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MESSAGE FROM THE PRESIDENT

Well, it's the beginning of a new year. While we're waiting for the fungi to appear, let's take a look at what's happening with your own local mushroom club.

If you love mushrooms and food, we have just the thing for you. Don't miss our April dinner at Heaven City Restaurant near Mukwonago. The cost is \$20/person, and you must reserve a space beforehand. For further details, see the article inside the newsletter and the enclosed flyer. This event is the brainchild of John Steinke -- Chefs will give short talks between each course, talking about the mushrooms and explaining their preparation. If you love mushrooms and food, don't miss this.

We've got a couple of exciting forays coming up this year. The first is exciting because it involves MORELS. Tom Volk of the Forest Products Research Lab in Madison is holding his second annual morel foray at an undisclosed location. We are meeting in Waunakee, then caravanning to the foray site. The second is a Labor Day weekend getaway to be held at Treehaven Nature Center near Tomahawk, Wisconsin. This has been arranged by Alan Parker and Carol Lamphear-Cook -- two of the club's professional mycologists. If you've never been on a trip where the focus is mushrooms, you should try it. The picking is great and we'll have the experts there to help with identifying. It's always an intense experience. Be sure to contact Alan or Diana Parker if you want to go. Space is limited.

Because of the demand suggested during our annual meeting last June, we've made our very own Wisconsin Mycological Society sweatshirts. These were designed by one of our artist members (and Vice President): Tula Erskine. They carry a unique design, come in three sizes (M-L-XL) and cost only \$25. To order one, sign up at the upcoming March 15th lecture. Wear it proudly.

If you own a computer and have communications capacity, you may want to connect with MYCONET, a mycology bulletin board service. The number is (408)866-9247. Most areas are open to everyone, but some areas, such as databases, are closed unless you wish to pay an annual membership of \$35.

Lastly, don't forget that we have our eleventh annual Mushroom Fair coming up in September at the Milwaukee Public Museum. If you want to volunteer, see Kris Ciombor, or if you have ideas for the fair, see Kris or Martyn Dibben.

This and all of our regular features also -- We've got something for everyone this year. As always, if you have new ideas for the Club tell me or one of the board members about it and maybe it will become reality.

Peter Vachuska,
President

UPCOMING EVENTS

March 15 -- Slide presentation by Steve Nelsen, "Mushrooms in July",
7:30 p.m., Mitchell Park Pavilion.

April 13 -- Mushroom dinner at Heaven City Restaurant in Mukwonago,
\$20/person. Contact John Steinke to make reservations. Further
information is enclosed in this newsletter.

May 8 -- Annual morel foray. Meet at the Waunakee City Park at 10 a.m. to
caravan to site.

June 18 -- Annual picnic and business meeting at Falk Park.

Further details on the May and June events will be provided in a separate mailing.

WHAT'S NEW FOR WMS AND YOU?

We now have a sweatshirt all our own, that's what! It is gray (heather) with a white fairy ring in green grass and the name of our organization on its front. The price of the sweatshirt is \$25 (including sales tax) and it is available in medium, large, or extra-large sizes. To order one, put your name and shirt size on the sign-up sheet when you next come to a WMS meeting. Otherwise, you can call Tula Erskine at 964-0818 (or the Vachuskas at 335- 3339) and she will put your name down. When there are enough names, another printing will be arranged. A few mediums and larges from a small trial printing are currently available and can be purchased immediately at the March meeting.

Artist and WMS board member Tula Erskine designed the shirt in response to the interest in having a club shirt that was shown at the annual picnic last year. Tula has also designed other T-shirts or sweatshirts, including one that won the NAMA T-shirt contest in 1988.

MUSHROOM DINNER

WMS Secretary/Treasurer John Steinke has made arrangements with Chef Scott McGlinchey for a special mushroom dinner to be served at McGlinchey's Heaven City Restaurant on April 13. The restaurant is located on County ES just east of Mukwonago (see the enclosed flyer for a map). The dinner will begin at 6 p.m. and will consist of the following courses: (1) Grilled shiitake mushroom with fontina cheese on a port wine mushroom reduction; (2) Bear's tooth mushroom broth with oyster mushroom dumpling; (3) Seasonal greens with warm portabella mushroom dressing; (4) Sauteed chicken breast dredged in mushroom powder and served with mushroom catsup and mushroom soy fried rice; (5) Mushroom ice cream with dry sack sherry. Reservations can be made by sending \$20 for each WMS member planning to attend the dinner to John Steinke. The price of the dinner is \$30 for nonmembers.

The site where the Heaven City Restaurant is located has had an interesting history. Over the years, it has been, among other things, a farm, a retirement home for brewery workhorses, an amusement park, and a school. In the 1930's, it was a religious commune (from which the name Heaven City originated) occupied by followers of one A. J. Moore. In the 1940's, Moore developed the Heaven City Hotel, which was something of a house of ill repute.

In 1989, the main house at the Heaven City site was restored and opened as a restaurant specializing in contemporary midwestern cuisine. The restaurant has won numerous awards and has been judged one of the 25 best restaurants in the state by Milwaukee Journal food critic Dennis Getto. The restaurant is evidently very innovative and confident, as shown by a recent feature article in the Milwaukee Journal on a special event at Heaven City, "Rude Night", where the waiters and waitresses are allowed to (in good fun) let off steam and be less than polite with the customers. Some readers might also remember a skydiving truffle drop at Heaven City last year, that Alan Parker reported on in the March '93 newsletter.

This dinner should be a real mushroom feast for members to enjoy. It will be a unique opportunity to hear about preparation of mushrooms from a professional chef and eat his work at the same time. So, make your reservations and plan to attend this special event.

REGISTRATION REMINDER

WMS Labor Day Weekend Foray at Treehaven

This weekend foray will be held 2-5 September 1994 at UW-Stevens Point Treehaven Field Station, just east of Tomahawk in the north-central part of the state. The cost is approximately \$90 per person for the entire weekend (3 nights lodging and 7 meals). Rooms may be reserved per couple or per 2-4 persons wishing to room together. Lodging is in a comfortable, heated, modern dormitory, with abundant hiking trails and woods right outside the door. For further information, see the December newsletter or call Alan/Diana Parker (542-7688). This foray is by reservation only, so call soon if you would like to join in this excellent opportunity to collect and study fungi in the north woods during the peak fall season!

MEMBERS' AND FUNGAL BRIEFS

WMS is sad to learn of the loss of one of its more unique members. Gordon Schroeder died on December 17, 1993 at the age of 65. Known as "Grandpa Gordie", he entertained the club with his magic tricks and humor at annual meetings and at the Mushroom Fair. Those of you that knew him might recall some of his impish spirit by reading a short article on "mushroom magic" that he wrote for the Sept. '86 newsletter. (Milwaukee Journal, December 19, 1993)

Evidently, this March 23, the members of the International Mushroom Pickers Society (IMPS), a Milwaukee mushroom club for people of Polish ancestry, will celebrate either the 20th, 21st, or 22nd anniversary of their group with a mushroom hunt at the Mitchell Park Domes. There is an amusing article, "Club Fungi: Rock marks the spot," about this group in the March 2 Milwaukee Sentinel.

Half Price Books in the Brookfield Fashion Center on Bluemound Road recently had an excellent price on Roger Phillips' "Mushrooms of North America". They are selling the hardbound edition for \$14.95 -- this was originally priced at near \$40.00 when issued in 1991.

Two famous mycologists passed away recently. Dr. Rolf Singer, of the Field Museum of Natural History, died on January 18. Singer had a long and productive career in mycology and published over 300 papers and several books. His name is a common occurrence in mushroom guides, as he identified numerous species of fungi. Also, Canadian mycologist, Dr. Rene Pomerleau, died in October. Pomerleau was well known for his popular book, "Mushrooms of Eastern Canada and the United States". (Mycological Society of America)

The California earthquake shook up some California fungi enough to release massive amounts of spores around the epicenter of the quake. There have been 60 cases of so-called "valley fever" caused by inhaling the spores of the fungus *Coccidioides immitis*. Most persons affected don't develop any symptoms, but some develop cold-like or respiratory problems, and in less than 1% of the cases, death results. Scientists believe that the cases seen are a direct result of fungi being agitated by the earthquake. (Milwaukee Journal, February 26, 1994)

JANUARY SLIDE SHOW AND SOCIAL

As cold as the weather was on January 19th, it could not dominate the conversations of the thirty hardy souls that attended our first gathering of the 1994 season. Our president, Peter Vachuska, was one of the casualties of the cold (to be more precise, his car was the casualty), and in his absence former president Martyn Dibben was kind enough to conduct the business of the meeting. During this portion, the need for volunteers for the September 25 MUSHROOM FAIR was addressed. This is a very good way to get to know members of the society and become more familiar with the fungi. We had only four members who brought slides this year, but every one of these little windows to warmer times was well received. This year's food was supplied by many contributing members with Kris and LeRoy Ciombor continuing their support (LeRoy's MOST EXCELLENT CHOWDER). This format worked pretty well, so if anyone out there in newsletter land thinks they have a MOST EXCELLENT recipe, set it aside, you may be called upon.

At this time, I would like to thank all of the members who helped make this a success: the members who brought slides, the members who brought food, the members who ate the food, and the members who gave \$43 in donations. Everyone's contribution was appreciated. I would like to list everybody, but rather than risking omitting somebody, I will not attempt this appropriate gesture.

by John Steinke

FEBRUARY MEETING

The February WMS meeting was held on the 15th at the Mitchell Park Pavilion, with about 20-25 people in attendance. Bill Blank presented the program, a NAMA slide show, "Mushrooms: Macro to Micro". The intent of the show was to point out some of the significant macroscopic and microscopic features of fungi and how the two types are related. An example of this connection is how the macroscopic features of a mushroom cap depend on the microscopic design of its cells. For instance, the smooth, silky texture of caps of *Entoloma* and *Pluteus* species is related to how the dermal cells of these mushrooms all rise to the same level. In another example, the distinctive splitting of the cap in the species *Inocybe* is related to how its hyphae run parallel to the surface, making it easier for the cap to split.

Supposedly, this is the best slide show that NAMA has available, and I don't doubt it. In fact, our club watched this same program a number of years ago, but it still seemed new and fresh to me. The photography was beautiful, and the ideas presented were thoughtful and interesting.

by Colleen Vachuska

1993 NAMA FORAY
by Dave Menke

I arrived in Seattle the Friday before the Dr. Daniel Stuntz Memorial Foray sponsored by NAMA. There was plenty of time to do some private hunting on national forest lands while sightseeing at Mt. Baker, visiting wineries, buying smoked salmon, and enjoying the company of relatives on a boat trip to the San Juan Islands. Even with David Arora's "Mushrooms Demystified" and "The New Savory Wild Mushroom" by Margaret McKenny and Daniel E. Stuntz at hand, many of the species I found were not identified before arriving at the foray. One species that was identified, *Lepiota rachodes*, carpeted the area around each old Douglas Fir stump in Anderson Lake State Park, a few miles below Port Townsend.

The foray was headquartered at Fort Worden State Park in Port Townsend, Washington on the Olympic Peninsula. The fort was formerly used to guard the passageway from the Straights of San Juan de Fuca to Puget Sound. It is on a bluff overlooking a beach. Housing and service buildings surround a large parade ground.

About 350 persons attending the foray slept in buildings ranging from officers' quarters to barracks. The officers' quarters were large houses containing individual bedrooms and common areas consisting of a large dining room, living room and sit-in kitchen complete with appliances and utensils. The barracks consisted of mostly individual rooms and some multi-bed rooms with common shower and toilet facilities segregated by sex.

Meals were served by professional caterers. The evening meals were prime rib, seafood, and barbecued salmon. Breakfast menus included a variety of traditional eggs and meats, hot and cold cereals, and a full range of beverages and juices. Sack lunches were available for foray participants.

There were so many programs that you could attend only 1/3 of them. All seminars and lectures held during the day were held at the same times as the forays. You had to choose between programs or forays.

All day forays were to the Ho Rain Forest and Lake Ozette in Olympic National Park. These consisted of 5 and 1/2 hours of bus ride and 2 hours of hunting. Half-day forays were a truffle hunt and two guided field trips to local areas. I went on the all-day forays and did not find out where the local field trips were held. Picking was sparse for this area due to unusually dry periods preceding the forays. However, what is sparse there is an average to abundant fall here.

Evening programs included "Habitats of the Olympic Peninsula - Forest Types and Trees" - Dr. Jan Hendersen; "Ecology of the Olympic National Park" - Dr. E. Schreiner, NAMA Business Awards and Photo Contest; and "Mushrooms, Monkeys and Man; the Mycology of a Tropical Rain Forest" - Dr. Roy Watling. One evening session was devoted to remembrances of Dr. Daniel Stuntz, in whose honor the foray was named.

After the evening programs were various social activities, including tasting of Washington wines and other local foods, and a night dance where Dr. Roy Watling (Scotland) and Ole Persson (Sweden) played a professional quality jazz session with the band.

Each afternoon a mycophagy (eating mushrooms) session was held at the beach house. These sessions often extended into the evening. A professional chef from the Puget Sound Mycological Society was on hand and the cuisine was excellent. This was a popular place!

This was my first NAMA foray, and it will not be my last. I hope that some of our members will go to one of these forays if they have a serious interest in meeting and hunting with some very interesting people in the field of mycology. The NAMA foray will be held in North Carolina in 1994, and is rumored to be in Minnesota in 1995. We should be well represented at Minnesota, as that will be within driving distance for most of our members.

1994 NAMA Foray

The 1994 NAMA foray will be in North Carolina sometime during the fall (as this went to press we were not sure of the date.) While the official

announcements and registration forms are not quite out yet, this year's foray will be held at the Montreat Conference Center near Asheville in the southern Appalachian Mountains.

Orson K. Miller, Jr. will be the principal foray mycologist. While final plans are still being honed, it is anticipated that Dr. Alan Bessette will discuss mushrooms of the area and tell us about the major genera and key identifying features of boletes. Dr. Tom Volk will talk about the genus *Armillaria* in North America. Steve Stephenson plans a talk on the distribution and ecology of *Myxomycetes*, while Mike Castellano will address truffle-like fungi and their uses.

Gary Lincoff will present programs in ethnomycology, as well as toxicology, and Bill Roody will discuss "Mushroom Trickery." Walt Sturgeon will present a program on Appalachian mushrooms. Taylor Lockwood will offer his fascinating and beautiful slide and music program, "Treasures of the Mushroom Kingdom."

There will be workshops as well. Arleen Bessette will conduct a beginners workshop, while Ray Fatto offers one on macroscopic and microscopic *Russula* identification. Jay Justice is doing one on *Amanitas* of the southeast. Sam Norris will teach us how to draw and paint mushrooms. Allein Stanley will show us how to make paper with them, and Ken Crouse and Glen Bailey will show us how to grow them.

Don't forget the pre- and post-foray workshops. The pre-foray program on *Hypomycetes* will be conducted by Dr. Bryce Kendrick at the Highlands Biological Research Station, and Ursula Pohl will conduct the post-foray program at Montreat on dyeing with mushrooms.

Thanks to Joe Miller on MYCONET for the information.

THE 'MAN ON HORSEBACK' AND SIRLOIN STEAKS
by Steve Nelsen

Tom Volk asks in the March '93 newsletter how *Tricholoma flavovirens* got the name 'man on horseback.' This is really only a question because of a nomenclatural change which I find puzzling. Almost all English 'common names' for mushrooms are simply translations of their Latin names, because real English common names do not exist for very many mushrooms. This particular mushroom is no exception to the general rule. This species was named *equestre* by Linneus (Carl von Linne, 1707-1778, the Swede who invented binomial nomenclatural classification into genus and species). Fries, whose 1821 book is supposed to be the starting date for mushroom nomenclature, used Linneus' species name. "Equestre" is the Latin adjective referring to horse-riding. I believe it must be simply a translation of the German folkname for the mushroom, which is "Ritterling". All *Tricholoma* species are called "Ritterling" in German, with various modifiers; this is the yellow-gilled one. Linneus and others, of course, just translated names which were in common use into Latin. The ending "-ling" is used for most folknames of mushrooms, and "Ritter" means "knight", so this mushroom was "man on horseback" a long time before Linneus translated the name into Latin, and somebody else translated it back into English.

The origin of a real folkname is of course always a guess, and anyone can do that. My guess will be that "knight" was chosen to confer rank to an excellent edible mushroom, in the same vein as an English king dubbing an especially good cut of beef "Sir Loin", an apocryphal but often repeated story.

Wilfred Funk ("Word Origins", Bell: New York, 1978 reprint of 1950 book) found the king as Henry VII, Charles II, and James I in various renditions of the story, a rather sure sign that the story isn't true. Although it does not help my case, Funk also points out the real origin of "sirloin", which is misinterpreted French: "sur" is "above", and "longe" is "loin". All educated people in England spoke French for hundreds of years, but most of the people never did, and there are many bungled French words in English. My favorite botanical one came up during a walk with a German friend who is interested in flowers, and wanted to know the English names for everything. I told him that a yellow one by the path was "dandelion". He pointed out that it is "Lowenzahne" (lion's tooth) in German. Well, we try to call it the same thing, but don't quite manage it. The French name is the same as the German, "dent de lion", which was simply bungled into "dandelion" by someone who didn't know any French.

The species in question is the type species of the genus, the genus is the type for the largest family of gilled mushrooms, and it was properly referred to as *Tricholoma equestre* (L.) Quel. or Fr. for over 100 years. However, the name was changed to *T. flavovirens* (Fr.) Lundell, possibly

sometime after World War II (at least, Graham used equestre in his 1944 manual, the latest in which I have found the name). The most puzzling things to me about this business are who S. Lundell is, on what grounds he wanted to change a Linnean species name, and why on earth mycologists would pay any attention to him if he did. Reference to Lundell's work appears neither in my German nor American books on mushrooms.

THE USE OF NEUTRAL CHARACTERS IN MUSHROOM IDENTIFICATION
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- 1a. Gills attached to the stipe
- 1b. Gills free from the stipe

- 20a. Odor somewhat like coal tar; taste disagreeable; stipe coated with gray fibrils or squamules.
- 20b. Odor and taste merely farinaceous.

- 22a. Pileus conic; yellow with a dingy to pale fuscous disc; under conifers
- 22b. Pileus broadly expanded, some shade of drab; growing under hardwood

If you have ever used the keys in "How to Know the Gilled Mushrooms" by Smith and Weber, in David Arora's "Mushrooms Demystified", or in a similar reference, you have seen these types of characters used. Why are these characters that don't seem to matter used in these keys? Who cares if the pileus has a pale fuscous disc? What's the difference if a fungus grew under a conifer or under a hardwood? Why is the distinction between two closely related species often based on something that seems so... well... stupid? The reason is that fungal systematics, as well as the systematics of all groups of organisms, is based on neutral characters.

But what are neutral characters? Neutral characters are those that have some degree of variability between organisms, but ideally, the character will have no effect on the survival of the organism. For example, it impacts very little on survival if the gills are attached or are free from the stipe. Spore color has virtually no effect on reproduction. The structure of the pileipellis (cap cuticle) doesn't matter. Spore size and shape are genetically controlled, but a cylindrical spore of 10 microns X 4 microns can survive just as well as a spherical spore of 6 microns X 6 microns. The survival of a species does not depend on whether there is a chemical in the spore walls that gives a blue (amyloid) or red (dextrinoid) reaction with Melzer's solution. Hence, these NEUTRAL CHARACTERS are free to change and evolve within and between groups.

It is a little more difficult to see the neutrality of several other kinds of characters, such as type of nutrition or configuration of the spore-bearing surface. The neutrality of these characters can be more easily understood if one considers that biological organisms have several overriding needs, such as nutrition, growth, and reproduction, but the WAYS that these needs can be satisfied really don't matter, as long as conditions are right. The method may have to do with adaptations to a particular environment or substrate. Fungi that fulfill these needs using similar methods are usually thought to have evolved from a common ancestor and are grouped together taxonomically using such neutral characteristics.

For example, fungi need to reproduce. Mechanisms for reproduction may vary depending on method of dispersal and availability of a specific substrate. Some Gasteromycetes such as Cyathus (the bird's nest fungus), Pilobolus (named after a dance troop), and Sphaerobolus (the cannon fungus) put very few "eggs in one basket." However, most other fungi produce and disperse as many spores as possible to ensure the survival of just a few. Methods to do this vary with the group and can be regarded as "neutral" in most cases. Most fungi occupy a very specialized niche, e.g., wood-rotters or mycorrhizae-formers are often restricted to members of a single species, genus, or family of hosts.

Since most spores of fungi are disseminated by the wind, the chance for a spore to land on a substrate that it can actually use and survive to reproduce is very small, probably less than one in a million. For example, we are not knee-deep in Calvatia gigantea (giant puffball) fruiting bodies, which is what would happen if all of the spores of just one fruiting body survived to reproduce. The point here is that to ensure the survival of their offspring, most fungi produce large numbers of spores.

Basidiomycetes produce all their spores on an external club-shaped structure called a basidium, so the easiest way to produce more spores is to have a greater surface area on which to produce those basidia. Mushrooms (Agaricales) generally do this by producing gills or pores, which increase the surface area by ten-fold or more in many cases.

Puffballs such as *Lycoperdon* and *Calvatia gigantea* increase their surface area for spore-bearing by increasing the number and size of internal chambers that have basidia on them. So to some degree, the method by which the surface area is increased in a particular fungus (theleporoid, merulioid, folds, gills, teeth, pores, coral-like branches, etc.) can be regarded as a neutral character.

However, many of the problems with classification have arisen because a given character in two unrelated fungi (such as the pores in polypores and boletes) has arisen independently. This is known as CONVERGENT EVOLUTION. Modern taxonomists try to separate fungi with convergent characters by using other techniques, such as microscopy or even molecular biology. For example, all of the toothed fungi were once placed in the family called the Hydnaceae, but are now placed in at least 56 other genera in 10 families based on microscopic, nutritional, and other criteria. Most of these are placed in genera that also contain non-toothed fungi.

Another example of a neutral character that has received increased attention is nutrition. For a fungus, the mode of nutrition (how they get their food) doesn't really matter. All fungi are HETEROTROPHIC (as opposed to AUTOTROPHIC plants), deriving their nutrition by digesting, then ingesting. (It should be noted that animals are heterotrophic also, but get their nutrition by ingesting, THEN digesting!). The mode of nutrition has become an important character at the generic level in the taxonomy of the Agaricales. For example, *Tricholoma* is considered a genus of mycorrhizal fungi, while *Armillaria* contains wood- and root-rotters. This means that fungi formerly familiar as *Armillaria*, such as the mycorrhizal *Armillaria ponderosa*, *Armillaria caligata*, and *Armillaria zelleri* are more properly placed with other mycorrhizae-formers in *Tricholoma*. There are numerous other examples of name changes resulting from an increased emphasis on mode of nutrition.

Depending on the group of fungi under discussion, nutritional mode can be used as a character at different taxonomic levels. For example, in distinguishing the genera of polypores, which are essentially all wood-rotters, the TYPE of rot produced by the fungus (i.e. white rot vs. brown rot) is an important character in separating genera.

Despite the large number of types of fungi, there are only a limited number of macroscopic characters that are useful (e.g., volva, annulus, shape of the cap, separation and thickness of the gills, etc.), so in order to make the finer distinctions between species it is often necessary to use microscopic characters. Microscopic characters provide abundant neutral characters that can be used in systematics and include spore size and shape, structure of the pileipellis (the "skin" of the mushroom cap), size, shape and location of cystidia if present, gill trama structure, and so on. However, even these can fail to distinguish closely related fungi, so taxonomists are increasingly turning to the chemical that ultimately determines the characters, namely the DNA. When used in conjunction with macroscopic and microscopic characters, molecular biology is a very useful and powerful tool. It may generate some name changes, but it does prove some relationships that would otherwise not be apparent. A prime example of this is the recently-discovered close relationship between *Suillus*, a genus of boletes, and *Coniophora*, a very common resupinate crust fungus. However, the only reason this relationship was explored at all was because of a neutral microscopic characteristic-- their very similar spore size and shape.

Besides being neutral, another important attribute of a good character is that it should have DISCONTINUOUS character states. The best discontinuous character states are PRESENT and ABSENT; i.e., either something is there or it isn't. The worst kinds of character states are those that intergrade or have a continuous range, such as color and size. For example, it would be difficult to separate a taxon with an orange-red pileus from one with a red- orange pileus. Sometimes a color characteristic may be useful; e.g., it would be easy to separate a mushroom with a consistently red pileus from one with a consistently green pileus. The operative word here is "consistently." Most fungi do not read the keys and do not know how they are "supposed" to look. Continuous characters are also more likely to change with changing environmental conditions.

In summary, neutral characters that are most useful in mushroom identification are those that on the surface may seem not to be important, but it is precisely their non-importance to the fungus that makes them meaningful characters in taxonomy. Maybe now you'll appreciate that dingy to pale fuscous disc.

RECIPE:

TURKEY TETRAZZINI WITH OYSTER MUSHROOMS

by Joanne Pasek

Combine the following:

- 3/4 cup home canned oyster or other winter mushrooms
(or 1/2 cup dried mushrooms simmered in 1-1/2 cups water)
- 1/4 cup diced green pepper
- 1/2 cup diced onion
- 2 tablespoons chopped fresh or 1 tablespoon dried parsley
- 1 teaspoon chicken soup base or 1 bouillon cube.

Simmer about 10 minutes to blend flavors. Add:

- 1 pound cooked ground turkey
- 1/4 cup dry milk.

Heat to blend flavors. Drain liquids from above to measure. Adjust the amount of liquid to 1-1/2 cups, adding water if needed. Return liquid to meat and vegetables.

Add:

- 1 teaspoon marjoram
- 2 tablespoons paprika
- 1/2 pound cooked spaghetti
- 1/4 cup grated parmesan cheese
- 1/4 pound grated swiss cheese (about 1/2 cup).

Heat to simmer and add a mixture of:

- 2 tablespoons corn starch blended in
- 1/4 cup cold water.

Bake at 350 degrees for 1/2 hour. Garnish with paprika, fresh chopped parsley, or toasted bread crumbs. Serves 4-8. Enjoy.

THE END