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 bulletin 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.

COVER: Ponderosa Pines, Hermosa Creek Trail, CO by Robert T. Leverett

© 2013 Native Tree Society
All rights reserved
TABLE OF CONTENTS

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

Contents

A tree grows in Brooklyn .................................................................13
Re: Do we have wildlife? ..............................................................13
Re: Eastern OLDLIST .................................................................14
Virgin rainforest near Singapore ..................................................14
Re: Videos of Old-Growth Oak Forest on Holston Mountain, TN ........16
Re: Metasequoia Glyptostroboides (Dawn Redwood) .......................17
Re: Metasequoia Glyptostroboides (Dawn Redwood) .......................17
How others describe height measuring .........................................18
Re: How others describe height measuring ....................................18
Re: How others describe height measuring ....................................18
Re: How others describe height measuring ....................................18
Re: How others describe height measuring ....................................19
Re: How others describe height measuring ....................................19
Re: How others describe height measuring ....................................19
Re: How others describe height measuring ....................................19
Re: How others describe height measuring ....................................20
Re: How others describe height measuring ....................................20
Re: How others describe height measuring ....................................20
Re: How others describe height measuring ....................................21
Re: How others describe height measuring ....................................21
Re: How others describe height measuring ....................................21
Re: How others describe height measuring ....................................21
Good spot in NE Michigan? (Lower peninsula) .............................22
Re: Good spot in NE Michigan? (Lower peninsula) .......................22
Re: Good spot in NE Michigan? (Lower peninsula) .......................22
Re: Tanglewood Park, NC revisited .............................................22
Oakwood, WV ...........................................................................24
Re: Nice American chestnut in Montreat, NC ...............................25
Re: Say Good Bye to the White Ash Tree (WV) .............................26
Re: American Forest’s Measurement Group ................................................................. 49
Henderson Hall, WV ........................................................................................................ 50
Re: It’s football vs. forest at Va. Tech............................................................ 51
Re: It’s football vs. forest at Va. Tech............................................................ 51
Tribute to Larry Tucei .................................................................................................... 51
Re: Tribute to Larry Tucei .............................................................................................. 51
Re: Tribute to Larry Tucei .............................................................................................. 52
Re: Tribute to Larry Tucei .............................................................................................. 52
Re: Tribute to Larry Tucei .............................................................................................. 52
Oak ID, MI ....................................................................................................................... 53
Re: Oak ID....................................................................................................................... 54
Re: Oak ID....................................................................................................................... 54
Re: Oak ID....................................................................................................................... 55
Re: Oak ID....................................................................................................................... 55
Re: Oak ID....................................................................................................................... 55
Re: Oak ID....................................................................................................................... 55
Coal Run - WV .................................................................................................................. 56
Re: Coal Run - WV .......................................................................................................... 57
Re: Coal Run - WV .......................................................................................................... 57
Re: Coal Run - WV .......................................................................................................... 57
Re: Coal Run - WV .......................................................................................................... 58
Geology question for Ed Frank .................................................................................... 58
Re: Geology question for Ed Frank .............................................................................. 58
Tribute to Georgia O’Keefe ............................................................................................. 58
Tribute to Georgia O’Keefe ............................................................................................. 59
Besser Natural Area (MI) ............................................................................................... 66
Re: Besser Natural Area (MI) ......................................................................................... 70
Re: Besser Natural Area (MI) ......................................................................................... 70
Re: Besser Natural Area (MI) ......................................................................................... 70
Virginia Pine Sites with 110 Footers ........................................................................... 71
Re: Virginia Pine Sites with 110 Footers ................................................................. 71
Re: Virginia Pine Sites with 110 Footers ................................................................. 72
Re: Big MN Cottonwood ............................................................................................... 72
Tree Maximums - Genus of the Week: Catalpa ......................................................... 72
Re: Tree Maximums - Genus of the Week: Catalpa ......................................................... 72
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re: Tree Maximums - Genus of the Week: Catalpa</td>
<td>73</td>
</tr>
<tr>
<td>Re: Aerial Drones</td>
<td>73</td>
</tr>
<tr>
<td>Re: Aerial Drones</td>
<td>73</td>
</tr>
<tr>
<td>Re: Aerial Drones</td>
<td>74</td>
</tr>
<tr>
<td>Re: Aerial Drones</td>
<td>74</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>75</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>75</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>75</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>75</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>76</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>76</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>76</td>
</tr>
<tr>
<td>Re: Mountains-to-Sea Trail</td>
<td>76</td>
</tr>
<tr>
<td>Larry Tucei's Pine and More</td>
<td>77</td>
</tr>
<tr>
<td>Re: Larry Tucei's Pine and More</td>
<td>80</td>
</tr>
<tr>
<td>Structure From Motion to create high resolution point clouds</td>
<td>81</td>
</tr>
<tr>
<td>Re: Structure From Motion to create high resolution point cl</td>
<td>83</td>
</tr>
<tr>
<td>Re: Structure From Motion to create high resolution point cl</td>
<td>83</td>
</tr>
<tr>
<td>Re: Structure From Motion to create high resolution point cl</td>
<td>83</td>
</tr>
<tr>
<td>Re: Structure From Motion to create high resolution point cl</td>
<td>83</td>
</tr>
<tr>
<td>Re: Structure From Motion to create high resolution point cl</td>
<td>83</td>
</tr>
<tr>
<td>Drone Explores &amp; Measures Trees In A Very Remote Forest</td>
<td>85</td>
</tr>
<tr>
<td>Re: Mission to Bridge Creek</td>
<td>92</td>
</tr>
<tr>
<td>Re: Mission to Bridge Creek</td>
<td>92</td>
</tr>
<tr>
<td>Re: Testing TruPulse 200 X</td>
<td>93</td>
</tr>
<tr>
<td>Re: Testing TruPulse 200 X</td>
<td>93</td>
</tr>
<tr>
<td>Re: 2013 Tree Climbers International/NTS Event October 9-14</td>
<td>94</td>
</tr>
<tr>
<td>Re: 2013 Tree Climbers International/NTS Event October 9-14</td>
<td>101</td>
</tr>
<tr>
<td>Kudos to NTS</td>
<td>101</td>
</tr>
<tr>
<td>Re: 2013 Tree Climbers International/NTS Event October 9-14</td>
<td>102</td>
</tr>
<tr>
<td>Oak Openings Metropark (OH)</td>
<td>102</td>
</tr>
<tr>
<td>Bernie Krause: The voice of the natural world</td>
<td>103</td>
</tr>
<tr>
<td>Re: Bernie Krause: The voice of the natural world</td>
<td>103</td>
</tr>
<tr>
<td>Re: Emerald Ash Borer</td>
<td>103</td>
</tr>
<tr>
<td>Re: Emerald Ash Borer</td>
<td>104</td>
</tr>
<tr>
<td>Re: Emerald Ash Borer</td>
<td>104</td>
</tr>
</tbody>
</table>
Re: Trees database- use it ......................................................................................................................170
Re: Group progress of AF measuring group ..........................................................................................171
Re: Group progress of AF measuring group ..........................................................................................173
Re: Group progress of AF measuring group ..........................................................................................173
Re: Group progress of AF measuring group ..........................................................................................174
Re: Group progress of AF measuring group ..........................................................................................175
Re: Group progress of AF measuring group ..........................................................................................176
Re: So-called Champion Baldcypress - Please Vote ..............................................................................177
Re: So-called Champion Baldcypress - Please Vote ..............................................................................177
Re: So-called Champion Baldcypress - Please Vote ..............................................................................177
Re: So-called Champion Baldcypress - Please Vote ..............................................................................178
Re: So-called Champion Baldcypress - Please Vote ..............................................................................178
How wildfires can do more good than harm .........................................................................................179
Re: How wildfires can do more good than harm ...................................................................................179
Re: Trees database- use it ......................................................................................................................179
ID this tree – Black Cherry ......................................................................................................................180
Re: ID this tree .........................................................................................................................................181
Re: ID this tree .........................................................................................................................................181
Re: ID this tree .........................................................................................................................................181

Those interested in reproducing materials (articles or photographs) from the
eNTS: the Magazine of the Native Tree Society should contact the Editor-in-Chief and/or the associated author/photographer directly for permission.
Editor’s Corner
By Edward Frank

Welcome to the July issue of eNTS: The magazine of Native Tree Society. I have not been as active in the BBS message boards this past month or few months as I have been in the past. I also am not getting out much into the field. This is simply because of some personal issues here at home. My interest in the Native Tree Society has not waned on the recent months. I am still reading all the posts as they are made via RSS feed and log into the BBS itself at least daily or not multiple times per day. I still and maintaining and posting interesting links to our Facebook Page and newer Facebook Group. I would encourage any NTS members who are on Facebook to join this group and page. The posts there contain links to events and tree info from around the world and are more cosmopolitan that what are posted to the BBS.

The conversation threads in which I have been particularly active are those dealing with the efforts of American Forests to update their tree measurement guidelines. I am hoping that changes will be made to better the quality and utility of the AF Big Tree Listing. I am not optimistic that much progress will be made, but am trying to help and encourage NTS members Robert Leverett and Don Bertolette in their efforts to bring the rest of the measurement committee around to the NTS way of thinking on several measurement fronts. This is an issue near and dear to my heart.

The other area I want to try to pursue is to encourage NTS members to enter their tree measurements into our Trees Database: http://www.treesdb.org/

It is a wonderful resource developed by Mitch Galehouse and Steve Galehouse that can serve our organization well, now and into the future.

The efforts of Michael Taylor to use remote drones to study trees is blowing me away. In particular his recent implementation of Structure from Motion to locate exceptional trees in remote locations. It is a privilege to have him in the organization.

This fall is a joint get-together with NTS and Tree Climbers International on October 9-14 in Norcross, Georgia http://www.ents-bbs.org/viewtopic.php?f=390&t=4856#p24469 I doubt I will be able to attend myself, but want to encourage everyone who can do so, to attend the event. Registration information can be found at the link above.

The final thing I want to see the organization work toward is to become a tax-exempt non-profit scientific organization in its own right instead of just being considered for tax purposes a subset of the Friends of Mohawk Trail State Forest group.

Edward Forrest Frank
A tree grows in Brooklyn

by Joe » Tue Jul 02, 2013 8:15 am

no, it's not Brooklyn, it's at the W.J. Graves gravel pit in East Templeton- an amazing enterprise where they have mountains of sand, gravel, crushed stone of all kinds and large and small rocks for construction purposes. I've been going there to purchase crushed stone for drainage behind a retaining wall I'm rebuilding next to my driveway. I love driving around the place as it's like being on the moon- if it wasn't for this lone tree, it would look as sterile as a.... solar or wind farm, you know, those "green energy" facilities. The reality is if you want "green energy"- grow trees. This lone tree is growing, miraculously, on a mountain of finely crushed stone.

Joe

Re: Do we have wildlife?

by Wit'sEnd » Mon Jul 01, 2013 1:36 pm

"...the core of the problem is our nature as a species."

I have come to appreciate the verity of that statement, Bob. Now reading this: "Denial: Self-Deception, False Beliefs, and the Origins of the Human Mind" which goes a long way towards explaining why we are so stupidly ruining our planet. I stopped by here because I happened across your essay about Michael Perlman http://enviroshow.wordpress.com/climate-crisis/

and I was wondering how you all, being tree-huggers, think they are faring since my last visit and questions about ozone. In the interim I wrote a book (free download) http://www.deadtrees-dyingforests.com/pillage-plunder-pollute-llc/

with a shorter update as a guest post http://scienceblogs.com/gregladen/2013/01/29/whispers-from-the-ghosting-trees/

How is his tree in the Algonquin Grove? His book is next on my list - The Power of Trees. I can't believe I never heard of it before.

Thanks,

Gail
http://witsendnj.blogspot.com/
Re: Eastern OLDLIST

by Neil » Tue Jul 02, 2013 10:03 am

Dear NTS,

Apologies for little activity. Life has sped up recently. I am trying to slow it a bit so I can participate more here.

I write with good news:

First, I got to meet Russ Carlson in person at the North American Dendroecological Fieldweek at Black Rock Forest last week. I learned a lot about wood anatomy and other tree attributes from Russ. It was great.

Second, the advanced dendroclimatology and intro groups re-located and sampled the oldest-documented pitch pine [in the known universe]. Because of efforts by the advanced dendroclimatology group, we now know that this tree is currently 398 years old! Guess we'll have to have a 400 yr celebration in 2015. Here is a picture of that tree:

Finally, the intro group cross-dated the oldest documented white oak in Kentucky and the 7th oldest known white oak. Russ actually cross-dated this wonderful tree. It resides in Mammoth Cave National Park. We missed the oldest pith date for a white oak in KY by 3 years. This tree is a little hollow and likely predates 1650.

These ages are now posted on Eastern OLDLIST: http://www.ldeo.columbia.edu/~adk/oldlisteast/#spp

neil

Virgin rainforest near Singapore

by Shorea » Tue Jul 02, 2013 12:17 pm

Hi all,

Who would have thought that a patch of virgin rainforest exists near Singapore, in Johor Bahru, Malaysia, just an hour or so drive away? But Mount Pulai is such a place. A hill almost 700 meters high just 20 km from the city of Johor Bahru, I visited there last month, and I am very impressed with the forest there. Size-wise about 2000-3000 hectares at least. You don't need to go all the way to Taman Negara (Malaysia's National Park) when you can visit Mount Pulai, whose forests are far more accessible.

This accessibility also increases the threats to the forest, and my earnest hope is that the entire forest is gazetted as a park of some sort in the near future. Awareness about the forest itself is surprisingly low, and I don't think it's a place people go to, to study rainforest ecology or other subjects. Very strange indeed.

The dipterocarp trees there are impressive, the standing ones still seem healthy with good crown structure. Many of the trees are 1 to 1.5m DBH, and are 40-45 (even above 50 meters) tall. Although disturbingly, many dead trees can be seen along fringes of exposed areas (but this is a global phenomenon apparently).

The constantly increasing rubbish is a major downer,
but IF this place is recognized and accorded protection, the litter problem will probably diminish, as is the placement of rubbish bins and periodic collection. It's very popular with locals and also Singaporeans due to its waterfall.

Here's sharing some photos (I am not sure if there is a way to upload directly into this forum without having to use a third party image hosting service).

I snapped this just before the rain came down in the nick of time. A good view overlooking the canopy of the forest, with the stream down there. The waterfall is further up.

Looking up the trees from walking along the road below. These are 35-45 meter tall trees on average. A very rich diversity. Note the secondary undergrowth along the forest fringe, many of these bushes are young saplings of *Macaranga*.

The view across the waterfall/stream, from the road up the hill. It runs parallel alongside the stream for some distance. A lot of big trees can be seen from across that side of the stream.

The crown of a dipterocarp tree, most likely *Shorea curtisii*. You can see how the beautiful cauliflower crowns are formed.
A fallen tree by the road. I measured it roughly, and it was around 50 meters to the top branches. It even still has its name plaque attached to its trunk. Dipterocarpus verrucosus, a species common in hills.

Giant Anisoptera spp inside the forest. Anisoptera is one of the dipterocarp genera.

A view of the one of the foothills in the evening light. Of course, the forest is an island surrounded by oil palm and housing estates.

Edit: Forgot to mention one thing. I think the unlogged portion of this forest reserve may not encompass the entire reserve, perhaps one third of it. Still, it would be great if the Johor State Government (within Malaysia) can get this patch of forest protected and managed better. I can only hope....

You can read more about this forest on my site: http://www.rainforestjournal.com/gunung-pulai-in-johor/

Re: Videos of Old-Growth Oak Forest on Holston Mountain, TN

by Josh Kelly » Wed Jul 03, 2013 10:52 am

http://www.youtube.com/watch?v=dHMHDYEHfuI
http://www.youtube.com/watch?v=XpnLz1bff4
http://www.youtube.com/watch?v=VDUhe5hR_FV0
http://www.youtube.com/watch?v=AyJUlZNYJk
http://www.youtube.com/watch?v=rbloVtKCsQ
http://www.youtube.com/watch?v=E2Gzdc4JbJU
http://www.youtube.com/watch?v=3X58ixac8p4
http://www.youtube.com/watch?v=jYTvgMnuv94

Neil wrote: nice find, Josh - looking to hear how old those trees are!
I didn't end up doing much age work there, but finding trees in the 250 age range is easy in that area. If looking for a dendro site for oaks or mesophytic species like birch, maple, ash, or poplar, Holston Mountain is an incredible site. About 400 acres of old-growth has been documented on Holston Mountain to date, and I'm positive that is just the beginning of a significant area of primary forest. The work done by the early Forest Service to acquire these last vestiges of primary forest in the Appalachians is truly incredible. Equally incredible is that society at large is basically unaware of the amazing legacy we have been given in our public lands.

Josh

**Re: Metasequoia Glyptostroboides (Dawn Redwood)**

*by bbeduhn* » Mon Jul 01, 2013 3:55 pm

I got the chance to measure some more redwoods on the way back from Greensboro. When I figure out my new iphone, I'll get pics posted. A few are from Asheville.

**ASHEVILLE**

Beverly & Hawthorne 98.9' 91.5' ~75'
Periwinkle 51.4'

**WINSTON-SALEM**

Salem College 87.1' 86.3' 89.7' 88.1' 93.7'
77.4' 88.8' 88.9' 88.2'
Gorgeous row! L to R
Tanglewood Park Manor House 97.5' 9'11.5" cbh

**HICKORY**

Quality Suites 66.9' 60.5' 58.5' 64.8' 61.6'
61.4' 66.1' 70.8' 65.6' 63.0'
R to L

MORGANTON

Riddle Developmental Center 80.5' 79.2' 91.4'

MARION

McDowell Comm. Coll 65.7'

**Re: Metasequoia Glyptostroboides (Dawn Redwood)**

*by bbeduhn* » Wed Jul 03, 2013 3:54 pm

Row of 9 at Salem College
87.1' 86.3' 89.7' 88.1' 93.7'
77.4' 88.8' 88.9' 88.2'
Gorgeous row! L to R

Brian Beduhn
How others describe height measuring

by dbhguru » Mon Jul 08, 2013 11:29 am

NTS. The AF project, testing new laser rangefinders, and our on-going efforts to do a better job of measuring the dimensions of trees has led me to look at lots of descriptions on the Internet on how to measure tree height. Here is a quote from a state champion tree site.

Tree Height
The total height of the tree is considered to be the distance between the base of the tree trunk and the topmost twig. The most reliable measuring tools are the Abney hand level, clinometer, or transit. If these tools are not available, one can measure the tree’s height with a straight stick.

The majority of state coordinators seem locked into a self-defeating pattern. They need to keep things simple for the public. Understood! But then they mislead readers on what is actually involved to get heights accurate enough to be published. The simple solution to me would be to describe two measurement processes: (1) simple in the ball park processes for the nominators, and (2) more rigorous processes for the certifiers. Lots of sympathy for the first group and no mercy for the second. This is the route I’ll be recommending to AF. We’ll see how far I get, but I think there are sympathetic ears for tightening down the rules for the certifiers.

On one website, the coordinator acknowledged the difficulty in measuring height and stated that the certifiers would often take multiple measurements and average them. This illustrates the lack of understanding on what the numbers represent and why the differences between measurements that exceed a couple or three feet (equipment-based errors). Why they believe averaging a set of incorrect numbers somehow magically cancels out the errors and allows them to arrive at a valid figure is mystifying to me, but there are plenty of examples of people thinking along those lines.

Robert T. Leverett

Re: How others describe height measuring

by Will Blozan » Mon Jul 08, 2013 6:21 pm

Bob, And don't forget about the "shadow" method...

I would like to see every state coordinator equipped with a laser, clinometer, and basic tree measuring guidelines. Make it so captain!

Will

Re: How others describe height measuring

by Larry Tucei » Mon Jul 08, 2013 8:41 pm

Bob - Great stuff, the future looks good with you and company at the AF. Will I believe has the right idea every State Coordinator get a laser, clinometer, or trupulse. It would be cool if NTS members could help our regional State Coordinators verify the champion’s true measurements with our experience in accurate measurement. Show them if they really wanted to learn the right way to measure tree height. Thoughts? Larry

Re: How others describe height measuring

by dbhguru » Mon Jul 08, 2013 10:18 pm

Larry,

This may be a possibility. LTI has tentatively expressed some interest in donating TruPulses to AF for use possibly by state coordinators. It would create a stronger partnership between AF and the coordinators. The subject has been broached. No decisions yet, but it is well within the realm of
possibility. Also, big Don Bertolette, a co-member of the measuring group has an extension to the two-level process. I like Don's idea even more, but I'll let him explain it.

Bob

Re: How others describe height measuring

by tsharp » Tue Jul 09, 2013 6:21 am

Bob,NTS:
I can not resist pointing out that West Virginia has seven state foresters supplied with laser rangefinders and clinometers. These are the people that verify nominations for the state Big Tree Register. The State Coordinator, Bob Hannah is one of them. The goal was to get the big tree register up to date and all heights measured by laser using the sine method. Although we did not get to 100 percent I believe the latest register (May 2013) has 95 percent of its entries with height measured by laser and most done since 2009. So it can be done -all it takes is to get started -that's the hard part.

The WV state big tree register has a column indicating how the height was determined. See it here:

http://www.wvcommerce.org/resources/forestry/big_tree/registered_trees/default.aspx

Re: How others describe height measuring

by Joe » Tue Jul 09, 2013 3:53 pm

dbhguru wrote: Change comes much more slowly than we think it should. Bob

all the more reason to write a definitive "Why Accurate Tree Measuring is Extremely Important"

Joe

Re: How others describe height measuring

by dbhguru » Wed Jul 10, 2013 9:58 am

Turner, Your point is well taken. It can be done, and obviously in WV has been done. I have a suspicion that you played a not insignificant role in WV's ascendancy, but that the others were receptive is a credit to them. I plan to use your example in discussions with the AF Group. And let's not forget Alaska and Don Bertolette. Since Don is a member of the Group, Alaska's state champion tree coordinator, and the president of WNTS, we are mightily well represented in AF to make real, long-lasting changes.

Sometimes, it is difficult for me to get out of the past. Change comes much more slowly than we think it should. I fear that I have a habit of concentrating on the problem areas instead of enjoying our successes. However, I acknowledge that we are making progress on many fronts thanks to all concerned.

Robert T. Leverett
spreads. We've discussed the reasons before. But here is another, nature writers and newspaper reporters seldom get it right when reporting. Lots of sources of wrong information out there.

Robert T. Leverett

Re: How others describe height measuring

by tsharp » Sat Jul 13, 2013 11:17 am

Bob, NTS:
I recently looked at Maryland's Big Tree list and found out that it appears it has changed structure and is now funded by the "Maryland Association of Forest Conservancy District Boards" instead of the Maryland Department of Natural Resources. They have a nice web page at:

http://www.mdbigtrees.com/view_tree.aspx

There is over a thousand trees on their register and as I was looking down through the list I noticed that they listed "ENTS" as a method of measurement and have links to Will's "Tree Measuring Guidelines" on the NTS web page.
The first ten biggest trees listed had seven identified as Ents method of measurement and the other three as tape and clinometers. It looks like they changed over about 2009. I am curious about how that came about. They list the measuring crews and I do not recognize any names that have been active on the BBS board. Does any NTS member have any knowledge of who or what precipitated their changeover?
There doesn't appear to be any any reservations about accepting multi-stem trees in their register although most of the pictures are good enough to identify them.
It also appears there may be some in the measuring group are not convinced that lasers are the way to go. See the comments about a Silver Maple here:


TS

Re: How others describe height measuring

by eliahd24 » Sat Jul 13, 2013 12:36 pm

For what it's worth, the state coordinator here in Georgia (Scott Griffin with Georgia Forestry Commission) has been very receptive to my input for our state list. He drove down to Atlanta a few years back and we spent the day visiting trees, taking measurement and photo's, etc. I used the SIN method with laser and clinometer for all trees that day. Now I can submit nominations and updated measurements to him and he'll post them without hesitation. Just a little bit of time invested early on has led to a great working relationship for years now.

Re: How others describe height measuring

by dbhguru » Sat Jul 13, 2013 12:58 pm

Turner,

I looked at the link. Measurers who use a laser-based hypsometer and can't find an opening to the center area of a crown (where they assume the top will be) are often at a loss as what to do thereafter. In truth, if you can't identify the sprig that you are calling the top and be able to locate it relative to other contenders and to the base of the trunk, then you are fooling yourself about what you are doing. This is a lesson that appears a long time in the coming, and it is made all the more difficult when the measurer is stumped by the underlying trigonometry and instead relies on a set measurement protocol. There is no substitute for experience and the use of a little commonsense. That said, from what you are seeing as well as others, including myself, huge strides have been made, and I expect as others take up the challenge, some of them will be teaching us a thing or two.

I expect that there have always been experienced
tree measurers out there who recognized that standard measurement protocols were flawed and continued to be used in lieu of more exacting methods for a variety of reasons, not the least of which was acceptability to others, i.e. the old guard.

Robert T. Leverett

Re: How others describe height measuring

 Jwt by Matt Markworth » Sat Jul 13, 2013 7:43 pm

Tsharp wrote: I noticed that they listed “ENTS” as a method of measurement and have links to Will's "Tree Measuring Guidelines" on the NTS web page.

It appears that the MD Big Tree site was modeled after the PA Big Tree site, and that may have been how the various NTS references made their way into the MD site. However they got there, it's great to see!

Here's an example of what I'm referring to. The MD page even references the PA Big Tree Program at the bottom of the page . . .

http://www.mdbigtrees.com/Measure.aspx

http://www.pabigtrees.com/Measure.aspx

- Matt

Re: How others describe height measuring

 Jwt by dbhguru » Sat Jul 13, 2013 8:58 pm

Mark,

These are relatively new changes and I think we will likely see a steady march toward tightening the reins by other state level coordinators. I expect that as they discover Ed's excellent guides on Wikipedia, even the most entrenched will want to improve their sites. Maybe we're seeing the beginning of a revolution in improving recreational tree measuring.

If we consider the level of expertise that exists in the mountaineering community, we can imagine some of it spilling over into tree measuring from unexpected directions. When the word circulates that American Forests is strengthening their guidelines, that will likely have a ripple effect.

The AF working group which has Don Bertolette, Scott Wade, and me as members will meet again in conference on the 19th. Please feel free to give us your opinion on measuring multi-stem trees, tree definition, etc. We welcome input.

Robert T. Leverett

Re: How others describe height measuring

 Jwt by Don » Mon Jul 15, 2013 5:22 pm

Mark, Turner, Will/NTS at large-

Yes, please do weigh in on accuracy measuring issues with multi-stem trees, tree definitions, etc., as they would be timely with our July 19th group meeting.

Don Bertolette
**Re: Good spot in NE Michigan? (Lower peninsula)**

**by DougBidlack » Thu Jul 04, 2013 7:39 pm**

Matt, unfortunately you may be in the poorest area of Michigan when it comes to tall trees. I can't think of any good places at the moment and I did a quick search and couldn't come up with anything better than the site you just visited. The only place that I can think of is Hartwick Pines SP and I'm sure you already know about it. It's also only on the very edge of northeastern LP and probably a little too far. Sorry I can't be of more help but I'm on my way to fireworks. Have fun even if you can't find tall trees and don't forget to measure the little guys like striped maples too!

Doug

---

**Re: Good spot in NE Michigan? (Lower peninsula)**

**by Matt Markworth » Thu Jul 04, 2013 8:14 pm**

Thanks Doug! I think you're onto something. I'll focus on the little guys. Enjoy the fireworks, I'll be strolling out to the beach and watching them across Thunder Bay this evening.

-Matt

---

**Re: Tanglewood Park, NC revisited**

**by bbeduhn » Tue Jul 02, 2013 9:01 am**

I finally got the chance to stop by Tanglewood. There wasn't enough time to traverse the trails and doing so would have been an exercise in frustration anyway, since the leaves are so thick. I stopped at the Manor House, which had a number of fine specimens and an arboretum as well. The state champ walnut looked a bit weary, wearing three belts to hold the trunk together and a cable or two. A couple of others were ready to mount a challenge to the title.

Blk. Walnut  
*Juglans nigra*  

<table>
<thead>
<tr>
<th>H</th>
<th>CBH</th>
<th>Spr</th>
<th>Pts</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.2’</td>
<td>161”</td>
<td>99.2’</td>
<td>262</td>
<td>no#  state champ</td>
</tr>
<tr>
<td>94.2’</td>
<td>146”</td>
<td>92.4’</td>
<td>263</td>
<td>529</td>
</tr>
<tr>
<td>88.2’</td>
<td>156”</td>
<td>102.0’</td>
<td>268</td>
<td>no#</td>
</tr>
<tr>
<td>95.1’</td>
<td>113”</td>
<td>111.6’</td>
<td>236</td>
<td>480</td>
</tr>
<tr>
<td>--</td>
<td>138”</td>
<td>--</td>
<td>--</td>
<td>536</td>
</tr>
</tbody>
</table>

South. shagbark hick

<table>
<thead>
<tr>
<th>H</th>
<th>CBH</th>
<th>Spr</th>
<th>Pts</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>98.4’</td>
<td>110”</td>
<td>96’</td>
<td>232</td>
<td>491</td>
</tr>
<tr>
<td>125.6’</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>512</td>
</tr>
</tbody>
</table>
South. Magnolia

-- 162" -- -- no# triple trunk

White oak

-- 174" 124.6' -- 517

Tuliptree

131.0' -- -- -- 511
132.0' 200.5" -- -- no#

Dawn redwood

97.5' 119.5" -- --

The new state champ, barring other challengers, is just 60 yards from the old champ. All three big ones are in close proximity. The Manor House was built in 1859, and I suspect these walnuts were planted in that year or shortly thereafter, making them likely 140-154 years old.
**Oakwood, WV**

by tsharp » Wed Jul 03, 2013 1:52 pm

NTS:
Sometime after the Derecho of June 29th, 2012 an acquaintance was bemoaning how many trees had been destroyed on their property. Since I had measured a few trees on their property in the past I was curious to take a look. The property is about eight acres in the city limits of Parkersburg and has two personal residences. About 6 acres is mowed. A previous owner was fixated on daffodils and allegedly planted over 100,000 bulbs in the 1920’s and 30’s. They put on a impressive display in the Spring. A total of 19 trees were destroyed by the storm of which two I had measured 2008. They were interested that they at least had a partial record of what was lost and for their future reference I agreed to measure at least two of the biggest of each species on the property after leaf drop. I spent a couple of partial days in November and December of 2012 on the property measuring trees.

The largest of species encountered were a mix on native and planted and are listed below in order of descending height.

- Yellow-poplar (*Lirodendron tulipifera*) 121.8’ x 12.7’, 112.7’ x 13.2’
- Pin Oak (*Quercus palustris*) 102.5’ x 8.0’, 91.2’ x 8.6’
- Black Oak (*Quercus velutina*) 101.7’ x 13.5’ - CBH taken @ 5 1/2’
- Blackgum (*Nyssa sylvatica*) 100.3’ x 10.5’, 84.5’ x 11.0’
- Northern Red Oak (*Quercus rubra*) 98.0’ x 9.3’, 92.0’ x 12.2’
- Norway Spruce (*Picea abies*) 91.2’ x 5.4’, 86.3’ x 6.7’
- Eastern Hemlock (*Tsuga canadensis*) 90.3’ x 6.9’ has HWA
- Shagbark Hickory (*Carya ovata*) 86.3’ x 5.4’, 78.5’ x 6.8’
- Eastern White Pine (*Pinus strobus*) 84.1’ x 7.0
- Black Walnut (*Juglans nigra*) 73.2’ x 9.4’
- Norway Maple (*Acer platanoides*) 72.3’ x 7.5’
- Red Pine (*Pinus resinosa*) 70.4’ x 3.9’
- Chinese Chestnut (*Castanea mollissima*) 70.2’ x 5.0’
- American Beech (*Fagus grandifolia*) 68.2’ x 9.8’
- Shingle Oak (*Quercus imbricaria*) 61.3’ x 4.2’

- American Holly (*Ilex opaca*) 60.4’ x 4.7’
- Sassafras (*Sassafras albidum*) 56.6’ x 2.4’, 51.5’ x 2.6’
- Ohio Buckeye (*Aesculus glabra*) 52.6’ x 6.0’ x 61’ (maximum crown spread)
- Umbrella-tree (*Magnolia tripetala*) 41.8’ x 5.6’ x 53’ (maximum crown spread)
- English Yew (*Taxus baccata*) 41.5’ x 5.2’ @ 3’ x 38.5’ (maximum crown spread)
- American Witch Hazel (*Hamamelis virginiana*) 7’ x 1.1’

The Witch Hazel was wind thrown but still a rooted and healthy tree. Main stem length is 29.2’ and maximum height from ground level was 6’

Below is a picture of the tallest Blackgum guarding one of the residences:

---

Photo by Turner Sharp
A complete list of trees measured can be found on the Trees database at:

http://www.treesdb.org/Browse/Sites/1559/Details

The Rucker indices for the site are:
RH10 = 94.9’
RG10 = 9.9’

There are a couple of species of note which I registered with the state of WV. They include the Ohio Buckeye, Umbrella-tree and English Yew.

The two destroyed trees that I had measured in 2008 were a Black Oak at 103.8’ x 13.9’ and a Northern Red Oak at 100.2’ x 9.6’

Of interest is an early deed for the property that specifies that for every Oak tree removed two had to be planted.

TS

Re: Nice American chestnut in Montreat, NC

by Will Blozan » Sat Jul 06, 2013 8:21 am

NTS,

I saw this tree this week and it still looks good. I will get updated measurements this fall (and some nuts perhaps).

(Original post August 5, 2012)
**Re: Say Good Bye to the White Ash Tree (WV)**

※ by Ranger Dan » Mon Jul 01, 2013 5:15 pm

For posterity, we should document the ash trees, as we wish could have been done for the American chestnut. Take lots of pictures, movies, measurements, notes on aspects of the site conditions and biological communities they live in. Take detailed pictures of the ones with unique and special character, especially.

Last fall I made a return trip to Prettyland Mountain, in the Smokies, because I recalled a lot of stately, tall ash trees there in never-logged forest. I have images and movie-ettes to share. Some of the trees are quite tall. No exceptional trunk diameters, but many in the 30-40” diameter range, and very beautiful, open forest, in company with yellow buckeye, other northern hardwoods, and spruce. It’s very tough to get to. I can give directions and descriptions to anyone interested.

At the Claytor Nature Study Center near Bedford, VA, where I work, we have an exceptional white ash. It was measured by our big tree coordinator and author of *Remarkable Trees of Virginia*, who says it may be Virginia’s 5th largest. We would like to be able to save it, but since the trunk diameter is 5 ft., I understand that may not be practical or even possible. We will be heartbroken to see it go, along with the other stately ash trees that are so common here.

Dan Miles

---

**Re: Say Good Bye to the White Ash Tree (WV)**

※ by Will Blozan » Mon Jul 01, 2013 6:47 pm

Dan, The removal costs of that 5’ diameter ash would surely equate to severa- if not many years of EAB treatments. Money has to be spent one way or another- that is unavoidable. If imidacloprid can be used it is super cheap. Dinotefuran is the second least costly and emamectin the most costly. Choose wisely.

Will

---

**Re: Say Good Bye to the White Ash Tree (WV)**

※ by Joe » Tue Jul 02, 2013 10:06 am

Speaking of WV, the attached photo was just sent to me by Peter Church, current Forest Stewardship Director for Mass- it's a "patch reserve".

![Attached photo](image)

**Re: Say Good Bye to the White Ash Tree (WV)**

※ by Ranger Dan » Sat Jul 06, 2013 9:54 am

Regarding treatment for emerald ash borer, accounts of failure of treatments have led me to believe that it
may be a waste of time and resources to attempt treating a 5-ft. diameter white ash, or even a modest sized one, for that matter. But I'm not giving up that easily. Can anyone give a recommendation on exactly how much imidacloprid (preferably) or other insecticide it would take to treat a white ash with a 16 ft. circumference? Some research I've read online suggests using twice the recommended rate of imidacloprid (Xytect in this case) on "larger" trees in the 15-22" range. Is injection with Emamectin Benzoate necessary?

**The "Tree" Without Roots**

by Matt Markworth » Sat Jul 06, 2013 10:31 pm

Hi All, I present The "Tree" Without Roots . . .
This living tree trunk (branch?) definitely found a fortunate spot on this Lake Huron beach. My theory is that after being cut down by a beaver, it drifted ashore and is being supplied with water through sheer saturation.

- Matt

**Re: The "Tree" Without Roots**

by edfrank  » Sat Jul 06, 2013 11:13 pm

There are a number of species that will eventually sprout roots from the trunk if the conditions are right. It is pretty common for black willow, and I assume other willow species. I have seen it happen with sycamore. I wonder in how many species this takes place. Usually it requires at least some of the roots on the existing fallen trunk to remain active and feeding the branches until they develop roots of their own. This is a really neat specimen.

Edward Forrest Frank

**Mt. Olivet Cemetery woodland, WV**

by tsharp  » Sat Jul 06, 2013 6:41 am

Mt. Olivet cemetery occupies about 75 acres in the city limits of Parkersburg, WV. About 20 acres is forested and not used as a cemetery and looks like it has been relatively undisturbed for the past 50-6 years. Even though it is only a short walk from where I live for some reason I never got around to measuring very many trees on this site. I corrected this oversight with a couple of measuring visits in November of 2012 and was pleasantly surprised as to the species diversity.

The largest trees of each species are listed below in descending order of height.

- Yellow-poplar (*Liriodendron tulipifera*) 127.5' x 11.7'
- American Sycamore (*Platanus occidentalis*) 120.2' x 8.7'
- Pignut Hickory (*Carya glabra*) 117.2' x 5.7'
- Northern Red Oak (*Quercus rubra*) 112.3' x 9.6', 90.8' x 12.0'
- Black Cherry (*Prunus serotina*) 112.3' x 9.6', 93.4' x 9.9'
- Bitternut Hickory (*Carya cordiformis*) 111.7' x 7.2'
- Red Maple (*Acer rubrum*) 109.9' x 8.2', 90.8' x 12.0'
- American Beech (*Fagus grandifolia*) 109.2' x 8.8', 107.7' x 9.8'
- Eastern Cottonwood (*Populus deltoides*) 109.1' x 6.0'
- White Oak (*Quercus alba*) 105.1' x 9.9'
- Tree-of-Heaven (*Ailanthus altissima*) 102.1' x 5.5'
- Sassafras (*Sassafras albidum*) 101.6' x 4.1', 93.2' x 4.6'
- Black Oak (*Quercus velutina*) 97.7' x 11.4'
- Red Elm (*Ulmus rubra*) 93.0' x 6.7'
- Shagbark Hickory (*Carya ovata*) 92.1' x 3.9'
- Yellow Buckeye (*Aesculus flava*) 91.7' x 7.8'
- Shingle Oak (*Quercus imbricaria*) 90.1' x 4.0'
- Blackgum (*Nyssa sylvatica*) 85.7' x 5.3'
- Sourwood (*Oxydendron arborea*) 81.9' x 6.2'
- Sugar Maple (*Acer saccharum*) 76.1' x 7.4'
- Black Walnut (*Juglans nigra*) 73.4' x 7.2'
- Common Hackberry (*Celtis occidentalis*) 67.4' x 4.8'
- American Hornbeam (*Carpinus caroliniana*) 41.4' x 1.3'
Common Persimmon (*Diospyros virginiana*) **** x 1.2'

For a complete listing of trees measured see the Trees database at:

http://www.treesdb.org/Browse/Sites/1587/Details

The Rucker indices for the site are RH10=114.0', RG10=10.0'

The site has a north facing aspect and a drop of elevation of 150 feet down from the high spot near the fence enclosing the cemetery to a small unnamed tributary of Worthington Creek at 600 feet elevation. The site is heavily browsed by deer and most of the understory is Pawpaw and a bush honeysuckle species (*Lonicera* spp.). For some reason I did not measure a single Pawpaw.

The most notable tree was the tallest Sassafras which was in a small grove of six all of which beat the record height for West Virginia. The tallest at 101.6 feet bumped up the maximum height for West Virginia from 91.8'. However I was able to best this height just two weeks later on another site.

TS

---

**Re: Mt. Olivet Cemetery woodland, WV**

- by *dbhguru* » Sat Jul 06, 2013 11:44 pm

Turner,

That's a heck of a cemetery forest. I never see them with so much variety, i.e. the unused portions.

Robert T. Leverett

**Stunted Trees on Lake Huron Coast**

- by *Matt Markworth* » Sat Jul 06, 2013 11:47 pm

Hi All,

I found these little trees fascinating. They inhabit the rocky Lake Huron coast at Besser Natural Area in NE Michigan (lower peninsula).

---

**Re: Mt. Olivet Cemetery woodland, WV**

- by *Will Blozan* » Sat Jul 06, 2013 8:00 am

Nice work Turner! I also was impressed with the sassafras for height and girth. The Ailanthus is quite impressive as well.

Will
Matt,

I have always been fascinated by these types of stunted trees. The stunted forests like are atop Mt. Greylock, MA are another example. The country is rife with patches of unusual forests. Those stunted by circumstances. Unusual assemblages related to soil chemistry or climatic conditions. Disjunct pockets of species found outside their normal range. Assemblages a result of unusual natural history processes. I have taken some stabs at trying to define what we need to look at for these types of forests, but my ideas need to be fleshed out more. If anyone has suggestions, please weigh on how to document the aesthetics, the uniqueness, and value of these types of forests.

Edward Forrest Frank

Re: Stunted Trees on Lake Huron Coast

by edfrank » Sat Jul 27, 2013 5:06 pm

Matt,

I have always been fascinated by these types of stunted trees. The stunted forests like are atop Mt. Greylock, MA are another example. The country is rife with patches of unusual forests. Those stunted by circumstances. Unusual assemblages related to soil chemistry or climatic conditions. Disjunct pockets of species found outside their normal range. Assemblages a result of unusual natural history processes. I have taken some stabs at trying to define what we need to look at for these types of forests, but my ideas need to be fleshed out more. If anyone has suggestions, please weigh on how to document the aesthetics, the uniqueness, and value of these types of forests.

Edward Forrest Frank

Tree Maximums - Genus of the Week: Castanea (Chestnut)

by Matt Markworth » Sun Jul 07, 2013 9:15 pm

Hi All,

Genus of the Week: Castanea

"Measured a chestnut stump on Asa White's land, twenty-three and nine twelfths feet in circumference, eight and one half feet one way, seven feet the other, at one foot from ground." – Henry David Thoreau, 6/2/1852

"Measured the great chestnut. At about seven feet from ground, the smallest place I could find, it is 14 3/4 feet in circumference; at six feet from ground, 15 1/12 feet in circumference; at five feet, 15 4/12; at one foot from ground not including some bulgings, 22 feet in circumference. It branches first at about nine feet from ground. The top has some dead limbs and is not large in proportion to trunk." – Henry David Thoreau, 8/14/1854

Shall we accept Thoreau’s measurements? :)
Please reply with these measurement details if you think you've measured a specimen displaying the growth potential (Height, Girth, Spread, or Volume) of the species. Please include photos when possible.

Species (Scientific):
Species (Common):
Height (ft):
CBH (ft):
Maximum Spread (ft):
Average Spread (ft):
Volume (ft³):
Site Name:
Subsite Name:
Country:
State or Province:
Property Owner:
Date of Measurement:
Measurer(s):
Method of Height Measurement:
Tree Name:
Habitat:
Notes:

Tree Maximums List and Guidelines:
http://www.ents-bbs.org/viewtopic.php?f=393&t=5221


USDA Plants Database:
http://plants.usda.gov/java/profile?symbol=CASTA

Don Leopold video . . .

http://www.youtube.com/watch?v=yLKe1YbLLYo

- Matt Markworth

Re: Tree Maximums - Genus of the Week: Castanea (Chestnut)

by edfrank » Sun Jul 07, 2013 9:48 pm

For people interested in Chestnuts, there is this photo contest from The American Chestnut Foundation:

Don't forget about our 2013 Photo Contest! This is your chance to see your image in print (plus other wonderful prizes)!
Re: Tree Maximums - Genus of the Week: Castanea (Chestnut)

by edfrank » Sat Jul 27, 2013 5:16 pm

Not a champion, but I have photos!!

Castanea dentata

Species (Scientific): Castanea
Species (Common): dentata
Height (ft): 72
CBH (ft): 4.33
Maximum Spread (ft): 33
Average Spread (ft): 33
Volume (ft³):
Site Name: Clear Creek SF
Subsite Name: Lyle Summit #1, Clarion
Country: Jefferson
State or Province: PA
Property Owner: PA Dept of Forestry
Date of Measurement: June 22, 2009
Measurer(s): Edward Forrest Frank
Method of Height Measurement: NTS
Tree Name:
Habitat: Forested
Notes: Healthy and producing nuts when last visited
http://www.nativetreesociety.org/fieldt ... eek_sf.htm

http://www.youtube.com/watch?v=iTT6FHUuaJc&fe ature=share&list=PLB786A1F385F1FE8C

Note there is a dead trunk from another tree in the photo behind the chestnut
Hi Friends,

On July 5th, Monica and I just returned from a 5-day stay in Monticello, Utah, with frequent visits to Canyonlands NP and one visit to Natural Bridges National Monument. We’d like to share our experiences with you in this first of several essays. We want to share lots of images with you, but to keep the size of the files manageable, we’ll present no more than seven or eight photos per submission. By the way, if these posts become too much, please just let us know.

Canyonlands National Park

The Southwest, and the Four Corners area in particular, is Monica’s favorite part of the West, but she had not visited Canyonlands near Moab and Monticello, Utah before, nor had I. We had read about the park and seen many photographs, but had not set our feet firmly on its soil. That has changed, and I can say that as a consequence of our treks, this national park has been elevated to be on par with the best that either of us have visited.

Edward Abbey describes this remote region best in his classic *Desert Solitaire*. We can never hope to match Abbey’s descriptions so we must let images do most of the talking for us. Our commentaries will be relatively brief. Here is a quote from Abbey about the Canyonlands: "the most weird, wonderful, magical place on earth—there is nothing else like it anywhere."

Canyonlands cover nearly 338,000 acres of Utah’s high desert/canyon country and is a creation largely of the Green and Colorado Rivers and their tributaries. In fact, the Green and the Colorado come together there. The river network creates four separate areas of the Park: Island in the Sky, Needles, Maze, and the rivers themselves. Island in the Sky receives the most visitation, followed by the Needles. To put the visits into context, of the roughly 450,000 annual visitors, Island in the Sky gets 35% of this total and that number is spread over about 7 months of the year. This equates to about 750 visitors per day. The bulk of these visitors come in half of March,
April, May, September and October. June, July, and August see reduced visitation due to the heat. So, we might see 450 visitors per day during July and they are spread over 12 hours and many miles of roads and trails. Basically, one gets to experience this region free from crowds – if one can handle the heat.

As our first image, we present a shot from the Slickrock Foot Trail in the Needles section of the Park, one of four named areas, and so far, my favorite. The layers of weathered rock sculpted into forms that challenge the imagination tell a story of the Earth’s transformation from a sea bottom many millions of years ago.

I took this photo in the Needles area. What are the Needles? Let’s have a look.
The geological explanation of the Needles and most Canyonlands formations can be mind-bending. Simple patterns of erosion can be recognized, but beyond them, I’m often left straining to understand the complex processes at work. Here is a closer look at the Needles.
What is especially striking is the impact on the imagination. However, the name given to the next formation puzzles me. It is North Sharpshooters Butte. What could have given rise to that colorful name?
One can describe the Canyonlands from many perspectives. I like to alternate between macro and micro perspectives. At the macro scale, the geological formations seem endless and their contorted surfaces appear impenetrable. The heat bears down and one cannot imagine lasting very long trekking through such a hostile environment. I think a lot of casual visitors hold this opinion. But Edward Abbey would disagree. From *Desert Solitaire*:

*The wind will not stop. Gusts of sand swirl before me, stinging my face. But there is still too much to see and marvel at, the world very much alive in the bright light and wind, exultant with the fever of spring, the delight of the morning. Strolling on, it seems to me that this strangeness and wonder of existence are emphasized here, in the desert, by the comparative sparsity of the flora and fauna: life not crowded upon life as in other places but scattered abroad in spareness and simplicity, with a generous gift of space for each herb and bush and tree, each stem of grass, so that the living organism stands out bold and brave and vivid against the lifeless sand and barren rock. The extreme clarity of the desert light is equaled by the extreme individuation of desert life forms. Love flowers best in openness and freedom.*

Starting out, one worries about being swallowed in a trackless wilderness, but once in the maze, an intimacy can be established in a more human-scaled environment. There are even friendly places. The next photo shows a spot used by both the Anasazi, and later, cowboys. There was a single pool of water that didn’t look very drinkable to me, but evidently it was the only potable water in miles.
There were a couple of petroglyphs on the walls. They aroused our curiosity. Here is a look at one of them.
Archeologists spend long hours attempting to decipher their meanings. The forms of people and animals tell stories. Other forms are less understandable unless you know the cultural contexts.

Later we got more tangible confirmation of an enduring occupation. We hiked to the location of an ancient Anasazi granary used to store seeds of various types. As we observed the ruins, we reminded ourselves that every structure was created with hand labor. No advanced tools were used to build the structures, yet surfaces were smooth and angles exact.
We will close with an image presented to capture a tiny bit of what makes the Canyonlands NP land so appealing. Its timelessness is presented in space and contorted formations at all scales.
Wildfire control in the American Southwest

This article is probably old hat to a lot of you around here, but thought it was a nice overview of the challenges presented by decades of wildfire suppression in the American Southwest. Might be a good reference when talking to non-tree people about the issues.

http://www.hcn.org/issues/43.17/good-policy-and-good-intentions-wont-stop-big-destructive-wildfires

Re: Wildfire control in the American Southwest

Rand-
Good point.
One point they missed was how the American Southwest experiences a weather feature regionally called the Monsoon. Around late June sometimes, more likely in July, and inevitably by August, the humidity picks up in the afternoon, from weather emanating from the SE, and results much of the time with lightning and thunder storms, sometimes with
rain, sometimes without. Huge stacking cumulus clouds build up, and all firefighters eyes are peeled. And the public as well, as the lightning and thunder is quite an experience. This pattern has been long a feature of the Southwest and the frequency of lightning downstrikes is exceeded only by a few locations, and not by much. For much of the ponderosa pine forest here (largest in the world), such a frequency leads to many small fires. This for many centuries kept wildfire burn intensity low and prevented large catastrophic wildfires.

The monsoon season has changed significantly. The USFS practice of putting out every wildfire from 1920's to 1990's left the region with abundant regeneration, freed of the once frequent ground fires. Much of the Southwest is now trying to return to previous more natural fire regimes. Forests around Flagstaff AZ have a bit of a head start, and much research to help pave the way.

Hopefully sequestered funds and a stumbling economy will soon resolve. Lest we burn. The Yarnell Fire that recently took nineteen lives of the Granite Station hotshot crew is an unfortunate example...

**Congaree Champion Tree Survey news**

by Will Blozan » Sun Jul 07, 2013 1:37 pm

NTS, I have been fortunate to be an informal behind-the-scenes consultant on an upcoming Champion tree survey soon to commence at Congaree National Park. It is with great excitement that I can announce that they will be implementing NTS SINE methodology for the height measurements, and the staff have conducted a training workshop already. Furthermore, they are seeking "teams" to survey the park based on sectors. I have not seen the sector map yet but it will give the opportunity for a thorough assessment of the tree resources park-wide. Also, there is the possibility that some funds will be available for the survey teams to cover travel expenses. I have volunteered my time for this upcoming project in addition to the many hours spent "selling" our methods and reviewing research documents. I feel this is a huge "win" given the past efforts by researchers who did not understand tree form and as a result- mis-measured trees significantly. In fact, my main mission was to dispense of the old methods (chain distance and tangent clinometer averaged from three measurements...) and illustrate that the value of NTS SINE was the way to go. Success!

Will

Re: Congaree Champion Tree Survey news

by dbhguru » Sun Jul 07, 2013 8:02 pm

Will,

Congratulations with a capital C. Somebody in Congaree was listening! He/she/they deserve lots of kudos. Now if we can have comparable success in AF, we will have finally turned the corner on recreational tree measuring as a serious endeavor. I know that for you, this success is especially sweet. I wonder who was advising them on using the clinometer and chain method to average 3 bad measurements. My bad.

Robert T. Leverett
**Re: American Forest's Measurement Group**

» by **tsharp**  » Mon Jul 01, 2013 6:19 am

Ed, Bob:
I am happy with a 13 foot threshold for a tree. I think that is the present AF threshold for a tree. AF has or used to have a 3 inch diameter requirement to be considered for inclusion in their champion tree list. I do not think they intended to redefine what a tree is but just set a criteria as to what they would accept. Three inches seemed to work.

TS

**Re: American Forest's Measurement Group**

» by **Will Blozan**  » Mon Jul 01, 2013 5:55 pm

Bob, I agree with Ed and Turner on the dead portion to be included. This is consistent with all other measurements. I seem to recall a minimum POINT threshold in the past. Seems like it was 25 points? This makes sense as it does not limit one dimension but it does bow to the ridiculous formula currently in place... I tried unsuccessfully to nominate a 25 or 26 point buffalo-nut (Pyrularia puberula) many years back as it was a superlative! I challenge anyone to find a bigger one. Alas, it was not on A. Little's list of acceptable species so it was rejected.

Turner,

Blackhaw (V. prunifolium) commonly achieves "tree" dimensions down here in NC. The largest I have seen were at "Poplar Forest" in VA:

One of the finest collections of black-haw viburnum I have ever seen grew in the understory of the tuliptrees and associated exotics. Diameters over 8 inches were encountered and one measured 35.3 feet tall which may be a new height record for the species. The largest black-haw could be a single stem state champion- the current champ is a fused mass as pictured on the VA Big Trees website.

As for the ten year rule- I am not sure. For trees super remote a return interval is unreasonable. For city/urban trees yes. Some species under severe pest threat (hemlock, ash) should be checked regularly and of course treated. I know BVP is adamantly against the 10 year rule as some trees are so remote they are unlikely to be visited again. However, you could possibly draw upon aerial photographs to verify- and this should be a legit method.

Will

**Re: American Forest's Measurement Group**

» by **dbhguru**  » Thu Jul 04, 2013 9:48 pm

Will, Ed, et. Al.,

I get it when most of the tree is alive. Measuring to a dead top for height or outstretched dead limbs for spread, but what if the tree is mostly dead? Suppose there is only a small area of live crown. Would we think of the rule the same way?

Bob

**Re: American Forest's Measurement Group**

» by **Will Blozan**  » Fri Jul 05, 2013 10:53 am

Bob, Great question. A huge dead tree with a basal sprout would not qualify for me. I see the point for the bristlecone and similar strip-bark species. However, most of our eastern trees don't normally do this except some conifers (Juniperus, Thuja for example), and as such cannot be considered "normal" to me. A tree with a small strip of bark with a mostly
dead crown is not going to be a good representative of a champion nor be a long lasting example.

Will

Re: American Forest's Measurement Group

Don wrote:Mike-
On another topic, have you checked out a recent conceptualization called "Structure for Motion"? And if so, whattaya think?

Hey Don, Structure From Motion theory is the crux of my point cloud mapping. Instead of paying $10,000 for a ground based flash LiDAR, I can just use my digital camera and photo-bundling to create dense and accurate point clouds of tree trunks and forest canopy. This is also the method I use to make point cloud maps from UAVs... I do a photo burst at various points above targets or forests of interest. I then use the "structure from motion" theory and free software to create a digital elevation model.

The one deficiency of the structure from motion point cloud is that it is not scaled, but every point in the cloud is proportional to each other. To find scale I use my secret weapon :) 

Michael Taylor

WNTS VP
California Big Trees Coordinator
www.landmarktrees.net

Re: American Forest's Measurement Group

by dbhguru » Fri Jul 05, 2013 6:34 pm

Will,

Yes, this is exactly what I was visualizing. I remember when the Bradford Pine in NH began breaking apart. A long dead projection hardly seemed what we would have wanted to include had the tree been in the running for the championship. I think we would have all wanted the pine to announce retirement and then just fade away. So where does that leave us? In a recent conference call Pete Smith from Texas began raising points and questions such as this and I thought to myself, "Oh Boy, there are lots of ways to look at these issues when you start considering trees at the margin."

Ed, Will, Michael, Turner, et. al.,

Now back to the definition of a tree. Here is what the Utah State forestry website says.

---

So trees, shrubs, and woody vines all have woody, perennial stems. What makes them different from one another? The distinction between trees and shrubs is not always clear. We all know that a large cottonwood is a tree and a creeping juniper is a shrub, but there are many shrub-like trees and tree-like shrubs. Though no scientific definition exists to separate trees and shrubs, a useful definition for a tree is a woody plant having one erect perennial stem (trunk) at least three inches in diameter at a point 4½ feet above the ground, a definitely formed crown of foliage, and a mature height of at least 13 feet. This definition works fine, though some trees may have more than one stem and young trees obviously don't meet the size criteria. A shrub can then be defined as a woody plant with several perennial stems that may be erect or may lay close to the ground. It will usually have a height less than 13 feet and stems no more than about three inches in diameter.

There is much more on the website and it seems that they have done a lot of serious thinking about the topic of definitions. Does this definition change anyone's thinking?

Robert T. Leverett
Re: American Forest's Measurement Group

by edfrank » Fri Jul 05, 2013 8:03 pm

Bob,

The USDA definition doesn't have a girth requirement, and I really don't think a girth requirement is advisable. If there is one, I don't think it should be a 3 inch diameter value. One example is the 53 foot high witch hazel along the Seneca Trail at Cook Forest. I don't believe it would meet the three inch diameter requirement although it would otherwise out point many of the fatter and much shorter examples from the park. Along the same line I disagree with Will's idea that there should be a minimum point value. He used an example in his own post where a specimen he tried to submit was short of points by only a couple. If the goal of the big tree list is to engender public participation, then any obstacles that would weed out marginal specimens is just that many more people who will not be able to have a specimen on the list. It doesn't cost them anything to have these marginal specimens on the website, and at most it would only add a page to the printed list. Let more people participate, and include these marginal trees - even if you personally would consider them shrubs.

Edward Forrest Frank

Re: American Forest's Measurement Group

by dbhguru » Fri Jul 05, 2013 11:28 pm

Ed,

Duly noted. I do understand where you are coming from. I wonder who else out there in Entland has thoughts on the topic?

Bob

Re: American Forest's Measurement Group

by Will Blozan » Sat Jul 06, 2013 8:18 am

Ed, I see your point with regard to a minimum point limitation. However, since it is the register of big TREES- a tree minimum has to be defined, albeit in a less restrictive way. In some areas what some would call and define as a shrub can be a definitive tree elsewhere.

This is a hard one!

Will

Re: American Forest's Measurement Group

by edfrank » Sat Jul 06, 2013 3:53 pm

Will, Bob, Turner, NTS,

There should be a minimum requirement, and I am suggesting that this conform to the definition used by the USDA: "Perennial, woody plant with a single stem (trunk), normally greater than 4 to 5 meters (13 to 16 feet) in height" without a minimum girth or point value. Currently the definition being used from the American Forest website is:

Q. What is the difference between a tree and a shrub?

A. Trees are woody plants that have one erect perennial stem or trunk at least 9 ½ inches in circumference at 4 ½ feet above the ground. They also have a definitively formed crown of foliage and a height of at least 13 feet. In contrast, shrubs are small woody plants, usually with several perennial stems branching at the base.

This is essentially the same as Utah's definition as noted by Bob, 3 inch diameter and 13 feet high. If there is going to be a definition of a tree used, why
should it vary from the USDA definition? There are many examples of specimens that are certainly tall enough that a reasonable person would call them a tree, but are not fat enough to meet the 3 inch diameter requirement. AF can use whatever definition they want. It is their list and so they can certainly set whatever criteria they want.

The wiggle room in the USDA definition is the word "normally." The list is not a list of the biggest trees or all it would have are sequoias and redwoods. It is a list of the biggest examples of each species. It just doesn't make any sense for me to have additional requirements beyond the minimal height. To do so simply eliminates species that are to my mind perfectly good trees. I really don't have anything more to add at this point, so whatever the rest of you decide is the NTS position on this issue - Fine.

Edward Frank

Re: American Forest's Measurement Group

by dbhguru » Sat Jul 06, 2013 5:43 pm

Ed, Will, Turner, et. al.,

This is exactly what I'm looking for - a thorough airing of the possibilities, a discussion of the fine points. In the end, 3 of us will vote on each topic after input from the ex-officio members. If there is a consensus among the three, the guideline/ rule passes. If one descents, no change occurs. So, while we're considering an issue, the more input, the better.

From my perspective, the AF criteria makes sense. A plant that at best never exceeds say an inch and a half in diameter at 4.5 feet really pushes the idea of a tree. However, we can certainly adjust our perspective. For example, suppose we have two species. One never exceeds an inch and a half in diameter at 4.5 feet and the other can reach 3 inches in diameter at 4.5 feet, but never exceeds say 12 feet in height. I would be more inclined to accept the latter over the former as a tree if only one could be selected. Here, I'm talking about what each species can achieve in dimensions, not what a particular specimen has achieved.

All Ents,

Many of you may not have strong opinions on some of these tree issues, but please don't hesitate to voice your opinions or ask questions. We especially need to hear from arborists, foresters, and forest ecologists.

Robert T. Leverett

Re: American Forest's Measurement Group

by edfrank » Sun Jul 07, 2013 2:25 pm

Bob, NTS,

I think the distinction between trees and shrubs is pretty much arbitrary - the are both a perennial plants with a self-supporting, erect, wooden stem. Shrubs often have multiple stems, trees often have multiple stems. Shrubs may have a single stem, trees often have a single stem. There isn't any real difference except for an arbitrary height, or in some definitions both a height and girth requirement. In Bob's example above, if these were the largest specimens for the species, I would accept them both for on a champion tree list. If there is to be an arbitrary boundary between trees and shrubs, as I have stated above, it should be based upon height alone. The best option would be to not make a distinction between the two.

Edward Frank

As for your unposted question, it doesn't really matter if one place calls a feature a bole or a trunk, or if they are branches or boughs, we just need to be consistent. Not every variation of every term need to be dealt
with or defined in a basic structure for use by American Forests. They just need to define a sequence and use it consistently. (Will is right in the post below.)

Edward Forrest Frank

Re: American Forest's Measurement Group

posted by Will Blozan » Sun Jul 07, 2013 2:44 pm

FYI- For crown mapping definitions the sequence is trunk, limb, branch. There are bifurcations (trunks only) and reiterations (secondary trunks originating from trunks or limbs). Branches can be supported by any trunk structure or limb. Branches are the only leaf supporting structures. Trunks, bifurcations and reiterations support branches or other trunks.

Will

Re: American Forest's Measurement Group

posted by Don » Mon Jul 08, 2013 1:59 am

Ed-
I've been out of town/cell for the last ten days and am just now getting back to the NTS BBS.

I see that you're citing a USDA definition/minimum girth criteria for a tree. I'm not familiar with that one...

For my own state, we use Leslie Viereck's "Alaska Trees and Shrubs" as a standard on Tree ID/Classification. It has since 1972 used Elbert Little's 1953 definition in the US Department of Ag. Agriculture Handbook 41, with 472 pages. who wrote "...woody plants having one erect perennial stem or trunk at least 3 inches (7.5cm) in diameter at breast height (4 1/2'..., 1.4 m), a more or less definitely formed crown of foliage, and a height of at least 12 ft. (4 m.)..." As far as I know, the USFS, the NPS, and the BLM all use Little's standard tree definition.

I was the contracting officer's representative (COR) for several arborist contracts, and my read on arborists is that they see tree's differently than we foresters, but I don't know that they consider the tree's girth inconsequential in their urban forest measurement/management.

I am willing to listen to your logic. I have seen your facility for data mining, I'm wondering where your USDA citation comes from? Could it be the Soil and Conservation Service?

On other topics, again you've raised the bar, your BBS periodical continues to amaze! Also the recent addition of NTS to Facebook has been a great addition!

-Don

Re: American Forest's Measurement Group

posted by Don » Mon Jul 08, 2013 3:34 am

Just another quick note...a little history on the definition of a tree. This from George B. Sudworth's "Forest Trees of the Pacific Slope" (1908).

It seems that George B. Sudworth wrote a manual that first appeared in 1908, as a publication of the united States Forest Service. Sudworth became the Chief Dendrologist of the Forest Service in 1904.

Since his graduation at the University of Michigan in 1885 until his selection as Chief Dendrologist (a title later held by Elbert Little, Jr), Sudworth performed and recorded extensive field studies. He did this field
travel at a time when much of the West could only be reached by pack train or on foot, and the accuracy, extent, and completeness of his notes and drawings still amaze and fascinate foresters today. As an aside, Sudworth's own notes were supplemented by those of Dr. C.Hart Merriam who made available extensive notes on tree distribution in California.

But back to the tree definition...Sudworth's definition was a "...woody plant having one well-defined stem and a more or less definitely formed crown (but not excluding unbranched cactuses, yuccas, and palms, and attaining somewhere in their natural or planted range a height of at least 8 feet and a diameter of not less than 2 inches. It has been difficult to apply this definition in all cases, for there is no sharp line between some shrub-like tree and some tree-like shrubs. However, though wholly arbitrary, it has been serviceable"

Don Bertolette

Re: American Forest's Measurement Group

by edfrank » Mon Jul 08, 2013 11:44 am

Don, You asked about the source of the definition. It is from the Natural Resource Conservation Service - The Plants Database people.

http://plants.usda.gov/growth_habits_def.html

I am sure the same situation applies to trees. Probably different branches within these agencies all have their own unique definition of what is a tree. I use the Plants Database quite a bit when looking up tree species, and have cited it before, often. I think the definition I cited is reasonable, straightforward to apply, and inclusive enough to almost suit me. As I said in a previous post in this thread I think the distinction between a shrub-like tree and a tree-like shrub is pretty arbitrary. If it is more than twice as tall as I am happy to call it is a tree. This definition represents a compromise between no distinction being made at all and more restrictive definitions that also include girth, crown spread, or point totals.

For the purposed of the NTS I would even lean to include plants like large cacti and the like which do not have a woody stem, because they essentially occupy the same ecological niche as trees in wetter areas. If they are big and perennial, and people want to measure them, go for it.

Edward Forrest Frank

Re: American Forest's Measurement Group

by Don » Mon Jul 08, 2013 4:22 pm

Ed-
I like inclusive!
-Don

Someone back in the earlier days of ENTS found in a quick search 98 definitions for old growth:
Henderson Hall, WV

by tsharp » Tue Jul 09, 2013 6:40 am

On the old river road between Williamstown and Parkersburg, WV is a large three story house known as Henderson Hall. This well known landmark is perched on an old river terrace about one hundred feet above the present day level of the Ohio River.

The history of this house and its occupants offer a glimpse back into the early days of this country.

Three Henderson brothers were early settlers in the area and came from eastern Virginia in the early 1800’s to settle on lands claimed by their father Alexander Henderson Sr. of Dumfries, VA. A grandson (George Washington Henderson) developed the property, married well, and soon controlled over 2,000 acres of land. A log structure built on the site was replaced by a brick structure in 1836 which was later replaced by an architect designed home built between 1856-1859. It was done in the Italianate style and incorporated the original brick building as a kitchen area. The family were slave holders and supported the Union while their eastern Virginia cousins supported the confederacy. The family continuously occupied the property until the last family member died in the 2000’s and the remaining property (65 acres) was donated to a local museum and is now open to the public.

A nice video about this family and property can be found at:

http://vimeo.com/53969361

What caught my eye was a tract of mature woods of about seven acres next to Henderson Hall. There was no problem getting permission to measure trees. Here is a list of the largest trees found:

Yellow-poplar (Liriodendron tulipifera) 134.5’ x 11.5’
American Sycamore (Platanus occidentalis) 121.5’ x 10.3’, 99.2’ x 12.7’
Black Walnut (Juglans nigra) 118.2’ x 7.7’ x 51’ (maximum crown spread), **** x 12.8’ (dead but standing)
White Ash (Fraxinus americana) 106.5’ x 6.9’, **** x 7.2’
Northern Red Oak (Quercus rubra) 104.3’ x 10.4’

American Beech (Fagus grandifolia) 98.5’ x 6.3’
Black Oak (Quercus velutina) 97.1’ x 8.2’, 88.2’ x 9.9’
Bitternut Hickory (Carya cordiformis) 96.1’ x 7.3’, **** x 11.8’ (top out)
Green Ash ([i]Fraxinus pennsylvaniana[/i]) 94.0’ x 10.4’
Hackberry (Celtis occidentalis) 93.3’ x 8.3’ x 61’ (maximum crown spread)
Cottonwood (Populus deltoides) 89.2’ x 5.6’
Pignut Hickory (Carya glabra) 87.6’ x 6.1’
Maidenhair Tree (Ginkgo biloba) 86.0’ x 9.8’
Black Cherry (Prunus serotina) 85.9’ x 5.5’
Honey Locust (Gleditsia triacanthos) 83.1’ x 7.3’
Black Maple (Acer nigrum) 75.8’ x 11.3’
Tree-of-Heaven (Ailanthus altissima) 73.2’ x 4.5’
American Elm (Ulmus americana) 71.1’ x 7.8’
Sugar Maple (Acer saccharum) 71.1’ x 4.6’
Common Persimmon (Diospyros virginiana) 68.8’ x 5.5’
White Mulberry (Morus alba) 52.5’ x 5.6’
Pawpaw (Asimina triloba) 48.3’ x 1.7’
Bur Oak (Quercus macrocarpa) 36.2’ x 3.1’
American Hornbeam (Carpinus virginiana) 28.8’ x 1.8’
Dogwood (Cornus florida) **** x 1.8’ (tree bent down by a bigger fallen tree)

Trees of note included two species which set new height records for West Virginia. Black Walnut at 118.2’ from the previous record of 111.3’ Hackberry at 93.3’ which upped the previous record of 85.6’

Rucker indices for the site are: RH10= 106.4, RG10=11.0’

Most of the trees measured were in the seven acre tract except a few planted species near Henderson Hall and some Bitternut Hickories across the road in the next lower river terrace which would be the horse pasture in the old picture.

A complete list of trees measured is at Trees database at:

http://www.treesdb.org/Browse/Sites/1599/Details
Re: It's football vs. forest at Va. Tech

by Joe » Tue Jul 02, 2013 7:11 am

Ashe County wrote: the trees may have won this time. alternate sites are being considered!

it's always amazing to me that when any project is proposed- such considerations are not given right from the beginning- is it stupidity or insensitivity?

personally, I have an extremely negative view of professional and college sports- it just feeds the Neanderthal love of violence in so many people- no insult to Neanderthals intended.... at least their violence was to remain alive in a world of wooly mamouths, wooly rhinos and cave bears....

hey, somewhat related--- just read that in California, one school is finally going to be allowed to teach yoga to students who are interested.... imagine--- sports are worshiped in every school in the nation but it took years of court battles in California to teach yoga!

Joe

Re: It's football vs. forest at Va. Tech

by jamesrobertsmith » Mon Jul 08, 2013 10:38 pm

Ashe County wrote: the students mobilized against it James. people were holding signs, talking thru megaphones, you get the picture. the faculty voted against it. the university board announced that the woods would not be cut. with enough citizen protest, policies can change.

WOO HOO! Great to hear!

Tribute to Larry Tucei

by dbhguru » Thu Jul 04, 2013 10:21 pm

I'd like to say a few words about our Mississippi buddy, Larry Tucei. We usually think of Larry and live oaks. But Larry was worth his weight in gold on this past WNTS rendezvous. He quickly got the measure of tall ponderosas, Colorado blue spruces, Englemann spruces, and Douglas firs. As a consequence we were very productive in our tall tree searches. It just recently occurred to me that for NTS, I think he now holds the point record for a Rocky Mountain ponderosa. The big 13.75-ft girth, 146.5-foot tall pondy beats my best. If any Ent has a Rocky Mountain variety ponderosa that tops 323 points, which is what I think Larry Tucei’s pondy earns, please let us know. Regardless, I propose we name his pine the Larry Tucei Ponderosa. Do I hear seconds?

Robert T. Leverett

Re: Tribute to Larry Tucei

by Matt Markworth » Fri Jul 05, 2013 10:30 pm

I'll second that!

Thank you both for sharing your experiences of that majestic forest and I look forward to future reports. It sounds like there is a lot left to explore!

-Matt
Re: Tribute to Larry Tucei

by Iowa Big Tree Guy » Sat Jul 06, 2013 10:39 pm

Bob,

I think it is very cool to name the big ponderosa after Larry. You wanted to know if any members of the NTS had measured any Rocky Mtn. Ponderosas with more than 323 points. Years ago, I used to go to Colorado for a week every summer to look for big trees. In 1995 Stuart Sarnow, a forester from the San Jaun National Forest showed me a very large ponderosa.

Even though I measured the tree using cross triangulation, I'm fairly confident that the dimensions I found are reasonably accurate. I was always a stickler for determining the point on the ground directly below the highest twig. I also took great pains to make sure I was looking at the actual highest twig when I took my readings.

The tree stands, or stood, near Pagosa Springs. In 1995 I found it to have these dimensions:

- circumference 14'8"
- height 144'
- crown spread 52'
- total points 334

Bob, when I come to Colorado in a couple of weeks one of my priorities is to show you this pine. If it is still standing, it will be interesting to measure it to see how our figures compare to my previous measurements. This tree was a national champion for a time but it was dethroned by a much larger tree in western montana.

I new there were larger ponderosas in Montana but I always thought they were a different tree. Does anyone know if they are the same as the Rocky Mtn ponderosa?

Mark

Re: Tribute to Larry Tucei

by dbhguru » Sat Jul 06, 2013 10:45 pm

Mark,

I absolutely trust your measurements. I'm hoping the fires out here won't prevent us from visiting the huge pine. Looking forward to your visit.

In terms of the sub-species of pine in Montana, I just don't know. The person to ask is Bob Van Pelt. He knows that species throughout its range. I'll send him an email and ask the question.

Robert T. Leverett

Re: Tribute to Larry Tucei

by tsharp » Sun Jul 07, 2013 8:55 am

Mark, Bob, NTS:

The Montana Ponderosa is likely P. ponderosa ssp. ponderosa and the one in Pagosa Springs is likely P. ponderosa ssp. scopulorum.

A good reference is Chris Earle's Gymnosperm database. His listings for Ponderosa Pine can be found here:

http://www.conifers.org/pi/Pinus_ponderosa.php

When I was in southern Arizona a while back I found his site to be very helpful and enlightening. I had no idea that how contentious the taxonomy of this and related species has been and continues to be.

Bob: This is a subject that American Forest's measuring group will have to deal with. I notice that American Forests only recognizes three varieties of Ponderosa while Chris Earle's page recognizes four (subs.) and the USDA plants recognizes five varieties. Have fun sorting that out.

TS
Hi All,

This species of Oak is very prevalent in the sandy soil forests that I visited in NE Michigan (lower peninsula) near Lake Huron. It was the only Oak species that I encountered.

The leaf says Black Oak, but the blocks on the bark seem way too big.

Thoughts?
**Re: Oak ID**

by lucager1483 » Fri Jul 12, 2013 6:36 am

Matt,

From the leaves and acorn, it's a pretty clearly northern red oak, or *quercus rubra*. The blocky bark resembles chestnut oak, though northern reds can sometimes have deep furrows, especially on poor sites, at least from my experience. I've never seen bark with blocks that pronounced on a northern red oak before, but, assuming the photos are all from the same tree, that would be my ID. It's definitely not black oak, though I suppose the two could hybridize. Cool tree from a cool place.

Elijah

---

**Re: Oak ID**

by Matt Markworth » Fri Jul 12, 2013 7:59 am

Thanks Elijah!

Photos 1 and 4 are the same tree and the rest are different trees. I looked at dozens of these trees and they all have the same blocky bark and the same leaves with shallow sinuses.

The blocky bark just completely threw me off, here's a photo of a downed tree . . .

Thanks,
Matt
Re: Oak ID

by tsharp » Sat Jul 13, 2013 10:45 am

Steve, NTS:
I do not have a good grasp on the older nomenclature for Northern Red Oak but at present USDA plants recognizes two varieties. *Q. rubra* var. *rubra* and *Q. rubra* var. *ambigua*. Apparently both of these varieties have in the past been tagged with *borealis* either as a species or variety. If the acorn cup pictured looks like a beret and covers no more than 1/4 of the acorn then it should be *Q. rubra* var. *rubra*. The leaves pictured are also consistent with variety *rubra*.

TS

Re: Oak ID

by tsharp » Fri Jul 12, 2013 10:05 am

Elijah, NTS: I agree with Northern Red Oak on a poor site. Since you have an acorn picture can you tell which variety of Northern Red Oak it is?

TS

Re: Oak ID

by Steve Galehouse » Fri Jul 12, 2013 11:13 pm

Looks like *Quercus rubra* v. *borealis*

Re: Oak ID

by Steve Galehouse » Sun Jul 14, 2013 11:35 am

Turner, NTS-

The acorn pic and especially the bark pics, still look like *Quercus rubra* var. *borealis* (now var. *ambigua*) to me. *Quercus rubra* var. *maxima* (now var. *rubra*) has much larger acorns, and is by far the commoner variety in my area. Here is a photo comparing the acorns of red oaks found in my area, left to right: Northern red var. rubra(maxima), scarlet, black, pin. The other form of northern red, as I have seen it, has acorns about the size of scarlet oak.
Coal Run - WV

by tsharp » Fri Jul 12, 2013 10:00 am

Coal Run is a small tributary of the New River that tumbles off the plateau near Cunard on the south side of the New River Gorge. The road from Cunard to the river drops about 750 feet of elevation and can be an exciting drive during the whitewater season because of the bus traffic going to the river access point. One can drive about a mile downstream of the river access and park near a footbridge crossing Coal Run. This road along the river and the foundation for the foot bridge were formerly a railroad bed. I had previously spotted a few trees in this area I wanted to measure. Therefore I invested two half day visits to the site in December of 2012.

The property is owned by the National Park Service as part of the New River Gorge National River. All trees measured where within 100 yards of Coal Run and all but one were between the footbridge spanning Coal Run down to the bank of the New River.

The largest trees measured are listed by descending order of height as follows.

Yellow-poplar (*Liriodendron tulipifera*) 125.1’ x 6.75’
American Sycamore (*Platanus occidentalis*) 116.1’ x ****
Northern Red Oak (*Quercus rubra*) 114.9’ x 7.4’
Red Maple (*Acer rubrum*) 112.8’ x 7.0’
Eastern Hemlock (*Tsuga canadensis*) 110.6’ x ****
(Has HWA)
Black Cherry (*Prunus serotina*) 105.6’ x 3.2’
*Sassafras* (*Sassafras albidum*) 103.6’ x 4.5’ x 27’
(maximum spread)
Green Ash (*Fraxinus pennsylvanica*) 100.5’ x 3.2’
Black Locust (*Robinia pseudoacacia*) 97.0’ x ****
American Beech (*Fagus grandifolia*) 94.0’ (nlt) x 14.0’ x 92’ (maximum spread)
Chestnut Oak (*Quercus prinus*) 86.9’ x 9.0’
Black Birch (*Betula lenta*) 79.7’ x 3.2’
Umbrella-tree (*Magnolia tripetala*) 69.9’ (nlt) x 2.7’ x 20.25’ (maximum spread)
Mountain Maple (*Acer spiatum*) **** x 2.2’

The Rucker Indices are: RH!0 = 109.2’, RG10 = 6.5’
Two height measurements are listed as Not Less Then (NLT) because of daylight constraints on a cloudy/misty December day. Trees of note include record heights in West Virginia for Sassafras at 103.6' (previously 101.6' just two weeks ago) and Umbrella Magnolia at 69.9' (previously 41.8'). It was this species that attracted me to the site and I still did not get a maximum reading. The Beech has the largest AF point total for any known in WV. The Mountain Maple at 1,000' elevation seems out of place but it is on a site with a north facing aspect and I can vouch for cold air draining down Coal Run. A complete list of trees measured can be found at Trees database:

http://www.treesdb.org/Browse/Sites/1608/Details

Turner Sharp

Re: Coal Run - WV

by Will Blozan » Fri Jul 12, 2013 3:30 pm

Turner,

I am glad you get excited about the little trees as well! That magnolia is close to- or is an eastern height record. I can't recall the tall one I measured in Savage Gulf but I do recall 66' was the magic number to beat at the time.

Could that green ash be a Biltmore ash?

Will

Re: Coal Run - WV

by Jess Riddle » Fri Jul 12, 2013 5:55 pm

Hi Turner,

Sounds like the site has an interesting mix of species. I've only been to a couple of sites with both mountain maple and umbrella magnolia, and the mountain maples were shrubby at both of them. I believe you umbrella is the second tallest NTS has measured with a 77' tree in Atlanta holding the record. I'm impressed they can get that tall at that latitude.

Re: Coal Run - WV

by tsharp » Sat Jul 13, 2013 12:25 pm

Will: I ID'd the Green Ash because the bark was not White Ash plus the site, although not bottom land, was a wet site near the river. Do you consider Biltmore Ash a species or a variety of White Ash? There is some controversy over Ash especially concerning the genetic evidence.

Jess Thee was also a Umbrella Magnolia measured by George Fieo in Philadelphia park at 72.1'. The site is interesting and has young vigorous trees and is recovering from man’s past activity. Basically it is at the bottom of a steep sided gorge that levels off as it gets close to the river and in places gets 300 yards wide with a moderate slope. Just as interesting it is probable that there is another 30 miles along the river very similar. I plan to hit a few more of those miles.
Re: Coal Run - WV

by Will Blozan » Sun Jul 14, 2013 7:55 pm

Turner,

I am fairly certain Biltmore ash is its own species now... Incidentally, it does not look much at all like white ash in most respects, and looks much more like green ash but still not quite. The bark and habitat allows for fairly easy differentiation although I have seen both white and Biltmore on the same site. However, they look different enough to distinguish. Biltmore ash bark is much more blocky and often lacks the diamond fissures so prevalent on white ash.

Will

Re: Geology question for Ed Frank

by edfrank » Mon Jul 15, 2013 12:27 am

Bob,

Basically, yes. The Sangre de Cristo Mountains of New Mexico are the southernmost range of the Rocky Mountains. They were uplifted as part of the Laramide orogeny occurring from between 80 to 55 Ma. The Jemez Mountains were formed by inner continental volcanism with major activity dating from 1.4 million years ago and continuing until the present. They are not part of the Laramide orogeny, therefore they are a separate mountain range even though they but up against the southern end of the Rockies. The thinking on the origin of the Rockies as the result of the Laramide orogeny hasn't really changed. There has been some arguments about the time range of the orogeny, but most agree with the standard dates and none are argued as being any younger than 35 million years in any part of the range, so it is quite distinct from the volcanism that formed the Jemez Mountains.

Ed

Geology question for Ed Frank

by dbhguru » Sun Jul 14, 2013 11:53 pm

Ed,

I need some help with geology. Today Monica and I went into the Jemez Mountains of northern New Mexico. As I suren you know, they are of recent volcanic origin. One description of them I read states that they and the Sangre de Cristo Mountains of New Mexico are the southern terminus of the Rocky Mountains. I had understood that the Sangres were, but not the Jemez mountains. What criteria is used to judge where the Rockies end? The Jemez apparently date back only about 1.5 million years and I think I read that the last volcanic activity was between 50,000 and 60,000 years ago. What defines the Rocky Mountains? How has the thinking changed from when the Rockies were defined as the result of the Laramide Orogeny?

Robert T. Leverett

Tribute to Georgia O'Keefe

by dbhguru » Tue Jul 16, 2013 5:59 pm

NTS,

The attachment is presented as a tribute to the late artist. She once said that if people were trees, she'd like them better. That deserves a tribute.

Bob

Georgia O'Keefe.docx

Robert T. Leverett
Tribute to Georgia O'Keefe

Hello Friends,

This submission is presented to honor Georgia O'Keefe. A couple of years ago, I barely knew who she was - I’d only seen a painting or two. Then last year Monica wanted to visit her home country as part of our trip to Santa Fe, where we took in two operas and visited a friend in Villanueva. On the trip from Durango, we stopped at the Abiquiu Inn and I got a sample of O'Keefe’s depiction of the landforms around her two homes in northern New Mexico. I recognized then her sensitivity to the landscape, but still had not immersed myself in her art, and wasn’t sure of how well I related to the modernist style. But the seeds had been sown.

This year Monica was insistent about our visiting Ghost Ranch, which had been the location of one of O'Keefe’s homes, and perhaps seeing her other home at Abiquiu. These home visits were not to be, since you have to sign up for guided tours months in advance. However, there are other sights to see at Ghost Ranch, including two museums, one on paleontology and the other on archeology. The ranch is a prime site for excavations in both fields. Of course, the other reason to visit the ranch is to see and enjoy the landscapes that O'Keefe knew and loved at that place. Here is a scene from near an old dwelling at the beginning of the ranch, one that she would have witnessed often.

Then we drove into the little town of Abiquiu. The village looked very historic and authentically Spanish or Spanish influenced. The streets were dusty and the...
community was obviously poor and religious. Monica spotted a small dwelling with a sign that said Visitor Information, and she rang the doorbell. An old gentleman made his way to the door and invited her in. She signaled for me. The gent’s name is Napoleon Suazo-Garcia, and he is a Genizaro (part Spanish, part Indian), and it turns out that he had worked for Georgia O’Keeffe for over 40 years.

What a story he had to tell! We bought his book (“The Genizaro and the Artist” by Napoleon Garcia and Analinda Dunn). Since my photo of him in his chair was not a good one, here is a photograph of a photo of Napoleon taken in his house with his permission.

Both Monica and I immediately sensed that there was something very special about this man. He spoke slowly and precisely. He was humble and it was obvious that he had a sense of mission about getting a little-told story about Georgia O’Keeffe out to the public. Napoleon explained to us how Georgia O’Keeffe had helped the people of Abiquiu over the decades, never interfering with their ways of life, and always being supportive. He talked of her deep devotion to the land and its people.

Okeeffe’s paintings tell the story of her connections to the many varied and colorful landforms. She loved her isolation (her paintings never included people), and was driven to capture the essence of what she observed in nature. Suddenly, I had a whole new perspective on Georgia O’Keeffe. She wasn’t just a rich woman who gained recognition as an avant-garde artist. She was part of the land she loved.

When Monica and I visited her museum in Santa Fe, I connected to her art as I never imagined I could. I understood, at least I thought I did, what she was
attempting to portray on canvas. She loved the landforms, and sought to connect with their essence. She never tired of looking at them, and watching them change in the changing light. She learned to mix paints to capture the range of hues she saw, amplifying them, but never compromising their distinctive identities.

One landform that she particularly liked was a butte or mesa or mountain named Cerro Pedernal, which translates to Flint Hill. The Pedernal, as it is usually called for short, owes its existence and its top to the Jemez Mountains, and their origin in fire. They are a young, volcanic range dating back only 1.4 million years, with volcanic activity as late as only 60,000 years ago. A second bit of information about Pedernal is that it was a sacred site of the Galena people and a place where they mined flint and made stone tools. At 9,862 feet above sea level, and because of its shape, the Pedernal draws one’s attention, as it did O’Keeffe’s. If you Google Pedernal and Georgia O’Keeffe, you’ll see many of her paintings featuring the mountain.

Beyond its distinctive shape and the moods that it imprinted on the landscape, features that cannot be missed, what was the pull of Pedernal for her? I don’t know, but both Monica and I felt its power.

Here is a series of images giving views from afar and close. First, Pedernal in a full landscape context.

Now, two views from perspectives that O’Keeffe often painted.
Last, a closer look that portrays Pedernal’s commanding presence and duel with the clouds for dominance.

Next, we see the mountain from a different angle. Pedernal would have surprised us with its narrowed profile, had we not been forewarned by a friend.
It is hard to overstate the importance of Pedernal to Georgia O’Keeffe. Here are two quotations of hers:

“I’ve traveled all over the world and I don’t think there’s anything as good as this.”

“It is my private mountain. God told me if I painted it enough, I could have it.”

Today, admirers come from around the world to visit Georgia O’Keeffe’s Ghost Ranch and Abiquiu homes, and her museum in Santa Fe. Many drive U.S. 84 and pass Pedernal, which is prominent to the west, and unmistakable. People say that they feel like they are driving through a Georgia O’Keeffe painting, and indeed they are, for she has portrayed these land forms many times over.

She traveled widely, but found no place that pleased her so much as this land she called home, with her favorite mountain to watch over her.

Georgia O’Keeffe’s ashes were strewn over the summit of Pedernal. I hope that her spirit approves of my small tribute to her and her beloved mountain.

O’Keeffe spent the last years of her life in Santa Fe, where proximity to medical attention was necessary. We conclude with an image taken from the upper deck of the Santa Fe opera house on July 13th. The dramatic image presents storm clouds, streaks of rain, a fading sunset, and the distant Jemez mountains – Nature’s opera as the background to Rossini’s La Donna Del Lago performed in Georgia O’Keeffe country. In a very real sense, her life was the region’s finest opera.
Bob

Georgia O'Keeffe, *Ram's Head White Hollyhock and Little Hills*, 1935, The Brooklyn Museum

http://en.wikipedia.org/wiki/Georgia_O%27Keeffe