

[Michigan Max Tree List](#)

by **DougBidlack** » Wed Feb 06, 2013 11:40 pm

NTS, I was inspired to put this list together by the recent Mississippi tall tree list provided by Larry.

The lines in red are measurements that were made by NTS or I at least got the info from our BBS. Several of the measurements by me haven't been posted before. The lines in black are mainly from "The Big Trees and Shrubs of Michigan" as well as a few other sources. These measurements are often extremely unreliable which is why I have them separate.

However, they do offer a good source of potential trees to remeasure. All heights and crown spreads are in feet and girths are in inches. I don't yet have a column for height measurement technique but I will in the future. I also have not included lats and longs.

I think this is something we may want to discuss for public lists like this even though some of the directions are detailed enough that lats and longs are not really needed.

I have no doubt that there are still plenty of errors and just better ways to present the info. If anybody notices anything please let me know. In particular, I think I will try to organize the plants alphabetically by scientific name because it will make them easier to find. I listed them based on relationship from ancestral to more derived genera for my own benefit.

Within each genus the species are in alphabetical order. I hope to update this list at the end of each measuring season in May or June at the very least. It will be nice to see the red lines getting longer and the black ones shorter!

I hope this attachment works well. I converted it to an excel file and I was able to open it with no problems on a PC.

[Re: Michigan Max Tree List](#)

by **dbhguru** » Thu Feb 07, 2013 2:26 pm

Doug, I realize this is a work in progress, and a mighty impressive amount of work, at that. We're grateful. But even with your qualifications, might I suggest another column to identify suspect measurements as such. Inflated numbers should be flagged in any of our lists in a way that a 3rd party who happens to see the list can see that we place no credibility in those measurements.

To Brian's point, we can be virtually certain that the tuliptree height measurement is off by tens of feet. I wouldn't be surprised if it weren't off by over 50 feet. And look at the crown spread. A 133-foot average crown spread for a tulip tree that doesn't quite make 15 feet in girth would be remarkable in and of itself. We're all very happy that you've gotten involved with the Michigan big tree lists that have made a laughing stock out of the state-level champion tree programs. Michigan has plenty of fine trees that can stand on their own. The cache of absurdly inflated heights needs to be purged once and for all. Monica and I will be traveling through Michigan in June. Perhaps we can check out a tree or two on our way. Regardless, thanks for your hard work.

Robert T. Leverett

[Re: Michigan Max Tree List](#)

by **edfrank** » Thu Feb 07, 2013 3:59 pm

Bob and Brian, Doug has already specified that the results in black are from an unreliable source:

The lines in black are mainly from "The Big Trees and Shrubs of Michigan" as well as a few other sources. These measurements are often extremely unreliable which is why I have them separate.

All I think is needed is a key that explains this fact as part of the spreadsheet itself. Those cells could potentially be color coded to make the distinction

clearer. I have attached a more color coded version with a prominent key of the spreadsheet provided by Doug.

The other thing needed in Doug's spreadsheet is that the tree name and species name needs to be included in every row, or when the data is sorted rows without that information will be lost and no longer associated with the species name.

I have made these adjustments on Doug's original spreadsheet and have attached it below.

Edward Frank

Re: Michigan Max Tree List

by **DougBidlack** » Fri Feb 08, 2013 5:19 pm

Ed, here is the next iteration of this list.

 [eNTS Michigan Tree Maximums 8Feb2013\(2\).xls](#)

It is now in alphabetical order which should make it much easier to use. These are all species that are supposed to be native to Michigan. However recent evidence suggests that the few specimens of chestnut oak (*Quercus montana*) that have been found in Waterloo State Recreation Area have simply spread from plantings. Also the name *Quercus prinus* for this species has been recommended for rejection so I changed it in the list. Scarlet oak (*Quercus coccinea*) is also questionable from Michigan in light of some work done by Hipp and Weber. All the specimens that they examined appear to be Hill's oak (*Quercus ellipsoidalis*) but Andrew Hipp still feels that true scarlet oak may yet be found in Michigan. I have left both on the list for now although it is quite likely that all the scarlet oaks are actually Hill's oaks.

I also added highbush blueberry to the list because I'm quite certain that the species reaches 15' in height in Michigan. So this brings up my definition for tree which is quite liberal. Basically I'm going to measure any woody plant that can reach 15' in height in Michigan and I'll call it a tree. That just makes life easier for me as I really don't want to have to deal

with trying to determine whether or not the plant is too shrubby-looking to be called a tree. I am certain that there are more species that are native to Michigan and grow to 15' in height than are on this list. It will change.

Doug

PS, I'm also planning a non-native list but that is well into the future as I'm trying to prioritize here.

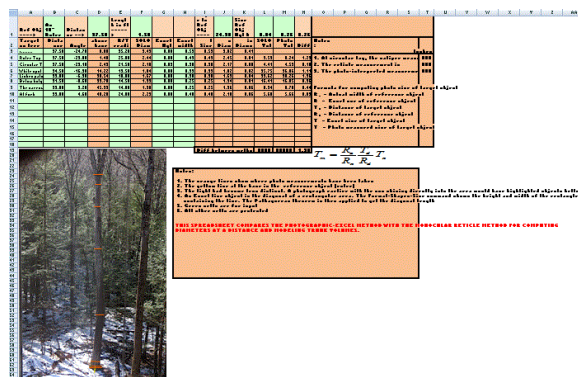
Photo Measuring for Trunk Modeling

by **dbhguru** » Thu Feb 07, 2013 4:48 pm

NTS, Please find attached an Excel workbook that provides my first modeling of the first 48 feet of the trunk of a Northern Red Oak in the back of the house. I affectionately call the oak Oakie. The spreadsheet results are encouraging. They speak for themselves.

 [PhotoVolMeasurementOakie.xlsx](#)

Robert T. Leverett



[Re: Photo Measuring for Trunk Modeling](#)

by **DougBidlack** » Fri Feb 08, 2013 12:01 am

Bob, very impressive! I would not have thought that the difference would amount to less than 2%. Just out of curiosity what would you say the time difference might be between the two methods in this particular example.

I've been thinking of trying to model some trees that I've planted because I'm very interested in growth. If the field work is fairly fast with this technique it will likely be a real winner for the project that I'm thinking about.

Doug

[Re: Photo Measuring for Trunk Modeling](#)

by **Larry Tucei** » Fri Feb 08, 2013 12:02 pm

Bob, I would like to try your photo process on the Ms Champion Live Oak combined with your sine volume formulas that you made some years back. I think we could get a very close estimate to the volume of this big tree. I estimate it would be somewhere between 4000-5000 cubic feet. In comparing it with the Middleton Oak I think it is very similar in size. Larry

[Re: Photo Measuring for Trunk Modeling](#)

by **dbhguru** » Fri Feb 08, 2013 1:07 pm

Doug and Larry,

Doug, the amount of outdoor effort is minimal. You identify the tree to be modeled, locate a spot from which to photograph it, identify the points along the trunk/limbs to be measured, place a reference object in the photo, shoot the distances and angles to the

reference object and each spot on the tree that is to be measured, and take the photograph. Everything else occurs indoors on your computer. With a template spreadsheet set up, all you have to do is import the image, mask all the distances to be measured with line shape objects, and post all the data into the template. I can describe the process in greater detail, maybe asking for Ed's assistance. His detailed instructions are almost always better than mine. So, the process using photography is much quicker than with the monocular, and the more measurements taken for a tree (or group of trees) within one photograph, the greater the efficiency of the photographic method.

The method can be made even more efficient with the use of Visual Basic for Applications, the macro language of Excel. It would be tricky, but an Excel macro could be developed to automatically read the dimensions of the masking lines and post them into cells within a template. A strict protocol would have to be followed such as proceeding from left to right and bottom to top in terms of placing the masking lines. The reference object would be covered first regardless of where it appeared in the photo, then the sweep from left to right. The more automatic this approach, the sophisticated the macro would need to be, especially if multiple trees were being modeled through a single photograph. At the beginning, we would need to keep it to a single tree so that the first mask would be the reference object, and all subsequent masks would be on the trunk going from bottom to top. Each limb would be a separate image.

Larry, You have me at your service. We should begin by modeling a simple form, perhaps a tree in your yard or neighborhood to work out the kinks. Once we have covered all the situations, we could go live. I'd dearly love to thoroughly model a big live oak this way. It would require many photographs. As an absolute minimum, one for the trunk and one for each major limb, but I expect that each limb would have to be broken into 2 or probably 3 photographs. We have to clearly see the targets.

NTS, BTW, there are other methods of getting measurements of objects in a photo other than Excel. I'm presently experimenting with ImageJ, image

processing software. Matt put us onto that software. But ImageJ is not for the faint of heart. It is extremely sophisticated, but the measurements you can take off an image are a little better than those from Excel.

Robert T. Leverett

Re: Photo Measuring for Trunk Modeling

by **edfrank** » Fri Feb 08, 2013 4:00 pm

1) Basically, if I understand this right, the idea behind the photo measurement is that the rate of change in perspective (trunk width) should change smoothly in a linear fashion as the target gets farther away. Your formula essentially is calculating the equivalent of the optical scaling factor based upon distance from the lens and apparent width of the reference object, much like is provided with a reticuled monocular.

2) The process for modeling the volume of a tree using photo measurement proceeds in the same way as with the monocular. The distance to each measurement and height above eye/photo level can be measured using the rangefinder and is input into your spreadsheet

3) I am not sure why you would need to maintain the line direction consistently, but if you say so. It really isn't a problem to do it this way.

4) Does the line across the tree need to be exactly horizontal or vertical, or can it be drawn at an angle?

5) So long as the focal length on a zoom lens does not change from image to image on a single tree the same scaling factor should work for multiple images in a set. So you could first take an overview photo to see how the tree is formed. You would need to make a sketch of the tree structure and measuring points to keep track of the position of the measurements. You

could zoom in as close as possible so the base of the trunk and the reference scale filled most of the width of the image. Without changing the focal length you could then shoot all of the targeted points. (Ideally you would have multiple images that could be stitched together to form a pan of the entire tree, but if parts were missing it would not really matter for measurement purposes) This would assure that the image being measured for any measurement was as large as possible. This would help alleviate the problem of tiny widths in an image of the entire tree in one photo.

6) How do you determine the length of a branch or trunk segment that isn't vertical in the volume measurement protocol? The angle of the trunk or branch might not be perpendicular to the viewer? (Short of doing an azimuth and plotting the positions of the end points of the segment in 3D.)

7) I would think it would be better to try to model just one tree per photograph, or at least simply treat each different tree as a separate entity on a separate spreadsheet page, rather than trying to do it all on one single spreadsheet page. It would be a nightmare to keep your data in order if multiple trees were on a single sheet, and if it makes the macro harder to write, why bother? It seems a bad idea all around.

8) Are the measurements to the tree to the front side of the tree with the spreadsheet correcting for the roundness of the trunk or to the edge of the tree?

9) If Excel will do the calculations, that is a big advantage over the photo software unless it will do the calculations also. It will be easier for people to use Excel and it will get used more even if the photo software gives comparable results.

Edward Frank

Densitometer

by edfrank » Fri Feb 08, 2013 5:44 pm

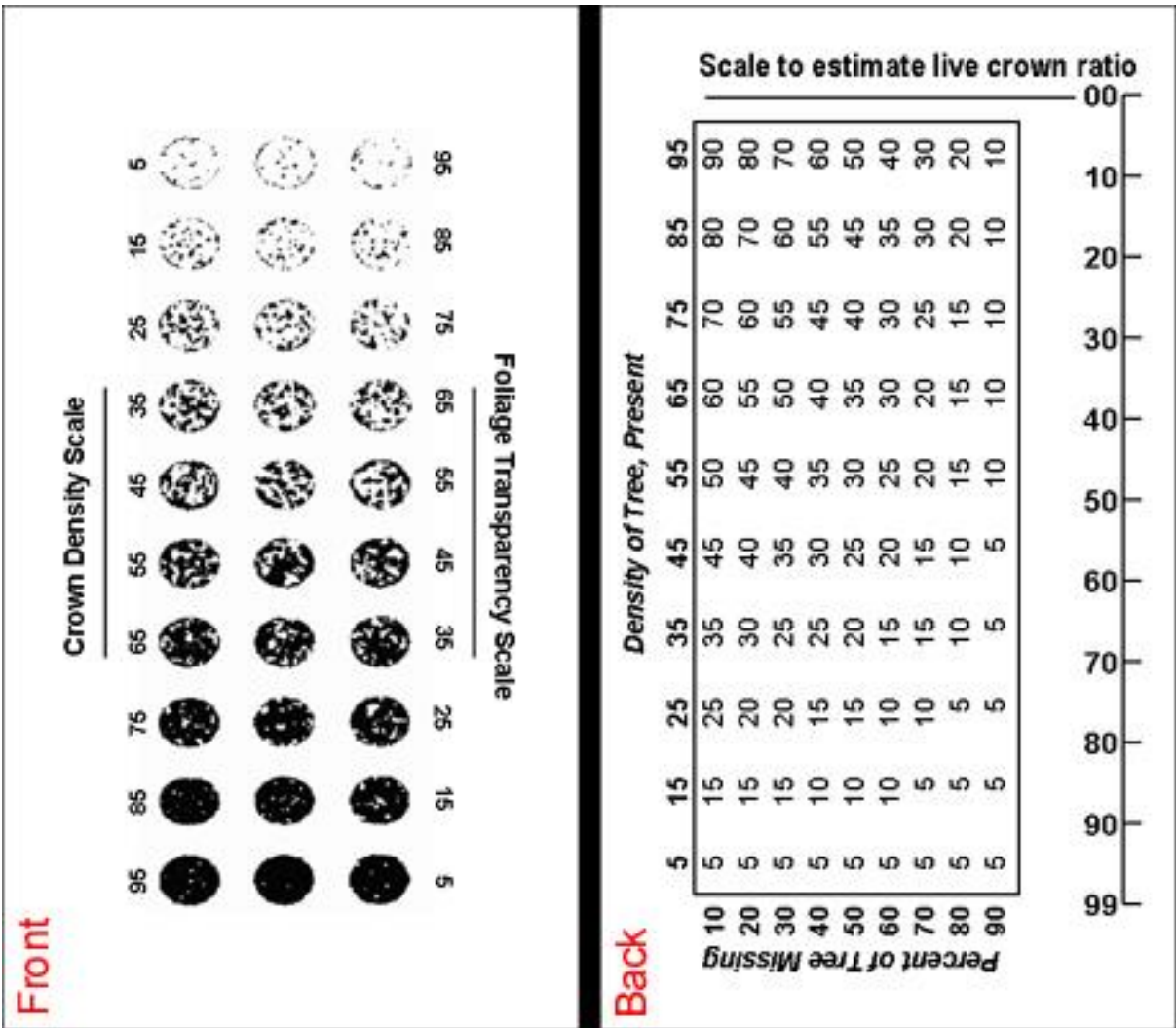
Here is an advertisement for a densitometer forwarded to e by Don Bertollette. It is an advertisement, but does give some worthwhile background on desitometers:

<http://www.grsgis.com/densitometer.html>

Re: Densitometer

by edfrank » Fri Feb 08, 2013 5:55 pm

There are other more basic foliage density tools also:
http://www.fia.fs.fed.us/library/field-guides-methods-proc/docs/2011/field_guide_p3_5-0_sec23_10_2010.pdf



[Torrey Pine on Google Maps](#)

by **RyanLeClair** » Fri Feb 08, 2013 3:33 pm

Hi all, It's rare, but every once in a while you can find a champion tree on the Google Maps "street view." I recently was lucky enough to find a tree in just this manner. It's the Nat'l Champion Torrey Pine; type "Carpinteria Library, Carpinteria, CA," into google maps and you will see the tree. It certainly is nothing like seeing the tree in person, but it also beats a still photograph.

[Re: Torrey Pine on Google Maps](#)

by **eliahd24** » Sat Feb 09, 2013 8:53 pm

I often scout big trees people have told me about by using Google Earth or Google Maps first. Works well if it's a front yard tree... not so much if it's behind the house/structure. Another GREAT use of Google Earth in particular relating to champion trees is measuring crown spread. They have a "ruler" tool that you can use in feet, meters, even miles. When using that (measuring in feet) and then ground truthing it, I find it to be 95-100% accurate.

Assuming it's an open grown tree with a clear view of the crown.

[Re: The tallest tree of Europe?](#)

by **bbeduhn** » Fri Feb 08, 2013 2:30 pm

Jeroen,

That is one thorough list! It's very interesting to see how tall exotics can get in other countries. The heights attained in some arboretums are quite impressive. The eucalypts in Spain and Portugal are so much taller than native trees. Giant sequoias top coast redwoods. I've always thought of Scotland as

being relatively barren of trees and it has two species over 60m, beaten only by eucalypts.

Do you have any trusted measurements on Metasequoias?
Brian

[Re: The tallest tree of Europe?](#)

by **Jeroen Philippona** » Fri Feb 08, 2013 8:53 pm

Brian,

Yes, I forgot to put Metasequoia at the list, I will do that soon. We have lasermeasured specimen of 33.2 m in Spain and 32.8 m in the Netherlands. In Germany there are a few trees reported up to 37 m, but I am not sure if they were measured accurate.

It's not strange that giant sequoias top coast redwoods: they are better adapted to areas with cold winters. The one coast redwood of 54 m in England is strange tall, the second is only 49 m. In Germany, with colder winters, the tallest coast redwood is only 38 m, tallest giant sequoia in that country is 53.6 m. Also coast redwoods for optimal growth need the oceanic mist of the Californian coast zone.

Scotland has barren areas, but also many sheltered valleys with beautiful estates with the tallest conifers of Western Europe. This because of the mild, oceanic winters and the high rainfall, comparable to the Pacific North West.

I now updated the excel file and included two laser records for Metasequoia as well as a new Hazel (*Corylus avellana*) record. See post nr. 20.

Jeroen Philippona

Re: The tallest tree of Europe?

by **KoutaR** » Sat Feb 09, 2013 9:36 am

Jeroen Philippona wrote: Also coast redwoods for optimal growth need the oceanic mist of the Californian coast zone.

I am not sure about this. I think coast redwood needs summer fog ONLY if the local climate has low summer precipitation like in California. For example, the growth rates of the famous redwood forest in Rotorua, NZ, are comparable with the best Californian redwood forests, and I don't think it is an actual fog climate as there is no cold ocean current and the forest is also over 40 km inland. But there is plentiful precipitation over the year, 125 mm in the driest month, compared to 4 mm in the driest months in Eureka, California.

Kouta

Re: The tallest tree of Europe?

by **Jeroen Philippona** » Sun Feb 10, 2013 7:28 am

The idea about fog being necessary for optimal height growth was described by Alan Mitchell in his book 'Alan Mitchell's trees of Britain' (1995, p. 140). Also he writes there is normally no frost in the natural area and summer temperatures are much higher than in the UK. The reason for the better growth in Rotorua, NZ compared to the UK will probably be the higher summer temperatures and the absence of frost.

He writes in the UK redwoods grow best in sheltered, damp sites with high water table, especially in the humidity and shelter of tall surrounding trees in deep, wooded combs or at the base of a wet hillside.

When exposed to cold or warm, dry winds like in the east of England the tops flatten. In Scotland the summers seem to be too cool for optimal growth.

Jeroen

Re: The tallest tree of Europe?

by **KoutaR** » Sun Feb 10, 2013 4:12 pm

Jeroen, I agree that colder climate is a reason for the inferior growth rate of redwood in the UK. But as I said, I doubt the fog explanation. What would be the mechanism making fog so important? Fog is actually only a type of precipitation. Fog condenses on the leaves and drips down as liquid water. In addition, redwood can absorb a limited amount of water directly through leaves. The fog drip is very important in Californian summer as there is almost no rain, but why would fog be needed if there is plentiful summer rainfall like in western Scotland for example.

The claim, that fog is crucially important for redwood in all the climates, can be read from some sources, and it is possible that fog has an influence by reducing the atmospheric water stress, but I think the Rotorua example disproves it. Instead, I feel that it is rather a "romantic" idea: the tallest tree of the world needs the unique fog of its homeland and does not do well without.

But I am not a redwood specialist.

Kouta

Re: The tallest tree of Europe?

by **fooman** » Sun Feb 10, 2013 6:32 pm

All, Just some more info with regards to the forest at Whakarewarewa (including the memorial redwood grove):

- Rotorua does get frosts, down to -7 °C. Records show 53.5 days of ground frost on average. Rotorua is one of the few inland cities in NZ, and is actually at a little bit of an altitude (~300 m asl). This does give it hotter summers and colder winters than cities of comparable latitude near the coast, or at lower elevations.

- It is approximately 44 km to the nearest coast (NE of Rotorua), approximately 130 km from the west coast (the prevailing wind direction in NZ). The prevailing wind direction in Rotorua appears to be W to SW
- The forest is approximately 3 km south of Lake Rotorua (80 km²)
- The forest is located on a north (sun) facing slope of approximately 200 m local relief. The grove is located at the foot of this hill.
- There is considerable volcanic activity in the area (Lake Rotorua is a flooded caldera, approximately 250 000 years old), with a few feet of ash-rich soils from large eruptions (most recently Mt Tawawera in 1886)
- And most notably, the grove is 1.3 km east of the Whakarewarewa geothermal area, which contains NZ's most productive remaining geyser field. Drift from the geothermal sourced clouds is quite common, and has been noted as a potential source of "foggy" conditions for the trees.

I've been wandering through the grove on a number of occasions, most recently during a very short visit during my families summer holidays - early one morning I managed to limp around the grove track with an injured foot, Nikon 550 in hand, to see what I could find - I was after a 67.1 m tree reported by Steve Sillett. Getting heights of trees was problematic in most of the grove: secondary growth of ~30 to 40 m obscured the tops of the trees planted in 1901. There is a small swamp/spring which looked and smelt a bit geothermal. Tops of trees were visible and the surrounding trees were level with the boardwalk bridging the swamp. On one edge of this opening, there were a number of trees exceeding 60 m, including one of 68.7 m (225 ft), 202 cm dbh. I have since learned from the administrator of the NZ Notable Trees Trust that Bob van Pelt measured 4 or so trees around 68 m during a visit in 200(9?). He also measured Douglas fir at around 55 m (a large stand to the NE of the redwood grove), and a number of specimen trees planted at the nearby forestry research institute (Scion), including a Torrey pine at 43 m tall.

Now, it could be said that the local conditions at Rotorua are great for redwoods, and conifers in general. Having said that, during the same trip I

managed to run the 550 over a small planting (~1 ha) of redwoods at a town called Te Kuiti, 100 km west of Rotorua. I had always wondered about the height of these Te Kuiti trees. I found that the ones at the edge of the grove were 50 to 55 m tall. I managed to measure one at ~ 62 m a few metres in from the edge. I have no history for the Te Kuiti grove, and could make no comment, other than a quick look inside, from the roadside showed that the stand was actively managed (trees were numbered and cbh levels were marked) and were not as large as the Rotorua trees, so may have been planted some time after the Rotorua trees (I suspect ~ 1920's as a lot of introduced conifer species were planted around that time in the central North Island).

Cheers,
Matt

[Re: The tallest tree of Europe?](#)

by **KoutaR** » Sun Feb 10, 2013 7:05 pm

Thanks, Matt! The possibility of geothermal fog didn't come to my mind. Maybe I was wrong and fog is after all important for redwood's optimal growth.

Kouta

Hendersonville, Flat Rock and Environs, NC

by **bbeduhn** » Mon Feb 11, 2013 12:10 pm

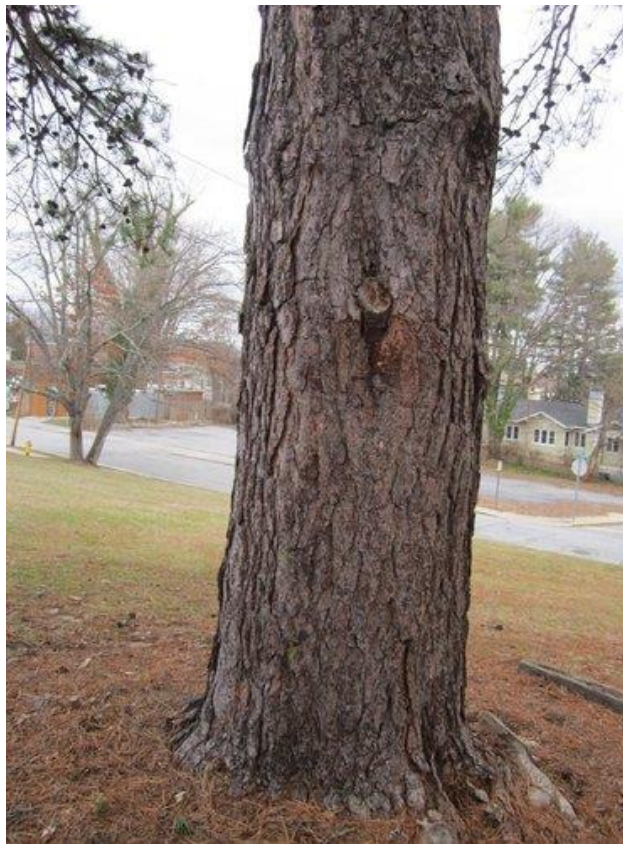
Asheville is a haven for exotic conifers so I figured Hendersonville would be as well. I just got in a small sampling of the area with more to come in the future.

Metasequoias

Talisman Academy	70.7'	71.2'	
Heatherwood	65.3'		
Crestville	85.5'	100.7'	87.3'
West Hills	71.8'	76.2'	45.3' about 15

more, away from the road. They've got a redwood forest of small metas going.

Eringhaus	95.2'	
Florida	96.2'	
The Oaks	71.0'	



9'9" cbh Pitch pine ~60' YMCA

Cryptomeria japonica	
Long John Mtn/191	59.2'
Midway/5th	83.0'
5th Street	76.2'

Ginkgo Biloba	
Talisman Academy	66.1'
4th Street	91.5' wide, open crown

Taxodium distichum	
The Oaks	72.0' 65.4' 72.7'

Re: Metasequoia Glyptostroboidea (Dawn Redwood)

by **bbeduhn** » Mon Feb 11, 2013 12:17 pm

Hendersonville area

Talisman Academy	70.7'	71.2'
Heatherwood	65.3'	
Crestville	85.5'	100.7' 87.3'
West Hills	71.8'	76.2' 45.3' 15

more 25'-45's, back from road

Eringhaus	95.2'
Florida	96.2'
The Oaks	71.0'

Asheville area

Woodland Hills	80.9'	82.2'	91.1'	83.9'
	75.0'			

Brian Beduhn

Mountains-to-Sea Trail

by **bbeduhn** » Mon Feb 11, 2013 1:00 pm

I lifted a portion of this post from an Asheville Trees post.

Blue blaze of MST off Parkway

pinus echinata shortleaf pine 120.7' and
very dead, formerly 124.6'

near Hendersonville Rd.

pinus rigida pitch pine 106.4' 110.1'
124.8' previously measured

Grove near upper Busbee reservoir.

prunus serotina	blk cherry	109.2'
acer rubrum	red maple	110.2'
quercus alba	white oak	111.4'
quercus coccinea	scarlet oak	105.4'
carya glabra	pignut hickory	129.4'
pinus rigida	pitch pine	99.4' 102.3'
pinus echinata	shortleaf pine	98.8' 113.0'
pinus strobus	white pine	128.3'
135.7'	136.3'	140.6' 147.3'

I noticed many more quality pines nearby. Will get back there soon.

near Fairview (route 74)

pinus echinata	116.7'	107.9'	111.3'	106.9'
	104.5'	110.8'		
pinus rigida	99.9'			
pinus virginiana	88.9'	98.3'	93.8'	93.2'
pinus strobus	127.5'	140.9'	with 11'9" cbh huge	

Brian Beduhn

Elk Pen Trail, Big Ivy (Coleman Boundary) North Carolina

by **bbeduhn** » Mon Feb 11, 2013 2:07 pm

This trail was created for a scene in "The Last of the Mohicans" from 1992. I'd hiked it over a year ago and noticed some sections of quality with a diversity of species not commonly seen outside of old growth forests. Indeed, there are some very old trees but the forest has been logged for the most part. There's an unbelievable upland, second growth hemlock forest consisting of 50+ hemlocks in the 95'-115' range.

95% are dead and the survivors have green only in the crowns. Sourwoods are particularly impressive. In the more disturbed areas, tulips dominate but in the diverse area, they play a small role. Maples are among the best I've seen in second growth forests.

I didn't make it up to the Walker Cove natural area. The sugars are huge and who knows how tall they get.

Tsuga canadensis	hemlock	127.7' (dead)
115.5'	108.5'	97.6' with witches broom
pinus strobus	white pine	121.1' 122.1'
123.8'	very young grove	
acer rubrum	red maple	103.4' 103.6'
110.2'	113.9'	122.7'
acer saccharum	sugar maple	95.9' 114.5'
123.2'	126.9'	
Oxydendrum arboreum	sourwood	81.0' 81.4'
89.6'	91.4'	91.4' 94.9'
magnolia fraseri	fraser magnolia	80.0' 91.0'
betula lenta	black birch	93.7' 99.0'
juglans nigra	walnut	87.9'
diospyros virginiana	persimmon	84.0'
quercus rubra	red oak	112.5' 113.6'
125.7'	130.7'	
quercus montana	chestnut oak	109.0' 113.7'
quercus alba	white oak	107.0'
Fagus grandifolia	beech	103.3'
103.3'	115.3'	
prunus serotina	black cherry	107.1'
116.5'		
fraxinus americana	white ash	117.3'
119.8'		
aesculus flava	yellow bukeye	106.8'

108.5' 108.7'
 tilia heterophylla white basswood 117.2'
 121.6'
 carya glabra pignut hickory 122.3'
 136.1'
 carya ovalis red hickory 115.1'
 carya alba mockernut hickory 97.2'
 104.5' 105.2' 108.0' ~3' dbh
 carya cordiformis bitternut hickory 102.9'
 113.5' (these could be carya glabra but I lean toward
 cordiformis)
 liriodendron tulipifera tuliptree 131.8'
 132.0' 133.0' 135.3' 136.0' 137.8' 138.7' 142.2'
 143.8'

some were
 quite old with ragged crowns and reiterations. Others
 were

young
 rockets.

There's plenty more to search. There's old growth in
 much of the Coleman Boundary area. Ents have
 searched in the Waterfall Creek section, which was
 loaded with the largest hemlocks outside of the
 Smokies. This will be an ongoing project.

Brian Beduhn

New Member, Michigan

by **MatthewMichigan** » Mon Feb 11, 2013 11:03
 pm

Hi,

I'm a 32 year old tree enthusiast. My wife and I enjoy
 camping and hiking and are planting the beginnings
 of a homestead on our property near Ann Arbor,
 Michigan, United States. (Van Buren
 Township/Belleville for those whom may be local)
 My wife is native to Poland and we travel there often
 to hike the forests and mountains, mostly in the Tatra
 area.

I'd love to meet fellow nature lovers from Poland
 and, of course Michigan. I hope these message

boards will be a resource for new information and
 travel ideas, as well as a place for me to share my
 excitement for the trees that I encounter.

Matt

Re: Native American Trail Marker Trees

by **pitsandmounds** » Sun Feb 10, 2013 7:17 pm

Great topic, here's another possible Trail Marker tree.
 I haven't found any references to it in any literature.
 Based on it's shape, I couldn't take the typical CBH
 measurement at 4.5'.

Situated on top of a ridge in California Woods Nature
 Preserve (Ohio), this Sycamore stands apart from the
 other Sycamores down below. I don't know if it was
 bent by man or by nature, but it makes a striking
 appearance in the forest.

With the confluence of the Little Miami River and
 the Ohio River a half mile to the west, the tree points
 almost due south to a bend in the Ohio River two
 miles away. The preserve is also in the vicinity of the
 historical Miami Indian Village of le Baril.

Here is some information on le Baril. It's interesting
 how it got that name . . .

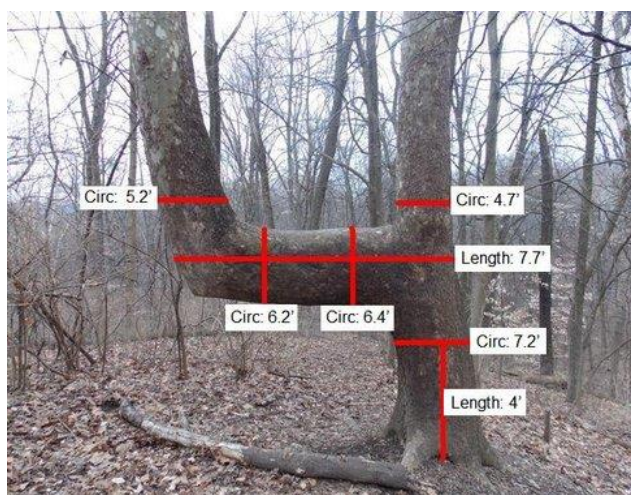
“Following the disappearance of the Fort Ancient
 people, the next village in the watershed was
 probably established by the Miami Indians at the end
 of the seventeenth century or the beginning of the
 eighteenth century. The Miami were then moving
 south from the Great Lakes region into Indiana and
 western Ohio, perhaps to improve their hunting for
 pelts and/or to find better growing conditions for
 their crops. Although it is uncertain when the Miami
 first settled in the Little Miami Valley, it is known
 that a Miami village was located in the watershed by
 1733. French traders called the settlement le Baril
 (The Barrel) after the shape of the chief who resided
 there. A 1749 French military expedition led by
 Monsieur de Celeron found le Baril to consist of

seven or eight cabins. The village was a few miles inland from the mouth of Riviere la Blanche (Clear River), the French name for the watercourse that British traders called the Little Miami.” The Little Miami, Stanley Hedeon



le Baril.JPG

<http://www.loc.gov/resource/g3400.ar077400/>





<http://www.youtube.com/watch?v=D-Lg8uxAzpM>

- Matt

[Re: Native American Trail Marker Trees](#)

by **edfrank** » Tue Feb 12, 2013 11:59 am

Matt, A very interesting post. Of course there is not any way to tell for sure if something had been used as a trail marker short of historical documentation. This has the right shape to be one, but I wonder about the age of the tree. Sycamores seem to grow pretty fast, and this isn't a big one, or at least it would not be a big one for this area. Is it a common species in your area and what size do they reach? It seems to be on a drier site rather than a river floodplain. In this case the girth to record would be the 7.2 foot girth below the branch at a height of 4 feet. Even if not an Indian trail marker, it make you wonder about how it ended up having that perfect right angle kink.

Edward Frank

[Re: Native American Trail Marker Trees](#)

by **pitsandmounds** » Tue Feb 12, 2013 8:48 pm

Ed, Yes, Sycamores are very common here and they can get pretty big. I measured another Sycamore in this preserve that is down in the creek bottom. It has a CBH of 10.9 ft. I found a Sycamore stump, also in the creek bottom, that has a circumference of 8.2 ft at a height of 2 ft. I counted approximately 100 rings on the stump. I couldn't find any other Sycamores up on the ridge for a better comparison.

I emailed Dennis Downes and he replied that it's possibly a Trail Marker tree, but would require more research. He mentioned that it does look a little young.

Here was my reply back,

"Thanks so much for the reply email, it's very much appreciated. It's definitely skinny compared to the other Sycamores down in the creek bottom. This one is high on a ridge, so the drier environment may

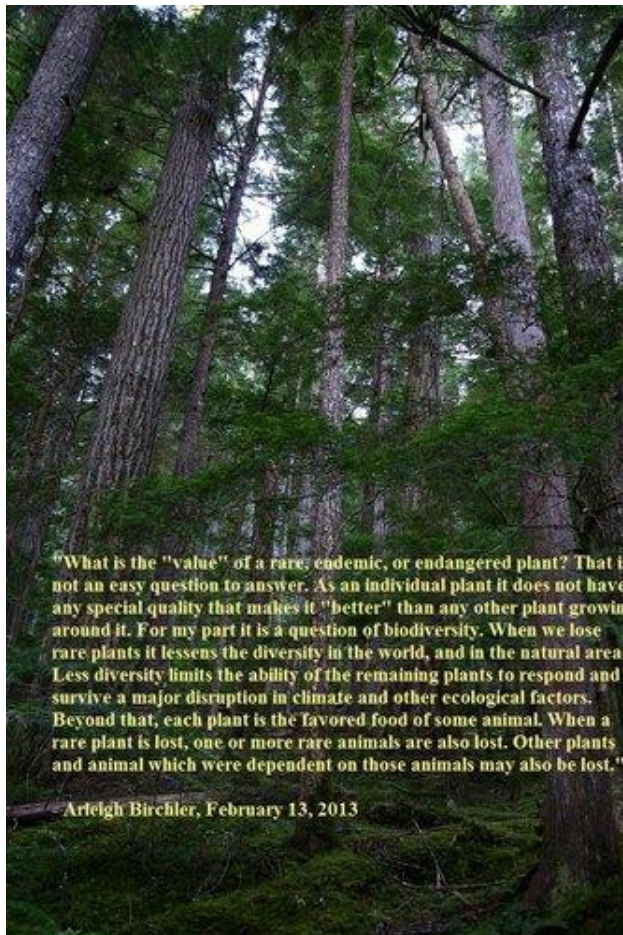
explain it in part. The park naturalist didn't have any additional information and she presumed that it had been split at some point in the past. I'm thinking that it's more likely that another tree fell on it and bent it over, but I doubt that it was split or otherwise compromised. I'll keep an eye out for any others and I'll also check out your book."

- Matt

What is the "value" of a rare, endemic, or endangered plant?

by **edfrank** » Wed Feb 13, 2013 6:06 pm

"What is the "value" of a rare, endemic, or endangered plant? That is not an easy question to answer. As an individual plant it does not have any special quality that makes it "better" than any other plant growing around it. For my part it is a question of biodiversity. When we lose rare plants it lessens the diversity in the world, and in the natural areas. Less diversity limits the ability of the remaining plants to respond and survive a major disruption in climate and other ecological factors. Beyond that, each plant is the favored food of some animal. When a rare plant is lost, one or more rare animals are also lost. Other plants and animal which were dependent on those animals may also be lost." - Arleigh Birchler, February 13, 2013



"What is the "value" of a rare, endemic, or endangered plant? That is not an easy question to answer. As an individual plant it does not have any special quality that makes it "better" than any other plant growing around it. For my part it is a question of biodiversity. When we lose rare plants it lessens the diversity in the world, and in the natural areas. Less diversity limits the ability of the remaining plants to respond and survive a major disruption in climate and other ecological factors. Beyond that, each plant is the favored food of some animal. When a rare plant is lost, one or more rare animals are also lost. Other plants and animal which were dependent on those animals may also be lost."

Arleigh Birchler, February 13, 2013

Re: What is the "value" of a rare, endemic, or endangered pl

by **Gary Beluzo** » Wed Feb 13, 2013 9:20 pm

A species may be rare, endemic, or endangered for a variety of reasons. A species may be rare because it is a specialist and occupying a small niche, endemic because a geographic location (e.g. Galapagos Islands) is unique and isolated, or endangered because the environment is changing or the species has come under pressure from another species (e.g. human).

There is inherent value in each species and as humans continue to homogenize the landscape unique habitats and niches are lost and species diversity diminishes..the system has less inertia to change and less resiliency to recover

Gary Beluzo

[Re: What is the "value" of a rare, endemic, or endangered pl](#)

by **Don** » Thu Feb 14, 2013 12:51 am

Gary/Ed-

In some ways, the answer is easy, and inappropriately enough captured by the credit card ad, "...it's priceless". Pure economics will say that the last five will be much more valuable than the first five of the last one hundred. Once they are gone, their value drops altogether and they're 'priceless'.

As an object lesson, they've much value.

In Grand Canyon, there is only one threatened and endangered species, the sentry milkvetch (*Astragalus chremnophylax* var. *chremnophylax*). I have seen most all of them and know exactly where they are located. At the turn of the century (1903) botanist Marcus E Jones recorded that they were 'common'. How much are the remaining few worth? That's quantifiable, if you look at the resources (read funding for employees, infrastructure, etc.) expended to meet the expectations of the Fish and Game Department's responsibility to ensure continued survival (NEPA or National Environmental Policy Act).

But Gary's right, it's more than dollars and cents...

Don Bertolette

[Re: What is the "value" of a rare, endemic, or endangered pl](#)

by **Joe** » Thu Feb 14, 2013 8:30 am

Wasn't it John J. Audubon, back in the 18th century, who mentioned that he saw so many passenger pigeons that they filled the sky from horizon to horizon for days at a time? All a hunter had to do was point up and shoot. With that many birds, we can only presume the forests were far richer with food-countless large trees producing vast amounts of mast-and this is just an example of how the continent was

truly "richer" in what counts- back before the dollar didn't even exist.

Joe Zorzin

[Re: What is the "value" of a rare, endemic, or endangered pl](#)

by **Bart Bouricius** » Thu Feb 14, 2013 9:24 pm

Again we get down to the sacred versus the profane, that is the aesthetic, emotional if you will spiritual vs the commercial value of a thing, be it an organism or a view. The Scenic Hudson case, which permitted for the first time standing in court, for other than strictly economic injury, ushered in the field of environmental law. This case was expanded in 2009 in the case of *Save the Pine Bush v. Common Council of the City of Albany*, when persons other than abutters were given standing in court because they would travel to visit an environment with certain prized species in it. So again I find myself railing against the commodification of all things that some narrow minded folks think is necessary in order to get the true market value of the thing in question, thus resolving the comparative quantification in order to choose competing policies. An extreme example of the desire to quantify everything, such that it might be considered as part of the market system, was when the Bureau of Land Management showed, with a Cost Benefit Analysis study that there would be a net benefit in damming the Grand Canyon because, among other things, boaters could get closer to the canyon walls to see them better. This 1966 study compared putting two dams in the Grand Canyon with a false nuclear alternative. There are plenty of economic criticisms of the study which was politically defeated by an outraged public and work by the Sierra Club. Anyway the real question is whether certain things should be valued in other ways than money, as simple as that.

Bart Bouricius

Trees falling in Hurricane Sandy

by **JohnnyDJersey** » Thu Feb 14, 2013 8:58 pm

Some of you may have seen this months ago on ABC news after Hurricane Sandy but thought I would post it. The video this kid shoots in the begining is crazy. It is worth a watch.

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

John D Harvey

Heath tunnels

by **jamesrobertsmith** » Thu Feb 14, 2013 1:04 pm

Brief bit about hiking through various heath tunnels in the southern Appalachians (mainly in North Carolina).

<http://tilthelasthemlockdies.blogspot.com/2013/02/heath-tunnels.html>



<http://youtu.be/WkEPblcn8Aw>

Re: Heath tunnels

by **dbhguru** » Thu Feb 14, 2013 8:54 pm

Robert Very good treatment of the subject. As a youth growing up in the southern Apps,

rhododendron and laurel thickets were places of intense interest and one where my friends and I prided ourselves in wading through. Of course, we limited our incursions.

The sheer amount of rhododendron in many areas of the southern Apps and in particular the Smokies is hard to fathom.

In my early youth I recall people calling laurel by the name ivy and rhododendron was called laurel.

Bob Leverett

Introducing myself

by **litharborist** » Fri Feb 15, 2013 9:56 am

I happened upon the Native Tree Society's Facebook page earlier this year, and enjoy the posts very much.

How can one not like a society whose magazine is named "eNTS"

I am retired from NC State University, but still work on wood anatomy, studying fossil plants and editing content of the InsideWood web site. This site was developed with collaboration of colleagues at the NC State library. If you want to see the insides of trees, this site likely has images, mostly taken with microscope, only a few macro, of their wood

<http://insidewood.lib.ncsu.edu>

As of Feb. 15 - the site has 6,085 Modern Wood descriptions and 39,112 Modern Wood images and 1,757 Fossil Wood descriptions and 2,325 Fossil Wood images.

The descriptions are based on microscopic features, so some background in wood anatomy is needed for the descriptions to make sense.

Live Oaks in Vacherie Louisiana **Part I Laura Plantation**

by **Larry Tucei** » Sat Feb 16, 2013 9:38 pm

NTS- I traveled to Vacherie Louisiana on Friday to first visit Laura Plantation after setting a date with the owner and document their 4 Live Oaks. After a few hours at Laura I finished up and went back to Oak Alley to complete the project I'm helping them with measuring their Live Oaks in the back of the Mansion, I have them on Power Point and Excel. My third stop was St. Joseph Plantation to document the Live Oaks at their two estates. But first I detail Laura. Laura Plantation was built in 1805 by a French Naval Veteran of the Revolutionary War named Guillaume

Duparc. <http://www.lauraplantation.com/sugar.asp> only one of the 4 Live Oaks I measured was over 19' so it will go on the Live Oak Listing which is now at 209 trees. Three of the four trees were most likely planted when the House was built and the fourth at a later time. The measurements were as follows #1 CBH- 22' 11", Height- 67.5' and Spread- 115.5' x 90'. This tree had damage from Hurricane Betsy in 1965 but still was thriving. Oak #2 measured CBH- 17' 8", Height- 63'5' and Spread-108' x 90'. Oak #3 measured CBH- 17' 4", Height- 69' and Spread-126' x 120', the tallest and broadest of the four. Oak #4 was much smaller with a CBH- 12' 5", Height- 45' and Spread- 102' x 67.5'. The House and grounds were lovely and the Live Oaks really made it special. To be continued-

Attachments



Laura Plantation Mansion



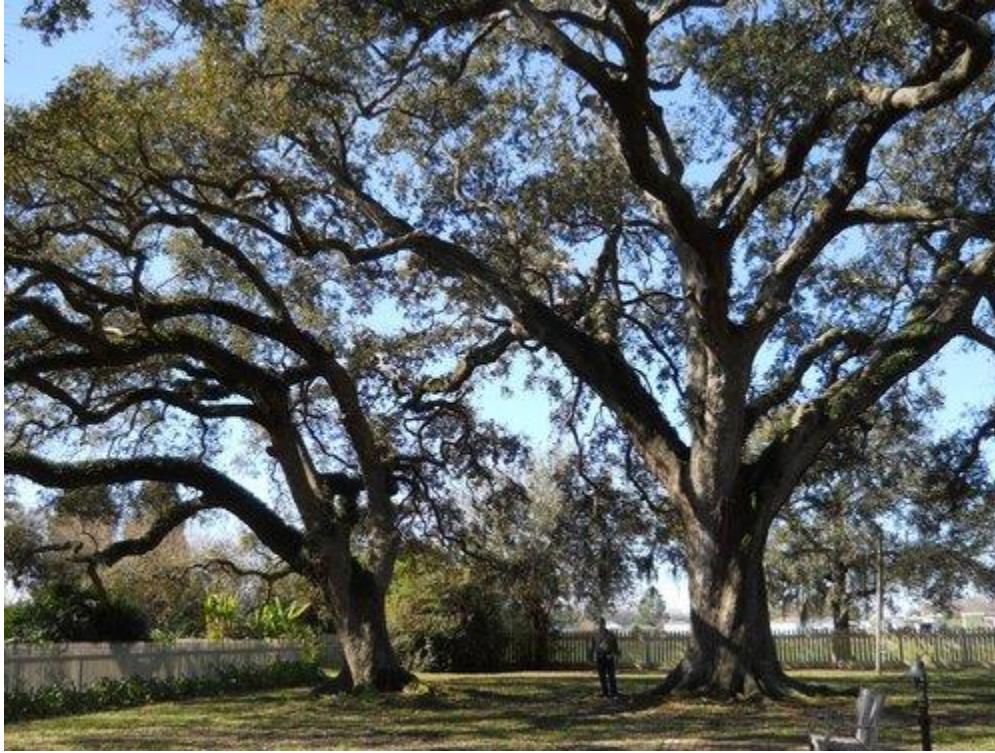
Oak 1



Oak 2



Oak 3



Oaks 3 & 4

Why trees can't grow taller than 100 metres

by **edfrank** » Thu Feb 14, 2013 5:29 pm

Why trees can't grow taller than 100 metres

16 January 2013

Magazine issue 2900.

<http://www.newscientist.com/article/mg21729004.800-why-trees-cant-grow-taller-than-100-metres.html>

Physical Limits to Leaf Size in Tall Trees
Phys. Rev. Lett. 110, 018104 (2013) [5 pages]

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DOI: 10.1103/PhysRevLett.110.018104

PACS: 87.10.-e, 47.63.-b, 47.85.Dh, 87.85.gf

Re: Why trees can't grow taller than 100 metres

by **KoutaR** » Fri Feb 15, 2013 5:33 am

The range of leaf sizes narrows and at around 100 m tall, the upper limit matches the lower limit.

The leaves of coast redwood are 1,3-3,2 cm x 0,1-0,3 cm on lower branches and 0,6-1,3 cm x ~0,1 cm on upper branches, the leaf area being about 0,06-1 cm².

The tallest *Eucalyptus regnans* is 99.6 m tall. Its leaves are 10-17 cm x 1-2 cm (mean width), the leaf

area being 10-34 cm². Thus, the length of its leaves is 5-17 times more than that of redwood's leaves, and the leaf area 35-170 times more than that of redwood's leaves.

Kouta

Re: Why trees can't grow taller than 100 metres

by **mdvaden** » Fri Feb 15, 2013 5:43 am

Wonder where that article fits into the research timeline.

Here's something about some most recent research ...

http://www.savetheredwoods.org/what-we-do/study/researchgrants_detail.php?id=35

Redwoods don't max at 115.6 meters either. Hyperion just pushed to 115.7 meters ... still inching upward. It may be a small difference, but it is a variance, and now that the brakes have been put on severe cutting of old growth, the recovery and heights seem something to be revealed over many years.

The title of the article with "100 meters" is a curiosity, because it does refer to a previous 115.6 meter measurement. And there's more than a handful of trees over 100 meters tall. Michael Taylor has nearly 250 redwoods listed at his site, over 100 meters.

M. D. Vaden

Re: Why trees can't grow taller than 100 metres

by **Bart Bouricius** » Fri Feb 15, 2013 7:45 pm

Every couple of years someone publishes another article about theoretical maximum tree height. Most previous theoretical limits were placed at around 130

meters which seems to mesh much better with reality than 100 meters. I seem to recall an article maybe 3 years ago indicating that the tracheids were not continuous, so that the top part of a tree could be somewhat independent of lower parts. This could obviously work in large moist tropical forest trees where adventitious roots often will take in moisture from the soil on branches over 30 meters high, thus resetting the beginning point. I also notice that the bread fruit tree which has one of the largest leaves around can get substantially higher than 30 meters, though probably not over 40. This is probably an exception that proves the rule. Considering the moist rainy foggy conditions on parts of the California coast, my question is do Redwood trees and Doug firs ever produce higher up adventitious roots ?

Bart Bouricius

Re: Why trees can't grow taller than 100 metres

by **dbhguru** » Fri Feb 15, 2013 8:32 pm

Bart, Good points. There is good reason to believe that at least one Doug Fir was accurately measured to around 405 feet, and the one I mentioned was confirmed at 393 feet. Somewhere in the range of 123 to maybe a few meters more, but not 100. There's no substance to Jensen's 100 meter limit, if taken literally.

Robert T. Leverett

[Re: Why trees can't grow taller than 100 metres](#)

by **edfrank** » Fri Feb 15, 2013 8:47 pm

We really need to read what the guy actually says in his article rather than the summary posted at the first link above. This article should have had at least the wisdom gleaned from previous maximum height articles as well as actual height data on existing trees. I bet the full article does not make the specific maximum claim cited by someone else's summary.

Edward Frank

[Re: Why trees can't grow taller than 100 metres](#)

by **Bart Bouricius** » Sat Feb 16, 2013 12:58 pm

Having looked around on the web while waiting for access to the actual article from the journal "Physical Review Letters" which would cost \$25.00 on line (ridiculous as usual), I discovered that:

1. The Authors Jensen and Zwieniecki considered only flowering plants, not gymnosperms like the Douglas fir and Redwood.
2. The tallest trees (the height range was not specified) were said to have leaves between 10 and 20 centimeters in length.
3. Based on this more thorough synopsis, the article did not focus on tree height, though noting that for Angiosperms it did seem to top out around 100 meters which was consistent with their model that also explained leaf size range. Here is the link <http://news.sciencemag.org/sciencenow/2013/01/sim-ple-physics-may-limit-the-size.html>

Bart Bouricius

[Re: Why trees can't grow taller than 100 metres](#)

by **pdbrandt** » Sat Feb 16, 2013 2:55 pm

Here is the full text of the article in question if anyone is interested in reading it. Thanks to UNC-Chapel Hill for the reprint.

 [PhysRevLett.110.018104.pdf](#)

[Re: Why trees can't grow taller than 100 metres](#)

by **dbhguru** » Sat Feb 16, 2013 1:19 pm

Ed and Bart, Valid points. We all know the propensity of reporters to misinterpret and their lack of facility with numbers is legendary.

On a related topic, the article brings up the challenge facing any author, reporter, or researcher needing to identify reliable sources of information on tree dimensions. Few subjects suffer more from erroneous, conflicting, misleading, or superficial information, which has trivialized the pursuit of tree measuring for decades. In the chapter I'm writing for Joan Maloof's new island press book, which is a follow-on to *Eastern Old-growth Forests, Prospects for Rediscovery and Recovery*, I'm re-researching: (1) accounts of big trees of the past, (2) information that is available to the general public through champion tree program lists, (3) cited maximum dimensions in popular tree guides, etc. What a mishmash!

Imagine yourself a reporter doing a story on the largest/tallest trees in the world with no fore-knowledge of the topic. If you aren't aware of who Steve Sillett, Bob Van Pelt, Michael Taylor, Will Blozan, etc. are, or NTS in general, and the roles they play, which of the hundreds of sources do you quote? I suppose some clarity can eventually be achieved if you do enough research, but that won't happen on a

quick turn-around. It makes our efforts to reach the greatest number of people with up-to-date information all the more important. Despite our efforts though, we can correct the errors of others. Here is an interesting example of the kind of dangerous web surfing that nets data from many different sources.

In David Allen Sibley's book THE SIBLEY GUIDE TO TREES, he provides tree height maximums for many species. Here is a sample.

Species	Sibley's Quoted Maximum-ft Source
---------	-----------------------------------

White Pine	220
------------	-----

Many list this height as a maximum

SW White Pine	111
---------------	-----

This is an odd number to list (It match's my measurement as reported in an NTS post, but there could be

other sources, maybe the original height in meters, with the 111 being a round foot equivalent.

Who knows?

Loblolly Pine	182
---------------	-----

Probably a champion tree list

Western White Pine	225
--------------------	-----

Obviously not the maximum

Pitch Pine	101
------------	-----

Obviously not the maximum

Longleaf Pine	150
---------------	-----

Who knows?

Tuliptree	200
-----------	-----

Many sources, none of which relate the number to an actual reliable measurement

Bluegum Eucalyptus	165
--------------------	-----

Huh?

Eastern Cottonwood	170
--------------------	-----

Phooey.

Shumard Oak	190
-------------	-----

Phooey, phooey.

Redwood	379
---------	-----

Okay, we know he found the right source

Cherrybark Oak	124
----------------	-----

Sibley didn't find our Congaree data

Red Maple	179
-----------	-----

We know where that ridiculous mis-measurement came from

Blue Spruce	148
-------------	-----

I've personally measured 4 over 150 feet.

Scarlet Oak	181
-------------	-----

Extremely unlikely.

I'll stop at this. The numbers are all over the map, a few from credible sources (us), and some from totally flaky sources, and others from ostensibly reliable sources, but in fact, unreliable. One can sympathize with Sibley or any other author. How are they to judge the reliable from the unreliable? I've rambled enough.

Robert T. Leverett

[Re: Why trees can't grow taller than 100 metres](#)

by **eliahd24** » Sat Feb 16, 2013 2:38 pm

Whoa Bob! I always thought Hyperion was the tallest ever measured. You're blowin' my mind a little here. Had no idea the Dougies had been measured to that height. How do you know it was accurately measured? Did they use the SIN method? Must have been a recent (within a decade or two) measurement, right?

[Re: Why trees can't grow taller than 100 metres](#)

by **dbhguru** » Sat Feb 16, 2013 4:27 pm

Eli, The second best convenient account of the Mineral Tree to my knowledge is found in Al Carder's **FOREST GIANTS OF THE WORLD PAST AND PRESENT**, a must for every Ent. Copyright is 1995 by Fitzhenry & Whiteside. BVP

knows Dr. Carder and was assistance to him. The account of the Mineral Tree is given on pages 3 & 4 of the book. The measurement of the standing part of the tree was in 1924. The broken top on the ground was measured in 1911. Had I not known of BVP's evaluation of the tree, my sense would still have been that the measurements are completely trustworthy, performed by extremely competent people.

In his *Forest Giants of the Pacific Coast* (another absolute must to own), BVP recounts the history of the Mineral Tree in even greater detail on page 44. With BVP's stamp of approval on the height, it's a done deal. In my mind, there's only one higher authority than BVP (it would be heresy to utter the name).

On page 3 of Carder's book, he recounts a Doug Fir measured on the ground by tape that was 380 feet to a broken top. The tree was named the NIsqually Tree. Apparently, a number of huge Doug Firs were measured as they lay on the ground. A Doug Fir was measured in British Columbia on the ground by the land owner to the suspect height of 415 feet. I'm inclined to trust the measurements of fallen giants made by foresters, surveyors, and engineers, but land owners with a glint in their eye for profit, I'm far less trusting.

Eli, ya gotta get copies of those two books.

Robert T. Leverett

[Re: Why trees can't grow taller than 100 metres](#)

by **Bart Bouricius** » Sun Feb 17, 2013 12:47 pm

Again, I want to harp on adventitious roots in the canopy and how they might conceivably play a role in producing taller trees than might seem physically possible otherwise. I found a 2003 article in the *American Journal of Botany* by Steve Sillett and Mark G. Bailey which indicates that Redwoods do indeed

produce arborial roots in canopy fern mats that they were studying. Clearly, if significant numbers of roots obtain moisture and nutrition starting high in the tree, the possible theoretical height of the tree would drastically increase. Probably other structural limitations would then become the limiting factor in height if high arborial adventitious roots play an important role in the upper canopy. Here is a relevant excerpt from the article. "The trees also directly exploit the water and nutrients stored in their epiphytic fern mats. We occasionally find well-developed adventitious tree roots amidst *P. scouleri* in both redwood and Sitka spruce. These roots are indistinguishable from their counterparts on the forest floor; both possess well-developed mycorrhizal associations. A similar phenomenon has been observed in a wide variety of other temperate and tropical rain forest canopies (Nadkarni, 1981, 1994). Of course this thought is just speculation, but that is the name of the game here.

[Re: Why trees can't grow taller than 100 metres](#)

by **edfrank** » Sun Feb 17, 2013 5:33 pm

The limits to tree height
George W. Koch¹, Stephen C. Sillett, Gregory M. Jennings & Stephen D. Davis

*Trees grow tall where resources are abundant, stresses are minor, and competition for light places a premium on height growth. The height to which trees can grow and the biophysical determinants of maximum height are poorly understood. Some models predict heights of up to 120m in the absence of mechanical damage, but there are historical accounts of taller trees⁵. Current hypotheses of height limitation focus on increasing water transport constraints in taller trees and the resulting reductions in leaf photosynthesis⁶. We studied redwoods (*Sequoia sempervirens*), including the tallest known tree on Earth (112.7 m), in wet temperate forests of northern California. Our regression analyses of height gradients in leaf functional characteristics*

estimate a maximum tree height of 122–130m barring mechanical damage, similar to the tallest recorded trees of the past. As trees grow taller, increasing leaf water stress due to gravity and path length resistance may ultimately limit leaf expansion and photosynthesis.(continued)

Introduction Dennis Crowe

by **Dennis Crowe** » Sun Feb 17, 2013 10:58 pm

Hi. In way of introduction, this is Dennis Crowe from northwest Wisconsin. I am a retired teacher (English and science) with an enduring personal connection to trees, starting as I recall from a long-ago National Geographic article on bristlecone pines, whose age and appearance really caught my attention. When I moved to the Oregon coast for a couple years in the 60's I started working through a tree id book, collecting conifer cones, and generally getting immersed. For the last 36 years or so my wife and family have been homesteading 79 acres, about 20 acres of which are mixed hardwoods. We have select cut and milled 5 times over the years, and most of our buildings are made of this lumber. The diversity here amazes me, with 17 native tree species in that 20 acres. When we did a milling about 6 years ago, there were 11 species represented in about 40 logs. When cutting firewood (two stoves) and logging we select for sugar maple to develop our sugar bush (up to about 250 taps, including a lot of red maple). This location (around 45 degree latitude has traditionally been Zone 3, but we're only 10 miles north of the tension zone, and last year's update of climate zones puts us in Zone 4b. We are starting to plant Zone 4 trees and fruit. I am trying to figure out how to get (pay for) a rangefinder and clinometer to start measuring trees. I have several in mind, locally including some white pine and a massive burr oak on a neighboring farm, and some trees in northeast Minnesota, which we visit often. ENTS is a great addition to my interests and I hope to make some positive contributions.

Dennis Crowe

Albino Redwoods

by **yofoghorn** » Sun Feb 17, 2013 10:43 pm

On February 14th and 15th, 2013, an arborist who lives in the Sierra Nevadas discovered a very important discovery! He found an albino redwood that was producing male cones! This has only been witnessed one other time, when Dale Holderman found male cones on an albino redwood and decided to do a genetics experiment with them. He then wrote a book called *The White Redwoods* where he talks about the experiment. A brief paragraph of his book is mentioned here:

http://www.mdvaden.com/redwood_albino.shtml

This is not the arborist's first discovery. In 1997, he found a chimera redwood in Western Sonoma County. In January 2013, I discovered a chimera in Big Basin Redwoods State Park. As of now, only 5 chimera are known to exist, and two of them have come out of the Dale Holderman 1976 experiment. Chimera is a phenomenon when a single organism has two different genotypes (basically sets of DNA). This can be seen with a "mosaic" of different colors. The arborist found the male cones on a chimera redwood in Sonoma County that is over 30 feet tall and stands without a mother tree. He also reports that this tree had some older, female cones that are now dead. This albino redwood is the only one in history to have been found with any evidence of female cone production!

I wrote this post because I am curious of a few things:

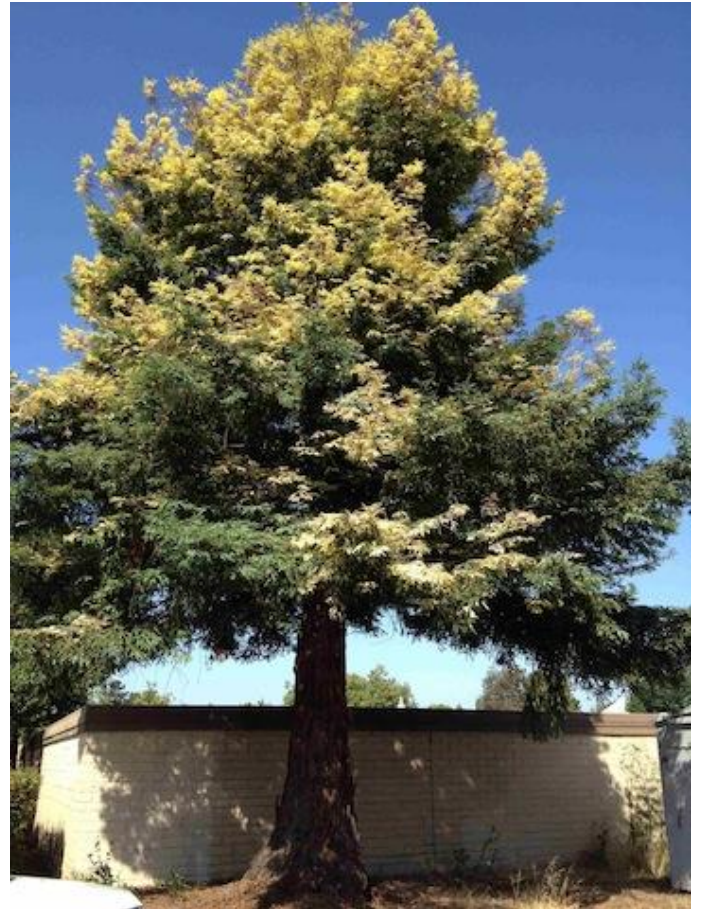
1. Where are the northernmost albino redwoods? Are there some north of the Eel River (in Redwood National Park, Prairie Creek, Jedediah Smith, Headwaters Forest, etc.)?
2. Has anyone seen any albino redwoods with male cones?
3. Does anyone know where the tallest albino redwood is located? How tall have you seen them? Please do not disclose the exact location, but a general one within a few miles preferably.

4. Has anyone seen any chimera albino redwoods? A picture is attached of a common growth pattern. Chimera redwoods tend to be part green and part white with distinct separation between the two colored tissues. Also, nonchimeric variegated (green white) albino redwoods are important to know about. There are 19 variegated (both chimeric and nonchimeric) albino redwoods known. To add more to that list would be of great importance!

5. Has anyone ever seen any pale-green or pale-yellow albino redwoods? Right now only 3 of them are known to exist, so I am hoping to change that!

I know albino redwood locations are very secretive. I mainly just want to have a discussion about albino redwoods, because I think we could all learn a lot from each others' observations. If anyone would like to message me privately with locations of either variegated or northernmost albino redwoods, that would be appreciated! Also, if anyone has pictures to share of albino redwoods, please do so. I think the WNTS can and should have this discussion. Also, if anyone has any questions about the anatomy, physiology, or just general information about albino redwoods, I, along with others on this forum, can help to answer those questions!

I personally have studied Santa Cruz County albino redwoods and have looked at their ring growth patterns, leaf and stem anatomy, and some physiology differences as well. I have a pretty decent understanding of what is going on except with genetics. Currently, even the geneticist working on albino redwoods is trying to find more variegated albino redwoods to study. So let's try and make this an open discussion, more or less, about albino redwoods. Please keep locations decently vague.



Cone Producing Albino Redwood - Photographer: Tom Stapleton



Albino Male Cones - Photographer: Tom Stapleton



Chimeric Redwood Shoot - Photographer: Audrey Moore

Zane J. Moore

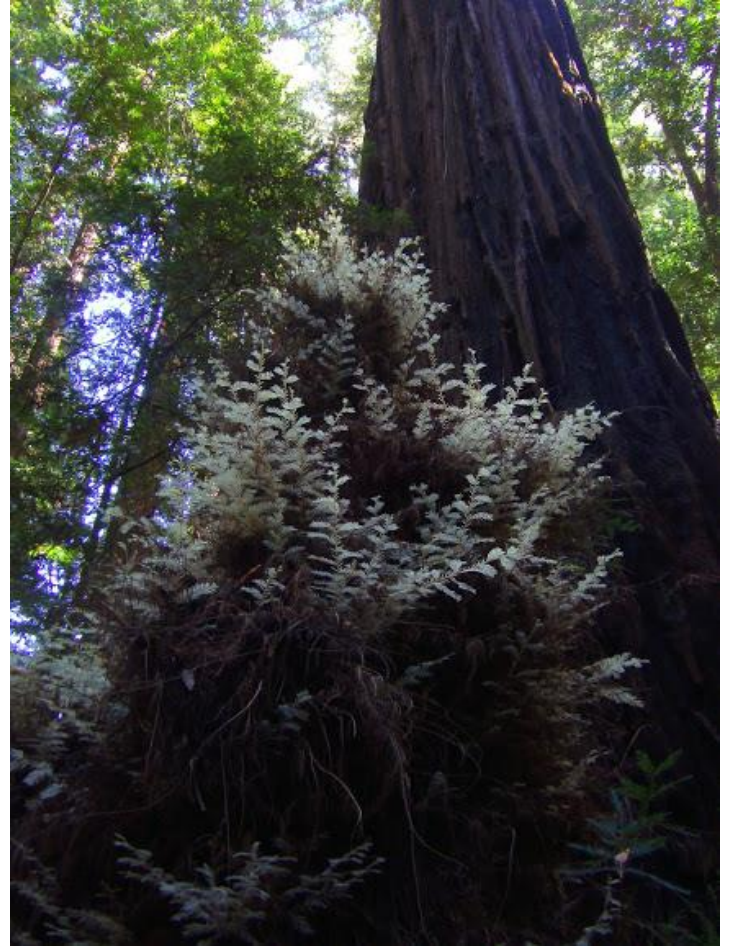
[Re: Albino Redwoods](#)

by **Mark Collins** » Mon Feb 18, 2013 1:41 am

Zane,

Here are pictures of a few of my favorite albinos I have seen during my hikes. These were all found in HRSP or south and without cones. I've never seen a chemera redwood before but will have to keep my eyes peeled now! I'd be curious if anyone has ever seen an albino growing on a drier hillside? Do you think that matters?





Mark Collins

[Re: Albino Redwoods](#)

by yofoghorn » Mon Feb 18, 2013 11:24 am

I have found an albino redwood at 1100 feet elevation about half way between a stream and ridge top. It is a healthy specimen and about 6 or 7 feet tall. Albino redwoods thrive, however, in more moist conditions. Without a continuous flow of water, the albino usually dies due to cavitation in the xylem which is caused by the trees' inability to control their stomata. They do create a cellular layer to try and counteract this water loss, which is not incredibly efficient though it does give the leaves their waxy feel.

Zane J. Moore



Re: Tallest Tree South Of SF Bay Confirmed

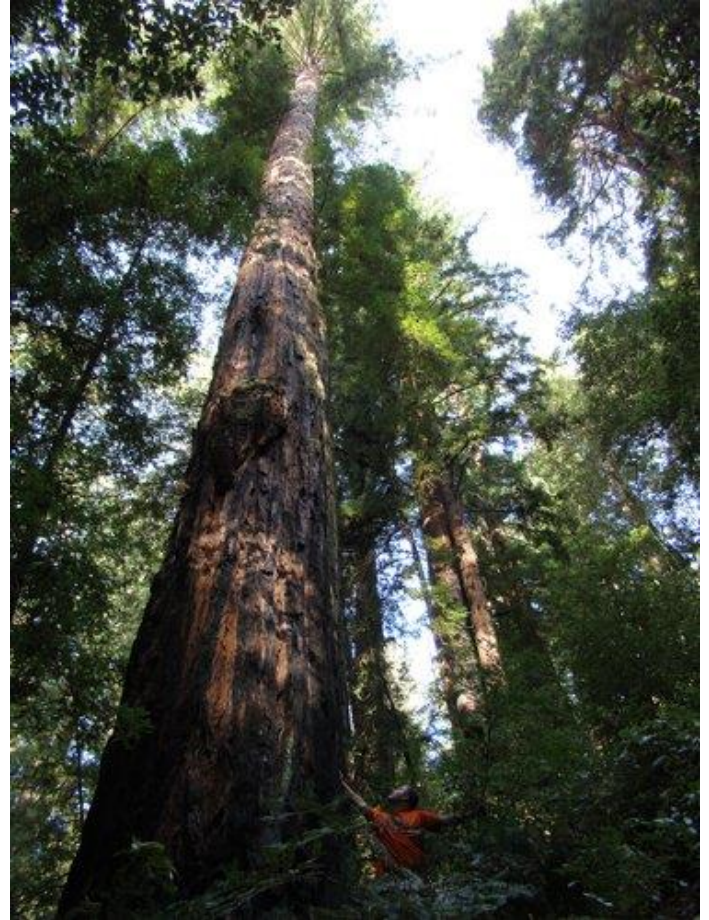
by [yofoghorn](#) » Sun Feb 17, 2013 10:09 pm

Ral wrote: Would it possible to see some more photos of these two redwoods at Big Basin, is it possible to see them from a distance photo or are they too tightly hemmed in by other trees? Is it likely that any other 100 metre or taller redwoods may yet be found somewhere in Big Basin State Park? Any other very tall tree species growing in Big Basin?

It would be very unlikely that there are taller trees in Big Basin Redwoods State Park. Almost the entire remaining old growth area in Big Basin and in Portola Redwoods has been searched. Tallest redwood in Big Basin is 100 meters and the tallest trees in Portola are 93 meters. There are fewer than 500 acres left of old growth on private property in the Santa Cruz Mountains that has yet to be searched. Most trees in Big Basin top out around 70 or 75 meters. Only 14 trees south of San Francisco are known to attain a height of 90 meters.

The tallest tree in Big Basin is 540 years old, is the smallest by volume 100 meter tree that Sillett has climbed, and is the fastest tree known to grow from 0 to 100 meters. For example, Hyperion took 800 years to reach that height. The tree is in an unlikely area and the location will not be disclosed to the public due to the tree being on a very steep slope and a lot of erosion potential.

To answer your question about tallest trees in Big Basin: the tallest Douglas Fir is just over 82 meters, discovered by Will Blozan in 2008. The second tallest tanoak in the world is also in Big Basin. It is just over 48 meters tall. I discovered that tree. The world record tanoak is 49.3 meters tall in the Forest of Nisene Marks State Park. Those are the main tall tree species in Big Basin. The other trees are not nearly as tall in the park. Tallest bay trees are 31 meters, where the world record for California bay laurel is 51.6 meters in Henry Cowell Redwoods State Park.



Looking Up the Trunk of the Tallest Big Basin Tree



Tallest tree south of San Francisco

Zane Moore

I know, no tree heights have been measured with the NTS sine method at Oregon Caves, and Big Tree never seemed to be as much as 182 ft. tall. In Agee's 1990 book, maximum heights are Douglas-fir - 42 m. (137.8 ft.), White Fir - 38 m. (124.6 ft.), Sugar Pine - 51 m. (167.3 ft.), Ponderosa Pine - 49 m. (160.7 ft.) - these heights seem reasonable, even if the method used was the inaccurate tangent method - I don't know what method was used. Agee gives the ages of most of the old growth Douglas-fir at Oregon Caves as 240- up to 300 years, and this also is reasonable. I remember counting 300 rings on the stump of an average sized Douglas-fir in the old growth forest there.

Tom Howard

[North Syracuse Oak Groves Height Update](#)


by [tomhoward](#) » Mon Feb 18, 2013 11:45 am

[Re: Oregon Caves Douglas Fir, OR](#)

by [tomhoward](#) » Mon Feb 18, 2013 12:16 pm

That is a fantastic tree, and a tree I knew well years ago, when I worked as a cave guide at Oregon Caves. It is called Big Tree, an appropriate name. When I was out there, a sign by the tree said it was 1200-1500 years old, and 182 ft. tall - these figures are almost certainly exaggerations, as few Douglas-firs are known to be that old. According to Oregon Caves Forest and Fire History by James Agee, Laura Potash, Michael Gracz (National Park Service Cooperative Park Studies Unit Cooperative Report CPSU/UW 90-1, 1990), a book I downloaded through Google Scholar, Big Tree is most likely about 600 years old, a more reasonable age. As far as



 [North Syracuse Cemetery Oak Grove Tree Heights 2012-2013.pdf](#)

NTS, These are the updated height measurements for the 2 old growth North Syracuse Oak Groves from Oct.-Dec. 2012. I have not done any measurements lately mainly because of the long snowy dreary central NY winter, and my lack of a vehicle to get to other sites. When spring comes, I should be able to do more measurements. The height measurements in the 2 oak groves are mostly complete, and the combination of Nikon 440 laser rangefinder, clinometer, scientific calculator with the sine method has, I believe, given me more precise measurements than the Forestry 550. Most of my studies have centered on the North Syracuse Cemetery Oak Grove due to a personal association with that site since early childhood, and the far greater ages, and greater number of old growth characteristics of that site than

in the Wizard of Oz Oak Grove.

I tried to send this document as a pdf - hopefully the columns will line up this way so it will be easier to read. I'm sending a print copy of this report to the grove's owner, the North Syracuse Cemetery Association.

I am enclosing 3 recent pictures of the North Syracuse Cemetery Oak Grove. The first picture shows the old growth canopy from the south.



Black Oak #27, Red Oak #26, White Oak #25, dense OG canopy



Red Oak 12.9 in. dbh, 100.8 ft. tall, high sinuosity

This rather small Red Oak could be as much as 200 years old. Despite all my many years of wandering in this little grove, Dec. 15, 2012 is the first time I really noticed this tree. This picture was taken Jan. 12, 2013. A much smaller Red Oak (stump only 4.5 in. radius) had 194 rings at Round Lake in Green Lakes State Park.

These are the Wizard of Oz Oak Grove heights:

 [Wizard of Oz Oak Grove Official Heights 20132.pdf](#)

Tom Howard

[Re: North Syracuse Oak Groves Height Update](#)

by **Rand** » Mon Feb 18, 2013 1:12 pm

The height measurements in the 2 oak groves are mostly complete, and the combination of Nikon 440 laser rangefinder, clinometer, scientific calculator with the sine method has, I believe, given me more precise measurements than the Forestry 550.

Steve Galehouse and I compared the two instruments a couple of times and this difference in accuracy is not your imagination. The Nikon is able to shoot through smaller windows and when pointed at the top of a tree is more likely to hit the highest twig vs the 550, which is more likely to hit a lower, intervening twig, returning a lower total height. The differences were 2' - 3' feet at times.

Rand Brown

[Re: Impressive Bur Oaks \(SW Ohio\)](#)

by [pitsandmounds](#) » Mon Feb 18, 2013 3:05 pm

Here are some more Bur Oaks of Southwest Ohio. This also shows the one from Ault Park for comparison purposes . . .

Site Name	Subsite	Species (Scientific)	Species (Common)	Height (ft)	Girth (ft)	Maximum Spread (ft)
Ault Park		Quercus macrocarpa	Bur Oak	103.2	16.9	98.4
Miami University	Natural Areas	Quercus macrocarpa	Bur Oak	98.7	16.9	99
Miami University	Bishop Woods	Quercus macrocarpa	Bur Oak		14.6	
Miami University	Bishop Woods	Quercus macrocarpa	Bur Oak		13	
Miami University	McKee Hall	Quercus macrocarpa	Bur Oak		14.2	
California Woods Nature Preserve		Quercus macrocarpa	Bur Oak	122.4	12.4	90

Miami University Natural Areas - Bur Oak with a CBH of 16.9ft, the same CBH as the one in Ault Park. Both measured exactly 203 inches, go figure! Here's a link with a vertical panorama (thanks for this idea Patrick!)

<http://photosynth.net/view.aspx?cid=0462e79c-9dc3-49a9-a2c3-abfd2c2b286b>

Miami University Bishop Woods - One alive and one dead. The dead one is the smaller of the two and was cut off high up on the trunk. The trunk segment on the ground has approximately 145 rings. Percy MacKaye was poet-in-residence at Miami in the 1920's and his shack/studio was in Bishop Woods.

<http://www.units.muohio.edu/landscape/blevens/historybishopwoods.html>

These Bur Oaks would have been over 50 years old when he wrote the following poem about the trees of Miami:

<http://poncer.blogspot.com/2010/10/percy-mackayes-trees-of-miami-circa.html>

Miami University McKee Hall - Open-grown Bur Oak that dominates the front of McKee Hall



McKee Hall Bur Oak

California Woods Nature Preserve - Tall Bur Oak residing in an old growth forest, irregularly shaped crown



California Woods Bur Oak



California Woods Bur Oak

My spreadsheet Master File: <http://www.ents-bbs.org/viewtopic.php?f=111&t=4836&p=20940#p20705>

- Matt

[Saint John in the Wilderness Church, Flat Rock, NC](#)

by **bbeduhn** » Tue Feb 19, 2013 5:46 pm

This part of Flat Rock is dominated by white pines and English ivy. Flat Rock is an old town but isn't overly developed.

The hemlocks at this site are in outstanding condition with no sign there's a blight. The hemlocks are all on church property but a handful of the taller pines are just across the road.

Saint John in the Wilderness

Tsuga canadensis	92.4'	94.7'	96.0'	96.1'
	96.9'	97.6'		
	100.6'	100.7'	101.9'	105.4'
	107.2'			
Tsuga caroliniana	77.0'			
Pinus strobus	127.1'	127.3'	129.7'	131.0'
	132.1'			
	133.2'	134.8'	135.7'	136.4'
Cunninghamia lanceolata	72.6'	89.0'		

Flat Rock Playhouse

Metasequoia glyptostroboides	63.3'
Cryptomeria japonica	54.7'

I forgot my camera so no pictures are forthcoming.

Brian Beduhn

[Another Carolina hemlock site in Ohio](#)

by **Steve Galehouse** » Mon Feb 18, 2013 11:58 pm

ENTS-

Today surveyed another stand of Carolina hemlock in NE Ohio. This was on a north facing bluff, about a mile west of a stand of Carolina hemlocks reported several years ago, along a north facing bluff of a

small stream. 30-50 trees of various sizes/ages, up to 59.8' x 36" cbh. They look very natural, not planted. Photos to follow tomorrow.

Steve Galehouse

[Re: Another Carolina hemlock site in Ohio](#)

by **Steve Galehouse** » Tue Feb 19, 2013 3:32 pm

ENTS, Ed, Will-

Here are a few pics of the second Carolina hemlock population. The site and exposure is entirely different from the first one. The second population on a small protected bluff along Salt Run, a minor creek; no sandstone cliffs present as with the other site.



The next shows a comparison of two trees, taken from the same vantage point in 1972 and yesterday, a 41 year time span. Judging from the growth rate displayed these photos, is it reasonable to think the trees in the B&W photo could have achieved their height in a maximum of 39 years(1933 was the earliest the CCC was operating)?



And a comparison of aerial photos from 1936 and recently---the magenta dot is in the same spot in both, the cluster of trees to the left of the dot seems similar in both photos.



Will, they haven't really been overlooked, but there has little academic interest in them. The park they are in is now part of the CVNP. I think it has been assumed that they were planted by the CCC because the notion of a disjunct population was not

considered seriously. I think there are still stands to be found in this area.

Steve Galehouse

[Re: Another Carolina hemlock site in Ohio](#)

by **edfrank** » Tue Feb 19, 2013 4:43 pm

Will, Steve and I have been discussing that issue for at least a couple of years. It doesn't seem unreasonable to me that they are naturally occurring disjunct populations. In the last photo above these seem to me to be the same trees in both photos and they were

well established and spread out across the landscape by 1936. That is not consistent with a CCC origin for the trees, nor escapees from a CCC planting. As Steve pointed out to me the Carolina hemlocks in that color photo are more yellowish in shade than the eastern hemlocks. They also to me look to be more scraggly, as do the cluster and some individual trees in the older black and white photo.



This is a broader view of the Richie Ledges area from 1936 that Steve Galehouse had sent to me. It is the source of the insert in the dual image above.

I really think this is the case of people thinking they know the answer to the tree origin and never bothered to consider the possibility that they are a naturally occurring disjunct population.

Edward Frank

[Re: Another Carolina hemlock site in Ohio](#)

by **Steve Galehouse** » Wed Feb 20, 2013 12:19 am

Ed, ENTS- If Carolina hemlock was used as a reforestation species in the CCC era, I would have expected a number of other parks in Ohio or Midwest or Northeast states to have been planted with the species. I haven't seen any record of any other Carolina hemlock stands outside of the purported native range, which leads me to believe these are disjunct native populations.

Steve

[Re: Exchange Club Park, Hillsborough, NC](#)

by **pdbrandt** » Wed Feb 20, 2013 9:44 am

Here are some interactive spherical panoramas of the park and its beautiful sycamores and tulip poplars.

The pictures were created with the free photosynth app for iPhone.

I hope you enjoy them!

<http://photosynth.net/view/65d91c00-973b-4623-89a8-75fe4ae1fdff>

<http://photosynth.net/view/b75e8c87-3b40-4b07-b995-ce1f171ad3ef>

<http://photosynth.net/view/a7a49227-e008-4eca-a922-78c6059bcff6>

<http://photosynth.net/view/e2cc11f1-c45c-4f48-8721-987ba58234f6>

Patrick Brandt

[NY Bot. Garden Tree Photos](#)

by **Jenny** » Wed Feb 20, 2013 11:18 am

Hoping this will inspire me to get back to tree photography. I've been so captivated by birds that I miss "my" trees very much.

Well....here's a Pine Siskin chowing down on some seeds in a sweet gum seed case as well as the link to the tree photo exhibit at the New York Botanical Garden:

<http://www.nybg.org/exhibitions/2013/lederman.php>

Jenny Dudley



[Re: The Trsteno Planes - largest trees of Europe?](#)

by **KoutaR** » Thu Feb 21, 2013 8:52 am

There is my video of the plane trees here:

<http://www.youtube.com/watch?v=jPPM013khiQ>

Michael can be seen at 0:34-0:50, 1:11-1:14 and 2:21-2:30.

Kouta

360 Panorama app - great way to showcase superlative trees

by **pdbrandt** » Sat Feb 16, 2013 9:56 am

NTS,

There is a cool app available for smart phones and tablets called 360 Panorama (<http://occipital.com/360/app>) that allows you to seamlessly stitch pictures in real time. You just tap the screen and pan your device in any direction. You'll see your panorama being built in realtime as each incoming frame is added to the composite picture. The app costs \$1 and is a great way to share views of large trees or impressive groves. It may also be a way to increase viewership and likes on the NTS Facebook page as the interactive click-and-drag-able composite images are really cool to play around with.

I've only been using the app for a day or two, but I am very excited about the potential. For example, here's a picture of a nice mango tree taken with a "normal" camera.



Mango in Cayey, Puerto Rico

Here is a link to an interactive stitch of the tree from a little closer to the tree: <http://360.io/zjnVmU>

Here is a link to another view from at the base of the tree looking up and around the canopy:

<http://360.io/dhH3A8>

Granted, the tree is not super-impressive, but imagine being able to pan around on the Middleton Oak or the Sag Branch Tulip Poplar, or one of Larry's live Oaks. Crazy tree lovers or just curious folks who appreciate nature would have a lot of fun interacting with the tree virtually. Since you can literally pan and stitch in 360 degrees, I think it would be awesome to create a 360 degree view from within the canopy of a giant tulip poplar showing the crown, the view out of the crown, and the forest floor far below.

Here are a couple more experimental panoramas:

Horizontal, full circle panorama of the campus of La Universidad de Puerto Rico Recinto Cayey:

<http://360.io/YbUWu9>

Ceiba tree: <http://360.io/29v8Rg>

Full view panorama in a small grove of trees along a stream: <http://360.io/BUm8MM>

PS. Ed, it would be cool to be able to embed the click-and-drag-able interactive panoramas directly into a NTS BBS post. Could that be done using this HTML code? `<script src="http://occipital.com/360/embed.js?pano=zjnVmU&width=640&height=480"></script>`

Last edited by pdbrandt on Sat Feb 16, 2013 10:15 am, edited 2 times in total.

Patrick Brandt

Re: 360 Panorama app - great way to showcase superlative tree

by [pdbrandt](#) » Sat Feb 16, 2013 10:11 am

Unfortunately, when I open the interactive panoramas on my desktop computer it only allows me to pan left and right not up and down. When I open the link on my ipad, the site recognizes that the ipad has a gyroscope and enables me to pan in any direction using the full 360 degree view by moving the screen around in front of me - kind of like a virtual (neck-bending) tour of the tree. That means that a panorama with significant vertical motion will end up distorted in the canopy if you are looking on a desktop/laptop computer. Try it on your gyroscope-enabled smart phone or tablet for the full experience.

I'll try to find out if there is way to enable vertical panning from Occipital help page. If not, I'll send them an email.

Patrick Brandt

Re: 360 Panorama app - great way to showcase superlative tree

by **Joe** » Sat Feb 16, 2013 10:35 am

another way to showcase great trees- something none of us could afford to do- would be if the Imax people would do a video on the greatest trees of the world

I recently bought my first hi def TV and I'm addicted to watching it- especially Imax and other great nature videos produced with top of the line cameras

After watching Avatar, which I had to watch first on my new TV (and which was almost as good as seeing it in 3D at a theatre, to my surprise), I saw an Imax video "Under the Sea" which was just stupendous- the camera they used weighs 1,300 pounds and has a lens over a foot wide- specially made for Imax- the

quality of the video is so good, as the divers pushed it along- you could see fantastic detail of the sea bottom, fish, and other animals- it was SO clear, it looked like there was no water, which normally would blur the image somewhat

I then watched an older Imax video on the Amazon, not quite as clear, but almost. Then I saw an Imax on the Hubble telescope- they didn't use such a large camera for this project because the use of such a camera in space by an astronaut would be too cumbersome, but whatever he used was still incredible- he filmed a crew fixing the Hubble after they found out its lens was defective- you really feel like you're up there floating around, watching that work, while looking down at the Earth in mind blowing crystal clear detail like I've never seen before.

I'm not aware that Imax or any other professional outfit has gone out to record forests specifically- but they should, especially the great forests with big and old trees using state of the art cameras. Though I'm sure watching such a video in an Imax theatre is the best- watching on a hi def TV is pretty good too!

I'm so excited about the possibilities, I'm going to see what I can do with my amateur hi def camcorder.
Joe

PS: I've been reading about the next generation of TV called "4X" which will have 4 times the detail of hi def--- oh, I can't wait!

Joe Zorzin

Re: 360 Panorama app - great way to showcase superlative tree

by [pdbrandt](#) » Sat Feb 16, 2013 10:47 am

pitsandmounds wrote: The gyroscope functionality is super cool. I'm already thinking of the possibilities, I think that in some situations this can get to the essence of a place better than photos and video. Thanks! --Matt

I totally agree, Matt. The gyroscope functionality essential transports you to the tree or grove virtually, including feeling the neck strain! Even better that Imax, right!? Although I agree with Joe, that it would be awesome if an Imax crew videoed an ascent into a coast redwood (assuming they can do it with minimal impact, of course).

I don't see any way at present to pan vertically from a laptop/desktop computer, but I sent the following email to the developers and will let you know when they respond.

Hi 360 panorama!

I love the iPad app and have been using it to take panoramic views of tall trees. These panoramas are mostly vertical and not horizontal. In other words they are neck-bending panoramas, not stand and spin panoramas. The panoramas are re-created well when I view them in gyroscope-assisted mode on the iPad, but when I view them on my laptop on the web, I can only pan left and right, not up and down. That results in a distorted view of the canopy (highest part of the tree). Is there any way to enable 360-degree panning from a laptop/desktop computer? If not yet, are you guys working on that functionality?

Here's an example of a tree that looks great in gyroscope-assisted viewing on the iPad, but is distorted on the laptop view. <http://360.io/29v8Rg>

Thanks and keep up the great work!

Patrick
<http://occipital.com/user/cbd4-752475/patrick-brandt>

Re: 360 Panorama app - great way to showcase superlative tre

by **Will Blozan** » Sat Feb 16, 2013 9:40 pm

I am fairly certain that IMAX has recorded the climbs of Steve Sillett and crew.

Adventures in Wild California, IMAX by MacGillivray-Freeman Films, 1999.

Will Blozan

Re: 360 Panorama app - great way to showcase superlative tre

by **pitsandmounds** » Sat Feb 16, 2013 10:21 pm

Patrick, I was browsing around and it looks like Microsoft's Photosynth app has the ability to pan horizontally and vertically on a desktop/laptop. I'll give it a test run in the field tomorrow.

Here's an example:

<http://photosynth.net/view.aspx?cid=5b6056e8-1291-49fb-a0c9-b6c44c0ec624>

- Matt

Re: 360 Panorama app - great way to showcase superlative tre

by **pdbbrandt** » Sun Feb 17, 2013 10:04 pm

Nice! And photosynth has a free iphone app. Check out this walk around panorama of the General Sherman tree. Very cool possibilities with this kind of app!

<http://photosynth.net/view.aspx?cid=5776e9de-d509-4125-b038-1ac160011ad8>

Patrick Brandt

Re: 360 Panorama app - great way to showcase superlative tre

by **pdbrandt** » Wed Feb 20, 2013 9:56 am

Matt (pitsandmounds) added a nice photosynth in one of his [recent posts](#). Here are a few examples I created this morning to show what is possible at least in an open area of tall trees. I'll try to create a photosynth of a huge woods tree soon to see how that comes out.

<http://photosynth.net/view/65d91c00-973b-4623-89a8-75fe4ae1fdff>

<http://photosynth.net/view/b75e8c87-3b40-4b07-b995-ce1f171ad3ef>

<http://photosynth.net/view/a7a49227-e008-4eca-a922-78c6059bcff6>

<http://photosynth.net/view/e2cc11f1-c45c-4f48-8721-987ba58234f6>

(These photosynths were also shared [in this recent post of mine](#).)

Patrick Brandt

Re: 360 Panorama app - great way to showcase superlative tre

by **pdbrandt** » Thu Feb 21, 2013 10:10 am

Here are a few photosynths of a 117 foot woods-grown tulip poplar. Notice the daffodils in bloom at the base. There is ample evidence all around this area that the site was once an old homestead. The tall white thing that appears in most of the photosynths is a cell phone tower at the top of the hill. When I first "discovered" this tree almost exactly 1 year ago, it was absolutely covered in English ivy and grape vines 2/3rds of the way into the crown.



Tulip Poplar covered in vines and ivy. Picture taken 2/2012

I've spent hours climbing and clearing away the vines so this tree has a special place in my heart. The growth of some of the lower limbs was severely influenced by the weight of the vines as evidenced by their undulating character and steeply upturned termini.

It is a little more difficult to create unfragmented images in the woods compared to capturing from further away as in the post above, but all-in-all I was very happy with how these came out. I could never have gotten a single picture of the whole tree with how close I was to the base. These synths are composed of 12 pictures on average.

Synth starting from daffodil level looking up into the crown.

<http://photosynth.net/view/0b240048-879f-4f2c-8283-bfc7f7bba114>

View from upslope

<http://photosynth.net/view/0ae095dd-bd33-48f7-b2b2-69499cb629fd>

View from downslope

<http://photosynth.net/view/82661a09-ad49-4938-9467-a9e115eaffaa>

Last one...

<http://photosynth.net/view/4bc61932-5ef8-4a18-8c23-d5f24cbffc20>

Patrick

Re: 360 Panorama app - great way to showcase superlative tree

by **edfrank** » Thu Feb 21, 2013 11:08 am



By [Patrick Brandt](#)

Patrick, I can embed individual scripts within the posts, but cannot make html embedding available to everyone because of the potential for the BBS to be trashed by a hacker. I will see if there is an BBCode I can use to make the option available to everyone.

Edward Frank

"Global Warming's Terrifying New Math"

by **Joe** » Sun Jul 22, 2012 6:45 am

<http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719?print=true>

Three simple numbers that add up to global catastrophe - and that make clear who the real enemy is by: Bill McKibben

"Science of Dendrology" Seminar in Maine

by **Jenny** » Fri Feb 22, 2013 10:53 am

This looks so great! It's at the the Eagle Hill Institute in Maine this August. The full title is "Trees and Shrubs of Northeastern North America; The Science of Dendrology" taught by John Kartesz.

Here is the link to the PDF. I hope I can afford to go and have the time off. Maybe they have scholarships.

Although, I'll bet all of you could teach me the same things in a much more personal and less expensive way! Maybe I'll bug some of you about it. Look at the flyer and see what you think.

<http://www.eaglehill.us/programs/nhs/se ... artesz.pdf>

Jenny

PIx: Male Cardinal not on a tree at all!

Female Cardinal on American (yes?) Holly



[Nanjiabawa Virgin Forest, Tibet](#)

by **KoutaR** » Fri Feb 22, 2013 8:56 am

NTS, There is a nice documentary on "Nanjiabawa Virgin Forest" in youtube. The first part is here:
<http://www.youtube.com/watch?v=K0pQbfVGuvq>

It is about a spruce forest (though much of the documentary shows animals on open meadows). The spruce species in question is likely *Picea smithiana*. According to the film, the biggest of them are 70 m (=230 ft) tall and 2 m thick. The forest is said to be the densest spruce forest in the world with 3000 m³/ha of timber. Indeed, if I use the medium density of Norway spruce (*Picea abies*) the stem biomass would be 1368 t/ha. It would be in the sixth position (and well before Sitka spruce forest) in my table of the most biomass-dense forest types in the world:

viewtopic.php?f=144&t=4966

There is a document on the Internet (it appears to be a book text) according to which there is an old height record 250 ft = 76 m for *Picea smithiana*:

<http://djvued.libs.uga.edu/text/6tgbitxt.txt>

The record may be exaggerated but I am fairly sure that somewhere in the Himalayas and adjacent areas there are taller forests than in Europe (perhaps without Caucasus) and eastern NA.

The location of the Mount Nanjiabawa can be seen here:

<http://www.mindat.org/maps.php?id=235214>

Sahni's book "The Book of Indian Trees" gives 250 ft = 76 m as the max. height for deodar cedar (*Cedrus deodara*), too. See also this old painting of deodar cedar forest:

<http://collections.vam.ac.uk/item/O7625...frederick/>

I am dreaming of a measuring trip to the Himalayas... Tibet is difficult as a special permission is needed for travelling there.

Check also other documentaries in the Forest China serie!

Kouta

<http://baumzaehlen.de>

[Taiwan](#)

by **dbhguru** » Fri Feb 22, 2013 9:32 am

Kouta, I salute your explorer spirit. One location that is seldom mentioned when talking about great forests of the world is the island of Taiwan. There are incredible forests on that island including trees 15 feet and more in diameter. It is my understanding that Steve Sillett and Bob Van Pelt are planing a trip there. Will has been invited to go with them. I was stationed on the island as a home base for two years when in the Air Force and can personally attest to the

abundance of magnificent forests. There has been a growing tree awareness in Taiwan since my time there. I'm seeing photos on the Internet that call back memories of Ali Shan and the Buddha Tree. It was a *Chamaesyparis formosensis*. Here is a blurb from Wikipedia on it.

It is a slow-growing, but long-lived and ultimately large to very large coniferous tree growing to 55–60 m tall with a trunk up to 7 m in diameter. The bark is red-brown, vertically fissured and with a stringy texture. The foliage is arranged in flat sprays; adult leaves are scale-like, 1–3 mm long, with pointed tips, green both above and below with only an inconspicuous stomatal band at the base of each scale-leaf; they are arranged in opposite decussate pairs on the shoots. The juvenile leaves, found on young seedlings, are needle-like, 4–8 mm long, soft and glaucous bluish-green. The cones are ovoid-oblong, 6–12 mm long and 4–8 mm diameter, with 8–16 scales arranged in opposite pairs, maturing in autumn about 7–8 months after pollination.[2]

I saw a live one in a park one that was pushing 18 feet in diameter. Seven meters is probably too much for any standing trees, today, but there is evidence to support a few in that range in the past.

I have a CD loaded with Taiwan images, courtesy of Will who scanned them for me. Can't locate the CD. If I find it, there will be postings aplenty. Taiwan has spectacular scenery with peaks up to just under 4,000 meters. Yu Shan is the highest. I climbed it in 1970.

Robert T. Leverett

entry equipment at an affordable price. New clinometers just seem to be going up in price and are now ~\$140 US. Ouch!

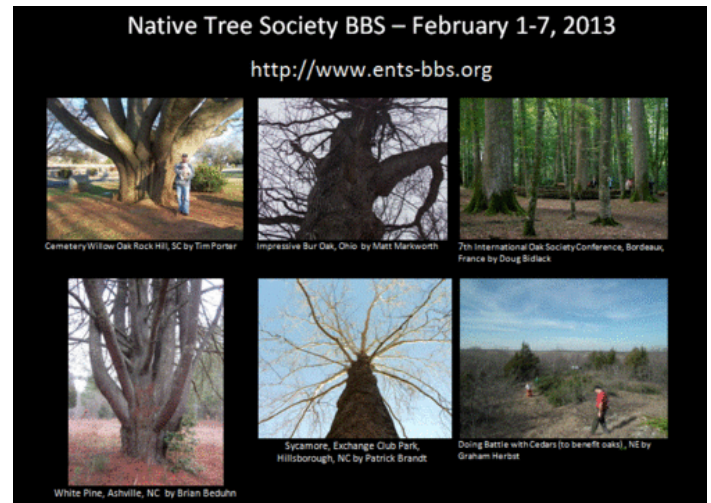
My other one cracked so I will send it back to be refurbished- which is still only about 1/2 the cost of new. So even if you can get a "shell" for cheap and have it refurbished you are still ahead price-wise of a new one!

Will Blozan

[Re: We need to do things like this!](#)

by **edfrank** » Wed Feb 13, 2013 7:41 pm

The first week of February 2013



[Friendly reminder to budding measurers](#)

by **Will Blozan** » Fri Feb 22, 2013 5:47 pm

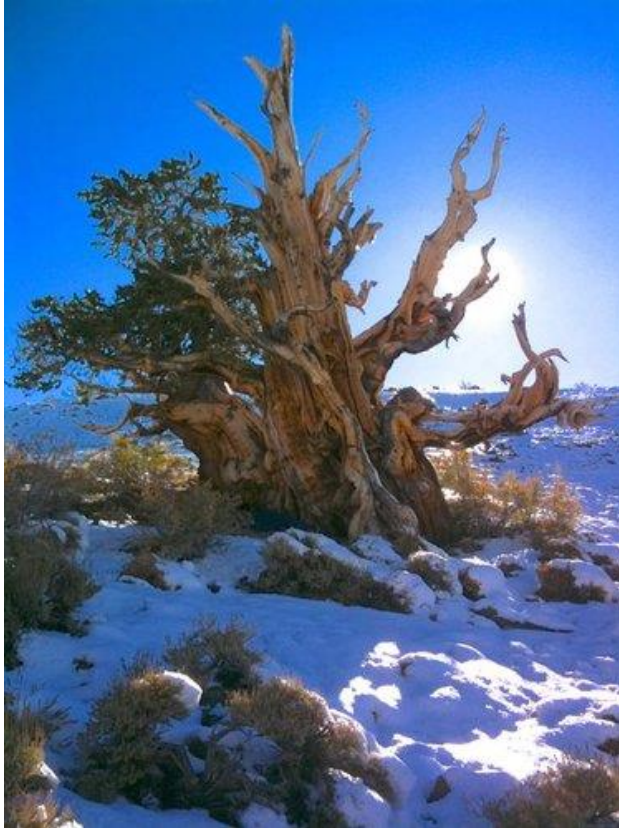
NTS, I just scored a mint condition Suunto clinometer off EBay for \$51.60 delivered! I am not sure if it has ever been used (!). Thus I urge you all to keep searching and monitoring sources like EBay for

[Re: We need to do things like this!](#)

by **Don** » Thu Feb 14, 2013 1:21 am

Ed- I'd be happy to offer up a WNTS image perhaps suitable for your brochure?

I'm sending it in Medium size and .jpg quality for viewing, but could send it in most any file size/resolution that you like.



Bristlecone National Forest (Tagged "0")

Don Bertolette

[Re: We need to do things like this!](#)

by **edfrank** » Thu Feb 14, 2013 2:03 pm

Don,

Thanks, I will make use of it. I am not sure how yet.

It appears that the 6 photo or so composites are liked and more frequently shared on Facebook. Also images with a good quote overlaid onto the image. I am not sure what we are gaining in membership - a few people have joined as result of interaction on Facebook, but we are reaching more people. And we are reaching people involved in many of the other tree interest groups there.

Edward Frank

[Re: We need to do things like this!](#)

by **pitsandmounds** » Thu Feb 14, 2013 10:12 pm

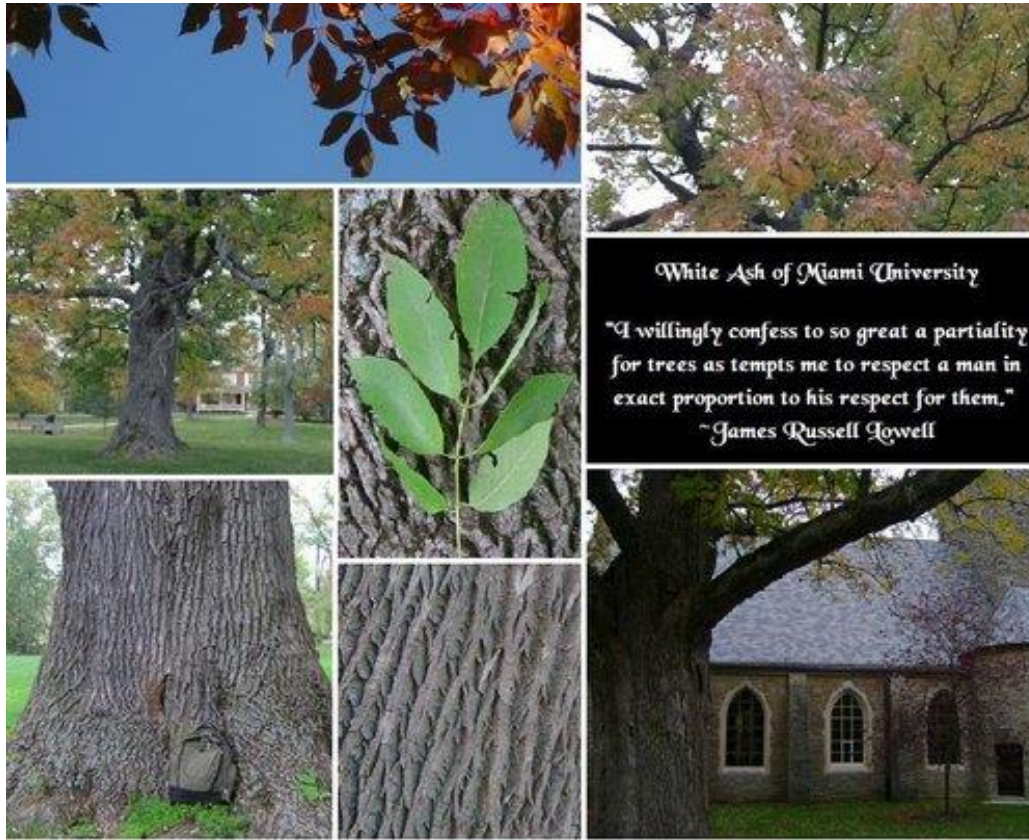
Here are some photos I took last year at Miami University, Ohio. This was done in Microsoft Paint . .



- Matt

[Re: We need to do things like this!](#)

by pitsandmounds » Fri Feb 15, 2013 8:21 pm



-Matt

[Re: We need to do things like this!](#)

by edfrank » Sat Feb 23, 2013 11:43 am

Matt, FYI, your Miami Oaks photo has been the 8th most popular posts this year with 807 views on Facebook. I will post your white ash collage now.

Edward Frank

More photos from Miami, this time a tribute to the White Ash . . .

[Serious industrial hemp movement gathering momentum](#)

by PAwildernessadvocate » Thu Feb 14, 2013 11:49 pm

To me it seems like this could be good for trees and forests if industrial hemp becomes legal again. It is such a versatile material it seems likely it could help offset some use of wood in a variety of products such as paper, fiberboard, bio-fuel, and others. And unlike trees that take decades to grow and replace, one can grow a whole new crop of hemp every year!

Also, I'm not exactly a student of the tobacco industry but it would seem like in our fight to curtail smoking in recent decades, giving current/former tobacco farmers in states like Kentucky a new profitable crop to grow would be welcome.

http://www.paul.senate.gov/?p=press_release&id=707

Sens. McConnell and Paul Co-sponsor Industrial Hemp Legislation

<http://www.wyden.senate.gov/news/press-...rial-hemp->

Senators Seek to Lift Restrictions on Industrial Hemp

<http://massie.house.gov/press-release/u...-hemp-bill>

U.S. Representative Massie Introduces Industrial Hemp Bill

<http://richmondregister.com/localnews/x...-hemp-bill>

[KY State] Senate passes industrial hemp bill

<http://en.wikipedia.org/wiki/Hemp#Uses>

Uses

That's crazy to me that such a useful crop was ever made illegal to begin with. The gall & overreach of the federal government sometimes! Geez!

P.S. I do believe it's important not to conflate legitimate efforts to allow farmers to grow industrial hemp again with efforts to legalize psychoactive marijuana for pot-smokers like Hollyweird actor Seth Rogan and those guys to get high with.

Kirk Johnson

Getting serious about big tree lists

by **dbhguru** » Sat Feb 16, 2013 4:31 pm

NTS, The chapter I'm writing in Joan Maloof's new Island Press Book is refocusing me on big tree lists and the need for us to provide them to set the record straight. It is a service that begs to be provided. Users of the lists (outside of us) would include authors of articles, books, websites, etc. If the lists grew sufficiently in prominence as absolutely trustworthy sources of information, our places in Valhalla would be assured. Would like to ramble on, but gotta get back to work.

Robert T. Leverett

Re: Getting serious about big tree lists

by **Will Blozan** » Sat Feb 16, 2013 7:23 pm

Bob,

I whole-heartedly agree. The best information we have to offer on the subject of tree maxima around the globe is scattered about in various posts, hard-drives and field notebooks. A number of NTS members have done great work compiling state and eastern lists (you know who you are-thanks!)- but aside from that a great deal of detective work must be done- and then who knows if it is the most current information. Jess Riddle's excellent MAXLIST is in need of updating- a task that shouldn't be done by one person by gleaning post after post. A central repository of not just a max list for all species we have measured worldwide but perhaps others more specific to country, state, province, region, park etc. The key is not for it to get so out of control and a huge task to maintain AND be refereed for accuracy. This of course could be an easy spin-off of the NTS tree database but not I am not sure how realistic it is at this time.

So how do we start? Perhaps we need to somehow

start with Jess's maxlist and add volume when known. The Euro-NTS would add their own and maybe tap into Brad's work in New Zealand. The list could be accessed freely and added to and then passed to the next person??

Just for kicks I will explore what I would be interested in for a single species, *Liriodendron tulipifera*. I would want to know the tallest, biggest and most voluminous as a start. I am also curious what the species does in Europe or New Zealand. Also, as a tree hunter in the US I would want to look up a state I was going to visit, say Florida, and look at the list and see what would be significant for the state. If I found a tree that was bigger (or a new occurrence for a species not on a state list) I would like to be able to add it in a reasonable amount of time and effort to the "central list". Also inherent in this process I would like the all-time maxima displayed so I would know how the tree ranked. This leads into a Tree Dimension Index possibility... See what I mean about it getting out of hand quickly?

Actually, the TDI system could get a huge jumpstart with such a compendium of accurate information. It would add another dimension to site to site comparisons besides the Rucker Index.

Seems overwhelming to me but nonetheless see this as a very important step towards fulfilling one of our mission statements.

Will Blozan

[Re: Getting serious about big tree lists](#)

by **edfrank** » Sun Feb 17, 2013 12:46 am

Will and Bob,

I was thinking about the Rucker Indexes today during my presentation. They definitely are something that should be regularly updated and available for download from the website and BBS. I can create a section on the BBS where the bigger lists can be

accessed directly from the index page of the BBS, and a section on the website that also links to them. If you want a state by state listing for big trees in addition to the master list these can be pinned to the top (or in the second row) of each state's individual listing.

Bob mentioned previously creating a sort of guidebook for each state highlighting the important tree sites, sort of an expanded listing like Mary Davis did. Until those are written in detail, a basic listing of some of the significant sites could be made with a link to one or more of the trip reports that give a good account of the site.

Ed

[Re: Getting serious about big tree lists](#)

by **KoutaR** » Sun Feb 17, 2013 7:33 am

Will, Karlheinz measured a 40.5 m (133 ft) tall tulip tree in Germany just a few days ago:

<http://www.monumentaltrees.com/en/deu/n...laneuborn/>

This is to our knowledge the tallest tulip tree in Europe that has been laser-measured with certainty. A 45-meter (148-ft) tulip tree has been reported in Spain but the measuring method is not known:

<http://www.monumentaltrees.com/en/esp/c...vesa/4825/>

Kouta

[Re: Getting serious about big tree lists](#)

by **Jeroen Philippona** » Sun Feb 17, 2013 7:40 am

Bob, Will, Ed, NTS, With Kouta I mailed a bit about this subject. I asked myself why NTS doesn't have an automatic database where all reliable measurements done by NTS members are added.

A few years ago Tim Bekaert from Belgium started with the website Monumental Trees

(<http://www.monumentaltrees.com>), we call it MT).

He created an interactive and automatic database where trees and measurements can be added. Kouta and I among several others are involved by further development of the site and the database.

See <http://www.monumentaltrees.com/en/records/>

When heightmeasurements are added, you can choose from several measurement technics. For the height database of all species:

<http://www.monumentaltrees.com/en/heightrecords/>

as well as for continents:

<http://www.monumentaltrees.com/en/heightrecords/europe/>

or countries, like the UK:

<http://www.monumentaltrees.com/en/heightrecords/gbr/>

France:

<http://www.monumentaltrees.com/en/heightrecords/fr/>

Germany:

<http://www.monumentaltrees.com/en/heightrecords/de/>

Belgium:

<http://www.monumentaltrees.com/en/heightrecords/bel/>

Netherlands:

<http://www.monumentaltrees.com/en/heightrecords/nld/>

Poland:

<http://www.monumentaltrees.com/en/heightrecords/pol/>

Slovakia:

<http://www.monumentaltrees.com/en/heightrecords/svk/> (all measured by one man! He did not measure a lot in forests till now)

or regions or separate species, for example

<http://www.monumentaltrees.com/en/world...spruce/hd1>

only sine-method lasermeasurements or climbing with direct tapedrop are accepted as reliable. But, as there is no strict control of the persons who added the input, it is based on trust. But with a group of MT-ers we have some control, we know most of the users

who add heightmeasurements.

There are height estimates added by several users, but these are shown in some of the database like "~40 m".

Also we know which users can be trusted and what kind of equipment they use, just like it is with a group of NTS measurers.

For example there was a height of 62 m given for a *Platanus x hispanica* in Pau, Southern France. We are sure this is a huge mismeasurement. The real record till now is 48.56 m, measured by climbing + tapedrop.

Will wrote he would like to know what are the maximum sizes for *Liriodendron* in Europe. These can be easily seen at MT:

<http://www.monumentaltrees.com/en/world-tuliptree/hd1>

reliable tallest is a tree in Germany of 40.5 m /132.9 ft, recently measured by Karlheinz. There are also two trees in Spain of 45 and 40 m in the database, but we don't know the measurement technique. The ~45 m tree is from a Spanish database of ornamental trees, I have asked the man who added the information about the technique, but till now did not get an answer. .

Biggest girth in the database

<http://www.monumentaltrees.com/en/world-tuliptree/gd1>

is a tree 5 km from my house with cbh of 676 cm and 32 m height. In England there are a few bigger Tulip Trees to over 30 feet, but most of them have short boles.

I don't know what are the largest volumes but they will not be concurrents for the Great Smokey Mountains trees.

The lists can automatic be made for locations at many levels, so could be used also to make Rucker Indexes in an automatic way.

Jeroen Philippona

[Re: Getting serious about big tree lists](#)

by **Will Blozan** » Sun Feb 17, 2013 11:38 am

Jereon, Thank you for sending such detailed information. I did join MT last week. It is a great interface- one that would work well for NTS as well. I am not currently sure about the status of the database Mitch Galehouse has been working on, but perhaps a happy median can be found. Also, the New Zealand database is similarly interactive and the framework of it was offered to NTS a while back.

Will Blozan

[Re: Getting serious about big tree lists](#)

by **fooman** » Sun Feb 17, 2013 1:34 pm

The New Zealand Notable Trees Trust website is at:

<http://www.notabletrees.org.nz>

The front end of the actual database is at:

<http://register.notabletrees.org.nz>

Cheers,
Matt

[Re: Getting serious about big tree lists](#)

by **KoutaR** » Sun Feb 17, 2013 2:53 pm

Thanks, Matt! The format of the database seems to be very good. The only downside I noticed during my short visit is that all the measuring methods (laser, clinometer, estimate etc.) are accepted in the height

record lists. I also compared the results with the height record lists you compiled (viewtopic.php?f=50&t=3710#p15294) and many important trees appear to be missing from the notabletrees.org.nz.

Btw, I find treesdb.org a very good database, too. The trees are just missing.

Kouta

[Re: Getting serious about big tree lists](#)

by **fooman** » Sun Feb 17, 2013 6:35 pm

Hi Kouta,

As far as I am aware, the NZNTT register was set up with a considerable amount of legacy information from written records. The requirement for various height measurement methods is a reflection of that.

The register itself is not just for trees with superlative dimensions, but also significant trees for cultural reasons.

At the moment there are approximately 1000 trees on the register, with around 50% being verified (i.e. legacy information confirmed from contemporary reports, or new trees entered into the register). There are a lot more trees in NZ deserving of inclusion, but tracking them down takes time and effort! A lot of the information comes from the records of S.W. "Bob" Burstall - he recorded the locations and dimensions of approximately 5000 trees from the 1960's to the early 80's as part of his work with the (now defunct) NZ Forest Service. 8 or 9 unpublished mensuration reports by Burstall were written, covering NZ trees by geographic location. Few copies of these reports exist, and are not readily available to the public. I have seen a copy of one in a local library. The reports were summarised in a more accessible form in the publication "Great Trees of New Zealand" in 1984. The lists were reviewed in

the early 2000's as part of a forestry course at a polytechnic. That work has been summarised in the following presentation:

http://www.trees.org.uk/aa/documents/amenitydocs/aa_amenityconf_tue5_Rob_Graham_2011.pdf

Even the above presentation has inaccurate measurements. The measurements taken by Bob van Pelt in a couple of jaunts to NZ are available to the NZNTT, but following these up will be a series of expeditions! The other thing to note, is that I am sure you could go to anywhere in Whirinaki, or Pureora forests and with a few days hiking, be able to completely redfine top 10s for the largest podocarp species in NZ - that is probably what BvP did!

Just to give you an idea, the Gymnosperm Database has the following information for the tallest Kahikatea (NZ's tallest native tree):

The tallest known native tree in New Zealand is a kahikatea in the Pirongia Forest Reserve, 62.7 m tall when measured in 1996/7 by a Department of Conservation ranger (emails from Sonia Frimmel, 2012.05.22; and Bruce Postill, DoC, 2012.06.18). There are unconfirmed reports floating about the Web (as of mid-2012) of a 66 or 67 m tree, also in Pirongia. Older tall tree reports include one 229.3 cm dbh and 56.4 m tall, on private land near Matirangi Forest in the Taranaki region (R. Van Pelt email 2009.04.14). Another very tall tree, 220 cm dbh and 55.1 m tall, was measured in the Pirongia Forest Reserve (R. Van Pelt email 2003.01.27).

The three separate trees at Pirongia (62.7m, 66-67 m, and 55.1 m) are, in my opinion, likely to be the same tree! There is a specific track (about 8 hours hiking return) to a particular tree in Pirongia Forest, and it is said to be NZ's tallest native tree. Of these measurements, I would trust BvP's the most, even if it means there is a taller Kahikatea somewhere else.

There is a video on youtube of a climb on the tree at <http://www.climbeverything.co.nz/category/blog/> (no tapedrop however). Verifying the tree for entry would be a bit of an expedition for me, but I will do it some day (maybe Easter: I will be ~3 hours drive away from the forest, so it will be a long day to do

so). That is for just one tree, and I am only a semi-enthusiastic amateur, with some restrictions on travel (i.e. family and work commitments).

The height records I compiled do need updating. I have some updated measurements of trees, plus some more information on heights of particular species from other reference books.

Cheers,
Matt

[Re: Getting serious about big tree lists](#)

by **KoutaR** » Mon Feb 18, 2013 4:20 am

Thanks, Matt, for the explanation!

"Semi-enthusiastic amateur" is an interesting description. I am probably hyper-enthusiastic amateur, also with travel restrictions.

Kouta

[Re: Getting serious about big tree lists](#)

by **JohnnyDJersey** » Mon Feb 18, 2013 9:37 pm

Yes I've been on Monumental Trees for a while now and have listed a few trees on there. The amount of trees from my state (New Jersey) and Pennsylvania were very few. I may even have listed the majority of the trees that are listed in these states now, also ones I have found and visited in Virginia. Great site but am very interested on some sort of list on this site as Ed was saying. Once I get my range finder after my CA trip I will begin to get more accurate heights of the trees I've documented in my area.

John D Harvey

[Re: Getting serious about big tree lists](#)

by Don » Sun Feb 24, 2013 4:10 am

This is a good thread and hopefully we'll end up with a solution that works for all of us (a 'tall' order) ! Of incredible value to those trying to draw conclusions on where else big tree candidates might reside, would be to have a column in the database that dealt with GPS coordinates (with common metadata, ie, same coordinate plane/projection, etc.). I recognize that precise locations need protection/security for such a database. The manner in which access is provided should be controlled. That said, having that data, and being able to mesh it with other layers in a GIS-Geographic Information System- (a few come to mind, vegetation communities, geographic contours and elevations, aspect, riparian zones, high rez satellite data, weather and climate trends, LIDAR coverage, MODIS 'phenology' mapping, etc.) would be a wonderful thing. Strategies for protection of areas that have a high likelihood of O-G/Big Trees is one of those things that first comes to mind, and I'm sure others can see other desirable scenarios.

Don Bertollette

very different things in order to lull consumers into buying products with the designation. Therefore I think we need to use a word which is unambiguous when it comes to forests (and other ecosystems). I prefer the word "autopoietic" because although not in widespread use yet, it clearly defines what is meant by "nature" and "natural" without getting caught up in the ambiguity of those overused words. In its most basic sense an Autopoietic Forest is one that is highly adaptive through natural selection, the result of the collective genome interacting with the environment. If a forest is being managed, in any way directed through artificial selection to follow a prescribed trajectory, then it is not autopoietic (ie natural). Whereas an Old Growth forest can arguably be created through silviculture, an Autopoietic Forest by definition cannot. Also, an Autopoietic Forest is an ongoing autogenic process whereas a MAN-aged forest is a product through intent.

Gary, I don't dispute what you say- but, I think there is a vast difference between good and not so good MAN-agement of forest and that on the better side of the spectrum- it can be rather similar to an autopoietic forest. I try to MANage forests with a very light touch- though it might not seem that way when you see my upcoming video on a biomass harvest- the machines doing the work are monsters- but the result is not a regimented tree farm.

Joe Zorzin

[Re: What qualifies as an Autopoietic Forest](#)

by Joe » Thu Feb 09, 2012 5:56 am

Gary Beluzo wrote:Joe,

The word "Nature" and "Natural" by definition does not include humans. After doing an exhaustive literature search on "nature" and "natural" I realize that the early philosophers created the word(s) specifically to distinguish what humans do and make ("artificial", "artifact" and "art") from all else ("nature"). However over the last 20-30 years people have used the words "nature" and "natural" to mean

[Re: What qualifies as an Autopoietic Forest](#)

by Don » Sun Feb 12, 2012 1:19 am

Gary-

First, I want to thank you for presenting your slide, as heretofore, what an autopoietic forest was, was an enigma to me! Perhaps it still is to an extent...

Second, I agree with Joe, you've thrown in some button-pushing, shows-your-bias phrasing in the 3rd and 4th [and 5th) rows under 'Artificial Forest'. But

Re: What is Urban Old Growth?

by **edfrank** » Sun Feb 24, 2013 12:26 pm

Don, This came out three years ago. The topic came up on another website, and I thought maybe I should repost it here again. Since its first introduction we have gained new people that likely have not read it, and longer term members might have some new thoughts on the subject. This article appeared in the Bulletin of the Eastern Native Tree Society, Volume 4, Issue 4, Fall 2009, p. 3-5.

[http://www.nativetreesociety.org/bullet ...
v04_04.pdf](http://www.nativetreesociety.org/bullet_v04_04.pdf)

Re: What is Urban Old Growth?

by **Don** » Sun Feb 24, 2013 4:26 pm

Ed- I don't know either where the bottom limits are on acreage for 'stands of significance', but if they're to have any kind of permanence, it will be the vegetative (and yes, human) community that it's in, that succors it.

Another consideration where the climate or environment provides cyclic disturbance regimes (for example, in New England, wind events; in the Southwest US, wildfire) it will be the frequency and/or intensity that drives ecosystem response, presence or absence of 'old-growth' characteristics in a stand...: > }

-Don

Re: What is Urban Old Growth?

by **edfrank** » Sun Feb 24, 2013 5:19 pm

Don, I agree with you. At the lower limits the "Urban Old Growth" is not self-sustaining without human community intervention and their persistence is dependent on the period of the disturbance regimes - many of which can also be affected by the actions of the human community.

Edward Frank

Re: What is Urban Old Growth?

by **Joe** » Sun Feb 24, 2013 7:04 pm

edfrank wrote: People who are in favor of preservation may use a broader definition that would restrict the cutting of the forest in order to preserve it for themselves and future generations.

Of course "cutting" could be destructive or very constructive if done right- good forest mgt. is a lot closer to preservation than any sort of land development- which is why, I suggest that those who push for more preservation and those who want more and better mgt. ought to be allies, though they seldom are. The foresters tend to despise those who want to "lock up the land" and the preservationists tend to despise "logging" as if it was all bad. It's all so unfortunate. There's enough land to do lots of both- especially if we tame the developers, who ought to be redeveloping land abused in the past.

Joe Zorzin