Mission Statement:

The Native Tree Society (NTS) is a cyberspace interest group devoted to the documentation and celebration of trees and forests of the eastern North America and around the world, through art, poetry, music, mythology, science, medicine, wood crafts, and collecting research data for a variety of purposes. This is a discussion forum for people who view trees and forests not just as a crop to be harvested, but also as something of value in their own right. Membership in the Native Tree Society and its regional chapters is free and open to anyone with an interest in trees living anywhere in the world.

Current Officers:

President—Will Blozan
Vice President—Lee Frelich
Executive Director—Robert T. Leverett
Webmaster—Edward Frank

Editorial Board, eNTS: The Magazine of the Native Tree Society:

Edward Frank, Editor-in-Chief
Robert T. Leverett, Associate Editor
Will Blozan, Associate Editor
Don C. Bragg, Associate Editor

Membership and Website Submissions:

Official membership in the NTS is FREE. Simply sign up for membership in our bulletins board at http://www.ents-bbs.org. Submissions to the website or magazine in terms of information, art, etc. should be made directly to Ed Frank at: edfrank@nativetreesociety.org. The eNTS: the Magazine of the Native Tree Society is provided as a free download in Adobe® PDF format through the NTS website and the NTS BBS. The editorial staff of eNTS: the Magazine of Native Tree Society are solely responsible for its content.
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I want to remind the readers of this magazine that the articles presented here are only a part, usually just the beginning, of the discussions being held on our BBS at http://www.ents-bbs.org. The full discussion can be read by clicking on the link embedded in the title of each individual article. - Edward Frank

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Re: We need to do things like this!

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and/or the associated author/photographer directly for permission.
Don Leopold's Dendrology Playlist

by pitsandmounds » Sun Feb 03, 2013 11:40 am

Jess Riddle wrote: My favorite book for bark photographs is Trees of the Central Hardwood Forest of North America by Leopold and others.

I've watched a lot of Don Leopold's videos about tree species. Here is his Dendrology playlist, there are 135 separate videos each focusing on one species...

Miranda Gibson in Eucalyptus tree for over a year

by pitsandmounds » Sat Feb 02, 2013 8:13 am

Conservationist Miranda Gibson ascended "The Observer Tree" on Dec 14th, 2011 and vows to remain there, perched on a platform 60M above the ground, until the forest is protected. The tree is an old-growth Eucalyptus in the heart of Tasmania’s southern forests.

Media Release, Tree sitter welcomes World Heritage nomination, Jan 31st 2013, observertree.org:

Conservationist Miranda Gibson today welcomes the announcement by Federal Minister Tony Burke that a nomination will be made to the World Heritage Committee to include forests such as the Tyenna where Ms Gibson is located in the Observer Tree. Ms Gibson now awaits confirmation that logging will cease in World Heritage nominated areas, in order to make a decision on whether to continue Australia’s longest running tree-sit.

“After decades of community campaigning drawing attention to the values of these world class forests, we have now achieved a significant milestone for the protection of Tasmania’s forests. Today’s announcement comes after many years of Still Wild Still Threatened and other grassroots community groups defending these forests, such as the Upper Florentine Valley, that are now on their way to protection” said Miranda Gibson.

“The international community has been calling for the protection of these globally significant forests for a long time. With a recent example of over 300 actions taking place across the globe in support of the Observer Tree last month. Today’s announcement will most certainly be welcome around the world” said Ms Gibson.

“This extension to the World Heritage boundary has been recommended by the World Heritage Committee itself several years ago, and Burke had a responsibility as Environment Minister to protect these forests, despite the stalled process of the Forest
Agreement.” said Ms Gibson.

“The World Heritage nomination for these areas should signal their protection. Burke has now acknowledged their values and must honour this nomination by protecting those values. This could potentially be a moment at which I could get down from the tree and celebrate, if these forests now safe from logging. However, I need to be certain that this significant international commitment will honoured on the ground, by the immediate withdrawal of logging operations from within the nominated forests” said Ms Gibson.

” It is our expectation that any ongoing logging within the area will cease within the coming days and that obviously no new logging coupes will be started. I will be waiting until we can confirm the cessation of logging before making a decision on getting down from the tree ” said Ms Gibson.

Visit from Miranda's Dad

Miranda's blog: http://observertree.org/

Tassieforests youtube page that is posting videos from the tree:

http://www.youtube.com/user/Tassieforests

News article about World Heritage nomination to extend protection:
http://news.ninemsn.com.au/national/2013/01/31/18/02/tassie-forests-up-for-world-heritage-list

- Matt
**Re: European beech forests**

☑ by **Morris** » Fri Feb 01, 2013 9:35 am

Hello everyone, if you are interested in comparing North American to European climate, you might also like this website. It features a list of tree species native to the US. If you click on "Prediction" a map appears that shows, where in the world the particular species would meet conditions, that are similar to it's native range.

http://www2.biologie.uni-halle.de/bot/ag_chorologie/areale/ARTENKATALO
G.php?sprache=E&arealtyp=631&suche=

Sincerely,
'Morris'

---

**Re: European beech forests**

☑ by **KoutaR** » Sat Feb 02, 2013 6:13 am

Morris, That's an interesting project, but currently it appears to be far too positive. For *Picea sitchensis* for example, over a half of Sweden and almost a half of Finland is marked in bright red. In reality, the species has no chance north of the Baltic Sea coast. On the other hand, if I switch to "global II" modelling the region where the species reaches its greatest height (NW California) is NOT marked in bright red.

Kouta - Native to Finland

---

**Cemetery Willow Oak Rock Hill, SC**

☑ by **Porter** » Fri Feb 01, 2013 9:55 am

I scoured ebay for a few weeks and finally got all the gear needed to do so serious measuring. Not too serious as I decided to go for the low hanging fruit and measure a cemetery willow oak I saw a few months back for my first ENTS method post. The tree is in Laurelwood Cemetery near downtown Rock Hill, SC. Open grown and not very tall, but it has a massive trunk. I took my little forester in training along to help out. Here's the measurements:

- Height 75.5'
- CBH 22' 11"
- Spread 119'
**Re: Cemetery Willow Oak Rock Hill, SC**

- **Re: Cemetery Willow Oak Rock Hill, SC**

  - **by bbeduhn » Fri Feb 01, 2013 10:25 am**

    Porter, That's a whopper! Cemeteries are excellent for learning how to measure. Willow oaks are fairly new to me. Do they normally have such a ridiculous number of large limbs? I found a cemetery willow that was also huge and had a good number of large limbs. It was difficult to tell if it was double trunked. Yours appears to be multitrunked but, like live oak, it may just grow that way single stemmed. Thoughts?

    Brian

- **Re: Cemetery Willow Oak Rock Hill, SC**

  - **by Porter » Fri Feb 01, 2013 12:36 pm**

    Brian, I thought it might be multi-stemmed too when I walked up on it but from some angles it definitely looks like a single-stemmed tree. At this point it's so massive that I can't tell for sure. It does have a bit of a live oak feel to it. The Charlotte/Rock Hill area is a hotbed for large willow oaks. I inspected a tree yesterday in Charlotte with a 72" DBH and height of 119'! Open grown trees do tend to have a spreading form with large limbs. I've marked a few big willow oaks for removal in the 60-75" DBH range thinking for sure they were double or multi-stemmed and found out later that they were single-stemmed, vice-versa too.

    Tim Porter

- **Re: Cemetery Willow Oak Rock Hill, SC**

  - **by Larry Tucei » Fri Feb 01, 2013 6:09 pm**

    Porter, That is one big Willow Oak! It's amazing how open grown Oaks will get so massive. It sure has the characteristics of a Live Oak. Willow Oak is common to Ms, but I see them in the Forest with clear trunks to 20-40' then the crown develops they can get quite large and tall with heights to 120-130'. Thanks for sharing.

    Larry

- **Re: Cemetery Willow Oak Rock Hill, SC**

  - **by pdbrandt » Sat Feb 02, 2013 7:33 pm**

    That is a beautiful willow oak, Porter. It reminds me of a similar willow oak in Efland, NC with a CBH of 18', 8" that is 91.8 feet tall. Here's a picture showing the massive limbs that branch off the huge trunk at 40 feet above the ground.

    Willow oak in Efland, NC


    Patrick Brandt
Re: Cemetery Willow Oak Rock Hill, SC

by Porter » Mon Feb 04, 2013 10:58 am

Larry, It's interesting to compare how a species will grow over varying site conditions. I measured a willow oak last week behind my office on a greenway trail at 119.5' tall with a clear trunk to about 55'. Site is a mix of open/forested but it's obvious this tree has been there a lot longer than it's neighbors. It's bordered by power lines on 3 sides but hasn't been butchered, just repeatedly pruned off the lines with a spread of 65'. The crown has no where to go but up!

Patrick that's a massive branch union on that willow oak. I checked out that post about the Efland oak and I agree those large branch unions are fun spots to hang out in while climbing. On a side note, I followed the thread regarding the rangefinder calibration and read you bought yours in early January off eBay. That's the same time I bought mine, I wonder if we were bidding against each other?!

Tim Porter

Hey everyone!

by th3rd3y3 » Mon Feb 04, 2013 2:39 pm

My name is Graham Herbst and I am the Community Forestry Specialist for Eastern Nebraska with the Nebraska Forest Service. I am based in Omaha but cover the eastern half of the state. Like most of you, I am a huge Quercus fan and enjoy using underutilized species on the tree planting grant projects that we make available each year. I look forward to posting on ENTS from time to time and hearing more from all of you on all things trees!

Re: Doing Battle with Cedars (to benefit oaks) , NE

by th3rd3y3 » Mon Feb 04, 2013 2:58 pm

Part of the ERC problem in this area in particular is the fact that Dwarf Chinkapin Oak is not very aggressive at casting shade. This population is on an elevated limestone bluff which means sharp drainage, poor fertility, etc. Perfect ground for ERC to take over. I cannot speak to why it wasn't a problem in the past. DCO only received it's own species designation because of its rhizomatous growth habit which probably makes it more capable of populating the slopes and hill crests better than Q. muehlenbergii and others that rely on seed dispersal. The squirrels can help, but acorns don't roll uphill! These steep slopes are worthless for cattle/crops so the farmers don't monitor these areas very often. With a national champion Q prinoides discovered the re and our efforts to help them keep ERC at bay have opened the land owners eyes to what they have there.

Beautiful territory!
Hi Folks

☐ by dlrossjr » Mon Feb 04, 2013 3:19 pm

I'm a life long nature person, but as you'll soon notice, no tree expert, despite the requisite 2 courses in dendrology @ WVU back in the mid 1980s! I'm now a middle school science teacher turned computer person, and am trying to get some of my school out to our new nature trail.

I'm based in the Piedmont, in Durham, NC, though I do get further afield now and again. TIA -- I'll be asking for help, 

Dave Ross

Newbie tree ID request

☐ by dlrossjr » Mon Feb 04, 2013 2:57 pm

Newbie tree ID request

I've a tree which seems somewhat common around Durham, NC which I'm trying to identify. The old field guides in my middle school library are just not quite letting me get a handle on it. It looks opposite in branching, so I'm guessing a buckeye of sorts?

I've posted a pic at this website -- its our infant nature trail page.
https://sites.google.com/site/carringtonnaturetrail/photogallery
Thanks,
Dave Ross

Re: Newbie tree ID request

☐ by Will Blozan » Mon Feb 04, 2013 6:54 pm

Dave, Welcome to NTS. I do hope you will eradicate the princess tree. Nasty weed with no place in a nature preserve.

Will Blozan

Re: Newbie tree ID request

☐ by Porter » Tue Feb 05, 2013 8:35 am

Princess tree (Paulownia tomentosa)?

Tim Porter

Re: Newbie tree ID request

☐ by tsharp » Tue Feb 05, 2013 10:56 am

NTS:
There was about a ten year period in the 1970's & 80's when the Japanese discovered that North America had an unexploited supply of Paulownia and they were willing to pay. Southern West Virginia had plenty, especially along railroad right of ways. This was about the same time that the New River Gorge National River came into existence. Locals discovered the value of Paulownia and it was there just for the taking. And take it they did. Unfortunately for some, the National Park Service had acquired quite a bit of land and the Park Service were put in the unfortunate position of prosecuting this timber theft in the federal court for a species they had active program of eradication. I do have to admit they put on quite a flower display. T.Sharp
**Impressive Bur Oak (SW Ohio)**

by *pitsandmounds*  » Sun Feb 03, 2013 6:12 pm

With its deeply furrowed bark, distinctive leaves, fringed acorn caps, and to borrow a term from Bob Leverett, its inherent “Oakness,” the Bur Oak is right up there with my favorite trees.

This behemoth resides alongside an old stagecoach route in Ault Park, Cincinnati.

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<th>J</th>
<th>K</th>
<th>M</th>
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<tr>
<td>Site Name</td>
<td>Species (Scientific)</td>
<td>Species (Common)</td>
<td>Height (ft)</td>
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<td><em>Quercus macrocarpa</em></td>
<td>Bur Oak</td>
<td>103.2</td>
<td>16.9</td>
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* Ault Park.xls
with Yellow buckeye
Bur Oak leaf (from a different tree)

Bur Oak Acorn Caps (from a different tree)
Re: Impressive Bur Oak (SW Ohio)

by pitsandmounds » Sun Feb 03, 2013 9:51 pm

I'd like to get up to Daughmer Bur Oak Prairie Savannah State Nature Preserve in Central Ohio later this year to see them in their full glory. The site just became a preserve last year and was part of the historic Sandusky Plains, a 200,000 acre tall grass prairie that was in north-central Ohio. Sadly, this preserve is probably the largest remnant at only 34 acres.


http://www.dispatch.com/content/stories/life_and_entertainment/2012/08/23/a-grassland-oasis.html

-Matt

Presentation in Warren Sat., 2/16 on Allegheny's Big Trees

by PAwildernessadvocate » Tue Feb 05, 2013 3:42 pm

Please Join the Native Tree Society, Friends of Allegheny Wilderness, and Allegheny Outfitters for a presentation on the Big Trees of the Allegheny Islands Wilderness!

When: Saturday, February 16th, 2013, 11:00 a.m.


Free and open to the public!

Once an area of Eastern second or third growth forestland is set aside for preservation, and all overt management activities are eliminated from that area in perpetuity -- such as by designating portions of the Allegheny National Forest as wilderness areas under the Wilderness Act of 1964 -- massive individual trees, later-successional forests, and old-growth forests will ultimately emerge with time through the inevitable process of natural succession. These remarkable tree specimens will be a tremendous natural legacy for future generations of people and wildlife alike to benefit from.

On Saturday, February 16th, 2013, at 11:00 a.m. the Native Tree Society, Friends of Allegheny Wilderness, and Allegheny Outfitters are sponsoring Ed Frank of the Native Tree Society presenting the findings of his organization's report, Trees and Forests of the Allegheny River Islands Wilderness and Nearby Islands. Below please find a link to this recently published report (15.8 MB document). Also included in the report is an extensive section on the logging history of the region.

The Native Tree Society is one of the many local, regional, statewide, and national organizations that have formally endorsed the Citizens' Wilderness Proposal for Pennsylvania's Allegheny National Forest.

Native Tree Society online:
http://www.nativetreesociety.org

Trees and Forests of the Allegheny River Islands Wilderness and Nearby Islands
By Edward Frank, Dale Luthringer, Carl Harting, and Anthony Kelly

Native Tree Society Special Publication Series:
Report #10

http://www.nativetreesociety.org/specia...ec2011.pdf [15.8 MB]

Friends of Allegheny Wilderness
220 Center Street
Warren, PA 16365
814-723-0620
info@pawild.org
http://www.pawild.org
Appalachian Face-lift

by jamesrobertsmith » Fri Feb 01, 2013 2:27 pm

Here's an interesting article about relatively recent geological activity here in NC (8 million years ago). This sounds similar to what is currently going on in the Adirondacks.

http://www.sciencedaily.com/releases/2013/01/13013114413.htm

Re: Appalachian Face-lift

by jamesrobertsmith » Tue Feb 05, 2013 12:17 pm

I knew that there was a significant uplift after the retreat of the continental glaciers, which resulted in the Smokies gaining a significant amount of elevation. But this information about the mountains around Highlands is all new stuff for me. The highest cliffs in the eastern USA are in a very compact area. Both Laurel Knob and Whiteside Mountain have cliffs in excess of 1,000 feet high. The area is exceedingly rugged with vast cliff faces and many exposed plutons. I'm not completely surprised to learn that some of the features in the vicinity are of relatively recent activity.

Big Green Mountain, not far from the area targeted in the article. Not a sign of the mantle "blister", but a nearby pluton formation.
The world's most biomass-dense forests

by KoutaR » Mon Jan 28, 2013 3:12 pm

NTS,

I made a literature search for the most biomass-dense forests on Earth. The forest types whose highest values are over 1000 tons/hectare have been listed below. I have named the forest types after the tree species with most biomass, with the exception of the last type where the biomass distribution between the two dominant species has not been specified. In all other types the named species have over twice the biomass of the second most important species. Other species may be more numerous, e.g. in the Sequoiadendron stand, Abies lowiana (= A. concolor var. lowiana) is much more numerous but the former contains much more biomass. It is well known that Sequoia sempervirens forests are the most biomass-dense but it is less well known that the best Eucalyptus regnans stands are not far behind, one factor being about 25% higher wood density. Only above-ground biomass is included.

<table>
<thead>
<tr>
<th>Dominant tree species</th>
<th>Biomass (t/ha)</th>
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<tr>
<td>Abies magnifica</td>
<td>1200</td>
<td>Sierra Nevada, California</td>
<td>?</td>
<td>7</td>
</tr>
<tr>
<td>Cryptomeria japonica</td>
<td>1140</td>
<td>Kaneyama, Japan</td>
<td>?</td>
<td>8</td>
</tr>
<tr>
<td>Picea aitchiensis, Tsuga heterophylla</td>
<td>1047</td>
<td>Cascade Head Experimental Forest, Oregon</td>
<td>0.8</td>
<td>9</td>
</tr>
</tbody>
</table>

The biomass values are not fully comparable. In some stands (especially S. sempervirens and Picea - Tsuga) the biomass of all the components, including tree leaves and herbs, has been calculated. In some stands (e.g. A. procera, Pseudotsuga and Sequoiadendron) only the stem biomass is included. In a few stands (e.g. E. regnans), it is difficult to say which components have been included, therefore I did not make any adjustments. Anyway, most of the biomass is in the tree stems (in the case of the Picea - Tsuga stand 88%), so the stem biomasses should be relatively close to the total biomasses. In Agathis australis, a much higher proportion of the biomass is in the branches; anyway, the value for the Agathis stand includes branches, too. In three cases, only stem volume was given; for them, I calculated biomasses by multiplying the volumes by the wood densities I found on the Internet, mainly from source #10. Those values are shown in italics. The reliability of the sources may also differ.

For the Picea - Tsuga type, I averaged the biomasses of the two most massive 0.4 ha plots in the same location, because I wanted the stands to have, if possible, at least ~1 ha sample area to be comparable. If only the most massive plot is used, the value is 1078 t/ha.

The Goat Marsh RNA stand. Most trees are Abies procera. Other species visible: Abies amabilis (with pale trunk, left), Pseudotsuga menziesii (with very coarse bark, background left) and Tsuga heterophylla (with lower branches, center and right).
My list may well be affected by accessibility of information. It should be noted that all the stands, with the exception of the old Cryptomeria japonica record, are located in English-speaking countries. Other candidates for the list could be, for example, the Taiwania - Chamaecyparis forests of Taiwan and the Himalayan coniferous forests. Other Eucalyptus species, like E. delegatensis, could also make the list.

It is well known that although tropical rainforests have much higher productivity they are not as biomass-dense as the western coniferous forests. However, the best stands are not far from making the list: the most massive value I have found is 873 t/ha for lowland evergreen dipterocarp rainforest in Sebulu, East Kalimantan. The value has been achieved by a very exact destructive sampling, though the sample area is only 0.125 ha (11).

For comparison, values for the eastern US and Europe would be useful, but I have not found (actually not intensively searched for) top values. I believe that exceptional European old-growth Abies alba - Fagus sylvatica forest could have 700 t/ha, in a small plot (like 0.1 ha) more.

A note about the significance of high biomass values: It is too easy to draw the conclusion that an extremely biomass-dense forest is a place "full of life". However, most of this biomass is dead wood inside the tree boles where its significance to other organisms (apart from loggers and big tree enthusiasts) is limited.

If anybody has additions or corrections, please post them here.

Sources:


10. *Wood Density Database*


Kouta

Re: The world's most biomass-dense forests

by KoutaR » Mon Feb 04, 2013 12:24 pm

eliahd24 wrote: This is very interesting Kouta. I'd be curious to see how forest of the southern Appalachians stack up - such as those old groves in the Smokies. Do any NTSers have any data on forest biomass for the eastern US?

I found two studies on this topic. The first one is Whittaker, R. H. (1966): Forest dimensions and production in the Great Smoky Mountains. Ecology, Vol. 47, No. 1, pp. 103-121. The second one is Busing, R. T., Clebsch, E. E. C. & White, P. S. (1993): Biomass and production of southern Appalachian cove forests reexamined. Can. J. For. Res. 23: 760-765. The latter appears to be more reliable: newer methods, larger sample plots; in addition, the plots and the data are partly the same; Busing, Clebsch and White have analysed Whittaker's data with better methods.

The highest estimate is 621 t/ha at Surrey Fork at 870 meters in Tsuga-Acer-Fagus-Aesculus forest.

However, the plot size is only 0.1 ha. The highest value for a plot about 1 ha is 471 t/ha at Roaring Fork at 1140 meters in Tsuga-Halesia-Aesculus forest. The plot size is 1.0 ha.

Leaves and branches have been included in the estimates. According to the authors, the most massive plots are located in particularly densely wooded areas in old-growth forests.

I must decrease my estimate for an exceptional European old-growth forest. My estimate was based on Leibundgut's data from Perucica Nature Reserve. He only gives estimates for stem volumes. I calculated biomasses from the wood densities and estimated the understorey and leaf biomasses from the values and the percentages of the Picea-Tsuga stand in Oregon. The latter was a mistake because the forests with an important Fagus-component has much sparser understoreys and also less leaf biomass. My new best guess is 700 t/ha. Fagus has much denser wood than conifers, and Abies alba reaches large dimensions and may grow in dense stands. I changed the value in my text above.

Kouta Rasanen

Re: The world's most biomass-dense forests

by dbhguru » Tue Feb 05, 2013 10:13 am

Kouta,

Stimulated by your interest in the highest bio-mass values for forests, I’ve started reviewing data that I’ve collected over the years in MTSF, Cook Forest, Bryant and other outstanding white pine forests in the Northeast. I’m assuming that your using metric tons in the tons/hectare statistic.

Preliminary calculations point to some of the Mohawk areas as supporting upwards of 500 tons/Ha. However, I doubt that the mass ever makes it to 600, certainly no entire hectare holds that much. However, areas of the Pocumtuck Grove, Trees of Peace, and Algonquin Groves do exceed 500. As they get older, the stands thin, and even though individual tree size increases, the overall stand volume/mass does not increase. My current belief is that maximums for the white pines are reached for stand ages between 100 and 150 years. Beyond that age range, I believe that standing mass is lost through self-thinning faster than gains from increased tree size can make up the difference. I expect that there is ample forestry data that sheds light on the accumulation of mass as a function of stand age. But the data almost certainly have been developed from highly managed stands and with stand age cutoffs that don’t apply to unmanaged forests.
Early on, I set out to develop a variety of statistics for Mohawk's white pine stands for the DCR. Nobody was doing it and it seemed to me that the data could be useful as a baseline for natural stand development. However, it soon became apparent that the Bureau of Forestry was not interested in the data so I began concentrating on collecting data along lines of my particular interests. Given the current day interest in biomass accumulation for carbon sequestration, I think I will double down and see if I can get a better handle on woody biomass in the Mohawk and probably Bryant white pine stands. But for the present, we might consider 500 tons/Ha as representing the best of the white pine forests in the Northeast.

One of my lists on white pines for Massachusetts covers the pines that I've modeled that have trunk volumes of 500 ft^3 or more. I've resisted going to meters^3 because when converted, the volumes are such small numbers that it doesn't seem sensible to be fretting over them. However, I'll likely express my lists in both English and metric units in the future.

Robert T. Leverett

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**Re: The world's most biomass-dense forests**

(by **dbhguru** » Tue Feb 05, 2013 6:52 pm)

Kouta, The white pine forests for which the calculations were made are almost pure white pine. There is a small percentage of understory hardwoods such as striped Maple and very young black birch, but the volume is insignificant. There's a stray hemlock here and there, which can be a little older, but again, the contribution to the biomass total is minor. By contrast, when the white pine forests age and the stands break up, hemlock and hardwoods come back in and eventually become significant to dominant to very dominant. I'm restricting my attention to white pines at their peak.

Robert T. Leverett

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**Re: The world's most biomass-dense forests**

(by **KoutaR** » Tue Feb 05, 2013 10:25 am)

Bob, I used metric tons, indeed. Is your estimate 500 tons/ha for pure white pine forest or for white pine - hardwood mix? If the latter is true, what is the proportion of white pine in those stands?

Kouta Rasanen
7th International Oak Society Conference, Bordeaux, France

by Doug Bidlack » Sun Feb 03, 2013 7:15 pm

NTS, the 7th International Oak Society (IOS) Conference was held in Bordeaux, France from the 30th of September to the 2nd of October and my wife and I were lucky enough to be able to attend. In addition, we attended a four day pre-conference tour from Paris to Bordeaux and a five day post-conference tour of southwestern France and a little bit of northern Spain. It was our first IOS meeting but it certainly won’t be our last. More on that later. For starters I must say that I didn’t measure a single tree and I will simply be showing some images of what we saw along with some descriptions. I’ll present this in two parts due to the number of images. The first part will include everything up to the Conference in Bordeaux while the second part will include Bordeaux and everything after.

Even before the pre-conference tour we spent five days in Versailles and Paris. It was tough work and I didn’t even get any good tree pictures at all. So my first images are from the Arboretum de Chevreloup near Versailles on our first full day of the pre-conference tour. The first shot is of Ellen next to a sessile oak (Quercus petraea).

The previous sessile oak was part of a nice allee. Half of the oaks in this allee were not sessile oaks but I forgot the other species. They were significantly smaller than the sessile oaks.

The last image from this arboretum is of Ellen standing next to a very nice cork oak (Quercus suber).
We were told that many of the old cork forests are currently being sold off and the land is being converted to residential and commercial properties because more and more corks are now synthetic and the cork trees are no longer worth enough to keep the land for this purpose.

The next day we traveled to the National Forest of Berce which Jeroen has already described very well in a previous post. I will simply show seven pictures of this very attractive forest. We stopped at two places but unfortunately I don't know exactly where they are within the whole forest. The first site had much more undergrowth and the trees appeared to be smaller than at the second site. Here is my only shot of the first site.

The remaining six images are from the second site. Several of these trees had fences around them like those in the pictures from Jeroen's post. The oaks here are all sessile oaks and many reached impressive heights as well as girths.
This last image shows Ellen next to a particularly stout sessile oak.

This is all I have for now. I'll try and upload the rest later today or possibly tomorrow.

Doug
Re: 7th International Oak Society Conference, Bordeaux, Fran

by DougBidlack » Tue Feb 05, 2013 12:52 am

NTS, so here is the second part.

We made it to Bordeaux a couple of days after visiting the National Forest at Berce and we would spend three full days in the city. On the second day we took a field trip to see how wine casks were made. They were made with what they called French Oak (Quercus robur) or American Oak (Q. alba). One of the most important tasks was roasting the inside of the casks over fire and only a few workers were considered skilled enough to be able roast each cask to the specifications of each winery. After the tour we were each presented with a bottle of wine. Another brutal day!

London Planetrees were very common throughout France and it really made me wonder about the common name of this species. Here is Ellen in the middle of a mini-forest of planes in Bordeaux.

Quercus robur was very much at home in this riparian forest. Earlier during the Conference a Romanian researcher gave a talk on the oaks of his country and he described the incredible number of Q. robur trees within the vast Danube River floodplain. Apparently there are two types of Q. robur that occur along the floodplains of the Danube and one is more flood tolerant and far more numerous than the typical form. Some people even regard it as a separate species. Unfortunately I don't recall the name of this subspecies/species.

Later in the day one of our French guides showed us a cork oak (Q. suber) that had been used to provide cork.
This was very close to the Atlantic Ocean in the Reserve Naturelle Nationale du Courant d’Huchet. This region was again very sandy and much of the area near the ocean was open sand dunes. Another one of our guides was having fun explaining to us that baldcypress was actually a French tree and that it was simply brought to the US by the French. And here was our proof that this is the original homeland of this beautiful species.

Our last stop to visit a forest rather than an arboretum was the Foret Communale de Sare with its ancestral pollarded oak population. The very old pollarded oaks were all *Quercus robur* but the area was also heavily planted (more recently of course) with northern red oaks (*Q. rubra*). Dan Keiser is standing here next to a fine *Q. robur* amongst the bracken ferns.

These International Oak Society Conferences only occur once every three years and the next one is going to be held at the Morton Arboretum in Chicago, Illinois in 2015. I imagine it will also be held in October which can be a fairly competitive time slot for people that love trees. I have brought up an idea for a Conference talk with Kunso Kim, the Head of Collections and Curator at the Morton and the organizer for the next Conference. The idea would be to give a talk on the world's largest known oaks by a member or members of the Native Tree Society. I think this could be a very exciting presentation of some of the best work by NTS and it could be preceded by a segment on how to properly measure trees. As of now I’m sure that any such talk would be mainly or entirely restricted to Europe, the eastern US and the western US because we know so little about the size of oaks in Mexico/Central America and Asia. Any thoughts on whether this is a good idea or not? Would anyone be interested in giving such a talk? It could even be divided into several segments with a different speaker for each. Naturally I’m putting the cart just a little before the horse but that’s just because I think it would be so darn cool!

Doug Bidlack
Here is an example of one of the ancient pollards.

Re: 7th International Oak Society Conference, Bordeaux, France

by KoutaR » Wed Feb 06, 2013 12:13 pm

DougBidlack wrote: Apparently there are two types of Q. robur that occur along the floodplains of the Danube and one is more flood tolerant and far more numerous than the typical form. Some people even regard it as a separate species. Unfortunately I don't recall the name of this subspecies/species.

Doug, There are many oak taxa in southeastern Europe that are locally considered distinct species but in western Europe only subspecies or varieties or even synonyms of more common species. Below a partial list.

\[ Q. \text{ pedunculiflora} = Q. \text{ robur subsp. pedunculiflora} \]

\[ Q. \text{ dalechampii} = Q. \text{ petraea var. dalechampii or Q. petraea subsp. medwediewii or Q. pubescens x petraea} \]

\[ Q. \text{ polyacarpa} = Q. \text{ petraea subsp. iberica} \]

\[ Q. \text{ virgiliana} = Q. \text{ pubescens or Q. pubescens subsp. virgiliana or Q. pubescens x petraea} \]

\[ Q. \text{ rotundifolia} = Q. \text{ ilex subsp. rotundifolia} \]

\[ Q. \text{ brachyphylla} = Q. \text{ pubescens} \]

There are also universally accepted species that do not occur in western Europe, e.g. \[ Q. \text{ cerris} \] and \[ Q. \text{ frainetto} \].

Link to Jeroen's Forêt de Bercé report:
viewtopic.php?f=344&t=4099

Kouta
Hi Ents -
Hiked through the Pawtuckaway S.P. with the Worcester Chapter of the AMC this weekend. For the most part it looks as if it was logged in the last 50-60 years - many double and triple trunked oaks and most trees well under 2ft in diameter. Two areas caught my eye however, the first, in "the Boulders", contained some white pines that are getting to substantial size. I measured one during our lunch break - there were 5-6 of similar size in the immediate area.

I used an inclinometer and Nikon 440 range finder to get the measurements. Since I'm not real experienced with the 440, I also took a straight-line ground measurement from the sight point. Although they should have trigged out fairly closely, I got a range of 120-130ft for height. Circumference of 8 ft giving 2.5ft diameter. I trust the 130ft number from the ground measurement since the rangefinder line of sight was not clear.
Regardless of the numbers, these trees are reaching for the sky!

The second site was on a north facing slope near the peak of North Mountain. The trees were almost exclusively hemlock. They certainly looked old; same gnarly lower limbs and deeply furrowed bark I've seen on much larger hemlocks. I'd estimate height at 60-80 ft and diameter 1-1.5 ft. Also did not have time to check off-trail, so there may be larger examples out of sight. The terrain is steep and rocky so it may have been spared the loggers craft for some time.
Composite Image showing the trees with the widest trunk (Arbor de Tule), oldest single-clone tree (Old Tjittko), oldest single tree – one stem (Methuselah), biggest volume tree (General Sherman), and tallest tree Hyperion.

Re: We need to do things like this!

☐ by Will Blozan » Thu Jan 31, 2013 7:58 pm

Ed, I agree and can come up with some shots.

How about for eastern trees:

Tallest angiosperm (Fork Ridge Tuliptree)
Tallest gymnosperm (Boogerman Pine)
Largest angiosperm (Sag Branch Tuliptree)
Largest gymnosperm (Riddle Loblolly or baldcypress?)
Widest trunk (Middleton Oak?)
Oldest tree (Black River Cypress?)

This list is quick off my head and only currently known trees, not historic.

Each significant site could have one as well, CONG, GRSM, MTSF, CFSP...

Will

Re: We need to do things like this!

☐ by edfrank » Sun Feb 03, 2013 8:24 pm

You could even do multiple shots of a single tree. I think this type of graphic is eye catching and could help us get out name out there. We could use them on our website, Facebook page, magazines, or fliers.

Many of you are not big on the Facebook NTS page,

Regards, JK
but the image posted above was our most popular post yet:

Unfortunately it was not by us and did not contain contact information. I had a fairly good response to one recently where I used one of M. D. Vaden's photos with an invitation to like our Facebook Page and to join our BBS:

If anybody is wondering, we have had an enormous surge in the number of likes we have on the page, partially because of these two posts above.

We were one of the biggest groups in terms of likes when we were sitting at around 1,500. In the last couple of weeks we have pushed to just under 3,200 likes and should get there soon.

Edward Frank
Re: We need to do things like this!

by edfrank » Tue Feb 05, 2013 5:49 pm

Really it is the result of multiple posts, but this one caused a dramatic jump in people checking out our page and deciding to Like our feed.

Re: We need to do things like this!

by Larry Tucei » Wed Feb 06, 2013 5:42 pm

Ed, I have been corresponding with the Owners of Oak Alley lately and they sent me a link that I think you and NTS members would be interested in. We could do something similar. I have wanted to do something like this with the Live Oaks. http://tclf.org/sites/default/files/microsites/everytree/index.html

Larry Tucei

Tad Bowman Photography

by Larry Tucei » Thu Feb 07, 2013 10:14 am

NTS, I found this site that Photographer Tad Bowman has the other day while searching for Aspen Alley in Wyoming. His photos are stunning! http://www.tadbowman.com/ I never had heard of Aspen Alley till the other day. What a beautiful grouping of trees! Thought you all would enjoy.

Larry
Setting up a GPS Arboretum

by dlrossjr » Mon Feb 04, 2013 5:37 pm

I'm trying to develop an arboretum with GPS coordinates for trees on my middle school's campus and nature trail. I know that the handheld devices available to us only offer so much accuracy, but maybe they're close enough with some descriptions? This project is for the most part in the idea stage, though we do have handheld Garmin Etrex GPS units and a GPS camera, as well as about a mile of trail, with varying aspects and hydrology—some hardwood, and mixed hardwoods.

I do worry about putting too much investment into tree tags, though some sort of marker might be needed. Thinking about some sort of plastic/ metal tacks, or paint markers?

If someone has some proven solutions, or important considerations I'd be happy to hear them.

Many of the larger trees we can find via Google Maps, and Google Earth.

Thanks,

Dave Ross

Re: Setting up a GPS Arboretum

by edfrank » Thu Feb 07, 2013 12:03 pm

Dave,

I am sure you have looked over our BBS to find articles related to your question. I thought I would provide a few links anyway for reference. There are different kinds of GPS units with varying degrees of accuracy.

http://www.gps.gov/systems/gps/performance/accuracy/

The U.S. government is committed to providing GPS to the civilian community at the performance levels specified in the GPS Standard Positioning Service (SPS) Performance Standard. For example, the GPS signal in space will provide a "worst case" pseudorange accuracy of 7.8 meters at a 95% confidence level.

The actual accuracy users attain depends on factors outside the government's control, including atmospheric effects and receiver quality. Real-world data collected by the FAA show that some high-quality GPS SPS receivers currently provide better than 3 meter horizontal accuracy.

This should be in most cases accurate enough to distinguish individual trees. There are sometimes other things that might affect the accuracy. The positioning is based upon both the accuracy of the location and accuracy of the GPS unit trying to relocate the point. So if the position listed is off by 3 meters, and the GPS unit error when trying to relocate the point is off by 3 meters, The errors could be additive or partially cancel each other. In any case they should be good enough. The key to good readings is to allow them to average the readings for long enough of a time. It measures the signals from several satellites and averages them. The longer the time up to a point, the better the location. So to collect location data let the instrument average for at least 2 minutes, and not more than 5. You can also check the locations on Google Earth if individual trees are identifiable. This serves as a double check.

Re: Setting up a GPS Arboretum

by pdbrandt » Mon Feb 04, 2013 6:22 pm

Hi Dave, I created a google map enabled virtual tree tour of the trees on UNC-Chapel Hill a couple of years ago. It works great on a GPS enabled tablet or smart phone. Each GPS point has 3 pictures of the tree associated with it so that tour goers can be sure they are at the right tree. It also helps helps that the trees I chose to highlight were already tagged with metal plaques. Here's the link to the tour: http://ncbg.unc.edu/trees-of-the-unc-campus/
for any transcription errors in the field data. Coupled with location descriptions people should not have any trouble locating the trees. We have some GPS location listings published for big trees at some of the state parks here in PA. Geocaching is a big hobby and they seem to find the caches, maybe looking at some geocaching sites might give you some tips.

Scott Wade works at Longwood Gardens near Philadelphia. He is measuring and mapping trees in the garden and putting up QR-Code Tags for some trees;
https://www.gps.gov/systems/gps/performance/accuracy/

QR-Tag for famous Trees of Texas:
https://viewtopic.php?f=194&t=4832 This has some other links where they are doing QR-Tags and could get your internet searches started.

QR-Tags for Trees: https://viewtopic.php?f=194&t=2063 This is our original discussion on the subject.

Good luck with your project. Give us some updates as your virtual trail progresses.

Edward Frank

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**Re: Calvary Episcopal Church, Fletcher, NC**

bbduhn » Thu Feb 07, 2013 4:40 pm

Tiger Tail Spruce 77' 79.2'
I'd read about some quality pines at the Kellogg Center, near Hendersonville. This property is owned by UNC Asheville, and also goes under the title “The Center for Craft, Creativity and Design”. I ran into a small group from the Native Plant Society, who were very interested in what I was doing. After a quick lesson on measuring, they were duly impressed. The assistant director for the center was hiking the trails as well. I spoke with her for a bit and explained what I was doing. She was interested in seeing the results.

The site is loaded with pitch pines, far more than I'd ever seen on a small site. The consistently tall pitch pines were unbelievable. White pines still dominate and Va pines make their presence known. Shortleaf pines were absent. A small stream runs through the property, lined with more pines. Hardwoods are crowded out with tulips reaching good size but no other hardwoods played a major role in the canopy. I didn't bother doing a Rucker index, just as Will forwent the index five years ago.

https://groups.google.com/forum/?hl=en& ... 6J-3DKrJLs

Pinus strobus  white pine
132.8'  135.2'  135.8'  137.2'  140.8'  142.3'  142.3'  144.8'  149.0'  152.3'

Pinus rigida  pitch pine
103.5'  103.8'  105.3'  105.9'  106.7'  108.7'  108.0'  108.8'  109.0'  109.0'
111.3'  114.0'  114.2'  119.1'  119.7'  122.0'  122.3'  125.1'

Pinus Virginiana  Virginia pine
104.3'  105.0'  106.3'

Tsuga Canadiensis  hemlock
100.5'

I wish I'd focused on the Virginia pines a bit more. They were mostly pretty scraggly but they soared. There are likely a few over 110'. The pitch pines garnered most of my attention. The 125.1' falls just short of the state record. Thanks to James Parton, who originally reported on the site.

The crazy white pine (I'd call it the octopus pine but it has too many limbs) is about 5' diameter. It has a smaller cousin nearby.

Crazy dodecapus pine
Big pitch pine & crazy mountain man

Tall pitch pines
White pine stump showing multiple stems. It appeared to be just one main stem from the side. I wonder if the crazy pines are similar.

Brian

**Exchange Club Park, Hillsborough, NC**

by pdbrandt » Thu Feb 07, 2013 9:31 am

NTS,

Exchange Club Park is a privately owned, but publicly available park in Hillsborough, NC. According to the park's website, Exchange Club Park, located at 331 Exchange Club Lane just outside downtown Hillsborough, is privately owned and operated. The park consists of 16 acres and includes one baseball field that is used frequently for scheduled Hillsborough Youth Athletic Association games. The park also has two playgrounds and open space areas, as well as 16 picnic tables and picnic shelters.

Those 16 acres enclose one of the best sites I have found in my immediate area for measuring tall trees. The park is watched over by towering sycamore and tulip poplar trees. I measured the 10 most prominent trees (all over 110 feet tall), but there are at least another 10 tulip poplars above 100 feet tall that line the creek bordering the park.

As you can see from the pictures below, the trees in the park are at an ideal density to allow them to compete vertically for sunlight but not crowd each others' crowns. The tall, symmetrical crowns and the uncluttered bases are visible from numerous points in the park making this site a perfect place for honing my tree measuring skills.

Here are the measurements for the top 10 trees in the park. Please excuse the strange tree descriptors.

<table>
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<tr>
<th>Exchange Club Park, Hillsborough, NC 2/6/2013</th>
<th>Height as measured by sine method (feet)</th>
<th>Difference (feet)</th>
<th>% difference</th>
<th>CBH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking lot sycamore measurement 1</td>
<td>122.2</td>
<td>1.7</td>
<td>1.4%</td>
<td>10', 5.5&quot;</td>
</tr>
<tr>
<td>Parking lot sycamore measurement 2</td>
<td>120.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Poplar near stream measurement 1</td>
<td>122.1</td>
<td>1.2</td>
<td>1.0%</td>
<td>6', 6&quot;</td>
</tr>
<tr>
<td>Tulip Poplar near stream measurement 2</td>
<td>120.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking lot Tulip Poplar measurement 1</td>
<td>115.4</td>
<td>0.5</td>
<td>0.4%</td>
<td>7',11&quot;</td>
</tr>
<tr>
<td>Parking lot Tulip Poplar measurement 2</td>
<td>115.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Poplar near the one with the garbage can measurement 1</td>
<td>114.2</td>
<td>2.6</td>
<td>2.3%</td>
<td>6',2&quot;</td>
</tr>
<tr>
<td>Tulip Poplar near the one with the garbage can measurement 2</td>
<td>111.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Poplar with garbage can at base measurement 1</td>
<td>112.6</td>
<td>4.1</td>
<td>3.6%</td>
<td>9',2&quot;</td>
</tr>
<tr>
<td>Tulip Poplar with garbage can at base measurement 2</td>
<td>109.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double trunk Tulip Poplar near stream</td>
<td>117.8</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>Sycamore near baseball diamond</td>
<td>115.1</td>
<td>12', 8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Poplar with sign on it</td>
<td>114.5</td>
<td>5', 1&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concession sycamore</td>
<td>114.4</td>
<td>10', 7&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulip Poplar near main road</td>
<td>110.9</td>
<td></td>
<td></td>
<td>not measured</td>
</tr>
</tbody>
</table>
You'll notice that I reported two height calculations for a few of the trees. These represent the measurements I was most confident in from opposite sides of the trees. I was tempted to only report the highest value (or average them together), but the ability to measure these trees from opposite sides was rather eye opening for me and brings up a couple of points for discussion.

1) a precision-obsessed NTser could go insane trying to pin down the "exact" height of a tree from the ground.
2) as pointed out by many a seasoned measurer, what looks like the tallest twig from one vantage point is often not the true tallest point. The two measurements for the "garbage can tulip poplar" being a perfect example. Hence the need for multiple measurements whenever possible. In a forest setting or after leaf out multiple measurements might not be possible so I should report single (or challenging) measurements with that disclaimer.
3) Even when aiming at the same twig from different sides of the tree, you're not likely to get the exact same measurement. I suspect this could also be said for measuring the same tree from the same spot on different days. This discrepancy represents the "human error" in the sine method. Hopefully as I measure more trees my human error will go down!

I've heard all these points in Will, Ed, and Bob's various online presentations and written guides, but it was helpful to have a first hand reminder.

Enjoy the pictures:

122.2', 10', 6." CBH "Parking lot" Sycamore
115.9', 7', 11" CBH "parking lot" Tulip Poplar in the foreground. Sycamore from first picture above in the background.

112.6', 9', 2" CBH Tulip Poplar (aka the garbage can TP)
115.1', 12', 8" CBH Sycamore near baseball diamond

Canopy of the baseball diamond Sycamore

114.5', 9', 1" CBH Tulip Poplar with sign on it
114.4’, 10’, 7” CBH Sycamore near concession stand

110.9’ Tulip Poplar near main road

Patrick Brandt
Re: American Chestnut maximum heights?

by Jess Riddle » Tue Feb 05, 2013 4:35 pm

Eli, Since good data is lacking, I view this question from more of an ecology and evolution perspective. What height would be most adaptive for chestnut, and how tall of trees could chestnut habitat support? Some chestnut traits that might help answer those questions include fast growth rate, low to moderate shade tolerance, rot resistant wood, broad crowns, and heavy animal dispersed fruits.

The tallest species in different regions of eastern North America, tuliptree, white pine, loblolly pine, are all wind dispersed. Being in dominant to emergent canopy positions helps to disperse their seeds. Some animal dispersed species are very tall, such as red hickory and yellow buckeye, but they are narrow crowned, slower growing species (black locust is the animal dispersed exception here, and I wonder how often it would have reached 150’ without agriculture and logging on massive scales dramatically increasing its access to rich, productive sites). Broad crowned animal dispersed species, primarily oaks, and other broad crowned early successional species, like cottonwood, are frequently tall species, but usually not the tallest in the region. It’s difficult to see how being an emergent would have increased a chestnut’s chance of reproducing, and the broad crown of emergent chestnuts would have made them susceptible to windthrow.

Chestnut stumps occasionally occur in rich, moist coves, but they are much more common on slightly drier sites. They seem to have occupied a niche similar to tuliptree as a fast growing, long lived gap colonizer. Chestnut was likely more drought tolerant, but the low frequency in rich coves suggests it would have been at a competitive disadvantage to tuliptree on the sites that support the tallest forests, and the tallest individuals of most tall species.

Chestnut’s dispersal mechanism, crown structure, and habitat all imply chestnut was a tall species but not as tall as tuliptree. None of those associations between life history traits and maximum height are hard and fast rules, hornbeam is wind dispersed after all, but they are suggestive. Overall, northern red oak (maximum height 156’) shares the most traits with chestnut and now occupies many of the sites formerly dominated by chestnut. I would be surprised if chestnut didn’t reach 150’ on the best sites under the appropriate stand conditions, but I would also be surprised if it exceeded 170’.

Jess Riddle

p.s. I’ve seen chestnut sprouts at three sites in Roswell, GA.

Re: American Chestnut maximum heights?

by Bart Bouricius » Thu Feb 07, 2013 10:00 pm

Three of the tallest trees or tree taxons in the Tropical America all possibly contending for 200’ status, though none are documented by known accurate measurement techniques yet, are the Brazil Nut Tree Bertholletia excelsa The wild almonds of the South and Central America respectively Dipteryx odorata and Dipteryx oleifera among others, and possibly of slightly less stature, the Wild Cashews Anacardium excelsum Central America and Anacardium gigantium in Peru. Like the Chestnut tree all are animal dispersed nut trees, but I do tend to agree that the American chestnut likely had a similar growth pattern to the oaks, and would point out that the ecological complexity greatly increases in the tropics where the diversity of species is so much greater, thus a principle that may hold sway in the US and Canada may not be valid further south.

Bart Bouricius
**Bigness Measures - Revisiting Crown Area**

Bob

I'm probably a little late on this, but coming to grips with what should be a simple task, like defining "big" in the context of champion tree candidates, has proven not so simple.

My thought process has been to begin with my physical approach. In retrospect, every tree that I have encountered as a potential champion candidate was 'big', and reasonably categorized by the trees emergent crown (tree height), and as I got closer, it's trunk (diameter to me is what is visible on approach, not the girth. I know separate argument, but this is still me approaching the champ candidate); and probably the most definitive aspect of a tree's bigness is it's crown.

I think we cut the crown short, or at least measure it short...when I was feeding "tree bio-mass" into FARSITE (a fire area growth assimilation program), we took a measure of the crown's portion of the tree, taking readings on base of tree, base of crown, and the tree's top; and an average crown spread (estimates that were challenged WHENEVER a team member disagreed (two-person team).

I'll say this separately for emphasis...for conifers year around, and deciduous trees when leafed out, THE TREE'S CROWN IS FOR ME, OFTEN THE DEFINING "BIGNESS".

In the context of champion tree measurements, I like your walk-around/EXCEL table approach...my only thought on improving it would be the incorporation of the GRS Densitometer in determining the accurate "edge" of the crown.

Enough rambling...: > ]

Don Bertolette

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**Re: Bigness Measures**

Don Bouricius

Don, The Balsa is probably a good tree to mention in this context, as it is in the same family as the giant ceiba trees. Though the balsa tree usually referring to the single species genus Ochroma, *Ochroma pyramidale* which does get to at least 100' high and over 6 feet in diameter according to one source [http://www.mat.uc.pt/~pedro/ncientifico ... chbal.html](http://www.mat.uc.pt/~pedro/ncientifico ... chbal.html). It's specific gravity is .16 and the specific gravity, though not as significant to the general public as a measure if bigness, has a great significance to scientists concerned with biomass and carbon sequestration, as it correlates quite well with them. The problem here is what part of bigness are we most concerned with. From a diplomatic perspective I would go with Ed (bigness is measurable dimensions), but from my own interest in carbon sequestration I would find density or specific gravity a more useful thinking tool.

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**Re: Bigness Measures**

Edfrank

Bart, Don, Bob,

There are physical aspects of Bigness in a tree. Some of these are things we can measure. We can measure height, girth, crown spread or volume, and wood volume. We can measure all kinds of stuff. I think for different trees, in different situations, and in different contexts, the thing that shouts BIG at us may be different aspects of the tree. It boils down to a reactions that is to a large degree emotional. We might be able to quantify that in the form of some type of a survey or check list, but it is not something we ca go out and measure with a tape. I am OK with that.

I have discussed with the idea of forest aesthetics: [http://www.nativetreesociety.org/projec ... thetic.htm](http://www.nativetreesociety.org/projec ... thetic.htm)

I would like to keep pursuing that idea. We could also think about trying to write a descriptions of
special trees we encounter. We could try in words to put down what makes this tree stand out to us in terms of "Bigness." There are trees that we just find interesting, or are drawn to, or are impressive in some other way. Perhaps we could try an experiment and try to use basic prose to try to better describe what it is about that particular tree that catches our attention. Forcing yourself to try to articulate the emotional impact or feel of a tree might enhance our aesthetic appreciation, or help us understand the emotional tie between some trees and some individuals. This is really the only approach available to us at this stage of the game, as we do not have tools to do otherwise. But description is one of the first and most basic steps to approach scientific discovery and artistic discovery.

I think we have different ideas based upon our backgrounds, experiences, training, and nature and will find different aspects of the tree encounters to highlight. If I know a tree is 600 years old, I will look at it differently than I might otherwise. If I know this is a giant for the species, this small tree will catch my attention. It isn't lack of knowledge versus knowledge, but differences between the two. If you lack knowledge you are free from the preconceptions that knowledge may carry as baggage, but the broader unfettered understanding is more superficial. With knowledge the understanding is deeper and different. You can see things someone without knowledge would not see, but your views are colored by the knowledge you have. So your knowing view is both deeper and more constrained.

Edward Frank

Re: Photo Measurements

Re: Photo Measurements

Edward Frank

Re: Photo Measurements

Re: Photo Measurements

Robert T. Leverett

Re: Photo Measurements

Re: Photo Measurements
work quite well for my Canon camera. I've resubmitted the last post with the errors corrected. The Excel workbook is updated. Sorry for any inconvenience.

So far, I haven't had any takers on joining me in testing this method with a variety of digital cameras, but I do believe it is worth the effort, especially for those who do not possess a reticled monocular. I think the photo-Excel method can serve us reasonably well for modeling a tree's trunk and limb volume. I'm thinking about straight-trunked trees like that huge Norway Spruce that Kouta, Geroen, and Michael measured. What an impressive tree!

Today, I plan to take the photographic process further by modeling a Northern Red Oak in the back of the house using the photo method and comparing the volume to reticle results. As I've repeatedly shown, the Vortex is extremely accurate and results from its use can be employed as the standard for comparison where the target is highly visible. But think about the leap in modeling efficiency if we can use a digital camera. We shoot distances to visible spots on the target with a highly visible reference object of known size and distance in the photo, and everything else can be done from the convenience of our computer (inside where it is warm with the coffee pot close by). I acknowledge that the photographic method probably has limitations that must be identified and explored. For example, Don wonders how accurate the method is near the edges of the photo. This definitely needs to be tested, but for the modeling of a trunk that is in the center of the image, distortion near the edges isn't a consideration. Onward and upward.

Robert Leverett

Re: Photo Measurements

by dbhguru » Fri Feb 08, 2013 8:51 am

Larry, I think 40 feet is a good distance, but be sure you are far enough back that you can see the full width of the tree.

Robert T. Leverett

Hemlock Aldelgid, Treatments!

by EmoryRiver » Fri Feb 08, 2013 1:09 am

I am hoping to save a few groves of Eastern Hemlock in Morgan County TN. The bug just showed up, what is the best attack??? I have around 1000 acres of hemlock, and plan on trying to save 2-3 groves. Nothing is huge but I do have several 30+ inch diameter trees. Mostly I have watersheds with hemlocks and hope to save a few patches.

Please let me know how to treat trees and how I should prioritize. My number is 307-760-7052.

I have been documenting with pictures incase they go the way of the chestnut. I hope they don't!

- Hugh Faust, Emory River Land Company (Owner/manager)
**Re: Hemlock Aldelgid, Treatments!**

by Will Blozan » Fri Feb 08, 2013 1:58 pm

Hugh, I can certainly guide you through the process as I have been working with HWA since 2002. Most of my work is hemlock preservation and to date have treated over 100,000 trees in residential and forest settings. You will have the benefit of 20/20 hindsight of my experience with managing this pest, and as a contractor, I can help you obtain cheap materials. This is not a sales plug but you can find some good HWA information on my company website at http://www.appalachianarborists.com.

Contact me off-BBS if you would like to discuss further.

Will Blozan

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**Re: The tallest tree of Europe?**

by Jeroen Philippona » Fri Feb 08, 2013 7:59 am

Here is an excel file Kouta and I made with the tallest accurate measured specimen of 88 treespecies in Europe. Only laser or tape drop measured trees are included. Also the records of different countries are included. In black are native species, in red exotic species. This is not always strict, like with planted trees in the Netherlands wich are only native in a certain area of the country.

Tallest trees indeed are four species of Eucalyptus of over 211 feet, followed by nine conifer species and one other Eucalypt taller than 160 feet. Tallest native broadleaved trees are Quercus petraea and Fraxinus excelsior nearing 160 feet. Hybrid planes (Platanus x hispanica) have been measured up to 159.3 ft in England, but are reported to grow taller in SW France.

The heights are in meters and in feet, the cbh only in centimeters.

Jeroen Philippona

**List treeheights-Europe-country-records-laser09-02-2013.xls**

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**Unconditional Love Video**

by edfrank » Fri Feb 08, 2013 3:13 pm

A few days ago a friend created this awesome sweet love song video called Unconditional Love. It's the story of Love told using trees and I think you lovely folks at The Native Tree Society and your partners will really like it. Check it out on the youtube link below. Have a great weekend!

http://www.youtube.com/watch?v=Wkb8C8BASwI

Best regards
Kens Khiu

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**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.
**Michigan Max Tree List**

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**

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**

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

bydbhguru » 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 densitometers:

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

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**Re: Densitometer**

☑️ by edfrank » Fri Feb 08, 2013 5:55 pm

There are other more basic foliage density tools also:

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

Jeroen Philippona

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 avelana) 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 to 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

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**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 Environ, 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’

Re: Metasequoia Glyptostroboidees (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

99” cbh Pitch pine ~60’ YMCA
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  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 canadiensis  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’
Oxynodendrum arboreum  sourwood  81.0’  81.4’
98.7’  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’
prunus serotina  116.5’
black cherry  107.1’
fraxinus americana  white ash  117.3’
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
115.1' 
carya cordiformis  bitternut hickory  102.9'
113.5'  (these could be carya glabra but I lean toward cordiformis)
liriodendron tulipfera  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

Re: Native American Trail Marker Trees

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

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 Hedeen

le Baril.JPG

http://www.loc.gov/resource/g3400.ar077400/
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 trial 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

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

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 plant

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 plant

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 plant

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 daming 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 beginning is crazy. It is worth a watch.

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

John D Harvey

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**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

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**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

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**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 2

Oak 3
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.

Physical Limits to Leaf Size in Tall Trees

Kaare H. Jensen*
Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, Massachusetts 02138, USA

Maciej A. Zwieniecki†
Department of Plant Sciences, University of California, Davis, California 95616, USA

Received 28 August 2012; published 4 January 2013

URL:
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 ...


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 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 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 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?
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

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 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/simple-physics-may-limit-the-siz.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.

http://news.sciencemag.org/sciencenow/2013/01/simple-physics-may-limit-the-siz.html

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 foreknowledge 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.

<table>
<thead>
<tr>
<th>Species</th>
<th>Sibley's Quoted Maximum-ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Pine</td>
<td>220</td>
</tr>
<tr>
<td>SW White Pine</td>
<td>111</td>
</tr>
</tbody>
</table>

Many list this height as a maximum

<table>
<thead>
<tr>
<th>Source</th>
<th>Species</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White Pine</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>SW White Pine</td>
<td>111</td>
</tr>
</tbody>
</table>

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 (t’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

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**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 trees. Current hypotheses of height limitation focus on increasing water transport constraints in taller trees and the resulting reductions in leaf photosynthesis. 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...
Albino Redwoods

d 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.

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Introduction Dennis Crowe

d by DennisCrowe » 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
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.
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 chimera 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.
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 height 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

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
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.
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 . . .

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Species</th>
<th>Species (Scientific)</th>
<th>Species (Common)</th>
<th>Height (ft)</th>
<th>Girth (in)</th>
<th>Maximum Spread (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ault Park</td>
<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>103.2</td>
<td>16.9</td>
<td>99.4</td>
<td></td>
</tr>
<tr>
<td>Miami University - Natural Area</td>
<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>90.7</td>
<td>16.9</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Miami University - Bishop Woods</td>
<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>14.6</td>
<td></td>
<td></td>
<td></td>
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<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miami University - Wadsworth Hall</td>
<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>14.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California Woods Natural Preserve</td>
<td>quercus macrocarpa</td>
<td>Bur Oak</td>
<td>122.4</td>
<td>23.4</td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

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!)
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:


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

McKee Hall Bur Oak

California Woods Bur Oak

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


- 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 canadiensis 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

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**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.

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**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
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 that 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/le'derman.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. Crazed 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 tre

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 tre

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 tre

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 assent 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](http://360.io/29v8Rg)

Thanks and keep up the great work!

Patrick
[http://occipital.com/user/cbd4-752475/patrick-brandt](http://occipital.com/user/cbd4-752475/patrick-brandt)

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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](http://photosynth.net/view.aspx?cid=5b6056e8-1291-49fb-a0c9-b6c44c0ec624)

- Matt

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

*by pdbrandt* » 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](http://photosynth.net/view.aspx?cid=5776e9de-d509-4125-b038-1ac160011ad8)

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

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 tree

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

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


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=K0pQbfVGuvg

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

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**Friendly reminder to budding measurers**

รวด 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 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

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**Re: We need to do things like this!**

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

The first week of February 2013

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**Re: We need to do things like this!**

รวด 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!

Re: We need to do things like this!

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

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

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

-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

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.
Sens. McConnell and Paul Co-sponsor Industrial Hemp Legislation

http://www.wyden.senate.gov/news/press-rele...rial-hemp-
Senators Seek to Lift Restrictions on Industrial Hemp

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 comparisions 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

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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 states 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

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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/e...vesa/4825/

Kouta

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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
were trees and measurements can be added. Koula
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:
as well as for continents:
or countries, like the UK:
http://www.monumentaltrees.com/en/heightrecords/uk/
France:
Germany:
Belgium:
Netherlands:
Poland:
Slovakia:
(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 heightmeasurement.

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

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**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

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**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

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**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:


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! Ther 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 redefine 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 seperate trees at Pironga (62.7m, 66-67 m, and 55.1 m) are, I 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 Ive 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 desireable scenarios.

Don Bertollette

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 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 upcomming 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 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
that isn't the thrust of my post.

I agree with, and like the rest of the slide enough, that "I'll see you, and raise you one"!

For my 'money', the autopoietic forest is the perfect 'core' in the schema presented in one of the basic tenets of Conservation Biology. The idea of an autopoietic forest as an undisturbed core of a forest community/ecosystem, surrounded by a protective 'buffer' where disturbed forests (natural or unnatural for the most part, for me) become MANaged, for old-growth research, where humans are allowed (we should discuss what level of HUMANity is or isn't natural) permitted though not allowed to trammel (essentially the MANagement a 'wilderness' gets), with as much connectivity between core/buffer areas as can be negotiated, permitting the natural transmission of plant and animal 'energies'.

All the remaining areas without sufficient 'resilience' to return an original pre-settlement state, are excellent candidates to see what the timber industry can do when all they get is what they leave themselves. Before it was co-opted, that was called Sustained Yield...

As to your comment that 'old-growth forests' can't by your definition become 'autopoietic forests', "can't" is pretty negative. I'd like to think that with enough Gary's around, some of those autopoietic forests could eventually provide an increased understanding of the ecosystem complexities, so that knowledge could be employed in 'directing' an old-growth forest in that direction. Surely that is a vector benign enough to warrant the substitution of "may not" for "can't"?

That's my bias showing...: > )

Don Bertolette

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**Urban Old Growth**

posted by edfrank » Sun Jun 19, 2011 8:14 pm

This a repost of an older topic from the Website/Google List

Subject: [ENTS] What is Urban Old Growth?
Date: Sun, 4 Oct 2009 17:56:11 -0400

**What is Urban Old Growth?**
Edward Frank, (revision 10-04-09)

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**Re: What is Urban Old Growth?**

posted by Don » Sun Feb 24, 2013 3:41 am

Ed- Surprised to see this com up under active topics, but it was a good read, and I think I’d only add one thought to what we said already. I think the two words that I’d probably bring to bear would be 'resiliency', and 'disturbance'. While I understand your focus on the lower end of the ‘area’ scale, the old-growth stand (trying to stay away from the word ecosystem for your benefit) lasts ONLY if it has enough resilience to sustain itself through the natural disturbance regime its location has. That resilience isn't QUITE magic, but it involves an assemblage of species that has over the years provided the moisture storage, nutritional systems (eg, soil critters, symbions, etc.), seed banks, pH buffers that sustained the stand through previous disturbances.

Don Bertolette
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

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 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
Re: What is Urban Old Growth?

by jamesrobertsmith » Sun Feb 24, 2013 8:25 pm

I encounter lots of big trees here in Charlotte. Sometimes even little groves of them. Old growth, though...not sure. As you say, it depends on the definition.

http://tilthelasthemlockdies.blogspot.com ... green.html

Re: "National Champion Sycamore"

by pitsandmounds » Mon Feb 25, 2013 8:29 pm

It looks like the photo is no longer on americanforests.org, but here’s a photo from the Ohio Champion Tree List.

This photo shows the scale and gives a better look at ground level:

While this tree is magnificent, it does show the need for a Single Stem Big Tree List.

The California Sycamore National Champion looks similar:
http://www.americanforests.org/bigtree/platanus-racemosa/

- Matt
Re: America Forests latest edition

by pitsandmounds » Tue Feb 26, 2013 8:59 am

Bob, Congrats on your article making the homepage!

Wayback Machine

by pitsandmounds » Tue Feb 26, 2013 11:54 am

Hi All, For anyone newer to NTS like myself, this is kind of neat to see what the website used to look like. For the URL “www.NativeTreeSociety.org”, the Wayback Machine goes back to Oct 22, 2006. As you click around the website, it will show when that particular page was archived.

Re: Revisiting Crown Area

by dbhguru » Wed Feb 20, 2013 9:57 pm

NTS, I have attached three solutions to computing crown area. All three circumscribe the crown area's drip-line with a polygon. All three methods divide the polygon into a series of adjacent triangles, measure the area of each triangle and sum them. AreaCrownLaserClinometer-1.xlsm measures each side of a triangle to compute its area. The other two method uses azimuths and one distance to calculate the area of a triangle.

There is a fourth computational algorithm that I'll eventually add, which is similar to the second method. Each method has its advantages and disadvantages, which I'll discuss in a future post. I wanted to get these methods posted so Ed can reference them if he needs to in the Wikipedia post he is working on.

The odds are that I haven't completely debugged these methods. Anyone who cares to pitch in and help me test them will earn good karma points.

Hi Bob, I used the first solution for a Sweetgum in my front yard using a tape, clinometer, and a couple of tripods. The spreadsheet shows an area of 112.68 m², which I believe is accurate.

[Front Yard Sweetgum - AreaCrownLaserClinometer-1 (1).xlsm](175.53 KiB) Downloaded 3 times

For comparison purposes, I measured a maximum spread of 13.2m. I used the shortest tip that was perpendicular to the maximum spread for a spread of 13.2m x 11.6m.

- Matt

Re: Revisiting Crown Area

by dbhguru » Sat Feb 23, 2013 5:04 pm

Matt, That's exciting. Thanks for giving the method a test. I think you chose the best one of the three. As soon as this infernal snow melts, I'm going to apply each of the methods to a big spreading hardwood in a nearby park. I need to get a feel for how errors carry through in methods 2 and 3.

BTW, I'm working on a 4th method, which I'll include in a future update. The 4th method allows you to walk the perimeter just shooting distances and azimuths to the next vertex of the polygon. You don't have to shoot to the tree. It doesn't matter what's inside the polygon. However, I think it is harder to control the error in methods 2,3, and 4. Nonetheless, for a very large area where there are obstructions to seeing the trunk, method 4 may be the way to go.

I wish I'd modeled a couple of the big banyans when I was in Hawaii in December. Oh well, there is always next year. Thanks again for giving the method a test.

Robert T. Leverett
Re: Revisiting Crown Area

by Don » Sun Feb 24, 2013 3:53 pm

Bob- I found a site in your own language that gets pretty close to the mark...check out:

https://engineering.purdue.edu/~asm215/...vcalc.html

As to the concept of 'error of closure', view items 3, 4 in:

http://surveying.wb.psu.edu/sur111/Labs...vcomps.htm

Don Bertolette

Edward Frank

Re: Revisiting Crown Area

by edfrank » Sun Feb 24, 2013 4:43 pm

Don, Bob and I have talked about these types of loop traverses as that is what I would do while surveying caves: doing the (x,y) coordinate positions for each station, calculating closure errors, using front and back sighting to minimize errors etc. You can use error closure routines, but they really don't eliminate the errors just average them across all points so that the loops close. They can be lessened in loops that interconnected in multiple places, but not for single loops like a crown or simple area outline. The loop closure mathematics will actually help if it is a systematic error resulting from a instrument miscalibration. But in reality most errors in these types of surveys are "busts" where most of the data is good and there is a mistake on one reading that accounts for most of the closure error. So various error correction, really error averaging programs, shift all of the points and change the geometric relationships between all of the points in the loop to make up for the one big error. So you introduce error in all of the points in the survey to "fix" error in one measurement. It really doesn't help when trying to measure our crown spread area or other area measurement. The closure error amount will not reflect the area error as the area error will depend on where in the loop the error occurred as well as its magnitude. The best way to minimize error is to make as many of the triangles or polygons within the larger polygon independent so that the error is not propagated, and to take care with the measurements themselves so they are correct and to try to do back sights to confirm the azimuth measurements are correct between points. The inclination errors are less important as we are looking at the area of a flat horizontal polygon, rather than a three dimensional loop, as inclination errors of a degree or so will not significantly affect the horizontal segment length distances.

The links are useful however as they cover the concepts and provides a check on what is being done in our case.

Edward Frank

Re: Revisiting Crown Area

by dbhguru » Wed Feb 27, 2013 11:29 am

NTS, Attached is the 4th method for measuring crown area. The measurer walks the perimeter shooting horizontal distances and azimuth to the next point until the the crown's perimeter is circled. The measurer does not interact with the trunk or any internal point of the polygon. I'll soon begin working on error correction processes implemented on an as you go protocol. Error correction will increase the required labor if implemented. However, at its most basic, this is the simplest and most flexible method of the four.

AreaAzimuthTapeClinometerCompass-4.xls

Saved as an older format xls file - I am not sure if any functionality has been lost. -Ed

AreaAzimuthTapeClinometerCompass-4.xlsxm

Robert T. Leverett

114
Re: Revisiting Crown Area

by Don » Mon Feb 25, 2013 2:33 am

Bob-
While reading a MacLife magazine, I ran across an intriguing app/attachment for an iPhone. Check out

www.prexiso.com
or

It's application is in home, but it doesn't take too much of our imagination to envision an outdoors model. Just a teaser!

Don Bertolette

Re: Revisiting Crown Area

by dbhguru » Mon Feb 25, 2013 9:17 am

Don, The number of devices that measure for us seems to be exploding. Who'd a thunk it? I'm pleased with the iPhone apps SeeLevel and its use of the iPhone camera(it can serve as a densitometer) and I also like their SeeCompass. I'm less sure about the much touted Spyglass app. It gets rave reviews, but the screen is so busy and the characters are so small, I can't read the returns. It's not a matter of practice or new glasses. I need new eyes.

So let's see, as dendromorphometrists, what do we have in our measuring kit these days?

(1) Infrared laser rangefinder
(2) Red beam industrial laser
(3) Inclinometer
(4) Compasses -old fashion and digital
(5) Hypsometer combining (1) and (3) or (1), (3), and (4)
(6) Reticle monocular
(7) Regular tape measure
(8) D-Tape
(9) Plumb bob
(10) Tripod
(11) Tripod

(12) Flagging tape
(13) Calipers
(14) Biltmore stick
(15) Digital camera
(16) Reflectors
(17) Dendrometer
(18) Relascope
(19) Scientific calculator
(20) GPS receiver
(21) Computer software

- OR-

(22) An iPhone 4 or later with abundant apps that do the jobs of most of the above.

Have I left anything out? Probably, but all the beginner really needs is the laser rangefinder, inclinometer, tape, and scientific calculator, -OR- increasingly, the iPhone. Ah, life is sooo good when we have lot's of neat gizmos to play with, or an iPhone. Who'd a thunk it?

Robert T. Leverett
Just about 80 feet short

by JohnnyDJersey » Thu Feb 28, 2013 12:55 am

In 1985 my very elderly Grandfather, who was born and raised in New Jersey, made his first and only trip to California to see the giant sequoias and hopefully measure a few of them. What did he bring to do this? A 25ft tape measure. He actually had no clue they were so big. I still get a kick out of this photo. Most north easterners really have no clue as to how massive trees can actually get. I believe the tree is the General Sherman.

PopPop at General Sherman-bmp.jpg (74.77 KiB)
Viewed 228 times

John D Harvey

Re: Just about 80 feet short

by JohnnyDJersey » Thu Feb 28, 2013 4:58 pm

Yeah I didnt think you could park that close either, I mean I know you cant now and for good reason. Another shot from the other side with some cousins.

Attachments
Neil Pederson on Nyssa sylvatica

by edfrank » Thu Feb 28, 2013 12:12 am

Nice article by Neil Pederson on Nyssa sylvatica:

Tall Tree Tales: Meet the Beast of Broadleaf
Longevity
By Dr. Neil Pederson

http://www.knps.org/newsletters/Summer2012_Vol2_7No2.pdf

Regional species pools

by edfrank » Wed Feb 27, 2013 8:34 pm

Biota of North America Program
http://bonap.org/

Pre-analysis regions (originally delineated to reduce analysis size). Regional species pools defined as species having 50% of their ranges within aggregates of these regions.
Nemophilist

(by edfrank) Thu Feb 28, 2013 9:53 pm

**nemophilist**

(n.) a haunter of the woods; one who loves the forest and its beauty and solitude

http://25.media.tumblr.com/353f762f7fb3b547010023a8e0bb9e9d/tumblr_mgd9udxDfr1r6nm6ao1_500.png

Ne·moph'i·ly noun [ Greek ne’mos wooded pasture, glade + filei^n to love.] Fondness for forest scenery; love of the woods. [ R.] Found op
http://www.encyclo.co.uk/webster/N/13

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**Tribbett Woods Nature Preserve (IN)**

(by pitsandmounds) Mon Feb 25, 2013 3:18 pm

Wander Indiana, Wander Indiana . . .

The diverse trees of this preserve sit on what is locally referred to as “white clay flats.” It was a pleasure to encounter a forest composition I had never seen before. The dominant species were American Beech, Swamp Chestnut Oak, and Sweetgum.

Here’s a description:


<table>
<thead>
<tr>
<th>Species (Scientific)</th>
<th>Species (Common)</th>
<th>Height (ft)</th>
<th>Girth (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer rubrum</td>
<td>Red Maple</td>
<td>8.8</td>
<td></td>
</tr>
<tr>
<td>Fagus Grandifolia</td>
<td>American Beech</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>Sweetgum</td>
<td>115.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>Sweetgum</td>
<td>115.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Nyssa sylvatica</td>
<td>Blackgum</td>
<td>109.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Quercus alba</td>
<td>White Oak</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>Quercus michauxii</td>
<td>Swamp Chestnut Oak</td>
<td>117.6</td>
<td>13.2</td>
</tr>
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<td>Quercus michauxii</td>
<td>Swamp Chestnut Oak</td>
<td>117.6</td>
<td>12.2</td>
</tr>
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<td>Swamp Chestnut Oak</td>
<td>117.6</td>
<td>14.1</td>
</tr>
<tr>
<td>Quercus palustris</td>
<td>Pin Oak</td>
<td>118.6</td>
<td>12.8</td>
</tr>
<tr>
<td>Quercus palustris</td>
<td>Pin Oak</td>
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<tr>
<td>Quercus palustris</td>
<td>Pin Oak</td>
<td>118.6</td>
<td>10.8</td>
</tr>
</tbody>
</table>

Panoramas

Pit and Mound:
http://photosynth.net/view.aspx?cid=60d92449-a407-4951-88c4-70a58fd1ec7b

Blackgum:
http://photosynth.net/view.aspx?cid=ac1ab320-2759-46f4-975f-584344e89095

Pin Oak:
http://photosynth.net/view.aspx?cid=81b9303a-506f-45e5-88ba-94d41c4efcf3
Me with 12.8ft CBH Pin Oak

Pin Oak leaves/acorns

Swamp Chestnut Oaks

Swamp Chestnut Oak leaves/acorns


- Matt
**Re: Tribbett Woods Nature Preserve (IN)**

by **dbhguru** » Mon Feb 25, 2013 3:32 pm

Matt, Another great post. I especially like the pin oak. It's a beauty. That species has been widely planted in the Northeast as a shade tree. They actually get into the size range of your 12.8 x 118 footer around here where planed, although heights are usually on the order of 90 to 110 feet. The trunk of the species is really columnar. The ones I find growing naturally in the wetland areas are considerably smaller than their urban cousins.

Robert T. Leverett

**Re: Tribbett Woods Nature Preserve (IN)**

by **pitsandmounds** » Thu Feb 28, 2013 10:13 pm

Thanks George,

To steal a line from a guidebook, the crown of this Blackgum looks like an Oak tree that had a bad hair day. I like the "alligator hide" and it has an interesting burl at the base. I'd like to measure more of the Oaks there for height, as I think they may go above 118 feet.

- Matt

**Presentation in Warren Sat., 2/16 on Allegheny's Big Trees**

by **PAwildernessadvocate** » Tue Feb 05, 2013

Please Join the Native Tree Society, Friends of Allegheny Wilderness, and Allegheny Outfitters for a presentation on the Big Trees of the Allegheny Islands Wilderness!

When: Saturday, February 16th, 2013, 11:00 a.m.


Free and open to the public!

Once an area of Eastern second or third growth forestland is set aside for preservation, and all overt management activities are eliminated from that area in perpetuity -- such as by designating portions of the Allegheny National Forest as wilderness areas under the Wilderness Act of 1964 -- massive individual trees, later-successional forests, and old-growth forests will ultimately emerge with time through the
inevitable process of natural succession. These remarkable tree specimens will be a tremendous natural legacy for future generations of people and wildlife alike to benefit from.

On Saturday, February 16th, 2013, at 11:00 a.m. the Native Tree Society, Friends of Allegheny Wilderness, and Allegheny Outfitters are sponsoring Ed Frank of the Native Tree Society presenting the findings of his organization's report, Trees and Forests of the Allegheny River Islands Wilderness and Nearby Islands. Below please find a link to this recently published report (15.8 MB document). Also included in the report is an extensive section on the logging history of the region.

The Native Tree Society is one of the many local, regional, statewide, and national organizations that have formally endorsed the Citizens' Wilderness Proposal for Pennsylvania's Allegheny National Forest.

Native Tree Society online:
http://www.nativetreesociety.org

http://www.nativetreesociety.org/specia ... ec2011.pdf [15.8 MB]

Trees and Forests of the Allegheny River Islands Wilderness and Nearby Islands
By Edward Frank, Dale Luthringer, Carl Harting, and Anthony Kelly

Native Tree Society Special Publication Series:
Report #10

Introduction
This report compiles the results as of December 2011 for the ongoing project of documenting forests and trees of the islands of the Allegheny River Island Wilderness and nearby islands in the middle Allegheny River in north central Pennsylvania. The islands included in this report are located in a stretch extending from the Buckaloons Recreation Area, seven miles downstream of Warren, Pennsylvania through Holeman Island, four miles downstream of Tionesta, Pennsylvania. This includes all of the islands in the Allegheny River Islands Wilderness, a number of forest service islands, and several private islands. Major islands investigated among others include, Crull's Island, Thompson's Island, Courson Island, Hemlock Island, King Island, Baker Island, and Holeman Island. At the present time some of the islands have been visited multiple times by groups of people, while others have seen only a quick scouting survey, or have not yet been visited.

--
Friends of Allegheny Wilderness
220 Center Street
Warren, PA  16365
814-723-0620
info@pawild.org
http://www.pawild.org

Re: Presentation in Warren Sat., 2/16 on Allegheny's Big Tre
by PAwildnessadvocate » Mon Feb 18, 2013

Here are a couple of pictures from Saturday's presentation. Thanks again to Ed Frank for all of the interesting information about the big trees of the Allegheny Islands Wilderness! Many of those in attendance have already told me how much they enjoyed the program. I would say about 15 people attended.
Kirk Johnson

Kaesa's Pine, Broad Brook, MA

by dbhguru » Thu Feb 28, 2013 6:38 pm

NTS, I've been reconnecting to Broad Brook, the stream that flows behind our house. Broad Brook heads about 1.5 miles north of us and flows south by our house and then curves to to the east, passing under North Farms Road to make Fitzgerald Lake. The stream exits at a damn and eventually flows into one of the region's two Mill Rivers, which in turn flows into the Connecticut River. The stream corridor behind our house is owned by Smith Vocational School, but the wetland areas and areas close to homes are usually left alone by their forestry program. The corridor is well forested and includes one of the last stands of tuliptrees as one goes in a northeasterly direction. On Monica's property, there are 10 tuliptrees, and up stream there are quite a few more. One tuliptree on Monica's property is 130.5 feet tall. As such, it is the northern most 130-foot tulip tree that I have yet measured in Massachusetts. But the little Broad Brook corridor has other tall trees. The tallest is a huge white pine, a double, discovered by Will Blozan in 2007. It is now 140.1 feet tall, making it one of 4 trees of any species breaking the 140-foot threshold in the Connecticut River corridor in Massachusetts. There used to be 5, but both of the tuliptrees have lost crown. So, we are left with 3 white pines.

Along Broad Brook, there are at least 6 trees (five pines and one tulip) that reach or surpass 130 feet between our house and the head of the brook. Presently, I'm fine tuning the measurements of the six 130s, which brings me to the Kaesa Pine, named for Kaesa Fern, a composer friend of Monica's and past participant on one of my walks. It is on our neighbor's property. The full height of Kaesa's pine is 130.2 feet. Here is an image of the Kaesa Pine taken from our back lot. A red arrow points to the top of the crown.

Re: Presentation in Warren Sat., 2/16 on Allegheny's Big Tre

by edfrank » Fri Mar 01, 2013 11:31 am

Kirk, Thanks for posting the images. I thought things went well overall. I talked too long, but nobody ran out on me. Thanks for the invitation fro you and Allegheny Outfitters.

Edward Frank
One lesson is that a tangent-based error committed for a chosen top can be largely canceled out relative to the true height of the tree when the true top is another sprig, the height of which equals, or nearly so, the height obtained by the tangent method for the chosen top. The actual measurement error for the tangent method here is 3.7 feet. However, the computed difference in height between the true top (127.4 using sine) and the apparent top (128.4 using tangent) is only a foot in this case. One must keep in mind the top being measured, and by what method.

This example points to situation that often needs explaining to the public. Let’s assume a tree has been mis-measured through the tangent method. Another close by tree of the same species yields the same number through the sine-sine method. The closeness of the two measurements may be touted by a third party as proof of the accuracy of the first even though different trees are being measured. Now, if the tangent method yields an exceptional number for a tree, the existence of another tree measured by the sine method yielding the same number may appear to validate the first in public eye, since the species will have been demonstrated to achieve such heights. When numbers are loosely tossed around, it can appear to outsiders that all this fuss and bother over sine and tangent is just internal squabbles. Something close to that may have occurred in Congaree National Park. I could cite other examples.

What I take away from this example is that we in NTS are always going to have to be explaining why some methods work and others don’t or don’t the way they are commonly applied.

Robert T. Leverett

Re: Kaesa's Pine, Broad Brook, MA

by Don » Sat Mar 02, 2013 1:47 am

Bob- Since nobody is giving you any props here, I thought I’d fire a few questions your way.

Looking at the latest Forestry Suppliers mailer, I notice that the TruPulse 200 has a 200b model, which goes the 200 once better by adding blue tooth capabilities.

As I’ve long advocated for field data recorders, I was pleased to see the TruPulse go wireless. My thoughts immediately went to the iPhone, wondering whether there might be a simple app for the iPhone that could
capture in a spreadsheet I suppose, the data recorded per tree (HD, VD, SD, Height, ID, etc.)...

Have you explored the 200b yet?
-Don

Re: Kaesa's Pine, Broad Brook, MA

by dbhguru » Sat Mar 02, 2013 10:00 am

Don, Unfortunately, I haven't. Future acquisitions of mine will be blue tooth enabled. I've written measurements down on paper for far too long. Michael Taylor has explored blue tooth connections and carried them very far in terms of subsequent spreadsheet analysis. Maybe we can get him to post on the topic. Regardless, I think you're direction is the one we need to take. Field recording would sooo simplify our task, especially where we want to capture the complexity of a crown.

Robert T. Leverett

Cedar Hollow's Common Hackberry, PA

by George Fieo » Thu Feb 28, 2013 9:05 pm

NTS, On 2/17/2013 I returned to Cedar Hollow Preserve to remeasure a tall common hackberry I first measured in 2009. The preserve is owned and maintained by the Open Land Conservancy of Chester County. This tree shares a common base with another hackberry that has slowly been losing it's footing over the years. About a year ago I recieved an email from the preserve's manager informing me that the lesser hackberry had finally blown down leaving the larger hackberry unscathed. The tree now stands at 12'8" x 119' and is currently the Northeast height champion for the species. Does anyone know of a taller specimen? Here are a few pics.

Nearly full view of the hackberry.
Common base.

View of the canopy.

George Fieo

Re: Cedar Hollow's Common Hackberry

by gnmcmartin » Thu Feb 28, 2013 9:56 pm

Thanks George, very interesting.

I have long loved hackberry trees, and think they are much underappreciated. Their most outstanding feature is their form, which is often perfectly
balanced and graceful. Even their "foot" and their base, as it tapers upward into the trunk. Just for two examples in very obvious public places--one is on the DC Mall, just to the south of the reflecting pool, towards the west end. This is a very large one, if memory serves, close to 9' CBH. It "soars" with perfect straightness and balance, and must be over 100'. But I haven't seen it for 15 years or more.

Another one that comes to mind is just medium sized, but it is a beauty. On route 11, south of Winchester, VA is Belle Grove Plantation, an old antebellum estate open to the public. It is just inside the entrance gate to the house.

It was interesting to see just how large they can become. They grow very well in this part of VA. Here, they don't so often have the witches brooms, which are the first thing that allows me to identify them from a distance in Michigan.

On the land around our house north of Winchester, I have made a point of protecting some of the young volunteers. Unfortunately, they are a favorite of rabbits, deer, and voles, which love to eat off the roots off young trees from underground, leaving them to flop over and lay on the ground. UUGGHH!

--Gaines

George, in December of 2006 I measured a hackberry in Michigan to 12'6" in girth by 115.5' in height. This was in Warren Woods and it was only my second attempt at using the Nikon 440 by shooting straight up. At the time I did not know about the scan feature so I would just find a twig and hit the button. The bottom line is that this tree in Michigan is probably pretty close to yours in size if it still exists...maybe just a bit shorter. I am hoping to be able to make a trip back there sometime this year.

Bob, I guess I think there is a decent chance that a hackberry over 120' will be found somewhere in the Midwest like Illinois or Missouri where it is far more common than here in the East.

Doug Bidlack

**Re: Cedar Hollow's Common Hackberry, PA**

**by Will Blozan » Fri Mar 01, 2013 6:56 pm**

George, Dude! That is a seriously impressive tree! Thanks for sharing the great photos. Hackberry's close cousin the sugarberry (Celtis laevigata) exceeds 130' in SC so the genus is capable of producing tall trees. I have no doubt a 130 footer will be found.

Will Blozan

**Re: Cedar Hollow's Common Hackberry, PA**

**by Jess Riddle » Sat Mar 02, 2013 4:13 pm**

George, Impressive hackberry, and as usual, your full tree photographs give a good impression of the tree's form and structure.

Most of the hackberries I saw in New York were on thin soils with little height potential. The few I saw on deeper soils barely topped 100'.

Jess Riddle
Fused redwoods

By F.Jakobsson » Thu Feb 14, 2013 10:38 am

The redwoods’ amazing ability to fuse can create remarkable results.

Along Cal Barrel Road in Prairie Creek Redwood State Park a couple of redwoods has fused together at the base creating one impressive trunk.

Higher up the trunks separate.

I have not measured the trunk, but me leaning against the backside gives an approximation of the size.

Cal Barrel Road fused trunk

Cal Barrel Road panorama with part of fused trunk at extreme right.

This is also a wonderful hiking area.
Cal Barrel Road sign
Another spectacular scene involving fused redwoods is the two pairs standing next to each other in Jedediah Smith Redwood State Park. A wonderful caption taken from the other side of these trees was recently posted by Mario Vaden in the topic about the Floyd Otter sequoia. Mario’s incredibly user friendly and helpful website mdvaden.com is overflowing with astonishing redwood photos, but I suppose you knew that…

The Boy Scout Tree is a fused redwood I’d want to visit. If you’d like to share photos or experiences of more redwoods that have fused at the base and created a very large trunk that resembles one tree until you look up, you’re most welcome.

Fredrik Jakobsson

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**Re: Fused redwoods**

by Mark Collins » Fri Feb 15, 2013 12:25 am

Fredrik,

Here are a couple of my favorite fused redwoods. In both of these cases, the tree's footprints are like enormous ovals. Both examples are incredibly thin if you were to examine them from the side. If I were to take a picture from a side angle, the tree would look ordinary and you'd never know it was part of a "wall of wood."

Fused redwood above only had a cbh of 49 feet 3 in.
Re: Fused redwoods

by F.Jakobsson » Fri Feb 15, 2013 3:04 am

In Henry Cowell Redwood State Park stands another “wall of wood” made up of three trunks separating just above photo.

Fredrik

Re: Fused redwoods

by edfrank » Sun Feb 17, 2013 11:50 pm

Fredrik and Larry, Here are some rows of tree from Olympic National Park:
Granted these are not redwoods, but the images illustrate a process. These are all individual trees, with separate origins growing on a fallen nurse log. To me, based upon the photos alone, and experience with much smaller multitrunk trees, I would suggest that some of these clusters might be growth from the same root system as is common with Larry’s Live Oaks. But that many may be separate trees that initially grew on nurse logs as in the examples above. Redwoods, from what I have read, easily fuse together both at the base and among the limbs themselves. So because of the ease of fusion, the two forms would be indistinguishable in many cases without genetic testing. If the trunks were obviously oriented in a line or wall that would strongly suggest growth on a fallen nurse log. If they were in a clump around a common center, that would suggest growth from a shared root mass. I would guess that the roots themselves may fuse together also even if they were distinct individuals initially, they may share some root function, but the trunks would be genetically distinct.

Edward Frank

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**Re: Fused redwoods**

by mdvaden » Tue Feb 19, 2013 4:10 am

Here's a wall of wood from James Irvine Trail in Prairie Creek Redwoods State Park.

Want to get this one with a wider lens sometime.

M. D. Vaden of Oregon
Re: Fused redwoods

by Rand » Tue Feb 19, 2013 8:08 pm

I got a couple of shots of the same cluster (It was hard to miss) when I was out there in 2010:

I also climbed up inside it, and it was more like a big cluster with several big dead trunks in the middle. More distressingly, there were some big holes that looked big enough to swallow a person up there. Looking straight up gave some nice cathedral views:
Re: Fused redwoods

by Don » Sun Mar 03, 2013 3:03 am

I was dealing with a burst pipe, wet drywall and carpets when the above posts and photos of redwoods momentarily took my breath away...while I still am dealing with the joys of homeownership, I now have a little time to post some photos from a March 2012 visit to some redwoods. They were in Prairie Creek Redwoods, some 50 miles north of Eureka and 25 miles south of Crescent City on Newton B. Drury Scenic Parkway off of Highway 101. Some I include for the 'fused' thread, the others for their own value...

In close proximity

Proverbial wall of wood

Riding high...
Fusion and more...

The Park’s "Big Tree", courtesy of Sony HX9B Panorama Mode - Note worker repairing deck in lower left hand corner...

Superlatives?

Just a roadside redwood...
I liked the light in this one too.

I liked the quality of light in this one.
Trillium thriving just a few feet from the road's edge

Oxalis or more commonly, redwood sorrel

Don Bertolette
La Pine ponderosa likely top of class, OR

by mdvaden » Sun Feb 24, 2013 1:29 am

I noticed that Ascending the Giants just posted on their Facebook page that the Oregon La Pine Ponderosa is now the national champion, and that they just climbed it.

But I didn't recall seeing any numbers posted for height, circumference or crown. So I'm curious where the extra points were gained on that La Pine tree.

M. D. Vaden

Re: La Pine ponderosa likely top of class, OR

by mdvaden » Mon Feb 25, 2013 1:45 pm

Just found an article on the Oregon Ponderosa near La Pine, and why it may be a new champion. It's because of an allowance by AF for sub-species to be divided one group for another.


One thought about this though ...

It's evident now that a tree so much in open, has no need at all for climbing anymore to verify it. That could be be measured with a laser to withing an inch. And since Ascending the Giants typically eye-balls the crown width by wandering beneath, their complete tally would be virtually no more accurate than a laser measure. In fact, give someone like Taylor a laser to hit the branch tips for crown spread estimate, the laser measurement would probably be more accurate.

I haven't been out to La Pine. That would be a nice tree to check out. It's on my list to go to eastern / central Oregon anyway, this year, to see the Painted Hills. I could check out both.

Live Oaks in Vacherie Louisiana Part 2 Oak Alley

by Larry Tucei » Mon Feb 18, 2013 4:56 pm

NTS, In the last few weeks I have been involved with helping the owners of Oak Alley in Documenting their Live Oaks behind the Mansion. I have been down 3 times and finally finished up with the process. I measured a total of 31 Live Oaks that ranged from 9' CBH to 19' CBH. I gave them a listing of measurements, locations of the various Live Oaks and a estimation on the ages of the trees. Four of the trees I measured are 19' + CBH and I put them on the Live Oak Project listing. It has been a pleasure working on this project. I also measured the large Water Oak that I reported on in an earlier visit. The first photo set is of one of the Live Oaks near the Restaurant that measured CBH-17' 9", Height-52.5' and Crown Spread-115' x 114', a beautiful Oak with older growth characteristics. The second set of photos are of the large Water Oak that pointed out at 355, the Louisiana State Champion Water Oak points out at 397 if their measurements are accurate. The Water Oak measured CBH- 20' 5", Height- 82.5' and Crown Spread-97.5' x 91.5'. Larry
Live Oak near gift shop

Live Oak location
Measurement and Age Estimates

Water Oak
Bob - the saga continues, part 3 is on Felicity which is the Sister Plantation to St. Joseph. I added 5 of the 6 Live Oaks I measured there to the Live Oak Listing which I will update in part 3. Johnny- I now have documented over 214 Live Oaks with a CBH of 19’ or greater- soon the Listing will reach 300! Larry

**Re: Live Oaks in Vacherie Louisiana**

*Part 2 Oak Alley*

by [Jeroen Philippona](#) » Thu Feb 21, 2013 5:00 pm

Hi Larry, Sure the Live Oaks are very impressive, perhaps the most impressive oak species concerning crown structure. The large girths are not so strange in such a good climate. But the idea that the more northern species are not able grow so big is perhaps not true. The biggest girths are on open grown oaks: in the formerly dense natural forest oaks were long trunked and probably rarely bigger than 20 - 25 feet, like you can see in Congaree now. Perhaps the Live Oaks in their natural habitat were often open grown and as large as they are now, up to over 30 feet.

I think that one of the reasons that there are very few 20+ oaks in the Northeast US can be the rather short history of open grown trees in this region.

In Europe, especially in the UK, there are many 20+ oaks. In the Ancient Tree Hunt there are 3827 oaks of all kinds recorded in the UK with a girth of 20 feet and over. Of these alone Quercus robur 1853 specimen.

This number is probably so large because of he many centuries old culture of open grown oaks in grazed forests, deer parks, estates and in the old style meadow landscape with hedges and solitarian trees.

Also in Sweden, Germany, France and Poland there are rather large numbers of big, open grown oaks. The largest of all living oaks (over 14 m, 46 ft) is in Sweden, so in a northern and rather cold climate.

Also I like to show you a very special pedunculate oak in Spain:


more photos at:

[http://lestetardsarboricoles.fr/wordpre ... e-espagne/](http://lestetardsarboricoles.fr/wordpre ... e-espagne/)
This is probably a product of old style pollarding the tree.

Jeroen Philippona

**Re: Live Oaks in Vacherie Louisiana Part 2 Oak Alley**

*by Larry Tucei* » Fri Feb 22, 2013 4:04 pm

Jeroen- The Oak in Navarre Spain is impressive thanks for the link. William Bartram detailed in his writings from the mid 1700's of Forests with trees of great size.  
http://docsouth.unc.edu/nc/bartram/bartram.html  
Live Oaks only grow in temps that don't stay below 10 degrees. I believe the short growing season in the northern climate and cold temperatures account for smaller size's. "The range of live oak corresponds to southeastern maritime strand communities (Oosting 1954) which lie southward of the 5.5° C (41.9° F) isotherm for average daily minimum temperatures in the coldest month of the year, typically January (Johnson and Barbour 1990)"

http://www.sms.si.edu/irlspec/Quercu_virginic.htm

Larry Tucei

**Re: Live Oaks in Vacherie Louisiana Part 2 Oak Alley**

*by Jeroen Philippona* » Sun Feb 24, 2013 10:12 am

Larry, I agree that colder climate is responsible for the smaller size of Live Oak in more northern states. But looking to the other oaks species in the eastern USA (like White Oak, Northern Red Oak, Cherry Bark Oak, Bur Oak, etc.) most of them in the natural situation before European settlers came grew in dense forests (except for the drier western borders of the eastern forest). So the oldest open grown oaks of those species (as well as other treespecies in the east) will date from the period that the great forests were cut open. I suppose that there are few open grown oaks outside the deep south of over 200 - 250 years old. That is a shorter period than in Europe, where the forests were cut open before the Roman period. Open grown oaks as well as Sweet Chestnuts, Plane trees (Platanus orientalis) and Lime trees (Tilia spec.) in Europe can be found from over 400 years. Ages are difficult to prove because most very big trees are hollow. Tree ring research for oak has proven some oaks were over 500 years. But some oaks as well as specimen of these other species are thought with reason to be 500 - 700 years, perhaps older. So my point is that the reason that there are more very big trunked oaks in Europe than in the eastern US (except for Quercus virginiana) could be the much longer tradition of open grown oaks in Europe.

Jeroen Philippona

**Live Oaks in Vacherie Louisiana Part III Felicity Plantation**

*by Larry Tucei* » Fri Feb 22, 2013 11:38 am

NTS, I had made an appointment to visit St. Joseph Plantation after I finished up at Oak Alley. Denise Borell the acting Director met up with me and we talked about the Plantation and great Live Oak trees. St. Joseph the 2500 acre active Sugar Plantation has a sister Mansion Felicity on the property and Denise had to go over there and asked me would I like to measure the Live Oaks. She explained that I wouldn't be able to get there without her and this would be a good time to do it, "I said lets go". We drove East a short distance though the property and arrived at Felicity Mansion and immediately I knew several of their Live Oaks would make the Live Oak Project Listing. After measuring the 6 largest Live Oaks 5 of them made the Listing. The St. Joseph property has 12 Live Oaks registered in 2002 with the Louisiana Live Oak Society and I believe 5-6 of those are growing here. The rest are growing at St. Joseph Mansion and I will go back down and Document those on a later visit. I'll call these Oaks Felicity Oaks for now until Denise, the staff and I can figure out
which tree belongs to what registered name. I have the names of the trees and gave her a copy; somehow the names had been misplaced. Saturin Waguespack bought the property in 1889 and his descendants still own the property. In 2005, The St. Joseph Plantation recently was restored by members of the Waguespack, Simon Families and is open for tours seven days a week. In 1907, Waguespack merged Felicity with St. Joseph (in which he had previously owned a one-third interest, along with two cousins) to form the St. Joseph Planting and Mfg. Corp. 

http://www.stjosephplantation.com/ Felicity is located at coordinates 30°0'19"N 90°45'55"W along the Ms. River. The movie Skeleton Key was filmed here as well as the 2012 Brad Pit Movie 12 years a Slave. Felicity was built in 1846 and was a wedding gift to Emma Felicite Aime from her father, Valcour Aime the wealthiest man in all of the south. He was sometimes called the Louis XIV of Louisiana. One of the tracts he once owned now holds Oak Alley. Aime bought that property in 1820 and gave it to his wife’s brother, Jacques Telespore Roman. All of these Plantations have very close ties to one another. The Live Oaks at Felicity were I would think around the time of construction of the Mansion making the trees somewhere around 160-170 years old. The measurements of the Live Oaks at the Mansion are

Felicity Oak A, CBH- 22’, Height- 55.5’ and Spread- 99” x 96”. Felicity Oak B, CBH- 22’ 2”, Height-70’ and Spread 138” x 106”. Felicity Oak C, CBH-22’ 7”, Height-75’ and Spread-139.5” x 130.5”. Felicity Oak D, CBH-17’, Heght-70’ and Spread-123’ x 120’. Felicity Oak E measured CBH-19’ 4”, Height-66.5’ and Spread- 126’ x 102’. Oak F measured CBH- 21’ 1”, Height-75’ and Spread- 124’ x 115’. Larry
Felicity Mansion 2

Felicity Oak 1

Oak 1a
Oak 2

Oak 2a
Oaks 4 & 5

Oak 4
External Links:

The much anticipated, long promised, long winded, Ever Lovin' Bonsai Soil Epic
Posted on February 1, 2013 by adamaskwhy
http://adamaskwhy.wordpress.com/2013/02/01/the-much-anticipated-long-promised-long-winded-ever-lovin-bonsai-soil-epic/?goback=gde_2696676_member_210450468

Elm Root cuttings
Posted on February 6, 2013 by adamaskwhy
http://adamaskwhy.wordpress.com/2013/02/06/elm-root-cuttings/?goback=gmp_2696676

Saving the Past in Dying Trees
by David Malakoff on 8 February 2013, 4:45 PM

Diverse Leaves May Protect Eucalyptus
A tree in Australia was found to have genetically dissimilar leaves that varied in attractiveness to herbivores. By Kate Yandell | February 20, 2013

Conservation photography and necessary evils
Jaymi Heimbuch, Living / Culture. February 26, 2013

Wade Davis: Gorgeous photos of a backyard wilderness worth saving

Tall Tree Tales: Meet the Beast of Broadleaf Longevity
By Dr. Neil Pederson
http://www.knps.org/newsletters/Summer2012_Vol2 7No2.pdf

Climbing one of the tallest white oaks that we've seen in north Georgia at nearly one hundred and thirty feet. Feb 22, 2013 7:26pm For full report go to http://www.treeclimbercoalition.org/phpbb3/viewtopi c.php?f=4&t=2508

International Day of Forests 2013
http://www.youtube.com/watch?v=1_kYSjnCsqY&fe ature=share

Desktop Wallpaper. Anyone want Stout Grove for Desktop Wallpaper? I've used this image for several years. 1920 x 1080 pixels is my screen's crop. I uploaded 2000 x 1500 if you would like to crop and fit. Here's the URL ...
http://www.mdvaden.com/images/StoutWall.jpg

M. D. Vaden

Guam's Brown Tree Snake Problem To Be Solved With Toxic Mice, Officials Hope by ERIC TALMADGE 02/22/13 ANDERSEN AIR FORCE BASE, Guam -- Dead mice laced with painkillers are about to rain down on Guam's jungle canopy. They are scientists' prescription for a headache that has caused the tiny U.S. territory misery for more than 60 years: the brown tree snake.
http://www.huffingtonpost.com/2013/02/22/guam-brown-tree-snake_n_2740733.html

The Scots pine appeared twisted and gaunt against the snow-capped hills. Glen Affric, Highlands: There is a debate about what should be Scotland's national tree. Surely there's only one candidate. Ray Collier, The Guardian, Wednesday
20 February 2013.
http://www.guardian.co.uk/environment/2013/feb/20/glen-affric-highlands-scots-pine

Selling World Heritage destruction: Stop the logging today. Published on Feb 19, 2013. The chainsaws that you were not meant to see in world heritage nominated forests. Please share this film and take online action at http://taann.good.do
http://www.youtube.com/watch?v=dMnSISqaE3M

Global Climate Change: The Evidence
Dr. Malcolm Hughes, Professor of Dendrochronology at the University of Arizona presented this lecture on October 24, 2007. Presented as part of UA College of Science's "Global Climate Change: A Series of 7 Lectures Exploring Our World and Ourselves” Fall 2007 http://cos.arizona.edu/climate/
http://www.youtube.com/watch?v=w6axoGfDId0

Global Climate Change: The Role of Living Things
Travis Huxman, Assistant Professor of Ecology and Evolutionary Biology. Topics that Dr. Huxman discussed include CO2 and climate, Gaia theory, the characteristics of life on Earth, and projected new distribution with a doubling of CO2 and changes in temperature. October 31, 2006 http://www.youtube.com/watch?v=dFg1gX3p0zg

Protest seeks to stop logging
ZARA DAWTREY
February 21, 2013 12.01am DEPUTY Premier Bryan Green has condemned a group of anti-forestry activists protesting at logging coupes in World Heritage-nominated Tasmanian forests. A group of 15 protesters from Still Wild Still Threatened arrived at remote Butlers Gorge, near Tarraleah, yesterday morning.

European Forests: Central to the World We Live in
"European Forests: Central to the World We Live in" gives an overall picture of Europe's most versatile ecological infrastructure, tracing a path from south to north and from west to east. As we tour around Europe, we ask why forests continue to be so important to each region, even in the 21st century.
http://www.youtube.com/watch?v=MaKKKdoLa2g&feature=youtu.be

"I want to find a 10m tree in Cornwall, my colleagues don't hold out much hope!"

Some Amazon tree (species) more than 8 million years old http://www.tff-indonesia.org/index.php/en/forest-news/3355-some-amazon-trees-more-than-8-million-years-old

Kalaloch Red Cedar, Olympic National Park, Washington
If you are interested in great trees consider joining our Native Tree Society BBS at http://www.ents-bbs.org/

Kalaloch red cedar, Olympic National Park, WA

The sound of one ant walking – inside the world of a wildlife audio expert Chris Watson, who has worked on Attenborough’s Frozen Planet and Life in the Undergrowth, shares a remarkable insight into sound recording, some exclusive clips - and his feelings about music in wildlife shows.
THOSE OLD TREES COULD HELP FORECAST FLOODS AND DROUGHTS, 12 Feb 2013. Some of the trees in far north Queensland are very old, perhaps going back hundreds of years. A James Cook University study getting underway on the Atherton Tablelands hopes those trees can tell us more about the weather over the past 400 years and help forecast future extreme weather event.

http://rdontheroad.wordpress.com/2013/02/12/those-old-trees-could-help-forecast-floods-and-droughts/

81m. An ascent of South Africa’s 2nd tallest tree. the video stops at 62m, the tree stops at 81.3m. The ascent was made using an ActSafe PME powered ascender after the team had successfully climbed and measured the tree. Music by the Steven Roberts Band.

http://www.youtube.com/watch?v=vD3TIs2EdWE&feature=share

POST’s Heart of the Redwoods Campaign. The Santa Cruz Mountains harbor some of the last stretches of unprotected redwoods in the world. Your support will help bring us closer to preserving 20,000 acres of these stunning coastal redwood forests. These expanses of towering trees inspire awe, help maintain healthy ecosystems, preserve water quality in our creeks and streams, provide habitat for unique wildlife, capture coastal fog to feed our local water supply, and filter greenhouse gases out of the air we breathe. Find out more about our Heart of the Redwoods Campaign at:

www.openspacetrust.org/redwoods

http://www.youtube.com/watch?v=UzJSKLktAs&feature=youtu.be

Big Tree Hunting - Guest Post by Eli Dickerson, Environmental Educator at Fernbank Museum. I’ve been helping Trees Atlanta update the Champion Tree list for over 2 years now. In that time I’ve measured close to 1,000 trees. Some would (accurately) say I’m obsessed. In fact, I don’t travel anywhere without my tape measure and other tree measuring tools.

http://treesatlanta.tumblr.com/post/2948972094/bigtreehunting

Preventing partnerships: Timber companies & indigenous groups grapple over land. 14 Feb 2013. BY Maya Thatcher. BOGOR, Indonesia (14 February 2013). Scientists have been sifting through stacks of case studies trying to understand why — despite all good intentions — some partnerships between indigenous groups and private timber companies in Indonesia fail, while others flourish.


Motion sensor cameras capture jungle wildlife in their natural habitat. These amazing images were captured by motion sensors on remote camera traps set up by Conservation International who are monitoring wildlife in tropical forest ecosystems.

http://www.telegraph.co.uk/earth/earthvideo/9867320/Motion-sensor-cameras-capture-jungle-wildlife-in-their-natural-habitat.html

"Indigenous territories comprise 18-25 percent of the Earth’s land surface, but harbor 80 percent of the remaining biodiversity. This means that of the nearly 2 million species known to live on earth, the vast majority of them thrive under Indigenous stewardship." -- http://www.firstpeoples.org/who-are-indigenous-peoples/how-our-societies-work

Saving the Past in Dying Trees by David Malakoff on 8 February 2013, 4:45 PM. "It’s a bit of a race against time—we don’t want to lose this natural archive of information about past climate and ecosystem change," says Amy Hessl, a tree ring researcher at West Virginia University in Morgantown. She’s one of the founders of the new Hemlock Legacy Project (HeLP), a volunteer effort unveiled last week in the journal Progress in Physical Geography.


Forestry Commission England publishes new guidance on managing public safety on harvesting sites.

http://www.forestry.gov.uk/PDF/FCPN019.pdf

Early warning system to detect tree diseases crossing the sea. An early warning system developed to detect plant diseases carried by the wind could help prevent the spread of devastating
outbreaks similar to ash dieback from blowing across the sea from the continent.

Leaf-Cam: A Hidden Camera Takes a Fresh Look. Published on Feb 9, 2013 Explore more at http://www.birdsofparadiseproject.org The extraordinary display of the Greater Bird-of-Paradise is a very hard thing to witness: the birds perform at dawn, high in the rainforest canopy. To capture the details of the display and the females' responses, Tim and Ed devised an ingenious remote camera they could place in the display tree, at eye level with the birds. Filmed and photographed by Tim Laman.
http://www.youtube.com/watch?v=2YDp7gVevj0&feature=share

Chopos cabeceros en la Serranía (Comunidad Valenciana) Última actualización el Lunes, 11 de Febrero de 2013 19:14 Escrito por Administrador Jueves, 07 de Febrero de 2013 19:09

The Fragmented Forests Project. Saving Earth's Treasures. Founded in 2012, by conservation photographer Terry Asker, the Fragmented Forests Project is a global educational outreach campaign designed to showcase Earth’s most critically threatened and important forest ecosystems.
http://www.fragmentedforests.org/

https://ameridendro.ltrr.arizona.edu/conferenceDisplay.py?confId=0

News in Brief: Nutrients matter in tropical forests. Soil phosphorus levels drive tree species' different growth patterns.

Widespread Local 'Extinctions' in Tropical Forest ‘remnants’ Aug. 9, 2012 — The small fragments of tropical forests left behind after deforestation are suffering extensive species 'extinction', according to new research led by the University of East Anglia (UEA).
http://www.sciencedaily.com/releases/2012/08/120814213404.htm

I created a word cloud of the content of the January 2013 issue of eNTS Magazine. This allows you to visualize what the important themes were in the issue. The more frequently the word appears the larger it is in size. It was produced by the web program called Wordle: http://www.wordle.net/ I deleted Re, Jan, pm and the numbers.

Magnificent & Weird Trees

Six thousand trees and counting. Volunteers in Wokingham started surveying veteran trees six years ago and now the group has gained more than 200 members and has many thousands of tree records under its belt. http://www.ancient-tree-hunt.org.uk/news/wdvt


Couch Surfing, Researching and Collecting Data from East to West. ASC adventurer Irina Muschik
talks about the things that inspire her to travel. 

**Carolyn White Pine.** from Andrew Joslin Plus 1
Dedicated to Carolyn Temes. Climbing a favorite white pine after a big snowstorm, some crows on the way to their evening roost were a little perturbed at my owl calls ;-)  http://vimeo.com/59622655

**Brazil to count every tree in its rainforests in massive census.** Jaymi Heimbuch, Science / Natural Sciences, February 12, 2013.

**Police: Man found in tree says he 'just likes climbing'** Officers asked English to come down from the tree and he did. Police said English said several times that he'd had some beers and just likes climbing trees. UPDATED 12:35 PM EST Feb 07, 2013  http://www.wlky.com/news/local-news/louisville-news/Police-Man-found-in-tree-says-he-just-likes-climbing/-/9718340/18451024/-/4efgfoz/-/index.html#ixzz2NiaWSJnZ

'Give Me The Money Or I'll Shoot The Trees' by David Kestenbaum, February 07, 2013 3:34 AM.
Ecuador's Yasuni National Park is one of the most diverse ecosystems on Earth. But there's a complication: The park sits on top of the equivalent of millions of barrels of oil.In 2007, Ecuador's president proposed a way around the dilemma: Ecuador would promise to leave the forest untouched if countries in the developed world would promise to give Ecuador half the value of the oil — $3.6 billion.


**North American Dendroecological Fieldweek**
Want to see this while learning about the basics of dendrochronology and the beginning of dendroclimatology in the eastern US? Sign up for the North American Dendroecological Fieldweek. Teachers include Kevin Anchukaitis, Jim Speer, Dario Martin, Christopher Gentry, Nicole Davi, Stockton Maxwell, David Barclay, Carol Griggs, Cari Leland and myself. Hosted by Lamont Tree Ring Lab, Black Rock Forest, and the Mohonk Preserve.

https://www.facebook.com/DendroFieldweek

https://www.facebook.com/pages/Mohonk-Preserve/10820489163?ref=ts

"Big Red," the 168' tall ponderosa pine at La Pine State Park near Bend, can now reclaim its title as the largest ponderosa pine in the nation. Big Red held the title until storms ripped off its upper branches in the 1990s, but the CA tree that held the title afterward is now recognized as a different species, a Pacific ponderosa. In this photo by Terry Asker, Portland arborist Brian French climbs Big Red to measure its height.  http://bit.ly/XZbQGi
Tree species cited as contributor to Neb. fires.
Posted: Saturday, February 23, 2013 6:00 pm.

Valentine’s Tree Love. Posted on February 14, 2013 by Kay Haw

http://wtcampaigns.wordpress.com/2013/02/14/valentines-tree-love/

Wilderness Graffiti. FAW leader says vandalism on rise in national forest. February 14, 2013. By BRIAN COLLINS (bcollins@timesobserver.com), The Times Observer.
http://www.timesobserver.com/page/content.detail/id/562706/Wilderness-Graffiti.html
Back Issues of eNTS: The Magazine of the Native Tree Society

[Image of a snowy scene]

eNTS Magazine January 2013 28 MB
Broken into Four Parts: A, B, C, D
About: eNTS: The Magazine of the Native Tree Society

This magazine is published monthly and contains material that is compiled from posts made to the NTS BBS. [http://www.ents-bbs.org](http://www.ents-bbs.org) It features notable trip reports, site descriptions and essays posted to the BBS by NTS members. The purpose of the magazine is to have an easily readable and distributable magazine of posts available for download for those interested in the Native Tree Society and in the work that is being conducted by its members.

This magazine serves as a companion to the more formal science-oriented *Bulletin of the Eastern Native Tree Society* and will help the group reach potential new members. To submit materials for inclusion in the next issue, post to the BBS. Members are welcome to suggest specific articles that you might want to see included in future issues of the magazine, or point out materials that were left from a particular month’s compilation that should have been included. Older articles can always be added as necessary to the magazine. The magazine will focus on the first post on a subject and provide a link to the discussion on the website. Where warranted later posts in a thread may also be selected for inclusion.

Edward Frank – Editor-in-Chief