

# SWPWO



September 2007

## *Southwestern Pennsylvania Woodland Owners*

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### **September Meetings: Mushrooms of SW PA**

Our next meeting will be on Wednesday, September 19 at the Greene County fairgrounds, building #10. We will be learning about and exploring the mushrooms of SW Pennsylvania. Our speaker will be Denise Binion from the USDA Forest Health and Technology Enterprise Team in Morgantown, WV. Denise will help us to recognize some of the mushrooms that are common in our area. Denise is currently working on a publication about the mushrooms associated with oak forests- which most of us have in this area.

A field trip will follow on Saturday, September 22 from 1-4 PM. We will be hiking in the Gamelands area called Enlow Forks in western Greene County. Siting mushrooms will depend on the weather. Mushrooms need moist conditions to form the fruiting bodies that we know and recognize. Harold and I have mapped out a few habitats that could house mushrooms under the right conditions. If it's too dry, we'll practice our tree identification for the pig roast and look over the habitat restoration project under way in the area. The hike will be along a

gamelands road. Wear good hiking boots. We will meet at the Greene County fairgrounds, building #10 at 12:30 PM and we can carpool to the site. Driving directions will be available at the Wednesday meeting.

### **Elections for 2008**

No, I will not involve you in the national election hoopla that is bombarding us these days. But we do need to think about SWPWO's leadership for the next years. At the November meeting we will be electing new officers for the positions of President, Secretary and one Board of Directors position. Both the current President and the Secretary have reached their term limits so they cannot serve another year. If you are interested in volunteering your time to help run SWPWO, please contact one of the officers by October 2006 meeting. Please remember, there is NO budget for running these campaigns- in fact there is really no campaigning.



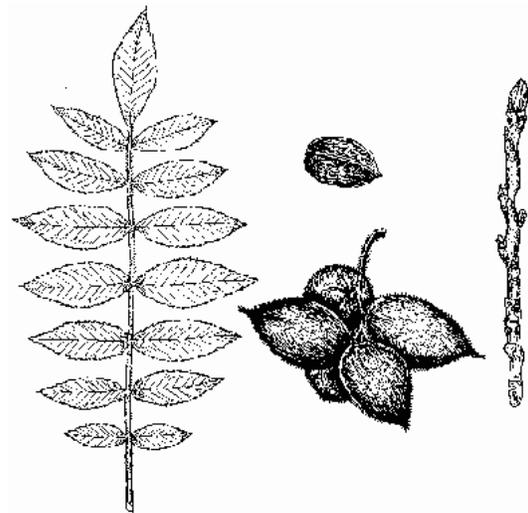
## ***The Interesting Life of the Butternut Tree***

The butternut tree (*Juglans cinerea*) is native to our area. However it is becoming a rare sighting because of an insidious disease called the butternut canker fungus, which has limited the numbers of this tree throughout its range. Foresters in both Canada and the United States believe that the butternut is an underutilized hardwood. It has a fine, brown satiny wood and high quality nuts. The butternut was designated as an endangered species in Canada in 2005 and only as a species of concern in some states of the northeast. It is widely accepted that the population of this species has declined over recent years. There is also a realization that there are butternuts remaining relatively healthy despite the rapid spread of the fungus. There has been much survey work devoted to identifying potentially resistant trees. Despite limited funding, advances have been made in developing the capacity to produce trees relatively rapidly for restoration efforts, and important work has been done on identifying likely regions and habitats for such efforts.

Selection of breeding options and objectives have been complicated by the recognition that butternut hybridizes with Persian walnut and Japanese walnut. These species appear to have been in the United States for over 100 years and these hybrids may not be uncommon. Researcher and breeder, Sandra Anagnostakis of the Connecticut Agricultural Experiment Station feels that there may be very

few true butternuts left in Connecticut and she has coined the term "butternots" for the hybrids she more commonly encounters. These hybrids are difficult to distinguish from pure butternuts. Hybrid vigor often identifies these hybrids and it is not clear whether apparent resistance to the fungus is related to that vigor or to possible resistant genes. Does it matter if resistant trees are pure? It certainly complicates the picture of what the mechanisms of resistance are, what objectives might be desirable for breeding and conservation, and how quickly valuable butternut genotypes are being lost.

*The above article was submitted by Arlyn Perkey from the journal Northern Woodland, Spring 2007, written by Dan Ruddell. It was edited by Gay Thistle*



### ***Our Purpose.***

*Southwestern Pennsylvania Woodland Owners (SWPWO), a not for profit association, is an organization of individuals interested in sound woodland management practices which encourage the diverse use of forests for timber production, wildlife habitat, watershed protection and recreation and to promote this multiple-use philosophy through education and technical assistance for the benefit of the membership and general public*

## **Winter Tree Identification Course Being Offered**

The first step in any forest management strategy is identifying the trees that are growing in your woodlands. To this end, SWPWO Advisor Arlyn Perkey is offering a course in identifying tree species by the bark. Those who sign up for this course will need to be able to commit to four Saturday afternoons during this winter. The dates of these Saturdays are; January 12, 26, February 9 and 23 and the SWPWO, March 12 (Wednesday) meeting. The class size is limited so as soon as you know you can commit to these dates, please let me know by the November 14 meeting. Contact information: Gay Thistle 724-499-5190 or at [thistle@winstream.net](mailto:thistle@winstream.net) More information will be given in the next newsletter (November).

## **SWPWO Committee for the year 2007**

### ***Officers***

**Harold Thistle- President**  
**Bob Daley - Vice Pres.**  
**Nadine Obermiller- Secretary**  
**Earl Novendstern- Treasurer**

### ***Board of Directors***

**Joe McNaney**  
**Max Loughman**  
**Maria Piantanida**

### ***Advisors***

**Bill Wentzel` Arlyn Perkey**  
**John Burnham- Past President**

## **Edge Density Key to Controlling Gypsy Moth Spread**

Controlling population peaks on the edges of the gypsy moth range may help to slow their invasion into virgin territory, according to a team of researchers. "Slowing the spread of the gypsy moth is a priority in forest management in the United States," says Ottar Bjornstad, assistant associate professor of entomology and biology in Penn State's College of Agricultural Sciences. "Understanding the underlying patterns in the spread of invasive species is important for the successful management." The accidental release of the gypsy moth in 1869 in Massachusetts has led to an infestation covering more than 386,000 square miles in the Northeast. Native to Europe and Asia, gypsy moth is currently found from Maine to North Carolina and west to Wisconsin, where they defoliate trees and occasionally cause extensive damage to northern deciduous forests. "We analyzed data on the spread of gypsy moth in the United states and found that its invasion has been characterized as by regular periods of rapid spread interspersed between periods of little expansion," says Bjornstad. "This is the first identification of pulsed invasion for an invading species." The research team-- which also included Derek Johnson of the University of Lousianna and Andrew Liebhold and Patrick Tobin of the USDA Forest Service (in Morgantown, WV)-- used historical, county-level quarantine records as well as Forest Service data from

more than 100,000 pheromone traps set along expanding gypsy moth population fronts for their theoretical model. The pheromone trap data was collected from 1988 to 2004. They used a theoretical model to show how the invasion pulses can be explained by the interaction of negative population growth at low densities - called the "Allee effect"-- and the existence of a few satellite seed colonies created by human transfer of the insect over long distances. The research was published in a recent issue of the journal *Nature*. The gypsy moth adult female is flightless and usually only spreads a short distance beyond infestation boundaries. External colonies occur when moths hitch a ride on vehicles or other items relocated by people. Without the Allee effect, these colonies would establish, but gypsy moths exhibit the Allee effect and the low populations are insufficient for establishment of permanent populations. This is also true at the edges of a population area. If population density is low, the Allee effect prevents growth across the boundaries. The model shows that no pulsed expansion exists for populations unaffected by the Allee effect. However, when it is a factor, not only does the pulsed expansion occur, but it mimics the historic pulses of gypsy moth population from 1960 to 2002 found in quarantine records. Now I had a difficult time understanding this so I asked Andrew Liebhold what it exactly meant. His response is such. "As for the gypsy moth paper, I would have to admit that even though it was published by *Nature*

which is one of the most fabulous journals, it is a bit complex to understand but I'll try to explain it. This thing that we call the "Allee Effect" (named after Warder Allee who first described the phenomenon over 50 years ago) refers to the situation in which population growth decreases as abundance decreases. This phenomenon can arise from many mechanisms but in the case of the gypsy moth and many other species, it arises from males and females not being able to locate each other for mating at low densities. While it is recognized as a 'bad thing' for endangered species, it is a 'good thing' for invading species because it can sometimes cause populations to go extinct without any human intervention. In the *Nature* paper we used a type of mathematical model to show that in the presence of an Allee effect, an invading species may not gradually expand its range, but instead it will expand in 'pulses' - basically what happens is that populations below a certain level are bound to go extinct because of Allee effects. As the invader expands its range, populations must build up at the edge of the range until they exceed this certain level, at which point the populations 'pulse' forward into new areas. Without the Allee effect however this phenomenon would not be expected to exist. The Allee effect, and this pulsed spread are both likely to affect the spread of a bunch of other invading species." Currently the containment program for gypsy moths aims at controlling outbreaks outside the current population boundaries. The researchers suggest that the invasion might be slowed by suppressing

outbreaks near the invasion front (within the populated area). This would decrease edge populations and prevent the periodic surges of growth that expand the territory. Other invading species may also exhibit pulsed spreading. If researchers can determine that the Allee effect is in place, then this same plan of containment might aid in controlling a variety of pests. The National Research Initiative of the USDA Cooperative State Research and Education Service supported this research. *This article was submitted by Nadine Obermiller and reprinted from the journal Penn State Agriculture, Summer/Fall 2077 written by A'ndrea Elyse Messer, edited by Gay Thistle*

### Membership Information

Membership to the Southwestern Pennsylvania Woodland Owners Association is \$10 per year for an individual and \$15 per year for a household. Dues are expected to be paid by January in order to ensure a timely receipt of the newsletter and notice of the next meeting. To join, please send name, address and phone number to:  
SWPWO,  
195 E., High St  
Waynesburg, PA 15370



### Calendar of Meetings for the 2007 Year

- **September 19 Meeting (NOTE NEW DATE) Mushrooms and Decomposers**  
Denise Binion from the USDA Forest Health and Technology Enterprise Team in Morgantown, WV  
Time: 7:00 PM  
Place: Building #10, Greene County Fairgrounds, Waynesburg, PA
- **September 22 Field Trip (NOTE NEW DATE) Identifying Mushrooms in Your Woodlands**  
Place to be determined  
Time: 1:00 PM  
Meet at: 12:30 PM Building #10, Greene County Fairgrounds, Waynesburg, PA
- **October 20 Picnic with Plant Identification Competition and Potato Gun Competition (Members Only)**  
Burnham's Tree Farm
- **November 14 Meeting Successful Management of Woodlands Through Low Impact Logging**  
Jim Finley  
Time: 7:00 PM  
Place: Courthouse Square Building Washington, PA
- **November 17 Field Trip Tree Felling, Horse Logging, and Timber Sawing**  
Burnham's Tree Farm
- **2008 SWPWO meetings will resume March 12, 2008.**

## **Library Recommendation**

In *Living in the Appalachian Forest: True Tales of Sustainable Forestry*, the author Chris Bolgiano describes several Eastern landowners "stumbling toward sustainability". The book is comprised of short narratives describing forest management activities and personal sacrifices people have made in the name of good stewardship. It is a book about people and the woods. The tales include some famous tales- like the Hatfields' and McCoy's feud -along with some not so famous but known-how Kane Pennsylvania became known as the "Black Cherry capital of the World", the secret underworld of the international ginseng trade, and logging with draft horses. Other chapters present dilemmas that landowners face in protecting the landscape from development, mining, and species eradication. This book contains something for everyone who has ever wanted to engage forest stewardship practices on their land and it is written about our local forests and our local problems. Curl up with a good book when your work is done ( for the day).

**Living in the Appalachian Forest: True Tales of Sustainable Forestry** by Chris Bolgiano. Stackpole books (5067 Ritter Rd., Mechanicsburg, PA 17055; [www.stackpolebooks.com](http://www.stackpolebooks.com); 1-800732-3669. 2002. ISBN 0-8117-2845-5. Submitted by Gay Thistle from a recommendation found in the publication *Forest Leaves*, Spring 2003

## **SWPWO Website**

The SWPWO official website can be accessed at the following address [www.cs.pitt.edu/~daley/swpwo](http://www.cs.pitt.edu/~daley/swpwo).

This website is available to us because of the talents and time of webmaster and officer, Bob Daley. The SWPWO website has the calendar of events for 2007, current information about our group, and photos from our outings. If you find a website that may interest others in our group e-mail Bob Daley at [daley@cs.pitt.edu](mailto:daley@cs.pitt.edu) and give him the web address. He is looking for interesting links and photos to post on our site.



*This newsletter is produced about 8 times per year. It is published about two weeks prior to the meetings. Articles and/or ideas are welcome. Contact the editors John Burnham at 724-223-8781 or e-mail at [burnhamjc@msn.com](mailto:burnhamjc@msn.com) or Gay Thistle at 724-499-5190 [thistle@windstream.net](mailto:thistle@windstream.net)*