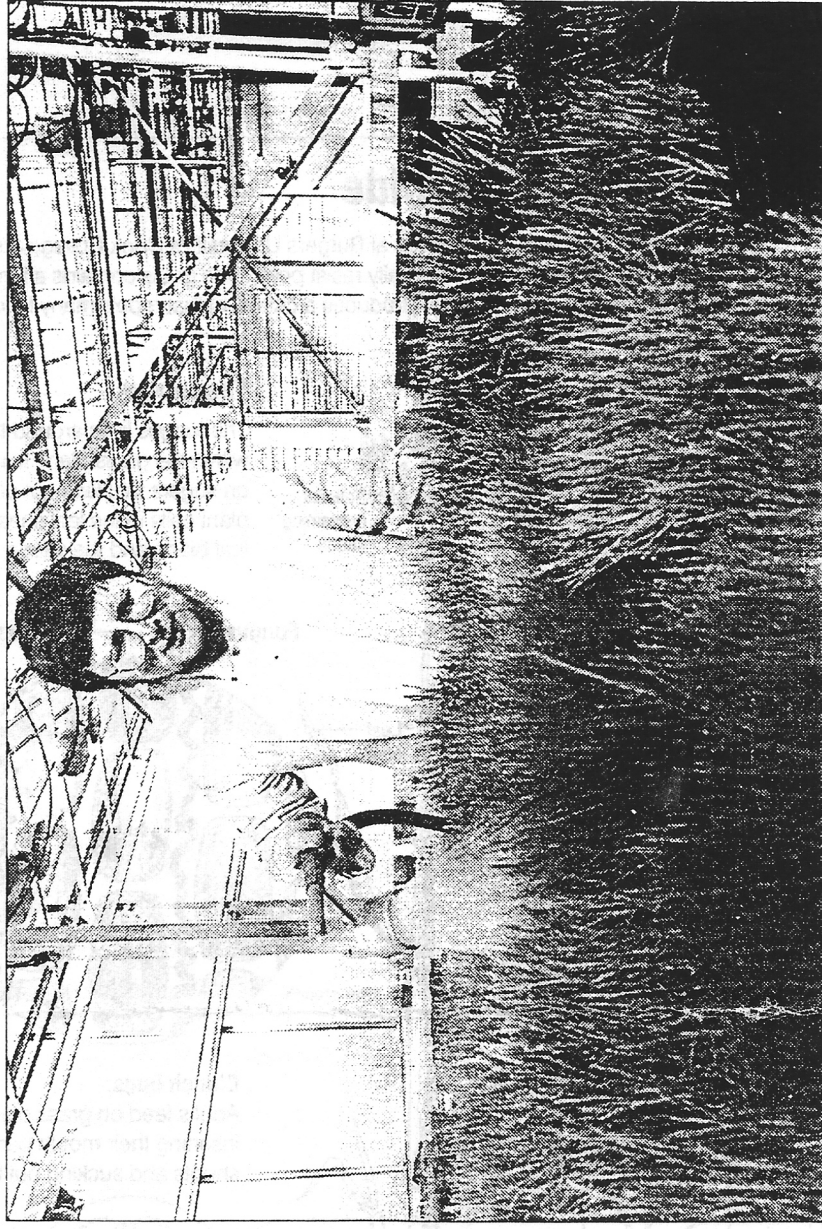


PHOTO BY GENE BOYARS

**Rutgers Prof. Jim White waters some of the new disease and insect resistant grasses he and co-workers have developed to control pest damage.**

days. There's a campground in New Mexico where people on horseback traditionally get stranded because their horses consume that grass and then go to sleep."

White said he and his colleagues are experimenting with a range of different types of grasses.

"There are endophytes that are desirable to use and there are those that are undesirable that we don't want to use," he said. "We're working on multiple grasses, trying to find the good endophytes. Sleepy grass may not be bad, if an animal sleeps. You

might go out and find rabbits and bunnies sleeping in your yard."

White said there are a number of endophytes that have already produced good results in two types of typical turf grasses: tall fescues and perennial rye grass.

"We also are working very hard to identify endophytes we can use in our Kentucky blue grasses and our bent grasses, two grasses that have not up to this point had endophytes in them. It's a matter of finding endophytes that are compatible," he said. Bent grass is used in golf courses for greens and Kentucky blue grass is a common turf grass found in yards.

"What we're doing is trying to take advantage of a natural situation, a natural symbiosis, something that's already out there as a result of thousands of years of evolution, and encourage that association," White said.

So far, they've found endophytes that deter chinch bugs, sod webworms, stem weevils and aphids.

White said enhanced turf grass seed has been available commercially for a few years and consumers can order "endophyte-enhanced" seed from seed companies. The cost should be similar to regular grass seed. He said Rutgers produces enhanced turf grasses and sells them to seed companies, collecting royalties for the varieties it develops.

Reed Funk, the head of the turfgrass breeding program at Cook, has an international reputation in the field, White said.

One believer in endophyte-enhanced grass is Fran Owsik, golf course superintendent at Middlesex County's Tamarack Golf Course in East Brunswick. He is responsible for the health of 80 acres of fairways and greens at the 350-acre complex.

The public facility sees about 120,000 rounds of play per year on its 36 holes, so Owsik uses rye grass on the fairways because it is more durable than bent grass, which is used on the greens.

"We do use endophyte grass on the fairways," Owsik said. "It can handle the wear, and it doesn't get as many diseases as some of the bents and it has this endophytic material in there, which helps us fight grubs and other insects that feed on the rye grass."

That, coupled with a policy of spraying pesticides only when there is evidence of heavy insect damage, has cut Tamarack's pesticide costs by about 25 percent. The club typically spends \$50,000 to \$75,000 a year controlling insects.

## Natural pesticide

Researchers at the Turf Center at Rutgers University's Cook College are developing grasses that naturally resist pests. The grass contains a fungus called an endophyte, which produces a chemical that repels many lawn dwelling insects.

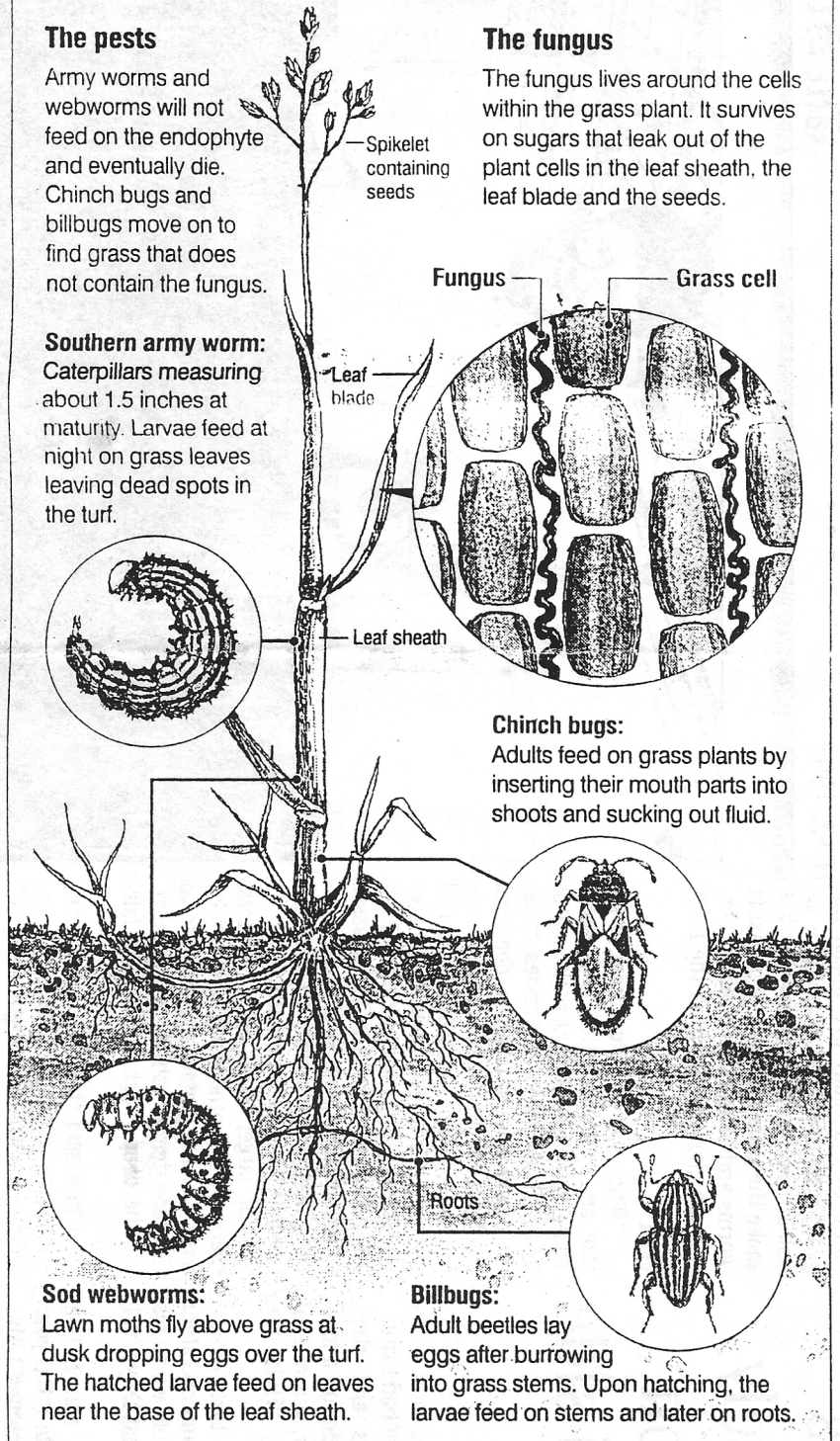
### The pests

Army worms and webworms will not feed on the endophyte and eventually die. Chinch bugs and billbugs move on to find grass that does not contain the fungus.

**Southern army worm:** Caterpillars measuring about 1.5 inches at maturity. Larvae feed at night on grass leaves leaving dead spots in the turf.

### The fungus

The fungus lives around the cells within the grass plant. It survives on sugars that leak out of the plant cells in the leaf sheath, the leaf blade and the seeds.

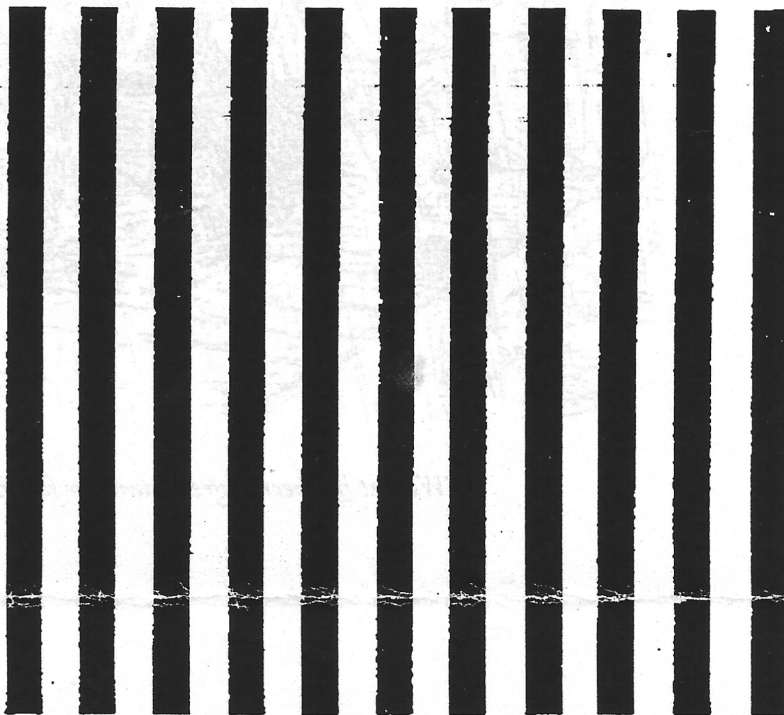


STAR-LEDGER  
3-13-97

# 6 The Mushroom Log

## Field Notes

This is a field identification sheet that we have found to be useful for recording mushroom characteristics and for determining spore print color. Photocopy as needed in the field.



Thanks to the *Mushroom Log* of the Ohio Mushroom Society for this field ID sheet.  
Stripes are so dark or light spores will show up.

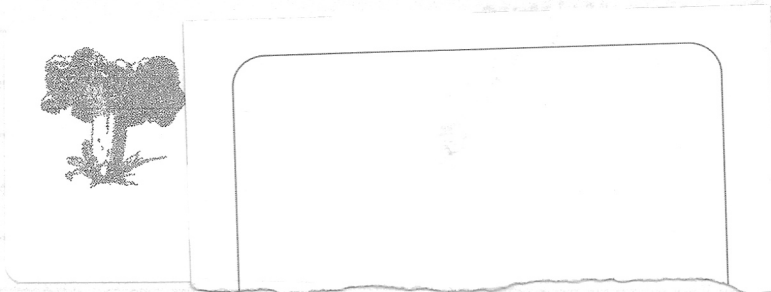
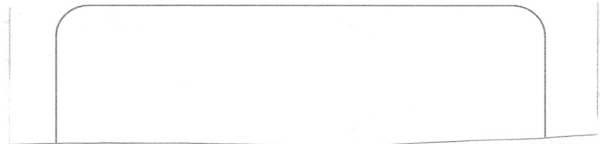
<b>Species</b>	<b>Date</b>
<hr/>	
<b>Location</b>	
<hr/>	
<b>Substrate</b>	
<hr/>	
<b>Surrounding Vegetation</b>	
<hr/>	
<b>Elevation, Moisture</b>	
<hr/>	
<b>Manner of Growth</b>	
<hr/>	
<b>Gills</b>	
<hr/>	
<b>Stipe</b>	
<hr/>	
<b>Cap</b>	
<hr/>	
<b>Ring</b>	
<hr/>	
<b>Base Cup</b>	
<hr/>	
<b>References</b>	
<hr/>	
<b>Remarks</b>	
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Let  
it  
Rain!



*"Well, it has been a great summer for chanterelles."*

**NJMA news  
c/o Sue Hopkins**



**First Class Mail**