Re: Norway spruces in Buckland

by johnofthetrees » Mon Oct 18, 2010 1:35 pm

Gaines, I will try to get back soon for a photo documentation before the needles fall. It would be great to have a definitive species assignment for the larch. I see there are several related species in Europe. I will also look for spruce cones new and old.

I didn't notice spruce or larch regeneration at this site. I will look more closely. I saw extensive regeneration of Norway spruce in Savoy, among the plantations on Spruce Hill, which is at a higher elevation.

There is an effort underway to see what documentation exists on the age of the plantation. It is probably safe to say it is 1930's, perhaps older.

Speaking of Tolkienesque woods, I should dig out some photos I have of the 30' cbh red oak about a half mile further into the forest (5 stems 13'c each fused into a massive trunk.)

John Eicholz

Re: Norway spruces in Buckland

D by **johnofthetrees** » Wed Oct 20, 2010 11:04 pm

I returned to Buckland State Forest to gather cones and some additional tree data. I also confirmed that the tall black cherry is 125.1'h x 5.2'c, so it is likely the tallest in Massachusetts.

Here are some pictures from the visit:



The spruce have excellent form, both in trunk and in crown.



Here is the trunk of the 146.1' x 7.4' spruce:

eNTS: The Magazine of the Native Tree Society - Volume 2, Number 05, May 2012



And here is the top of the 150.4' spruce with a bird on the tip of the branch for scale -- what luck!



Spruce and Larch:



Larch close-up:



Larch in profile:



Here are some close-ups of cones and needles:

Norway spruce cones:



European larch cones:



Savoy state forest in Massachusetts:



European Larch needles:



I hope someone can finally declare the Larch to be Larix Decidua!

John Eichholz

http://s835.photobucket.com/albums/zz27 ... n%20Larch/

Kouta Rasane wrote (oct. 21, 2010): John, It is Larix

decidua. In Europe, there are only two larch species:
L. decidua and L. sibirica in boreal Russia. In
Russian taxonomy, the western (e.g. European)
populations of L. sibirica are separated to a different
species L. sukaczewii, but this is usually not followed
in other countries. In Russia, the smallest taxonomic
rank is species, and e.g. Scots pine is divided to
several (maybe about ten) species. You wrote there
would be several European larch species. Perhaps you
meant there are several subspecies of L. decidua. Or
that there are several species in Eurasia. In Asia,
there are more species.

Norway spruce needles:



And finally, Norway spruce regeneration in

Re: Charter Oak near Buckland, MA

Duby johnofthetrees » Wed Oct 20, 2010 11:14 pm

Oh, also, here are some photos of the charter oak, a large 5 stem tree down the road from the spruce/larch grove:





The overall girth is 30.0' at 4.5', about at the level of the wall.

John Eicholz

"How Can I Tell if My Woods are Old Growth?"

D by **Joe** » Tue May 29, 2012 7:56 am

http://northernwoodlands.org/articles/article/how-can-i-tell-if-my-woods-are-old-growth
by Michael Snyder | April 10th 2012

Old-growth forests, sometimes simply called "old growth," are just that: really old woods.

Accordingly, they are marked by the presence of exceptionally old, typically large-diameter trees that are living, dying, and dead. For most forest types in our region, this likely means there are trees exceeding 150 years old and some may be as old as 200 (white pine), 250 (sugar maple), or 400 years (hemlock). (Continued)

Re: "How Can I Tell if My Woods are Old Growth?"

■ by **dbhguru** » Tue May 29, 2012 11:12 am

NTS, Michael Snyder's description is pretty good, but needs amplification. So, I am presenting observations on some important points based on my own participation in old-growth research that began in the mid-1980s.

The New York Adirondacks have, by far, the largest old growth reserves in the Northeast. The only larger region in the eastern biome is the upper Midwest, and northern Minnesota in particular. The southern Appalachians rank third. New Hampshire's and Maine's old growth is miniscule by comparison. My advice to anyone in the northeastern region who has the time and wants to see class-A old growth in abundance, visit the Dacks. For the East as a whole, Dr. Mary Byrd Davis's "Old Growth in the East" is still the most complete listing of old-growth sites that we have. "Eastern Old-Growth Forests - Prospects for Rediscovery and Recovery" by Island Press is still the most readable book about eastern old growth ecosystems and covers the subject from soup to nuts. I can list sources that cover the topic if desired. In time Dr. Joan Maloof's inventory as a result of her old-growth forest network will be an important source of information.

In terms of old-growth characteristics, the pit and mound micro-topography fits some forest types better than others. In particular, pits and mounds fit the forests that Michael Snyder is talking about, but midwestern oak-dominated old growth seldom exhibits this feature to any significant extent. There are reasons for it that I won't go into here.

Much of the surviving old growth in the East does not exhibit big trees because the growing conditions are too austere, and the sites are steep and rather inaccessible. The Cross-timbers in Arkansas, Oklahoma, Texas, and Kansas is a prime example. Small, gnarled post oaks and eastern red cedar reach advanced ages, yet most people who pass through those woodlands think of them as just scrubby and unimportant. The tops of rocky ridges in both the

northern and southern Appalachians harbor old growth that has until recently gone unnoticed.

Contrary to the belief of some, there is an abundance of research on eastern old growth out there in the literature that dates to the early 1900s. It is just very scattered. Our own Dr. Lee Frelich, NTS VP, is one of the foremost experts on eastern oldgrowth forests on the planet. He is a source of infinite depth and experience. And we have others. Dr. Neil Pederson has seen and studied more than his share of old-growth sites. Then there is Dr. Dave Stahle, whose credentials are known around the world, and let's not forget Dr. Don Bragg. The list doesn't end there. Will Blozan has seen as much old growth as any of us, and often from up in the canopy. The list goes on. I mention these names because if there is a desire to discuss eastern old growth, we have no better place to turn than to the efforts of some current members of NTS.

One of our biggest challenges today is to decide where we come down on hands-off policies versus some form of management of sites identified as old growth. Today, our forests are faced by the invasives that threaten to eliminate important species. A strict hands-off policy makes little sense. Neither does turning over these sites to conventional forestry - a prescription for their elimination. Important old growth sites need multi-disciplinary scientific committees to oversee them and make the hard decisions to protect species from extirpation from sources that we humans introduced. This is basically the game plan for the forest reserves here in Massachusetts.

Robert T. Leverett

More Big Tuliptrees in Baltimore: Leakin Park, MD

by **MickR** » Tue May 29, 2012 1:04 pm

So, as mentioned in my other post about the three big tuliptrees, I've been exploring more of the stream valley and found some really huge trees. Just to be clear which site I have been exploring, the park is Leakin Park/Gwynns Falls Trail. The Crimera estate area has what could possibly be old-growth forest; very mature trees, lots of snags and plenty of huge rotting wood on the floor and a general feel of beech/oak climax forest, especially on top of the hills.

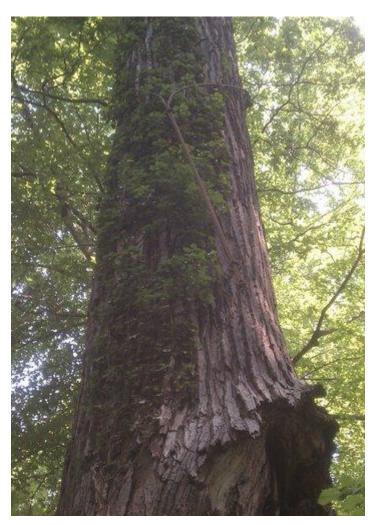
So, on to my big trees. On Sunday, I went off on a small, hilly trail called the Franklintown Loop; a treacherous singletrack across the ridge line and through some small tributaries. I found many big tulips (my primary hunt for the day); so many were between 15 and 17' CBH. I wish I could give you heights but I'm not "there yet". Anyway, I came across a huge one right off the trail, very old with an ancient, enormous gash on the side. The tree is declining but it looks to be in a state of internal rot for decades; somebody built a "fort" inside this thing with concrete and wood... its just bizarre. Also, there are guy wires or something attached to the tree, possibly from some old Outward Bound treehouse thing... not sure. I want to meet people in the area who know more history of the park. Anyway, on to the pictures:



Most of the center of the tree is rotted to a height of about 20 feet. My theory though, is that this is a very old condition to the tree. The buttressing on the other sides of the tree is staggering, as if the tree adapted to its problem on one side to stabilize itself.

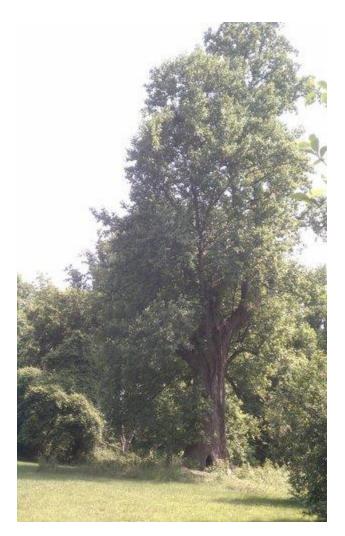


Here you can see the top of the tear, or gash. This is about 20 or so feet up. What could cause this? Also visible is the rusty guy wire-thing:



So, the circumference. I had a hard time coming up with a fair way to measure across the gaping hole. I just stretched it across the divide in the end. I got 22 feet at breast height starting from the high side (the buttressed side), exactly. Standing next to this beauty is awe-inspiring. It is very tall too, being in the middle of the dark forest. Somebody come and help me measure the height!

Next up is another giant, but out in the clearings of the park. The entire top was blown off some years ago, and it is fascinating to study how it adapted (not unlike the other big tree from my other post). I would not have noticed this one just looking for tall canopies... it is off in the corner of the estate and if the tail of a jumping deer didn't entice me to that corner I might have missed it.



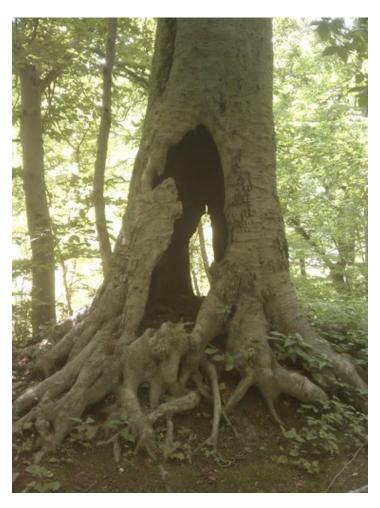
It is still very tall, but a closer inspection shows that the main trunk is almost completely cut off in the middle. I can only imagine this tree in its full glory. The bole is HUGE, and standing next to it is humbling. I thought it was bigger than the other tree, but alas, I measured 20 feet CBH exactly. This tree is also rotting from the inside out; notice the hole down in the bottom.



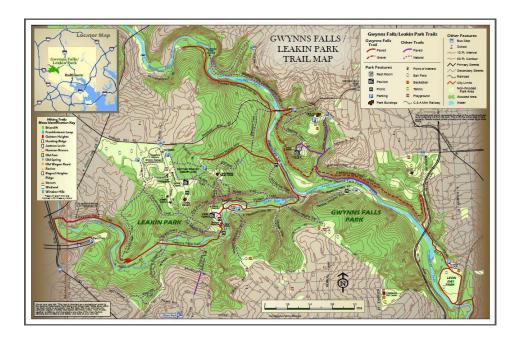
Sorry, no bike this time for scale. That hole is probably 18" high. Here is a picture of the back side, showing the old carnage to the main trunk:



Since this post has a theme of old rotting trunks, have a look at this old beech on the main Gwynns Falls stream trail; this tree is very healthy up top:

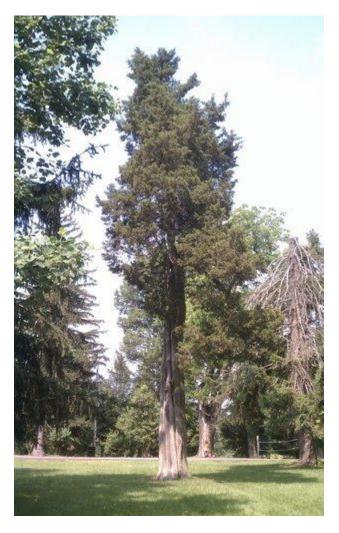


Here is a link to the park: http://friendsofgwynnsfallsleakinpark.org/history.php



View detailed PDF of map (26 megabytes)

I'll finish up with a shot of a nice old Eastern redcedar feature tree, 10'-6 CBH.



Mick Ricereto

Surfing tangent-based calculations

by dbhguru » Tue May 29, 2012 1:05 pm

NTS.

I've been dead serious about tree-measuring for nearly 25 years. To put a humorous face on it, I commonly describe myself to others as obsessed. The first 5 years of the measuring mission were spent

making the common measuring errors, ala tape and clinometer, but after getting myself thoroughly embarrassed, I began exploring ways to make a better mousetrap. Will Blozan and I joined forces and both of us became determined to achieve ever higher levels of accuracy in order that good tree sites be accurately described and honest tree champions not be trivialized by bogus ones. Later my friend Professor Gary Beluzo coined the term Dendromorphometry to describe what some of us were doing. He acknowledged our obsession in a partly playful, partly serious tribute. The term stuck. The central question was then, and still is, do we have a real pursuit, worthy of the respect of others, or are we engaged in an eccentric passion? Today, I doubt that anyone who knows me and Will who doesn't believe that we think the pursuit is dead serious, but is it a worthy application of our time? Same applies now to a couple dozen others of you. For example, look at what Eli Dickerson is accomplishing in Atlanta.

I suppose that the tree-measuring fanatical among us can take comfort in knowing that the number of serious tree measurers, as we define them, has steadily grown. But what makes Dendromorphometry a worthy endeavor? Who sets the rules? So far, it is us, which leaves us vulnerable to criticism and/or being ignored. However, we have one thing in our favor that our competition does not. We go to great lengths to verify our measurements, and we constantly look for methods to improve our craft. But how can a newcomer recognize who among competing groups is the legitimate leader of the pack?

I've come to the conclusion that the only way to settle disputes between competing camps on how best to measure tree heights is to examine the three prominent methods (sine-sine, tangent-tangent, similar triangles) in microscopic detail, presenting every conceivable strength and weakness of each, plus run numerous tests, and hunt for ever clearer diagrams such as the one that Kouta recently posted. My reasoning in going to such excesses is that commonsense doesn't seem to work with tree measurements. We still have people with impressive credentials defending the way they've done things for decades. Consequently, we in NTS are left with no

alternative but to exhaust every conceivable argument, pro or con, for each measurement method. Even with this exhaustive approach, I expect that we'll still have an uphill battle.

Toward the pursuit of this mission, about two weeks ago, I began exploring the concept of average error for a set of conditions. My assumption is that lots of people speak in terms of averages, especially when underlying trends are not easy to comprehend. For example, we might examine the average impact of say an angle error of x degrees maintained for a particular trunk baseline over a range of angles, say

25 to 65 degrees. Then this wider range could be partitioned by looking at the average impact of the error for angles from say 25 to 45 degrees and from 45 to 65 degrees, i.e. a range of lower angles versus higher angles. This would be done for both tangent and sine-based calculations.

Toward this objective, here is a formula for the average error in height resulting from a specified angle error taken for a specified baseline distance and over a range of angles for the tangent method.

$$\begin{split} E_{avg} &= \frac{D}{b-a} \int_{a}^{b} [\tan(x+c) - \tan(x)] dx \\ E_{avg} &= \left(\frac{D}{b-a}\right) \left[\ln\left(\cos b\right) - \ln\left(\cos(b+c) - \ln\left(\cos a\right) + \ln\left(\cos(a+c)\right)\right] \end{split}$$

Here, b = the upper end of the angle range, e.g. 65 degrees, a = the lower end, c = angle error, and D = the fixed baseline distance. The variable x in the above integration formula is angle. The second formula is the evaluation of the definite integral in terms of a and b. LN stands for natural logarithm and the angles are expressed in radians. Radians =

(Degrees x PI)/180. So, what would an evaluation look like for a range of angles from 45 to 65 degrees for a baseline distance of 120 feet and the angle error of 2/3rd of a degree? Here is a look at the calculations and result.

$$\begin{split} E_{\text{avg}} = & \left(\frac{D}{b-a} \right) \! \Big[\ln \left(\cos b \right) - \ln \left(\cos (b+c) - \ln \left(\cos a \right) + \ln \left(\cos (a+c) \right) \Big] \\ E_{\text{avg}} = & \left(\frac{120}{1.134464 - 0.785398} \right) \! \Big[\ln \left(\cos (1.134464) \right) - \ln \left(\cos (1.134464 + 0.011641) - \ln \left(\cos (0.785398) \right) + \ln \left(\cos (0.785398 + 0.011641) \right) \Big] \\ E_{\text{avg}} = & 4.666 \end{split}$$

If the above exercise looks a little contrived, I'd admit to that. But lots of folks feel secure in speaking about averages. So is this just filling a square of possibilities, a covering all the bases? A "more to the point", exercise is to explore the answers to concrete situations such as: Suppose you establish a 100-foot baseline, but believe that you can't read your clinometer to an accuracy of closer than +/- 0.5

degrees. If you're willing to accept height errors of up to +/- 3.0 feet, what is the highest angle that stays within the error tolerance of +/- 3.0 feet?. For tangent-based calculations, here is the formula needed to answer that question along with some example applications.

$$E = D \Big[\tan(a+e) - \tan(a) \Big]$$

$$\frac{E}{D} = \tan(a+e) - \tan(a)$$

$$\frac{E}{D} = \frac{\tan(a+e) + \tan(e)}{1 - \tan(a)\tan(e)} - \tan(a)$$

$$\tan(a) = \frac{E - D\tan(e)}{(E+D)\tan(e)}$$

$$a = \tan^{-1} \Big[\frac{E - D\tan(e)}{(E+D)\tan(e)} \Big]$$

<=E	D	<=e	max(a)
2.00	100.00	0.33	67.58
2.00	100.00	0.50	51.70
2.00	100.00	0.75	27.36
2.00	100.00	1.00	8.13
2.50	100.00	0.50	61.20
2.50	100.00	0.75	41.59
2.50	125.00	0.67	34.85
2.50	150.00	0.50	41.83
2.50	200.00	0.50	23.12
5.00	200.00	0.10	85.60
5.00	200.00	0.25	77.77
5.00	200.00	0.75	41.59
5.55	200.00	0.75	42.55

The practical nature of this formula should be apparent. If you set a baseline of D feet and are willing to buy a height error of up to say 2.5 feet and believe that your angle will not be in error of over 0.5 degrees, what is the maximum angle you can afford? Lots of what-if games can be played here.

Robert T. Leverett

Re: Old Growth on private land.... Does anyone here have it?

by Ranger Dan » Tue May 29, 2012 5:05 pm

Rex-Bless you! Hopefully you will be able to put your land into a conservation easement that will preserve the forest in perpetuity. I, too, am preserving my land. It's 29 acres, mostly wooded (last logged, selectively, in the 1950's), with some trees over a hundred years old and a couple over 40" dbh. I have been watching them grow for close to 50 years, and I have been measuring their girth every year for about 15 years. There are now many tuliptrees over 30", with nice crowns and trunks with wide strips of furrowed bark where the first and second shedding has occurred. I'm witnessing the maturation of these trees into "old growth" character, with more and more massive limbs, pileated woodpecker holes, and hollows where lightning and storms have caused injuries that cause decay and healing into interesting forms. There are many logs on the ground now, and canopy gaps. The recent death of a 36" red oak will bring the first largediameter one to the forest floor. I've done some very light management to accelerate the growth of the largest trees, by removing some of the understory trees where they form thickets, and by girdling some of the competing canopy trees (primarily Virginia pine, which will die soon of natural causes anyway). Most, if not all of my land was at one time cleared and farmed (though over a hundred years ago), and in places deeply gullied. For many years, cows ate every leaf from the forest floor, and we scrounged all the logs for firewood. Now, 30 years after the cows have gone and we left the logs to lay, the woods are a very different place, with a lush cover of herbaceous plants and limbs high overhead.

One of my passions is native plant conservation, and for years I have done extensive work here to eliminate alien species and introduce native plants. I now have reproducing colonies of now-rare plants that may have lived here prior to the arrival of Europeans, (yellow ladyslipper, ginseng, goldenseal...) and many species that grow well but probably never lived here before (several species of trillium, shooting-stars, wood poppy...). These may

someday be invaluable as reserve colonies, isolated from pathogens or other causes that may threaten the existence of plants in their natural ranges. Some of these are threatened and endangered species that I am happy to report are thriving and reproducing.

I've seen the surrounding forest that was my childhood wandering wilderness converted to eroding cow pasture and sterile house lots. I know that soon my island will be the only place in the neighborhood with any plants rarer than a dandelion. I intend to leave my land and house to some organization that would oversee the forest and the plant colonies in perpetuity, but I am not a millionaire, and without a substantial endowment, I know of no suitable willing takers. If anyone has any ideas, I will be happy to know!

Dan Miles

Urban Tree to Wood Bike

□ by **edfrank** » Tue May 29, 2012 6:59 pm



https://www.youtube.com/watch?v=zN45LMAV7CU

Uploaded by SpotsUnknown on Dec 28, 2011

Blog post: http://wp.me/pFHCG-Kx

Bill Holloway and Mauro Hernandez of Masterworks Woodworking in San Jose, CA, salvage condemned city trees, then build beautiful bicycles out of them. The story of these bikes goes from the felling of a family's guardian tree, through the woodworking process, and finally, the completion of art you can ride.

Thanks to Andrew Joslin for finding this.

Ed Frank

18th Century Ship Building

by **edfrank** » Mon May 28, 2012 10:00 pm

NTS, There is an interesting discussion going on in the ITRDBFOR related to shipbuilding in the early Americas. The key posts are reproduced below:

http://www.entsbbs.org/viewtopic.php?f=144&t=4145



Spanish Galleon http://en.wikipedia.org/wiki/Galleon

International Tree Ring Database Forum ITRDBFOR@LISTSERV.ARIZONA.EDU http://listserv.arizona.edu/cgi-bin/wa?SUBED1=itrdbfor&A=1

Edward Frank

Is this American chestnut?

by jamesrobertsmith » Tue May 29, 2012

You guys excuse me if I act the dunce, but I was wondering what this is:



I encountered a fair number of these in Virginia on a hike today. I encounter them from time to time on my hikes, but this was the highest volume of chestnuts that I've seen in one spot. Probably ever. This was on Torrey Ridge which bleeds off of Bald Mountain not far from the Blue Ridge Parkway. I was hiking the Blue Loop Trail when I began to encounter the trees. Lots of small ones--I didn't see any more than about 15 to 18 feet tall. But lots of them, just the same.

James Robert Smith

Ed Frank replied: American Chestnut - I really have little doubt it is American Chestnut. In some places they once occupied up to 90% of the basal area. In Allegheny National Forest in the Chestnut Ridge area they are still the dominant species making up over 50% of the stems with a few growing large enough to flower.

Re: Is this American chestnut?

by **Rand** » Wed May 30, 2012 11:33 am

Here's a small but still promising sized american chestnut growing in the spruce knob-seneca rocks area of West Virginia. Maybe 8" dia at the base, 20'-30' tall.





Presumably an old chestnut stump:



Also saw some interesting fungi on the trip. Anybody know what they are?



Coral fungus or clavarioid fungus (*Artomyces pyxidatus*).





Indian Pipe

<u>Check this out - Multiple tops in a Sycamore</u>

■ by **dbhguru** » Wed May 30, 2012 2:55 pm

NTS, The following 4 images show a sycamore in Look Park, Northampton. The first shows the tree from a distance.



Now a look at the crown



Where's the top?

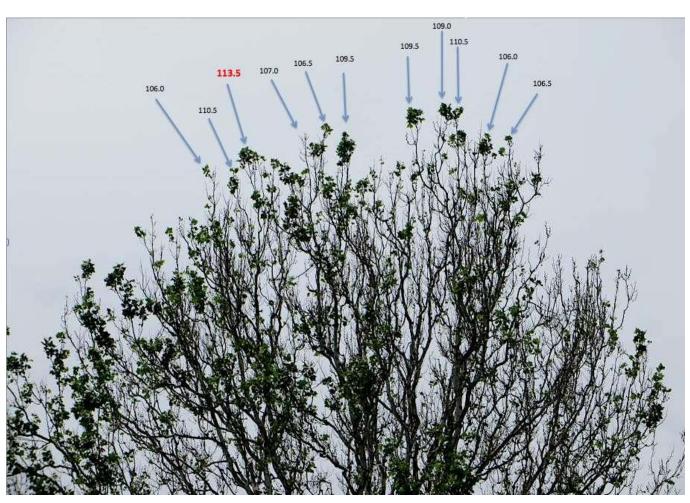
eNTS: The Magazine of the Native Tree Society - Volume 2, Number 05, May 2012



Below is a comparison of different tops.

Speaks volumes, doesn't it.

Robert T. Leverett



Re: Check this out

by dbhguru » Wed May 30, 2012 7:32 pm

For trees like this big sycamore, it is all about crown architecture. The crown may look two-dimensional from a distance, but is most assuredly threedimensional, with competing tops at different heights spread over several hundred square feet. Consider a tree with many tops and the highest offset 15 feet from the trunk. We may treat the offset as the radius of a circle. The area of a circle with a radius of 15 feet is 707 square feet. No wonder the model of the apically dominate tree with its top always vertically over its base is so misleading. I urge you to try the crown-offset worksheet. If we gather enough information using this spreadsheet, we can move tree measuring up a couple of notches. The top that shows up as the highest is 113.5 feet above eye level. There was 4 feet below eye level. So its full height is 117.5 feet, and who would have chosen that top without testing all the candidates? Of course, that is a big advantage of the sine method.

Robert T. Leverett

Re: Check this out

by **dbhguru** » Wed May 30, 2012 8:45 pm

Larry, I've attached a spreadsheet with your name (Larry's Crown-offset Measurement and Direction). I'm hoping that you'll give it a test drive on those big broad-crowned southern hardwoods. You'll need to add a compass to your equipment repertoire to get the crown and base azimuth readings. You'll see by the column headings that the spreadsheet computes a lot of things. Among them are the horizontal crown-offset distance and direction. The outputs are defined.

LarrysCrownOffsetMD.xlsx

Robert T. Leverett

A Mostly Tree Day, NYC, NY

by Jenny » Wed May 30, 2012 3:26 pm

Had mostly a tree day in Central Park. Of course, some beloved pigeons, mourning doves, and a house sparrow at the end....



There's a vimeo version https://vimeo.com/43127225

and a mobile me version (http://gallery.me.com/jennifdudley#101100)

Jennifer Dudley

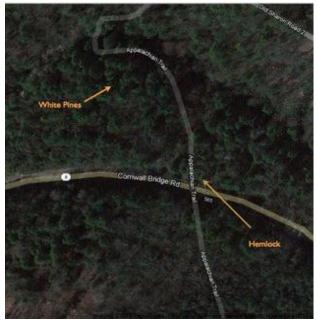
Large Pines, CT

by **jeffk** » Wed May 30, 2012 10:02 pm

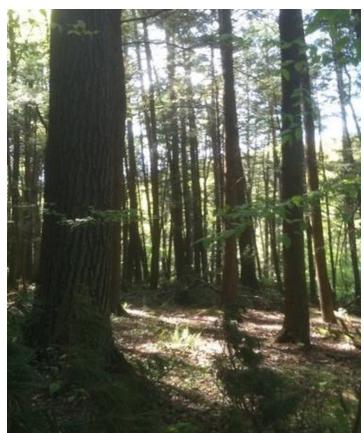
Two weeks ago was hiking the Appalachian Trail in Connecticut between Sharon and Cornwall Bridge. I was immediately struck by the preponderance of chestnut oak, black oak(?) with witch hazel, low bush blueberry, sheep laurel and some type of grass in the understory. That's as it should be - I believe this neck of the woods is firmly planted in the southern New England oak forest which these species are indicative of. I'm from western Mass. and am used to seeing hemlock, maple, beech, yellow and black birch which were almost totally absent at least on the ridge tops which the AT inevitably seeks out - it was nice to see an ecosystem which I had only read about previously.

The real reason for this post is to make Ents aware a few large White Pines and at least one Hemlock located along the AT where it crosses Rt 4 just west of CornwallBridge. Right here -





It's hard to imagine these trees escaped notice, but figured I'd post the info anyway. Here's a photo of the base -





My hiking pole is 3-1/2 feet long which puts the diameter at roughly the same. I'd estimate height at 100' plus -



Might be worth measuring properly if they haven't been documented already.

Jeff Knox



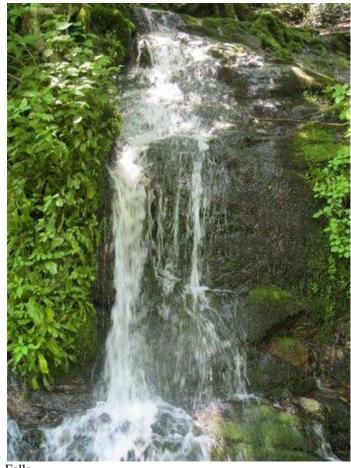
by James Parton » Thu May 31, 2012 1:02 am

I thought I would post a few pictures from our outing.

James E Parton
Ovate Course Graduate - Druid Student
Bardic Mentor, New Order of Druids
http://www.druidcircle.org/nod/index.ph ...
Itemid=145



Will Blozan and giant hickory



Falls

Fraser's Sedge



Into the Forest



Old Growth Tuliptree

Corot's Trees

by **Jenny** » Thu May 31, 2012 10:18 am

At least living in NYC I can go to the Metropolitan Museum of Art to visit some of my favorite paintings: those of Camille Corot (1796-1875).

Here are a few striking images. If interested, Google "Corot Trees". The first one is definitely my favorite. I know that a few years ago we posted great paintings of trees and landscapes from the Hudson River School, but why not do it again if you want to post favorites. I would really like to see artwork of trees that others love.



corot-leaning-tree-trunk-NG2625-r-half.jpg





Corot-Park-at-Monsieur-Wall_t479.jpg

Jenifer Dudley

Re: Richfield, Ohio location

by **Steve Galehouse** » Wed May 30, 2012

I reviewed the location using LiDAR data, which came up with a maximum height of 117'---perhaps it's been selectively logged sometime in the past 40 years (it appears to be on private property).

About two or three miles east of this site, along Everett Road, is a woods that holds several Ohio height records: Black walnut-133', Sycamore-154.5', Black cherry-135', and Black oak-129'. Northern Summit County seems to have the greatest concentration of tall trees in the state.

Here is a short list of tall trees from northern Summit County-all except the hemlock and beech are state height records for the species to my knowledge.

Tuliptree	170.01	
Sycamore	154.5"	
Red oak	146'	
Eaastern cottonwood	143.4'	
Bitternut hickory	141.8'	
White ash	135.7	
Beech	135.2'	
Black walnut	133'	
Eastern hemlock	129'	
Black oak	129'	

Steve Galehouse

External Links:

International Wood Culture Society

http://www.iwcs.com/?p=home

Handful of Heavyweight Trees Per Acre Are Forest Champs

http://www.sciencedaily.com/releases/2012/05/12050 2184416.htm

Wildlife Sound Recording Society - Parabolic

Stereo http://www.wildlife-

sound.org/equipment/stereo parabol/index.htm

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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