

SWPWO



June 2006

Southwestern Pennsylvania Woodland Owners

Summer Tour:

Saturday, June 10 Cooper's Rock Tour

Cooper's Rock, West Virginia

Time: 12:00 PM

Meet at: Building #10, Greene
County Fairgrounds,
Waynesburg, PA

Maximum Tree Height

Foresters have long observed that trees of a given species seem to attain a maximum height. Even under ideal conditions, trees stop getting taller before their natural life span ends and trees tend to get taller at a slower rate as middle age progresses. Forest researchers have long wondered what factors determined this slowing of growth eventually resulting in a maximum height. With modern techniques and instruments and an accumulation of research and observation, researchers have concluded that the answer is probably hydraulic. This is to say that the tree simply can't overcome gravity and the friction of pulling water up through the tree beyond a certain level. One piece to this puzzle has been added by researchers who are now able to do research in the tops of trees more effectively than in previous times. This work has allowed them to observe that foliar stomata remain closed

longer the higher up you go. Without sufficient water, open stomata would contribute to evaporative loss of moisture from the foliage but not contribute to photosynthesis. Without water available, foliage above a maximum height would not contribute energy to the tree so it is not to the advantage of the tree to keep growing upward. Though water availability is often a limiting factor in tree growth, it has been difficult to prove its role in maximum height, but scientific consensus seems to be converging on the upward movement of water as the culprit. These results seem to hold most strongly for tall species (the tallest known tree in the world is a 113 m (393') tall redwood in Northern California). The role of other factors such as a loss of vigor with age and other physiological differences is still not clear. As always, the resolution of one question leads to other questions to keep inquisitive minds engaged. *Submitted by Harold Thistle, (Summarized from 'The Sky Is Not the Limit', Science, Vol. 310, No. 5756, December 23, 2005)*

Eyes on the Ground in the Ocalla

When we first arrived in Greene County, one of our neighbors asked us about the 'ocalla' and we didn't immediately understand. Now, seven years later we relish our walks through our 'ocalla' especially in the spring time. We took

our first walk with the express purpose of finding morel mushrooms this past month and though we found no morels, we did find that it is a great time of year to walk through the woods with eyes to the ground. The local wild flowers we spotted included delphiniums, trilliums, and fire pinks. Violets seemed to be the ground cover in many places. As we walked up the hollow we passed flowering dogwood and hawthorne. The forest in the hollow begins at its lower end with a stand of predominantly shag bark hickory. It is known locally as the Oak Hollow because the most common species at the upper end of the hollow is White Oak, though, as with most of the forest in Greene County, it is mixed with Red Oak, Black Walnut, Yellow Poplar, Sugar Maple and many other species. This hollow opens to the south and the stream bottom trends up the hollow to the north. When Bill Wentzel walked the property with us six years ago, he pointed out that the open forest floor under the lower reaches of the hollow probably reflected the practice by previous owners of grazing under the forest by first sheep and then more recently cattle. We do not own livestock but the role of large mammals in the landscape has been taken over by white tail deer on our property. The presence of a large deer population is reflected in the heavy browse pressure in the hollow and the almost complete absence of young oaks and maples. The stream was about 4 inches deep and 18 inches wide in most places that day. As an example of the dynamism of these little streams, the stream has incised into the soil in the lower reaches of the hollow so that it is at the bottom of a steep sided slot (30" in places) in the earth. Much of this deepening of the stream channel (though the water in the stream has not

noticeably deepened) has occurred since we bought the property. In the upper hollow, a broad bar of shale flakes, something like a sand bar but composed of small flat flakes from the local rocks, formed during the flooding associated with Hurricane Ivan and the almost as dramatic local flood the autumn prior to Ivan. This bar of small stones was left as a reminder of those events.

As we got to one of our interior fence lines that cordoned off the old pastures, we spotted a single turkey egg on the ground. As we looked around, we found the nest with a clutch of eight or so eggs. These eggs are similar in size to chicken eggs (Rodney Burns, our local conservation officer, told me they are typically a little larger) and are various shades of beige with brown spots. We were excited by this find and continued on, crossing the fence and there discovered a second nest of eight or so eggs with two additional eggs lying about outside the nest. These finds were interesting for me because we do not see many turkeys on our property. I think this is due to the open nature of much of the forest understory as discussed earlier. At the high end of the hollow around these nests, the woods thicken and there is more cover.

The head of the hollow ends in a series of deep gullies oriented at angles to the hollow, both east and west. These appear to be fairly recent erosion features that have formed during some prior land use (it is likely that the entire hollow was deforested at some point but the origin of these gullies is open to speculation). They are knee deep in old leaves and provide promising looking mushroom habitat but no luck. We are up against our back fence line at this point in our journey so we turn around and head back to the house with two wet

and dirty dogs at our heels and memories of a poor mushroom hunt but a good day in the woods with our eyes down. *By Harold Thistle*

Committee for the year 2006

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Harold Thistle- President

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SWPWO Website

The SWPWO official website can be accessed at the following address 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 been updated with the Calendar of Events for 2006.

SWPWO

Calendar of Events

July 8 Summer Tour

What You Don't Know About Roads In Your Woodlands Can Hurt You

Time: 12:30 PM

Arlyn Perkey's Tree Farm and Stewardship Forest in W.

Greene County, PA

Meet at: Building #10, Greene County Fairgrounds, Waynesburg, PA

August 12 Summer Tour

George Marinchak's Tree

Farm George Marinchak's Woodland in SW Washington County, PA

Time: 12:00 PM

Meet at: Building #10, Greene County Fairgrounds, Waynesburg, PA, or Sears Parking Area, Crown Center Shopping Mall, Washington, PA (meet 12:30 PM)

September 13 Meeting

Forest Stewardship Plans:

How To Bill Wentzel, Service Forester, PA Bureau of Forestry
Panel: Maria Piantanida, Bob Daley, John Burnham

PA Game Commission Deer Management Program

Update Roxane Palone, PA Game Commissioner

Time: 7:00 PM

Place: Building #10, Greene County Fairgrounds, Waynesburg, PA

September 16 Field Trip

Forest Stewardship in

Action Sunset Woods Tree Farm in SW Washington County, PA

Time: 12:00 PM

Meet at: Building #10, Greene County Fairgrounds, Waynesburg, PA, or Sears Parking Area, Crown Center Shopping Mall, Washington, PA (meet 12:30 PM)

October 21 Picnic

Time and Place to be determined **November 9**

Meeting

Growing Chestnuts: Seed Management, Grafting, and

Planting Greg Miller, Empire Chestnut Company

Note Unusual Day Thursday

Time: 7:00 PM

Place: First Floor Meeting Room, Courthouse Square Building, 100 W. Beau Street, Washington, PA

November 11 Field Trip

Time and place to be determined

