Volume 13, Number 1 March, 1996

MESSAGE FROM THE PRESIDENT

The date is 3 February 1996; as I sit in front of the computer typing this, the outside temperature is -26° F. That is not a typo. When this is read in March, the cold should have faded from mind and serious optimists will be looking for the first crocus. There couldn't have been a better excuse for spending lots of time studying mushroom books in early February than the weather provided.

The January meeting is reviewed within, as is the second annual prize drawing for early membership renewals. Sincere thanks to all those who took part in any way. Both the February (poisonous fungi) and March (polypores) meetings feature fungi of broad interest. All of our members have seen innumerable poisonous mushrooms, particularly during the fall, and respect the fact that a few species could be a final meal. Polypores are great friends because they are always apparent in woodlands, although at some seasons looking less than prime. They are one of the few groups of fungi that dry beautifully and look natural lying on a fireplace mantle, bookshelf, or table. Also not to be overlooked are a couple of great edibles.

At this point plans for the April restaurant meeting are still pending. A series of unfortunate events over which the Society had no control has resulted in loss of a past arrangement. An alternate plan may or may not materialize. We will, however, very likely have a May morel hunt somewhere in southern Wisconsin. As is always the case with *Morchella*, hunting does not always imply finding. And then comes the June annual meeting and picnic, which will be announced in this newsletter and again in early June. I hope a few people are able to attend the first State Morel Mushroom Hunting Championship in Magnolia, IL – see details in this newsletter. Our June newsletter will have reviews of the 1996 morel season in Wisconsin, if we have one, and something about Magnolia if possible. In closing I should remind one and all that we are always grateful for any contribution to the newsletter. Best wishes for a spring filled with lilacs, asparagus, and morels.

Alan Parker

UPCOMING WMS EVENTS

March 13 (Wed.) — Slide lecture by Tom Volk of the Forest Products Lab on "Naming the Polypores: Why *Polyporus* has been split into more than 100 genera", 7:30 p.m., Mitchell Park Pavilion, Milwaukee.

May 18 (Sat.) — Morel Foray, North Kettle Moraine. Location and time to be announced later.

Mid to late June (Sat.) — Annual Meeting and Picnic, Falk Park, Milwaukee.

September – October 1996. One-credit fungi course meeting at UW-Waukesha for 8 Monday nights from 7-9 p.m. The class will be listed as Botany 291 – Identification of Mushrooms and other Large Fungi. The course may be taken for credit or through special student enrollment for audit credit (no exams, just the fun part); the fee is very reasonable at about \$75 for the entire course. Details: An introduction to the methods and literature used in identifying fleshy fungi. Edible and poisonous mushrooms and many other large fungi of Wisconsin will be studied. Groups covered include cup fungi, *Xylaria* family, morels, gilled mushrooms, boletes, corals, tooth fungi, leather fungi, polypores, jelly fungi, chanterelles, puffballs, and puffball relatives. Fresh material collected over weekends will be used whenever possible; one Saturday field trip. If you would like more information or would like to enroll in this class, call Dr. Alan Parker (home 542-7688; office 521-5495). The class is limited to 24, so make your plans early. This is an excellent way to see

and learn a large number of fungi in a short time.

Dr. Sami Saad is teaching the following fungi-related courses in the fall '96 semester at the University of Wisconsin – West Bend campus. BOTANY 291 — Fungi, Other Microbes, and Humans (2 credits) — gives a general account of fungi, bacteria, and other microorganisms and their impact on our daily lives with emphasis on their ecological, pathological, and industrial importance. BOTANY 291 — Survey of Plant Diseases (1 credit) — gives a general survey of the most important plant diseases of vegetables, shade trees, field crops and ornamentals of Wisconsin. Control measure recommendations including biological control will be emphasized.

THE GREAT MOREL HUNT SOUTH OF THE BORDER

by Alan Parker

The "Outdoors" column in the 25 January 1996 issue of the *Chicago Tribune* should attract considerable attention among morel fanatics. Writer John Husar interviewed Tom and Vicky Nauman of Magnolia, Illinois about their organizing the first State Morel Mushroom Hunting Championship. It seems a secret spot in north-central Illinois will be promoted as an alternative to the famous yearly National Championship morel madhouse centered around Boyne City, Michigan.

According to the article, the Illinois hunt will be held 4 May 1996 in Magnolia — with the hope of drawing from 300 to 1000 hunters. The entry fee is \$10; there will be a trophy and \$100 first prize. The population of Magnolia is about 200, so the town will certainly be crowded with potential morel hunter champions. The volunteer fire department will sell barbequed pork chops at the local park, and a church group plans to provide early morning food and caffeine. There will also be a morel auction and "tours of prime mushroom country."

Contestants will be hauled in school buses to the secret location for a "shotgun start"; they will have 90 minutes to pick as many morels as possible. According to Nauman "It'll be crazy. There are thousands of dead elms on the place." For entries and details call the Naumans at 309-364-3319. It would be great to have at least one WMS member attend and provide a newsletter report.

If you've read this far and you're a dedicated morel hunter, you're probably asking why on earth would someone draw great attention to their favorite morel spots? As a biologist I automatically eliminate altruism and assume one of the following: temporary insanity, fame, pleasures of the flesh, or money. In this case it seems to almost certainly involve the latter. As noted in Husar's article, "the Naumans are so crazy about morels they have started a side business (Morel Mania) that markets 'shroomy crafts, recipes, tips and whatnot to hard-core hunters'. Now the picture is clearing. We have two of Naumans morel magnets on our refrigerator, and two morel "decoys" at this moment on bookshelves. All are beautifully carved wooden morels that we are very pleased with. I move the "decoys" around the house during the winter just to keep my eyes in training for the real thing in May. I also put these carved morels on display along with three sizes of concrete ones during my spring morel hunting workshop at UW-Waukesha. If you would like to see the Nauman catalog, write to Morel Mania, RR1 Box 42, Magnolia, IL 61336. Along with other neat stuff they carry Nancy Weber's book <u>A Morel Hunter's Companion</u> for \$14.95 + postage. I consider this to be the best single morel reference available, and people often ask me where they can buy a copy.

Maybe I'll see you in Magnolia, Illinois on 4 May 1996! I'm really tempted just to see the spectacle of that many people enjoying such a great spring ritual — the morel hunt. The "shotgun start" alone will probably be worth the price of the trip. Someone should videotape the highlights and sell that along with everything else popping up. This historic first in Illinois mushrooming will definitely not go unnoticed — the good people of Magnolia will probably be very pleased when 5,000 morel-crazed strangers wander into town. Smear mud all over your license plates just in case.

By the way, where is Magnolia? Locate Rockford on an Illinois roadmap, follow Hwy 39 straight south to Peru/LaSalle/Ottawa, go one inch further south to the junction of Hwys 51 and 18, turn west on 18 or just under an inch and you're in what the map indicates is Magnolia. From Waukesha to downtown Beloit takes about an hour; my guess

is from metro-Milwaukee to Magnolia would be roughly 2 1/2 hours. That's assuming when you hit the state line you drive in the manner of a typical Illinois resident. The closest motels are probably in the Peru area along Interstate 80; there's also Peoria to the south for the more adventuresome. Magnolia is a wonderful name for a town, and I'm looking forward to seeing the area. For those who don't wish to cross our southern border, there's always our own yearly morel festivities at Muscoda. It's usually held one week before or one week after the best part of the season. Happy morel hunting wherever you go!

MYCO-BRIEFS

- Amateur collectors have found a 94-million-year-old fossil mushroom encased in amber in East Brunswick, New Jersey. The fungus was preserved over the millennia by resin from a tree of the cedar family. This gilled mushroom is at least 50 million years older than any other known fossil mushroom. Remarkably though, David Hibbett, a mycologist at Harvard who helped to classify it, notes that "If you found this growing out in the woods now, you wouldn't bat an eye, because it's absolutely typical." The ancient mushroom strongly resembles modern *Marasmius*, which suggests that the basic form of this genus has remained unchanged for a very long time. (from *Discover*, Feb. '96, courtesy of the electronic Mushroom News Service)
- The death of one person and the severe illness of another in an Iowa community was likely caused by tea made with the kombucha mushroom. The two women had been drinking the tea for about two months when they developed their acute illnesses, which were characterized by metabolic acidosis, respiratory distress and cardiac arrest. The relationship between the illnesses and the tea is unknown, but it was the only similarity the women shared. More than 100 people had been drinking the tea in the Iowa town, but only the two cases of illness were reported. (quoted from an abstract in INFOTRAC database service of *Morbidity and Mortality Weekly Report*, Dec. 8 '95)
- Experimentation by Japanese researchers has shown that the mushroom *Suillus bovinus* possesses greater antioxidant properties than those of the commonly used synthetic antioxidants BHA and tocopherol. Since synthetic antioxidants also exhibit carcinogenic and promutagenic activity, natural antioxidants such as this are always welcome. The antioxidant properties of this *Suillus* are due to the pigments variegatic acid and diboviquinone 4,4. (from an abstract in INFOTRAC based on an article in *Journal of Food Science*, Sept.-Oct. '95)

JANUARY MEETING REPORT

Given Wisconsin weather patterns, scheduling the January WMS meeting is always a gamble. No matter what the chosen date, there's concern about snow and all that goes with it. The odds caught up with us and the January 23rd members' slide show was held during a rather significant storm. Only once before in 13 years has there been rough weather around the January meeting, although one year this meeting was held simultaneously with the initial invasion of Iraq during Desert Storm.

Back to 23 January 1996 — a very respectable turnout included 22 adults and two carefree little people. Visions of warmer seasons were abundant as four members provided excellent material for the slide show. An amazing array of fungi briefly appeared on screen and gave all attendees renewed hope for the upcoming mushroom seasons. We even had a few fungi show up from New Mexico and some closer to home from sphagnum bogs in the Michigan UP. After the slides, members were treated to an excellent variety of refreshments prepared by Kris Ciombor, Chuck Soden, and Sunny Rupnow. Many thanks to the refreshments committee! What this year's group lacked in numbers it certainly made up for in enthusiasm. Those hearty souls who were able to brave the elements seemed to enjoy the first meeting of 1996.

Nineteen members entered the "Mushroom Test" contest on the back of the 1996 membership renewal form. The original plan was to have those answering all 20 questions correctly be eligible for a prize drawing at the January 23rd meeting. Three people (Randy Beth, Chuck Fonaas, and Tom Truax) got all the answers correct, while the other 16 gave it a gallant effort. On the night of the 23rd management decided to slightly modify the contest in two ways. It was decided to be especially generous and award two prizes instead of one, but to make both prizes the same. The winner of the three-person "all correct" drawing was Tom Truax of Oshkosh. Winning the 16 entrant "gallant effort" drawing was John Lovaas of Woodstock, IL. Both lucky winners will receive a copy of <u>A Cook's Book of Mushrooms</u> by Jack Czarnecki. Sincere thanks to all who participated and renewed their memberships early!

TWO STORIES OF MUSHROOM POISONING IN CALIFORNIA

by Peter Vachuska

The Chang Story

The first story starts on a typical cool overcast San Francisco winter weekend. It was Saturday, February 3rd, and the Chang family (originally of Taiwan) was eager to go out mushroom hunting after all of the wet weather they were having near their home in the affluent community of Orinda, CA, seven miles east of Berkeley.

Rita's husband Sam, who is a banker, was away for a few days on business in Asia, so the Chang family went to the nearby Lafayette Reservoir with "a trusted old gentleman and family friend who was absolutely confident in his knowledge of wild mushrooms." (WARNING!)

The mushroom hunt was fruitful. The family came back with enough mushrooms of various types to use in making a nice spaghetti sauce to have for supper that evening.

The Changs' problems started about six hours after supper with vomiting and upset stomachs. After a very uncomfortable night, Mrs. Chang was too weak to take her family to the hospital; so Sunday morning (Feb. 4th) she asked a neighbor to take them to the emergency room at the Alta Bates Medical Center in Berkeley. (Unfortunately, this was 14 hours after ingesting the mushrooms.) After spending three to five hours at the medical center, the family was released, having been given medication to reduce vomiting.

It was still not suspected that *Amanita* poisoning was involved and no lab tests were given to check for this. *Amanita* poisoning usually doesn't cause the serious gastrointestinal symptoms that the family experienced.

Within a short time, however the medical center realized what they were dealing with. Evidently two toxic mushrooms were collected and consumed that Saturday: *Amanita phalloides* and a yet unidentified poisonous mushroom which made the family ill enough to check into the hospital Sunday morning and masked the effects of the *Amanita*. All four family members, Anton (11), Jennifer (13), Jason (14) and their mother Rita, were showing signs of liver damage and it was suspected that all would need liver transplants.

Fortunately, only a part of one cap of *Amanita phalloides* was included in the sauce. Rita and her two sons were the lucky ones in this game of Russian roulette. Little thirteen year old Jennifer wasn't so lucky. By Wednesday, she was moved to the top of a list of 700 potential San Francisco area liver recipients. She would die within a week if she didn't receive a liver transplant.

Wednesday night, the University of California Medical Center located a donor organ. In an all-night operation, lasting from 12:30 to 8:15 on Thursday morning, a team led by Dr. Jean Emond, the surgical director of UCSF's pediatric liver transplant program, grafted a portion of the healthy donor liver onto Jennifer's damaged liver. (Early Thursday the portion of donor liver not used was used in a second partial transplant.)

Since this took place, Jennifer's condition has stabilized and she has hopes of a full recovery. The boys recovered fast enough to be back in school within a couple of weeks.

Arturo Leyba-Sanchez's Story

The second story is more tragic.

Life had been hard for Arturo Leyba-Sanchez. In Mexico, Arturo was in the "poultry business," but when that went sour he decided to come to the U. S. to find work to support his wife and three daughters. He crossed the border illegally, paying smugglers known as "coyotes" and hiding in a van.

He made his way to Petaluma, California, 30 miles north of San Francisco, where he shared a rundown house with his brother and sister-in-law. He would often work odd gardening jobs, sending money back to his family in Mexico when he could. But with all of the recent rains he was finding jobs scarce.

Being resourceful and perhaps trying to make his money stretch a little further, on that same fateful Saturday, February 3rd, he picked some wild mushrooms to eat. Upon bringing them home, his sister-in-law advised him not to them. He brushed her advice aside, saying "I know what I'm doing." (WARNING!)

He cooked the mushrooms, now believed to be a mixture of *Amanita phalloides* with less toxic fungi, with oil and salt and had them as an afternoon meal, washed down with a beer. He became sick within a hour, yet he went out later to drink with friends.

He became sick that evening and was vomiting all Sunday. He assumed that it was because he had a lot to drink on Saturday night. By Monday, he was very bad. His brother and sister-in-law insisted he go to the hospital and took him to the Petaluma Valley Hospital in a semiconscious state.

Arturo Leyba-Sanchez died about 7:30 a.m. on Tuesday, February 6th. He was 43. The autopsy showed signs of amanitin toxicity.

THE UNICORN ENTOLOMA AND THE TENSION ZONE

by Steve Nelsen

Point Beach was too dry for finding many mushrooms at the WMS Foray this past September 9th, but there were a few. Adrienne and I intercepted John Steinke near a tamarack swamp where he was successful the year before, and in one of the few places that was still moist this year, we found 5 small species of *Entoloma* among mosses in an area of maybe 30 square yards. Two were brightly colored and closely related, the "Unicorn Entoloma", *E. murraii*, which is bright yellow and has a distinct "horn" in the center of its sharply conical cap, and *E. salmoneum*, which is orangey-salmon when young and often lacks a horn. None of us had seen the Unicorn before.

Peck found both of these mushrooms at Sandlake, NY, in August of 1871, and admitted to some trepidation about describing them as separate species because they are so similar in every respect except color and the horn. I believe that no one has ever proposed that they be combined. Neither species is common in the upper Great Lakes. Kauffman called *E. salmoneum* "infrequent and local" in his 1918 *Agarics of Michigan*, and he says that *E. murraii* had only once been found outside of NY, by Mrs. T. A. Cahn of the Detroit Mycological Club at Eloise, MI (in 1912). Both appear in popular mushroom guides because they are easily identified and pretty, if rather small. Phillips' book has good photos (of somewhat tired specimens), but the usually excellent Audubon guide by Lincoff manages to make *salmoneum* look as yellow and as horned as *murraii*, which is not true. It was also unfortunate to coin "Salmon Unicorn" because the majority of them have no horn. These species are microscopically nearly identical, their most distinctive feature being that their spores, which grow corners as they mature, are almost cubical (if the large apiculus is ignored) by the time they are shed; they are technically described as "quadrate."

Mazzur (in his 1976 *Pourazella* monograph) uses these species to illustrate "northern" versus "southern" mushroom distribution in the upper Great Lakes. The "tension zone" (see the figure) has been recognized as significant for over a

century. First described for trees, J. T. Curtis put this concept on a firm footing using 182 varied vascular plants, discussed in his 1959 <u>Vegetation of Wisconsin</u> (which virtually ignores fungi). The shaded region in Wisconsin shows his final conclusion about where the tension zone lies (redrawn from p. 20). It is the area where the maximum number of north/south border curves for all of his carefully selected species occur, and also correlates approximately with several weather parameters: 67°F average summer temperature, 48 ″ average snowfall, 5 ″ average evaporation in July, 60 days/year of temperature 68°F, and 95 days/year of 0.01 ″ rainfall. This zone enters Wisconsin from NE Minnesota at about 45.5° N latitude (north of St. Croix Falls) and sweeps irregularly southeast to Milwaukee near 43° (43° N runs between Lincoln and Cleveland Ave. in West Allis). I have not seen a correspondingly accurate map for Michigan, but it picks up on the other side of Lake Michigan roughly near 43° N, and apparently extends near this parallel until it dips to cross Lake Ontario and enters northeastern Ohio, where it veers south, broadens, and rapidly loses any significance. The concept of a tension zone also becomes useless in mountains, such as those to the east and south of Ohio.

Documented mushroom collecting has especially been done in Michigan, the University home of C. H. Kauffman (1869-1931) and A. H. Smith (1904-86), who made Ann Arbor the center of American mushroom studies for most of this century. Areas intensively collected have been quite non-uniform. Mazzur believes that enough collecting to ensure that one knows what is really there has only occurred in parts of the three counties marked with dots on the map. Cheboygan County, well to the north of the tension zone at the tip of the LP, and Washtenaw County, to the south of the tension zone where Ann Arbor lies, have been well scoured near UM field stations by generations of faculty and students. Gratiot, the middle county which lies within the tension zone according to Mazzur (and this did not come from Curtis, his only reference), was collected extensively only by the single amateur, Victor C. Potter of Ithaca, but that suffices. Potter (1920-64) was confined to crutches by severe arthritis, yet collected 20,000 specimens over 15 seasons: Smith and Thiers dedicated their Bolete monograph to him. Mazzur points out that plants as distinctive as *E. murraii* and *salmoneum* won't have been missed. From all collections stored in the UM Museum, Ann Arbor, *E. salmoneum* appears 60 times from north of 44° N (including Cheboygan Co.), 11 times between 43 and 44° (Potter's territory), and never south of 43° N. The corresponding *E. murraii* counts are 11, 7 and 1 (it never reappeared after the 1912 find). Both are northern species, and *E. murraii* appears to be a lot less common than *E. salmoneum*. I'll add that Potter pretty clearly found what was there, rare or not.

The tension zone was not located from finds of rare species, but by determining where common species which start or stop appearing somewhere from north to south start or stop accompanying the species with which they are found where they do grow. The tension zone attempts to deal with macroclimate, while finding a place where a particular uncommon mushroom occurs involves microclimate. For plants as unusual as these two northern *Entolomas*, finds south of the tension zone will mark special habitat which can support them. John Steinke and I have found *E. salmoneum* in the Southern Kettle area and at Baxter's Hollow in Sauk County (well documented to harbor many disjunct populations of other northern plants as well) respectively. Graham points out in 1944 that *E. murraii* and *E. salmoneum* also occur in northern Illinois sphagnum bogs (which are themselves rare that far south) and in mosses under conifers. Both species occur in the Smokies (Hesler's bailiwick).

Mazzur discusses a third species from the same quadrate-spored complex, *E. luteum*, which is yellow (but less so than *murraii* when mature), less sharply conical, and lacks the horn. It was collected 26 times north of 44°N in Michigan but was never uncovered by Potter, so it is less rare than *E. murraii* far enough north, but does not come as far south. I found a quadrate-spored *Entoloma* answering to this description at Baxter's Hollow in 1982. It looks yellow in my pictures and might be *E. luteum*, but this was before I kept specimens and I am not sure that it is not the considerably more common *E. salmoneum* (which I had not seen then). There are also brown species which used to be put in *Leptonia* and *Nolanea* belonging to this quadrate-spored complex, and they can only be told from others by looking at their spores. I'd be very interested in the locations of any quadrate-spored *Entoloma* finds, as well as in dried specimens of small brown-capped ones so I could see if they belong in this group.

MUSHROOMS 101: Pleurotus, Panus, etc.

by Brian McNett (reprinted from MYCOINFO 9/27/95)

Due to the sheer complexity of the family Tricholomataceae, I've chosen to break it down into relatively small chunks. I'm also making frequent use of my reference materials, which up to this point wasn't terribly necessary (I've been

hunting mushrooms from about the age of 3, and though my knowledge is not complete, I've learned a bit.).

This artificial grouping of wood inhabiting mushrooms is characterized by their mostly off-center to lateral, or even rudimentary, stalk. Gills are usually adnate to decurrent (broadly attached to the stalk to descending the stalk), but not with serrated edges. A veil is absent (except in *Pleurotus dryinus*), nor is there a volva. Spores are smooth and not amyloid (a chemical trait), with the exception being *Panellus*. Spore print is white, yellowish, pale lilac or pinkish. *Pleurotus* itself has been broken into a number of segregate genera based on microscopic traits. I've attempted to include a few of those here, but few can be distinguished properly in the field. Although this loose grouping consists mostly of "safe" mushrooms, I offer no endorsement on edibility. CARRY AND CONSULT A FIELD GUIDE AS TO EACH SPECIES.

<u>Pleurotus</u> Soft and pliant, deeply decurrent gills. Stalk almost completely absent. Color varies throughout the genus. Some tropical species are bright yellow or brilliant pink. Remarkably cosmopolitan, though they prefer hardwoods, they are known to grow on old newspapers, and discarded coffee grounds! No known poisonous varieties, in fact, many species of *Pleurotus* are now in cultivation throughout the world (Given their cosmopolitan nature it's easy to see why). *Pleurotus ostreatus* is among the best edible mushrooms. Microscopically, the mycelium possesses awl-shaped sidebranches on the hyphae, which exude droplets of yellow liquid which is toxic to nematodes.

<u>Panus</u> Tough and often hairy. Most species I'm acquainted with are usually violet or ruddy brown when young, but fade to tan at maturity. *Panus strigosus* tends to be white, buff, or creamy-colored (yellowish at maturity), and can reach nearly 2 feet across, but is apparently rare. They completely lack the lubricous quality of *Pleurotus*.

Panellus Usually more viscid than *Pleurotus*, sometimes with a gelatinous layer under the cap cuticle. Gills are commonly colored, usually dramatically different than the cap (some shade of yellow, orange-yellow, olive-yellow, pallid, pinkish-gray, violet, brownish). At least one species *Panellus stipticus* has luminescent gills. Spores from dried specimens are amyloid. Some species are bitter, especially in age.

Hohenbeuhelia Somewhat rubbery and gelatinous, spatula-shaped when upright, or petal-shaped when shelving, with a stem-like base usually in small clusters on rotting or buried wood. Generally brown, grayish-brown, bluish-black, hazel-brown, or tan capped. Closely crowded gills which may become crisped (wavy) in age or dry weather. Microscopically, the gills possess large thick-walled sterile cells (cystidia). Formerly included in *Pleurotus*.

Hypsizygus Only two species are known, both formerly included in *Pleurotus*, but segregated because they lack the awl-shaped sidebranches on the hyphae. *Hypsizygus tessulatus* with a marbled cap and well-developed stem (stem usually with hollow sections), usually fruiting high in trees (often in live trees, but always on necrotic tissue), widespread, but not common. Gills are adnate, never decurrent. *Hypsizygus ulmarius*, with a tan or pinkish cap, breaking into scales with age, usually on elm, also on living trees (again on necrotic tissue (not a true parasite)), rare. *Hypsizygus mycelium* is also toxic to nematodes, suggesting a close relationship to *Pleurotus*.

Phyllotopsis Densely hairy cap, bright orange (*P. nidulans*). Rudimentary or absent stalk. Gills close, narrow. Pinkish or apricot-pink to pinkish brown spore print. *Phyllotopsis nidulans* has a disgusting odor of sewer gas or rotten eggs. (1)

Other genera **Rhodotus** of which only *R. palmatus* can be easily distinguished by its convex to broadly convex cap, which is somewhat gelatinous in consistency and "rivulose-reticulate" according to Thiers and Largent (2), and creamypink spore print. **Resupinatus** with very small fruiting body, almost cup-shaped, gelatinous, not blue, not orange, not white, stalk absent or attached laterally to a sterile portion of the cap.

- (1) Arora, David, <u>Mushrooms Demystified</u>, Ten Speed Press, 1986.
- (2) Largent, David L. Thiers, Harry D., <u>How to Identify Mushrooms to Genus II: Field Identification of Genera</u>, Mad River Press, 1978.

RECIPE: REDUCED FAT CHICKEN TETRAZZINI

by Joanne Pasek

- 3 teaspoons corn oil margarine (divided)
- 3 tablespoons white dry wine
- 1 pound (about 6 cups sliced) mushrooms, sliced and precooked to desired doneness
- 6 tablespoons unbleached all-purpose flour
- 1-1/2 cups defatted chicken broth
- 1 cup non-fat milk
- 1/2 teaspoon salt
- 1/4 teaspoon ground black pepper
- 1/4 teaspoon dried thyme, crushed
- 1/4 teaspoon dried tarragon, crushed
- 1/2 cup light sour cream
- 12 ounces yolkless egg noodles, cooked per package directions and drained
- 1-1/4 pounds boneless, skinless chicken breasts, cooked and cup to bite-size pieces (about three cups)

Melt margarine in a medium saucepan over medium heat. Stir in flour with wire wisk, and cook while stirring 1 minute. Pour in chicken stock and wine. Stir. Slowly stir in milk (at room temp.). Simmer 15 minutes. Add salt and pepper, thyme and tarragon; stir 1 minute more. Remove from heat, blend in sour cream. Combine noodles, chicken, mushrooms, and sauce in a large mixing bowl. Pour into 9 by 13 inch baking dish sprayed with a non-stick vegetable coating. Cover with foil. Bake at 375 degrees for 20 minutes until hot. Makes 8 servings.