

## Savage Gulf State Park Hemlock Preservation

by Will Blozan » Sun Nov 13, 2011 2:11 pm

NTS, Last week my company, Appalachian Arborists, began treatments of eastern hemlocks (*Tsuga canadensis*) for the eminent arrival of hemlock woolly adelgid (*Adelges tsugae*) in Savage Gulf State Park (SGSP). As most of you are aware this insect has decimated hemlock stands in adjacent lands in NC, SC, GA, and TN. SGSP contains what is arguably one of the finest remaining old-growth hemlock forests remaining in the southern range of the species.

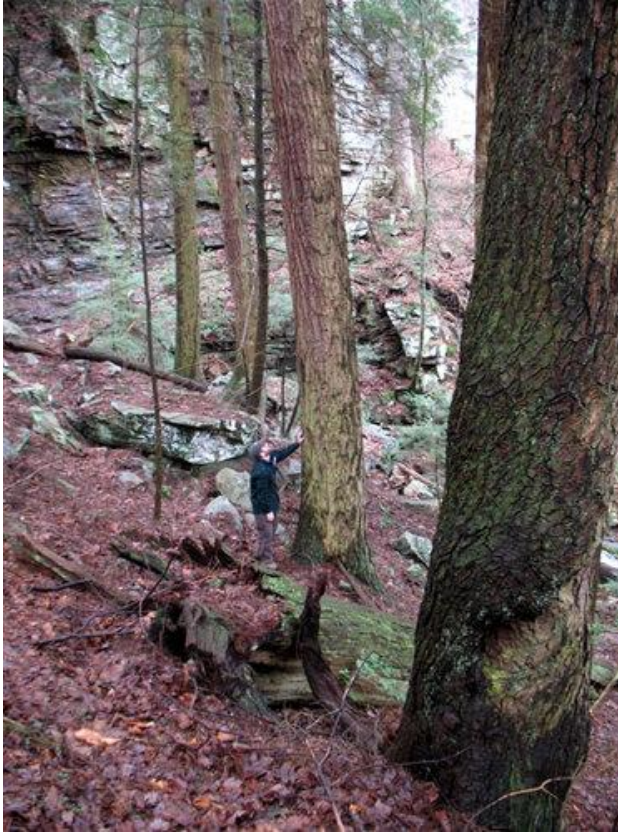


*View up Savage Creek from North Rim Trail*



*Savage Creek from South Rim Trail*





*Jason among the ancient on Savage Creek*

I won't bore you with details of the park as copious amounts of information can be found online and the ENTS website. Two stellar ENTS- Michael Davie and Jess Riddle- have visited the park before and their trip reports can be found here:

[http://www.nativetreesociety.org/fieldt...\\_redux.htm](http://www.nativetreesociety.org/fieldt..._redux.htm)

The bottom-line; SGSP has the second highest Rucker Index yet recorded for the eastern forests. It currently stands at 152.5- second only to Great Smoky Mountains National Park (RI= 168.3). Although I will have limited time for detailed exploration, I envision inching the RI up a bit as this project progresses. I will be walking in vast areas of tall tree potential and of course I will have my measuring gear!



*Hemlock and sycamore, Savage Creek*





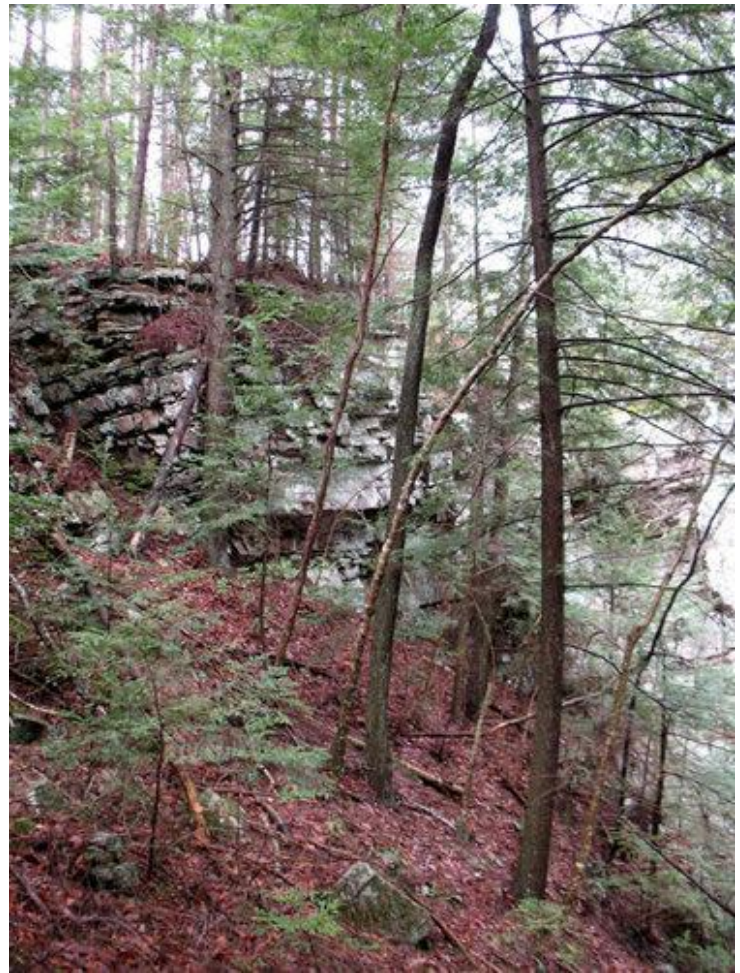
*Close-up of sycamore, Savage Creek*

Funding for this project is coming from Tennessee State Parks and this is the first large-scale treatment in the Cumberland Plateau region. Many other sites have large amounts of hemlock forest as well and plans are underway to work towards their preservation.

A main obstacle of course is funding but also finding people who have the experience to do the applications. Generally, hemlocks on the Cumberland Plateau are in deep, cool, shaded ravines and canyons. The terrain is rough, steep, dangerous, and very challenging. Add rosebay rhododendron and mountain laurel thickets to the steep slopes, cliffs, and talus and you can get the idea. It is not for the faint of heart or timid casual hiker. I fully expect to be pushed to the limits with this project.



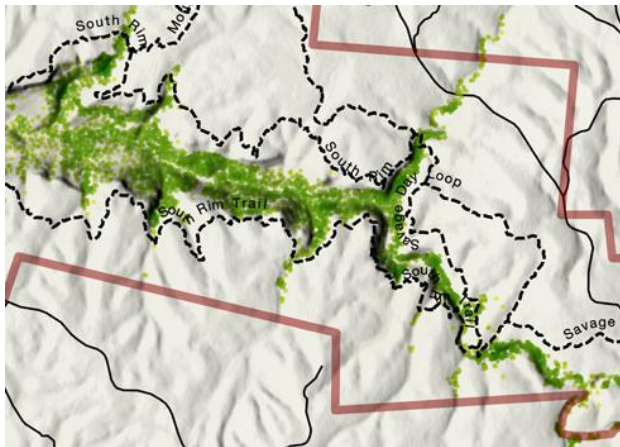
*Jason Childs and Nick Smith contemplating a plan of attack*



*Steep terrain*



Sewanee University has done tons of work in preparation for this project as well as other sites in the region. They have produced a very helpful map of individual hemlocks in SGSP which we use to help assess how much material to bring in. Here is a sample of the map; every green dot is a canopy dominant hemlock. Solid green areas are dense groves. The area below is upper Savage Creek which we started last week. As far as old-growth quality and aesthetics, it contains some of the most impressive hemlock I have ever seen. And I have seen a lot of hemlock forest!



Map excerpt (Some trails labeled wrong)

Of course, not every tree can be saved but for this project we are treating every hemlock over 12" (30.5 cm) diameter within 150' (46 m) of the main creeks and tributaries. Also, some select trails are being similarly treated. The insecticide used is imidacloprid which should give these trees 4-7 years of protection based on my experience with this pest under similar conditions. The treatment area is in the neighborhood of 33.5 miles (KM) long and 300 feet (92 m) wide. There is a minor setback for applications near water but basically we are looking at around 1,200 acres (493 ha) of treatment area. This is comparable to the successful chemically treated stands in Great Smoky Mountains National Park. We anticipate treating over 20,000 trees.

But enough about hemlocks. I have measured one super-tree already which may have been one Jess or Mike already measured. It was a 35" dbh shagbark hickory (*Carya ovata*) that soared to 154.2'. I also

measured a Carolina buckthorn (*Rhamnus caroliniana*) at 3.1" (7.9 cm) dbh X 24.9' (7.6 m) tall - the tallest I have seen. The hickory was stunning but fit right in with the superlative high canopy surrounding it. The cucumbertree (*Magnolia acuminata*), northern red oak (*Quercus rubra* var. *rubra*), white basswood (*Tilia heterophylla*), and tuliptree (*Liriodendron tulipifera*) next to it where all over 140' (42.7 m) based on straight-up laser shots. This place is unreal!



154' shagbark hickory





*Tall red oak near hickory- the reported 172 footer?*

Oh yeah, one other tree which I think Jess and Mike measured. I would have to say it is the largest volume Virginia pine (*Pinus virginiana*) I have ever seen- a slow-tapered beast 27" (68.6 cm) dbh X 112.3' (34.2 m) tall. I have never seen one with such volume! This tree was on the North Rim Trail just about 30 yards (27 m) west after crossing Meadow Creek. HUGE!



*Giant Virginia pine*



*Huge Virginia pine crown detail- just look at that thing!!!*

As we work our way through the project I will post periodic updates of what we have done and found. My firsthand experience with the forest of the park after this project should yield valuable sites for further exploration in a future ENTS rendezvous I have in mind.

Will Blozan

### [Re: Savage Gulf State Park Hemlock Preservation](#)

by Neil » Tue Nov 15, 2011 7:22 pm

a few bits of additional information. the hemlocks have been dated to 1610 by Dr. Ed Cook. Jess Riddle, Dan Griffin and I went back to update the collection a couple of years ago. While we didn't push back to before 1610 (we only got to 1635), we got a good number of hemlock dating to the mid to late-1600s.

it is indeed a cool place.

Neil Pederson

### [Washington Grove City Park](#)

by adam.rosen » Sun Nov 13, 2011 11:18 am

This terrific urban old growth spot now has a facebook page. Many pictures that ENTS will recognize as fine old growth.

<http://www.facebook.com/pages/Friends-of-Washington-Grove-City-Park/7090453217>

Adam Rosen

### [Re: Washington Grove City Park](#)

by lucager1483 » Mon Nov 14, 2011 12:57 am

When I visited the park a couple of years ago, I was struck by the number and size of the old oaks. If I remember correctly, the largest trees were generally the black and red oaks - some of the biggest of their kind I've seen. There's also several tall butternut and sassafras trees, and a few American chestnut sprouts.

The variety of hardwood species is very similar to the Wizard of Oz grove in N. Syracuse, though the Rochester trees are, on average, much larger girth-wise.

Elijah Whitcomb

### [Re: Washington Grove City Park](#)

by adam.rosen » Mon Nov 14, 2011 5:33 pm

I don't have too much to add to that. I plan on measuring a black oak there--the largest. I used my not-so-trusty stick method to get some heights in the 120's, but more work needs to be done in that department. The oaks are black, white and red.

There are also some nice maples. I did a ring count on a smaller downed oak and got 220+ on a smaller oak. I emphasize the smaller! The large black oak there is huge! The bole on it goes up and up with no interruptions. Funny how groves can have one dominant tree. Liverpool grove is the same way with it's huge maple.

Also--Washington grove has a very tall black cherry that must be 9'CBH. I want to measure that particular tree--the largest black cherry I have ever seen.

Adam's father in Washington Grove.  
Attachments





Here is a photo of Rochester Native and my father, Rick Rosen, in the grove.

Adam Rosen

### [Re: Washington Grove City Park](#)

by tomhoward » Tue Nov 15, 2011 9:17 pm

Adam, Elijah,

I definitely have to visit this grove!

Old growth oak groves are my specialty, and this site looks like a sister to the old growth oak groves in North Syracuse. In North Syracuse the oaks are also black, white, and red.

We have tall Sassafras (85-90 ft. here), and American Chestnut sprouts. There is Butternut in North Syracuse, but not so much in the oak groves. In the Tuliptree Cathedral in Green Lakes State Park is a Butternut over 20" dbh and 107 ft. tall.

The stick method tends to exaggerate tree heights, and a 120 ft. oak is a stretch in upstate NY. As far as I know the tallest in upstate NY are: White Oak, John Lennon Tree in Wizard of Oz grove (115 ft.), Black Oak in North Syracuse Cemetery Oak Grove (105 ft.), Red Oak in Zoar Valley (140 ft.). (In central NY the tallest Red Oaks I know of are about 118 ft. tall in the old growth mixed hardwood forest of Green Lakes). According to ENTS records that I have seen, the tallest White Oak in NY is 121.6 ft. tall at

Vanderbilt Estate downstate, tallest Black Oak in NY 106 ft. tall at Welwyn Preserve on Long Island, tallest Red Oak 140 ft. at Zoar Valley.

The 220+ ring count you got on the smaller oak is awesome! Was that tree a White Oak? White Oak usually grows slower than Red Oak or Black Oak. Size and age do not always correspond; in other words, bigger is not always older. The largest trees in the Wizard of Oz grove are Red Oaks that are no older than 150 years (and they go to 4 ft. dbh); the Black Oaks there are no older. But the smaller White Oaks in that grove reach estimated ages of 200 or more years. The highest ring count I got there was from a long dead White Oak snag stump only 18" diameter with 220 rings. The highest ring count in the North Syracuse Cemetery Oak Grove was also from a long dead White Oak snag stump 18" diameter with 190 rings. The oldest trees, by estimate, in both oak groves are not oaks but Black Gums (in Wizard of Oz grove, Anne Frank Black Gum 20" dbh, 94.5 ft. tall and estimated 240 years old, and in North Syracuse Cemetery Oak Grove Black Gum 19.9" dbh, 78 ft. tall, super-gnarly and estimated 300 years old). Do you have Black Gums in Washington Grove?

I'm looking forward to your measurements of the giant Black Oak in Washington Grove! I absolutely have to see that tree! The great Black Oak in North Syracuse Cemetery Oak Grove (45.8" dbh, 105 ft. tall) is the largest forest-grown Black Oak I know of in central NY. The largest Black Oak I've ever seen is an open-grown tree in Mt. Adnah Cemetery in Fulton – single trunk 74" dbh but only about 70 ft. tall, and no more than about 200 years old.

The Wizard of Oz grove also has some magnificent old growth Red Maples, including a shaggy twisty one 26.7" dbh and at least 110 ft. tall.

I'd like to see the big Black Cherry at Washington Grove, too. The largest Black Cherries in this area are about the same size, but in the old growth Lily Dale Grove (Conifer-Northern Hardwood type) in Chautauqua County are much larger ones, Black Cherries to over 12 ft. girth and over 130 ft. tall.

Tom Howard

## The Treaty Oak, Jacksonville, FL

<http://www.facebook.com/media/set/?set=a.2651572936690.2148102.1476760571&type=3>

by Hook » Wed Nov 16, 2011 4:58 pm



The Treaty Oak is an octopus-like Southern live oak (*Quercus virginiana*) in Jacksonville, Florida. The tree is estimated to be 250 years old and may be the single oldest living thing in Jacksonville, predating the founding of the city by Isaiah Hart during the 1820s.

The tree has a trunk over 25 feet in circumference, it rises to height of 70 feet, and its crown spreads over 145 feet, with twisting branches that bow to the ground and curl back up. The oak shades a roughly circular area, about 190 feet in diameter.

The name's origin is generally believed to be related to some local apocryphal stories about peace accords between Native Americans and Spanish or American settlers signed under its branches. In reality, the name was created by the Florida Times-Union journalist Pat Moran who, in an attempt to rescue it from

destruction by developers, wrote an article in the early 1930s claiming a treaty had been signed at the site by native Floridians and early settlers and called it Treaty Oak. Prior to that, the tree was known simply as Giant Oak

Duane Hook



## Re: Monster Pines of the Central Sierra

by M.W.Taylor » Sun Nov 13, 2011 9:09 pm

I returned to Eldorado National Forest and Calaveras Big Trees State Park this weekend to look for more big pines and also get a tripod measurement on the 255' preliminary measurement sugar pine I reported last week.

My exploring partner Mike and I located a few more notable pine trees in Eldorado National Forest, now one of my favorite places. One particular ponderosa was a 208' tall & 7.5' dbh in a draw above Gerle Creek. This ponderosa had a slow taper and should easily exceed 4,000 cubic feet of wood volume. I will measure its volume next year after the snows melt. Only a few hundred feet away was a slow tapering sugar pine nearly 8' dbh.

I also remeasured the 255' preliminary height sugar pine I reported last week with a tripod mounted Impulse200 LR laser, remote trigger and prism/pole survey. My official height for the tall Calaveras sugar pine is 253.02 feet above the average ground level. The Trupulse200 that I used to estimate the height the 1st time was slightly inflated, which is typical with my handheld Trupulse200 laser.

See pictures of survey and new big pine trees attached to this post.

Michael Taylor

WNTS VP  
AFA California Big Trees Coordinator  
<http://www.landmarktrees.net>

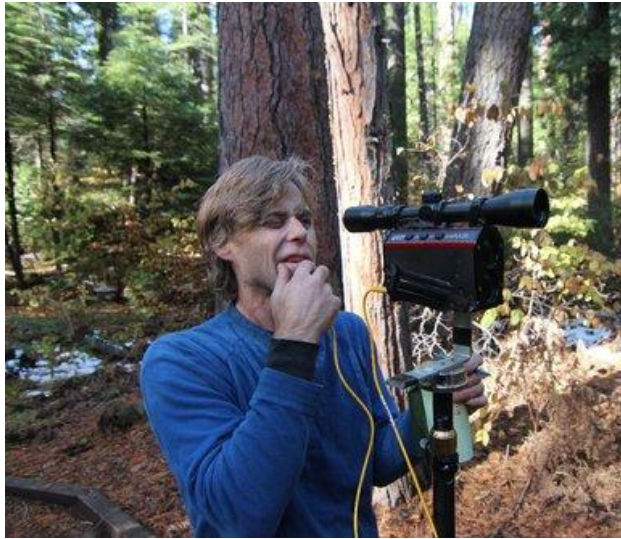


Giant 7.5' dbh ponderosa discovered in the dark.  
Should easily make 4,000+ cubic feet



8' dbh sugar pine discovered in the dark

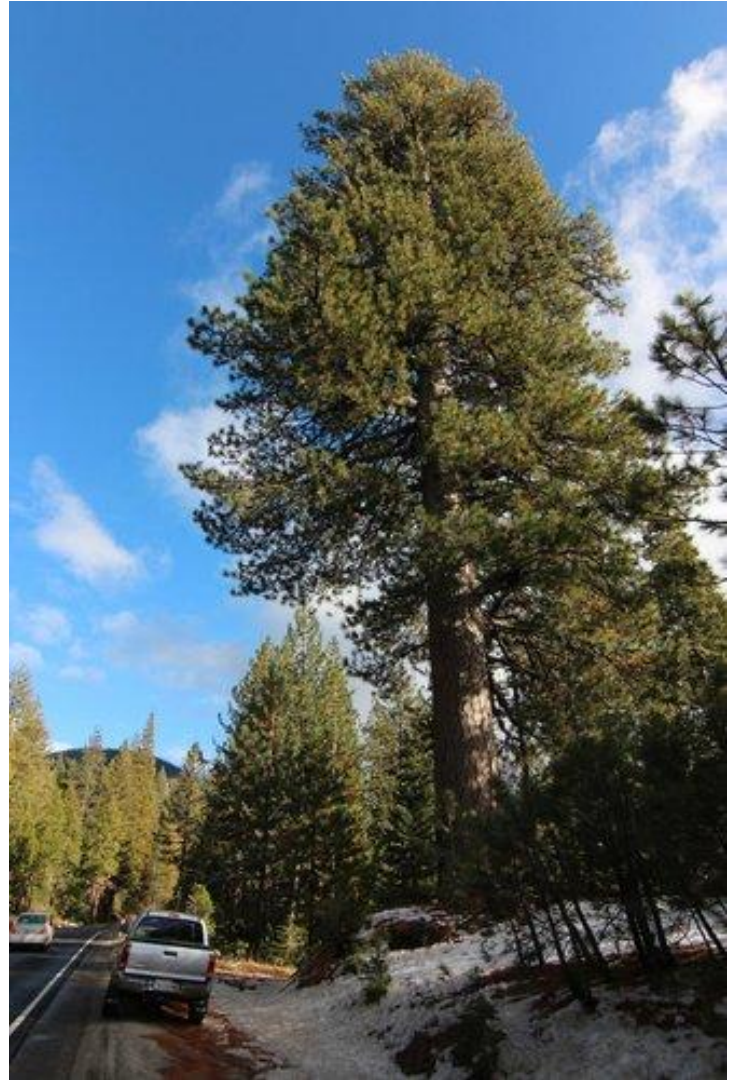




ground survey. Remote trigger greatly increases stability and accuracy of the Impulse200LR laser



new generation 360 degree survey prism



7' dbh ponderosa right off the road on highway 50



prism pole survey for tree base determined





measuring the 253'+ sugar pine with Impulse200LR laser and prism/pole survey

### [Re: Monster Pines of the Central Sierra](#)

by dbhguru » Mon Nov 14, 2011 9:25 am

Michael, Fabulous finds. Thanks for keeping us informed. We also should thank Don Bertolette for initially shining the light on El Dorado. He started something spectacular. Hooray for reunions of old fraternity brothers.

It is fascinating how we are almost in 2012, and absolutely fabulous big tree finds are taking place, East and West. The number of people doing the hunting is miniscule, but the results suggest a trend that may continue for several years - at least a couple. And now that East and West have united, NTS is where the action is.

What is your current feeling about the maximum growth capability of the sugar and ponderosa pines?

Robert T. Leverett

### [Re: Monster Pines of the Central Sierra](#)

by M.W.Taylor » Mon Nov 14, 2011 12:45 pm

Bob, I can't thank Don enough for inspiring me to go out there again. I also think there may be some record sized Jeffrey pines there. I just attached a picture of a rare 7' dbh Jeffrey in Eldorado NF, not far away from Don's big ponderosa.

I believe the maximum size potential for sugar vs ponderosa would be (at least) 10,000 cubic feet and 6,500 cubic feet respectively. I make this assessment based on historical evidence and currently standing trees. The Whelan is probably the largest sugar pine in modern existence before and after logging. This is from John Muir's account. The Whelan Tree is the General Sherman of sugar pines. The trunk volume alone for Whelan is 9,000 cubic feet. If you add up the branches and twigs I think Whelan easily exceeds 10,000 cubic feet of wood volume. Another "goose-pen" sugar pine in Oregon was reported by Douglas with a diameter of 18' at the base. The broken top was very big according to Douglas.

Sugar pine is truly the "king of pines".

That largest ponderosa ever recorded has about 5,400 cubic feet of trunk volume. I doubt this was the largest ponderosa that ever grew, but probably close to it. John Muir, for example said the largest *Pinus ponderosa* he encountered in his travels was in the Sierra Nevada and it measured 220 feet high and had a diameter of 8 feet (Peattie 1953). Muir visited these forests prior to massive logging. He saw the finest forests of the Sierra. The largest ponderosa he saw was no larger than the largest today. There is reportedly a 9' dbh specimen ponderosa growing near Chester California on Collins Pine land. I have not yet seen this tree. There is a small chance of a 6,000 being still undiscovered in some remote basin of California or Oregon.

I am fairly certain a few sugar pines (and possibly ponderosa) in Briggs Valley, Oregon exceeded 300 ft in height but they were logged 50+ years ago. The 7' dbh scraps that remain in Briggs Valley still tower over 250'. Loggers report increbiy tall 9' & 10' dbh slow tapered trees of "all 3 species" being logged in

Briggs Valley. This would include douglas fir, sugar pine and ponderosa. Ponderosa certainly can reach 280' or possibly even 290' in Oregon. I believe those specimens are long gone however.

Michael Taylor



7' dbh Jeffrey in Crystal Basin Eldorado National Forest

### [Calibrating the Rifle Scope Used with the Impulse 200LR](#)

by M.W.Taylor » Wed Nov 16, 2011 1:40 pm

That is a good question about how I calibrated that big rifle scope to the Impulse200LR. It's actually fairly easy to do and repeatable.

The scope of the Laser Technologies Inc. Impulse200 series is not set to converge with the laser at a specific target range as you would calibrate a true rifle scope. The scope alignment is set in parallel to the IR laser of the Impulse200LR, which is calibrated to the unit's internal inclinometer and 90 degrees to the force of gravity. What this means is the laser and the rifle scope cross-hairs never actually converge at any specific distance...they are set to infinity relative to each other. This is not the same principle as a riflescope.

However, with that being said, this parallel alignment between laser and rifle scope offers a great benefit because it makes calibration easy and repeatable.

To calibrate the entire rifle scope/Impulse200LR system I simply calibrated the rifle scope cross-hairs to read the correct angle relative to gravity with zero degrees as being 90 degrees to the force direction of gravity. The Impulse200LR's internal inclinometer/laser alignment was not affected by the scope removal and replacement to begin with...it's already accurate and calibrated at 90 degree or perpendicular to gravity (unless your Impulse200 laser or inclinometer is off-calibration to begin with). This calibration is much more difficult to perform and beyond the scope of this forum. If you lose the internal calibration of the 200LR unit, I would highly recommend sending it back to LTI for re-calibration.

To perform the scope calibration I used a shallow and still pond that is almost 300 feet wide. At the water's edge on one side of the pond I mount the Impulse200 with riflescope attached to a tripod yoke mount and survey pole. I carefully measure the distance from the surface of the pond's water to the center of scope cross-hair which is the center of the scope tube. On the other side of the pond's edge I have another target mounted on a prism pole that is the same height above the pond's surface. The survey pole with point tip provides an easy vertical distance measurement to the center of scope above the water surface. I then adjust the elevation thumbscrews on the rifle scope to hit the level target, while verifying the Impulse200LR inclinometer is reading zero degrees. I use a remote trigger to keep the system steady and activate the inclinometer repeatedly while I adjust the



elevation thumbscrews until aligned.

Water seeks its level and this pond has no outlet and is not flowing so both sides of the pond are level.

Now the elevation is calibrated to the Impulse200LR centroid, though off-set 3 inches approximately. But I am still not done yet. I now need to align the scope's windage to the laser's center and do this by using the sound emitter of the Impulse200LR while targeting a pointy tree top with only sky as the background. The Impulse200LR's toggle speaker informs me when the laser is hitting a viable target...I make fine adjustments until the windage is perfectly centered..using the sound feedback of the laser emitter as my guide. It's difficult to explain this unless you used an Impulse200LR but it's quite easy to center using the sound feedback. A video demonstration with sound may be helpful in explaining this to people who have never used the Impulse200LR.

Laser Tech Inc. also has a 3x-9x scope option for their Impulse2K model, just like the one I mounted on my Impulse200LR. The 200LR does not come standard with the 3-9x option and it would cost over \$500 to have one custom mounted by Laser Tech.

I used the standard Cabelas \$40 dollar 3x-9x rifle scope with windage and elevation that are adjustable with thumb screws...that is the key. "Adjustable". Without the adjustability, I would not be able to calibrate the system.

Michael Taylor

### [Sheffield Black Cherry, PA](#)

by djluthringer » Wed Nov 16, 2011 5:05 pm

On 1/29/10 I visited Sheffield, PA to measure a trunk portion of a large black cherry that was salvaged from the 1985 derecho that decimated a large section of the Tionesta Scenic and Research Natural Area. It is located in the town park on the edge of the ball field adjacent to RT6. The locals had a long open shelter built over it to protect it.

Although the log is very respectable, I don't believe it to be the bottom butt log. I expect it to be part of the upper portion of the trunk. Please note the pic provided by Dr. Susan Stout of the National Forest Service, Northern Research Station out of Irvine, PA (adjacent to the Buckaloons Recreation Area) before the tree came down.

The CBH of this log would easily have been 12ft around, possibly up to 15ft. It was truly a massive tree while standing. In my numerous trips into the Tionesta Research N.A. over the years exploring the old growth, I've yet to see any single stem black cherry that would come close to the girth of this monster.

I've been told by agency personnel that it wasn't far from an access road and on the edge of a gas well clearing. The 1985 derecho that went through the area ripped its top off, but didn't down the tree. Bill Sweeney, fellow old growth sleuth, viewed the tree soon after the storm. He said it was still standing in the tornado swath and viewable a few 100 yards distant from the road. He wasn't willing to risk the hike into the swath to see it up close since the area was near impassible due to the downed trees. Bill couldn't recall the road he saw it from and asked me if I'd ever seen it in my travels. I had never seen the tree, and for good reason, the cherry had been salvaged with part of the massive trunk being set aside for posterity in Sheffield. Sheffield was the last site in Pennsylvania to harvest timber from original old growth forests during the tail end of the timber boom in the 1920's & 30's.

The shelter has a sign erected in front of the log which reads:

"1836          Sheffield          1986

As part of the 1986 Sheffield Sesquicentennial, this 150 year old black cherry log, destroyed in the 1985 tornado, was placed here by the logging industry. It serves as a remembrance of those individuals who contributed to Sheffield's growth through the wise use of this area's natural resources."

A simple ring count of the log yielded 186 rings suggesting the tree easily started growing prior to 1799. Remember, this log is nowhere near the

bottom of the trunk. I wouldn't be surprised if this tree went over 250 years old., with 300+ being a possibility.

The log's dimensions are:

circumference at small end = 7.6ft

circumference at large end = 9.2ft

length of log = 60.4ft

cubic volume = 331.8ft<sup>3</sup> (devised from two sections of the log using frustums of a cone)

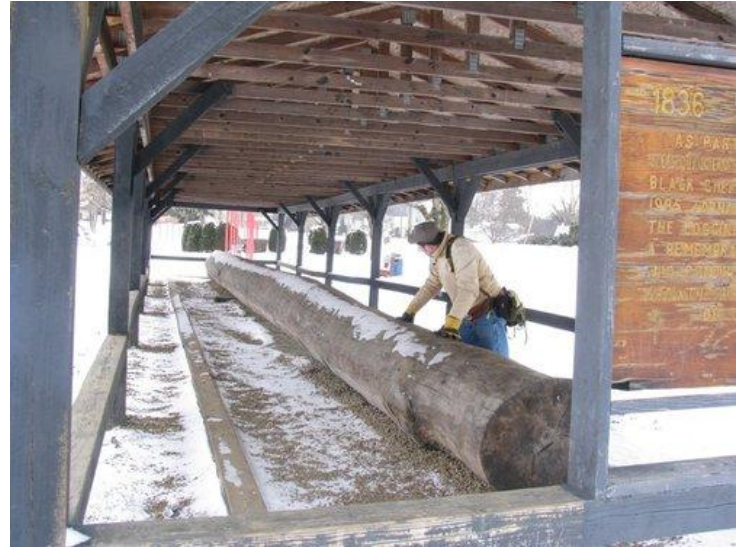
potential marketable timber volume = 3,981.6 board ft

So, if you drive through the small town of Sheffield, PA on RT6, east of Hearts Content, and NW of the Tionesta Scenic Area, don't forget to take a few minutes to view an immortalized remnant of this massive tree.

Dale







Dale Luthringer

## **Military Bases Provide Unlikely Refuge for South's Logleaf**

by Joe » Thu Nov 10, 2011 6:15 pm

[http://e360.yale.edu/feature/military\\_bases\\_provide\\_unlikely\\_refuge\\_for\\_loogleaf\\_pine\\_in\\_us\\_south/2463/](http://e360.yale.edu/feature/military_bases_provide_unlikely_refuge_for_loogleaf_pine_in_us_south/2463/)

*The expanses of loogleaf pine forest that once covered the southeastern United States have been whittled away to just 3 percent of their original range. But as scientists are discovering, this threatened forest ecosystem has found a sanctuary in an unexpected place — U.S. military installations.*  
by bruce dorminey

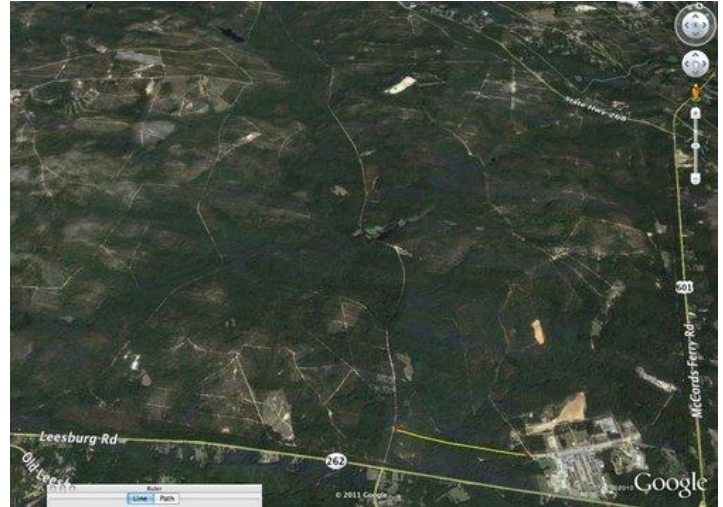
Joe Zorzin

## **Re: Military Bases Provide Unlikely Refuge for South's Longl**

by Rand » Tue Nov 15, 2011 10:33 pm

I helped with vegetation surveys on Leesburg Training Center outside of Columbia, SC one summer in 1995. The area is dominated by loblolly pine on the rolling hills with more hardwoods in the stream valleys. A scattering of slash and loogleaf pines were sprinkled around to keep things interesting. The area is subdivided with a dense grid of fire roads from the 'Smokey the Bear' era.

Apparently they had some type of timber harvest rotation going on, so most of the pines were fairly small-usually ~1' dbh and growing in dense even age stands.



Yellow line is 1 mile

When I got there, more enlightened minds were in charge and a prescribed burning/loogleaf pine restoration project was being introduced. The decades of fire suppression had allowed dense stands of loblolly pine and scrub oak to take over. They were in the process of clearcutting the pines, bulldozing or spraying the oaks and then planting in dense stands of loogleaf (a seedling every 5' or so).

If I remember correctly they were counting on prescribed burns to thin out the plantings over time.

It still strikes me as a pretty heavy handed approach, and wondered if they'd have been better off to simply thin the existing stands and let the loogleafs gradually assert themselves. There were enough remnant loogleafs scattered about that they reproduced fairly well in the open areas.

There were a few old pine groves that contained red cockaded woodpecker nesting sights, but once again, the fire suppression let the undergrowth grow up and they were gradually being abandoned.

The exception were the areas they fired their artillery into, which started the necessary fires. One of the biologist took me out to one of the beautifully open parklike stands with lush grass/herb layer covering the ground and said 'There. That's what it's supposed to look like.' Uh-huh. Night and day difference to the dense stands of pines and undergrowth that covered the rest of the area.

Naturally the woodpeckers favored nesting in these areas, which created some conflicts. The trainees



were supposed to shoot around them, but didn't always succeed. There was a minor hubbub when someone screwed up and by chance, shot one of the rare nesting trees right in half. I guess that's why the call it training.

A few other random memories:

- You don't try to pull over a 60 ton M1 tank with a pickup truck for being on an off limits road. They might unexpectedly begin backing down that narrow, unfamiliar road and the driver won't notice you until -after- he pancakes your vehicle. As I heard it, the driver was able to leap out of his truck in time to escape injury.

- They also showed another casualty of a prescribed burn that got away from them and found an untended pickup truck to consume.

- The ticks were just awful. One day I hit a newly hatch egg cluster or something and had literally a hundred of the little monsters crawling up my pant leg. Masses of insect repellent slowed them down. sorta.

- A few areas had thousands of spent .30 caliber bullets floating around. They tended to wash into gully bottoms like gravel. Very odd looking.

Rand Brown

## European Records in Finland

by Kouta Räsänen » Wed Nov 16, 2011 3:03 pm

NTS,

Jukka Lehtonen from Finnish Forest Research Institute showed me in August some Finnish height record trees. He had measured them in 90's with Vertex hypsometer and now I measured them with Nikon Laser 550A S. If I could get with laser close to Jukka's measurements, they would be European records, too. Note that these trees grow at a latitude of ~60 degrees.

## **Common Juniper (*Juniperus communis*)**

Common juniper has the widest distribution of any tree or shrub species. It is divided to several varieties, most of them being only shrubs, but particularly the European variety (var. *communis*) often attains tree form, generally up to 5-6 meters (16-20 ft), occasionally taller. It attains its maximum size around the Baltic sea. The record juniper is located in Sääksjärvi, Mäntsälä. According to Jukka's measurement, it was 16.8 meters tall in 90's. My measurement was **16.4 m (53.8 ft)**. CBH is 89 cm. Its age is very hard to tell without coring it, but the tree has been mentioned to be exceptionally tall already 100 years ago. It grows in Norway spruce (*Picea abies*) - silver birch (*Betula pendula*) forest, in the immediate vicinity there are plenty of exceptionally large junipers. In the photo below, Jukka and the record juniper.



According to the conifers.org, there is a 18.5-meter common juniper in Sweden, but it is probably not laser measured. A forest researcher measured decades ago a 19-meter common juniper in Finland, but he promised to the land-owner not to reveal the location. The researcher has passed away and so we cannot ask about it anymore.

### Goat Willow (*Salix caprea*)

Goat willow has a very wide distribution, almost whole Europe and to east Asia, and it is very common particularly in the European boreal zone. Unlike most large willow species, the habitat of goat willow is not restricted to floodplains and riversides. In the boreal zone, it is a part of pioneer forest vegetation besides birches, aspen (*Populus tremula*) and grey alder (*Alnus incana*). The North American equivalent is probably Bebb willow (*S. bebbiana*). The record goat willow is located in Nuuksio National Park, only 20 km from the city center of Helsinki. This tree was the biggest surprise to me: Jukka's measurement from 90's was 24.5 m. It was probably close to the truth and the tree had still grown: my measurement was **26.2 m (86.0 ft)**. The CBH is 66 cm. The tree grows in Norway spruce dominated forest in a small valley, with silver birch, downy birch (*B. pubescens*), black alder (*Alnus glutinosa*), aspen, Norway maple (*Acer platanoides*) and small-leaved linden (*Tilia cordata*). In the photo below, the record willow, Norway spruces and two downy birches in the background.





Still another photo of the grove. The record goat willow on the left with a yellow band. Norway spruces, shrub-like rowans (*Sorbus aucuparia*) and two silver birches with white-black trunks on the left-center, the right one of which is 33 m (108 ft) tall, it would be very tall for the species in Central Europe, too.



### Grey Alder (*Alnus incana*)

This species also has a very wide distribution in Europe, Asia and North America. It is divided to several subspecies. Like in common juniper, the European subspecies (subsp. *incana*) becomes taller than the North American one. In boreal Europe, grey alder is very common as a pioneer tree and on lake shores. In central Europe the species is largely restricted to mountains. Jukka's record grey alder had fallen, but there were equally tall individuals next to it. The height of the new record grey alder is **27.2 m (89.2 ft)** and CBH 100 cm. It grows in Ruotsinkylä, Tuusula, in 90-year-old forest dominated by +30 m tall Norway spruces. The forest type is the most fertile in Finland. Other trees in the grove are black alder, aspen, silver and downy birch, and bird cherry (*Prunus padus*). The understory is dominated by lady fern (*Athyrium filix-femina*).





**European Rowan = European Mountain-ash**  
(*Sorbus aucuparia*)

Rowan also has a very wide distribution across Eurasia. It is very similar to American Mountain-ash (*S. americana*). The record rowan was our new find. Jukka pointed it to me as we walked to the alder group mentioned above. Its height is **22.3 m (73.2 ft)** and CBH 112 cm.



In more southern locations, there are probably taller rowans, but measurements are still missing. In the British Tree Register, there is even 28 m (92 ft) tall rowan, but it is probably not laser measured.

Kouta Räsänen

*Steve Galehouse wrote: Nice post! Even at that latitude, trees are still tall. Are you aware of any other arborescent species native to both Europe and North America, or Asia and North America? I know there are quite a few circumboreal shrubs, but woody plants that achieve tree size on both continents are rare.*

Kouta replied:

In addition to *Juniperus communis* and *Alnus incana*, there is at least *Alnus viridis*, though it is more often shrub rather than tree. And if Greenland is in Europe (politically it belongs to Denmark), there is also *Sorbus decora*, one of the three tree species native to Greenland. I don't know any additional trees native to both Asia and North America.

Of course, the answer depends on the taxonomy. Some authors think the subspecies of *Alnus incana* and *A. viridis* are species. And some authors think there is only one *Taxus* species, for example.



### [Re: A new way of computing diameters](#)

by M.W.Taylor » Thu Nov 17, 2011 2:45 pm

Bob, it is my opinion that your new method for estimating trunk widths at various height intervals using the TP360 and "missing line" routine should in theory be more precise, faster and easier than using the Macroscope25 with laser. The Macroscopes are handy little items for estimating trunk width, but as you stated earlier, there is distortion when you fill the entire screen up on the Macroscope. There is just no way around this unless you can get trunk views that are far away which is difficult in a cluttered forest. I don't know how calculate this distortion error so I always try to get as far back as possible with the Macroscope25.

Also, just as significant may be the Macroscope25's 50 tick mark stadia scale which is cruder when compared to the TP360's .1 degree azimuth resolution. The accuracy relative to true North on the TP360 (which seems to drift a little from site to site and day to day) is not relevant to the accuracy of each trunk azimuth estimate from edge to edge. If I did my calculations correctly, each tick mark on the Macroscope is equivalent to .7625 degrees when using 75 as the Macroscope constant. This is lousy resolution when compared to the TP360. The key is for the Macroscope user to estimate in-between ticks. Can be done with practice but to .1 resolution like the TP360 ? Seems easier said than done.

Now the price tag of \$1,600 for TP360 vs. \$150 for Macroscope25 is a consideration for most people. A home-built horizontal transit is one cheaper alternative.

Wendell Flint measured the volumes of the giant sequoias for his book "To Find The Largest Tree", using a transit and horizontal sweep angles to determine trunk widths at various height intervals. His transit/tape-line derived trunk diameters have been proven very close to tape wraps and certainly more accurate than a Macroscope25 based measurement.

Bob, your new trunk diameter measuring technique is very practical and I would say accurate too. Thanks

for posting your method on the NTS blog. I plan to use your method as soon as I get my hands on a TP360. I will use the remote trigger + tripod to get the best possible results from the TP360.

I may in fact ditch the Macroscope25 if the TP360 works better for me. Your results are very encouraging.

Michael Taylor

### [Re: A new way of computing diameters](#)

by dbhguru » Thu Nov 17, 2011 3:29 pm

Michael, Last night I performed a simple test on the TP 360. I took an ordinary waste basket, one foot deep and with a top diameter of 13 inches and a bottom diameter of 11 inches. Its form is a perfect frustum of a cone. Its dimensions yielded a volume of 0.787 cubic feet. I then measured its dimensions using the TP 360 from a distance of 21.5 feet. The results led to a volume of 0.736 cubic feet. The difference is 0.051 cubic feet or 6.5% of the actual volume. That percentage is likely to drop significantly for larger trees, since the angle and distance errors don't go up in absolute value as the diameter increases.

I have developed an Excel workbook that utilizes the TP 360's features. I'll soon send it to you for review.

Robert leverett

### [New 170ft class pine at Cook Forest](#)

by djluthringer » Thu Nov 17, 2011 4:42 pm

NTS, Just re-measured a pine today that was first measured at 9.4ft CBH x 167.9ft high on 7/26/03. Today's measurement yielded 9.6ft CBH x 170.5ft. I first hit 170.3ft, but since it was so close to the 170ft threshold I decided to find a good mid-slope measurement and utilize a pole for the bottom

measurement. So, I settled on 170.5ft. It's a bear to measure, and located on the steep slope between Seneca & Mohawk Trails. If you know where the Seneca Hemlock is... just go up the trail ~200 yards, then up the hill ~65 yards to the tree (tac 358, 41 19.696N x 79 12.714W).

Also, re-measured the Seneca Hemlock today. I last measured it at 12.1ft CBH x 147.5ft high on 9/21/10. Today, I was only able to squeak it up one tenth of foot to 147.6ft high. It was another bear to measure, had to go wayyy upslope to get the best measurement.

Also, tried to re-measure a fat white pine near the new 170footer that I hadn't measured since 3/4/03. Back then, I had it to 12.4ft CBH x 159.4ft high. It is now dead, and looks like it's been so for years.

Also, tried to bump another tall pine into the 160ft class in the vicinity and uphill from the Seneca Hemlock, directly on Mohawk Trail (tac 346, 41 19.840N x 79 12.650W). On 5/1/03 I had it to 9.9ft CBH x 157.8ft high. It now sits at 9.9ft CBH x 159.5ft high. Believe me, I couldn't put any more height on this one. This was the worst of them all to measure. Had to go almost to the top of the hill to get the best shot. Wouldn't have been possible without my pole to help me eyeball the base. GPS had me running around like crazy up & down hill trying to pin-point these trees. Now my legs feel like jelly... Will would've run me into the ground today. Damn desk fat...

So, our current white pine tally stands at:

Height Class	# trees
180	1
170	3 (remember, the Jani Pine lost the majority of its top and is now ~135ft high)
160	29
150	77
140	146

Dale Luthringer

## Re: new 170ft class pine at Cook Forest

by lucager1483 » Thu Nov 17, 2011 7:38 pm

Dale, Thanks for the work you're doing. I've only been to Cook once, but I thought it was beautiful. I spent a whole day wandering the trails, but saw just a part of what it had to offer. From time to time I drive through PA on I-80, and the most scenic part, in my opinion, is the stretch through the Clarion River area. Just writing about it makes me want to go back - someday. Cook Forest is a true gem, and the kings of Cook Forest are the White Pines.







Elijah Whitcomb

### [Old Elderberr, Netherlands](#)

Posted by Arie Pieters in Groene Monumenten

To be a tree, or not to be a tree. That's a bit on this ancient elderberry bush between Piershil and Goudswaard. Fortunately, we know from many older residents of the area where these tough elderberry has long stood for the war. Different tree experts also went to see him and confirmed that he was probably around 90-110 years zijn. We must have two years ago, called for extra protection for these tough rascal. And fortunately there ears to the Water Board.



(This is in South Holland in the Netherlands)



### [Big Tree Oele, Netherlands](#)

Arie Pieters in Groene Monumenten

The "big tree Oele" is no more. Around 1930 he seems to have been felled by a tornado. The oak was at that time one of the thickest of the Netherlands with its circumference of almost 7 meters. He was probably between 300-400 years old. (Source: Bomeninfo.nl)



## Native yellow berried *Cornus florida*

by edfrank » Sun Nov 20, 2011 2:46 pm

This was posted on our Facebook Page:

Tim At Nichols Nursery  
My brother and I have MrMaple.com  
<http://www.facebook.com/JapaneseMaple> which specializes in Japanese maples, but recently we started propagating a native yellow-berried cornus florida (dogwood) that my father found in East Flat Rock, NC. The original tree is almost 80 years old. Any native experts every seen anything like this?

The original tree is on land that has been owned by our family since the early 1920's .. we have some rooted cuttings we started this year and we should be grafting it this winter.



The 3 berries in the photo are the same 3 berries below in the hand. Neither photo has been edited. They were taken directly by my blackberry. The photo above has bad lighting and thus the berries appear much more orange than they actually are. You can see the same berries in the picture below in the cluster of 3.



Comments anyone?

## A new area of Monroe SF, MA

by dbhguru » Sun Nov 20, 2011 2:04 pm

Yesterday super-Ent John Eichholz and I went to Monroe SF. I hadn't been in the woods with John since our trek into Hawley SF many months ago. It is always great to get out with John. He is as good of a tree measurer as we have in ENTS, and John has an exceptionally good eye for locating the highest sprig in traditionally difficult to measure species like broad spreading oaks. As for myself, I specifically wanted to check on a tall N. red oak I had measured to around 120 feet nearly a decade ago. John had not been to the particular area of Monroe where the oak grows, so, it was a new spot for him worth becoming acquainted with.



We started the day with a breakfast at our traditional ENTS hangout - the Charlemont Inn. There was only one other table occupied by a family of about 6 people. So, the Inn was quiet. Our voices were easily heard by people at the other table as John and I talked sines, cosines, and tangents. I believe the other folks thought we were either foreigners, or from another planet. But it was great to be able to discuss esoteric topics in Dendromorphometry with John. Since he is a mathematician, we could communicate on the efficacy of our present measurement methods and bang around new ideas. Speaking of which, John has a new measurement technique, which I leave it to him to explain. It's a shortcut to regular sine-sine measuring.

Once at the parking area, we put on our gear and departed. The trek is up hill and off trail. The ridge rising above the Deerfield is steep with dramatic outcroppings of schist - very scenic. Well, that adjective applies to the whole Deerfield River gorge, which is between 800 to 1,000 feet deep. As such, it is one of the most dramatic landscapes in Massachusetts. But there is more. There are swaths of old growth forest on the ridge sides and in the ravines. There are also mature second growth forests with some our most outstanding trees. Most travelers along River Road that runs through the gorge never realize that 200-300 year old trees are common on the slopes above.

From the parking area, we crossed River Road and climbed up to an open swath created by the power line. The nondescript trunks of young trees along the borders of the power line obscure the big tree treasures lying just beyond. But once you enter the forest, through a narrow ecotone, big trees immediately make their presence known. The contrast between the young and shrubby band behind you and the stately, mature forest in front of you is remarkable. Nobody fails to notice the contrast. However, it is a fairly simple forest. Within the band of old growth and mature second growth growing along the ridge, two species dominate, namely N. red oak and sugar maple. White ash, yellow birch, and American beech make their presence known, but it is the oaks and maples that dominate, and especially the oaks. The first 4 images below showcase big oaks.

The first tree is 11.7 feet in girth and around 100 feet in height, maybe slightly less. It wasn't worth our time to locate the absolute highest point in the complex crown of that big tree. In terms of age, I think the oak is around 170 years old, maybe a little older. Other trees in the vicinity are equally old and older. A few may be pushing 300 years.

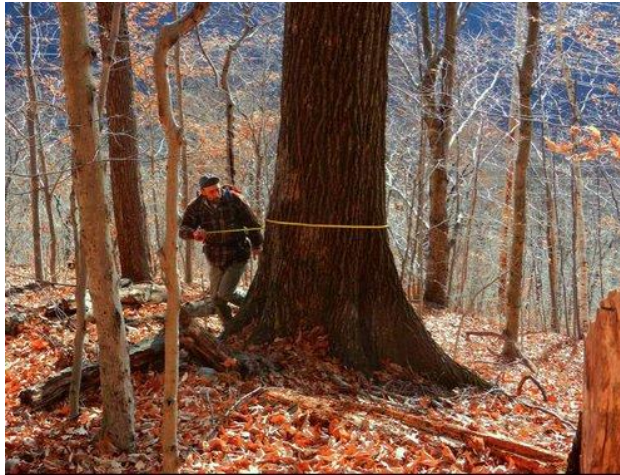


The second image is of an even larger oak farther out the ridge in a down stream direction. We measured its girth to 12.3 feet and 103 feet in height. John took considerable time in locating mid-slope.





The oak story continues. The second image of the next two shows a downed trunk.



We made time for the unusual. Here is a small beech acting like a part of a trellis.



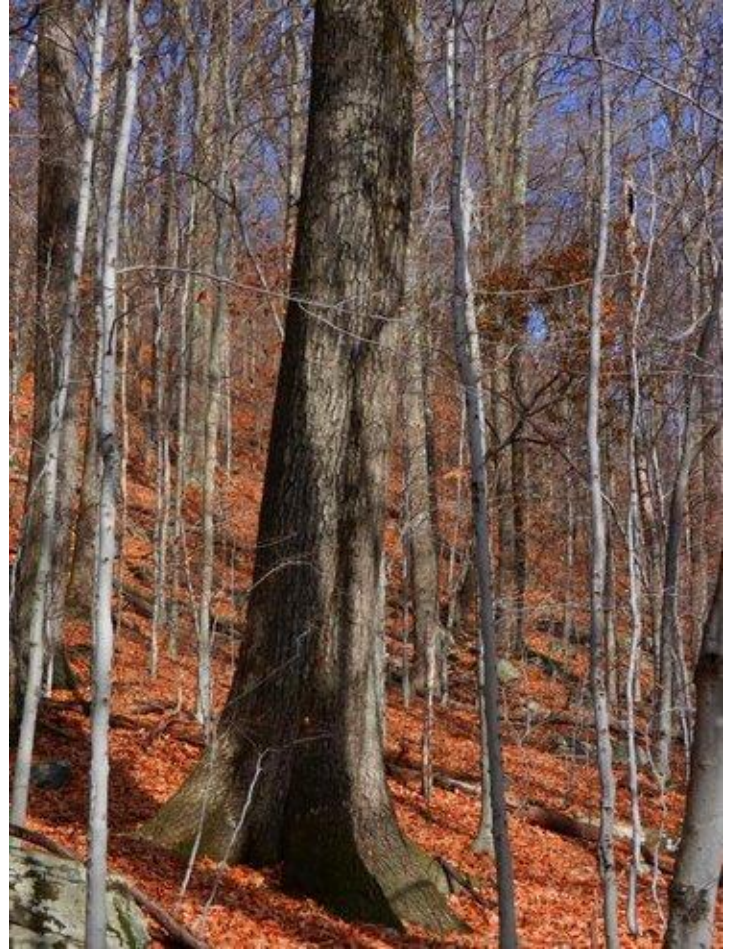
One small area we visited with a conspicuous rock outcropping showcases two yellow birches, each with an amazing root structure. Roots overpower trunks. Here is a look.







We did make it to the area with the tall N. red oak. But its exact whereabouts wasn't obvious. After considerable measuring we got 119.975 feet on one tree, which rounds to 120. I'll take it. Interestingly, I'm confident that it isn't the original oak that I thought I'd gotten 120 feet out of a decade earlier. Near the end of our search, I think I recognized that tree, and it is around 110 feet. I probably confused its crown with the crown of an adjacent tree. The new 120 is a coppiced oak, with two stems, each right on 7 feet in girth. The new champ isn't a particular handsome specimen, as the next image shows. The champ is followed by a more handsome specimen thrown in for comparison.



So, what conclusions can be drawn from our trek? The forest along the ridge boasts the largest concentration of large N. reds that John can recall for a site in the Massachusetts Berkshires. I agree with John's assessment. However, it is not a tall forest. The oak-maple canopy is generally between 90 and 105 feet, with a few oaks and maples touching 110. There is an exception. At the base of the ledges lower on the ridge, where soils have pooled, the ashes reach significant heights. We got 135.8 feet out of one and 134+ out of another. There are other ashes downstream that Will Blozan and I measured several years ago that are in the mid-120s. The ashes are just fulfilling their customary role. No other hardwood species can challenge the white ash for height in Massachusetts, and the Berkshires have the best examples of what the species can achieve.

The ridge we explored is steep. Footing is a constant challenge. Both John and I found ourselves getting up off the ground on multiple occasions. On



at least one instance, I found myself question the legitimacy of the parents of a log I had just stumbled over. Still, I found the experience satisfying, arthritic joints, deteriorating balance, and all. The power of the surrounding trees and the rocks, the sounds of the Deerfield River below (minus those of the power generating station), and the wildness of the woods reminded me of why these natural forest environments, far from city congestion, are so stimulating and important to me. Yesterday afforded me another opportunity to engage in Japanese wood air bathing. I've come to embrace the practice thanks to my friend Dr. Joan Maloof. No rules or protocol, you just walk and breathe. The molecules enter your lungs and ultimately your blood stream and impart their beneficial effects while you concentrate on listening to birds, measuring trees, identifying plants, or photographing the beauty of your surroundings. Who could ask for more?

When growing up in the southern Appalachians, I identified myself as a southern mountaineer. I was part of that culture, and proud of it. I was barely aware of the northern Appalachians, and was not drawn to them in any way. I could not have imagined myself one day scrambling over rocks and logs trying to maintain my balance, hunting and measuring trees in the Massachusetts Berkshires - and loving every minute of it. The northern hardwoods and hemlocks of Monroe wouldn't even have been noticeable in great forests of the Smokies. Yet, I have come to appreciate that the old Berkshire forests have a charm born of their particular development and history.

Today, MSF's Rucker Index stands at 123. Given the flurry of recent discoveries in PA, Delaware, and Ohio, 123 isn't much to crow about. The Central Atlantic and Mid-west are rising to assume their rightful places in the hierarchy, but for the latitude, Monroe remains pretty darn good, and certainly merits a thorough documentation, which brings me to my final thought. We'd never get the kind of forest documentation that we do from conventional forest sources and associated activities. It is a singular ENTS mission with no guaranteed paybacks. But, I can't think of anything I'd rather be doing these days.

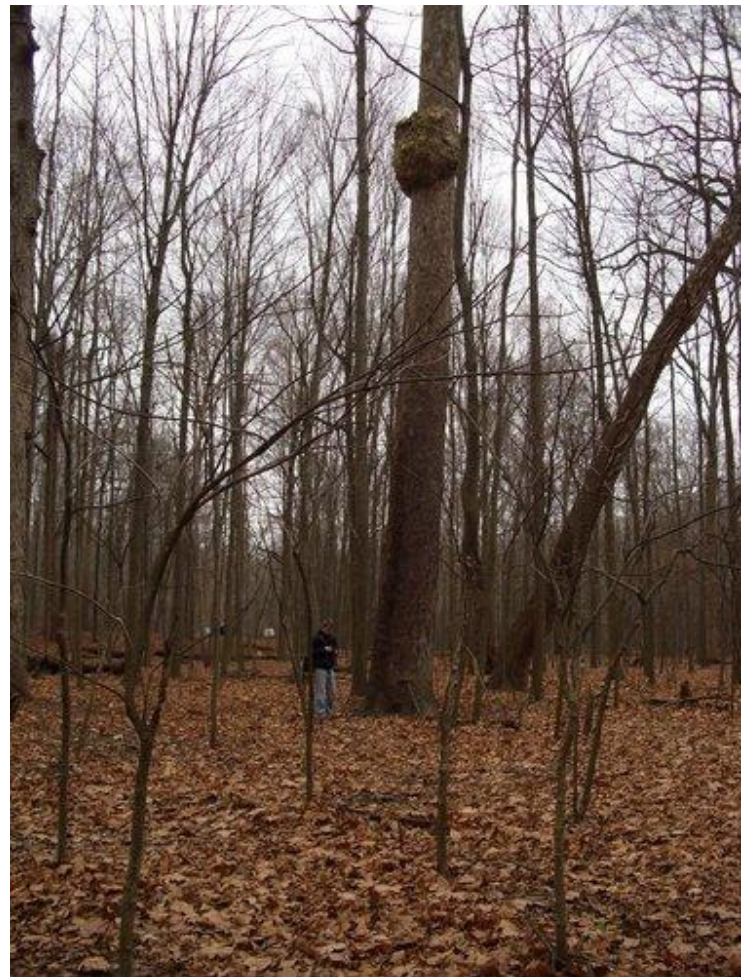
Robert T. Leverett

## [East Branch stroll... OH](#)

by Steve Galehouse » Mon Nov 21, 2011

Oldest son Mitch and I took advantage of the mild weather, and had a nice two hour stroll along the East Branch of the Rocky River---I can't say it was even a hike, since it was all level ground and either paved or on a bridle trail. No height records found or expected, but some interesting trees encountered non-the-less. The most interesting was a sycamore with a significant burl. I usually see burls on oaks, maples, and black cherries, but this was one of the largest I've seen (the chestnut oak burl at Stebbins Gulch was the largest). Here are a couple of pics:

Sycamore with burl, Mitch for scale:





*Look at the knobs on that burl! ;)*



Also visited an "old friend", a swamp white oak measured at 103' x 15' 10" girth in 2010. These pics give a better impression of the size of the tree.



I hope to get out a few more times before winter sets in. There are a couple of sites I recently learned of that should hold some nice trees.

Steve Galehouse

## Tree-ing and outreach

by Chris » Mon Nov 21, 2011 1:34 am

*\*\*I should apologize at the start. It is never nice to start "objecting" to the way things operate when you are new, but I think this post is nice and builds on ideas posted before.\*\**

I am thinking this as extensions of [previous discussions](#) about "tree-ing" [ie think birding].

Birding is big. Depending on what you count as a birder, there are hundred of thousands or even millions just in the US. Those people don't exist in a vacuum. Birding has grown *hand in hand* with the availability of cheaper optics, field guides, local Audubon groups, festivals, blogs, and even a [hollywood feature film](#).

Every US state has a local birding group with a list of the best sites in the area. Over the entire world there are set rules for [Important Bird Areas](#). Increasing number of places have [Birding Trails](#), that direct people to sites with information about when to visit, what to expect, access rules, and directions. Some places even have road signs helping you to follow the "trail". If you are interested in birding, that are resources available.

Those interested in trees are living in the stone age by comparison.

As mentioned in my intro, I have traveled a lot in the last few years. There are many places to check when looking for "trees places" to visit. Various federal or state lands (National Parks, NWR, State Forests, etc...) have good sites, but they rarely publicize the fact broadly. The Nature Conservancy often have unique places, but focus on sites they own and/or manage. Most states have "state natural areas" that preserve typical or especially diverse/interesting natural features. In the east, Mary Davis's "Old Growth Survey" site is a good source. And of course, NTS has a list of sites. But there is nothing close approaching the ease that greets birders.

Unlike birds, trees don't move, so directions should be easy! Instead, often there are few to no directions.

I have literally driven in circles looking for sites because of poor documentation. Sure, a few trees or forest should remain "secret" to protect them [Hyperion is an example], but very vast majority can and should be public.

It seems to me that NTS is the group that should be rectifying these problems. Imagine a *Tree Trail of Western North Carolina*. A several page pdf that could be printed out or accessed by smart phone, with directions to 10 premier sites. Some would have especially large trees, others areas of high diversity, maybe one with historical importance [Biltmore, Coweeta?]. There would be a short description of what to see, access rules, directions, and accessibility [bushwhack, paved trail, etc.]. Or how about a *Tree Checklist* to particular sites, like nearly every NWR has for birds, that would help illustrate the diversity? Think about trees life lists and how fun competition can drive exploration [first to find species x at place Y]. Perhaps even an NTS version of Cornell's Bird Lab's [All About Birds](#)?

At the very least, I think it would attract more members to NTS. A few months back, there was a thread asking "Why Aren't Women More Active in ENTS?". [One member wrote](#)

For myself, however, I am less interested in the exactness of the height measurements (and all the instruments used to obtain them) and more interested in things like the ecosystem, health of the trees or new findings. I have felt intimidated by the effort and documentation involved in obtaining the measurements and do not feel qualified to comment on them. With that said, however, I do have a deep appreciation for the attention brought to certain trees and stands based on the measurements obtained. I recognize that it is a way of paying attention to and honoring the trees. It's just not a way that I feel connected to.

I personally would agree. I understand that ENTS was started focused on tree measurements. But if the group as a whole is interested in increasing membership and, more broadly, appreciation and protection of trees, diversity in membership, skills, and interests is key. Just as every birder isn't interested in doing Christmas Bird Counts or entering



data in eBird, not every tree person wants to measure trees. It seems that providing other "outlets" would attract more people. Perhaps I don't want to measure, but would like to contribute photographs to a online guide to native trees, or compute checklists, or make maps. Sure, anyone could do that now, but once it goes off the radar of being an active topic here, it will only be viewed by those specifically looking for it. But by linking photographs with measurements with descriptions, you create a synergy that increases the visibility, quality, and impact of our fun.

Thoughts? Chris Morris

### **Re: Tree-ing and outreach**

by edfrank » Mon Nov 21, 2011 5:22 am

Chris, You raise some points that are worth discussing. In any organization there are competing and sometimes conflicting goals that the group is trying to achieve. Essentially the Eastern Native Tree Society, now called just the Native Tree Society was organized as a scientific organization. The primary goal was to encourage citizen scientists to go out and find, document, and measure the remnants of the great forests and individual trees that once dominated the the pre-settlement landscape. A secondary goal was to explore the relationship between people and trees and forests through art, aesthetics, and the human spirit. That is how the organization was first envisioned and we have tried to remain true to that vision.

There are those that feel we are spending too much time and discussion on topics other than the strict documentation and measurement goals. Others feel our goals are best achieved by expanding our membership by exploring some of these secondary goals of human-forest interactions ad relationships.

It is from this pool of interested people that we can potentially draw future citizen-scientist to take up the documentation goals. This broader membership pool will be exposed to the measurement and documentation aspects of the group, hopefully will be encouraged to participate, and the hard core members will be exposed to different ways of looking at the

forest and considering forest processes.

There are subjects we can address with respect to forest measurement and processes that will never be examined or considered by a profit driven timber industry, or even in academia with the need to produce quickly publishable results. We can bring many people to bear on a question or task and each can add a perspective that is unique to their background. We may see relationships or processes that are missed by those with more narrow training in the field. We can cover a broad region or even look at things on a global scale, if we grow enough. So we can contribute in a meaningful way to the advancement of science.

I want to expand the membership as I am interested in the broad spectrum fully from art to measurement.

But I do not want to see the scientific aspirations of the group to be overwhelmed by the recreational aspects of forest visitation. I do not want to see the goals overwhelmed by timber management for profit.

I am personally a strong advocate for a forest conservation ethos, but I do not even want the group to be overwhelmed by conservation issues. We need a balance. There are for example, many recreational tree climbers out there, and tree climbing businesses that introduce people to recreational climbing. Our goal should not be to create new recreational tree climbers, but to encourage tree climbers to participate in our scientific efforts and to participate in our discussions and attempts to understand the relationships we have as humans with trees and the forests.

I don't want us to simply become a recreational group about checking off trees on a list. If making guidebooks will help us better achieve the goal of creating more citizen-scientists, then perhaps that is what we should do, what we need to do. But if it is just going to add more casual member numbers who dilute or inhibit the advancement of what we set out to achieve, we would be better off to remain smaller.

I will post more thoughts later on the subject. For now I will give you and others a chance to respond to the points you have raised.

Ed Frank

## Re: Tree-ing and outreach

by dbhguru » Fri Nov 25, 2011 10:32 am

Chris and Ed, Chris, you've introduced a topic deserving of discussion. You asked some important questions, and Ed, your response is spot on. I'll now put in my two cents worth.

Can greater interest in trees be spawned through the activity of "treeing", and could that interest lead to increased NTS membership? Could treeing take a page from the successes of birding? Maybe on both questions. The possibility exists for gaining NTS members at a more rapid rate by focusing attention on the fun aspects of tree identification and hunting to invoke the excitement of treasure hunting. I'd like to see us continue discussing this topic, but with caution. Quality over quantity.

Ed, you've summarized the path of ENTS-NTS quite well. I agree that the best overall solution is to maintain a balance between the esoteric and the popular, keeping an eye on our original mission and where we make our best contributions. To this end, I'll re-state something that both of us have covered in the past. In NTS, we pursue niche science. Over time, it is where we can make many important contributions. But we need to be constantly searching for scientifically useful information that we can collect employing our rather unique tree-measuring skills. In truth, we've hardly scratched the surface in this arena, but let's not get discouraged if progress remains slow, because we're filling niches.

The above said, I think the pursuit of art in our tree-forest missions is equally important and it has unlimited potential. I state this here, because I don't want anybody in NTS to feel that I regard art as less important than our numerical pursuits. Art has transformative power in ways that simple tree measuring can't begin to match. But I'm not an artist, and won't be one of the ones who pursues the development of tree and forest art. I will, nonetheless, fully support those who do.

Back to treeing. I can see, if dimly, how we might introduce treeing as an activity and pursue it in NTS without it becoming a trivial pursuit. But I'll hold my

comments on how until others have weighed in.

Although, it is not a big membership builder, from my perspective, one critically important NTS objective is to attract more mainstream scientists to NTS. We would be partners in their research as opposed to being cited in bibliographies. The PhD level scientists in NTS would be in charge of projects that use our data. At present, Lee, Neil, Don, Doug, Gary, Joan, etc. are the ones who would need to establish the connections. Least anyone be reluctant to toot the NTS horn, fearing outsiders see us as mere hobbyists, we have already established productive partnerships with researchers and agencies with scientific missions. It might be good to update the list of ENTS/WNTS activities that have been done in partnership with or recognized by scientists in important institutions, e.g. the NPS, the USFS, and various state-level agencies that manage forests.

I will close by updating our membership on an initiative that speaks to the way that at least some important sources view our skills. I have briefly mentioned that Michael Taylor and I are about to enter into an advisory relationship with Laser Technologies Inc. on the design and uses of their TruPulse line of hypsometers. We may have considerable influence on future modifications to the TruPulse 360. Laser Tech is not pursuing this relationship for benevolent reasons. They have acknowledged a level of expertise in our use of their TruPulses unmatched by other users. That's pretty flattering, but they are not in the business to flatter. I take them at their word.

My point is that we are currently having these kinds of successes and can build on them. Tree measuring, equipment testing, new applications, operator guides, etc. the sky is the limit. After I return from Cook Forest, I plan to dive into the Dendromorphometry book and finish the draft. Michael Taylor will be my partner in producing the draft, which will then go to Lee, Don, BVP, and Will. Lee has stated that Cambridge Press may be interested in this book project. But without NTS, this project would not exist.

Robert T. Leverett



## Re: Tree-ing and outreach

by Chris » Fri Nov 25, 2011 2:49 pm

*edfrank wrote: There are those that feel we are spending too much time and discussion on topics other than the strict documentation and measurement goals. Others feel our goals are best achieved by expanding our membership by exploring some of these secondary goals of human-forest interactions and relationships.*

Surely the forum, as opposed to the listserv(s) helps this? If you don't care about the interactions between art and forests, you can skip that forum. But then you do lose the charm and comfort of a smaller membership forum where someone can read every post and really get to know other members. A trade off I guess.

*edfrank wrote: It is from this pool of interested people that we can potentially draw future citizen-scientist to take up the documentation goals. This broader membership pool will be exposed to the measurement and documentation aspects of the group, hopefully will be encouraged to participate, and the hard core members will be exposed to different ways of looking at the forest and considering forest processes.*

Yes, that was my general idea. There are any number of *potential* members that simply don't know such a group or activity exists. Using lasers to measure trees is not something that most people are going to think of *on their own*, even though they could love it. The question is how reach those people? Perhaps it would be useful to know how current members learned about NTS?

*edfrank wrote: But I do not want to see the scientific aspirations of the group to be overwhelmed by the recreational aspects of forest visitation. I do not want to see the goals overwhelmed by timber management for profit. I am personally a strong advocate for a forest conservation ethos, but I do not even want the group to be overwhelmed by conservation issues.*

I agree 100%. I wasn't suggesting that this forum become, for example, a recreational tree climber hang out, but if you make such groups [I assume they are out there] aware of us, a few might think "cool, I can have fun climbing trees AND collect good data".

*edfrank wrote: I don't want us to simply become a recreational group about checking off trees on a list. If making guidebooks will help us better achieve the goal of creating more citizen-scientists, then perhaps that is what we should do, what we need to do. But if it is just going to add more casual member numbers who dilute or inhibit the advancement of what we set out to achieve, we would be better off to remain smaller.*

*dbhguru wrote: Although, it is not a big membership builder, from my perspective, one critically important NTS objective is to attract more mainstream scientists to NTS. We would be partners in their research as opposed to being cited in bibliographies.*

I put these thoughts together, because they are parts of the same larger picture to me. What, if anything, does our citizen-science work produce? Maybe some people are happy just measuring tree heights, but I guess most would like their "work" to go to something more. Certainly, peer-reviewed research is one route. A guide book of large trees is another. Different people value different outputs. I see these as complimentary strategies, rather than in conflict.

I would also suggest we expand our views of what forest science can mean. It seems like individual tree issues [height, volume, morphology] get more attention than ecosystem data. Perfectly good, publishable data could be gathered of species diversity indexes of various forest, nut production, phenology, etc... Robert, as you said there are lots of niches that can be filled.

*dbhguru wrote: Back to treeing. I can see, if dimly, how we might introduce treeing as an activity and pursue it in NTS without it becoming a trivial pursuit.*

I certainly don't want it to become trivial. But I really