THE NEWSLETTER OF THE WISCONSIN MYCOLOGICAL SOCIETY June, 1994 Vol. 11, No. 2

### Contents:

- 1) Message from the President
- 2) Summer & Fall Foray Schedule
- 3) Other Upcoming Events
- 4) Labor Day Weekend Foray Cancelled
- 5) Help Wanted
- 6) March Meeting
- 7) Mushroom Dinner by Colleen Vachuska
- 8) Second Annual WMS Morel Foray, May 9, 1994 by Tom Volk
- 9) How was the 1994 Morel Season? 10) Fungal Briefs
- 11) Puffball Madness by Colleen and Peter Vachuska
- 12) More on Puffballs
- 13) A Psychological Profile of the Non-professional Mycologist by John Steinke
- 14) Hygrocybe: Often Colorful "Wetheads" by Steve Nelsen
- 15) Recipe: Mushroom Crescents (Pierozki) by Joanne Pasek

#### MESSAGE FROM THE PRESIDENT

You'll notice our format change with this issue. We've decided to switch to a new magazine-like style. The content hasn't changed, either in quantity or quality, just the presentation. We hope that this is a little friendlier and easier to read.

This has not been an outstanding spring for morels as far as I can tell. The weather has been a little drier than myco-searchers would like. Our spring morel foray gave morels as promised. Though not in great quantities, almost every group found something. Both esculenta and semilibera were found. While I don't get Morchella madness as badly as some (most) of our members, I have been out looking in a few of my favorite local spots -- but without luck, save for 30 or so individuals. The only other mushrooms I've seen were some healthy collections of Flammulina velutipes.

Along with our usual forays, we want to try something a little different this year -- a tree foray. A lot of our favorite mushrooms grow only near a specific kind of tree. Some have what's called a mycorrhizal relationship with the tree. The fungus extends and protects the roots of the tree and in turn gets nutriments from the tree. For example, morels with elm or ash, or certain Suillus with larch or fir. Other times the relationship is more one-sided with the fungus attacking the tree (or at least getting more benefit than the tree is receiving). Grifola frondosa (Hen of the Woods) on oak is an example of this. It's very important to have a good knowledge of trees when looking for mushrooms. This foray will hopefully be a joint venture with the Botanical Club of Wisconsin.

Our first foray of the summer will be the second annual Midsummer's Foray hosted by John Steinke. Last year it was quite successful. Most of us don't think about finding fungi growing in mid-July, and we were impressed with the amount and variety that we saw last year. Of course, having a knowledgeable guide who can judge where the best places are to look helps.

Peter Vachuska

# SUMMER & FALL FORAY SCHEDULE

July 16 -- Midsummer's Foray

August -- Tree Foray (this is a new event)

September 10 -- Mauthe Lake September 17 -- South Kettle Moraine

September 24 -- pre-fair mini-forays

October 1 -- Madison area October 2 -- Point Beach State Forest (Sunday)

October 8 -- Brightondale County Park

Detailed announcements of the forays will be mailed later this summer.

### OTHER UPCOMING EVENTS

June 18 -- Annual Picnic/Business Meeting, Falk Park Pavilion in Milwaukee. Nature hike at 4 p.m., supper at 5:30. Bring a dish to share. Business meeting and election of officers at 6:30. Those of you that ordered a club sweatshirt will be able to pick yours up (with payment).

Sept 25 -- Eleventh Annual Mushroom Fair at the Milwaukee Public Museum.

This year's general theme is "Beauty and the Beast"; also the cooking booth will have a Polish theme. NAMA award-winning photographer Taylor Lockwood will present a talk/slide show.

If you are interested in participating, contact Kris Ciombor or Bill Blank.

## LABOR DAY WEEKEND FORAY CANCELLED

The planned Sept. 2-5 foray to the Treehaven Field Station has been cancelled due to few participants. We might try to arrange such a foray another year. If anyone has another suggestion for where the club could have a future Labor Day weekend foray, please bring it to the attention of a board member.

### HELP WANTED

John Steinke is looking for someone to help him with his duties as WMS Secretary/Treasurer. If you are interested in becoming more active in the club and would like to be the Assistant Secretary/Treasurer, please contact John at (414) 363-7407 or talk to him at the annual picnic.

Another way that you can become more active in the club is by contributing to our newsletter. We have several fine contributors who write more technical articles, but each of you has something to contribute -- an interesting or amusing mushroom-hunting experience, a mushroom drawing, a favorite recipe, a review of your favorite field guide, an essay on your favorite mushroom or on how you first became interested in fungi. Send any contributions to: Colleen Vachuska, 440 North Street, West Bend, WI 53095.

#### MARCH MEETING

On March 15, Steve Nelsen presented a slide show-lecture entitled, "Mushrooms in July" (a followup to Steve's 1991 talk on fungi before June 15). Most of the slides were taken at Wyalusing State Park over a 15-year period. Steve showed a good mixture of edibles and other fungi, most of which can be collected in July, although he cheated a bit by showing a few slides of morels (no one objected). There were a few technical glitches in the program, including having to get someone from the park staff to dim the lights so that we could see the slides, and also discovering that it takes at least 4 mycologists to fix a slide projector. Even that was useful, though, in that it provided time for people to ask questions.

### MUSHROOM DINNER

On the evening of April 13, over 60 WMS members gathered at Heaven City Restaurant near Mukonago to enjoy our club's first ever mushroom dinner. Chef Scott McGlinchey and his staff prepared an excellent 5 course mushroom dinner for us to enjoy. After a round of Italian bread sticks and loaves of other breads, the mushroom courses began wonderfully with "Grilled shiitake on a port wine reduction." This dish with its rich smoky-flavored sauce turned out to be the hit of the meal at my table. The second course was "Bear's tooth broth with oyster dumpling," a pleasant, mild-flavored soup with chewy dumplings. The bear's tooth mushroom was provided by John Steinke. At the beginning of each course, Chef McGlinchey would briefly stop in each dining room and explain a little about the dish being served. In one of his stops, he pointed out how much he liked preparing special dinners such as this because he was able to be creative and do something different each time. This was evident in the salad course, "Seasonal greens with warm portabella dressing," a salad topped with a very good basic dressing served warm and containing finely chopped portabella mushroom. The main course was "Chicken breast dredged in mushroom powder served with mushroom ketchup and mushroom fried rice". Our chef pointed out that the mushroom powder was a way to use stems and other mushroom scraps. The mushroom ketchup was prepared by following a regular tomato ketchup recipe with mushrooms substituted for the tomatoes. The rice contained bean sprouts and chopped hen of the woods (again, courtesy of John Steinke) and was prepared with mushroom soy sauce from an Oriental grocery. It was accompanied by a nice vegetable saute of peapods, zucchini, red pepper, and purple onion. The finale of the meal was "mushroom ice cream with dry sac sherry." The ice cream was prepared with less sugar than a standard ice cream, with the mushroom flavor being provided by mushroom powder. Chef McGlinchey pointed out that this was the only mushroom dessert he knew of, and so he always used it in his mushroom theme dinners. That was fine with me, as dessert was my favorite part of the meal. I really didn't expect mushroom ice cream to be good, but it was, with the sherry being just the right touch. I'm sure that all the members who attended want to thank John Steinke for coming up with the idea for the dinner and making all

the arrangements, and to thank Chef McGlinchey and his staff at Heaven City for a fine dinner and a memorable evening. This should be an annual event!

Colleen Vachuska

SECOND ANNUAL WMS MOREL FORAY May 9, 1994

It was a beautiful day for morel hunting in south central Wisconsin. About 60 people took advantage of the beautiful day to meet at Waunakee Park, anxious to find out exactly where we were going for the day's activities, comparing notes as to who had already found morels, where they had found them (in general, of course) and so on. Several people said they had found morels, but small ones, and they thought it was too early for a bonanza. But all the signs were there: the oak leaves were the size of a squirrel's ear, and the lilacs were just beginning to flower in the city. At our 10 a.m. meeting time, I announced that we would be convoying to Indian Lake County Park, in Dane County on Hwy 19 west of Hwy 12. Everyone jumped into their cars, wanting to be the first ones there to find morels.

After a short explanation of the park layout and possible places to look, potential mycophagists went off in small groups to hunt the elusive morel. Of course I didn't find any myself, at least not at this site. But I would say about 10 people found 1 or 2 or 10 morels each, mostly half-free morels (Morchella semilibera) but also a few smaller black morels (Morchella conica, or M. elata or M. angusticeps or whatever you want to call them) and a few very small gray morels (Morchella esculenta). However, the prize was one by a skilled (lucky?) couple from Watertown (I'm sorry I didn't get your names) who found about 50 LARGE yellow or gray morels, about 5-6 inches tall under some dead elms at the edge of an alfalfa field. I wish (like everyone else did) that it had been me who found the "mother lode," but at least I felt vindicated that I had brought so many people to a spot that actually produced morels! A few Pleurotus (oyster mushrooms) and some Flammulina velutipes (winter mushrooms, velvet stems, enoki, etc.) were also found. And the great abundance of wildflowers gave those that had tired of scraping the ground and turning leaves to no avail something pretty to look at.

So although most people didn't get enough morels for a meal, everyone seemed to agree that they had a fun time. There also seemed to be general agreement that it was more fun to keep the hunting site a secret until the day of the foray. This date was a bit early for the normal morel peak, but due to lack of later rain, I didn't find large numbers of morels in the weeks following. But I did find a whole bunch of black morels later the same day of the foray at one of my secret spots ....

Tom Volk

HOW WAS THE 1994 MOREL SEASON?

Bill Blank, Milwaukee: "We went to a spot that we haven't found anything at in 3 years, and there were morels there this year ... we had about 94 of them." (Bill collected in an elm grove on a river bank, an area which he canoed to.)

Kris Ciombor, Greenfield: "We did okay, we found them here and there, but no real major clump." (Kris and LeRoy hunted in the southwestern part of the state, collecting about 100 specimens.)

Martyn Dibben, Glendale: "The morel hunting was meagre this year. Both N. and S. Kettle Moraines with limited and small finds -- 18 in the N. and 22 in the S.. All small and needing rain -- like the rest of the plant world."

Alan Parker, Waukesha: "It certainly wasn't outstanding, but it certainly wasn't bad." (Alan collected a few hundred morels in the southwestern part of the state, but says that they are getting harder to find there because the dead elms are almost all gone.)

Sunny Rupnow, New Berlin: "We did very well, ... more than we've ever found before." (Sunny and Norm went out every day for a while, collecting about 200 total near their home.)

Thomas Volk, Madison: "I didn't have a particularly good morel season. I found LOTS of black morels at `my spot.' I found hardly any gray or yellow morels, and a few semilibera. I know of people who found more over in Grant County near the Missisippi, but I didn't get a chance to go there. "

- \* When Congress voted to halt funding on the Superconducting Super Collider at Waxahachie, Texas, one of the things that was left behind was a five-mile stretch of lined tunnel 200 feet underground. What does one do with five miles of damp dark tunnels? Raise mushrooms, of course! This is what Omnimex Energy Inc., a Texas firm with ties to a Colorado mushroom farm, is looking to use it for. The firm says that the tunnel is exactly what they were looking for and suited perfectly for raising white button mushrooms. (Milwaukee Journal March 25, 1994)
- \* While fungi are great decomposers of forest matter, this can be a problem when mold attacks fruits and vegetables. However, rather than applying fungicides, researchers at the Department of Agriculture in West Virginia have come up with a novel way to stop all this rot: More fungi! Researchers found that by applying a pink yeast which occurs naturally on most fruits that they can decrease the amount of mold growth to a level below the amount found when the fruit is treated with fungicides. And because it occurs naturally it should be safe to use on fresh produce. (Science News June 4, 1994)
- \* A new method for using fungi to clean wastewater containinated with heavy metals such as mercury or lead has been developed at the Israel Institute of Technology in Haifa, Israel. While using fungi or bacteria to clean wastewater is not new, this method shows substantial improvements. First of all, the fungus used is spent brewers yeast that is normally thrown away and is a waste problem itself; so it does not have to be specially cultured. Secondly, with other methods high concentrations of heavy metals can be toxic and kill the organisms involved, but with this method the yeast is killed before use and this is no longer a problem. So how do dead yeast remove heavy metals from water? Briefly, they are partially dried, then, under pressure, the cytoplasm is removed so that only the cell wall remains. The wastewater is then run through a column of cell walls. Researchers say that they can then separate the heavy metals to be recycled and can also use the cell walls over again. (Discover July 1994)

## PUFFBALL MADNESS

Some bizarre experiences originating at an Easter Sunday party in West Bend put fungi in the local news this spring. Several people became extremely ill and had to be hospitalized after inhaling puffball (Lycoperdon perlatum) spores in an attempt to get high. All have since been released, but many questions remain about how or why this unfortunate incident occurred.

The party was held on the night of April 3, with about 15 people, ranging in age from at least 16 to 20, in attendance. Two central characters were Shane Cook, 19, formerly of West Bend, now living in Knapp near Eau Claire, and Rick Pohanka, 18, of the town of Trenton. Cook called Pohanka from the party and asked if he could get some mushrooms. Cook and several other people then left the party and purchased a bag of mushrooms from Pohanka. The mushrooms had previously been collected by Pohanka and another man in woods near Pohanka's home. Though Cook later testified that the mushrooms didn't look like psychedelic ones he had seen before, Pohanka allegedly told Cook that he had been doing them for 3 days and was hallucinating, and that it was possible to get high by chopping the mushrooms up and snorting them, chewing on them, or sucking them.

Cook returned to the party with the mushrooms in a baggie, put them on the dining room table, and offered them to anyone who wanted to try them. Though it has been reported that no one got high from the mushrooms, at least seven persons who tried the mushrooms experienced illness afterward. Some had nausea and vomiting right away, but it took up to two weeks in some cases for more serious respiratory problems to develop. Reactions included chest pains and breathing problems. Cook, who chewed, inhaled, and snorted the puffballs, was one of the most severely affected. After the party, he went home and vomited for an hour. He was very sick for the next week until finally, when his lips turned purple, his mother took him to the hospital. At the hospital, he spent 18 days in a coma and had surgery to have a portion of his lung removed. For a time he was not expected to live.

Another one of the participants at the party was admitted to West Allis Memorial Hospital on April 14 with respiratory failure and systems of pneumocystis, an unusual kind of pneumonia. A lung biopsy showed spores. Both this man and his girlfriend were treated with steroids and the antifungal medication, Itraconizole. Two other persons who became ill from the mushrooms were hospitalized at Froedtert Memorial Lutheran Hospital, one of whom was in critical condition and on a respirator

during his hospital stay.

Physicians do not know whether the respiratory problems experienced by the youths were caused by an infection or by an allergic reaction to the spores. Certainly, such a severe reaction to inhaling mushroom spores is unusual. Sami Saad, botany professor at UW Center -- Washington County, said that the bag the teenagers inhaled from must have contained a huge number of spores and been very concentrated for such a reaction to be produced. An epidemiologist for the state, Jim Kazmierczak, said there have been only three other reports in the medical literature of respiratory failure caused by inhaling puffball mushroom spores. In two of the cases, the mushrooms were used as a folk remedy to try to stop a nosebleed, and the other case involved children playing.

It was physicians and lab personnel at West Allis Memorial Hospital that made the connection between the respiratory problems experienced by the teenagers and their having inhaled mushroom spores days earlier. The medical personnel at first suspected a more common fungus Cryptococcus, but they were not convinced. Eventually, they consulted Martyn Dibben of the Milwaukee Public Museum who made the identification of Lycoperdon perlatum after looking at residual material, recollected specimens, slides, and lab-plated material. Dr. Dibben has since sent the medical personnel mushroom literature and slides.

The puffball incident and ensuing illnesses were slow to become public. After his son was hospitalized, the father of one of the sick boys brought the incident to the attention of the police. However, the Washington County Sheriff's Department did not release any statement about it for at least a week due to lack of solid information. Washington County District Attorney J. Dennis Thornton suggested that a John Doe investigation be conducted because many witnesses and parents were not cooperating. In a John Doe investigation, subpoenas are issued and persons are questioned under oath in front of a judge to try to determine if a crime has been committed and who committed the crime. May 17 the hearing began at the Washington County Courthouse. Officials were also trying to determine if the state's look-alike drug law could be applied. In this context, the law says that "if the person who supplied the mushrooms told the teens they would get `high' by inhaling the spores, that person would face the same penalties as someone who provided the teens with real drugs." Also, a possible charge of "endangering the safety of another by conduct regardless of life" was to be investigated. The hearing continued on May 25 and concluded on June 3, at which time Circuit Judge Leo Schlaefer ruled that there was probable cause to charge Pohanka and Cook with violating the look-alike drug law. Reasons given for his decision include that the mushrooms ingested at the party looked similar to hallucinogenic psilocybin mushrooms (a sheriff's deputy had testified to this effect, though to someone who knows something about mushrooms this is hard to believe given that one is a gilled mushroom and one isn't); the mushrooms were packaged in a plastic bag as illegal drugs often are, and persons at the party were told the mushrooms would get them "high". Pohanka and Cook are expected to be charged soon. The maximum sentence for delivery of a non-controlled substance represented as a controlled substance is one year in prison and a \$5000 fine. (Summary of information obtained from articles in the West Bend Daily News and Milwaukee Journal between April 21 and June 6, 1994)

Colleen & Peter Vachuska

# MORE ON PUFFBALLS

Puffballs, which occur all across the continent, often in considerable numbers, were used extensively by many different tribes of Native Americans. The Dakota, Ponca, Omaha and other Plains tribes used puffballs mainly as medicinal styptics (substances which check bleeding). The Cherokee placed a small puffball on the navel of a newborn infant keeping it in place until the umbilical cord dried. The Menominee, Potawatomi and Rappahannoks used pulverized puffballs like talcum powder to prevent skin chafing, while the Blackfoot used Calvatia craniformis spores to treat wounds, internal hemorrhage, and eye infections. (Terry Krebs in Spores Afield, the newsletter of the Colorado Mycological Society)

A PSYCHOLOGICAL PROFILE OF THE NON-PROFESSIONAL MYCOLOGIST by John Steinke

I was going to start this article by explaining how, through the years, I had come to see how unique the members of the Wisconsin Mycological Society really are, but I think I recognized that uniqueness the first time I met the membership (January 1986). From where they came, to why they were there, they all had a different story to tell. The Society has all levels of income and enough occupations to start a very diversified business. The only way I could list the nationalities would be as

American and then I am not sure I would be right. You would think once we bring all these people together in such a specific society, it would be easy to put together a profile, but this is not true either. Many of you, new members in particular, have not had an opportunity to go on a WMS foray yet; next time we go out take a little time and appreciate the diversity within our species. From the moment you arrive, this diversity will start to unfold before your very eyes. Everyone has their own personal little agenda (and outfitted to match) that flows within the parameters of the foray. One member may pull from the trunk enough camera equipment to go on an African safari, another will have a favorite walking stick in hand and be dressed like an ad from the Land's End catalog. The next may be wearing a raggedy old field jacket and carrying a basket big enough to require its own set of wheels. Once a fellow even brought a grill, anticipating a successful hunt (it was). The more equipment that one pulls from the trunk the easier it is to figure out the individual's agenda, whether it be getting that perfect shot, finding a little side dish for the evening meal, learning a little more about the mysterious world of fungi, getting out for some exercise, or attempting to lay away enough fungi to feed the Russian army most of the winter.

I could go on and on about what sets us apart, but to end this I need to draw my conclusion as to what binds us together. My profile would be, "A person interested in all or any features possessed by fungi, or a person interested in such a person." This profile was based solely on the non-professional membership of the Wisconsin Mycological Society. I excluded the variety, Professional Mycologists, due to the lack of sufficient time and money needed to do a study at the level they are accustomed to, and the tardiness of the arrival of the DNA analysis.

HYGROCYBE: OFTEN COLORFUL "WETHEADS" by Steve Nelsen

Hesler and Smith kept the three major genera of the family Hygrophoraceae that people now use as sections of Hygrophorus (Greek for moisture or water-bearing) in their 1963 monograph North American Species of Hygophorus, but even Smith uses Hygrocybe in later books. Hygrophoraceae have "waxy" gills, caused by the unusually long and narrow basidia (spore-bearing cells) which cover them. The gills are adnate to decurrent and sharp-edged but usually wedge-shaped, with rather thick bases, causing them to be medium to distant in separation. They have white, non-amyloid, smooth spores which are of little use in separating them from genera with which they might be confused, except the spiny-spored Laccaria species which also have thick, somewhat waxy rather widely separated gills. The three major groups were established by Fries in 1838, who separated Hygrophorus from Clitocybe. The genera are now technically separated by the arrangement of hyphae (long threads of cells) in the gill trama (the flesh under the basidia), which are parallel in Hygrocybe, interwoven in Camarophyllus (Cuphophyllus) and divergent in Hygrophorus (sensu restricto, also called by Fries's Tribe name, Limaceum). Their macroscopic appearance is different enough that few species had to be transferred. Hygrocybe has the slender-stemmed, smallish species, and includes many brilliantly colored ones.

There are well over 60 Hygrocybe species in the U.S., and it is useful to break them into smaller groups, which is often not done in manuals. The genus Hygrocybe is broken into three sections: Hygrocybe, Punicei, and Psittacini. The conical-capped species, of which the commonest is H. conicus, are put into Subsection Conici of Section Hygrocybe. Although its color ranges from red through orange to yellowish, H. conicus is the easiest species to recognize because it blackens in age or upon handling. It is the earliest species to appear, sometimes in May, occurs in grassy places and on gravel as well as in woods, and is variable enough that some recognize more than one blackening species. Section Hygrocybe also includes the convex, dry-capped species in two other Subsections. Subsection Hygrocybe has the species whose caps get roughish in age, of which some especially pretty examples are the intense, darkish-red and especially rough-capped H. squamosus, the oranger and smoother H. miniatus, and the especially decurrent-gilled H. cantherellus. Smooth convex dry-capped species are in Subsection Coccinei, of which the type species is the brilliant red H. coccineus. Section Punicei has the dry-stemmed but viscid-capped (sticky to gooey-surfaced) species, including the brilliant red H. puniceus. Hesler and Smith explain in excruciating detail how hard it is to tell coccineus from pucineus (the latter is hardly sticky under most conditions, and the descriptions usually given of the differences are not reliable). I am not sure I have yet seen coccineus in Wisconsin. The color intensity is truly remarkable, and in the green moss in which it often grows, the edges sometimes appear to shimmer from the contrast in colors. Finally, Section Psittacini has the species with viscid caps and stems, allowing instant identification to this level. H. psittacinus is distinctly green at first, but soon fades to non-descript orange when exposed to light, and

old specimens are hard to tell from several others. Other Psittacini also fade in age, with relatively common species including the buff to grayish (but drying pinkish) laetus/peckii, the yellow chlorophanous and nitidus, the red reae and minitulus, and the orange ceraceus.

Hygrocybes are apparently edible, but most are rather small, although sometimes abundant. Most people tend to avoid highly colored mushrooms for food, although I am not aware that any toxins have been specifically identified in this genus. I have not tried eating them. "Madman" McIlvaine even recommends conicus; most authors list it as suspect to poisonous. If Hygrocybes were three times the size they are, they would certainly be more spectacular, but their brilliant colors make many of them stand out anyway.

The best spot I have seen for finding Hygrocybe is the wet woods along Otter Creek in Baxter's Hollow, at the southern edge of the Baraboo Hills off County C in Sauk County. The more common Hygrocybe species, including all those mentioned above, also occur in Europe. Others from Baxter's Hollow are less widespread, including the yellow-gilled brown Psittacini H. perplexeus, first described by Smith in 1954 from Michigan and (poorly) illustrated with New Jersey specimens in Phillips' book. Oddly, Bon's manual illustrates H. perplexus Arnolds from Europe, equated with saphidus, from which Smith explicitly distinguished his perplexus, and which rather clearly is a different species.

#### RECIPE:

MUSHROOM CRESCENTS (PIEROZKI) by Joanne Pasek

Dough

2 cups all-purpose flour pinch of salt 5 ounces butter or stick margarine 1 egg

1 tablespoon yogurt or sour cream

Filling

- 1 cup dried mushrooms
  1 tablespoon butter
  1 small onion, finely chopped
  1-2 tablespoons fresh bread crumbs
- 1 small egg salt and pepper
- 1. Prepare pierozki dough. Sift the flour with a pinch of salt into a large bowl. Cut the butter into small pieces and rub into flour until the mixture resembles fine bread crumbs.
- 2. Mix the egg and yogurt or sour cream together and combine with the flour and butter to make a firm dough. Knead the dough together into a bowl, wrap well and chill for 30 minutes.
- 3. Place the dried mushrooms in a small sauce pan and cover with 2 cups water. Cover and bring to a boil. Allow to simmer until the mushrooms soften and are tender. Strain and save the liquid for soup. Chop the mushrooms finely.
- 4. Melt 1 tablespoon butter for the filling in a small sauce pan and add the onion and chopped mushroom. Cook briskly to evaporate moisture, and blend in the egg and bread crumbs. Add enough crumbs to help the mixture hold its shape. Set the filling aside to cool completely. Roll out dough thinly on a well-floured surface. Cut into circles about 3 inches in diameter. Fill with a spoonful of filling, wet the edges with water and fold over to seal. Crimp with a fork, if desired. Bake on greased baking sheets in pre-heated 425 degree oven for about 10-15 minutes, or until brown and crisp. I serve these with soup or stew.

THE END