



Moving around and shooting the tree from different locations yielded tangent heights from 73 to 96 feet - all for a tree with an actual height of 68.0 feet.

Don, Here is an Excel spreadsheet that computes the heights, crown-offset and direction. The angle designated as a5 in the spreadsheet is the value you seek. Had I been optimally positioned for the oak, a5 would have been 90 degrees. I created the spreadsheet to calculate the crown-point offset and direction independent of the measurer's location. The object with the spreadsheet isn't to optimize location, but to get data on crown-point offset distances for different species in varying terrain. Comparison between sin and tan calculations and the angle a5 are extras. So we can also use it in comparative analysis. I think the spreadsheet has great potential, but that remains to be seen. In your hands, it could be valuable because you'll be able to get compass readings for the two azimuths called for. 2012-05-19

 [CrownOffsetMeasurementAndDirection-2.xlsx](#)

Robert T. Leverett

[Mallard attacked by dog in Central Park](#)

by **Jenny** » Sun May 13, 2012 8:49 am

ENTS, This is a wrenching story of a dog that attacked and injured a female mallard so seriously that it had to be euthanized. A Park Ranger found the duck near the pond in the southeast section of the park and brought it to the bird rehab center Wild Bird Fund. Half the beak and tongue were bitten off and there were lacerations on the back of the head. The bird had to be euthanized.

There are certain times in the early morning when dogs are allowed to be off-leash and this has lead to some pretty bad consequences for wildlife.

Waterfowl in particular. I know that it is the minority of dog owners who can't control their dogs, or have no clue how dangerous their dogs can be if they jump in the lakes and ponds, for example (that is NOT allowed - but where is a Park Ranger when you need one....I try to gently tell people not to do this, but usually people that abuse the privilege in the first place just ignore me or tell me to mind my own business!).



The story was picked up by the NY Times:
<http://www.nytimes.com/2012/05/11/nyreghtml? r=1>

Jennifer Dudley

Warbler on Fallen Tree Trunk

by **Jenny** » Sun May 13, 2012 9:27 am

On a quick trip to Central Park (NYC) I found this Black and White Warbler on a tree blown down in a terrible storm 2 summers ago. (I rotated the pic)

Not sure what species of tree this is, I'll have to check more closely when I pass it again.



Jennifer Dudley

Baron Wormser's Book

by **RyanLeClair** » Sun May 13, 2012 3:05 pm

Hey NTS, This is a book I highly recommend for all. It's "...a poet's memoir of living off the grid." For twenty years Maine poet laureate Baron Wormser "lived off the land" in the countryside; this book is a commemoration of the experience. Don't worry, it's not preachy. He never says, "Look at all of you dumb people living your wasteful lives," or anything of that nature. He actually is just as self-deprecating as anyone I've ever read.

I've had the pleasure to meet Mr. Wormser. My mother studied under him at Fairfield University.

Some warnings: a good part of the book is theory on poetry. Also, Wormser offers critiques of Christianity and capitalism. But again, he doesn't hit you over the head. In fact, he offers very heart-felt commemorations of his neighbors, who are decidedly capitalistic and Christian.

http://www.amazon.com/The-Road-Washes-Out-Spring/dp/1584657049/ref=sr_1_1?ie=UTF8&qid=1336935325&sr=8-1

Ryan leClair

Reflecting on Ed Abbey & Desert Solitaire...by Lloyd Pierson

by **edfrank** » Sun May 13, 2012 3:30 pm

Reflecting on Ed Abbey & Desert Solitaire...by Lloyd Pierson

<http://www.canyoncountryzephyr.com/2012/04/01/reflecting-on-ed-abbey-desert-solitaire-by-lloyd-pierson/>

[Re: Edward Abbey Interview - 1982](#)

by **PAwildernessadvocate** » Sun May 13, 2012
11:34 pm

Gary Smith wrote: Cactus Ed is one of my favorite authors and I have quite a few of his books. Desert Solitaire is a classic but I don't think it was Abbey's favorite. I've drawn a blank as to which book was supposed to have been his favorite.

I believe his favorite was "Fool's Progress," which is semi-autobiographical. It's probably my favorite Abbey book too, followed closely by "Good News."

Gary Smith wrote: Anybody live near Home, PA? That was Abbey's hometown and I believe there is a sign honoring Abbey as one enters the town limits.

I took this photo of an official Pennsylvania Historical and Museum Commission historical marker many years ago:



In fact, the Abbey marker served as my own inspiration to apply for a PHMC historical marker for Wilderness Act author Howard Zahniser near Tionesta, PA, which was installed in 2001:



http://www.youtube.com/watch?v=i7q_sHMJqo

Kirk Johnson

[Re: Trees Tell the Story of 500 Years of NYC Drought History](#)

by **Neil** » Mon May 14, 2012 7:10 am

Chris Morris wrote: Have there been any attempts to look at fire scars and correlate them to these especially drier times periods? Yes you have issues with Native American set fires and suppression by Europeans, but would some old Pitch Pines on some drier ridge perhaps have escaped most of that and reflect a more "nature" burn regime. How about proxys for rainfall [sedimentation]?

Hi Chris, Good question. The science of reconstructing fire history in the eastern US is just beginning in earnest. By just beginning I mean over the last 20 years. Much of the work has been conducted in coniferous forests of the east, though there are some nice exceptions in the midwest. Many records are rather short in the most eastern portion of the eastern US [only about 120-180 yrs], a period that is dominated by burning by European settlers [they burned as much, if not more than first nation people/Indians]. I do not know this part of the literature as well as others, but some good places to look are here:

Google publications in Scholar Google for Richard Guyette and Michael Stambaugh of the Missouri Tree

Ring Lab [here is a good intro vid of Mike <http://vimeo.com/14515784>]. While they have made a massive collection across the eastern US, much of their earlier work is in the midwest - <http://web.missouri.edu/~guyetter/pubs.html>. Henri Grissino-Mayer of the University of Tennessee and Charles Lafon of Texas A&M are doing some nice work in the Southern Appalachians. Here are two recent publications: <http://web.utk.edu/~grissino/downloads/Flatley%20et%20al.%20Landscape%20Ecology.pdf> and <http://web.utk.edu/~grissino/downloads/Aldrich%20et%20al.%20AVS.pdf>. The Minnesota Tree Ring lab, Kurt Kipfmueeller and Scott St. George, will start cranking out work from the Boundary Waters and points north: <https://sites.google.com/a/umn.edu/umndendro/>. A couple of nice papers have started to come out of the West Virginia Tree Ring lab led by Amy Hessl: <http://www.geo.wvu.edu/~ahessl/publications.html>. The three species paper is nice: <http://www.nrs.fs.fed.us/pubs/40520>. I am on a paper in preparation with Ryan McEwan looking at fire history since the late-1600s at Lilley Cornett Woods.

My favorite from the WVU group is a look at the causes of fire in the contemporary records collected by the state of West Virginia. From what I recall, it burns a bit more often and the fires are large when it is dry, despite the contemporary use of fire by locals: <http://bellwether.metapress.com/content/n232602j6322j3m5/?p=a79f955e00384ea5a0a3f9f3887d284f&pi=2>. So, extrapolating that record to long-term drought history would suggest it has burned more in the past due to a more favorable climate for fire (but, that is just speculation by me).

One of my favorite papers on fire in the east was conducted in Vermont red pine. They got a nice long record of fire: <http://home.mtholyoke.edu/courses/jbubier/pdf/Mann94QR42.PDF>. It shows a slowing of fire in recent decades, as does fire records from the northern range limit of red pine in Canada and thereabouts. These records come from areas where humans have less of an impact on fire. Click on the "Cited by" link for this paper: <http://scholar.google.com/scholar?hl=en&q=fire+in+eastern+canada%2C+red+pine+northern+range+limit>

[&btnG=&as_sdt=1%2C33&as_sdt=](#). I've seen scattered papers showing wetting in the north. Given what we know about fire and trends in moisture in eastern North America, it might not be too surprising that fires have become less common.

I apologize if I left off other major pieces of contemporary work in the east. I imagine I did. Bud Heinselman did a nice piece in the early 1970s: http://www.frc.state.mn.us/documents/council/landscape/NE%20Landscape/NE_Update_2011/Reich_Fire_Patterns_NEMN_2012-02-15.pdf and <http://www.sciencedirect.com/science/journal/00335894/3/3>

Neil Pederson

Unexpected formula

by **dbhguru** » Mon May 14, 2012 11:07 am

NTS, my recent preoccupation has been with the sources, trends, and magnitudes of errors in our tree height calculation routines. We've discussed the various sources of errors many times before. The topic isn't exactly glamorous as compared to the discovery of new sites and giant trees. However, at the base of our interests and activities in NTS, I would argue that Dendromorphometry is the one pursuit that separates us from being largely a free wheeling group of old-growth forest and big tree hunters with artistic and scientific interests that broaden the subject matter we discuss. Maybe I'm just trying to justify my obsession with measuring. Regardless, I stumbled onto a formula yesterday that can help us grasp the impact tree height calculations caused by angle errors occurring at high versus low angles for sine and tangent-based calculations. The formula's value is computational.

We've long understood in broad terms what most impacts the magnitude of angle and distance errors for sine versus tangent-based calculations. Computing the impact for a range of conditions is simply enough, but messy. Not any more. Suppose the measurer is curious about the relative impact of

making an angle error at a high versus low angle for a set baseline. For instance, assume a baseline of D feet and a lower angle of a1 degrees and a higher angle of a2 degrees. Suppose the angle error is fixed, e.g. a half of a degree. The ratio of the height error made for a2 versus a1 can be computed very simple as:

$$Et = [\cos(a1)/\cos(a2)]^2 \quad \text{for tangent-based calculations and}$$

$$Es = \cos(a2)/\cos(a1) \quad \text{for sine-based calculations.}$$

If the angle errors are different at the different values of a1 and a2, then the above formulas become a little more complicated. I'll skip the more complex forms for the present. So, say a1 = 30 degrees and a2 = 45 degrees, what are the values of Et and Es? The table below shows some random values of a1 and a2 to give an idea of the impacts.

a1	a2	a1 rad	a2 rad	tan	sin
-25	45	-0.436	0.785	1.643	0.780
-10	30	-0.175	0.524	1.293	0.879
5	15	0.087	0.262	1.064	0.970
5	70	0.087	1.222	8.484	0.343
10	25	0.175	0.436	1.181	0.920
10	75	0.175	1.309	14.478	0.263
11	15	0.192	0.262	1.033	0.984
20	50	0.349	0.873	2.137	0.684
20	60	0.349	1.047	3.532	0.532
25	30	0.436	0.524	1.095	0.956
30	45	0.524	0.785	1.500	0.816
35	65	0.611	1.134	3.757	0.516
45	60	0.785	1.047	2.000	0.707
45	50	0.785	0.873	1.210	0.909
58	67	1.012	1.169	1.839	0.737

The results speak for themselves. For example for tangent-based calculations, the impact of an angle error of say a half a degree will be 3.5 times greater at 60 degrees than at 20 degrees. The sine-based error will be half as much at 60 degrees as at 20 degrees.

Robert T. Leverett

Re: Unexpected formula

by **edfrank** » Mon May 14, 2012 12:05 pm

Bob, A parallel consideration might be looking at how people are measuring the distance to the base of the tree using the tangent baseline/clinometer method. I am thinking that many may not be measuring the distance to the base of the tree along a level line, but simply measuring the distance to the base of the tree itself whether level or not.

What kind of errors would you have? This table shows the results of treating a non-horizontal baseline as a horizontal baseline using the tangent method, from 100 feet away.

Angle	Measured Baseline	Actual Baseline cos(a) x100	True Vertical Offset sin(a) x 100	Calculated Vertical Offset tan(a) x 100	Height Error 1 sin - tan values
1	100	99.98	1.75	1.75	0
2	100	99.94	3.49	3.49	0
5	100	99.62	8.72	8.75	0.03
10	100	98.48	17.36	17.63	0.27
15	100	96.59	25.88	26.79	0.91
20	100	93.97	34.2	36.39	2.19

First you would have a height error by counting the base of the tree as height zero, when in fact it is some distance above or below eye level. For shallow angles of only a couple degrees this error can be several feet (column 4 - True Vertical Offset). Small angles could be overlooked in the haste to make a measurement, but likely since the measurer is using a clinometer they will be caught.

The second error will be from considering the distance to the tree along the hypotenuse to be the horizontal distance. The exact vertical offset can be calculated using the proper sine-angle method since the hypotenuse is actually being measured, but that would require math. This is shown as (column 4 - True Vertical Offset.) If reading numbers directly from the clinometer using the percentage scale (tangent method) you will get a height (column 5) that will differ from true offset by an ever increasing amount as the angle increases (column 6 - Height Error 1). This is because the wrong baseline is being used. With a measured distance to the base of the tree at 100 feet, the actual horizontal baseline decreases with a steeper angle (column 3 Actual

baseline).

Therefore even if the problem is broken into two parts - a top triangle and a bottom triangle, and the top of the tree is directly over the base of the tree, if the distance to the base of the tree is used instead of the true horizontal distance to the tree, then there will be an error in both halves of the problem because or using an incorrect baseline length.

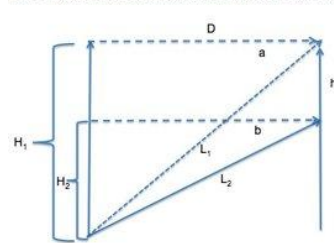
Ed Frank

Re: Unexpected formula

by dbhguru » Thu May 17, 2012 4:37 pm

NTS, Don Bertollette's description of tables used in the Forest Service to instruct the measurer to adjust his/her position on a slope to achieve a particular baseline set me to thinking. How would I solve the problem? Assuming the slope is more or less constant, here is a solution.

Adjusting ground distance to satisfy a baseline requirement



if D_0 = desired baseline length
 L_0 = corresponding slope distance
 x = distance to move forward or back along ground path shown by L_2 .

$$\begin{aligned} D &= L_1 \cos a & D_0 &= L_0 \cos b \\ H_1 &= L_1 \sin a & L_0 &= \frac{D_0}{\cos b} \\ H_2 &= H_1 - h & x &= L_2 - L_0 \\ b &= \tan^{-1}\left(\frac{H_2}{D}\right) & L_2 &= \frac{D}{\cos a} \end{aligned}$$

If $L_2 - L_0 > 0$, you move downhill x units of distance. If $L_2 - L_0 < 0$, you move uphill x units of distance. The variable h is the measurer's height. The variable a is the angle to the base of the tree. The variable b is the actual ground slope angle. L_1 is the distance from the eye to the base of the tree.

Robert T. Leverett

Tree Top Offset Project

by dbhguru » Wed May 16, 2012 7:07 pm

Don, et al., In the days prior to handheld electronic scientific calculators, we did calculations in the head, with pencil and paper, slide rule, and with the aid of tables. One could not have too many tables. They were a way of life. In forestry, I recognize that shortcuts were worked out to make the arithmetic simple for field measurements. In terms of how they were applied, I have no trouble believing that thousands upon thousands of western conifers were measured to an acceptable degree of accuracy. It was certainly the intent to do that. With large, eastern hardwoods, I expect the story has always been quite different. With the hardwoods, it isn't so much a question of compensating for the lack of level on the trunk, but establishing the right baseline to the crown-point. It is, and always has been, a two-baseline problem. Moving forward or backward to adjust for a slope is fine for the base, but that doesn't work for the crown. Without a lot of work the measurer doesn't know what the crown-point offset is. Treating it as though it were zero has led to the eye-popping errors we've seen for the eastern broad-crowned hardwoods.

With western conifers, a common level baseline to the trunk to serve for both the crown-point and base can be made to work, much, if not most of the time. With the hardwoods, at best it is a roll of the dice. However, there is a way to quantify these baseline measuring challenges. We can compute the crown-offset for the trees we measure as a standard part of our measuring protocol. On occasion, I set out to do this, but then I get lazy. However, I have a nifty Excel spreadsheet set up to handle crown-offset. If we all contribute, we could build a database that would quantify crown-offset for many species and age classes. To my knowledge other than what we in NTS have done, this kind of information is totally lacking in tree statistics. If many contribute, it will become second nature to collect the extra information. All that is required of the spreadsheet is:

1. Direct crown-point distance
2. Crown angle

3. Direct base distance
4. Base angle
5. Azimuth of base
6. Azimuth of crown-point

These 6 measurements are all that are needed for the spreadsheet. The first four are taken any way. So, we would be only adding two measurements, and fairly easy ones at that. The results for the crown-offset wouldn't be extremely accurate, but sufficiently so to highlight the problem. An additional return would be the azimuth of the crown-point computed from the trunk, i.e. as if the measurer were standing with his/her back to the trunk and shooting toward the crown-point.

Who is interested in undertaking this crown-point measuring project with me?

 [CrownOffsetMeasurementAndDirection-2.xlsx](#)

Robert T. Leverett

dataset in a meaningful manner.

Bob's proposal would allow the collection of data for individual trees so that the detail on this scale could be examined. It can better demonstrate the problems with the tangent method of tree height measurement related to crown offset, and other aspects of tree form.

This project only requires two more measurements - azimuth to the top and azimuth to the base above those normally collected.

I would encourage active tree measurers to participate in the project. It is important that for a particular trip, that all of the trees be measured including the azimuth readings to the top and base.

That assures that the data set will not be biased by preferential selection of those trees with greater offsets than average, whether deliberately or unconsciously. In any case it will eliminate any potential argument about bias in the data set.

Edward Frank

Re: Tree Top Offset Project

by **edfrank** » Wed May 23, 2012 11:24 am

NTS, The project Bob is suggesting would be worthwhile. We have previously talked about Tree Top Offset in many contexts. In 2005 using Bob's existing dataset of about 1800 trees, we calculated an average offset for the tops of about 13 feet.

http://www.nativetreesociety.org/measure/crown/tree_top_offset.htm

There were some critical assumptions made in this analysis and procedural problems with some of the measurements which were not collected for the express purpose of measuring crown offset. A final limitation of the original calculation is that it deals with the trees as an amalgam of all the measurements, so data for individual trees, and to a degree subsets of trees cannot be extracted for the larger

Bear attack! (On my Doug-fir tree?!?!)

by **PAwildernessadvocate** » Mon May 14, 2012 12:27 pm

I went outside this past Saturday morning to find my young (previously perfectly healthy) Douglas-fir tree that's been in the ground for several years suddenly leaning dramatically to one side.

I thought at first, "now why would someone want to vandalize my little ol' Douglas-fir tree, and if someone were to vandalize it, why not just cut it down instead of pushing it to one side like that???"

So I looked a little closer and realized it was some kind of an animal that did it. There were claw marks (and/or bite marks) up and down the trunk, and strands of stringy black fur stuck to the sap where I'd recently pruned branches off. My guess is it was

probably a black bear, but I don't really understand why it was picking on my poor tree, ha ha.



Anyway, I staked it upright again, fertilized it, and watered the hell out of it. I think it will probably live, despite the deep clawing in places, as long as it doesn't suffer another bear attack or some other unfortunate traumatization.

Here are some close-ups of the claw marks (there are more than just what's pictured here):





Here's a close-up of some of the fur stuck to the sap. I collected every strand I could find. I wonder if there's a way to get it DNA tested for free to confirm what kind of animal it was? Luckily, with all the rain we've gotten lately I think the ground was soft enough that the roots started to pull up under the weight of the animal. I tend to think that if the ground was drier, and there was no give to the roots, whatever it was may have snapped the tree off altogether.



Kirk Johnson

[Keeping Things Quiet In The National Parks](#)

Keeping Things Quiet In The National Parks
Submitted by Kurt Repanshek on May 13, 2012 -
1:18am

<http://www.nationalparkstraveler.com/2012/05/keeping-things-quiet-national-parks9889>

[Re: Keeping Things Quiet In The National Parks](#)

by **jamesrobertsmith** » Mon May 14, 2012

The best way to find quiet in a National Park is to seek out some solitude. You're not going to find that in an RV campground or a parking lot or paved overlook. You have to hike to find the solitude. The sounds of Man and his machines will vanish if you walk far enough in.

Sometimes, if you're lucky, you can even find peace and quiet in a semi-developed site. My wife and I had the parking lot at the summit of Cadillac Mountain in Acadia NP all to ourselves one night. We sat and watched a meteor shower (Perseids) turn into a meteor storm. One of the greatest things either of us ever saw. And just a couple of years ago we drove to an overlook above Yellowstone Lake and--surprise!--there was no one else up there! So we sat and soaked up the relative silence.

James Robert Smith

[Re: Keeping Things Quiet In The National Parks](#)

by **Don** » Wed May 16, 2012 3:32 am

The soundscape at Grand Canyon was a big issue. It would start at the wildlife level, and with NEPA constraints on impact, run all the way to the FAA, causing decades of legislative wrangling. It's probably still going on as there are still many, many flights a day (helicopters, fixed wing twin engine multi-passenger planes).

One of my GIS co-workers put together several coverages for congressional comparisons, several times as the wrangling evolved/escalated. She explored the envelope of GIS transparency layers and was very effectively dealing with 3-D imagery. Her efforts to make clear where planes could fly (at what altitudes through which segments of the Park), where helicopters were permitted.

As a Hazard Tree Reduction Coordinator, when assigned the task of removing limbs, or entire trees as necessary from Phantom Ranch (Historical Cabins, structures from 1920's), I had to respond to constraints on times during which we could run chainsaws, yet not disturb nesting eagles. How long do you think it took my three man crew to remove and prune 12 cottonwoods planted in the early 1920's, disperse branches and debris, working hour on, hour off, during four hours in mid-morning, same in after noon?

Ask Mike Dunne, one of our own ENTS, he was one of our arborists in training. I still speak well of his boss, for his continued focus on safe tree work.

Don Bertolette

Trees Tell the Story of 500 Years of NYC Drought History

by Neil » Sat May 12, 2012 4:32 am

Regarding: *Trees Tell the Story of 500 Years of NYC Drought History* Posted on April 29, 2012
<http://seaandskyny.com/2012/04/29/trees-tell-the-story-of-500-years-of-nyc-drought-history/>
by Neil Pederson

We do consider as many of the potential factors of tree growth as possible when making climatic reconstructions from tree rings. In the blog post I mentioned that it took a long time to get this paper 'out' because I made three versions of the reconstruction until I was convinced that what I was seeing was not the result of some of these other factors. I reworked the data multiple times to test this idea, especially the idea that a change in competition in recent decades was causing what turns out to be an 'epic' pluvial - the extended, recent wet period. Tree age matters little when it comes to growth rates. Some of the oldest trees in this collection are growing faster than ever. Some of the younger trees might not be growing as fast as one might expect. You are correct, it is more complex in the east.

What wins us over in the end are the statistics. Once we reduce factors like competition and growth releases (the ecology) from the raw ring widths, we conduct multiple tests to ensure the trees are reflecting what is recorded in the instrumental data. In this case, the trees account for 66.2% of the annual change of May-Aug drought from 1895-1981 and pass several verification tests. That isn't too shabby for trees growing in humid environments like the eastern US. We only go to 1981 in this case because this is the common period for all of the trees used in this reconstruction. We tested subsets of the collection between 1981 and 2002. The trees account for 49.3% of the drought variance in 2001 and more than 51% between 1982 and 2000. We cannot go closer to the present with this collection of tree rings - not enough tree-ring data were collected after 2001 to make a reconstruction.

Finally, this is a well-replicated network of tree rings. We use 32 distinct collections over the 1852-1981

common period. I do not have the final numbers in my head, but I estimate we have at least 450 trees, and likely closer to 500, for the 1852-1981 period. From 1982-2001 we had a minimum of 275 trees and likely have closer to 300-320 trees.

We feel pretty confident with the data and the results. Now, if we could get more trees prior to 1531, man what a cool record this would be!

Neil Pederson

Deathly Tree Limb Collapses in NYC

by Jenny » Mon May 14, 2012 8:56 am

Joe brought this NY Times article from today to my attention. The ignorance of tree inspectors and budget cuts are some of the causes behind collapsing tree limbs that have caused deaths and serious injuries all over the city. This is worth reading.

My favorite ridiculous quote from Adrian Beppe, the parks commissioner is ""The only absolute correction," Mr. Benepe continued, "would be to have no trees at all..." Huh? Granted, it's a newspaper article and the quote may be way out of context.

http://www.nytimes.com/2012/05/14/nyregion/in-new-york-neglected-trees-prove-deadly.html?pagewanted=1&_r=1&hp

Jennifer Dudley

Re: Why Do We Need This Degree of Accuracy?

by dbhguru » Tue May 15, 2012 6:14 pm

Joe Zorzin wrote: Just a sideline here, but --- I'd like to see a discussion of just why it's so important to get tree measuring as accurate as possible. It's probably been done before in this BBS but I suggest that continued efforts to improve the measurement techniques should go hand in hand with ongoing discussion of why it's important.

Joe, this might seem a little weak, but I contend that NTS type accuracy is important to our pursuit of pure species understanding. At present, there is no driving economic need, nor for big tree contests. The latter might be important, were there money on the table, but there isn't.

As a analogy, one might ask what importance is getting the exact elevations of mountains listed on maps correct. Certainly, people interested in mountains for climbing generate the feeling of the need to know, to get them right. It is also this way with trees. In time, more accurate data of the type we generate may find uses in scientific studies, but we're just at the door of that kind of usage.

Some of us argue that good data are needed to correctly portray the value of some forest assets. For example, MTSF is truly extraordinary in its growth achievement. But to convince others of that, comparisons between Mohawk and other forested properties need to be accurate. More thoughts to come.

Robert T. Leverett

Re: Why Do We Need This Degree of Accuracy?

by Joe » Tue May 15, 2012 7:02 pm

Right- must be lots of good reasons, such as:

- * standard forestry economics- accurate measurement is required to determine rate of growth of value- a bank wouldn't say that their interest on deposits is "somewhere between 1-5%" because then nobody would put their money in the bank, likewise, forest owners need to know accurately, the economics of their forest before investing in forestry practices
- * tree health- a periodic measurement of some trees can help us to understand tree health- for example, how much does a specific infestation of say, gypsy moth, effect growth
- * good tree measurement may help us to understand how long trees can continue to sequester carbon- does it stop at 75 years or 175? Vague numbers are just not good enough. The Manomet Report was built on a lot of very rough numbers, yet they're going to use it to set policies- the numbers must improve to improve policies
- * trees are very complex in shape- learning to measure them better should enhance the measuring tools and mathematics, then these advances may be useful in other ways

just a few thoughts---

Joe Zorzin

The Interrupted Forest (Maine)

by **Jenny** » Wed May 16, 2012 6:46 am

From "The Interrupted Forest: A History of Maine's Wildlands", a great book by Neil Rolde

And geez, what a geek I am. My Dudleys being Mainers, my brother knows Neil and had him send me an autographed book. I was sooooo excited....

Regarding lumber and written in the 1860s or so by Hugh McCullough -1808 - 1895 (born in Kennebunk, Maine and a United States Secretary of the Treasury under Lincoln, Johnson, and Arthur).

"The wildest speculation that has ever prevailed in any part of the United States was in the timberlands of Maine...The desire to speculate became so great that a courier line was established between Boston and Bangor by which orders first to buy and subsequently to sell were transmitted and for months little was talked about but Maine lands."

Jenny Dudley

Re: Sulfur Finding May Hold Key to Gaia Theory of Earth as Living Organism

<http://www.sciencedaily.com/releases/2012/05/120515203100.htm>

by **Bart Bouricius** » Thu May 17, 2012 11:21 am

Glad this was posted, but having taken courses from Lynn Margulis I know she would have told you that the Gaia Hypothesis is just that, it is not a theory or a philosophy, though it is slowly moving toward becoming a theory. It is a testable hypothesis that is continually being tested as mentioned in this article which tests only "a coupling in the Gaia hypothesis," according to author Farquhar. Had Lynn not died recently, I believe she would be irritated by this posted article about the original article claiming that

her and James Lovelock's hypothesis had anything to do with the earth being "essentially sentient", or that the earth is alive. The Hypothesis is in basic terms, the contention that the atmosphere and outer skin of the earth are regulated by a series of feedback systems involving metabolic processes of bacteria and other living organisms, in such a way that the conditions for life such as a certain temperature range, the salinity range of the oceans etc. will not get too far out of whack to maintain life. In order to understand how this is thought to work, I would suggest Googling "daisy world". James Lovelock developed this daisy world model to demonstrate on a simple level how a feedback system could do this.

Joe Zorzin wrote: though the theory isn't philosophy, it certainly lends itself to philosophical interpretation

That is certainly true and many interpretations have evolved that have little to do with the actual hypothesis, yet I must admit that I myself find it comforting to examine the connections and feed back systems of life on earth and think about how humans fit into this amazing process. A quote from Lynn and Dorian Sagan's preface to their 1997 edition of their book Microcosmos probably gives a glimpse of Lynn's thought process regarding humans role though: "A forum in Harper's Magazine, entitled "Only Man's Presence Can Save Nature," exemplifies humanity's typically grandiose, almost solipsistic, view of itself.

Atmospheric chemist James Lovelock speaks of the relationship between humans and Nature as an impending "war"; ecofundamentalist Dave Foreman declares that, far from being the central nervous system or brain of Gaia, we are a cancer eating away at her; while University of Texas Professor of Arts and Humanities Frederick Turner transcendently assures us that humanity is the living incarnation of Nature's billion-year-old desire. We would like to take all these views to task. In medieval times an interesting prop of the jesting Fool, besides glittering jeweled bauble and wooden knife, was the globe.

Picture this figure -- capped and belled Fool, ear flaps a-dan-gling as he handles a mock Earth -- for a more festive, if no less true, summary of how things stand between Homo sapiens and Nature."

Bart Bouricius

[Point au Roche, NY](#)

by **dbhguru** » Thu May 17, 2012 8:07 pm

NTS, Monica and I have been at Point au Roche on Lake Champlain for the last 3 days. It is one of our favorite places. I was out to add big cottonwoods to my list and Monica was out to simply enjoy this great place. We stay at the Point au Roche Lodge, which we highly recommend. I know of no better place.

First, the images. Number one show a large willow. They are all over the place, and they grow quite large and develop a lot of character.



The next 3 images show very old cottonwoods on Long Point. None are exceptionally large, but Oh Boy, do they have character.





Now to the numbers. These are the most notable cottonwoods measured on this trip.

Girth	Height
16.8	103.5
16.0	87.0
15.6	115.0
15.4	101.5
12.0	111.0
	114.5

I expected to find more, but the weather didn't cooperate. It rained buckets. But next time, that slender list will be greatly expanded. More images when I return to Massachusetts. It is just about my bedtime.

Oh yes, this is a great location for birding. We saw lots of Baltimore Orioles today. And we were the closest to a Pileated Woodpecker I've ever been - around 25 feet. Jennifer Dudley would love this place. Monica could list all the species we've seen. That will be part of the next posting.

Robert T. Leverett

And last and not least, a look at my breakfast this morning. The chef is incredible.



Big Kentucky Coffeetree, WV

by tsharp » Thu May 17, 2012 10:33 pm

NTS: A local arborist alerted me to this tree. It is located on a farm overlooking the Ohio River about five miles downriver from Ravenswood, WV. It is a Kentucky Coffeetree (*Gymnocladus dioecious*). It is native to the area but of course this one is planted. The old part of the farmhouse is ca 1845 so it is possible the tree could be that old. The following two pictures were taken between heavy rain showers.

14.9"CBH X 70.2' Ht. X 71' Max. Crown Spread
#1 son standing next to tree is 6' 2" . I have agonized over whether to call this a singlestem or Multstem tree. At first i was pretty sure it was a double stem. However, after thinking about other planted specimens of all ages that I have seen and noting the propensity for open grown specimens to have fairly



Photos by Turner Sharp 4/28/2012

low branching, I decided that the apparent seams in the trunk were the result of the low branches just adding on wood that may extend all the way to ground level. It also appear to me that if one followed a pith line of the branches to the main bole they would intersect at least to belly level. What say ye lovers of single stem trees. Single stem or Multi stem?

Turner Sharp

(Single!!)

Tall oaks in the "Forêt de Bercé near Le Mans

by **Jeroen Philippona** » Fri May 18, 2012

In last April I visited France. I spent a week in the Morvan, an old, lower Mountain chain in Burgundy, some 150 miles southeast from Paris; for a great part the bedrock is granite with some slate, but especially in the northwestern part also limestone and marl can be found. Forests in the Morvan are a mixture of wood production plantations with Douglas firs and other exotic conifers as well as more native broadleaf forest with mainly European beech, mixed with sessile oak, pedunculate oak, Hornbeam and some European chestnut and Sycamore maple (*Acer pseudoplatanus*) other species. Some of these beechforests are of rather natural species composition and have been declared a forest reserve, but none have old growth character.



The last two days I visited the Forêt de Bercé, a famous forest about 100 miles to the southwest of Paris and 20 km south from the town of Le Mans.

This forest of 5380 hectare (13.450 acres) is one of the forests planted with Sessile oak (*Quercus petraea*) for high quality timber production during the reign of King Louis XIV (1643 - 1715) on command of his Minister Colbert.

The forest lies in an area with plateaus with an altitude of around 130 - 160 m above sea level but dissected by small river valleys going down to 100 m asl. The soil at the plateaus is deep sandy-loam to loam-clay brown earths, with parent material of flint

clay formed in the Turonian. Soil is relatively acidic and relatively poor, but still of a good class of fertility (F.Lebourgeois et al. 2004). In the valleys soils are somewhat richer.

Still some parts with the original oaks, dating from 1680 - 1720, exist. Famous is the small reserve: "Futaie des Clos" of 8 hectare (20 acres) with still over 400 oaks planted in that period and located at a plateau.

The oaks should have been felled between 1903 and 1933, but in 1895 this area was declared a special forest reserve because of the special quality of its oaks; in 1930 this was declared to be one of the "Artistic reserves" for its special beauty.

In the publications about this forest always the very great heights of the oaks were mentioned. In 2006 the forester Yves Gouchet measured many of the oaks in the "Futaie des Clos" as well as in some other parts of the forest, probably with a Vertex hypsometer, a tangent style of instrument. He measured several oaks of over 43 meters (141 ft), among which two of 45 m (147.6 ft), one of 47 m (154.2 ft) and one of 50 m (164 ft). In a later publication after remeasuring this was mentioned as 49.5 m (162.4 ft).

Before I went to France I tried to get in contact with mr. Gouchet, but failed. Backwards this was because mr. Gouchet retired as a forester in January 2012.

When I was back in Holland I got e-mail contact with mr. Gouchet. He sent me a mail of other foresters, who had measured another oak of 49.0 m (160.76 ft) in the "Futaie des Clos". They also wrote that LIDAR surveys of the forest will be held soon. They wanted to have exact GPS positions of several of the oaks.

In a publication in 2004 by François Lebourgeois c.s.: Climate-tree-growth relationships of *Quercus petraea* Mill. stand in the Forest of Bercé ("Futaie des Clos", Sarthe, France) the medium height of 81 oaks in the "Futaie des Clos" was given as 45.2 m (148.3 ft). The measuring method alas was not given but very probable was also with a Vertex Hypsometer, the most common used height measurement instrument used by European forest researchers and foresters between 1995 and 2010.



[Quercus-petraea-F.Bercé Lebourgeois 2004 .pdf](#)

So at the 28th of April in the beginning of a rainy evening I visited the first location in the forest: here the second tallest oak was reported by mr. Gouchet, called the "Chêne Emery", which should be easy to find. On the way to it at a plateau stood only light and relatively low oak forest (height around 20 - 22 m (70 ft); but then a small road turned into a small valley descending towards the east. Here I saw much taller forest of sessile oak and beech. A first laser shot gave 38 m (125 ft), so much better). Then I saw down in the valley a nice forest of very tall and rather big oaks as well as beeches.



The "Chêne Emery" with signpost and fence. The tree just at left and in front of it is a beech of 40 m tall.

The "Chêne Emery" is marked by a signpost and is surrounded by a fence. I made many measurements with my Nikon Forestry 550 laser ranger (for Robert Leverett: without the 3-point tangent method). It was

good to be measured, while it is near to the small road where one can get good sights of the tallest tops from several points. After many measurements I concluded it to be around 47.4 meters - 155.5 ft. This was a new laser measured record for *Quercus* in Europe! The cbh was 341 cm - 11.19 ft. Several other oaks were 43 to 44 m (141 - 144.4 ft) tall with cbh of 370 - 400 cm (12 - 13.1 ft). The tallest European beech here I measured as 41.4 m (136 ft). Beeches were younger than the oaks and planted to get long clean oak trunks. Indeed the trunk of the Emery Oak is 29 m (95 ft) clean till the first branches.





The "Chêne Emery" at the signpost is given a total woodvolume of 21.5 cubic m (759 cubic feet) and a trunkvolume of 16.5 m³ (582.7 ft³)

At the signpost the height of this oak is given as 47.75 m (156.66 ft) so not much different from my measurement. Its age is given as 265 years in 2007, so planted in 1742: this part of the forest is somewhat younger than the "Futaie des Clos".

At April the 29th I visited two other parts of the forest, the above mentioned "Futaie des Clos" and another valley, called the "Sources de l'Hermitière". Here the oak of 49.5 or 50 m was reported. Indeed this was a very beautiful forested valley with a small stream flowing from west to northeast. So this was a very sheltered location. At once I saw this forest was very promising: the first oaks and beeches I measured were around 42 m (138 ft) tall. As I walked along the stream I measured an oak of 43.3 m (142 ft) with cbh of 374 cm (12.27 ft).



The forest at the Sources de l'Hermitière with oak of 43.3 m (142 ft) in the centre





I measured several more oaks up to 44 m (144.36 ft). A few hundred meters to the west I found a taller oak. It was difficult to find the highest tops, while it was already well in leaf and surrounded by other oaks and beeches. In the end I concluded it to be 46.0 m (150.9 ft) tall, with cbh of 366 cm (12 ft).



The impressive oak of 46 m (150.9 ft) with the tallest oak of 48.4 m (158.8 ft) to the right.



Oak of 46 m (150.9 ft), cbh 366 cm (12 ft)



The forest canopy with at left the oaks of 46 and 48.4 m. The trees without leaves are European beeches, the others all sessile oaks.

The thinner oak beside it (cbh 313 cm (10.27 ft) till then I had not given much attention, but when I measured the tallest tops of it, it was found to be taller even! The highest tops I was able to measure gave me consequent 48.4 m (158.79 ft), as far as I know a new record height for any oak laser measured in Europe!



The tallest oak I measured in the Forêt de Bercé of 48.4 m (158.8 ft) is the tree with lightgreen leaves at the middle left; just to the right with leaves farther open is the oak of 46 m; to the right is a beech of 42 m tall still without leaves

This is 4.8 m (15.75 ft) taller than the tallest laser measured common oak (*Quercus robur*) in the more natural forest of Bialowieza in Poland and 3.8 m (12.47 ft) taller than the former tallest *Quercus petraea* measured by Kouta Räsänen in Kelheim Forest, Germany.

This is even the second tall native broadleaf tree in Europe measured by laser or climbing with direct tape drop as far as we are aware of!

In the USA only one specimen of Cherrybark oak (*Quercus pagoda*) in Congaree was measured to be taller, but of the white oak group no tree has been measured as tall before.

The tallest beech I measured was 44.6 m (146.3 ft), not a new record but still quite good.

In the "Futaie des Clos" I found oaks up to 44 m (144.3 ft); I spend only 1½ hour here, probably some of the oaks in this part will be taller, but I doubt if the tree reported to be 49.0 m in this part in reality is that tall. Also the mean height of 45.2 (148.3 ft) reported in the publication I cannot confirm. I think the mean height of the old oaks (I measured cbh of up to 434 cm / 14.24 ft) will be between 40 and 43 m (130 and 140 ft).



Typical view in the "Futaie des Clos" with old sessile oaks, younger beech and some undergrowth of Holly (*Ilex aquifolium*)



One of the tallest oaks I measured in the "Futaie des Clos": 44 m (144.4 ft), cbh 406 cm (13.32 ft)

Jeroen Philippona

Sessile oak trees in the Forêt de Bercé in Jupilles
http://www.monumentaltrees.com/en/fra/sarthe/jupilles/4052_foretdeberce/

~4.7 feet in diameter Sand Laurel Oak

by samson'sseed » Thu May 17, 2012 11:54 am

I found a sand laurel oak (*Quercus hemispherica*) with a trunk that is an estimated 4.7 feet in diameter growing on Hephzibah-Mcbean Road near the entrance to Westbrook Road.



Despite the size of the trunk, the tree is only about 50 feet tall. Most of the trees in my neighborhood don't get very tall. The soil is of poor quality and sandy. It's near a former Eocene shoreline.



Above is a view of the canopy. There are muscadine grape, English Ivy, and Virginia Creeper growing on it. Carpenter ants live in the tree also.



Above is another sizable sand laurel oak that is almost as big. Sand laurel oaks are by far the most common oak tree in this part of south Richmond County and they co-dominate along with loblolly pine.

Sand laurel oaks (*Quercus hemispherica*) used to be considered the same species as swamp laurel oak (*Quercus laurifolia*) because they are almost identical. The latter reportedly has hairs underneath the leaves. But the main difference between the 2 is that sand laurel oaks can't grow in swamps, and swamp laurel oaks can't grow in dry sandy soils. The difference in habitat requirements is about all that separates these 2 species.

I found the tape measure. The tree is only a 2 minute drive from my house, so I measured it more accurately. It was 185 inches in circumference. By dead reckoning I'd underestimated the size by about 11 inches.

$185/3.14 = 58.9$ inches which translates to about 4.9 feet in diameter. Not 7 feet, but compared to most of the trees in my neighborhood it's exceptionally large in diameter but not height.

Samson's Seed

How do you know a tree limb is about the fall?

by **Jenny** » Fri May 18, 2012 7:33 am

Continuing the discussion about tree limbs falling: there were a few follow-up articles about this subject after the article in the New York Times which discussed recent tragic accidents caused by tree branches falling. These articles talk about the warning signs.

The first link is a photo slide show from the NYT and the second link discussing warning signs that MAY lead to falling limbs; for example: leafless limb that should be in bloom, strong wind events weakening limbs, Y-shaped/co-dominant trunks resulting in 2 equal sized limbs, poor pruning, biological invaders such as mushrooms growing, trees growing at a fast rate (probably a lot of the trees in NYC due to urban heat island effect), cracks, water sprouts, and dangling limbs (DUH!). There are other factors that simply can not be seen from the outside.

<http://www.nytimes.com/slideshow/2012/0...ms-ss.html>

http://www.popularmechanics.com/outdoor...=pm_latest

Jenny Dudley

Re: How do you know a tree limb is about the fall?

by **Don** » Fri May 18, 2012 11:02 pm

Rand/Jenny-

With Hazard Tree Coordinator collateral duties for Grand Canyon NP until I retired, I worked with Regional Hazard Tree experts to identify hazard trees in the Phantom Ranch site along the Colorado River.

In the 1920's, Phantom Ranch was developed as a recreation site with rustic cottages and a lodge, and for shade, a large number of cottonwood and sycamores were planted. Quick and abundant shade

was had, and all at the time were elated. Then some 80 years later, not coincidentally, the structural problems of cottonwoods had made their presence known, with a number of near misses reported. After a thorough inspection of soundness of branches, limbs and boles, we made our determinations and returned to the South Rim. I lined up a Hazard Tree Reduction Crew (NTS's John Dunne was one of them), and after completing NEPA requirements, scheduled the crew for a trip down to Phantom Ranch a few weeks later.

During that period, I got a call from the Park's Safety Officer (not always a good sign). It seems that what had been a perfectly sound looking cottonwood limb to us a month earlier, had broken unexpectedly and fallen onto a campsite below, but not before striking one camper out of four that were sitting at the picnic table.

That one camper was a lawyer, our Safety Officer informed me, and was I comfortable going to court?

Well, it all worked out in the end, a little time was lost dealing with it on both sides, but no moneys exchanged hands.

The lawyer was lightly bruised, with minor scratches.

What did our Deputy Superintendent say to me?

Don, visitors are informed upon entry that they entering a wilderness, and they can't have expectations of complete safety.

Don Bertollette

[Re: The Interrupted Forest \(Maine\)](#)

by **Jenny** » Fri May 18, 2012 5:40 pm

Found a cool video of the Maine 'old-timers' who worked for a lumber co. in Machias Maine:



<http://www.youtube.com/watch?v=maejzhXIW4s>

Jennifer Dudley

[Re: Keeping Things Quiet In The National Parks](#)

by **michael gatonska** » Sat May 19, 2012 7:13 am

Hi everyone,

I wanted to post two more articles related to the the topic which I think are pretty good;

The first article is from the Seattle Weekly, which highlights the work of Gordon Hempton, and his work to protect quiet places like our National Parks - the article is also very informative on the issue and how the growing amount of noise is becoming man's greatest hidden issue.

<http://www.seattleweekly.com/2012-04-25/news/gordon-hempton-wants-you-to-shut-up/>

Whisper of the Wild is an article that recently appeared in the NY Times, which also discusses our increasingly endangered resource: natural sound.

Following the plane crash above the Grand Canyon

National Park in 1986, Congress passed the National Parks Overflights Act. The act also called for studying the impacts of overflight noise on other parks.

Initial research returned alarming results. In Yosemite, planes were heard 30 to 60 percent of the day. In the Haleakala volcano crater in Maui, 8 to 10 helicopters passed overhead per hour. What's more, other experiments showed, much as the M.I.T. study did, that noise affected the way visitors saw landscapes: when volunteers viewed photos of natural vistas while listening to helicopters on tape, they rated the scenes less picturesque than they did under quieter conditions.

http://www.nytimes.com/2012/03/18/magazine/is-silence-going-extinct.html?_r=1&pagewanted=all

Michael Gatonska

[Picea abies](#)

by **michael gatonska** » Sat May 19, 2012 7:22 am

In my slowly accumulating collection of needlelike tree sound recordings thus far, there is a noticeable and recognizable difference in the quality of songs that are made by each individual species.

This captured soundscape adds to my eco-sound-collection the song of our only spruce (European), that has drooping twigs and branches. You can hear their clicks and scrapes in this soundscape.



<http://www.youtube.com/watch?v=4711stbgazQ>

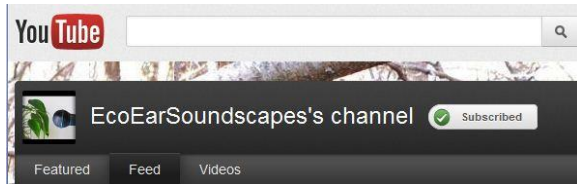
What I enjoy about this particular recording is the wide variety of wind speeds, including some abrupt and strong variances in speeds; these variances are (sometimes vociferously) reflected by the spruce tree. The swishing band of noise from the spruce tree has a definite brightness - in the absence of clear pitch, brightness can suggest pitch -- and in this example, as the wind increases, the brightness increases as we "go up the scale".

Michael Gatonska

[Re: Picea abies](#)

by **michael gatonska** » Sat May 19, 2012 8:40 am

Hi Jenny, I have set up a YouTube channel with all of the soundscapes (the truncated versions!) that I have done thus far.



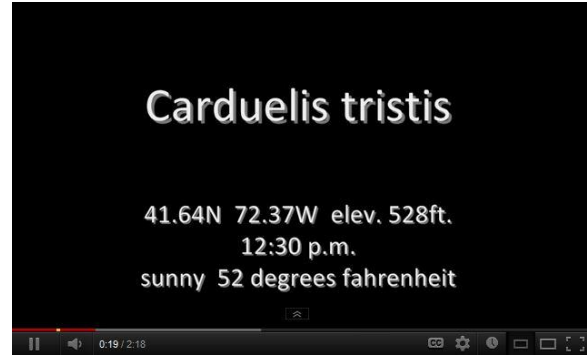
Here is the link

http://www.youtube.com/user/ecoearsoundscapes?feature=results_main

Thus far, I have made only one bird song recording; I hope to do many more.

American Goldfinch

<http://www.youtube.com/watch?v=rOtKU74mmbM>



AS to getting started with equipment, there are a lot of mic's that are decent and quite affordable. Here is how I got started, with a little bit of inspiration from one of Ed Frank's posts...

<http://www.ents-bbs.org/viewtopic.php?f=246&t=2202>

Michael Gatonska

[More Lake Champlain, NY](#)

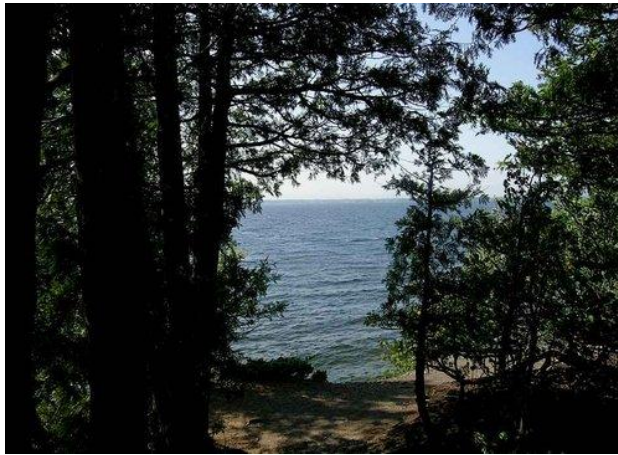
by **dbhguru** » Sat May 19, 2012 8:40 am

Upstate New York is one of my favorite places on the planet. I can't get enough of it. Here are some more pictures of Champlain and the cottonwoods. The first two images show driftwood art.





The next image is from on Long Point at Point Au Roche.



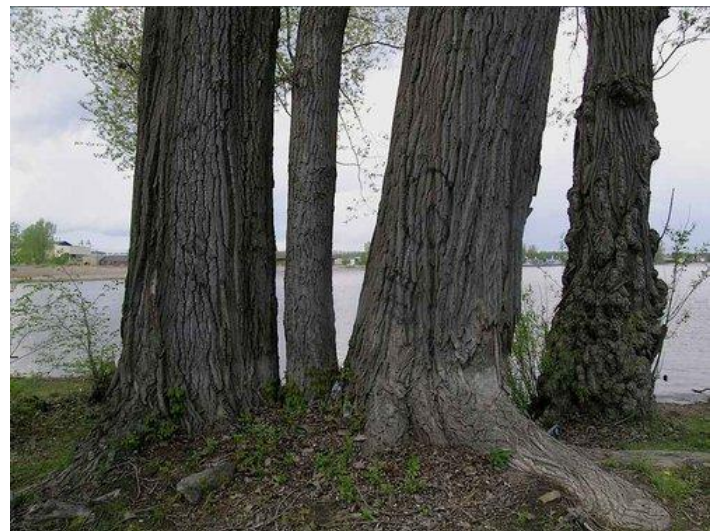
Now to a 16.8-foot CBH cottonwood and Monica for scale.



Balding cottonwoods, anyone?



A common scene of large trunks. So many that people hardly notice.



Here is the 15.6-foot girth, 115.0-foot tall Cottonwood. It is in a yard. I hope its owners appreciate it. Gorgeous tree.



The Lake Champlain country is peaceful and spacious. It has so much to offer and for us tree geeks, cottonwoods galore. They are the kings, the monarchs. You see their large crowns soar above all other species. You can look across an open field and see them on the border. What a treasure of gorgeous big trees.

Robert T. Leverett

[Re: More Lake Champlain](#)

by dbhguru » Sun May 20, 2012 11:03 am

The Champlain valley is a treat for the eye. The lake stretches for miles with the Green Mountains to the east and the Adirondacks to the west. The lake has been there since the end of the glacial period. So, its ecosystems are well established. And what is sooooo good is that there are no big cities in the region to overload the aquatic ecosystems and create the usual stultifying congestion that goes with metropolitan life where nature is reduced to isolated trees and

manicured parks flooded with tuned-out dog walkers, joggers, and derelicts. Ooh, my prejudices are showing through this morning.

I'll end with two more images. The first is a red pine on stilts.



The second looks like a big cottonwood and out into the lake toward Vermont.



Robert T. Leverett

"My" City Tree

by **Jenny** » Sun May 20, 2012 12:44 pm

Over 2 years ago, I wrote to the city and asked that a tree be planted on my bleak block. On April 7, 2010 lo and behold a honey locust! Here are photos of it today (May 20, 2012) and when it first arrived:



Jenny Dudley

Willard Memorial Chapel

by **lucager1483** » Sun May 20, 2012 11:40 pm

Ents, This afternoon I made a quick visit to the Willard Memorial Chapel in Auburn, NY. The church/concert hall/museum is on the National Register of Historic Places, mostly because it is the last intact example of a religious structure with stained-glass windows designed and built by Louis C. Tiffany.

Some information can be found here:

<http://willardchapel.org/index.html>. A helpful video is also on Youtube:

<http://www.youtube.com/watch?v=C2GQnd00sPo>.

I've been inside for a concert or two, but this time I

wanted to measure a couple of trees on the grounds, a European larch (*Larix decidua*, I'm guessing) and a Bur oak (*Quercus macrocarpa*). Both trees are planted, though Bur oak is native to the area. The buildings date from 1892-1894, and my guess is that the oak dates from that period, but I don't know about the larch. A couple pictures of the building:



The bur oak is very much open-grown and measures 74.7' in height by 12'3" in circumference at breast height.





The larch is also a specimen tree but grows in an area with a little more shade. It measures 63.8' tall by 9' in circumference. The trunk has lots of taper to it.





Enjoy!

Elijah Whitcomb

[Re: \[Video\] Fstoppers: Tree Spirit Project, \[NON\] Nudes In Nature](#)

by **mdvaden** » Mon May 21, 2012 2:22 am

Took a couple of woodland photos the past few weeks and remembered this thread. Not nudes though. Both in a vine maple and Corylus grove in Beaverton.

Lately it was more challenging because it's been sunnier, and a green glow is beginning to show more on skin. The B&W was on an overcast day, and did not have much of the green glow thing even in the color version.



M. D. Vaden of Oregon

"The Great Animal Orchestra"

by **pattyjenkins1** » Mon May 21, 2012 3:56 pm

For Michael G., Andrew, and others interested in sound recordings:

http://www.nytimes.com/2012/04/15/books/review/the-great-animal-orchestra-by-bernie-krause.html?nl=books&emc=edit_bk_20120413

"The Great Animal Orchestra: Finding the Origins of Music in the World's Wild Places" by Bernie Krause, a review from the New York Times Book Review, April 12, 2012.

Patty Jenkins

Three Big Tuliptrees in Baltimore

by **MickR** » Mon May 21, 2012 3:49 pm

On my weekly bike loop on the Gwynns Falls trail here in the city, I have been admiring three big tulip poplars over the past couple of years. I had been riding by the third one without stopping to admire... I'm not sure why as it is right on the trail and sports a most colossal trunk. Gwynns Falls trail is based on an Olmstead Brothers stream-side park created in 1904. Sections of it are quite woody and secluded.

Anyway, if you are a fan of *Liriodendron tulipifera*, here are two feature trees and one naturally-planted giant. First up in order of size, the big poplar at the top of the hill in Leakin Park:



Big tulip poplar in Leakin Park

I posed my bike at the base to show it's size. I measured 13'-6" circumference. This tree is sited perfectly at the top of the hill. Some branches cascade down and makes for a lovely picnic spot, and also makes it easy to get eye-to-eye with some tulip flowers (as I write this the rain is likely filling up the cups and petals falling to the grass).

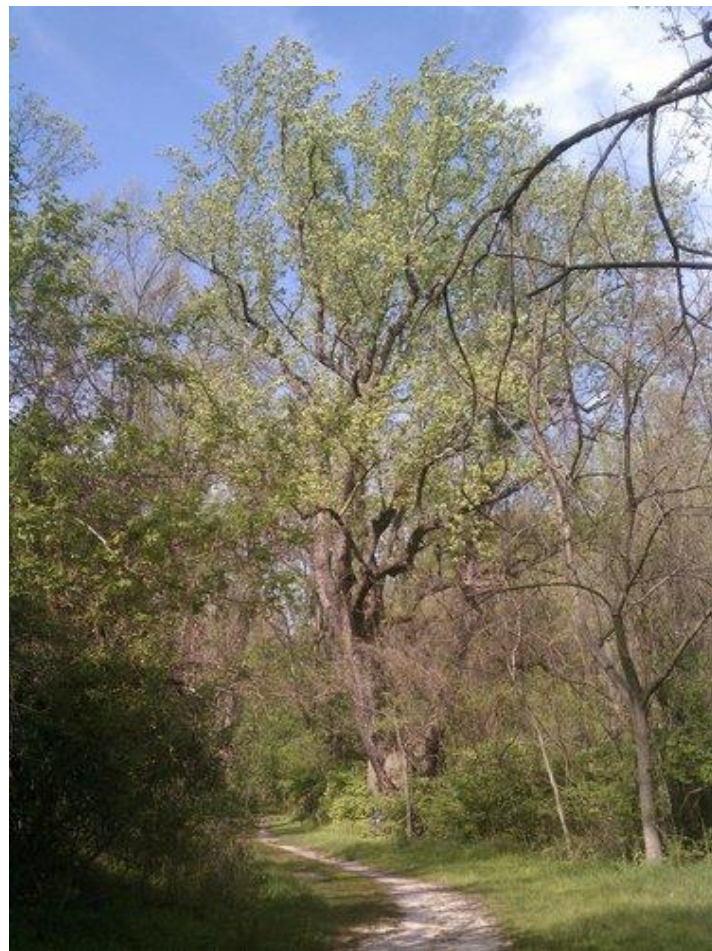
Next up is this old beauty, marked with a plaque, in the center of the Crimera estate, part of the park system and also part of Outward Bound.



Big tulip poplar in Crimera

I measured 15'-4" circumference. How old could this tree be? Thomas Winans (founder of the B&O railroad) built a house on this estate in 1856; I wonder if the tree was already established and they chose to leave it when they created the clearing? Or was it planted?

This third tree is a whopper. You can barely see my bike in this picture. The site is the high side of a small tributary which feeds into the Gwynns Falls with a mini canyon between two high points in the woodsy-est section of the park. Way up above, in the winter, one can see the neighborhood of Fairmount Park. On the other side of the tributary, up high is an abandoned park structure and playground, crumbling to bits and surrounded by weedy parking lots. The good flow of groundwater must have fed this biggie.



Huge tuliptree on Gwynns Falls trail

I had a real hard time measuring this tree, as the trail side is about 4 feet or so higher than the slope side, which is also covered in thorny bushes. Closeup:



Giant tuliptree

That is some gnarled bark. I made this trip on the 100th anniversary of the Titanic sinking last month... and almost named this tree Titan but thought better of it later. I decided to put the tape at about 3 feet up on the trail side, which would be about 6 or so feet up on the slope side. I got 17'-6" - the biggest tree I ever measured around here. I thought this was big until I looked up the state champ... haha. The trunk looks to have burn scars; look up above the bike seat. Curious.

There are lots of other big trees along the Gwynns, especially along the escarpment; I think I shall take my time and look for some big beeches and white oak next time out.

Mick Ricereto

[Ancient trees: Andalusia, Spain](#)

by **Jeroen Philippona** » Mon May 21, 2012 5:46 pm

Don Bertollette wrote: I will be travelling to Spain next week, and am curious if there are any arboreal wonders there. Our destination will be the South of Spain...Andalucia...with intentions of visiting their national parks and reserves. ,

Don,

I never visited Andalusia except for a short passing through in 1977, although I was several times somewhat to the north in Extremadura. There are some big trees in this part of Spain, but because of the dry, warm climate and the history of cutting most forests as well as heavy grazing I think there are few forests. Perhaps there are some interesting forest in the National Parks in mountainous areas, with Spanish fir: *Abies pinsapo*. Probably there will be some old cork oaks (*Quercus suber*) and holm oaks (*Quercus ilex*) but I don't know their locations.

See:

<http://www.monumentaltrees.com/en/esp/andalucia/>
Here some very large, old European sweet chestnuts are reported, with girth up to 13.8 m (45 ft).

Also look for websites with the words: arboles monumentales, arboles singulares and arboles notables combined with Andalusia.

See: <http://waste.ideal.es/arbolessingulares.htm> and <http://rutasyfotos.blogspot.com/2010/03...es-de.html> <http://www.catpaisatge.net/dossiers/arb...ectori.php>

So you have to search somewhat at different websites.

Jeroen Philippona