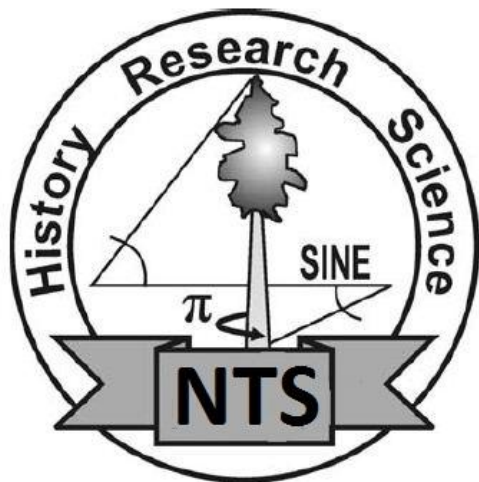




# eNTS

The Magazine of the  
Native Tree Society  
Volume 1, Number 6,  
June 2011





## ENTS: The Magazine of the Native Tree Society

The Native Tree Society and the Eastern Native Tree Society

<http://www.nativetreesociety.org>

<http://www.ents-bbs.org>

Volume 1, Number 6, June 2011

### Mission Statement:

The Native Tree Society (NTS) and its parent organization the Eastern Native Tree Society (ENTS) are a cyberspace interest groups devoted to the documentation and celebration of trees and forests of the eastern North

America and around the world, through art, poetry, music, mythology, science, medicine, wood crafts, and collecting research data for a variety of purposes. ENTS is the premiere tree measuring group of the eastern forest of the United States. This is a discussion forum for people who view trees and forests not just as a crop to be harvested, but also as something of value in their own right. Membership in the Native Tree Society and its parent organization the Eastern Native Tree Society is free and open to anyone with an interest in trees living anywhere in the world.

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*COVER: Congress Trail, Sequoia National Park, California. Photo by Will Blozan, 2011.*

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## Guest Editorial:

### Looking back, marching onward

By Robert Leverett, originally posted to the NTS BBS on Friday June 10, 2011



Here it is almost the middle of 2011 and time to take stock. We have a lot going on. Looking back, we have visited a number of new sites like Morristown National Historic Park in NJ. We have made some astounding discoveries/confirmations like the world's tallest tuliptree. We have completed some important projects such as modeling of the Poplar Forest tuliptree. The BBS, website, and Bulletin continue to be outstanding. The ENTS tree database is functional. We have begun the video on tree measuring. We have an empowered European arm that adds true class to ENTS. We have stellar performers in the scientific community to impart credibility to our efforts. I can hear big Ed saying, see Bob, I told you so, and he's right.

Looking forward, Neil's tuliptree article, in which he is graciously including me as a coauthor, is about finished. Gary Beluzo and I are planning the 7th Forest Summit and 2011 ENTS rendezvous. Soon Don Bertolette and I will host the second annual rendezvous of WNTS. And Don plans to present an avant garde tree measuring guide on his Alaska champion tree website. I am beginning a project to photographically document MTSF and MSF as a joint FMTSF/ENTS-DCR partnership. I will also be training DCR personnel who certify champion trees

in tree measuring techniques. Will and company have begun the special tuliptree project for the GSMNP. Big Larry continues to roll as he documents more and more of those wonderful live oaks. Steve and Rand continue rolling across the Ohio countryside, changing our notion of what the Buckeye State still has to offer. Eli does similarly for central Georgia. The list goes on and on.

It would be hard to argue with our successes, and I think we're going to continue on an upward path. Amidst all the bad economic and environmental news, our successes are a breath of fresh air. We have held our focus and success is paying dividends as our numbers increase. Is there any area where I'd like to see us expand operations? Well, yes, I surely hope we can attract more serious tree measurers so that we can expand our list of outstanding forest sites and build a tree database of accurate measurements that will suffice for scientific research. I see little evidence that outside groups and individuals are going to pick up the slack. Let's face it, tree measuring is our niche and we are unique in our abilities to locate tall tree sites and convert them to indices that foster meaningful comparisons. With a very few exceptions, the champion tree programs can't do that. It is not in the nature of academic research to focus on maximums for their own sake. Forestry is about growing trees and cutting them at an age and size that falls well short of our interests. So, who, if not ENTS, will continue to perfect tree measuring and piece together the picture of what each species does and where across its full range. Answer is nobody.

So what, if anything, stands between us and an expanded tree measuring mission? Over the long run, - probably nothing. If we keep our noses to the grindstone, we'll get there. But in the near term progress will continue to be slow unless we can establish hooks into communities that have at least a potential interest in what we do. I've tried to make connections into the schools and almost succeeded twice. But it is a tough sell. There is always initial enthusiasm and interest, but the efforts never quite get off the ground. I'm open to ideas. How can we move the measuring boat forward to attract a much wider audience? And where are the lady measurers? Why is this almost exclusively an old boy occupation? Just wondering.

Robert T. Leverett  
Co-founder and Executive Director  
Eastern Native Tree Society  
Co-founder and President  
Friends of Mohawk Trail State Forest



## Sand Live Oak (*Quercus geminata*)

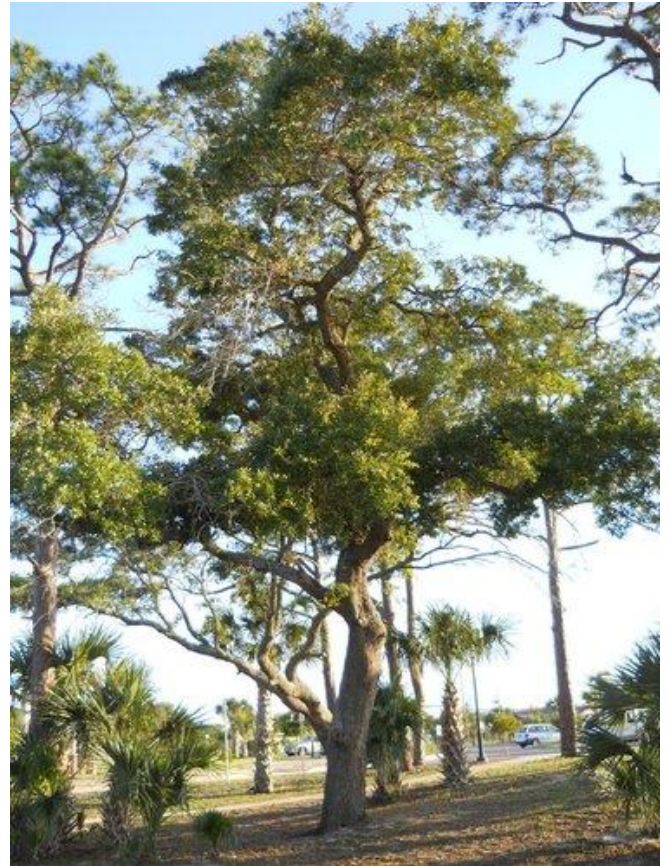
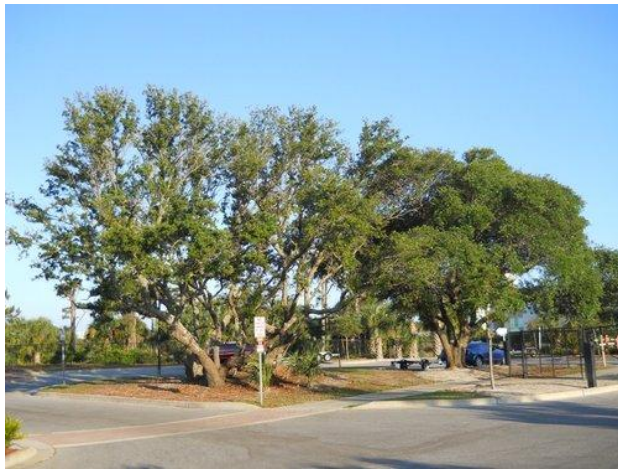
by Larry Tucei » Wed Jun 01, 2011 1:35 pm

ENTS, I traveled to Northwest Florida this past weekend for some swimming and snorkeling. I stayed in Ft. Walton and snorkeled Navarre and Pensacola Beaches. While in Ft. Walton I noticed a Public Picnic and Boat launch on the southeast corner of the bridge on Hwy 98 that crossed the bay. The park had several Sand Live Oaks growing throughout the area. I didn't measure them but they were not over 30' high and around 6' CBH. Sand Live Oak is a beautiful species smaller but very similar to the Live Oak.

<http://www.duke.edu/~cwcook/trees/quge.html>

Some photos.

Larry Tucei



## Hudson Highlands State Park, NY

by dbhguru » Thu Jun 02, 2011 11:37 am

Yesterday, in high humidity and heat, Gary Beluzo, Bart Bouricius, and I went to the Hudson Highland State Park in search of more tuliptrees for Neil's study. We had been tipped off about a big tree on an access road and a grove of tulips that were supposed to be impressive. The tip was accurate. Although the canopy is thick, I managed to measure 7 trees. I'm not sure that i found their tops, but am probably close. Here are the numbers.

Tree #	Girth	Height
1		119.6
2		130.0
3	15.0	132.6
4		136.1
5	10.9	137.6
6	16.9	141.0
7	15.7	146.0



Bart measured another at 15.2 feet, I think he said, but I couldn't see its top. So, it didn't get measure for height. There are other large trees in the strip. None are old. The area suffered a lot of logging and quarrying in the past. It is recovering, and the tuliptrees are part of the recovery. The area is very rocky and rugged. The area favorable to tuliptree growth is a narrow corridor. However, there must be others. Two of the largest are partly open grown, but the largest isn't. Here are two images from yesterday.

Hudson Highlands SP is across the Hudson from West Point and Storm King. This area must have been incredibly impressive in pre-settlement times before Europeans discovered its wealth of minerals and forests. Today, tour boats go up and down the Hudson. The ridges on both sides of the Hudson reach elevations of 800 to 1200 feet, with Bull Hill making 1420. At 1610 feet, Beacon Hill is the highest point in the Hudson Highlands. The Hudson River is just a few feet above sea level, so the relief is dramatic.



Here is Bart and the 15.7-foot girth, 146.0 feet tall tulip.



Storm King, on the West side, has a small state park and the area supports tuliptrees, so we will return.

Here is Bart near a large sycamore at a trailhead. Believe it or not, we didn't measure it.

Bob Leverett

### [White Pine Listing](#)

by dbhguru » Fri Jun 03, 2011 8:13 pm

I've been updating a white pine listing for DCR. See the attached spreadsheet. It contains white pines we have measured with a probably have volumes exceeding 500 cubic feet that we've measured in the Northeast. The listing of trees outside of Massachusetts is for comparison purposes for DCR. They need to understand where Massachusetts stands, as well as properties inside Massachusetts. DCR officials tend to tout the Quabbin Reservoir - an intensely managed area with nothing to show a visitor interested in big trees.



In the listing, I've made some guesses on the form factor of many of the trees. So, this is a work in progress. However, for the most part I believe I have been conservative. If I get the time, I'll begin entering some of these trees in the ENTS database, but importing from a spreadsheet would be the desired method. I may wait for this feature.

[TimsUpdateWPVols500.xls](#)

Bob Leverett

## [Changing forest--Porcupine Mountains, MI](#)

by Lee Frelich » Sun Jun 05, 2011 12:45 pm

During mid-May I took a group of European visitors to see one of the premiere old-growth forests in the eastern U.S.--the 35,000 unlogged maple and hemlock forest of the Porcupine Mountains Wilderness State Park, Michigan.

On the trip were Fulbright scholars visiting me for the academic year, Kalev Jogiste Estonian University of Life Sciences, and George Schlaghamersky from the Czech Republic. Kalev's expertise is disturbance ecology, while George studies insects in dead wood and Enchytraeids (closely related to earthworms; 180 native species in North America). Kayar Koster and student Kristi Teppo, faculty and student from Estonian University of Life Sciences, interested in disturbance and dead wood dynamics, were also with us.

The view from the Lake of the Clouds overlook, showing the Big Carp River Valley and primary forest as far as you can see in every direction, is as alluring as ever (photo by Kajar):



The multi-aged forests of the Little Carp River valley, with trees from a few to 500 years old and many species all mixed together in a random spatial pattern, has changed little in the 30 years I have been doing research there, as shown by the delicate tapestry of early spring colors in this photo, which was taken only a few days after the winter's 300+ inches of snow had melted (light green, sugar maple in flower; dark green, hemlock; olive green white cedar; light red, red maple; no leaves, basswood) (photo by Kajar).



Spring wildflowers such as Dutchmans breeches and spring beauty were present in phenomenal numbers, as well as occasional rare lichens such as Lobaria pulmonaria (photos by Kristi):



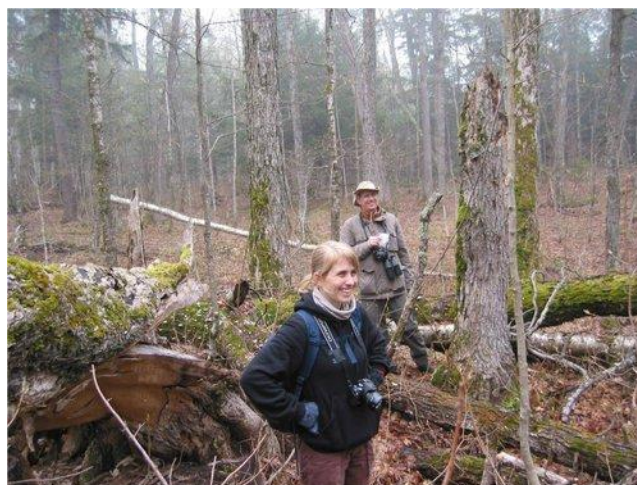




in the Porcupine Mountains in the early 1980s, and subsisting on wild leeks for those 10 days, Kalev insisted on harvesting a few leeks for lunch (I refused to take part, having previously had more than a lifetime quota of leeks) (photo by Kajar):



We were happy to see that the balanced all-aged stand of sugar maple that was featured in my publications in the mid 1980s to early 1990s was still intact, although it has had the expected ongoing mortality of individual trees with gap infill, thus perpetuating the all-aged condition, as shown in this picture taken by Kalev, with Kristi and George examining a large new gap:



After the obligatory trip to see the waterfalls of the Presque Isle River (photo by Kajar):

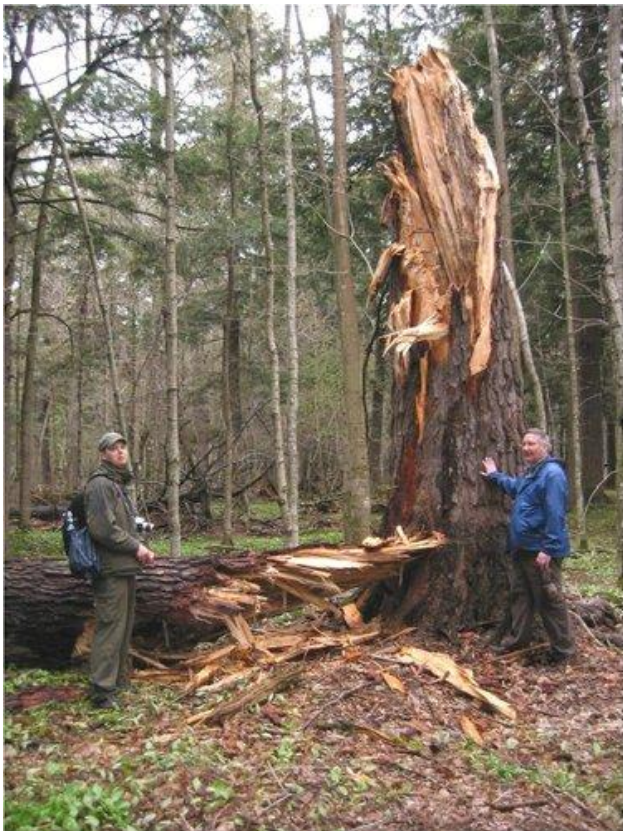
After hearing my story about running out of food 10 days before the end of a 7 week long wilderness trip





The great Presque Isle sugar maple that Bob Leverett, Will Blozan, Paul Jost, John Kneurr and I visited several years ago, is now the biggest piece of sugar maple coarse woody debris on the planet (photo below by Kalev). Apparently it, along with many champion trees at the west end of the park, which is not sheltered from Lake Superior by hills like most of the park, was subject to the relentless winds of the 'Landicane' of October 2010, during which average waves heights on Lake Superior reached 30 feet.

We proceeded to examine the surrounding forest and found that several of the Porcupine Mountains great champion trees (which were vertical last year) were now laying on the ground. There was evidence of two separate storms, one last fall, and one early this spring. The 500 year old, 13 foot cbh hemlock I had been taking people to see had been snapped off sometime in the last few weeks, and still had the smell of fresh coarse woody debris (Kajar (left) and myself (right) are examining the remains of the tree, photo by Kalev):



Much of the Porcupine Mountains forest remains untouched by logging, and is one of the few places where one can see forests not invaded by the world's most damaging terrestrial invasive species, exotic earthworms, although in some areas high deer populations have prevented reproduction of trees, as shown in this photo of George, Kalev, Lee and Kajar hiking in a stand of old-growth hemlock and white cedar (Photo by Kristi):







These stands with high deer populations have pretty much progressed as I predicted they would 25-30 years ago, with maple, ash, and basswood slowly replacing hemlocks and cedars. However, the parts of the Porcupine Mountains with very deep snow continue to be protected from winter deer browsing, as shown in this picture above of George examining a dead hemlock that is embedded in dense hemlock reproduction (photo by Kristi):

This concludes my report on forest change in the Porcupine Mountains. Thanks.

Lee Frelich

### [American chestnut](#)

by Steve Galehouse » Tue Jun 07, 2011 11:09 pm

I occasionally encounter American chestnut saplings while exploring...here is a photo of one in a local Metropark. There is another individual in the park as well, but neither approach fruiting size.



Steve Galehouse

### [Amostown Road West Springfield, MA](#)

by sam goodwin » Tue Jun 07, 2011 3:56 pm

Last spring I measured a large tree here but I could not tell what it was. I stopped back today to look at the leaves. I will go out on a limb and maybe make an "ash" of myself but, Ash 19' 10" cbh at 80" tall. This is the second large ash I have seen in the last week. They said the other one was 300 years old. That one was 16'8" cbh and dead. Today's tree had much better growing conditions.

Sam Goodwin

### [Re: Poplar Forest](#)

by dbhguru » Wed Jun 08, 2011 10:43 am

Attached is the spreadsheet model of the tuliptree in Poplar Forest that Will and I modeled on April 22nd. Below is the email sent to Jack Gary, Chief Archeologist at Poplar Forest

Bob Leverett

=====

Jack,

I apologize for this having taken so long. But back from California where he was helping Drs. Steve Sillett, Bob Van Pelt, and team model a giant sequoia, Will had a chance to add up the numbers for the tuliptree we modeled on the lawn of Poplar Forest on April 22nd. The attached Excel spreadsheet shows the numbers and the percentages of volume contained



in the trunk, limbs, and branches. As you will see, the total volume is 1,102 cubic feet or 31.21 cubic meters (sounds better in feet). Based on this volume, I expect that the big tulip down the hill at the edge of the woods will go about 1,300 cubes. In pre-settlement times, mature tuliptrees in the vicinity of forest Thomas Jefferson's properties would likely have held between 500 and 1,500 cubic feet. However, some would have gone over 2,000 cubic feet and an occasional tree might have reached between 2,500 and 3,000.

For comparison purposes, the largest tuliptree ENTS has modeled is the Sag Branch Tuliptree in the Great Smoky Mountains NP. That huge tree has a combined trunk and limb volume of approximately 4,000 cubic feet. Hard to image isn't it until you've seen it. The tallest we have measured (climbed by Will and tape-drop measured) is also a tulip in the GSMNP with an astounding height of 191.9 feet. The tallest tuliptree in Virginia we have measured grows at Montpelier and is an impressive 168.7 feet in height. A nearby specimen is 168.6 feet.

The 5 large tuliptrees in front of the Poplar Forest estate including the one down the hill at the edge of the forest have the following dimensions:

TT #	Height	Girth
1	133.0	15.9
2	113.0	14.1
3	110.0	11.2
4	103.0	14.0
5	90.0	16.2

Far down the hill near the stream and in the grove, Will measured a tuliptree to 146.0 feet in height on a visit 5 or 6 years ago. When we return, I'd like to relocate the tree and remeasure it. It may be close to 150 feet by now.

I'd like to now say a few words about our measurement methodology. First, the modeling method we used. Each section of trunk or limb was modeled employing the frustum of a cone as the controlling geometrical form. The formula applied to calculate the volume of each section was

$$V = \pi \frac{h}{3} (r_1^2 + r_1 r_2 + r_2^2)$$

In the formula, h = length of segment and r1 and r2 are the radii at each end of the segment. This model assumes that the cross-sectional area of the segment is circular. In many cases, the form is either elliptical or irregular in ways that would defy using a simple formula. However, for a specified girth (circumference) and a regular geometrical shape, the circular area is a maximum. So we are not shortchanging the tree, but probably overstating its volume slightly. A straight-trunked tuliptree with a girth of 16 feet at 4.5 feet above ground level and a height of 150 feet would have a conical trunk volume of 1018 cubic feet. But the forms of actual trees are more complex often going from neiloid at the base to paraboloid and then to conical. Unless a tree is broken up into relatively short sections, large modeling errors can result. That is why Will climbed the tree and we broke its trunk and limbs into sections.

In terms of the heights measured for the lawn and edge of the forest trees, I used a Laser Technologies TruPulse 360 hypsometer. I have tested this instrument exhaustively. It measures distance accurate to +/- 0.1 feet on close, distinct targets. On distant targets, such as the highest sprig of foliage, it is usually within +/- 1.0 feet. Angle accuracy when placed on a tripod is +/- 0.1 degree. These accuracies exceed the advertised specifications. However, I was one of those who field tested the instrument for laser Technologies. It is an exceedingly good instrument. Also, the method employed for determining height used the ENTS sine top-sine bottom method which gets around situations where the high point is horizontally offset from the base of the tree - the fatal flaw of many tape and clinometer measurements.

Thank you so much for the opportunity to participate and provide data on a tree that no doubt Thomas Jefferson would have treasured. We look forward to returning next year and resuming the documentation. We have a productive partnership with you and we value it. Hopefully our dendrochronological partners Drs. Dave Stahle and Neil Pederson will be able to join us.

Bob Leverett

[Poplar Forest Tuliptree 4-22-2011.xls](#)

## [A good day tree-ing...thanks, Stefan](#)

by Steve Galehouse » Sat Jun 11, 2011 10:37 pm

Today I met up with one of our newer members, Stefan Radivoyevitch, and we explored two areas very familiar and dear to me. We met at Sand Run in north Akron, and proceeded immediately to the state height record tuliptree, the "Bob Leverett Tuliptree", which is also the state height record for all trees in Ohio. A quick and dirty measurement showed the tree to have increased to 168'+, but I think this might be inflated due to sight line at the base. Anyway, it's not shrunk from storm damage since the last time it was measured out-of-leaf. After viewing the tall tulip, Stefan and I went "off roading" into a hemlock ravine that felt extremely remote despite the proximity to suburbia. Hemlocks in this area Rand Brown and I measured to 125' last fall.

After Sand Run, Stefan and I had a nice lunch(thanks again, Stefan), and proceeded to Ritchie Ledges about 10 minutes away. I showed Stefan the Carolina hemlocks, as well as exceptional cucumber magnolias and black cherries. I'm thoroughly glad to have another ENTS type in the immediate area.

## [Hemlock regeneration](#)

by Lee Frelich » Sat Jun 11, 2011 4:12 pm

My recent trip to the Porcupine Mountains yielded some good pictures that show how the regeneration niche of hemlock works.

First, notice that in areas with high winter deer density, all hemlock seedlings are eaten, and there are no young hemlocks to replace old ones that die, as shown in this photo of a 500 year hemlock that fell several weeks ago (same tree as in the earlier post a week ago, but from a different perspective), notice that several saplings near the base of the old hemlock are maples (photo by George Schlaghamersky).



This picture of a severely browsed hemlock seedling, which still has some live foliage, was taken during May 2011. A picture of the same seedling appeared in a paper I published in 1985, Current and predicted long-term effects of deer browsing in hemlock forests in Michigan USA, Biological Conservation 34: 99-120. Unfortunately, the pdf of these older papers are very low quality, so I can't show you the 1985 picture--but I believe the live part is actually a few inches shorter now than it was in 1985--a slowly shrinking bonsai created by deer. The live part is the light green foliage in the center of the photo (photo by George S.).



Next, is a picture of a hemlock tree that died in 1981, and I took a slab from it in 1982, when the log was still solid, and it had 513 rings, about 15 feet above the ground. We estimated that the tree was around 540 years old(moss-covered log on the ground, photo by George S.). The trees in the gap that formed in 1981 in the background of the picture are now pole-sized trees, but they are all maple, which shows that the deer have been preventing hemlock from replacing itself at least that long--in fact we know from this type of reconstruction that hemlock has not replaced itself since the 1940s when Aldo Leopold



wrote an article about the eruption of deer populations in the area.



However, a visit to nearby areas without deer in the winter, shows that even without deer, hemlock seedlings still only survive in a certain small subset of the forest floor. Germinating hemlock seedlings cannot grow on thick duff or compete with large herbs, so they occur on rocky terrain, tip up mounds and rotting wood.

Hemlock saplings growing on talus at base of cliff (photo by George S.).



Hemlock seedlings growing on mineral soil of a tip up mound (photo by George S.)



Hemlock seedling growing on rotted conifer log (they rarely appear on rotted hardwood logs, photo by Kristi Teppo).



Lee Frelich



## Giant Johnson City trees April 2011

by Will Blozan » Sat Jun 11, 2011 10:02 am

I was recently in Johnson City, TN for a pesticide exam and was able to meet up with Aaron Knoblet, a local arborist, to show me some big trees.

First was a pin oak (*Quercus palustris*) at Snow Memorial Baptist Church. It had recently received an unfortunately brutal lower crown raising which greatly diminished the form of the tree but it was still impressive. We measured it to 19' (5.8 m) CBH X 76.7' (23.4 m) tall. Crown spread was circular at 105' (32 m) in all directions.



Snow MBC pin oak trunk



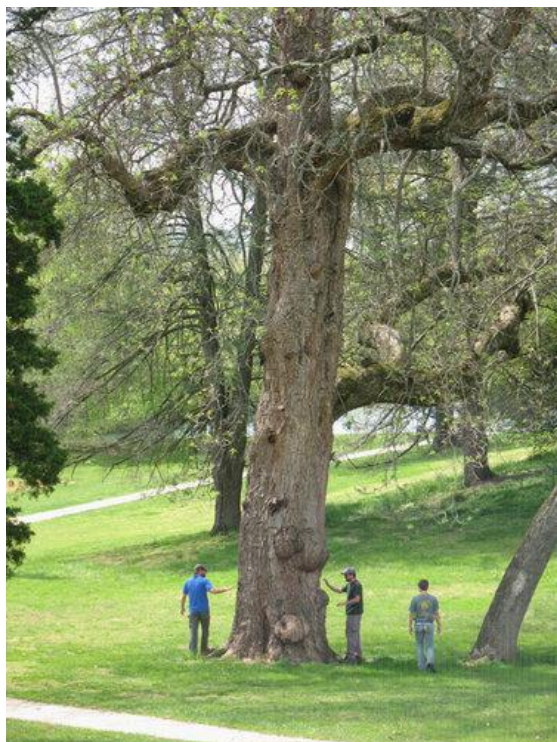
*Snow MBC pin oak crown*

Second was a southern catalpa (*Catalpa bignonioides*) at James H. Quillen VAMC in nearby Mountain Home, TN. This tree blew me away! By far the largest I have ever seen. Super gnarl-factor and lots of wood- I would love to see this specimen in full bloom!



*Huge catalpa crown*





*Huge catalpa trunk*

We measured it to 17.4' (5.3 m) CBH X 86' (26.2 m) tall with an average crown spread of 85' (25.9 m).

Not too far away was a huge elm that except for crown form looks like Siberian elm (*Ulmus pumila*). I am not sure what species it is for sure but regardless it is a beast. This tree grows with no competition and has already reached 17.8' (5.4 m) CBH X 103.9' (\*31.7 m) tall with a rather narrow 70' (21.3 m) spread.



*Mystery elm crown*



*Mystery elm trunk*



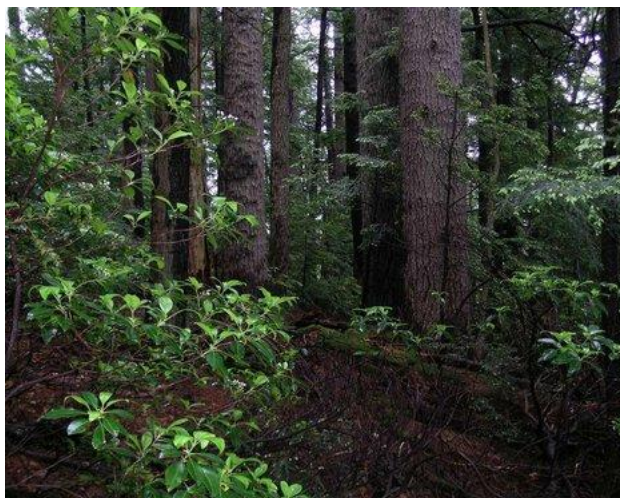
## Howard Mason Pine and Hull Woods MA

by dbhguru » Sun Jun 12, 2011 4:37 pm

Today I went to check on an old friend, the Howard Mason Pine in Hull Woods, located in Ashfield, MA. Howard Mason, an old forester who died a few years ago saved a patch of old forest on the property of then Peck Lumber Company. It now belongs to Bill Hull and is protected. To make a long story short, a young forester for Peck was going to cut the olds woods, and Howard Mason saw value in preserving the woods and succeeded in saving them. The area of oldest trees is relatively small, perhaps 3 acres, 4 at the most. But the woods are very aesthetic. Howard's tree is probably close to 200 years old and the largest tree in the stand. Howard's pine is a most worthy tree. I remeasured it today. Its stats are girth = 12.1 feet, height = 130.7 feet. When I first measured it, it was about 11.6 feet in girth and between 126 and 127 feet in height.

The old forest consists mainly of white pine, hemlock, yellow birch, red maple, and black birch. The duff layer is extremely thick and the stand overlooks a bog. The last two images are of Howard's pine. I had the honor of measuring that pine for Howard 12 or 13 years ago. The stand is only about 16 miles from Monica's house. I am truly blessed with a good dozen exceptional woodlands all within relatively short driving distance.

The following sequence of shots from Hull Woods speaks for themselves. Be sure to click on each image to get the expanded version.







Robert T. Leverett

## New Tall Douglas Fir Of SW Oregon

by Tree Warrior » Wed Jun 15, 2011 3:38 pm

Here are the results of our last 6 expeditions to SW Oregon in search of tall douglas fir (*Pseudotsuga menziesii*) and tall sugar and ponderosa pine. Explorers for the last 2 expeditions included Mario Vaden, Chris Atkins and Mike Hanusckik.

Tallest Douglas fir found this year:

Height	Dbh	Location
322.8	8.0	Coos County-BLM
317.6	7.1	Coos County-BLM - Alder Creek
317.5	10.1	Coos County-BLM - Tioga Creek

317.2	6.7	Coos County-BLM - N. Fork Cherry Creek
314.0	9.9	Coos County-BLM - Tioga Creek
310.0	8.1	Coos County-BLM - Susan Creek
309.3	9.0	Coos County-BLM - Park Creek
307.0	7.0	Coos County - BLM - Tioga Creek
306.0	7.2	Coos County - BLM - Park Creek
303.0	N/A	Coos County - BLM - Tioga Creek
302.0	N/A	Coos County - BLM - Park Creek

Tallest Ponderosa & Sugar Pines found this year:

268.7	5.5	Josephine County - Siskiyou National Forest-Ponderosa
266.0	6.2	Josephine County - Siskiyou National Forest-Ponderosa
262.0	4.0	Josephine County - Siskiyou National Forest-Ponderosa
259.5	3.5	Josephine County - Siskiyou National Forest-Ponderosa
259.0	5.5	Josephine County - Siskiyou National Forest-Ponderosa
258.0	5.0	Josephine County - Siskiyou National Forest-Ponderosa
255.0	7.7	Jackson County - Umpqua National Forest -Sugar
254.0	7.1	Josephine County - Siskiyou National Forest -Ponderosa

+ many more in the 247-253' range... see [landmarktrees.net](http://landmarktrees.net) for a complete list.

The tallest known pines and douglas fir grow in SW Oregon coast ranges for a reason, which is superior top soil, moderate temperatures and ample rainfall.

Will the 327.3' Brummett fir of Oregon be topped ? I think there is a 25% chance it will be dethroned by the end of the year and this taller douglas fir will also be found in SW Oregon in either Coos or Douglas County.

I will post more big/tall/champion tree updates after SW Oregon expedition#5 this summer.

Michael Taylor

## Landmark Tree Expeditions, SW Oregon

by M.W.Taylor » Thu Jun 16, 2011 1:28 pm

The list below is the correct height/diameter/location for the tall and big douglas fir and pines found in the SW Oregon "Landmark Tree Expeditions".

Height feet	meters	Diameter feet	meters	Location
322.8	98.34	8.6	2.62	Noname, Coos County, SW Oregon. Tripod Mounted Impulse 200LR
317.6	96.79	7.0	2.13	Edge Fir, Alder Creek, Coos County, SW Oregon. Tripod Impulse 200LR
317.5	96.77	6.5	1.98	Noname. Tioga Creek, Coos County, SW Oregon. Site Altitude 2300'.
317.2	96.68	10.1	3.07	Noname. N. Fork Cherry Creek. Two tops, the other 95.5m. Coos County
314.0	95.70	9.9	3.01	Noname. Tioga Creek, Coos County, SW Oregon. Dbh from high side of ground
310.0	94.48	8.0	2.54	Noname. Susan Creek, Coos County, SW Oregon. Dbh from on high of ground
309.3	94.27	8.5	2.59	Coyote Gulch Tree, Park Creek Watershed, Coos County, Oregon.
308.0	93.90	8.0	2.54	Noname, Tioga Creek, Coos County.
307.7	93.80	N/A	N/A	Noname, S. Fork Park Creek, Coos County, Oregon.
305.0	92.96	N/A	N/A	Noname. Tioga Creek, Coos County, Oregon.
303.0	92.35	8.4	2.56	Noname, Tioga Creek, Coos County, Oregon.
301.8	92.80	N/A	N/A	Noname, Park Creek, Coos County, Oregon.

Tallest Ponderosa Pines all in Siskyou National Forest unless otherwise stated:

268.73	81.9	5.7	1.73	Ponderosa Pine (Benthamiana or Pacifica)
266.0	81.1	6.1	1.86	

Ponderosa Pine (Benthamiana or Pacifica)	262.0	79.9	4.5	1.37
Ponderosa Pine (Benthamiana or Pacifica)	259.5	79.1	4.8	1.46
Ponderosa Pine (Benthamiana or Pacifica)	258.0	78.6	5.7	1.73
Ponderosa Pine (Benthamiana or Pacifica)	257.5	78.5	4.1	1.26
Ponderosa Pine (Benthamiana or Pacifica)	257.0	78.3	5.2	1.58
Ponderosa Pine (Benthamiana or Pacifica)	256.5	78.2	5.4	1.65
Ponderosa Pine (Benthamiana or Pacifica)	255.0	77.7	7.7	2.28
Sugar Pine, Umpqua Nat. Forest. Jackson Creek	254.0	77.4	7.1	2.16
Ponderosa Pine (Benthamiana or Pacifica)	252.3	76.9	5.5	1.67
Ponderosa Pine (Benthamiana or Pacifica)	250.5	76.4	4.4	1.34
Ponderosa Pine (Benthamiana or Pacifica)	250.0	76.2	4.0	1.22
Ponderosa Pine (Benthamiana or Pacifica)	250.0	76.2	5.1	1.55
Ponderosa Pine (Benthamiana or Pacifica)	249.0	75.9	4.2	1.28
Ponderosa Pine (Benthamiana or Pacifica)	247.6	75.5	5.3	1.62
Ponderosa Pine (Benthamiana or Pacifica)	247.0	75.3	4.6	1.40
Ponderosa Pine (Benthamiana or Pacifica)				

We do have a partial LIDAR set (1.5 million acres) for SW Oregon's tallest douglas fir, which has led us to a few of these tall firs. Most of the LIDAR hits on our Oregon hit-list are over-estimated by 20-30 feet due to steep terrain of the area and most of the LIDAR hits have been verified now, yielding no world records yet. The tallest known douglas fir now listed on the landmarktrees.net website are a 50/50 mixture of LIDAR trees and trees located by brute force searching methods.

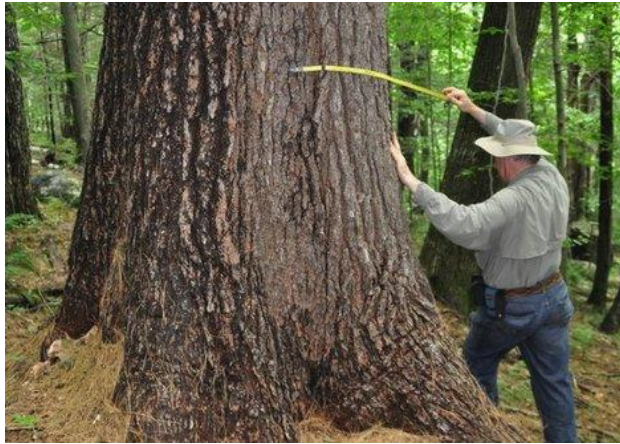
There was no LIDAR hit list for the tallest pine trees of Oregon so we found them using the old fashioned techniques which is typically finding over-looks to nice groves of trees.



## Tim's Photographic Prowess

by dbhguru » Fri Jun 17, 2011 8:02 am

On Wednesday, I met District manager Tim Zelazo at MTSF and we looked at Americorp's efforts to improve a trail into the Trout Brook area of Mohawk. Tim had his camera and was ready to document scenes. he hadn't seen the Madison and Jefferson pine, so they were a priority. here is a look at yours truly remeasuring the Jefferson Pine.



The big pine has a nice growth candle. I now have it as 144.2 feet in height and depending on where mid-slope is placed, 12.4 or 12.5 feet in girth. Higher on the ridge, the Madison Pine rivals Jefferson. Its stats are 12.0 feet in girth at between 152 and 153 feet in height. These pines certainly caught Tim's eye, but he was particularly attracted to a slender pine near Jefferson. It is arrow straight and the very appearance of vitality. It is a young tree, only 7.4 feet in girth. See next shot.



This fine tree is quite young, but is already 148.6 feet in height. It will likely join the 150 Club in 2 or 3 years. Lastly, Tim took a shot of white ash trees with soaring trunks. It is all second growth, but impressive. The Trout Brook ash trees are visions of loveliness, and this watershed is where the 152.5-foot ash grows.



Robert Leverett

## Features and Attributes of MTSF

by Bob Leverett » Fri Jun 17, 2011 8:02 am

I have been experimenting with a format to present the features and attributes of MTSF in a way as to facilitate their evaluation and comparison. The attached Excel spreadsheet is my first attempt. The features have not been prioritized. I'm unsure if this approach will work except as a convenient way of listing features that I personally consider important. However, I think Tim likes what has been done so far.

[MTSFAttributes.xls](#)



## Stages of earthworm invasion

by Lee Frelich » Fri Jun 17, 2011 1:43 pm

The pictures from my May field trip to the Porcupine Mountains can be further used to illustrate the stages of European earthworm invasion in sugar maple forest. Several of us at the University of MN (Scott Loss, Ryan Hueffmeier, myself, George Host, Gerry Sjerven, and Cindy Hale) have also submitted a manuscript for publication in a peer-reviewed journal on rapid visual assessment of earthworm invasion.

The landscape of the Porcupine Mountains is very large and has places with all stages of invasion (photo by G. Schlaghamserky).



Stage 1 is no earthworms. The leaf litter is flat (after several months cover by snow), the leaves are stuck together and bleached to a light color, reflecting no earthworm movement through the leaves (photos G. Schlaghamersky and Kalev Jogiste):



Notice that this is visible even at the stand level (photo by Kristi Teppo):



Compare this with pictures of stage 2, with thick leaf litter, with all three layers still present (L = fresh litter, F = fragmented litter and H = humus), but with the small earthworm *Dendrobaena octeadra* moving through, so that the surface of the litter has a different color and texture (Photos by Kristi Teppo):





Stage 2 is hard to differentiate from stage 3 in spring, but here are two pictures of stage 3, which actually has a thin F layer underneath the fresh litter, and notice how loose the leaf litter is. *Lumbricus rubellus* (leaf worm) and *Aporrectodea* species (angleworms) are present (photos by G. Schlaghamserky and Kajar Koster):



Stage 4 has patchy invasion of *Lumbricus terrestris* (nightcrawler), but is still dominated by *L. rubellus* and *Aporrectodea*. Here the F layer is absent in some areas, so that fresh leaf litter is sitting on top of mineral soil, but there are still some fragmented patches of F layer underneath the fresh litter. Note that mineral soil is visible in the lower left, and that most leaves are standing at angles at various angles from 40 degrees to vertical:





Stage 5 of invasion (terminal stage) is dominated by nightcrawlers, and only fresh leaf litter that has not yet been eaten is present, and often it is in bunches, since the nightcrawlers have pulled leaves they want to eat partially into their burrows. In the second photo, which was taken in late summer on a different field trip, basswood and maple leaves have been eaten and oak leaves remain, since worms eat leaves in order of palatability (Photos by Kristi Teppo and Paul Ojanen):



Finally, three profiles from soil cores illustrate stages 2, 3, and 5 of invasion (Photos by G. Schlaghamersky):

Stage 2, with a few *Dendrobaena* and thick fresh litter at right, fragmented litter (F layer, brown with some brighter flecks) and humus (H layer, black) underneath the fresh litter, on top of beige mineral soil at left (8 inch deep core):



Stage 3, a thin fresh litter layer at right, very thin almost invisible F layer, and mineral soil of the A horizon starting to change color at left. Leaf worms and angleworms are present.



And stage 5, litter on top at right is a middens of a nightcrawler (remains of leaves the worm has eaten). The F and H layers are gone, and the mineral A



horizon of the soil has turned black, and looks like what soils scientists call a plow layer, which occupies most of the core.



So, that's the sequence of invasion--hope you find it interesting.

Lee Frelich

## [Algonquin Provincial Park, Ontario](#)

by dbhguru » Tue Jun 21, 2011 7:46 am

For the past couple of days, Monica and I have explored a small section of Ontario's huge Algonquin Provincial Park. Guess what we discovered? Yes, a remnant area of old growth white pines named the Big Pines Area. There were once many, but lumbermen hammered the area unmercifully. One small area survived. Its origin dates to a 1790 fire. The area is protected now, but remains of the old logging camp are still visible.



Here are some images from the pines area



The largest pine in the stand or collection, I might say (there are 74 remaining pines), is this next whopper. It measures 12 feet in girth and is 120.4 feet in height. Most of the pines are between 100 and 113 feet in height.







A nearby wetland.



Robert T. Leverett



We also discovered for ourselves an area of old growth hardwoods and hemlocks. The hemlock regeneration was phenomenal. I'll write more about this area later. However, I'm pretty sure ages exceed 350 years on some trees. The area also features a mix of red, white, and black spruce. Large yellow birches show great age characteristics. It is quite a place

### [Upper Peninsula, Michigan](#)

by dbhguru » Wed Jun 22, 2011 7:31 pm

Monica and I are in Michigan's UP. Here are some scenes from the day. First two shots are from Whitefish Bay. The first is of driftwood.







The last shot is of a whopper giant white pine. It measures 15.75 feet in girth and 120 feet in height. I figure it has at least 920 cubes, maybe more. A nearby pine has almost the same dimensions. The two huge pines are said to be 185 years old. The surrounding forest is old growth, about 1700 acres. The sign next to the first tree claims there is enough wood in the two trees to build a 5-room house.



The next image is Jack Pine flowering



In terms of the waterfalls, The lower falls aren't much to look at, but the upper falls are definitely impressive. I'll have more to report about Whitefish Point and the Bay and Tehquomenon Falls State Park in a future communication.

From the road,

Bob and Monica Leverett

The next shot is Upper Tehquomenon Falls



## Lord's Hill

by adam.rosen » Thu Jun 23, 2011 10:45 pm

I'm surprised to see the Lord's Hill natural area doesn't have a post. It's state land surrounded by private land, and permission to visit can be obtained.

Old growth hardwoods and hemlocks are present, including what I have heard are state record's for height.





I wish I had some data on this huge old yellow birch. Obviously, that snap at 60' keeps this off the record books, but this tree has some girth.



another look at that same maple

Adam Rosen



some friends under a large, tall, old maple. No height data.

### Cambridge Pines Natural area

by adam.rosen » Thu Jun 23, 2011 10:34 pm

I've got photos here from an excursion fairly far north in Vermont. Unfortunately, no height data. There was one really nice, wolfy old pine, and many, many second growth pine that seemed well on their way.

The tree I photographed here has lots of lower branches, indicating, to me, that it grew up in a pasture. It is adjacent to a cemetery that dates back to 1800, so, I date the tree to that date or so. 14 feet around seems impressive to me, especially as we are on the banks of Lamoille River here, 40 miles from Canada.

There also were some fine hemlocks in this stand,



and my notes tell me that this other specimen was a hemlock. I wouldn't trust that completely, and i think I need some assistants who are older than 12 to help me out. Either way, I'd like to return to this spot for some more measurements.

Attachments



My notes tell me that I was measuring a hemlock in this photo. I'd like to go back and check! That would be a fine specimen indeed!



better view of this entire tree, with some puny humans for perspective.



same tree, another view.



This is the largest pine in the Cambridge pines natural area.

Adam Rosen



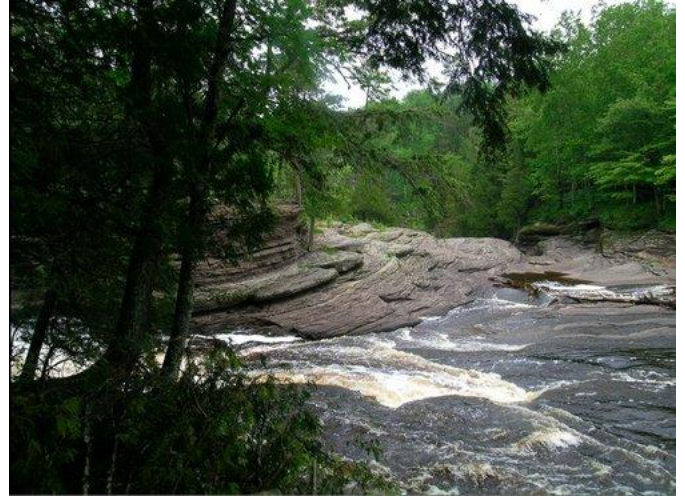
## Porcupine Mountains, MI

by dbhguru » Fri Jun 24, 2011 10:39 pm

I don't know where to begin on this subject. The Porcupine Mountains Wilderness Park of the UP in Michigan is off the charts in terms of importance and quality. It isn't just a local or state resource, it is a national treasure? No, an international treasure. The Porkies have close to 35,000 acres of original growth forest in an environment of pristine mountains and rivers. I'm not going to say much at this point. I'm going to leave the interpretation to the ENTS VP, Dr. Lee Frelich. I just want to share some of the extraordinary images I got today. The Porkies cannot be over-described, but words at their flowery best still do not do the Porkies justice. Neither can my meager photography, for which I apologize. But maybe some of the magic will come through. All the images come from two areas: the Little carp River Trail, and the Presque Isle River Trail. Both are visual feasts. Well, here goes.











Robert T. Leverett

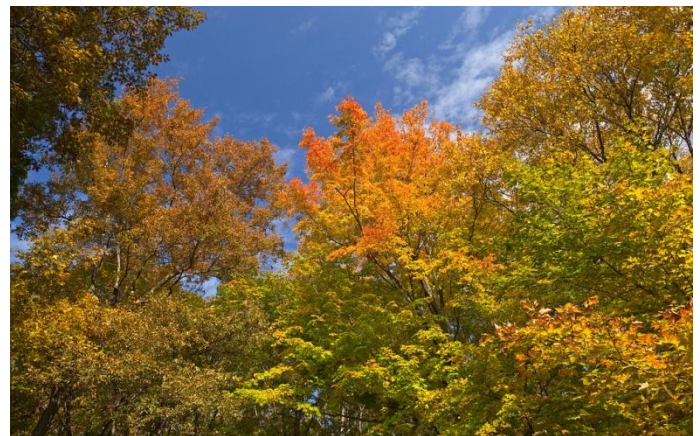
### [Small Sugar Maple rich NJ forest patch](#)

by greenent22 » Sat Jun 25, 2011 6:08 pm

This really belongs in the NJ section now, not MA (although I had originally put it there for a clear reason). How old does everyone think this patch of a forest is (NJ):



Very roughly: It is VERY sugar maple rich but it has a tulip tree or two. Some Yellow-birch. A couple of Ironwood. A few Beech. A White Ash or two, although the big one got killed by drought a few years back. It had one modest Eastern Hemlock on the boundaries between a patch that looks to have been clearcut logged sometime before the early 60s and another patch that looks much older than that but not as old as this patch. A few Spicebush in understory in a few spots. I think there is at least one walnut as well as a few oaks. Sugar Maple is very much the dominant at all ages.







(not necessarily the best photos but only things available online at the moment)

Lots of pit and mound. Quite rocky. Soils don't feel as rich, soft spongy as say old forests I have been in in the Adirondacks. I know that at least as far back as 1970 there 100% zero cut stumps in evidence whatsoever. I have no info on before then.

One of the Ironwoods on the boundary of the forest where it meets homes fell and was cut with a chain saw. The tree was not very thick, I'm guessing 11" DBH, I can get a better sense when I measure the remaining one that had been right next to it and was of a similar size. I have to look up the details but I believe it had around 130 rings when it was counted perhaps in 1995.

I really need to post some measurements from it. I have incredibly easy, instant access to this area. My equipment got lost during a move, still trying to find it, it is definitely somewhere, in some box. I don't think anything is over 3' DBH (I vaguely recall measuring one of the largest Sugar Maples to something like 32" DBH a number of years ago and I think that may have been the thickest tree in the patch, one of the Beech that got killed 20 years ago might have been a little thicker) and most of the big ones are probably more like 21'-27' I'd very, very roughly guess by eyeball.

The section with the characteristics above is only about 2-3 acres. It had adjoined an area with quite a few 2-3' DBH Beech surrounding a small 25'x25' sort of swamp with 6-12" standing water and stream flowing out of it. That part also looked pretty old and was maybe another 1-2 acres. The large Beech all slowly blew over and the swamp totally eutrophied :( it had been really nice, a nice hardwood swap with

nearly closed canopy, I think one of the houses they put in above maybe using bad detergent, phosphorus rich or something, all I know is it went from a crystal clear, pebble bottom lined, bubbling brook exiting it to a muddy mess with the stream no longer clear and all the pebbles on the bottom covered in silt, in just two years and today is more like soggy soil with a few standing puddles here and there. Below that it looks a bit younger although down the mountain side there are some more small areas that look somewhat older. Heading straight back the forest becomes a bit younger looking and then quickly hits an old dirt road and then powerlines on the other side it looks much younger until you hit north and east slopes where it looks older again. I vaguely recall on section maybe 2-3 acres that seemed to have very large oaks, perhaps larger than anything in the photos above. That was years ago and I knew nothing about trees really or old-growth in the East at all (I kinda used to think that most woods that didn't look 100% clearly chopped over had never been cut, I couldn't fathom that almost everything had been cut, I figured most of the slightly more rural areas with woods were all old-growth other than a few parts logged for this or that, unless it was highways and homes and stores).

I don't recall seeing much mention of old-growth in the 1890s forest reports of NJ for this region. I think there was some talk of 50 year old forests patches in this area near where the photo above are from, although they didn't seem to have carefully surveyed the area at all since large parts of it had been reported on 20 year rotations! so i think they kind of quickly moved on without a careful survey. I think one of them vaguely hinted at possibility of some very old oak forests around where there are vague reports of an OG oak or forest now NW of the reservoir but it sounded like they didn't give it a good look since it was deep in and there were reports of fires having burned large sections of the region recently. There had been lots of iron mining during the Revolutionary War. I think there was some talk of some 100-150 year old sections going along the line between some towns in the area back then which would be very old now but what little peeking I did along the one path didn't seem like it had 250+ stuff at all and the other area is almost 100% homes now although there is one little chunk that has some nice older looking trees.

[The forest goes on for hundreds of acres, but certainly large parts of it look younger and some parts are on exposed ridges and sort of miniaturized a bit even with some tiny little grasslands of sort. There are a few other that look like they may be at least as old from what I recall and some chunks that look



only moderately younger. This 800 or so acres of (paved) roadless area seems to have a lot more of the older looking patches than many of the other chunks in the region. If you cross one paved road and allow for dirt roads then the forest goes on for thousands and thousands of acres and of course you hit all sorts of everything with recovering former villages now with young birch and young oaks forest and so on, many large sections of it are much oak dominated and look much, much younger. There are some claims that there is an uncut portion on the northwest shore of a reservoir in a bumpy area. What I have read is very unclear. Most reports refer to a giant old-growth Northern Red Oak but only some make it sound like it part of an OG forest and not a lone remnant and none give any clue as to size of the potential OG forest zone. Looking at the bumpy area on a map it would be hard to imagine it could be over 50 acres and maybe even just a handful (or perhaps it is just the one tree). This area is about 3.5 miles away from the section shown above.

I once caught a reference to an old-growth Eastern Hemlock-Northern Red Oak forest older than 200-250 or something years when there was talk of putting in a pumped storage energy plant and some power lines and some state biologists said in the flier that the power line would cut through it. The location was not entirely clear, nor extent. It might have been 1.5-2 miles away from this I've shown above or perhaps they meant in the forest in the next town over a few miles away since the lines would have extended for a number of miles and the report didn't quite make it clear to which existing lines they would connect. I know the flier had a lot more details, but it sadly got lost right away and this is all from memory from like 20 years ago. I know I saw another reference to it in a book on the NJ Highlands, I need to dig that up and see if the any of the authors of that section can still be reached.

I saw some large logs from a few trees carried out from where they put a horrible destructive dirt road which recently turned into a development of mega mc mansion that cut across one of the largest unfragmented chunks of this greater forest and one of the largest in the middle NJ highlands, just awful!! and I counted 160 rings on it about 10 years ago, driving into the development where the actual paved roads for it ended up I didn't seem to see anything quite that large, not sure from what part of the forest they dragged those trees out of.]

Larry Baum

## Bartholomew's Cobble

by adam.rosen » Sat Jun 25, 2011 1:27 pm

I know that there have been some nice posts about the huge cottonwood and it's smaller brethren at Bartholomew's Cobble. Well, for the trouble of two tick bites, I have some photos of that tree, as well as nice tulip tree that has been marked at the Cobble. Bartholomew's Cobble is a very nice place to visit on the Northern Mass and Connecticut border, and I think the whole Route 7 corridor, from Connecticut to Pittsfield, is prime tree viewing territory. [adam next to cotton wood.jpg[/attachment]jpg[/attachment]

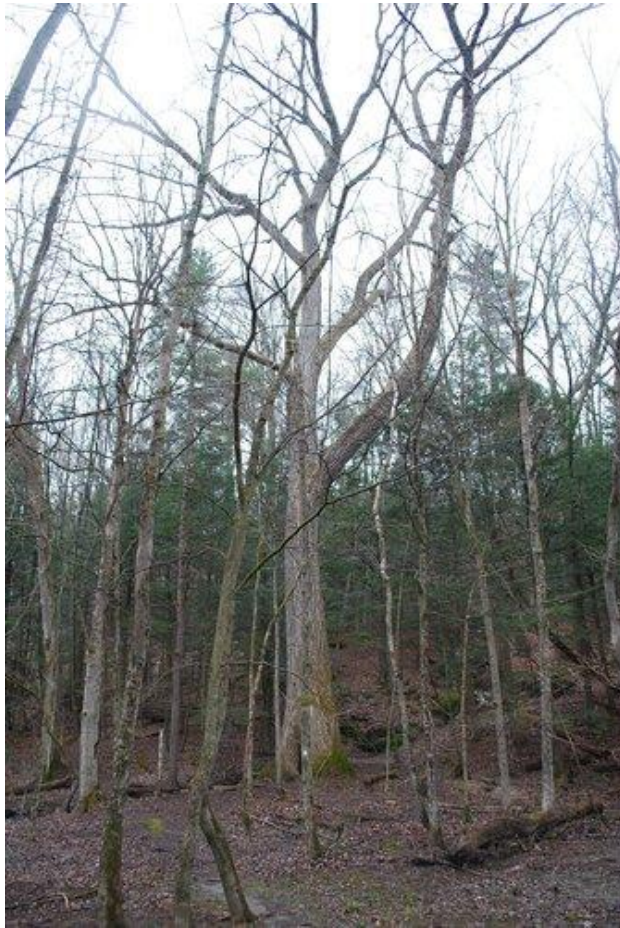


Here's me next to this wonderful tulip tree at the cobble. Girth didn't get measure, but you've got 110 kilos for comparison.

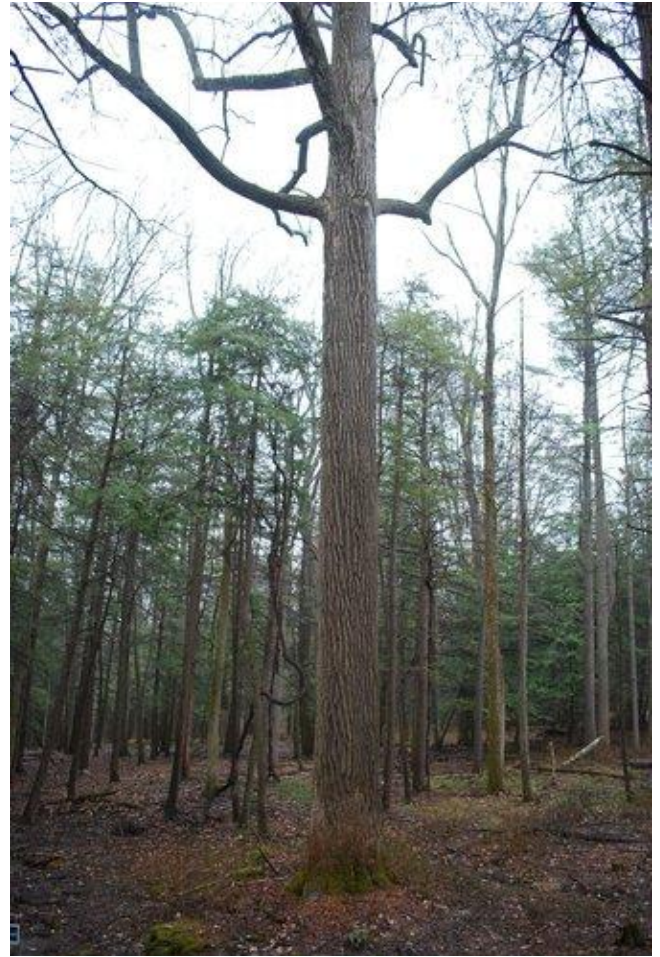


And here I am with this wonderful cottonwood. I love this tree! Supposedly, one in Hubbardton VT is bigger, but someone will have to take me there. (400+ Points--in Vermont--Show me)





And here is that whole Cottonwood, a tree that i know has been measured and get's checked in on. Wear your tick repellent!



More of the tulip tree. What a beauty! Why does the trunk get scruffy at the base? 120 height was my estimate.

Adam Rosen



## Fork Ridge red spruce LiDAR hunt

by Will Blozan » Sun Jun 26, 2011 11:27 am

I took the opportunity as a trip leader at the Smoky Mountain Wildflower Pilgrimage in early May to ground-truth some tall LiDAR hits in the spruce zone of Fork Ridge. Fork Ridge (yes, the same system as the tallest tuliptree) is a gently sloping southeast running ridge covered in some of the finest red spruce (*Picea rubens*) forest in Great Smoky Mountains National Park.



Old giant on Fork Ridge Trail

Josh Kelly sent me some waypoints and I uploaded them to my GPS. All seven of the hits were above 140' (42.7 m) which is significant for the elevations being sampled; ~5,000' (1,500 m). There were only three options for what the hits could be; tall spruce, moderately tall hemlock (*Tsuga canadensis*), or erroneous readings from leaning trees. We found all three.

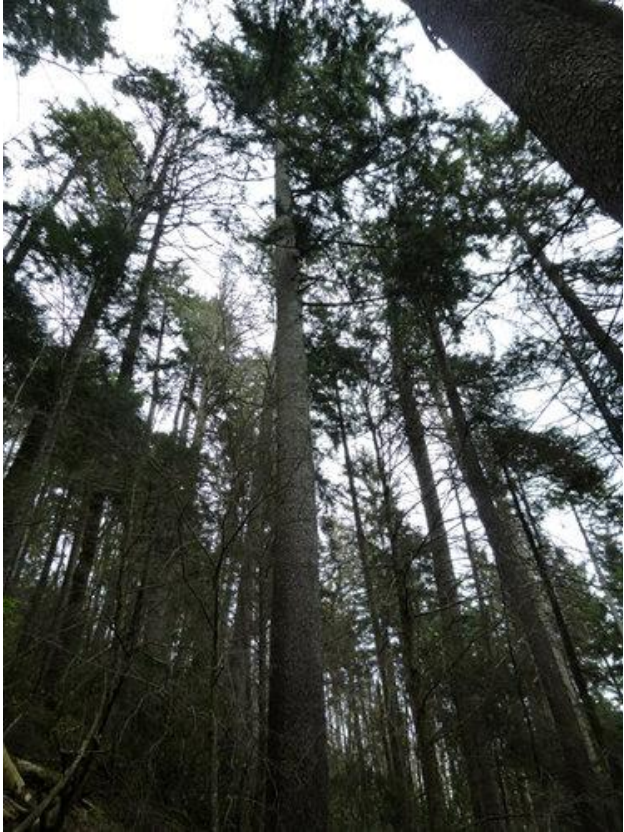
Hit #1 was a 143' (43.6 m) return in old-growth red spruce forest. The stand was steep, dense and tall so finding the tree took some time. The search paid off

with a 151.2 footer (46.1 m)- the third spruce ever documented over 150'. Diameter was a respectable 35.2" (89.3 cm).



Dense grove with 151.2 foot spruce





151.2 foot spruce

Hit #2 was a 141 foot return which turned out to be a 148.1' (45.1 m) spruce with a large trunk 37" (94.0 cm) diameter. This was the same tree I measured to 147' (44.8 m) back in 1996-7.



148.1 foot spruce

Hit #3 was a 148' return which was actually a respectable hemlock. Dead from HWA.

Hit #4 was a 154' return which we were really excited about. Damn, downslope-leaning ancient hemlock. Dead from HWA.

Hit #5 was a 144' return at the base of a narrow ravine. A towering spruce resided there and stood 152.6' (46.5 m) tall on a large base 38" (96.4 cm) diameter. The tree had just died and would have been the third tallest specimen ever documented.

Hit #6 was nearby and turned out to be a leaning spruce with an interesting multi-topped crown. LiDAR suggested 143' (43.6 m) but it was actually 136.6' (41.6 m).

Hit #7 was hoped to be the crowning tree of the day. A 157' LiDAR hit in dense spruce forest instead yielded a large leaning hemlock over a steep slope. Yep, you guessed it- dead from HWA.



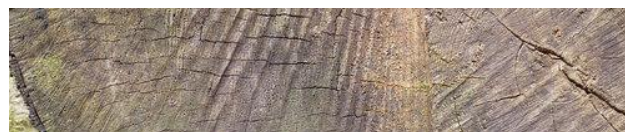


Tallest dead spruce 152.6 feet



136.6 footer with split top

On the way out I stopped to count the rings on a freshly cut fallen spruce log. It was solidly over 400 years and not very close to the base. Back in the late 1990's I also ring counted a 380 year log about 50' from the base. This is a really old spruce forest and I have no doubt a 500 year tree could be found here.



400+ year log

We have ground-truthed LiDAR hits in hardwood forest and this was the first spruce zone foray. The LiDAR data do tend to underestimate height so this, coupled with the rather coarse 20' (6 m) sampled grid left a high possibility of the heights being

significantly low for narrow-topped spruce. This also suggested that the LiDAR would commonly miss tall trees with a narrow top not near a sampled point. This is definitely the case- as we found adjacent trees not recorded by LiDAR that were taller than 140' (42.7 m). Basically, the current LiDAR data are insufficient

to accurately assess individual spruce heights but they do give a good indication of where the tall trees are. This fact alone is immeasurably helpful as red spruce forests are one of the nastiest to traverse. Of all the eastern forests types red spruce is one of the least sampled and remains the last frontier for superlative specimens. Nearly every trip into the red spruce zone yields new records for the species. We are at the tip of the iceberg so to speak for this species.

Thanks to Hugh Erwin for his help with measuring in the difficult terrain!

Will Blozan



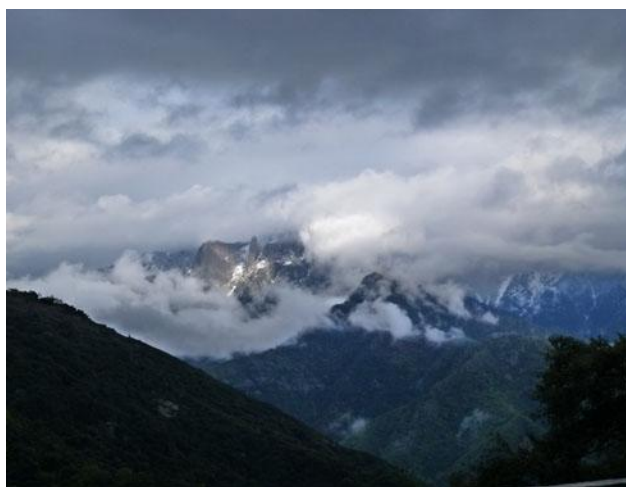
## Sequoia/Kings Canyon NP- Giant Forest research 2011

by Will Blozan » Sun Jun 26, 2011 9:49 am

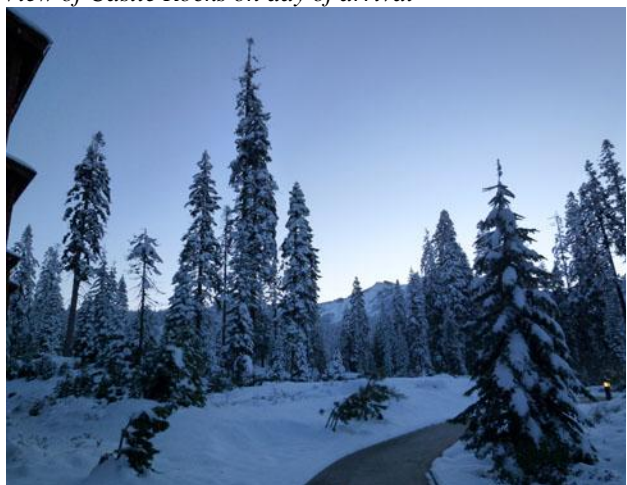
Hey all,

Thanks for the the encouragement and excitement!

I am sorry to temporarily report that due to the project being funded by National Geographic I cannot discuss details yet about the "big tree" we climbed. As soon as I get the go-ahead I will post on this tree specifically.



*View of Castle Rocks on day of arrival*



*Frosty morning*

In spite of the the winter weather the project was completed in the short window of time allotted. Giant Forest and all the high peaks were covered in snow- in some places many feet deep. It was apparently the

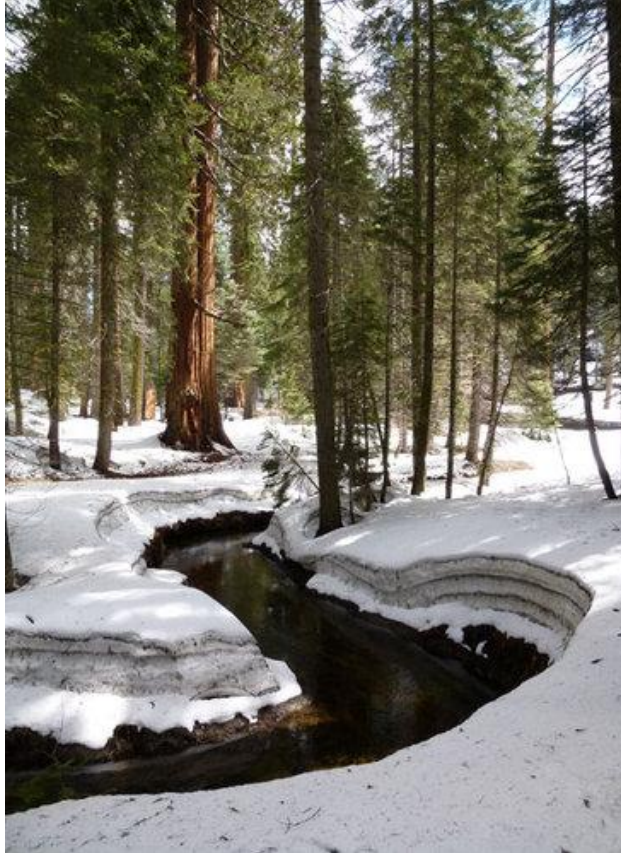
second highest recorded snowfall for the season. Thank goodness we had funding for a lodge- we were supposed to camp much of the time!!!



*Moon rise at the lodge*

The research permit did not allow an extension of time to work so the climbs continued despite the weather conditions which, as those of you familiar with the Sierras know, can change in a matter of seconds. Crystal blue sky would change to super-dense fog and a dripping mess. Another day would be a mix of heavy snow to an unpleasant sunny, snowmelt canopy waterfall in minutes (These giant trees hold a tremendous amount of snow!) We were cold and wet for much of the project.





Giant Forest in snow



*Snowshoeing to the tree*



Largest tree in the world (?) - the General Sherman





Congress Trail in snow



Foggy forest



*"Big" ones along the Congress Trail*

Remember my post on Sequoia climbing 101?

[http://www.nativetreesociety.org/fieldtrips/us\\_west/california/20090726-sequoia/sequoia\\_adventures\\_1.htm](http://www.nativetreesociety.org/fieldtrips/us_west/california/20090726-sequoia/sequoia_adventures_1.htm)

Well, add some snow and ice to the already slippery bark and what do you have? The greatest ice show on earth of course! When else can you see the world's finest canopy researchers all together skating in one of the largest organisms on earth? Man, Nat Geo should have filmed that!





Snowy limbs



Memorial Day snow fall



*Snowy canopy (for Mario!)*

How many of you were climbing trees in an 8 inch snow storm on Memorial Day?



*Steve and Marie coring in Memorial Day storm-work must go on!*

I will post some awesome tree finds and other topics in a separate posting.

Will Blozan



## Naomi Starks Oak, AL

by Larry Tucei » Mon Jun 27, 2011 9:25 pm

While in Mobile Ala., back in April I noticed a large Live Oak on Cottage Hill rd. The tree was at least 22' in circumference. No one was there so I left a card at the address and the homeowner contacted me later.

After we talked she gave me permission to come back and measure this fine Oak. The Naomi Starks Oak was the largest of many Oaks on the property. The results were CBH-23'1", Height-69' and Spread=118' x 120'. The Starks oak is a beautiful tree with massive limbs and nice crown.



Larry Tucei

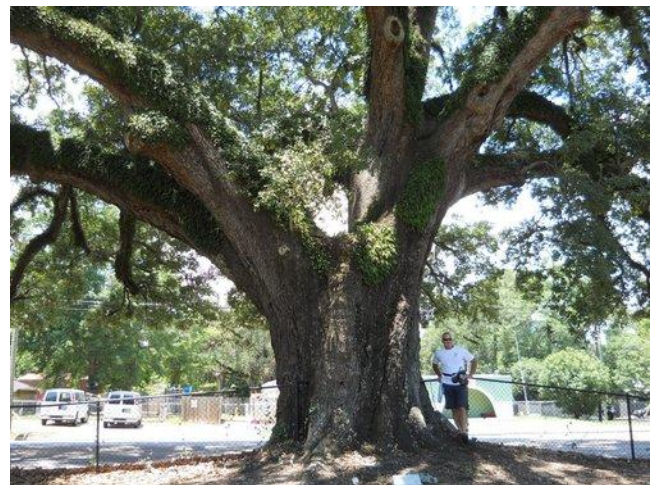
## Pinecrest Cemetery Mobile Ala

by Larry Tucei » Mon Jun 27, 2011 9:40 pm

Mobile Ala., has many Live Oaks throughout the city and some are quite large. I have been doing some research on the Louisiana Live Oak society listing and noticed these two located at Pinecrest Cemetery.

A beautiful Cemetery located in southeastern Mobile. The listing has several registered trees at Pinecrest but these are the two largest. The first tree I did #2519, is George Washington Carver Oak. This tree is multi-trunked and had been braced between the two trunks some years ago. Without this one of the trunks would have split from the great stress at its base. The tree measured CBH-27', Height-54' and Spread-114' x 120'.

The second Live Oak I measured at Pinecrest Cemetery was #2520 on the Louisiana Live Oak Society listing. The Abraham Lincoln Oak is a fantastic tree with a huge crown overgrowing Dauphin Island Parkway. The trees spread would be much longer but it has been trimmed back some. The Oak is a massive tree with a beautiful and large crown. I had to climb over the fence at the trunk to measure this great Oak. Some of the limbs were 4' Dia. and the tree had a dominating but tranquil appearance. The tree measured CBH-25'2", Height-75' and Spread-123' x 126'.

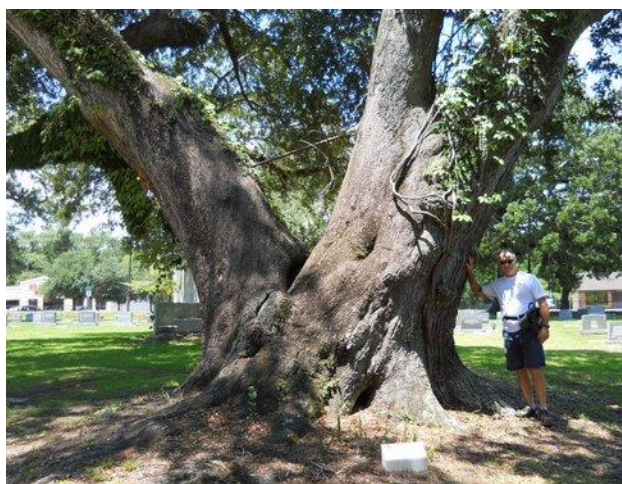


Abraham Lincoln Oak





Abraham Lincoln Oak



George Washington Carver Oak



George Washington Carver Oak

## Mountains-to-Sea Trail @ Craven Gap

by bbeduhn » Mon Jun 27, 2011 11:12 am

On Saturday, I spent 5 hours measuring in a fine second growth forest. It has many mature trees, some of great height. The elevation is 3000-3200 feet. It's mostly sloping. My 550 rangefinder couldn't penetrate as well as I'd like it to. The tulips are quite tall but I didn't get any spectacular readings on them.

In November, I expect to top 150' on the tulips. The surprises were many forest grown walnuts and tall sourwoods. The tallest sourwood grows in an area thoroughly dominated by chestnut oaks, sourwood and mtn. laurel. This is an old forest.

Walnut	Jungus nigra	102' 103'
White Ash	Fraxinus Americana	110'
115' 117' 120'		
Black oak	Quercus velutina	102.5'
127'		
White oak	Quercus alba	112'
116'		
Chestnut oak	Quercus Montana	97' 105'
105'		
White pine	Pinus strobus	119'
Pignut hickory	Carya glabra	123'
Mockernut hick	Carya tomentosa	101.5'
107'		
Ironwood/blue beech	Caroinus caroliniana	77'
85.5'		
Tuliptree	Liriodendron tulipifera	115'
120' 121.5' 123' 123' 123' 125' 127' 127' 129' 130'		
133'		
Sourwood	Oxydendrum arboreum	59'
59' 60' 61' 63' 66' 72' 81'		

### MTS @ route 74

White pine	Pinus strobus	123'
10'7"	131' 11'+	
Shortleaf pine	Pinus echinata	103'
Pitch pine	Pinus Rigida	99'

I'm keeping a Rucker of the MTS Trail in the Asheville area. It is currently @ 120.4'. I haven't measured any sycamores yet and the tulips should yield much better results so it's just a preliminary figure for now. 130' is a possibility but is doubtful.

Brian Beduhn

[Live Oak Project.xlsx](#) Updated Live Oak Listing

Larry Tucei



## Congaree Max Dimension List

by Tyler » Wed Jun 29, 2011 9:53 am

I have completed the first version of the Congaree Max List. It includes the max dimensions, current or historical, of all species measured by ents at the park. Superlative trees, volume measurements, shrubs and vines are also included. If anyone has data for the list, please send it to me.

[CongMaxListv1.0.xls](#)

Tyler Phillips

## South Carolina Max List

by Tyler » Wed Jun 29, 2011 9:59 am

I have also completed the first version of the South Carolina Max Dimension List. Thanks to Jess Riddle for helping me with this. If anyone has data please send it to me.

[scmaxlistv1.0.xlsx](#)

Tyler Phillips

## **External Links**

### American Forests Spring 2011 Issue

American Forests Spring 2011 Issue is now available online:

[http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011\\_mag/index.php](http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011_mag/index.php)

These enormous eastern hemlocks would be so impressive - if they weren't dead on arrival. What's killing them off? Read about the threat to eastern hemlocks and what's being done to fight it in this great article "The Last of the Giants" by Will Blozan

<http://ow.ly/5gtgv> The entire issue is 202 MB in size:

[http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011\\_mag/AFspr11final.pdf](http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011_mag/AFspr11final.pdf)

THE LAST OF THE GIANTS Would-be tree champions bring attention to the disease wiping out eastern hemlocks. —by Will Blozan 26.5 MB

[http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011\\_mag/TheLastOfTheGiants.pdf](http://www.americanforests.org/productsandpubs/magazine/archives/Spring2011_mag/TheLastOfTheGiants.pdf)

The Root Bridges of Cherrapunji

<http://atlasobscura.com/place/root-bridges-cherrapunjee>

Studying Cypress Trees, The Climate Detective - Texas Parks

[http://www.youtube.com/watch?v=zwPdfWahk4s&feature=player\\_embedded](http://www.youtube.com/watch?v=zwPdfWahk4s&feature=player_embedded)

World's Largest Douglas-fir Tree - The Red Creek Fir! [http://www.youtube.com/watch?v=XfBWLvj-Xjg&feature=player\\_embedded](http://www.youtube.com/watch?v=XfBWLvj-Xjg&feature=player_embedded)

Ancient Trees Throughout Israel

[http://www.youtube.com/watch?v=anjsDjPvsN8&feature=player\\_embedded](http://www.youtube.com/watch?v=anjsDjPvsN8&feature=player_embedded)

Explore Redwood Trees in 3D

<http://www.youtube.com/watch?v=U0QAVvbfMoY>

Miraculous Maple Tree (1966)

<http://www.archive.org/details/MiraculousMapleTree>

Learning from old trees, artists and dead poets

[http://www.treeworks.co.uk/downloads/CONSERVATION\\_ARBORICULTURELearning\\_Review4-16-06-2011.pdf](http://www.treeworks.co.uk/downloads/CONSERVATION_ARBORICULTURELearning_Review4-16-06-2011.pdf)

Old-growth W.Va. trees helping climate scientists

<http://www.fosters.com/apps/pbcs.dll/article?AID=%2F20110612%2FGJLIFESTYLES%2F110609437%2F-1%2Ffoslifestyles>

Poland's Mysterious Crooked Forest

<http://news.discovery.com/earth/polands-crooked-forest-mystery-110628.html>



## About: eNTS: The Magazine of the Native Tree Society

This magazine is published monthly and contain materials that are compiled from posts made to the NTS BBS <http://www.ents-bbs.org> It features notable trip reports, site descriptions and essays posted to the BBS by NTS members. The purpose of the magazine to have an easily readable and distributable magazine of posts available for download for those interested in the Native Tree Society and in the work that is being conducted by its members.

This magazine serves as a companion to the more formal science-oriented Bulletin of the *Eastern Native Tree Society* and will help the group reach potential new members. To submit materials for inclusion in the next issue, post to the BBS. Members are welcome to suggest specific articles that you might want to see included in future issues of the magazine, or point out materials that were left from a particular month's compilation that should have been included. Older articles can always be added as necessary to the magazine. The magazine will focus on the first post on a subject and provide a link to the discussion on the website. Where warranted later posts in a thread may also be selected for inclusion.

Edward Frank, Editor-in-Chief