Impulse200LR Laser Accuracy

by M.W.Taylor » Tue Aug 16, 2011 7:25 pm

The only tree hunters I know of that use the Impulse200LR are Chris Atkins, myself, Steve Sillet and Bob VP. I actually use a Trupulse200 for most exploratory work and only pull out the Impulse200 when I need to measure a tree accurately for documentation and/or ranking purposes.

For forester and tree hunters, the Trupulse & Nikon Forestry Lasers are sufficient for most documentation purposes.

Impulse 200LR laser rangefinder

A scientist measuring yearly growth on tree tops or a tree fanatic with a few extra $$ to burn may seriously consider getting an Impulse200LR. I have tested other knock-offs of the Impulse200LR and they really do not measure up.

I wanted to clarify the model type as Impulse200LR, which is more accurate than the Impulse200XL, Impulse200 and Impulse200K.

Using the Impulse200LR, Chris Atkins has proven over and over that he is usually within +,- 2 inches of Steve's direct tape drop. This is repeatable. This is why Steve pays Chris to measure trees for him. He has about a 95% chance of getting to within +,- 2 inches of tape drop. The other 5% of the time he slightly underestimates the tree's height due to not being able to quite hit the true top of the tree with the broad laser of the Impulse200LR.

Occasionally with big broad top trees like the Redwood Creek Giant, you can't actually see the true top until you are out of range of the Impulse200's laser. Thus, only a direct tape drop or other ground based method (Triangle Method ?) will work. Same with Hyperion. You would literally need to get a mile back on Hyperion to see its central leader clear enough to hit it with a laser.

If any of Chris or my ground based measurements are off, they would be off on the short side so I guess I could say it's best that we at least error on the conservative side if were to error.

The main drawbacks of using the Impulse200LR vs Trupulse200 is

1) HEAVY. Approximately the size, shape and weight of a brick. You really notice it after a long bushwhack. Heavy at 2.2 lbs vs. 8 ounces for Trupulse

2) Shorter range of about 1500ft vs 2000'ft and beyond for Trupulse

3) Wide laser beam. size of Nat Geo magazine at 1000 feet vs. deck of cards for Trupulse at same distance. The Impulse200LR does not do well in cluttered forests with tiny windows as compared to the Trupulse200. It is mostly for this reason alone I usually carry the Trupulse

4)Scope to laser off-set of .291 which creates an additional error that must be accounted for. The easiest way to correct this is to use Bob's Pivot Adjustment Formula, but there are other ways to correct for this...too complicated for me to explain at this late hour.

5) Expensive. $2,700 new for new Impulse 200LR. And LTI accessories are so expensive you'd think they are made of gold or something.

6) Heavy. Oh, I already mentioned that. 2.2 lbs does not seem like much until you go on a 3 day bushwhack. Then it reminds one of a large brick and then feelings of remorse begin to set in.

The key to getting +,- 2 inch or better accuracy is 1) Use Sturdy Tripod 2)Use Remote Trigger 3) Take average of at least 10 height readings 4) Use a prism

pole to incrementally survey the additional height to the tree's base...not the height sub-routine on the Impulse200 or Trupulse200. And then to top it off, use Bob's Pivot Adjustment Formulas for the vertical angle to the tree's top.

Chris does not use pivot adjustment yet still gets to within +,- 2 inches of tape drop. He has other ways of compensating for this, but it's not as easy as using a simple plug and play formula.

I can usually get to within a few inches of Steve's tape drop, but I have not proven this over and over like Chris has. Chris is a perfectionist when it comes to measuring tree heights and that is why I use his figures for my tree list, when available. And if a direct tape drop is available from a trusted colleague, then I use that figure.

On my tree list when I say the measurement is "preliminary" or "handheld" that would indicate the measurement was taken without a tripod or remote trigger. For handheld Impulse200LR, Chris and I usually get to within a foot of the tree's actual height and when using the Impulse200 handheld, I usually get to within 2 feet of the tree's actual height.

And for shorter trees in open areas, the accuracy is greater than +,- 2 inches. I am referring to coastal redwoods which grow as tall as radio towers in very dense forests. They are nearly the most challenging trees to measure accurately from ground or canopy.

Bob, I would say trust Will and Steve's tape drop first, then Chris's tripod mounted Impulse200LR measurements. He is the best in the business at measuring trees accurately from the ground.

Michael Taylor

Sleeping Under a Great Sugar Pine in the the Sierra Nevada, CA

by gnmcmartin » Tue Aug 16, 2011 10:01 pm

I have always loved sugar pines, especially thier graceful crowns. John Muir in his sketch tries to capture this, but doesn't quite get it.

I have fond memories of a wonderful teee I used to sleep under. It was over a little ridge from the Grant Grove campground. I never liked to sleep in the campgrounds, but would carry my sleeping bag away to some peaceful and beautiful spot. Well, maybe a couple of hundred yards from the campground was a little ridge. I would climb over this and have a view down into the San Joaquin Valley. A couple hundred feet down from the crest of the ridge there was a very large sugarpine--a beautiful, beautiful tree, maybe as much as 7 feet in diameter, but probably not as much as 200 feet tall. The trunk and the root swell on that slope made a level spot just wide/long enough to make a nice little sleeping spot. And from where I slept I could look off into the Valley in the night, and up and down, see the lights of the towns far below.

These days there is so much smog, that is not possible. When I first slept under this tree I was just 18 years old--in 1957. I returned in 1959 and slept under the same tree again. But a few years later when I again visited the park, and with excitement carried my sleeping bag back up to that tree, to my favorite private and personal sleeping spot, that wonderful tree had been cut down. Apparently it had succumbed to beetles.

The first morning, after sleeping so, so peacefully under this tree, I was awakened by cones plummeting down. There was a squirrel up there--an early riser--getting his breakfast. These cones are huge, were still green, and very heavy--I didn't linger long there that morning.

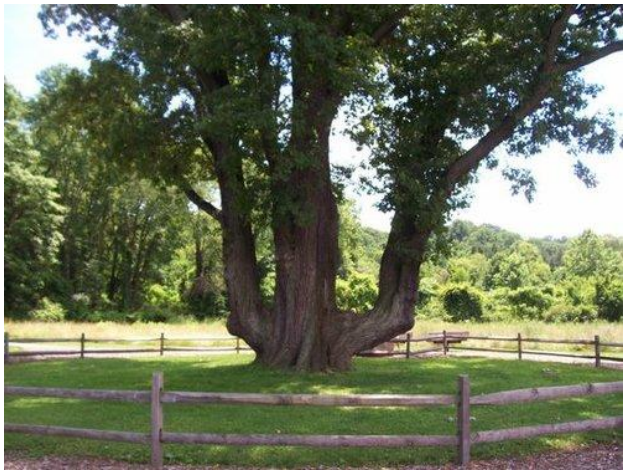
I wish these amazingly beautiful trees could live for ever.

--Gaines McMartin

Native American Trail Marker Trees, OH

by Steve Galehouse » Tue Aug 16, 2011 9:25 pm

Here is photo of a signal(marker) tree from Akron; a big bur oak that indicated the trail from the Cuyahoga River to the Tuscarawas River, connecting the Great Lakes/St. Lawrence drainage system with the Ohio/Mississippi Drainage system.



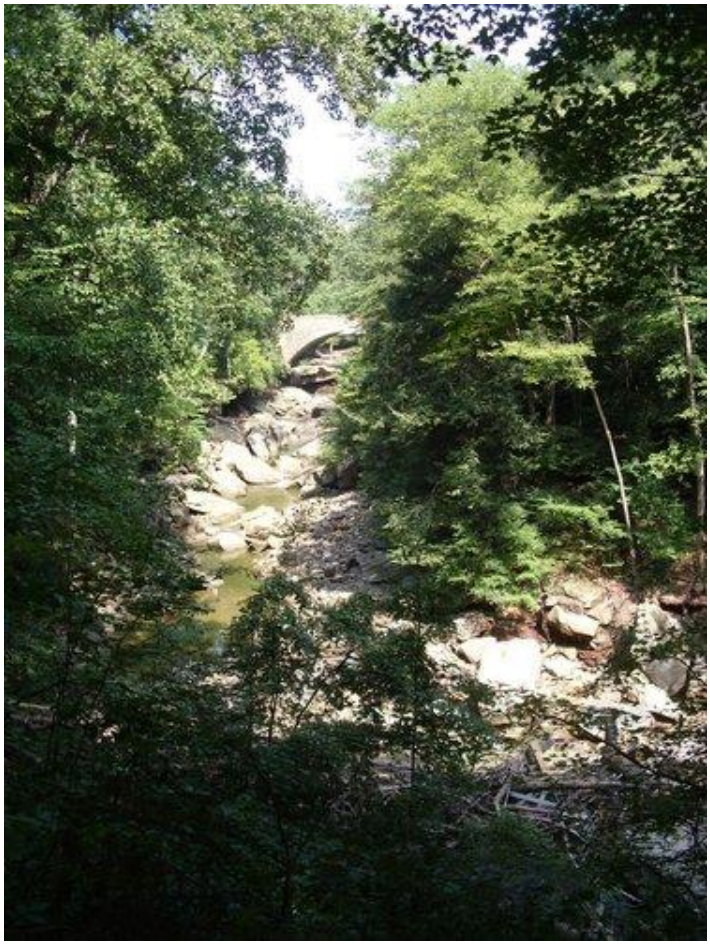
The unusual branching is why it is considered a signal tree, although I'm not sure if the alignment of the branches is significant. The tree is quite large; the central trunk is around 4' in diameter.

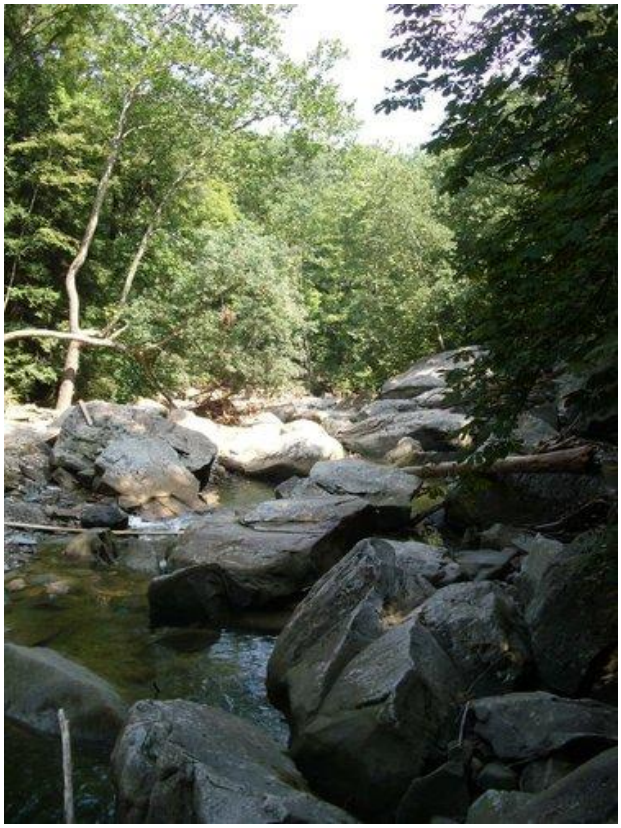
Steve Galehouse

Chippewa Creek, Brecksville Reservation, OH

by Steve Galehouse » Thu Aug 18, 2011 6:36 pm

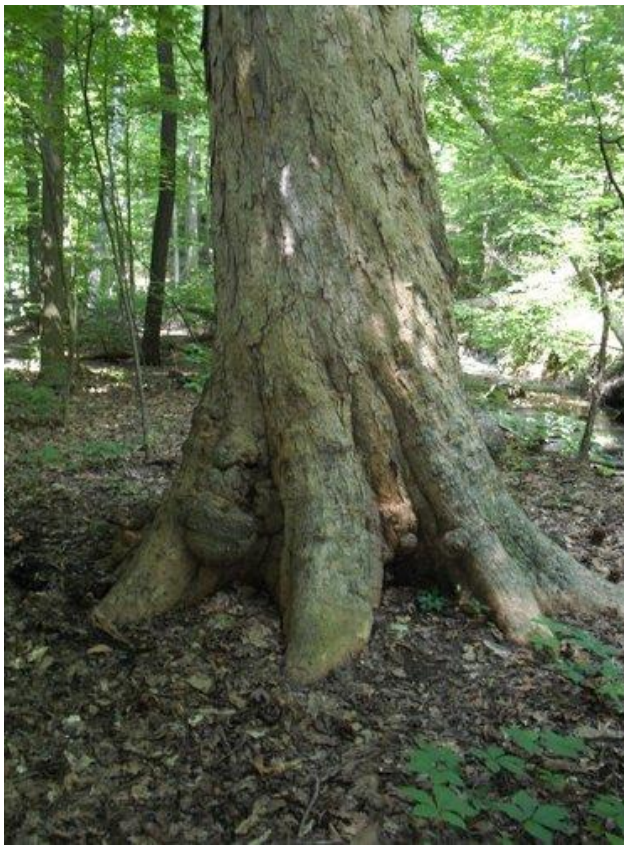
Today I made a short trip to Chippewa Creek in Brecksville Reservation, which is part of the Cleveland Metroparks. Chippewa Creek is a very picturesque little stream, strewn with huge sandstone blocks that have been cleaved from the sides of the gorge. There was hardly any water in the creek today, but a lot of debris was perched about 15' above the stream-bed, so the water must really gush after a heavy rain. Here are a few photos of the creek; the first shows a roadway bridge in the distance for scale, in the third the sandstone block in the lower right is about the size of a small school bus:





The forest here is mature if not old growth, with hemlock, tulip, magnolia, several oaks, beech and sugar maple the most frequent. Canopy cover was too dense to get really good measurements, but I did come up with a Rucker 10 of 106+, with just a cursory search of the area, summary here: http://rev215.treesdb.org/Browse/Sites/605/Details

Here are a few photos of trees:



While I don't expect to find any really tall trees(the best LiDAR hit was in the 140's), the area certainly warrants a revisit after leaf-drop.

Steve Galehouse

Glenn Creek Nature Preserve, GA

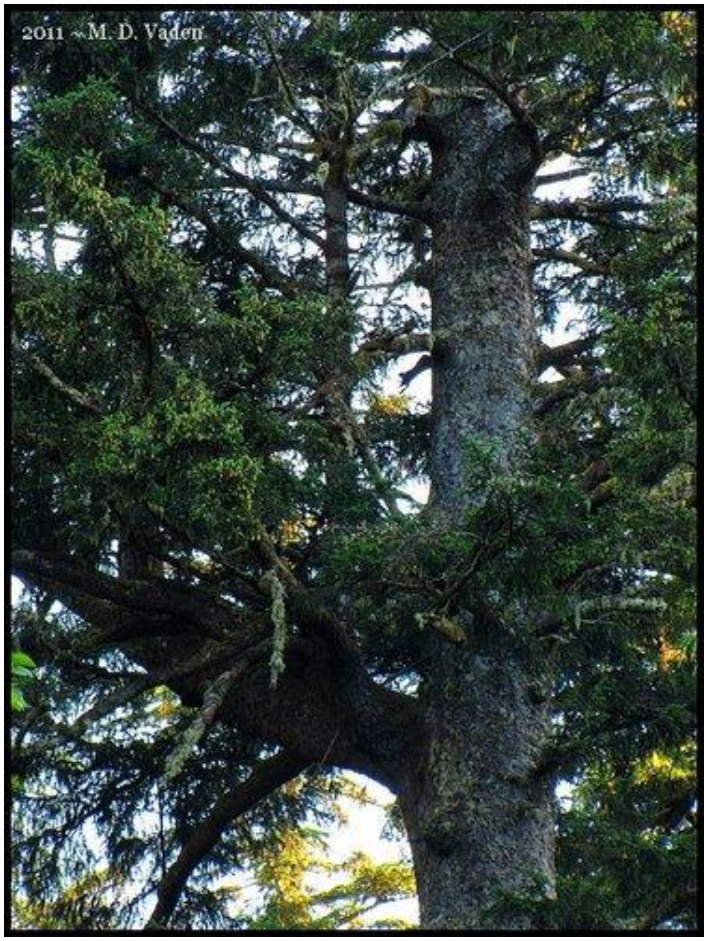
by **treesrock** » Mon Aug 15, 2011 10:08 am

We have cleared most the privet and english ivy out of this beautiful 3 acre forest in Decatur. Before its purchase in 2004 50 years of Eng. Ivy growth was in the crown, now very eng ivy on the property. I will post pictures later. I plan to tree survey this property one day. www.glenncreeknaturepreserve.org

Re: Big Sitka Spruce, OR

by mdvaden » Thu Aug 18, 2011 10:04 pm

Here are a couple more photos of the Sitka Spruce. Even though I can't get up in that canopy, the laser helped me size-up some things. Like the the 10 foot difference in vertical height between the limbs using the VD setting. There is a nice size extra stem coming from one of the larger limbs ...



M. D. Vaden

Improving Our State Parks on a Shoestring Budget

by dbhguru » Wed Aug 17, 2011 11:19 am

In late October I'll be addressing the Massachusetts Friends Network that supports our state parks. Massachusetts parks have been devastated financially. It is time for citizen volunteers to play a bigger role in providing interpretive services and information on the attractions offered by each park. My initial shot over the bow is presented in the attachment. Ideas are welcomed. Citizen volunteers are well represented across the country in the many Friends groups. I'm sure there are no new ideas in what I wrote, but there are going to be better ways to implement.

TimAndStateParks.docx

Robert T. Leverett

Update on Tallest Tree by State

by dbhguru » Thu Aug 18, 2011 11:35 am

This morning I began pulling together the latest maximum height for all trees by state - the states we've concentrated on. The information is scattered, but I think the numbers given in the attached list are accurate. the only non-NTS number is the Kentucky tall tree, because it was climbed and tape-drop measured. I refuse to even consider non-NTS sources, especially in eastern states like Michigan, which have zero credibility. We need to add more western states. I'll leave that to Michael Taylor and Don Bertolette. I'm unsure if we have enough data from Alabama, Mississippi, and Arkansas to list the highest number we have. Conspicuously absent from the list are Connecticut and Rhode Island, practically my backyard. However, I have not been able to locate outstanding tall tree sites in either state, although I have good reason to believe they exist, especially Connecticut. I request the help of the rest of you in maintaining this list. Eventually, we should rely on the database for this kind of information, but in the near term, we need to maintain it in Excel. Oh yes, I didn't include the dead Yellow Buckeye from West Virginia. The list is not meant to be historical maximums, but one of currently live trees.

TallestTreesEastList.xlsx

Robert T. Leverett

Huntington Reservation, Bay Village, Ohio

by Steve Galehouse » Sat Aug 20, 2011 11:10 pm

Huntington Reservation is a Cleveland Metropark about a half mile from my home, with a creek running through it that empties into Lake Erie. The park along Lake Erie is a nice sandy beach, while slightly inland is a floodplain woods along with an uplands woods on a bluff above the creek, all second growth at best with some areas planted in a naturalistic manner. There are no really tall trees in the park, 110' being the tallest found, but the unusual association of species makes this area unique---- where else might someone find a natural looking woods containing pond pine, Douglas-fir, Scots pine, pin oak, European beech, river birch, and a host of other species? So far I've documented nearly 30 arborescent species, with a total of 40 to come---do we have a Rucker 40 list?

Steve Galehouse

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	A	B	C	D	E	F	G
1	**Common Name**	**Botanical Name**	**County or township**	**Subsite**	**Latitude**	**Height (ft)**	**Height measurement method**
2	Red Maple	Acer rubrum	Cuyahoga			99.9'	Clinometer/laser rangefinder/sine
3	Silver Maple	Acer saccharinum	Cuyahoga			65.5'	Clinometer/laser rangefinder/sine
4	River Birch	Betula nigra	Cuyahoga			65.3'	Clinometer/laser rangefinder/sine
5	Pignut Hickory	Carya glabra	Cuyahoga			92.4'	Clinometer/laser rangefinder/sine
6	Shagbark Hickory	Carya ovata	Cuyahoga			93.9'	Clinometer/laser rangefinder/sine
7	American Beech	Fagus grandifolia	Cuyahoga			84.8'	Clinometer/laser rangefinder/sine
8	European Beech	Fagus sylvatica	Cuyahoga			77.4'	Clinometer/laser rangefinder/sine
9	White Ash	Fraxinus americana	Cuyahoga			96.4'	Clinometer/laser rangefinder/sine
10	Green Ash	Fraxinus pennsylvanica	Cuyahoga			103.7'	Clinometer/laser rangefinder/sine
11	Honeylocust	Gleditsia triacanthos	Cuyahoga			62.6'	Clinometer/laser rangefinder/sine
12	Sweetgum	Liquidambar styraciflua	Cuyahoga			78.0'	Clinometer/laser rangefinder/sine
13	Blackgum	Nyssa sylvatica	Cuyahoga			50.0'	Clinometer/laser rangefinder/sine
14	Hophornbeam	Ostrya virginiana	Cuyahoga			66.6'	Clinometer/laser rangefinder/sine
15	Norway Spruce	Picea abies	Cuyahoga			93.2'	Clinometer/laser rangefinder/sine
16	Pond Pine	Pinus serotina	Cuyahoga			76.3'	Clinometer/laser rangefinder/sine
17	Eastern White Pine	Pinus strobus	Cuyahoga			110.5'	Clinometer/laser rangefinder/sine
18	Scots Pine	Pinus sylvestris	Cuyahoga			81.6'	Clinometer/laser rangefinder/sine
19	American Sycamore	Platanus occidentalis	Cuyahoga			105.7'	Clinometer/laser rangefinder/sine
20	Eastern Cottonwood	Populus deltoides	Cuyahoga			88.0'	Clinometer/laser rangefinder/sine
21	Black Cherry	Prunus serotina	Cuyahoga			87.0'	Clinometer/laser rangefinder/sine
22	Douglas-Fir	Pseudotsuga menziesii	Cuyahoga			72.9'	Clinometer/laser rangefinder/sine
23	White Oak	Quercus alba	Cuyahoga			96.8'	Clinometer/laser rangefinder/sine
24	Scarlet Oak	Quercus coccinea	Cuyahoga			78.0'	Clinometer/laser rangefinder/sine
25	Pin Oak	Quercus palustris	Cuyahoga			100.9'	Clinometer/laser rangefinder/sine
26	Northern Red Oak	Quercus rubra	Cuyahoga			97.3'	Clinometer/laser rangefinder/sine
27	Black Oak	Quercus velutina	Cuyahoga			93.0'	Clinometer/laser rangefinder/sine
28	Black Locust	Robinia pseudoacacia	Cuyahoga			69.7'	Clinometer/laser rangefinder/sine
29	Sassafras	Sassafras albidum	Cuyahoga			79.8'	Clinometer/laser rangefinder/sine
30	Eastern Hemlock	Tsuga canadensis	Cuyahoga			101.0'	Clinometer/laser rangefinder/sine
31							

New big pine in Trout Brook, MA

by dbhguru » Fri Aug 19, 2011 6:32 pm

Today my philosopher friend Dr. Doug Seale and I went to MTSF. Doug had not see the Trout Brook cove, so off we went. The forest in the upper end of the cove is very thick. It is basically a Sugar Maple, White Ash, Red Maple, American Basswood, Yellow Birch forest. My goal was to relocate and measure the 152-foot white ash, but the clutter was too great. That mission will have to await fall. Here are some looks at the forest.

Upper Trout Brook cove is awash in beautiful White Ash trees. Here is a look at soaring trunks.

On the way out of the Sugar Maple-Ash zone, we detoured over a ridge with lots of Hemlock.

Farther on, I spotted a multi-stemmed white pine that I have bypassed for years because it is a weevil pine. It is one tree, but multi-stemmed. Today I finally decided to measure it. Glad I did. Here's a look.

Dimensions? Well, its girth is 14.1 feet! YEEEHA! Height? It is 143.3 feet. Not too shabby. So, once again Mohawk has a 14-foot girth white pine. In fact, the tree belongs to the prestigious 14 x 140 Club. In Massachusetts, that club has only 3 members that we know of. There are other 14-foot girth pines, but they are usually between 100 and 120 feet. Here are the club's members.

Monroe State Forest: Grandfather Pine 14.2 x 144.4
Howland Cemetery in Conway: Yo Mama's Brother 14.6 x 142.4
MTSF: Nina Leopold Bradley Pine 14.1 x 143.3

Doug named the big pine for the recently deceased daughter of Aldo Leopold. Nina's pine has 5 stems. Leopold had 5 children.

I'm thrilled that once again Mohawk has a living 14-footer. When Big Bertha croaked, we lost the largest pine. She was 14.6 feet around and 148 feet in height. Nina's Pine has lots of areas of decay, but the crown is in good shape.

Elsewhere, we know of at least three 14 x 140s in the Adirondacks and one in New Hampshire. There used to be two. They are scarce.

Robert T. Leverett

429 Point American Sycamore Champion, NC

by Will Blozan » Sun Aug 21, 2011 3:19 pm

Today I remeasured a huge sycamore (Platanus occidentalis) near Waynesville, NC. Michael Davie and I originally measured the tree in 2004, and since it is far larger than the current NC State Champion I obtained permission from the owner to visit the tree again. This tree has an unusally high, wide crown even at 100' up. The massive branching up high is mighty impressive.

Tree and house.jpg

I was pleased to find the tree in good condition except for a lightening strike spiraling down the trunk. The highest point of the crown was a dead twig so height is to the highest leaf. A large wound is present which will likely lead to the tree becoming hollow.

Here are the measurements:
Girth at 4.5 feet 268" (22'4") (260" in 2004)
Height 132.5' (131.1' in 2004)
Average spread 112' (95' in 2004)
Max spread 126'
AF Big Tree Points 429 (358 current NC champ)

Pretty dang tall for open grown!

Will Blozan

Confirmed: Eldorado ponderosa largest by volume, CA

by M.W.Taylor » Sun Aug 21, 2011 12:57 pm

Bob Van Pelt has just measured the "Ruby Tree", the new AFA co-champion ponderosa in Eldorado National Forest, Sierra Nevada Range. Site altitude 5,300 feet.

His volume estimate is an astounding 5,398 cubic feet !

This would make the Eldorado National Forest ponderosa larger than even some of the biggest recorded sugar pines like Yosemite Giant which as 9.2' dbh, 269' tall and 5,390 cubic feet of trunk volume.

Bob says he was blown away by this tree. He has seen no other ponderosa with such a gigantic lower trunk.

No other ponderosa he has seen measures up to this one...except maybe the old AFA champion in Shasta-Trinity National Forest which grows in the Klamath intermediate ranges with different climate and soils. Site altitude at the champion Trinity ponderosa is about 4,400ft. I recently calculated the volume of the giant Trinity ponderosa at 5,240 cubic feet, a close rival to the Eldorado tree. I am curious what Bob Van Pelt gets for the Trinity giant ponderosa. Will keep the forum updated if he gets around to measuring it.

Bob's relaskop and lower trunk tape wrap diameters are as follows:

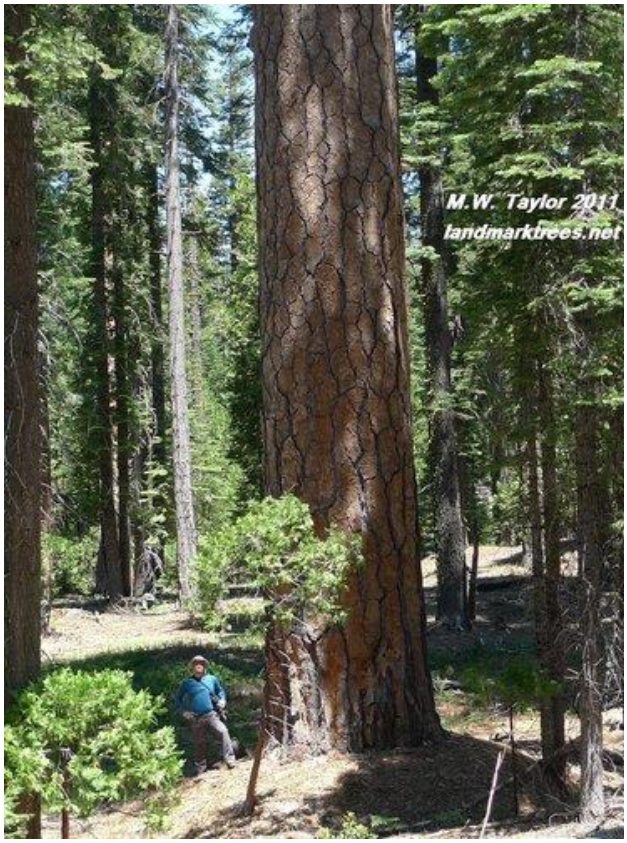
Height	Diameter
0	9.06
2.62	8.63
4.59	8.37
8.20	8.07
16.40	7.87
32.81	7.51
49.21	7.021
65.62	6.63
82.02	6.20
98.43	5.77
114.83	5.28
131.23	4.79
164.04	3.77
196.85	2.33
213.25	1.21
231.30	0

Total Volume 5,398 cubic feet

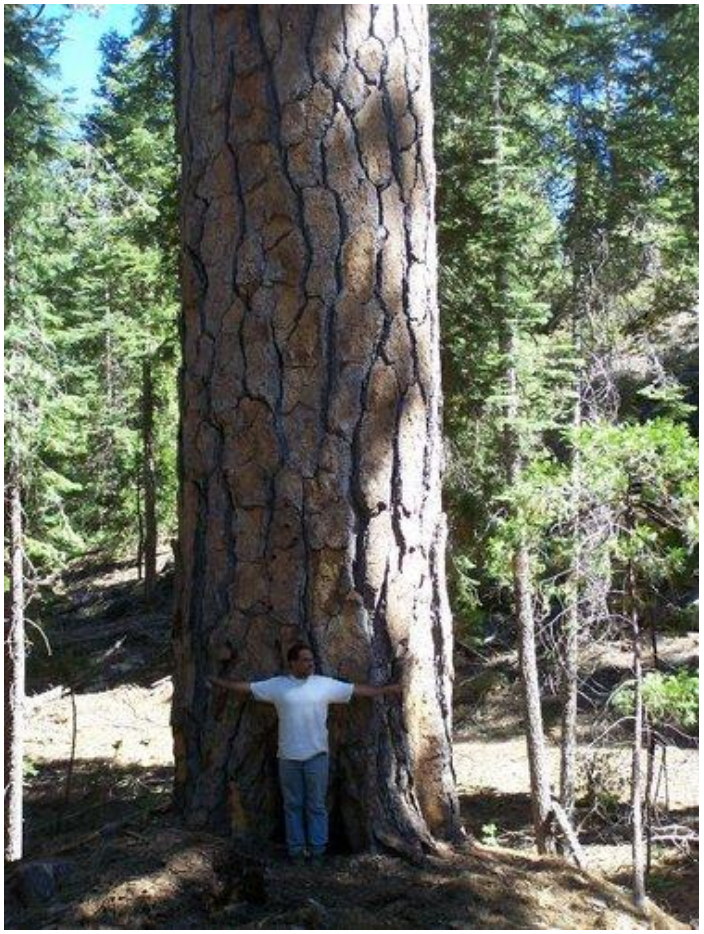
Over 8' thick at 8' above ground and over 7' thick at 50' above the ground. Arguably, another 4ft could be added to the height interval figures because these were taken at the top of the 4ft debris pile that surrounds the tree.

This giant ponderosa pine is a real spanker !

Michael Taylor



6'3" Mike Hanushick and 8.6' dbh Eldorado National Forest Ponderosa



Don Errington Under the Ruby Tree. He discovered and nominated it.

WNTS Vice President Reporting For Duty

by **M.W.Taylor** » Sun Aug 21, 2011 2:16 pm

Hi Everyone, I have agreed to take on the position of WNTS Vice President. Sorry I missed you guys at Pocatello 2011. I will see you in 2012 (unless I break my leg and a bone is sticking out)

Michael Taylor

Re: WNTS Vice President Reporting For Duty

by dbhguru » Sun Aug 21, 2011 4:01 pm

Michael, Thanks very much!

WNTS, ENTS, and any other arms of NTS that we may establish share a common mission. It is just carried out in different geographical areas. That said, our most visible tree measuring accomplishments will predictably by concentrated in areas where the size and ages of the trees challenge the human imagination. And in that arena, no place surpasses California, Oregon, and Washington. The redwoods, Douglas firs, and sequoias are the Mount Everests, K2s, and Kanchenjungas of the tree world. These three tree species challenge the very best in the tree-measuring world. Consequently, Don Bertolette, WNTS president, and I look forward to working with Michael Taylor to expand the reach of WNTS.

Thanks to webmaster Ed Frank's tireless efforts, we have the Internet infrastructure firmly in place to support an expansion of the WNTS mission. But it doesn't end there. Thanks to Dr. Don Bragg's efforts, we have a vehicle for presenting technical material in the appropriate format to the scientific community. Thanks to Mitch Galehouse, we have an excellent tool for recording our tree measurements in a database that will allow us to get the most mileage out of our collective efforts. Thanks to the splendid efforts of the NTS A-team, we have the best and most accurate set of measurements for "wild trees" ever assembled. It is up to us to maintain quality control. Quality is what we must always stand for.

We have seen serious tree measuring compromised through the state and national champion tree programs. The data these organizations have accumulated and regularly present in their lists is virtually useless. If that sounds unduly harsh, I challenge anyone to come forward and prove me wrong. We regularly see multi-stemmed trees, often the fusion of two or more separate trees, presented as candidates for big tree champion status. We regularly see trees listed that have obviously been over-measured as to height, sometimes in the tens of feet, and continue to watch as those trees stay listed. We see the weaknesses of the infrastructure that supports these champion tree programs, but are not in a position to do much about it. Still, NTS shares a common mission with the champion tree programs to promote the importance of the largest, tallest, and oldest members of each tree species to the public.

Although they may not always understand, we are not in competition with the champion tree programs. We very much want to see them succeed. But as a group, they seem paralyzed. A few programs stress quality and are making progress toward achieving it, but the rate of progress for the others is disappointing. Unless something changes, I predict the group, as a whole, will not arrive before the year 2100. If anyone one person or group is going to help the collective of champion tree programs speed up this snail's pace progress, I believe it has to be NTS, and leading the charge will be none other than WNTS president Don Bertolette. However, Don is but one person. He needs help.

With Michael Taylor on board as the WNTS VP, we are now in a much better position to help Don in Alaska, as well as achieve a number of worthy goals, coast to coast, WNTS or ENTS; i.e. NTS. Michael, Don and I have been anxiously awaiting your officially arrival. From your WNTS and ENTS brothers and sisters, welcome aboard.

Robert T. Leverett

Google Earth to accurately measure canopy spread

by sfischer_16 » Fri Apr 22, 2011 12:35 am

(My apologies to Steve for accidentally leaving the following post out of the April issue of the NTS Magazine. - Ed Frank)

I experimented with using Google Earth to measure the canopy of a silver maple. Google Earth has a measuring tool that is known to be accurate (http://bbs.keyhole.com/ubb/ubbthreads.p ... d=1#import)

Attached are two images showing that the canopy of this tree is 115' at its widest and 78' at its narrowest.

Seems like this could revolutionize canopy measurement, as it is simple, free, repeatable and verifiable. With experience ENTS could develop guidelines for correct usage to standardize it as a measuring tool. (In some settings the outline of the canopy might be hard to detect.) Note that the image includes GPS coordinates.

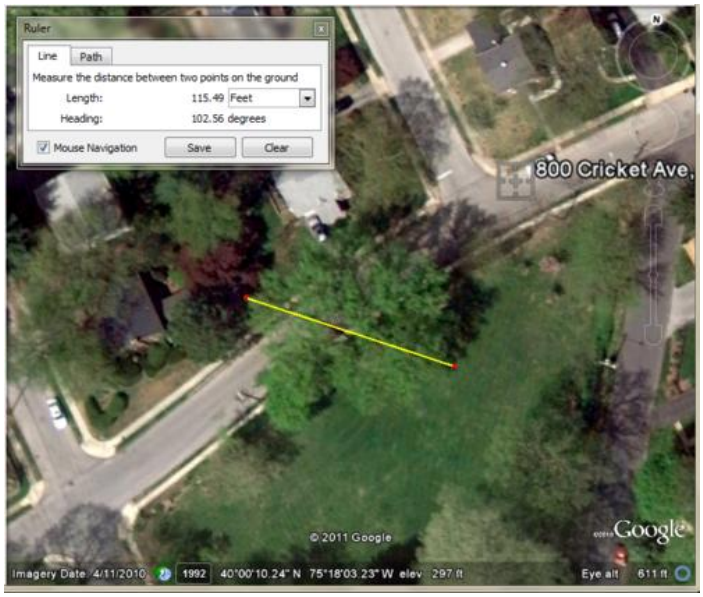
The address I used to search for this tree is 800 Cricket Avenue, 19003.

To download Google Earth, go here:
http://earth.google.com

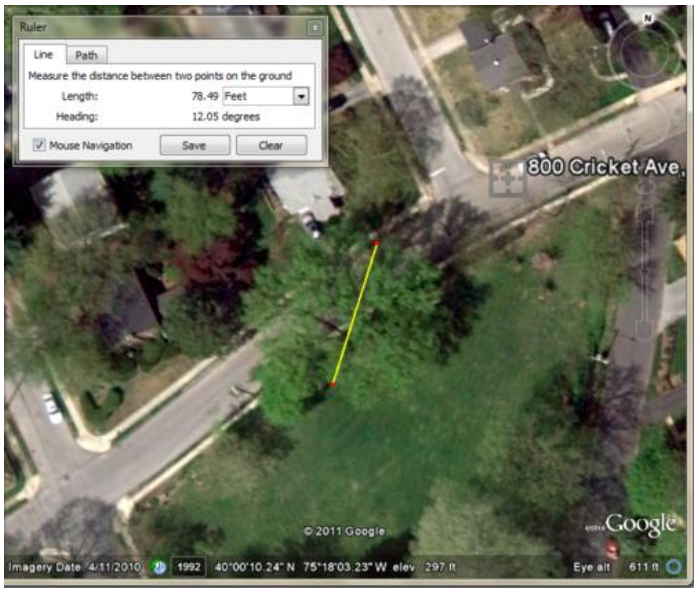
Give it a try (and verify my measurements)!

(By the way, this silver maple has a girth of 268". Still need to measure height, which I plan to do by sighting with a carpenter's square held against my cheekbone.)

Steve Fischer



Google Earth measurement of canopy at its widest: 115'.



Google Earth measurement of canopy at its narrowest: 78'

Ohio forest-tree crown measurement idea

by dantheman9758 » Sat Aug 20, 2011 11:42 am

The most accurate crown measurement method I've found to date. In addition to your field tools, you will need:

Fusion Lidar Viewer:
http://forsys.cfr.washington.edu/fusion/fusion290.html
(You will need to obtain your area's lidar data)

Google Earth:
http://www.google.com/earth/index.html

EasyAcreage V1.0 - Google Earth area measurement tool (all you need is the free demo version):
http://www.wildsoft.org/

1.) Measure a tree's height in the field, mark theGPS location.

2.) A.) If you've used lidar to help locate the tree before you measured it in the field, locate this Lidar point lead and move on to step 3.

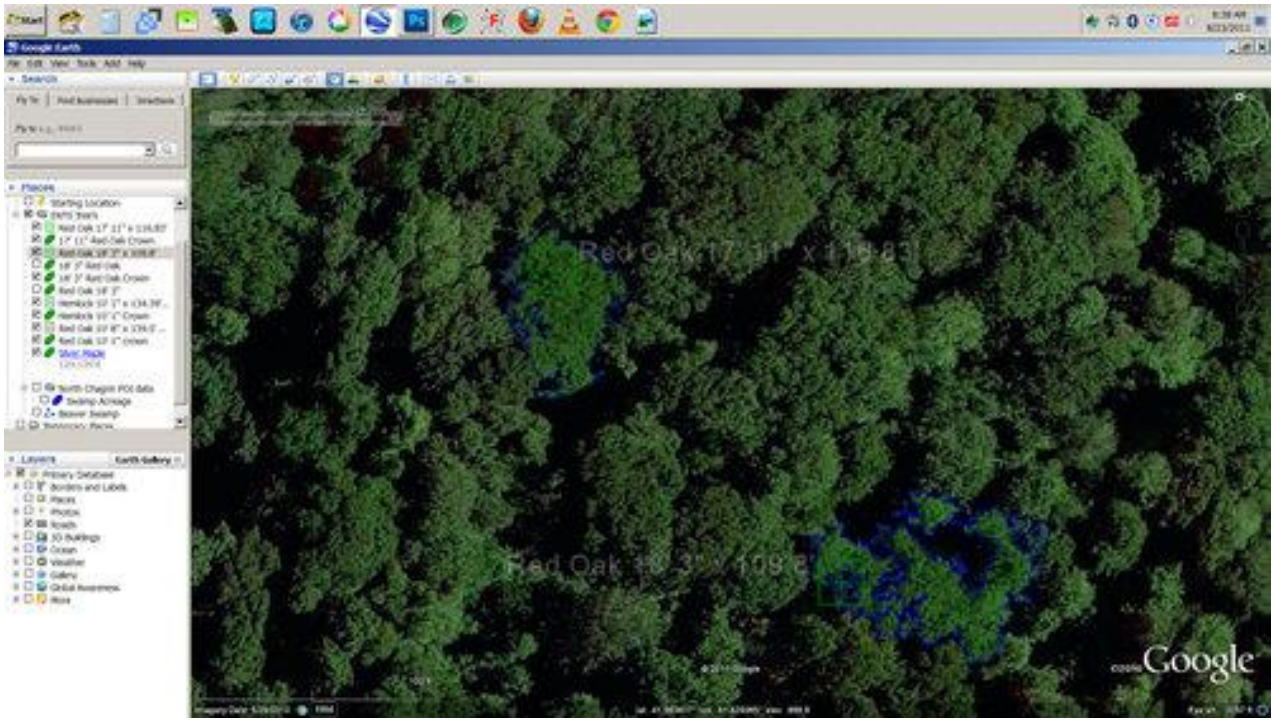
B.) If you did not initially use lidar to find the specific tree, than open up google earth and type in the waypoint you obtained in the field. Zoom in to the generalized GPS location. Take note of where this is marker is located. Open lidar and find the spot where the marker was located on Google Earth. Scan the trees surrounding the location, and see if the specific tree that was measured can be isolated via logical deduction of the height data in the 3d canopy model. If it can not be isolated by way of lidar it will not be possible to use this method. However if it can be confidently isolated then move on to step three.

3.) Obtain the *precise* latitude and longitude point of this tree through Lidar. In the 3d viewing mode of Lidar you can use the measurement tool to get very specific co-ordinates that will show up on the bottom of the screen

4.) With these extremely precise waypoints, open up Google Earth, plug them in and, zoom to the location. The precise points will take you right to the individual tree. If you have trouble identifying the boundary of the specific tree crown, flip through Google Earth imagery data via the timeline tool. It isn't always crystal clear, but the multiple years of Google Earth imagery exponentially increases your odds of locating the definitive tree crown surrounding your coordinate point, - this works most of the time, even within a forest

5.) If you've isolated your tree crown, use the *polygon* creation tool in the Google Earth toolbar. Carefully trace the contours of the crown with this tool and it will create a 2d dimensional shape of what you trace which will later be converted into useful crown data. Once you have created your 2d "polygon" of the crown, highlight it and save it "as" a KML file, and remember into which folder you've saved it.

6.) Open up the EasyAcreage V1.0 tool http://www.wildsoft.org/EasyAcreage/ - locate your saved KML polygon file, and drag and drop it into EasyAcreage. EasyAcreage will instantly give you the numerical "area" of your crown measurement, and you can choose to display this as feet. Copy this area data and open up your internet browser. Open up the circle and sphere calculator via this website: http://www.csgnetwork.com/circle_sphere_area_calculator.html. Paste the number you copied into the appropriate box. The crown's natural and irregular shape has now been translated into a very honest diameter via *area* data. Neat huh?



The 18' 3" Red Oak in this picture lost a massive limb in 2009. Taking the Google Earth timeline imagery back to a high resolution image from 2007 revealed the crowns actual dimensions by showing a crown that was full, and gap-less. The 2010 data would have been impossible to discern the crowns present "shape" without the 2007 data outlining the original crown. The fragmented appearance and large gaps of the 2010 image, shown above, now accounts for the damage caused by one of the tree's largest limbs. Despite the loss of perhaps <30% of the former crown area, the farthest stretching branches, and the relative crown shape in 2010 still fall within the same relative points that they did in 2007. X Y field measurements would not have a way to address this massive loss of crown volume.

I see that crown measurements are rarely taken. Relative to the precision of a rangefinder/clinometer height or the direct circumference measurements acquirable through tape, the crown data methods seem to lack the characteristic precision pursued by the ENTS. If accuracy is the name of the ENTS game, I suggest this method be tested and reviewed by other members. Google Earth scaling data is 99.909% accurate, and is used by professionals in a variety of fields. Digital measurements obtained for our purposes are so small that there is essentially no error. I've tried this method for 5 tree's now. One field tree, and four forest trees. Three of these four forest tree's had imagery that clearly defined their crowns. So finding a tree, and identifying its crown is where user interpretation is key - if the data becomes unclear, than it is probably best to just skip it and try another tree.

Dan Reed

E. Daniel Ayres - zundapman - intro

by zundapman » Tue Aug 23, 2011 12:27 pm

Hi ENTS... When I retired some years ago, one of my mantras for my retirement was, "I'm going to plant trees until I drop." So far, I don't have a particularly good track record. My first "big" project was the creation of approximately 1200 stems of transplantable essentially open pollinated Chestnut Trees from nuts obtained from a "nut farmer" in Antrim County, Michigan. The lots of bagged nuts, labeled for breeding experiments conducted the year before had been sprouting in a refrigerator because no one associated with the nut farm had the gumption to plant them. I received the bagged batches without

documentation but with a promise that I could get it later. I was told I would be receiving over 3,000 viable nuts and planned in advance accordingly with an order for nursery trays and plant bands from Monarch. I had sense enough to buy the more expensive "heavy duty" plant bands because I was not in a position to grow the nuts in a greenhouse shelter. Not knowing any better, I purchased standard local "lawn cover" topsoil that was delivered to landscape contractors working in the area by a well established local service provider. By the time I had the nuts in my possession and was able to start actually planting them in the nursery trays it was the third week in May and many of the bagged nuts had sprouts up to several inches long. Some of the bags of nuts had fermented turning the juice in them into a kind of liquor. None of the nuts from these batches were viable. Of the 3000 plus nuts I received, only 2400 were judged to have any chance of sprouting. Of those that were planted, by September, I had around 1200 living stems. Unfortunately I had spent most of my time and effort all season just keeping the nursery trays watered and free enough from weeds to prevent some "shade kill." I had also worn myself out. I was only able to get abut 250 of the stems transplanted out, many of them into fairly random and unattended spots in soils not particularly hospitable to Chestnut. Living in Washtenaw County, MI, our average pH is 7.4 or more, and the sites where I was working were disturbed subsoils with even higher pH ranging from 7.6 to 8.0. These locations were not ideal places for baby Chestnuts to survive, but the planting sites were places I had access to and support from landowners willing to allow the potential trees to survive in the locations we identified. Of the stems not planted in the fall, a large number survived the winter only to be killed by freaky spring weather as the nursery trays set out in field locations were subjected to daily warm-ups followed by windy cold nights that created a freeze-thaw mechanism which actually cracked off many of the stems close to the ground surface as they started to bud out. The shock proved too much for almost all of the stems that broke off. A single varmit, probably a rabbit or muskrat munched on another 100 plus stems. Setting the survivors out in the spring was a long-drawn out effort involving a few stems a day. Survival was hampered by draught and the fact that many of the sites were un-mown "old field" grass infested sites where hay mowing had been one of the most recent agricultural uses. The unmown grasses shaded out and killed off the young seedlings by limiting available moisture and sunlight. Now, I walk my dog past about five surviving stems on the margin of a golf course which is adjacent to my house and note that two of the five have successfully open-pollinated each other and I can count between 30 and 45 burrs, some eight seasons since the planting effort was made. There may be as many as 60 stems from the effort surviving in various locations around the county. So much for my "Chestnut Project." Last fall I underwent major thoracic surgery for an upper aortic aneurysm and have been instructed by the medical profession not to lift push or pull more than 50lb and to avoid repetitive lifting efforts like shoveling. This situation makes it unlikely that I can persue the kind of project described above again in my lifetime.

I hold the internet name: "afforestation.org" registered over ten years ago but never publicly hosted. I'm looking for collaborators to help put together a volunteer and charitably supported effort to promote and facilitate tree planting projects and document them for research and practical purposes. Anyone interested in collaborating with me is encouraged to contact me directly. I'm on Facebook, have an old personal web site at http://home.comcast.net/~eayres. and use the "handle" ZundapMan based on my passion for a vintage motorcycle designed by Ferdinand Porsche before WWII and manufactured in Hamburg by ZundappWerke until 1956-7 when competition from BMW finally killed it. I worked in a motorcycle shop one summer for a retired sidecar racer who had been a dealer and had dominated side car racing in the upper midwest circuit with one during the mid 1950's.

E. Daniel Ayres
afforestation.org

Cuyahoga Valley, OH composite

by Steve Galehouse » Tue Aug 23, 2011 7:30 pm

Rand Brown and I have measured several sites in the Cuyahoga Valley in the past couple of years, and I thought it would be interesting to combine the data in a separate post. Each of the four sites was once part of the Akron/Summit County Metropark system; now some of the sites are managed by the National Park system or jointly managed by NPS and Metroparks. All the sites are in northern Summit County and within a few miles of each other, and all share a common geography, with steep hills and ravines with small streams that lead into the Cuyahoga River. I look it as one continuous site that has been divided and disrupted by both urban and agricultural land use.

The composite data give a Rucker 5 index of 148.28, a Rucker 10 index 139.62, and a Rucker 20 index of 128.8---not too shabby!

Common Name	Botanical Name	Height (ft)	Girth (ft)	Girth (in)	Crown spread (ft)	Tree commer
Tuliptree	Liriodendron tulipifera	163.7'	14.7'	176"	91.0'	Sand Run
American Sycamore	Platanus occidentalis	154.9'	8.8'	105"	67.0'	Everett Woods
Northern Red Oak	Quercus rubra	146.0'	10.5'	126"		Sand Run
Bitternut Hickory	Carya cordiformis	141.8'	5.8'	70"		Sand Run
Black Cherry	Prunus serotina	135.0'	5.2'	62"		Everett Woods
Black Walnut	Juglans nigra	133.0'	7.7'	92"		Everett Woods
American Beech	Fagus grandifolia	132.0'	7.4'	89"		Sand Run
White Ash	Fraxinus americana	131.8'	11.1'	133"		Sand Run
Black Oak	Quercus velutina	129.0'	9.2'	110"		Everett Woods
Eastern Hemlock	Tsuga canadensis	129.0'	7.1'	85"		Ritchie Ledges
Cucumber-Tree	Magnolia acuminata	126.0'	9.4'	113"		Ritchie Ledges
Eastern Cottonwood	Populus deltoides	125.4'	7.4'	89"		Sand Run
Sugar Maple	Acer saccharum	122.2'	7.9'	95"		Sand Run
Slippery Elm	Ulmus rubra	121.2'				Sand Run
American Basswood	Tilia americana	118.6'				Sand Run
Black Maple	Acer nigrum	118.4'				Sand Run
White Oak	Quercus alba	118.0'	9.9'	119"		Hampton Hills
American Elm	Ulmus americana	114.0'	6.4'	77"		Hampton Hills
Red Maple	Acer rubrum	112.0'	6.8'	81"		Ritchie Ledges
Scarlet Oak	Quercus coccinea	104.0'				Sand Run
Shingle Oak	Quercus imbricaria	104.0'	9.8'	117"		Sand Run
Sassafras	Sassafras albidum	101.0'				Everett Woods
Blackgum	Nyssa sylvatica	97.7'				Everett Woods
Butternut	Juglans cinerea	95.0'				Sand Run
Yellow Birch	Betula alleghaniensis	74.5'	5.9'	71"		Ritchie Ledges

http://rev215.treesdb.org/Browse/Sites/627/Details

Steve Galehouse

Patuxent Wildlife Research Center, MD

by Darian Copiz » Tue Aug 23, 2011 11:47 pm

Last fall I received a research permit to investigate habitats and measure trees at the Patuxent Wildlife Research Center near Laurel, Maryland. I visited the property several times during the winter. The site is located in Prince George's and Anne Arundel counties and is in the coastal plain physiographic province. Part of why I wanted to visit the site was to investigate reports of old growth forest along the Patuxent River in the refuge. The following is an excerpt of the report I that I wrote based on these investigations. A discussion of old growth is followed by some tree measurement data. I have removed citations and made some edits from the original.

The Maryland Department of Natural Resources defines old growth as the following:

"An old growth forest is a minimum of 2 ha (5 acres) in size with a preponderance of old trees, of which the oldest trees exceed at least half of the projected maximum attainable age for that species, and that exhibits most of the following characteristics:
1. Shade tolerant species are present in all age/size classes.
2. There are randomly distributed canopy gaps.
3. There is a high degree of structural diversity characterized by multiple growth layers (canopy, understory trees, shrub, herbaceous, ground layers) that reflect a broad spectrum of ages.
4. There is an accumulation of dead wood of varying sizes and stages of decomposition, standing and down, accompanied by decadence in live dominant trees.
5. Pit and mound topography can be observed, if the soil conditions permit it."

A search for old growth forest at the Patuxent Research Refuge was inspired primarily by Mary Byrd Davis' document, "Old Growth in the East: A Survey" and Matthew C. Perry's description of large trees at the refuge. Davis' assessment indicated that there may be as much as several hundred acres of old growth, uncut, or virgin forest at the refuge.

For the purposes of determining the occurrence of old growth forest, both research and in the field reconnaissance was employed. Through a conversation with Dr. Matthew Perry, some areas were identified for investigation, including the site known as Beech Island - located upriver of Duvall Bridge. Aerial photography was also used to determine promising areas for old growth forest.

Historical maps and site history were investigated to determine past disturbance on the refuge.

The conclusion derived through this research and site investigation is that it is unlikely that any areas in the north or central tracts of the Patuxent Research Refuge could be considered old growth. Resultantly, it is even less likely that any areas contain primary or virgin forest. Below is a rough review of field observations for the DNR old growth criteria. These observations focus on the Patuxent River floodplain, more specifically around Beech Island. Most other areas in the refuge were clearly young-aged forest.

As no trees were cored as part of this study, tree ages were not recorded. Perry's description of the big trees of Patuxent is undated, but appears to have been written within the past ten years. It states that based on ring counts done in the past, some trees in the Patuxent floodplain are over 135 years old. Although this is relatively old for the region, for many species it would not meet the DNR criteria for which the oldest trees exceed half the maximum known age for the species. Species found on the refuge which live longer than 270 years include Liriodendron tulipifera, Quercus alba, and Nyssa sylvatica. Although some of the trees in the floodplain are fairly large, one might expect them to be larger if they were old growth. The floodplain consists of rich soils, and moisture is abundant. The large sizes of the trees may be attributable more to growing conditions than exceptionally old age. Tree coring could potentially extend the known ages of the trees in the floodplain. However, many of the largest (assumed oldest) trees are hollow. Dating these trees through tree ring counts would most likely be inconclusive.

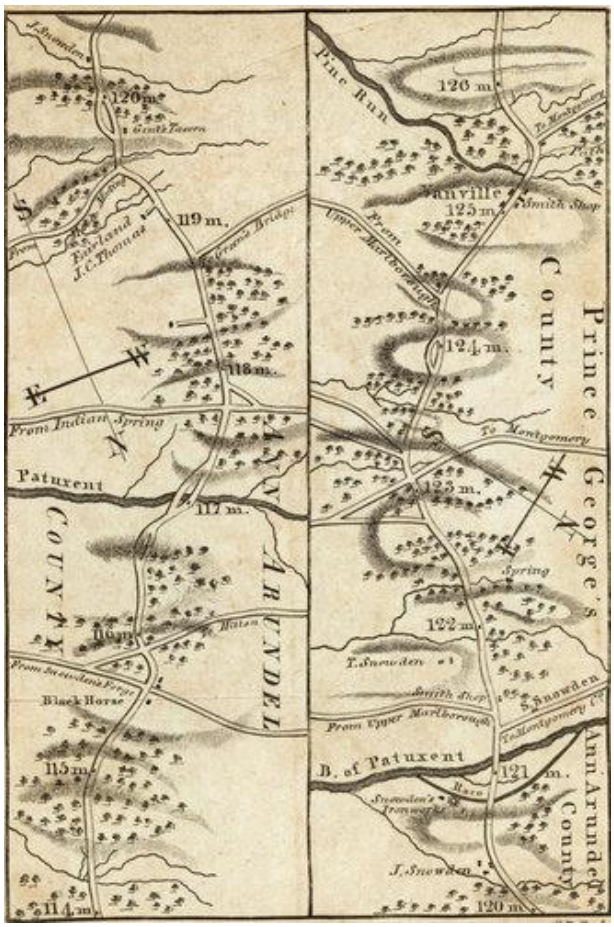
Observations of additional DNR criteria may also be inconclusive. Shade tolerant species (beech) were observed in a variety of age classes. However, this is common for many secondary forested areas as well. Canopy gaps were common, but this was primarily a result of the braided river channel. A low degree of structural diversity existed. There was little shrub layer or herbaceous layer, little downed dead wood, and little pit and mound topography. However, each of these attributes could be lacking due to frequent flooding in this area.

Determination of old growth based on observation did not yield a definitive result. There are some old sections of floodplain forest, but they may not be old enough to qualify as old growth. Historic conditions, however, further indicate the unlikelihood of old growth, and particularly primary forest on the refuge.

In 1690, Richard Snowden built Birmingham Manor on a knoll northeast of Brock Bridge. Much of the site is now under the Baltimore Washington Parkway, but some of the remains of the manor still exist. According to at least one source, the brick and oak timbers for the house were transported up the Patuxent River by barge. It is unclear how far up the river barges went, but the same source also indicates that since the time of the manor's construction, the river has silted in, forming islands and a braided channel.

At least as early as 1734 the Snowden's had constructed the Patuxent Furnaces iron works along the Little Patuxent River near the bridge just east of the contact station. However, it is likely that some form of iron production was occurring at this or nearby sites, particularly near Brock Bridge, even earlier, and probably shortly after the construction of Birmingham Manor. By 1795 maps show iron works in the area as well as a mill at Duvall Bridge. Churches and farms are also scattered across the landscape. Iron furnaces and forges required a large quantity of wood for the production of charcoal used in fueling the facilities. By 1800, and for many decades before, the land which is now the Patuxent Research Refuge had been under intensive industrial and agricultural use. Another map produced shortly after 1800 shows the area around Brock Bridge and the crossing of the Little Patuxent River. Although trees are shown elsewhere on the map, no trees are shown along the Patuxent River. The Patuxent Furnaces were closed in 1856 due to a lack of wood and iron ore. The other iron works and saw mills in the area probably closed soon after as well.

Griffith map from 1795 depicting an iron forge on the Little Patuxent River, an iron furnace on the Patuxent River near what is now Brock Bridge and a mill near what is now Duvall Bridge.

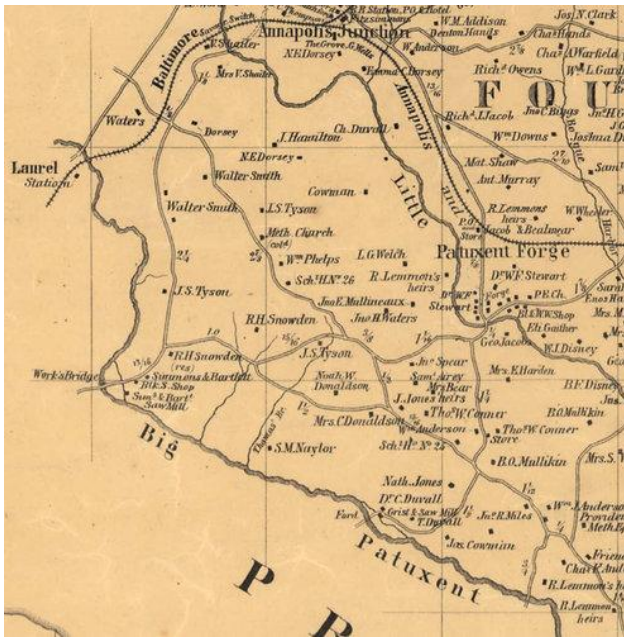


Moore travel map from 1802. The map on the right depicts the crossing of the Little Patuxent River. The lefthand map shows the crossing of the Patuxent River near what is now Brock Bridge. The Snowden Iron works are marked near this crossing. Trees are not shown within either river valley.

Prior to the creation of Fort Meade in 1917 and subsequently the Patuxent Research Refuge in 1936, the north and central tracts had experienced over 225 years of disturbance. Over 120 of these years were intense disturbance, including repeated cutting of trees for lumber and charcoal production. It is likely that trees unsuitable for lumber were also cut, because they could be used for charcoal production for use in the iron works. Considering that wood was eventually in short supply, it is likely that any tree of significance was cut, even if access was not particularly easy.

Mining for iron ore consisted mostly of open pits. Tobacco farming and other forms of farming also occurred in the area. The heavy impacts of tree cutting, iron mining, and farming most likely generated a large quantity of sediment, both in the refuge and upstream of the refuge. Slash from tree cutting was historically thrown into rivers which would have also increased sediment deposition in the Patuxent. The islands and braided channels existing along the Patuxent River in the refuge today are likely a result of siltation from this sediment. It is unlikely that the currently existing islands occurred in their present form or locations 320 years ago when Birmingham Manor was built.

For these reasons as well as the lack of conclusive field observation evidence, it is very unlikely that there is any old growth on the Patuxent Research Refuge north or central tracts. However, it is probable that some trees on the refuge are over 150 years old, which corresponds to previous tree ring counts and also to the end of intensive use of the site. By some definitions, some areas on the refuge might be considered old growth. Additionally, the refuge also provides very good potential for future old growth, but it can be said with a relatively high level of certainty, that the refuge does not include any primary or virgin forest.



The Martenent map from 1860 has Patuxent Forge labeled along the Little Patuxent River. A blacksmith shop and saw mill are shown near Work's Bridge, the approximate present location of Brock Bridge. A grist and saw mill are shown near the present location of Duvall Bridge.

As part of field investigations for old growth forest , some trees were measured on the refuge. These were typically examples of the species which were particularly large. Circumference at breast height (CBH) was measured with a tape at 4.5 feet above the ground at mid-slope. Heights were measured using the Eastern Native Tree Society methodology which uses laser range finders, clinometers, and sine calculations to determine height. This is the most accurate method of height measurements commonly available. The included table provides documentation of these measurements.

Species - CBH - Height - Notes
Carpinus caroliniana - 3' 10" - 55' - fallen, on ground, height measured with tape
Carpinus caroliniana - 3' 8" - 56.5'
Fagus grandifolia - 14' 5" - 110.8' - appears trunk may be hollow at base
Fraxinus americana - 10' 8" - 114.8'
Fraxinus pensylvanica - 9' 9.5" - 120.5'
Fraxinus pensylvanica - 10' 9" - 126.4'
Liriodendron tulipifera - 13' 0" - 137.1'
Liriodendron tulipifera - 15' 0" - 127.5' - bark is balding near base
Magnolia virginiana - 2' 10" - NA - measured at 2' from ground, hollowed out trunk
Magnolia virginiana - 1' 9" - NA
Magnolia virginiana - 1' 9" - 55.7'
Pinus virginiana - 3' 6" - 112.3'
Platanus occidentalis - 20' 5" - 119.0'
Quercus lyrata - 10' 5.5" - 113.6'
Quercus michauxii - 10' 4" - 107.6'
Quercus michauxii - 13' 8" - 118.8'
Quercus palustris - 11' 8" - 111.6'
Toxicodendron vernix - 11.5" - 24.3'

Trees of note include the following:

Carpinus caroliniana (American hornbeam): Two large trees of this species were measured, but one of them had recently fallen. The tree which was still standing was large, but is not larger than the current state champion. However, it is quite a bit taller than the current champion, and as such is note worthy. It is very likely that larger trees of the species exist in the refuge elsewhere along the Patuxent River.

Platanus occidentalis (sycamore): This tree is not large enough to qualify for state champion status. However, it is a particularly nice specimen of the species. The habit is uniform, the trunk does not appear to be hollow, and the tree is very large. This tree grows along the Little Patuxent River, but is easily accessible from the nearby road.

Large sycamore in the floodplain of the Little Patuxent River, near the past location of Patuxent Forge.

Quercus lyrata (overcup oak): There were several trees of this species occurring in an area of the Patuxent floodplain. The example measured appeared to be the largest, but others were similar in size and exploration over a broader area might lead to discovery of a larger tree. One dead tree of very similar size had fallen nearby. Overcup oak is an uncommon species in Maryland. The tree measured is much larger than that of the current state champion, and as such should easily be able to become the new state champion if nominated.

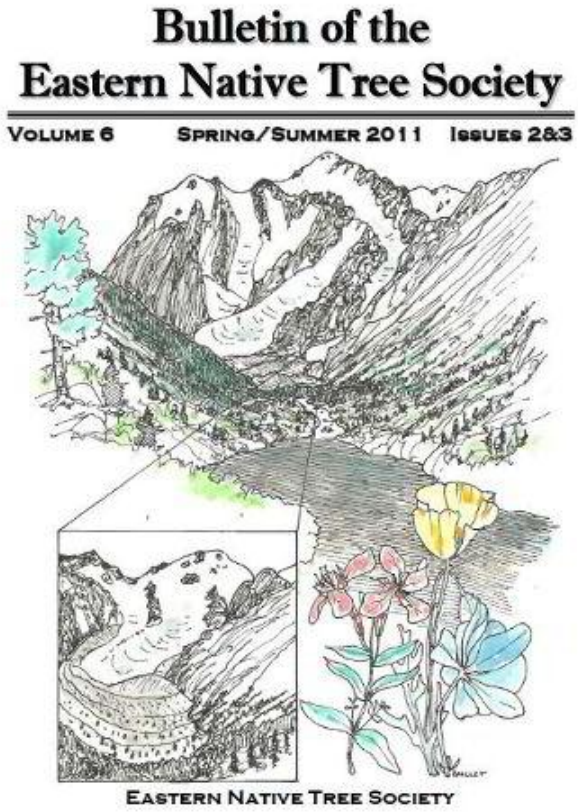
The Patuxent Wildlife Research Center is a fairly large site. I measured relatively few trees and would like to measure more. I am hoping to renew my research permit for this winter and make more extensive measurements of the trees on the property.

Darian Copiz

Bulletin of the Eastern Native Tree Society, Volume 6, No. 2-3, Spring and Summer 2011

Edited by Don Bragg, Mon Aug 22, 2011 2:42 pm

ENTS Bulletin, Volume 6, No. 2-3, Spring and Summer 2011
http://www.nativetreesociety.org/bulletin/b6_2_3/B_ENTS_v06_02&3.pdf



An artistic rendition of the glaciers at Shavlinsky Lake in Russia. Line drawing/watercolor by Fred Paillet.

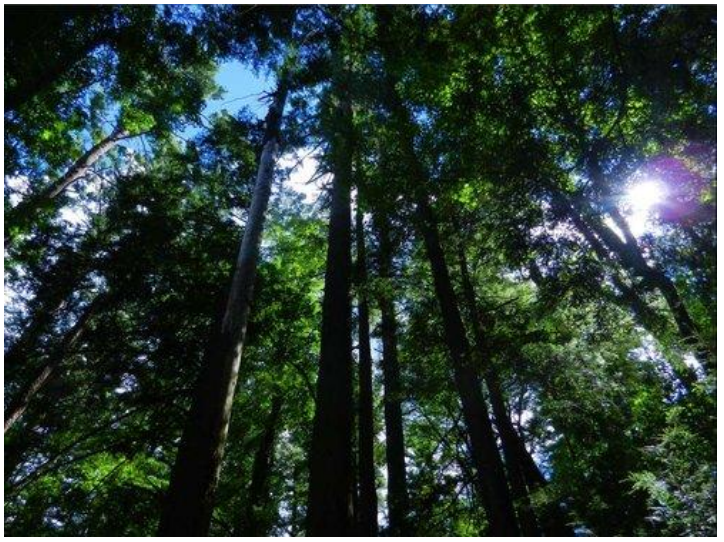
Here is another excellent issue that has been produced by Don Bragg. I am particularly intrigued by the numerous drawings and illustrations provided by Fred Paillet. – Ed Frank

Bryant Woods Extras, MA

by dbhguru » Wed Aug 24, 2011 8:54 am

Yesterday was a gorgeous day, so I headed solo over to the Bryant Homestead to begin the update of the big trees. It is only a 22-mile drive through the eastern and into the central Berkshire region. You would never expect so a lovely property awaits you. Below is a series of images that hopefully captures a little more of the Bryant Woods magic. The Bryant Homestead is a property of the Trustees of Reservations.

The first two images show the Bryant Pine from a different side. Of course, I remeasured the pine. Do ducks quack? I got numbers from 157.2 feet to 157.8 this time. However, I'll stick with 157.1 from the measurement from a few days ago. I'll stay conservative for the time. The Bryant Pine's true height is very likely somewhere between 157.0 and 157.5 feet.

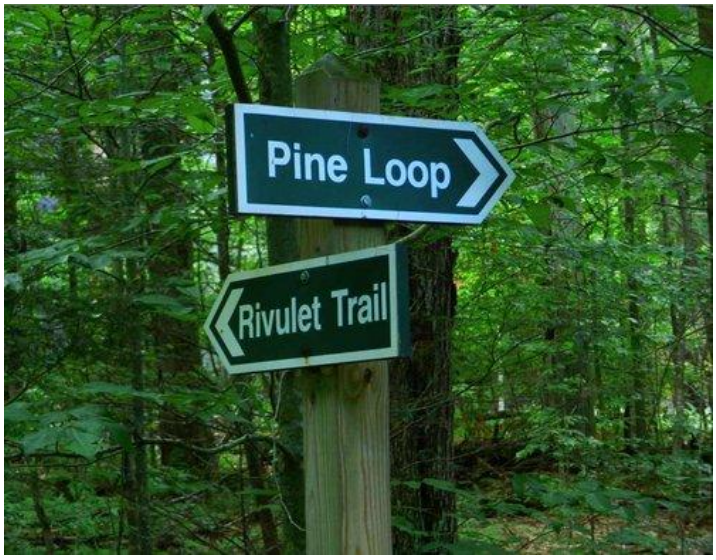


On the way to the pine grove, the Rivulet Trail passes some exquisite yellow birches. Here is one of them.

Now to the remains of an old hophornbeam. There are several large, partially open-grown hornbeams in an area of the woods where the forest thins out, signifying more intensive past land use.

Here is my attempt at an artistic shot of a turkeytail fungus.

Most of my time yesterday was spent on the Pine Loop Trail. Here is the sign at the start of the trail. I can't resist mentioning that yours truly and two students from Smith College laid out the Pine Loop Trail.



Here are a couple of typical scenes from along the trail. I've posted many in the past.

Although, it wasn't in my list of things to do at the outset, it occurred to me that the big pine at the start of the loop trail was crying out for a name. I'd tried to attach a name to it previously, but none stuck. I guess it wasn't time. But yesterday was different. After thinking of bizarre choices like the Shakespeare Pine, the name Dr. Joan Maloof suddenly popped into my head. I've been reading "Among the Ancients - Adventures in the Eastern Old-Growth Forests" and it occurred to me that Joan represents an extraordinary voice for special places. Yes, that was it. So, I boldly declared the big trailhead pine to be the Joan Maloof Pine. Let's take a look at it.

Joan's pine measures a solid 11.4 feet around and reaches to 150.6 feet. It is one of 11 great whites that I've confirmed to 150 feet or more in Bryant Woods. I have confidence that there is at least one more 150 out there. An even dozen would be nice. What makes the 150s especially significant is that the Bryant pines were hit hard by a hideous ice storm several years ago that devastated lesser forests in the general area. The big Bryant pines absorbed the hit, looked a little bewildered for a time, but kept on ticking. Now, they look great once again.

Oh yes, I did remeasure the Walt Whitman Pine. I keep trying to find the best average base spot. I settled on a location yesterday and now have the girth at 13.3 feet. The huge pine appears to have lost a little height this past year. According to yesterday's measurement, it stands slightly over 141 feet. I had it at a little over 143. I plan to remeasure Whitman again in the late fall. Other measurements were: Emily Dickinson Pine at 11.1 x 152.7 ft and Robert Frost at 11.1 x 154.7 ft. Emily is about a foot less than I previously had it.

I often report on Bryant Woods. I beg your indulgence. I love the place, but there is more to the attention given the property than my personal feelings for it. Among big tree aficionados, Bryant Woods hardly makes a bleep on the radar scope, and

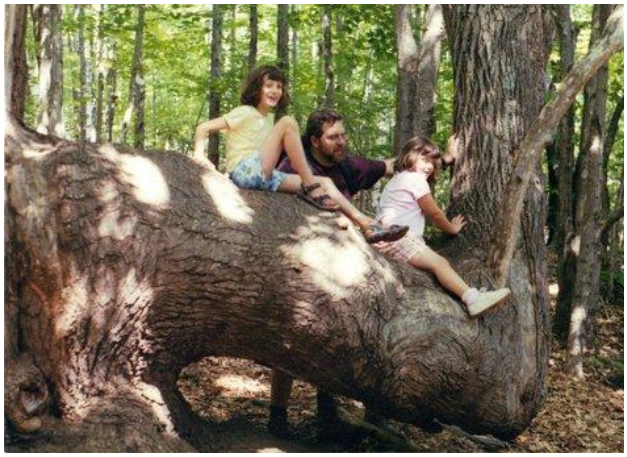
it should hog the whole screen. The same could be said for other great forests that NTS has championed in recent years. The attention of big tree hunters, who might otherwise value the pines of Pine Loop and give them loving attention, is often absorbed measuring the awkward forms of half dead, multi-trunked trees growing in ditches. The purpose, I suppose, is to carve another notch on their big tree revolvers. Yes, it is fun competition and probably a worthy cause, but far more important places and far better trees go unrecognized because of that silly champion tree formula that proves absolutely freaking nothing. Oh well, I should shut up.

Robert T. Leverett

Elephant tree/native trail marker tree, VT

by adam.rosen » Wed Aug 24, 2011 5:13 pm

Here is the famed Putney Mountain "Elephant Tree" a huge Ash tree, circa 2002, with my kids and I much younger than we are now. Of course, no measurements from me, just the experience of the tree. It is supposed to be a Native American Trail Marker from the 1700's. Probably is too.



Adam Rosen

Oregon Willamette NF | Tall Grove Trail | Only 280 ft. minus

by mdvaden » Thu Aug 25, 2011 10:21 pm

Finally got around to checking out part of the Willamette National Forest, which someone forwarded an old article about, some months ago. It was claimed that Douglas fir there reached upwards of 320 feet. Pretty sure that's the number. Can't find the article, but maybe Michael Taylor saved the link. Article was from the 1980s, almost 30 years ago. So I drove out there today - takes about 1 hour from Interstate 5 and passing through a small town Lowell, Oregon. About 40 miles from 1-5.

The tallest I could find anywhere near that grove was 280 feet. And almost nil in the 260 to 270 foot range. Several 250 footers. No trunks bigger than the 5' to 6' diameter range either. The trail is mostly okay, but a lot of debris in places. The last section is closed-off by a big stack of fallen trees, and the observation deck is broken: in disrepair. Most roads - because they are used - are in pretty good shape. But the last roads which are 3.5 & 0.5 miles long leading to the trailhead have small trunks to dodge continually. Whoever cut them must have been lazy, because even a person in a hurry could have cut 3 more feet clearance width in the same amount of time. My impression is that the trail draws little interest anymore. They could practically decommission it and let the grove be what it will be. There are a lot of fallen trunks in the grove, most of which are bigger ones, not small ones. It's not a low protected valley. It's a tiny valley and slopes that were exposed on all sides, and the impact of time and weather are clearly apparent. If there was anything over 300 feet, maybe it's on the ground now.

Anyhow, today's exploration should save Taylor a future trip from Trinity County, CA.

Compared to the BLM land and Doerner Fir trail area, I'd give this Willamette NF grove a #2 on a scale of 1 to 10 for enjoyment, and the Doerner trail more like a #7.

The mirror photo is indicative of the road. That was the tightest squeeze. And on the way out. Going in, I

actually brushed the truck against it so gently that it did not crease the metal or scratch paint.

M. D. Vaden of Oregon

Laurel Fields, Sigel, PA, June 2011

by edfrank » Fri Aug 26, 2011 8:34 pm

View of the Laurel Fields in mid-June near Sigel, PA

Edward Frank

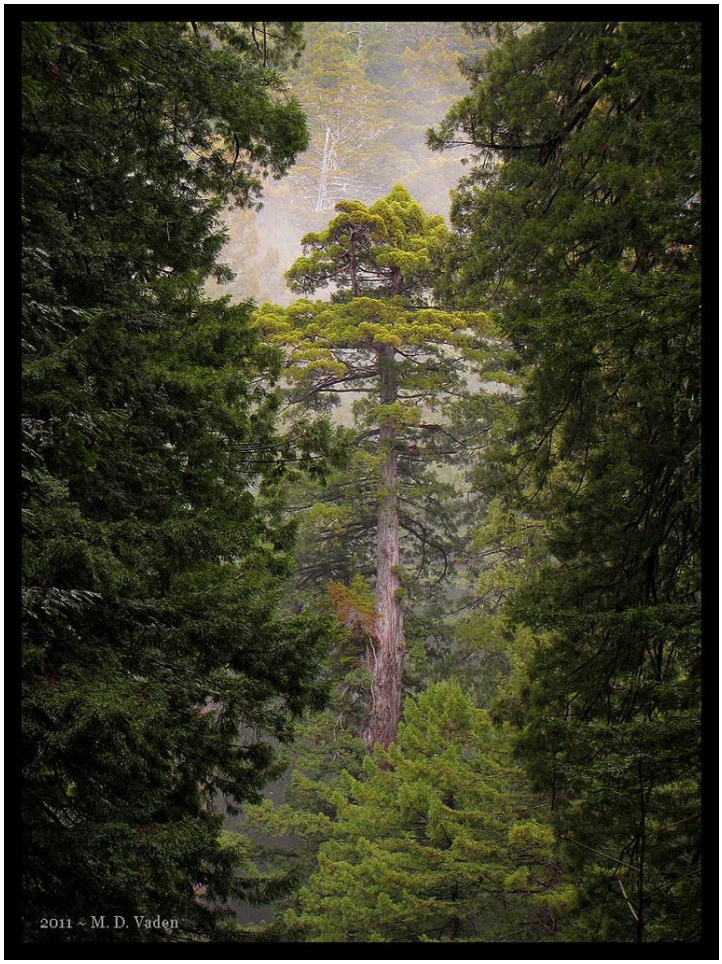
2011 Redwood Photo Contest Finalist

by mdvaden » Fri Aug 05, 2011 12:50 am

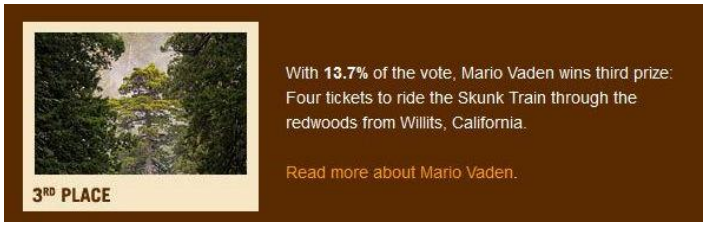
Save the Redwoods League offered a photo contest again this year, and one of my photos was selected as one of ten finalists from over 500 pics submitted. Voting for finalists is open until August 12th, 2011

The image below is the one I submitted, titled "Prairie Creek Redwoods State Park"

M. D. Vaden of Oregon



(Mario Vaden finished third after the final voting - August 25, 2011



Congratulations on the high finish, and sorry you did not win first place

Ed Frank)

Dotted Hawthorn accepted as National Champ, PA

by edfrank » Fri Aug 26, 2011 10:32 pm

After finding this tree in 2007, and submitting it to American Forests as a new point champion for dotted hawthorn *(Crataegus punctata)* it was accepted. It only took four years.

Here is what the certificate and accompanying letter looks like:

AMERICAN FORESTS

August 15, 2011

Edward Frank, D. Luthringer, and A. Kelly
8718 Route 322
Reynoldsville PA 15851

Dear Edward Frank, D. Luthringer, and A. Kelly,

Congratulations! The enclosed certificate acknowledges your nomination of a new national champion tree. There are a total of 751 national champion and co-champion trees on the 2011 National Register of Big Trees. You may view the entire 2011 National Register of Big Trees on our website at http://www.americanforests.org/our-programs/bigtree/.

For over 70 years, American Forests' National Big Tree Program has campaigned to locate, protect, and save the biggest trees in the United States. Big trees are emblematic of what any tree can become if it is planted in the right place and is properly maintained. They not only represent the rich history of our forests, but also the value trees provide to our lives and the environment.

American Forests is committed to fostering interest in and appreciation of the largest and most significant trees in the country. We work to protect and restore forests around the world by planting millions of trees each year, advocating for forests in public policy issues, and working with cities to expand urban tree canopy cover. We recognize that no matter the size, all trees are champions for the environment.

The success of the National Register depends on you – the people who love big trees. Please continue to support American Forests and our Big Tree Program by spreading the word about the great work we do to protect forests.

Thank you for participating in the National Register of Big Trees and making American Forests aware of the big trees in your life. When you visit your champion tree, remember to take lots of pictures. Share your experience with us so that we can see these amazing trees through your stories.

Sincerely,

Sheri Shannon
Program Coordinator, National Big Tree Program

734 15th St. NW, Suite 800 | WASHINGTON, DC | 20005-1016 | 202.737.1944 | www.americanforests.org

Edward Frank

Potomac Gorge - Scotts Run Preserve and upriver, VA

by Darian Copiz » Sat Aug 27, 2011 5:24 pm

This past winter Will introduced me to Bob Vickers, who is a big tree hunter and is on the Fairfax County Tree Commission in Northern Virginia. Bob and I met a few times in the winter to check out some big trees in the Potomac Gorge. We went to Scotts Run Preserve to measure a big sycamore he had scoped out. I got the height on the sycamore and at a later date also measured a tulip, beech, green ash, and pawpaw in the immediate vicinity. These are all in the rich floodplain of the Potomac at the base of a steep slope.

Bob also took me to see the national champion chestnut oak which is further up the Potomac from Scotts Run. I measured the oak shorter than what is in the records. Also, it's a triple trunk tree, but still impressive – and considering it's growing at the end of a slight spur ridge, it's respectably tall.

All these trees are listed below, including an elm I measured at another location in Fairfax County along the Potomac.

Species - CBH - Height - Notes
Asimina triloba - 1' 8" - 67.4'
Fagus grandifolia - 7' 9" - 118.5'
Fraxinus pennsylvanica - 8' 9" - 123.1'
Liriodendron tulipifera - 17' 7" - 145.5' - bark is sloughing off main trunk, tree may be gone soon
Platanus occidentails - 15' 7" - 149.7' - height measured previously as 154.9' possibly in error
Quercus prinus - 18' 6" - 133.3' - national champion, cbh taken from records, triple trunk
Ulmus americana - 12' 9" - 100.8'

I measured the pawpaw twice, on two separate days, to double-check the height. I also double checked the sycamore, but wasn't able to replicate my initial measurement so used my second measurement. The pawpaw, sycamore, and tulip were all within a hundred feet or so of each other. The tulip is in significant decline and probably won't be around much longer.

I plan to make more measurements in Scotts Run and elsewhere along the Potomac, but not necessarily at a fast pace. Bob also has some more trees in mind he'd like to show me – particularly some pawpaws on an island in the Potomac. I hope to go see these soon, when the canopy clears up.

Darian Copiz

On Golden Pond, Squam Lake, NH

by dbhguru » Sun Aug 28, 2011 10:15 am

With trepidation over the approaching storm, on Friday Monica and I headed north to the New Hampshire lake country. Monica had a musical retreat with colleagues at a quaint NH camp on the shores of a lake. Rockywold- Deephaven Camps, founded in 1897, was the choice. The event was to begin Friday evening and end Sunday night. It would conclude with a concert open to the people staying at the camp, a worthy gesture by David Perkins, organizer of the event and patron of the arts.

My first detail to pass along is that our location wasn't on just any lake. For those of you who saw *On Golden Pond* with Henry Fonda and Katharine Hepburn, the camp we stayed at was on Golden Pond. Except, there is no Golden Pond. The actual name is Squam Lake. I think I understand. Were I a producer, I think a title like *On Golden Pond* would sound more enticing, romantic, and marketable, than *On Squam Lake*. Regardless, and by whatever the name, Squam Lake has abundant credits and charms. It is New Hampshire's second largest natural body of water lying entirely within the Granite State's borders. The lake is 6 miles long, up to 4 miles wide, covering approximately 6,800 acres. It reaches a maximum depth of 98 feet, and like most natural bodies of water, Squam Lake possesses shoreline features that are simultaneously wild and aesthetic.

My role in the program was to lead a nature walk for the musicians, that I looked forward to doing, but truthfully, I was unfamiliar with the forest attractions. I had visited Squam Lake during the 2004 old growth forest conference and remembered a shoreline peppered with mature white pines. I also remembered the sounds of loons - always a draw. But as to tree specifics, I would just have to do the best I could with whatever the location offered. I would wing it if necessary.

Although the musical affair was originally scheduled for three days, plans changed, courtesy of Hurricane Irene. Monica and I were going to stay Friday and Saturday nights, but as it turned out, we stayed only Friday night. We weren't alone. Nobody wanted to

stay the whole time with details becoming ever more intimidating with the approaching tempest. So, we left on Saturday around 4:00 PM. However, despite our abbreviated stay, we enjoyed our time on Golden Pond, although my initial reaction to the surrounding trees was less than enthusiastic. I'll explain in due course.

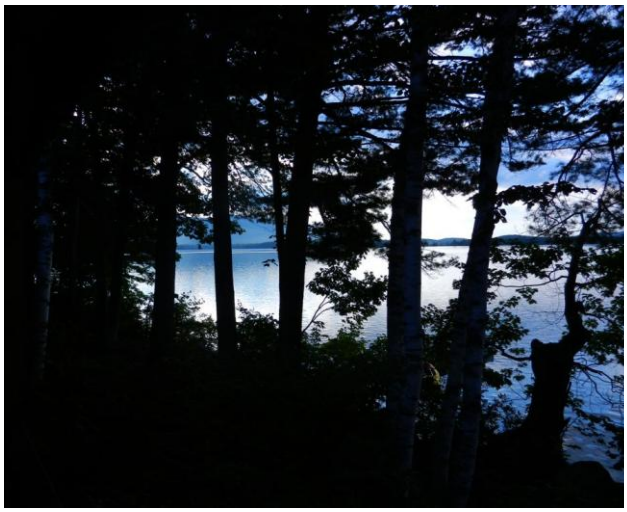
The forest around Squam Lake is a classic New Hampshire lake country woodland. White and red pines, northern red oaks, white oaks, American beech, and sugar maples dominate in the forest overstory, the exact mix depending on whether you are near the lake shore or more inland. Hophornbeam and witch hazel are wide spread in the understory. A white birch pops up here or there like a candle in the forest, and there is a fair amount of bright green striped maple. Red maple, white ash, and American basswood are also present, but not abundant in the areas we explored. I was most surprised at the small amount of red maple. All in all, it is a simple forest in terms of the number of tree species, not challenging for me to interpret for others, but very attractive to the eye.

My initial disappointment with the forest had to do with tree dimensions. The solid granite base to the New Hampshire landscape and the glacial scouring has left little in the way of soils to support super growth. But then, one doesn't visit the lake country of New Hampshire to savor big timber. Large and/or tall trees exist in a few places, but for the most part, they don't grow on granitic bases. The exceptions we observed are the boundary oaks and maples, surviving along old rock walls. Sugar bushes support some large-girth maples. At least, they can be broad near their bases, giving the impression of larger trees. But their stocky bases play out quickly.

We had originally planned to visit Hemenway State Forest and the big Tamworth Pines as part of the weekend, and it was images of those great pines that danced in my head. However, the best the old Squam Lake pines can muster is between 100 and 110 feet, and 7 to 10 feet in girth. The red pines are considerably smaller, making heights of up to 80 feet and girths typically 4 to 7 feet. The northern red oaks and sugar maples make it to 80 feet, but can be much larger in girth, especially the rock wall trees.

However, there is another story to tell. What the Squam Lake forest lacks in stature, it makes up for in pleasing proportions and balance. The old white pines thrust their crowns through a hardwood canopy, creating the sensation of a much taller forest. The eye can easily be fooled. Everything gets scaled back in the absolute dimensions, but a pleasing forest ambiance can be projected in other ways.

The area near the camp offers a nature preserve with hiking trails and a gorgeous vista where one can look out over the Squam Lakes country (there is more than one) and behold a complex landscape that looks wild and endless. At the lakeshore, the atmosphere is more settled. Sitting on the porch of the Long House, where we stayed, I could gaze out into the lake in comfort. I'll now present four images taken from in front of the lodge.



The next telephoto view shows one of the many intriguing small islands that populate Squam Lake. It is this complex shoreline that separates Squam Lake from the simpler forms of manmade reservoirs.

Rising above Squam Lake just beyond the Camp boundaries is Rattlesnake Ridge. It is a scenic destination. There are also items of botanical interest, although they go largely unnoticed. The big draw is the view. Visitors can look down into the lake country from a rock outcropping approximately 450 vertical feet above the lake. Here is what they see.

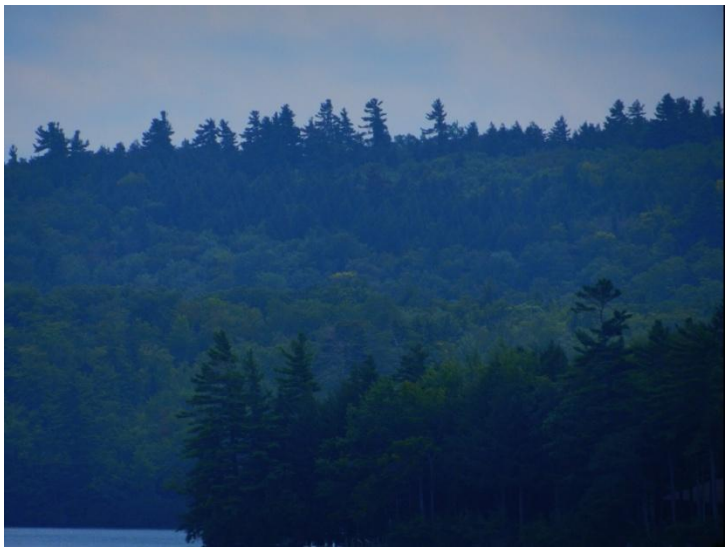
Note the gnarly red pine on the right in the above image. Old red pines dot the landscape, on the crags and along the lakeshore. They are one of the forest's most attractive features. However, there is a less appealing story to tell about our hike to the lookout. Depending on which path you take, you are treated to either a fairly aesthetic woodland, or to the unsightly remains of an old field now populated by the grotesque forms of "weevil" white pines, testament to abuses heaped on the forest by early white settlers. The Pasture Trail is of the latter type and it left a sour taste in my mouth. It reveals the aftermath of land uses that impoverished many New England forests. The settlers thought they were improving the land by clearing it, but they weren't thinking like a forest. The wild woods were believed to be the abode of Satan, and it fell to them, the God-fearing settlers to

tame the land. This also meant importing plants and animals from Europe. Land clearing led to soil depletion and the introduction of invasive species that have persisted. The white pine weevil is one of the non-native life forms that caused economic havoc in the late 1800s, and still plagues us today. Basically, the weevil kills the primary growth leader of the host pine, the part of the tree that keeps it growing straight and vertical. The death of the leader allows curved branches to assume the role of the main trunk, and the result is ungainly multi-stemmed pines that have none of the elegance of the great straight-trunked mast pines of yesteryear.

Here is an interesting paradox. Once at the summit, the distant views across the lake reveal the return of the forest to the once bare hillsides. The densely wooded slopes look lush and green. To the novice, it looks like healthy forests have become re-established and proof that our land ethic isn't misguided. This view appeals to those with a strictly utilitarian outlook. In their minds we can cut and clear our forests and have them too. It is only when one takes a more intimate look, under the mantle of green, that past mistakes with their unsightly scars tell the full story.

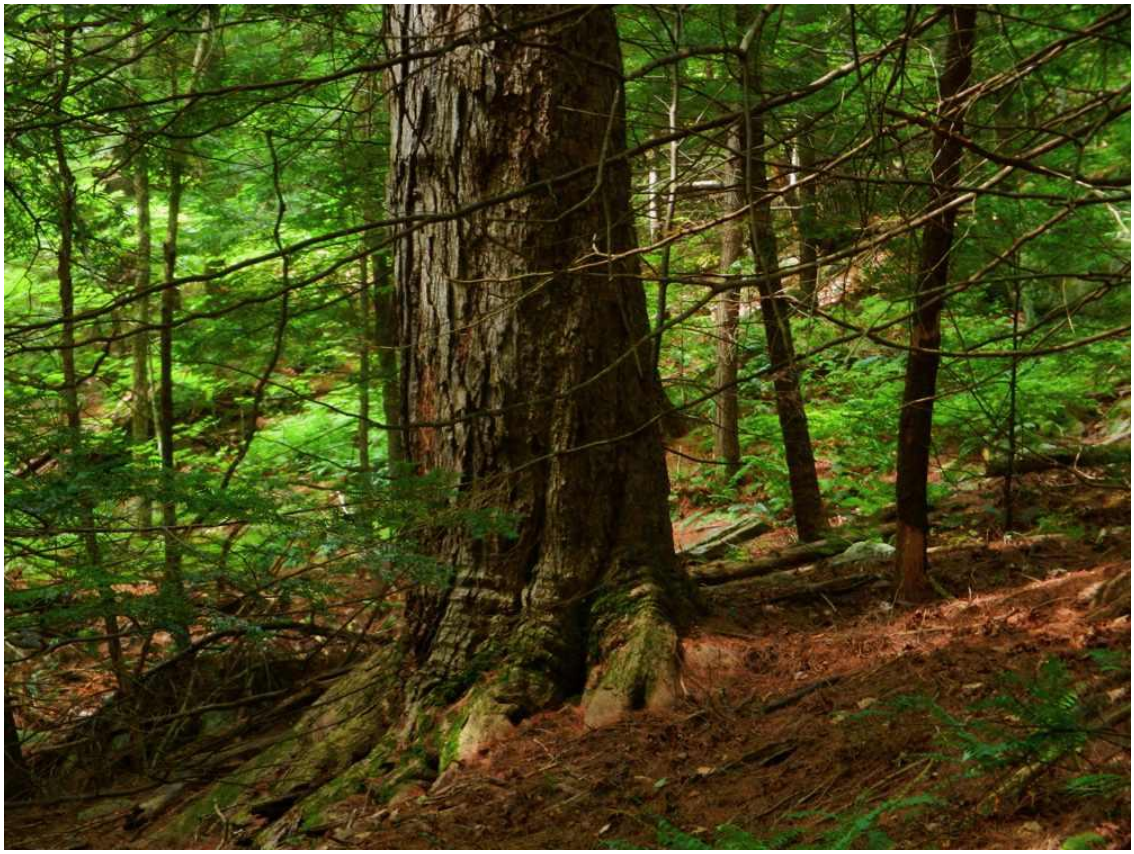
But, oh, the view from the top is lovely, and one sees the crowns of old white pines rising above the predominant hardwood canopy. Swaths along ridge crests and among the granite boulders were not cleared entirely. It is the ray of sunshine in what is often a depressing story. Here is a telephoto shot of pines thrusting their sculpted crowns skyward. The pines in the image are located on a ridge on the opposite side of the lake. As you can see by their forms, these are not young trees. I believe them to be between 150 and 200 years old.

From the summit of Rattlesnake Ridge, the Ridge and Col Trails leading back down the mountainside provide a far more aesthetic forest. Clusters of older trees come into view. The pines ride skyward on single trunks, fulfilling their roles as the flagship species of New England. Scattered sugar maples reveal the forms and bark characteristics that we associate with ages between 200 and 300 years. Their columnar forms contrast to the broad, spreading forms of boundary trees. Here is an image of the lower trunk of an old maple.



Although my first impression of the Squam Lake forests was one of disappointment, I have since reconsidered. Peninsulas jut out into Squam Lake with forests that call out to be explored. Black gums make one of their most northerly stands here, and may be the region's oldest trees. But exploration will have to await a future visit, when Monica and I can return without the fear of an approaching hurricane. In addition, I won't be expecting big trees such as the pines at Tamworth. I'll be looking for the old, the gnarly, the historic, and the aesthetic, and am confident I will find all four.

To reinforce the aesthetic, a shot (second shot below) from the deck of the lodge reveals the old red pines that surrounded us. They are gorgeous.



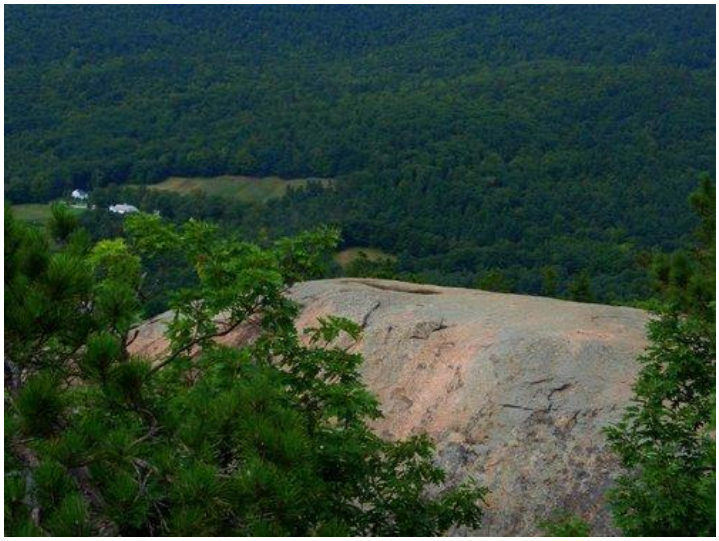
I don't want to forget that the purpose of our trip was musical. Music critic and artistic director David Perkins organized the Squam Lake event, the climax of which was a concert featuring eleven exceptional musicians. The final concert began at 2:00 PM on Saturday in the spacious lobby of Long House. The acoustics were excellent. As the musicians called upon their extensive classical repertoires, the haunting sounds of finely tuned instruments filled the surrounding space. It almost could have been an experience from a parlor of a nineteenth century European patron, albeit more rustic. But this was New England, and the inside sounds of the singers, piano, violins, viola and cello were shadowed by a captivating scene from outside. Through the large windows, the sculpted forms of nearby trees, the lake's sparkling waters, and the undulating, distant ridges formed a soothing scene that complemented the superlative music. It reminded me of an impressionistic painting, a blended rendering of New England at its cultural and natural best. I briefly entertained the thought of what Beethoven, Schubert, and Clara Schumann might have thought about the far reach of their music. Could they ever have imagined?

Monica and I will return next year. I feel confident of it. I'm sure that a 2012 gathering is taking shape in the fertile imagination of David Perkins, as I write this account. There is timeless music to be played, and there are precious remnants of virgin forest to be explored and shared. We'll be prepared. I'll close with an image of the musicians who made it all happen. A heart-felt thanks to them all.

Squam Lake, NH: Coordinates: 43°44′43″N 71°31′34″W

Clockwise, l. to r., from back row: Suzan Smith, soprano; Peter W. Shea, tenor; Colleen Jennings, violin; Sarah Briggs, violin; Wayne Smith, cello; David Perkins, baritone and Artistic Director; Elizabeth Rose, viola; Elizabeth Dubuisson, Edward Rosser, and Monica Jakuc Leverett, piano. Missing from picture is Eileen Ruby, mezzo-soprano.

One more image from the lookout.



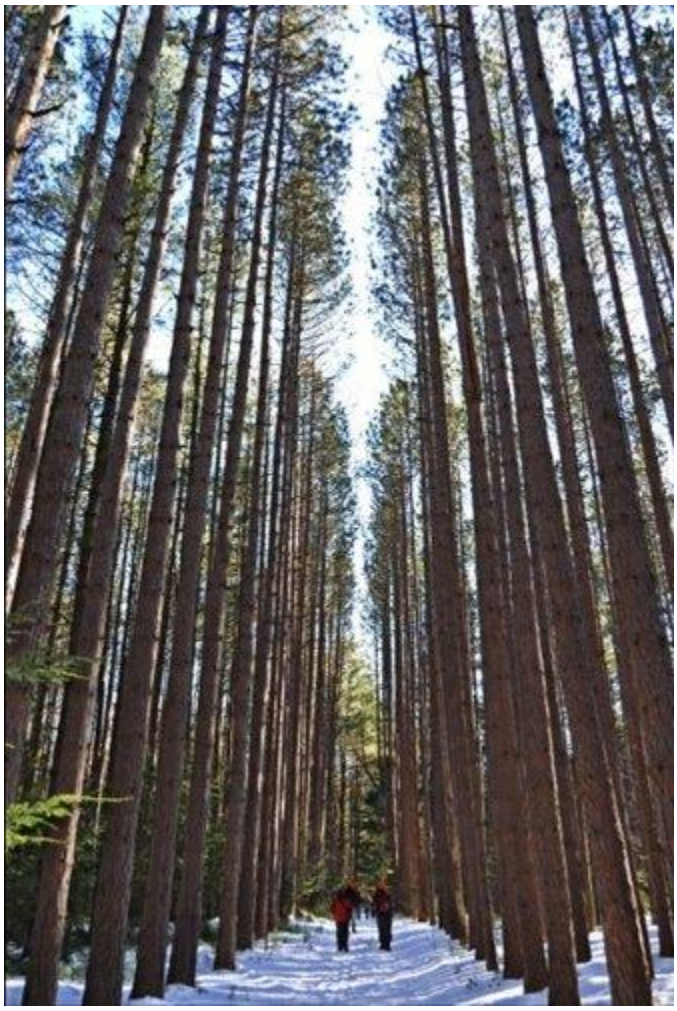
Robert T. Leverett

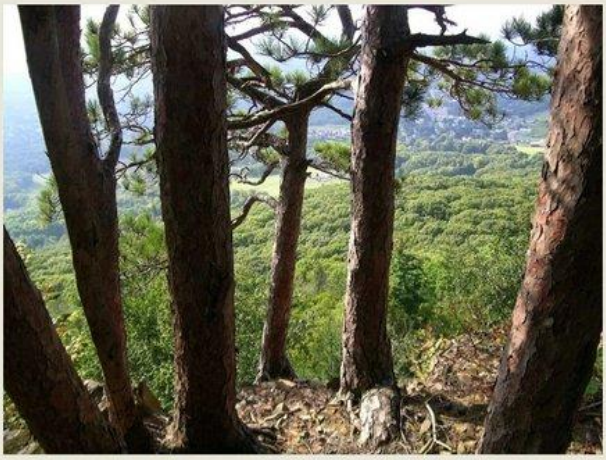
Images of Red Pine *(Pinus resinosa)*

by dbhguru » Mon Aug 29, 2011 9:34 am

Pinus resinosa or red pine is a two needled northern species. I think there is a relict colony in West Virginia. That is as far south I've every heard of it growing naturally. The species is native to Massachusetts, but sparsely distributed. You see it mainly planted around reservoirs. Farther north it appears in rocky areas and is distributed more widely. In areas of Michigan, Wisconsin, and Minnesota, it can form impressive stands. Red pine can get to be fairly large and tall, although a 9-foot girth red is a whopper. It can top 100 feet in good growing areas, but seldom surpasses 120. In Mohawk, we have one red at 121 feet and one on Mount Tom Reservation at 122. Those are our tallest in Mass. Will Blozan and I measured red pines in Hartwick Pines State Park, MI to 144 feet. Visually it is stunning. Ages can exceed 400 years.

Here are some images of reds. Lots of repeats, but the series speaks to the beauty of the species. Here are a few more red pine images. The first shows plantation pines in MTSF. The second are stunted reds on the escarpment of Mount Tom. The third looks off the porch of the Long House where we stayed. The last is near that spot at the water's edge - a stunted red looks out over the water.





Red pines: ages 150 – 210 years

Robert T. Leverett

Meeting with an unusual tree MI & Cathedral State Park, WV

by RyanLeClair » Mon Aug 29, 2011 12:45 am

About three weeks ago I took a 3,000+/- mile road trip, through 12 states -- needless to say, it was a lot of driving. Even so, my family took the time to see some amazing trees.

In Guy Sternberg's "Native Trees for North American Landscapes," Sternberg, who is very interested in tree superlatives, talks of a record northern catalpa tree: "A slingshot-shaped catalpa on the state capitol grounds is 107 feet tall and about 6.5 feet thick..." The state capitol of Michigan is Lansing. Our trip happened to be taking us right through Lansing. Remembering Sternberg's words, I asked if we stop at the capitol building to see the mother of all bean-trees.

The catalpa, I'm providing scale...


The Catalpa

As you can see from the photos, this particular catalpa is a double-tree--it almost certainly has two separate piths at ground level. Right off the bat, this one-time champ appeared dubious. In addition (this is harder to surmise from the photos), there doesn't seem to be a snowball's chance the tree is 107 feet tall. If anything, it looked to be as tall as the 65-foot hemlock in my front yard. Yet though it doesn't fit the champion standard, it still is an amazing tree.

On our way back home to Connecticut we passed through West Virginia. What a state! The mountains we saw weren't so tall, but they were very unpredictable--not long and rolling, but rather abrupt and knobby. The endless forests were green and mesmerizing. There were some downsides to our stay in WV, though. When we stopped for lunch, we ate at the worst restaurant ever. I ordered alfredo, and let me tell you, do not order Italian food in the back woods. What the waitress put on the table before me looked like Ramen noodles smothered in white Play-Doh. My dad had to finish it for me, because I have a weak stomach.

After the disastrous meal, we stopped at Cathedral State Park. The pride of this park is its hemlock stands. We found tree after tree in the 4+/- foot range. One tree along the trail was 20+ feet CBH, though it was a double tree. The estimated age of these giants was 350-550 years. What's more, the park was extremely lush--it had the appearance of temperate rainforest. Rhododendron were everywhere, and every surface was covered generously with moss. All in all, I heartily recommend this park to any Ent.

Ryan LeClair

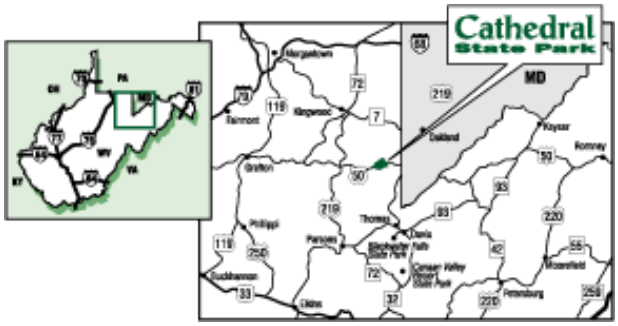
Re: Meeting with an unusual tree/ Cathedral State Park

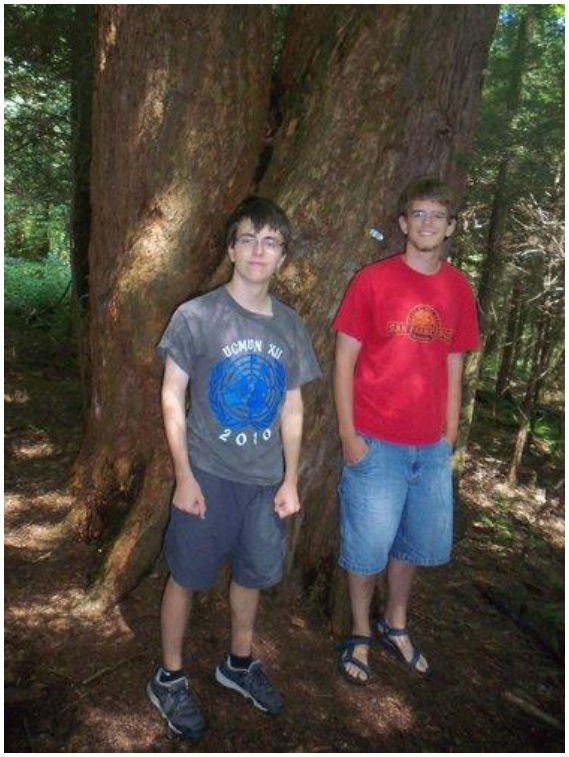
by RyanLeClair » Wed Aug 31, 2011 11:04 pm

Here are some pics from Cathedral State Park. The two largest trees in the park in terms of CBH were double trees. They both split at roughly breast height.

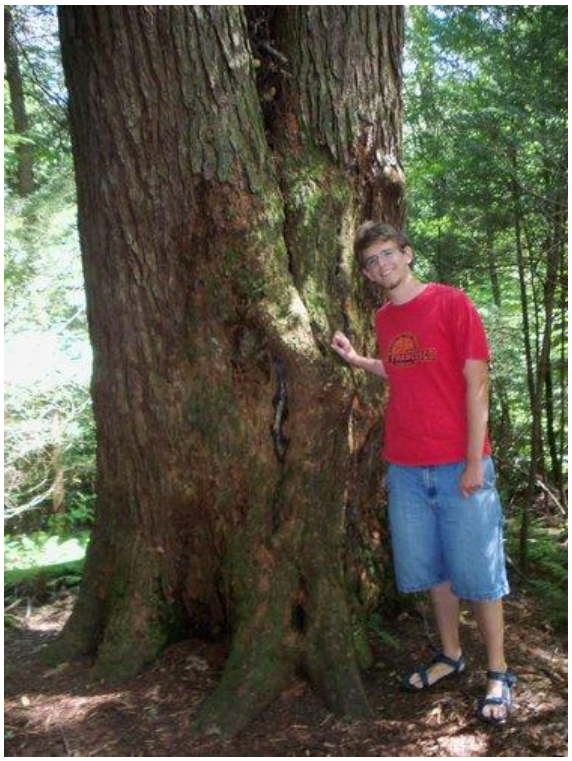
Note the photo with the woman in front of the hemlock (that's my mom, by the way). The tree in this photo was what a lot of the other trees looked like. I wish I could have measured some of the trees, but time did not permit.


View of hemlocks





Brother and me with largest girthed hemlock

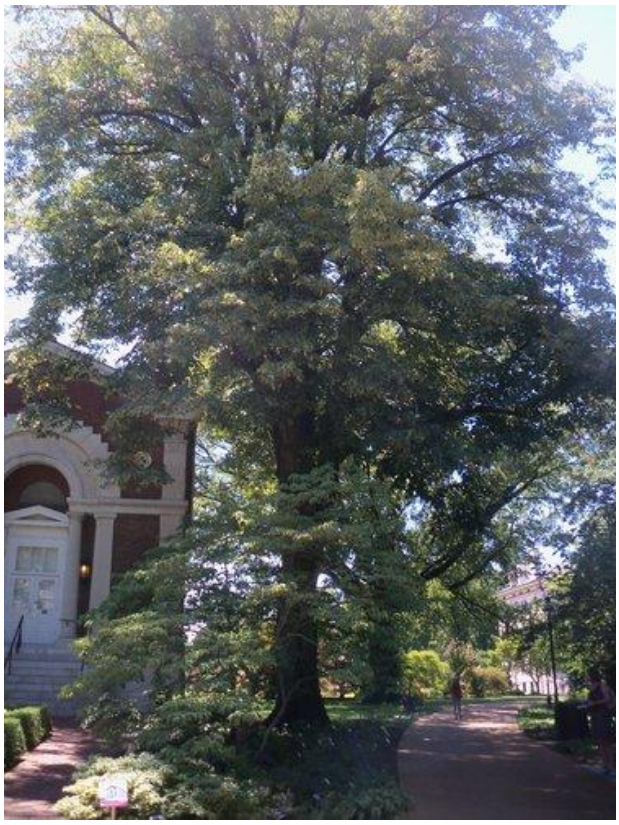


Me with hemlock

My mom with a hemlock

I'd also like to show you a very interesting white basswood (*Tilia heterophylla*}. Located at the Shaw Botanical Garden in St. Louis. http://www.mobot.org/default.asp

This tree is reputed to be the national champ.



Whole T. heterophylla

The bole of the T. heterophylla

http://www.mobot.org/visit/maps/VS%20Guide%202011_web.pdf

Ryan LeClair

Large Eastern Cottonwood, Brookline, MA

by AndrewJoslin » Mon Aug 29, 2011 3:50 pm

While visiting the Von Huene Workshop, (early music instruments and sheet music) in Brookline, Massachusetts I happened to look out a back window and observe a massive tree trunk. I went behind the building and found a very impressive Eastern Cottonwood, a single trunk up to 35 or so feet then two leaders with apparent good height. During a severe lightning storm a week and a half ago it was struck and suffered significant damage to limbs on one of the leaders, the taller leader is unharmed. I returned this morning to measure, very challenging to sight the top due to close proximity to buildings combined with foliage. I might be able to add a few feet to the height once the leaves are down.

Height: 111.4'
CBH: 15.4'

It might be worth doing the crown spread on Google Earth, much of the crown is over buildings and impossible to measure from the ground, here's the satellite view

Andrew Joslin
Jamaica Plain, MA

Hurricane Irene Status

by edfrank » Sun Aug 28, 2011 12:06 am

Many of our members along the east coast of the US are being impacted by Hurricane Irene. Many areas are flooded, there has been wind damage, and large areas are without power. For those of you affected, I hope you are all well. When you get back online, please post a reply to this message and let everyone know how you are doing and of your personal experiences with the storm. Let us know you are safe as we are pretty much a family here.

Edward Frank

Re: Hurricane Irene Status

by AndrewJoslin » Sun Aug 28, 2011 5:17 pm

We had some nice gusts and plenty of rain in Boston, here's some video out the window during some of the greatest wind gusts. Note the 92' Honey Locust in the foreground holding up well, such a strong tree. A broad-crowned white ash in the background was really moving, it handled the wind very well. Norway maples, probably the dominant species in my semi-urban neighborhood suffered the most. You can hear three different episodes of large limbs failing during the video, all Norway maples.

Sunday morning winds http://vimeo.com/28267427

Andrew Joslin

Monica and I did check on Bryant Woods. They came through in flying colors. In fact I confirmed another 150 today. That makes 12 for Bryant. I'll ride the emotional high until tomorrow when I see Mohawk. I'll report on the devastation tomorrow evening.

Robert T. Leverett

Deerfield River, MA - Hurricane Aftermath

by dbhguru » Mon Aug 29, 2011 8:04 pm

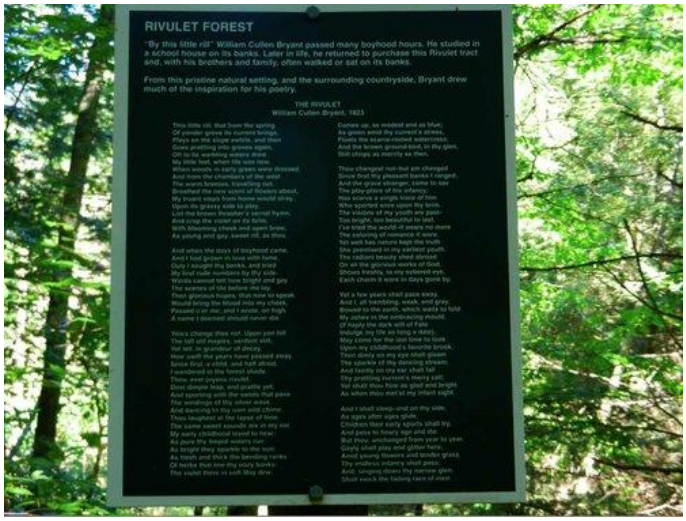
Sarah Bellows from MTSF forwarded me these images of the Deerfield River, post Irene. They are taken from Route #2. Mohawk Trail State Forest got hit hard. I don't know what the damage is, but I'm told that the picnic area doesn't exist any more. And several campsites no longer exist. I don't know how much damage is wind versus water. Tomorrow, I'll walk into the area. Route #2 is closed in the vicinity of Mohawk. I'll have walk in from about two miles down the road. Here are the images.

Re: Deerfield River-Hurricane Aftermath – Images from Bryant Woods, MA

by dbhguru » Tue Aug 30, 2011 8:29 am

A couple more images sent to me by Tim Zelazo from MTSF offers hope. The rains were torrential and the flooding epic. Charlemont was evacuated on Sunday. However, one image from the Mohawk Campground showed one of the large campground pines still standing in the middle of what had been a torrent. If the winds weren't too bad, then the big stuff may just have survived. I'll have some images tonight. It is going to be a long walk in. Sore feet.

On the positive side, here are images from Bryant from yesterday. All is well there.



Robert T. Leverett

Re: Deerfield River-Hurricane Aftermath – MTSF, MA

by dbhguru » Tue Aug 30, 2011 6:25 pm

I am very happy to report that the big trees of Mohawk gave Irene the cold shoulder. On our way to the Trees of Peace, we inspected the big trees of the Elders Grove. Osceola, just uphill from Tecumseh, joins the 160 club. That makes an even dozen 160s in Mohawk.

In the Trees of Peace, Jake shrugged off the wind and rain with no apparent damage. Here is a telephoto shot of Jake's crown. The two distinctive leaders are the high points. The one on the right is the 169.6-foot spike. You can see that Jake grew well.

After determining that Jake made it , I remeasured the companion Joe Norton Pine. It is now 165.4 feet by my latest measurement. So the line up looks like this as a consequence of this year's re-measurements.

Jake	169.6
Saheda	167.1
Tecumseh	166.0
Joe	165.4

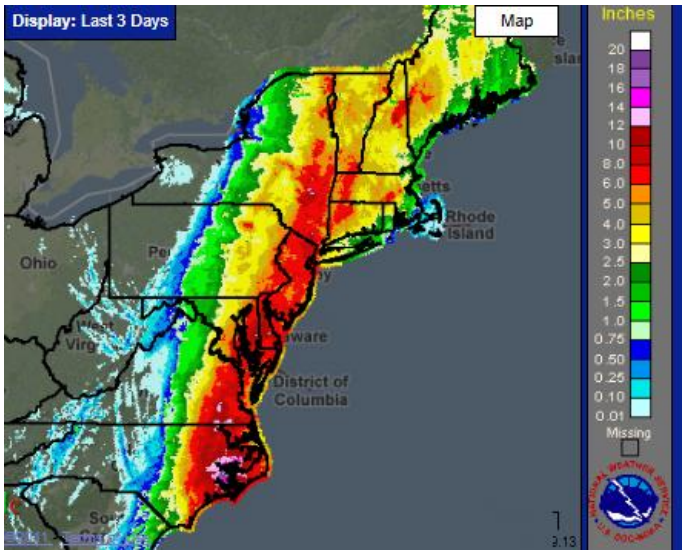
The damage in Mohawk is restricted to the corridor along the Cold River. The severity of which remains to be determined.
However, I can sleep tonight.

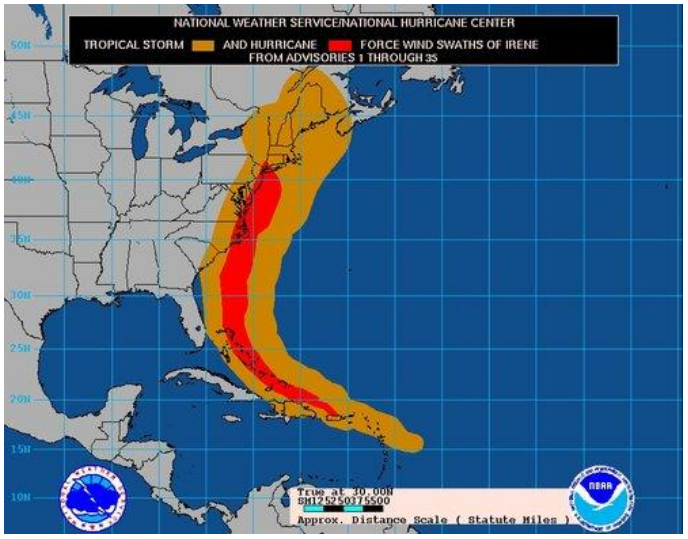
Robert T. Leverett

Re: Deerfield River-Hurricane Aftermath

by Rand » Tue Aug 30, 2011 7:39 pm

Here's a map of the rainfall totals from Irene:





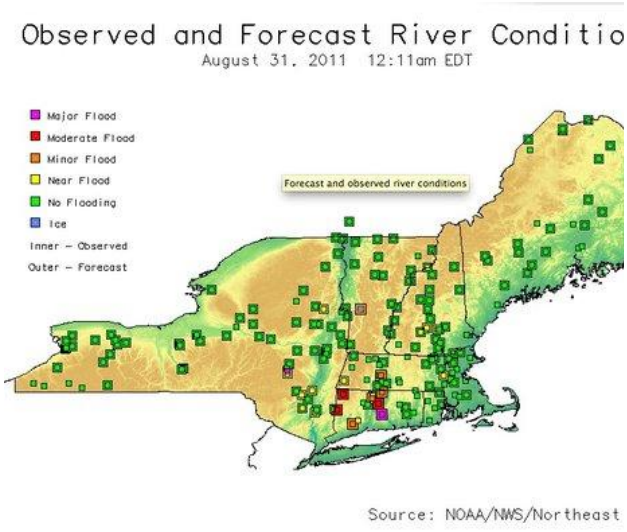
http://www.nhc.noaa.gov/archive/2011/graphics/al09/loop_S.shtml

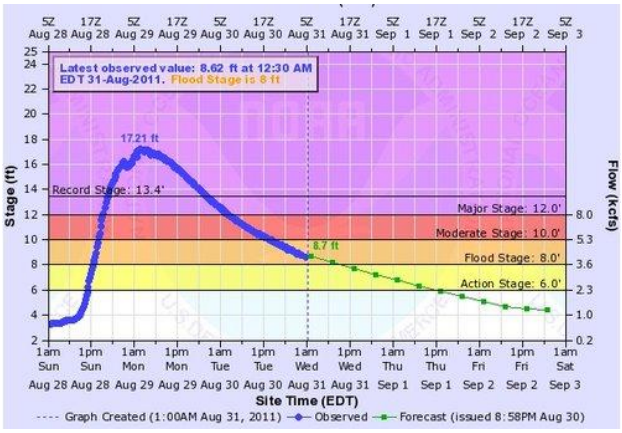
Looks like the storm was winding down by the time it got to New England, but they'd received heavy rain the week before so it all turned into runoff.

http://www.accuweather.com/blogs/weathermatrix/story/54403/extreme-flooding-in-new-england-from-hurricane-irene.asp

NOAA has a section on their site show stream guages for New England:

The flood seems to have passed on most rivers but you can still see the past flood crests by clicking on the green squares. Here's an example:



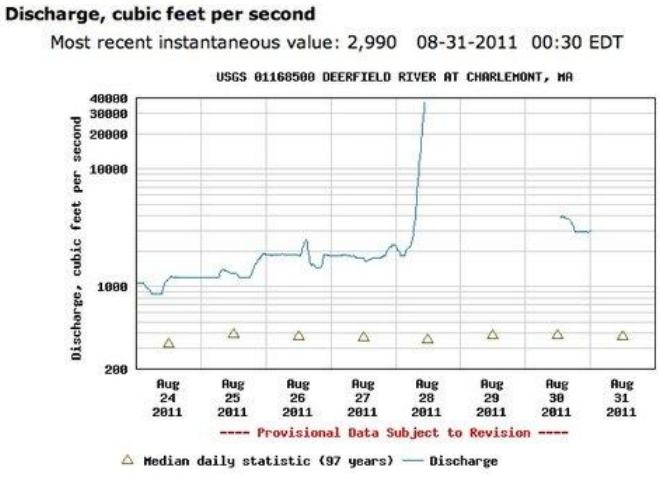


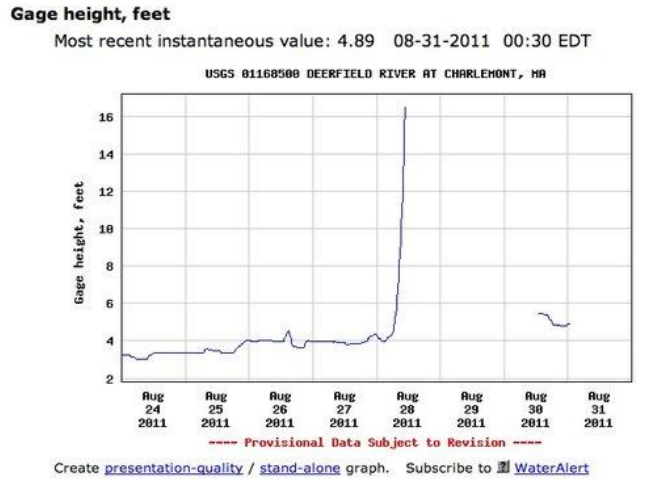
http://www.erh.noaa.gov/nerfc/

USGS also has one:

http://waterwatch.usgs.gov/new/index.php?id=ww_current

Looks like the discharge and river gauge for the deerfield river were blown off the scale:





http://waterwatch.usgs.gov/new/index.php?m=real&r=ma&w=map

Re: Deerfield River-Hurricane Aftermath – picnic and camping area MTSF, MA

by dbhguru » Wed Aug 31, 2011 8:52 am

The picnic and camping area of MTSF adjacent to the Cold River were devastated. In addition, the bridge crossing the Cold going into Mohawk has been severely undermined. As a park, Mohawk is closed for the remainder of the year. The HQ buildings, nature center, and cabins made it just fine. Here are some images from along Route #2 taken by Tim Zelazo. The first shows the undermining of the bridge over the Cold River going into the park. The second shows what was campsite 16. The others were taken from along Route #2. Note that the mature forest on the ridge sides is intact.

Robert T. Leverett

Re: Deerfield River-Hurricane Aftermath – Monroe State Forest, MA

by dbhguru » Wed Aug 31, 2011 7:26 pm

Today Monica and I went to Monroe State Forest. At the trailhead, we could see that Dunbar Brook had done its worst. The major bridge over the brook was gone completely. here's a view of the dam.

A few yards up the trail and looking across the brook, we could see where the bank had washed out. Here is a look.

Still farther up the trail, we came to the main bridge across Dunbar - well what used to be the bridge across Dunbar. We spotted the two big support logs downstream 300 feet. The bridge is no more.

The good news is that the trail is in good shape except for the bridge and Dunbar's forest didn't even blink. Here is a shot of the huge Dunbar ash. It just treated Irene as a nice bath.

I got the report that some of the Berkshire Hill towns received 13 inches of rain. Now I understand why the Cold River did so much damage.

Robert T. Leverett

External Links:

Winter Water Stress in the Pacific Northwest
http://www.terradaily.com/reports/Pacific_Northwest_trees_struggle_for_water_while_standing_in_it_999.html

World Sacred Forests Mapped Out
http://www.enn.com/top_stories/article/43012

Julian Treasure: 5 ways to listen better
http://www.ted.com/talks/julian_treasure_5_ways_to_listen_better.html

Cougar Travels 1,500 Miles to Connecticut
http://magblog.audubon.org/cougar-travels-1500-miles-connecticut

Climate Meddling Dates Back 8,000 Years
http://www.sciencenews.org/view/generic/id/71932/title/Climate_meddling_dates_back_8%2C000_years

Fire threatens Dismal Swamp Atlantic white cedar ecosystem
http://www.reuters.com/article/2011/08/15/us-swamp-fire-virginia-idUSTRE77E4Z920110815

Yellowstone National Park's ancient trees tell of climate centuries ago
http://www.bozemandailychronicle.com/news/environment/article_82b91fb4-bbe8-11e0-ba69-001cc4c002e0.html

CAROLINA GOLD Reclaiming Submerged 19th Century Timbers
http://www.highlandwoodworking.com/blog4/carolinagoldB.html

Mongolia: Sawdust and Mosquito Wings (blog)
http://mongolianecologyculture.wordpress.com/2011/08/18/sawdust-and-mosquito-wings/

Native American Trail Marker Trees: Marking Paths Through The Wilderness
http://chicagosbooks.com/native_american_trail_marker_trees.aspx

Champion trees of Britain and Ireland
http://www.telegraph.co.uk/gardening/plants/trees/8675208/Champion-trees-of-Britain-and-Ireland.html

Japanese God Tree Work (video)
http://www.youtube.com/watch?v=wTPDSBkxBvc&feature=player_embedded

Lost in time - botanist Douglas Larson's discovery of the oldest intact forest ecosystem in eastern North America
http://findarticles.com/p/articles/mi_m1170/is_n4_v24/ai_16094014/?tag=mantle_skin;content

The Creative Perambulations of Sherwood Forest
http://creativesherwoodforestperambulations.blogspot.com/

World of Ancient Trees, Part 1 by nationaltrustcharity (UK)
http://www.youtube.com/watch?v=1-tNfDZuhlg&feature=relmfu

World of Ancient Trees, Part 2
http://www.youtube.com/watch?v=UEUjk-g7mbo&feature=relmfu

About: *e*NTS: 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