

and the nature conservancy. New twist though in that they are trying to incorporate sat gps, computer tablets, and drones. Nature conservancy is trying to raise three mil to fund the test project as gov. won't fund at this time..."

It's not too hard to imagine a drone capturing imagery (kept on line by satellite GPS input/direction) that among other tasks, provides data for SfM (Structure from Motion). To get a rudimentary idea, Wikipedia has a good introductory piece at:

http://en.wikipedia.org/wiki/Structure_from_motion

and if that whet's your appetite, I suspect Ken W can steer you to some more URLs.

Anyway, KenW, welcome to the 'fold', you'll find many friends in this forest forum!

Don Bertollette

[Re: Peter Meinke and Tree Identification](#)

by **Matt Markworth** » Wed Jun 12, 2013 11:16 pm

Here's my attempt at something similar . . .

I will get to the essence of a place, using the facts, yes, but drawing parallels too like the hulking wrecks at dinsmore woods and the pilgrimage to the cottonwoods at high

cliff, to photograph in different seasons a travelogue of sorts, yet anti-travel to capture the vibrant first impression and avoid dulling with repetition

then turned around and walked back in and saw drift wood in the sky and saw roots in the sky, and thought it worthwhile and could briefly understand that some

see them as but woods, monochromatic

but did not give credence to that thought and remembered where i was and reveled in my amateur status

shall i revel in my current state and bring a perspective not commonly known? and never document for sheer beauty yet simply to document and be connected to place

and the undisclosed location shall remain undisclosed, beeches and oaks for they are for every person, not EVERY person, more than mere hunters

i've witnessed the attitude too many times, up close and personal, yes they are monochromatic, to most, and I walked the trail and captured my impressions

- Matt

[Re: Peter Meinke and Tree Identification](#)

by **dbhguru** » Thu Jun 13, 2013 10:04 am

Matt,

I enjoyed your poem. It speaks to me as I imagine it speaks to many. You and Carol are fulfilling the original purpose of NTS. There is a hidden poet in the hearts of many of us. We're just too timid to let it out for fear of sounding amateurish. Thanks again for moving us forward.

Monica and I have an invitation to visit the famous American poet W.S. Merwin on Maui next January or February. We hope to take him up on the invitation. He is a great conservationist as well as poet.

Well, we're in the Black Hills of SD presently and will move on to the Big Horns later today for hiking. Yesterday we were in the Badlands. Heck of a place!

Robert T. Leverett

[Re: Peter Meinke and Tree Identification](#)

by **Matt Markworth** » Thu Jun 13, 2013 10:03 pm

Thanks Bob, I just reserved W.S. Merwin's *The Shadow of Sirius* and *The Carrier of Ladders* from the library, they look very interesting. Here are a couple photos of the places that inspired the poem . . .



High Cliff Natural Area, Lake Winnebago, WI



Dinsmore Woods, KY

Here's a short one:

Hot sun, asphalt, brief time away
Time clock, ticks fast, short break today
Soft trail, sun shade, clock stands still
Zone out, my time, oh what a thrill!



- Matt

[Re: Peter Meinke and Tree Identification](#)

by **Bosque** » Sat Jun 15, 2013 2:43 pm

Matt and Bob,

Thanks for educating me about Merwin. I'll look for the books. A generous relative has a house on the big island in Hawai'i, so we go there when we feel we can splurge on the airfare. Might have to see Maui now too. Thanks for sharing you poem and photographs Matt. More please.

Carol

[Re: Peter Meinke and Tree Identification](#)

by **dbhguru** » Sun Jun 16, 2013 12:14 am

Carol and Matt,

Monica and I attended an event at Smith College recently where Merwin spoke. I was enormously impressed by him and his tributes to nature made me reflect on how much we benefit from poetry. I do hope the two of you will continue exploring our connections to nature, and more specifically trees, through poetic expression.

Robert T. Leverett

[Re: Gifford Woods State Park Aug. 22, 2012](#)

by **adam.rosen** » Sun Jun 16, 2013 10:50 am



I brought my camera to Gifford Woods yesterday, June 15, and went to the forest--not the interpretive trail on the west side of Route 100, but the 7 acres of unmarked woods on the other side. A few steps off the pavement and the mystery unfolds. I wasn't measuring for tree height, but I took some CBH measurements and photographed some of the old growth evidence--coarse woody debris (I love that term!), twisted trunks, buttressed roots, and an amazing twisted crack halfway up the bole of an OG hemlock. I've seen a couple sources--one an ents liked data base, and the other the Longstreet Highroad Guide to Vermont Mountains, that date that hemlock at at least 400 years old. For the numbers, I took a CBH on the hemlock of just over 10 feet, and CBH on the largest Maple I measured at 13 feet and two inches. Neither is one for the record books, but, Tom Howard, how does that compare with the ancient giant of the Liverpool grove.

So, here are pictures: looking up trunks, details of trunks, cracks and fissures, standing snags, and that great hemlock.

Why am I dressed up? I was returning from a good friend's memorial service.

Technical advice on how to rotate the images is welcome.







[Re: Gifford Woods State Park Aug. 22, 2012](#)

by **tomhoward** » Sun Jun 16, 2013 12:43 pm

Adam,

Those pictures of Gifford Woods are awesome! The next time I am in Vermont, I plan to visit the old growth forest across Rt. 100 from the developed part of the park that we visited last year. It is very impressive indeed. The site compares well with the Liverpool School Maple Grove in size of trees and age of maples, but the Liverpool Maple Grove is a little larger in area, and Liverpool has no 400 year old hemlocks (or 400 year old trees of any kind, I don't think). 13 ft. 2 in. cbh is really big for a Sugar Maple and the great tree you found is only a tiny bit smaller than Liverpool's great Maple (the Liverpool Sugar Maple is 13.8 ft. cbh and est. 350 years old). Liverpool and Gifford may be comparable height-wise - it should be interested to get out in Gifford after the leaves are down to get some heights - Liverpool's tallest trees just touch 120 ft. and the biggest Maple is 116 ft. tall.

Tom Howard



Tree Maximums - Genus of the Week: Amelanchier(Serviceberry)

by **Matt Markworth** » Sat Jun 08, 2013 6:10 pm

Hi All,

Genus of the Week: Amelanchier

<http://plants.usda.gov/java/profile?symbol=AMELA>

Here's a sampling of Amelanchier that can be submitted:

- Amelanchier alnifolia, Saskatoon serviceberry
- Amelanchier arborea, Common Serviceberry
- Amelanchier canadensis, Canadian Serviceberry
- Amelanchier laevis, Allegheny Serviceberry
- Amelanchier utahensis, Utah Serviceberry

An excerpt from Jess's MaxList:

Species (Latin)	Species (Common)	Record	Chk	Height (ft)	Spread (ft)	Form	Area	Date	Date	Measure	
Amelanchier arborea	Serviceberry	Circumference	36	73.4		Forest	Zink Valley	NY	May 05	J. Robbins	
Amelanchier arborea	Serviceberry	Circumference	41			Intermediate	Cocoro Swamp Wildlife Management Area	NY	6/22/2008	J. Robbins	
Amelanchier arborea	Serviceberry	Height	36	73.4		Forest	Zink Valley	NY	May 05	J. Robbins	
Amelanchier arborea	Serviceberry	Height	25.5	45.5	29.5	25.5	Forest	Pigeon Mountain	GA	9/4/2004	J. Robbins, D. Robbins
Amelanchier laevis	Serviceberry	Circumference	10	52.5		Forest	Catawchee, GSNBP	NC	5/14/2007	J. Robbins	
Amelanchier laevis	Serviceberry	Height	51	108.8		Forest	Catawchee, GSNBP	NC	6/27/2004	W. Blazan, J. Robbins	

Don Leopold video:

<http://www.youtube.com/watch?v=WdVJzwiiU9M>

- Matt

Re: Tree Maximums - Genus of the Week: Amelanchier(Servicebe

by **tsharp** » Sun Jun 09, 2013 11:41 am

Matt: Here is an Amelanchier submission.
 Scientific name: Amelanchier arborea
 Common name: Common or Downy Serviceberry
 Height: 101'
 CBH: 65"
 Crown Spread: 28' average
 Site name: Carpenter farm
 Subsite:

Country: USA
 State: West Virginia
 County: Upshur
 Property owner: Private, Sean Carpenter
 Date of measurement: 3/13/2011 by Dan Cooley
 Method of measurement: Sine method using handheld Nikon 550 laser rangefinder and Suunto clinometer
 Habitat: Forested area near the headwaters of Little Kanawha River near Holly Grove. Owner cut timber in the area but saved a grove surrounding the serviceberry. 1900' elevation.
 Notes: This tree was brought to the attention of Elizabeth Byers by the landowner Sean Carpenter. Byers works for the WV DNR as an ecologist and was assessing a nearby wetland.
 TS

Re: Tree Maximums - Genus of the Week: Amelanchier(Servicebe

by **tsharp** » Sun Jun 09, 2013 12:10 pm

Matt another amelanchier submission:

Scientific name: Amelanchier arborea
 Common name: Common or Downy Serviceberry
 Height: 44'
 CBH: 102"
 Crown Spread: 56' average
 Site name: C. W. Cassell
 Subsite:
 Country: USA
 State: West Virginia
 County: Pocahontas
 Property owner: Private
 Date of measurement: 4/12/2010 by Dan Cooley
 Method of measurement: Sine method using handheld Nikon 550 laser rangefinder and Suunto clinometer
 Habitat: Tree located in an open area of active pasture land. 2900' elevation

T. Sharp

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Will Blozan** » Sun Jun 09, 2013 3:45 pm

Turner,

Holy crap! You're positive they are arborea? I've laevis that big but never arborea!

Will

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Joe** » Mon Jun 10, 2013 7:03 am

photos please!

we planted one in the back yard last fall- it's flowering this spring was gorgeous but it has no berries...



[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Mon Jun 10, 2013 10:28 am

Will, NTS:

Will I can not be sure. However when this tree was submitted i queried Dan Cooley and later Elizabeth Byers about the species ID. Dan deferred to Elizabeth and in later communications I had with her it was obvious she knows Serviceberrys. She works for WV Natural Heritage Program based in Elkins as an ecologist and and does a lot of field work monitoring wetland areas throughout WV and is very familiar with all the species of Amelanchier. Not that A. arborea or A. laevis are wetland species, but apparently they really like to grow on moist sites near wetlands. Of course she can make a mistake like anyone else. If you would like to communicate with her I can get her contact info. She was a wealth of information.

The only way I can differentiate the two species is when the leaves first come out. Do you have any other ID suggestions.

TS

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Mon Jun 10, 2013 5:28 pm

Joe, NTS'

Joe no picture of the tall Serviceberry, but I can't resist posting this picture of a Common Serviceberry in all its spring glory.

It is the same tree I nominated for biggest girth.



Photo by Dan Cooley 4/12/2010

This tree is almost directly beneath the east facing overlook that Cass Scenic Railroad uses on Bald Knob. Of course it is about 1,500 feet elevation lower in the Greenbrier River drainage.

TS

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Matt Markworth** » Mon Jun 10, 2013 9:06 pm

Turner,

Thank you for the submissions. That Serviceberry is a beaut, I practically started sneezing after just looking at the picture:) I'm allergic to nearly every flowering tree and I've heard that we can crave what we are allergic to, and this may explain why I get a little stir crazy when I haven't been in the forest for awhile.

All,

Beyond the discussion of Amelanchier, this thread has me pondering some important questions as they relate to the Tree Maximums List as a whole. I pose these as rhetorical questions, realizing that they are very situational based on the species being discussed.

For example, how should submissions be handled when they are substantially bigger than known maximums, especially for species/subspecies that are commonly misidentified? The Yellow Buckeye in Kentucky that reigned as the Ohio Buckeye champ for 30 years comes to mind. My thought is that the identification has to be rock solid to establish a significantly higher benchmark for a species.

Should photos always be included when making a submission? I know there has been some discussion that the AF National Register of Big Trees should require photos. My thought is that photos shouldn't be a requirement for submission, however they should always be encouraged, especially for species that are commonly misidentified (with sufficient zoom to positively identify) and also when there is a question of single-stem vs. multi-stem.

Do non-NTS measurements have a place in the list? My feeling is that if the NTS Member has direct knowledge that a Non-NTS member has accurately measured the tree with a tape drop or the ENTS Sine Method, then this submission can be included in the spreadsheet tab titled, "Non-NTS Reliable Maximums." Over time, as the Tree Maximums List increases in status as a reliable source of Tree Maxima, then it should serve as a recruiting tool as Non-NTS big tree hunters will want their tree listed in the official list. Also, as we discuss the tree with the Non-NTS Member, there may be an opportunity to have them create a username and to submit the tree on their own, therefore becoming a member.

I appreciate all the ideas that have been provided and am very pleased with the improvements to the list that have been made thus far. I welcome any and all ideas to refine the list even further.

Thanks,
Matt

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Tue Jun 11, 2013 8:32 pm

Matt: An A. laevis submission for crown spread in case no else has one.

Common name: Allegheny or Smooth Serviceberry

Height: 43.7'

CBH: 69"

Crown Spread: 45' maximum, 40.5' average

Volume:

Site name: Marlinton

Subsite

Country: USA

State: West Virginia

County: Pocahontas

Property owner: Private

Date of measurement: 5/17/2011 by Turner Sharp

Method of measurement: Sine method using handheld Nikon 440 laser rangefinder and Suunto clinometer

Tree name:

Habitat: Tree located in a fence line between two property owners and is under a much larger Oak. Elevation 2200'

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Will Blozan** » Wed Jun 12, 2013 12:37 pm

Turner,

The arborea I see around here are planted, multi-stemmed, and small. The largest by far- and I mean by far- is a tree in Swanannoa that has a stem about 10" diameter. The tree is about 25' tall as well as wide. When I climbed this tree to prune it a few years ago I was "gagged out" by the fine woolly hairs under the leaves. This characteristic has been a constant ID feature. I saw some yesterday and they were fully flopped in fine white hairs under the leaves. Laevis is

glabrous or has a few fine hairs along the veins but nothing like arborea. Also, I hear laevis fruits are tasty while arborea are not so good.

I suspect your giants are laevis and perhaps there are intermediates as well.

My two cents.

Will

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Thu Jun 13, 2013 2:41 pm

Matt:

Matt: To answer or comment on three questions you posed in a previous post

Q1: How should submissions be handled when they are substantially bigger than known maximums, especially for species/subspecies that are commonly misidentified?

I think it would be prudent to note that the submission is substantially much bigger than any previously measured and place it in a "pending" status until a second on site inspection can be obtained.

Q2: Should photos always be included when making a submission?

Not always, but are appropriate if they can clearly illustrate characteristics of the tree that may be called into question.

Q3: Do non-NTS measurements have a place in the list?

If I interpret your question correctly you are referring to people making the measurements. I believe your original requirement was to only accept measurements by NTS member but I believe you later changed it to 'or have knowledge of the person measuring the tree.'

I believe that measurements by anyone should be accepted as long they are using measurement methods acceptable to the NTS

Comment: I believe that any submission that has not been verified after a certain time should be flagged

and other submissions be allowed.
American Forests uses 10 years and they don't flag them -they delete many of them.

Will:
Your 2 cents worth are valued. I agree the woolly hairs present when the leaves unfurl are surefire way to identify that species. In my experience they disappear after 2-4 weeks and I have always been at a loss to ID Serviceberry at other times of the year. Maybe I better start taste testing. Next spring I will make an attempt to evaluate the two giants.

TSharp

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Will Blozan** » Thu Jun 13, 2013 3:59 pm

Turner,

The downy's here are woolly all summer. Laevis starts woolly then loses it (mostly).

Will

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Fri Jun 14, 2013 11:39 am

Will: Apparently we have different expressions of "Downy" in the A. arborea in the part of WV close to the Ohio River. Just this morning I checked on two trees that were fully "downy" when they first leafed out this spring. Not a bit in evidence.

We have had at least three bouts of strong thunderstorms with high winds and driving rain since they leafed out.

TSharp

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **edfrank** » Fri Jun 14, 2013 1:54 pm

I wonder about how much regional variation is expressed in Amelanchier (and other species) where there are two similar species. Are the characteristics used to distinguish between the two forms the same at both ends of its range? Do they coexist as distinct species or subspecies in some parts of their range while they are all but indistinguishable in other parts? Do the species grade from one form to the other? In terms of hawthorn there have been literally thousands of species/subspecies described but likely many of these differences are simply regional variations or expressions of the same genetic stack. Jack Horner has been trying to show that many of the different dinosaur species described are really just variations in skull form expressed as the dinosaur ages. Are the two species really different? Maybe there are more than two different species.....

Turner, there must be some reason why you decided the large specimen was arboria instead of laevis - you are good with species identification, so why did you make that call in the first place? Have those reasons changed? I wish there was a cheap DNA machine we could carry around and do tree species ID's. There actually are portable DNA machines, but each test is still relatively expensive and it doesn't come with a tree ID data set.

Ed

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **tsharp** » Sat Jun 15, 2013 7:38 am

Ed:
Your comments about regional variation is appropriate.
To clarify who made the species ID on the three nominations I submitted for Matt's max dimension list.

I did not make the species ID on the tall Serviceberry or big girth Serviceberry. For the tall one in Uphur County Elizabeth Byers made the initial ID and Dan Cooley concurred. The big girth Serviceberry (pictured in full bloom) was actually a re-measurement of a tree previously identified by John Rossell (WV DOF forester) in 1999. Dan Cooley concurred with the previous ID but commented that the leaves had not opened when it was there. The tree I measured in Marlinton was also a re-measurement originally identified as a *A. laevis* by Robert Furgeson in 1995. He was a District Ranger for the Monongahela National Forest and lived nearby. I was there when the leaves were newly opened and there were no hairs present so I had no trouble concurring with the original ID.
TS

[Re: Tree Maximums - Genus of the Week: Amelanchier\(Servicebe](#)

by **Matt Markworth** » Sun Jun 16, 2013 6:48 pm

Hi All,

Thanks for the great discussion about Serviceberry. I have a better understanding of the genus than I did one week ago.

Turner - Those are impressive Serviceberries. I shaded the two Amelanchier arborea in light blue and added a comment that they are pending species confirmation.

Jess, Will - Let me know if you'd like to include any notes for your Amelanchier finds.

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

- Matt

[Maryland's once biggest tree, in pieces :\(](#)

by **JohnnyDJersey** » Sun Jun 16, 2013 7:57 pm

I took a spontaneous trip this weekend through Maryland to do some tree hunting and check out some of the largest trees in the state. One of my visits was to the champion Silver Maple and Maryland's once largest tree. It held this title from the day the famous Wye Oak collapsed in 2002 until a year or two ago when it lost a main limb. I found the tree in the forest, precisely where Big Trees of Maryland (http://www.mdbigtrees.com/view_tree.aspx) said it was. Unfortunately when I arrived, all I found was a gigantic stump. The tree has apparently lost its other leader recently and I'm unfortunately announcing its demise. The tree once had a girth of almost 27 feet, and claimed 479 point. I'll post a picture of the tree in its glory as well as the photos I took today. Notice how massive the stump is still. On the brighter side, I was also able to visit the White Oak in Rising Sun MD, this tree is healthy and seems to be the perfect example of an old growth white oak. Posting photo of it as well.



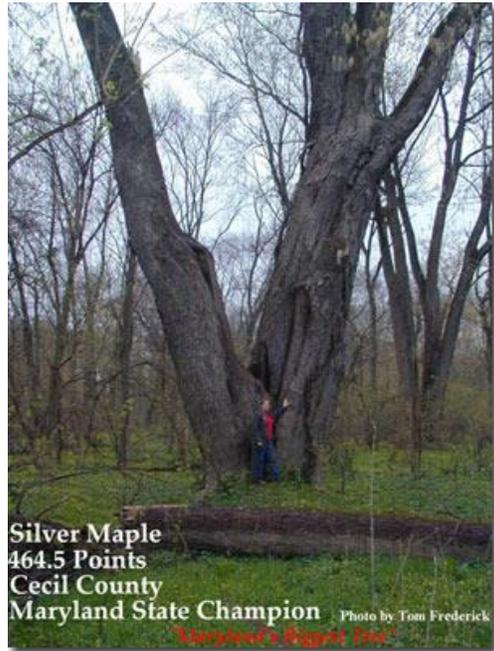
White Oak Rising Sun



The massive limb it lost first



other limb



Silver Maple
464.5 Points
Cecil County
Maryland State Champion Photo by Tom Frederick
"Virginia's Biggest Tree"

In its glory



The stump as it stands now

John D Harvey

[Wizard of Oz Oak Grove June 16, 2013](#)

by **tomhoward** » Sun Jun 16, 2013 12:31 pm

Wizard of Oz Memorial Oak Grove - June 16, 2013

From Candlewood Suites where I am staying while my apartment is being renovated, I can see the green south wall of the Wizard of Oz Oak Grove to the north. The canopy of the south wall is about 90-95 ft. tall, lower than the 110 ft. heights of the Forest Cathedral in the northern half of the Grove. From Candlewood Suites, I can see the thin broad crown of

a Red Maple towering above the south wall. This is the crown of the double-trunked Mother Teresa Red Maple, which I measured to 97 ft. in the official list of tree heights. In *The Sierra Club Guide to the Ancient Forests of the Northeast* by Bruce Kershner and Bob Leverett (2004), the Mother Teresa Red Maple is listed as 110 ft. tall, “tallest in the grove” (p. 115). Although I don’t think this is the tallest tree in the Grove, the 110 ft. may well be accurate. This tree can be seen from a mile away towering over and behind the Grove’s south edge – the thin wide crown of this tree is unmistakable.

On this warm humid morning I walked up to the Grove, and I was quickly enfolded into its dark green depths. I got a straight up shot (with the Nikon 440 Laser Rangefinder) a slender (17.5” dbh) Red Maple just east of Mother Teresa and got a height of 97.5 ft., and this is without seeing the highest part of the tree. I measured the Mother Teresa Tree from the north using the NTS Sine method:

A1	66	A2	5
D1	36.5	D2	14
H1	33.344	H2	1.22

Height 103.7+ (This is still not the highest point – a more accurate measurement will have to be made this fall when visibility improves after leaves come down.) D1, D2, H1, H2 are in yards, while final tree height is in feet.

The Grove is undergoing a Gypsy Moth infestation and in the southwestern part of the Grove every White Oak is covered with caterpillars. There are far fewer caterpillars in the Forest Cathedral, but they are present. The Grove is permeated with the sound of pieces of leaves falling, and the ground is littered with fallen pieces of White Oak leaves, which caterpillars are consuming high in the canopy. The White Oaks still have full green leafy crowns, and from the ground I could not see any defoliation. The caterpillars infest White Oak and Beech but they do not trouble Red Maple, Black Gum, or other species very much. There were also plenty of mosquitoes in the Grove.

When I left the Grove a light rain began to fall.

Tom Howard

Re: American Forest's Measurement Group

by **Don** » Sat May 18, 2013 6:12 pm

Rand-

AF's Big Tree Program is making a significant effort to transition into a more scientifically based program, and they are committing time, energy and resources to upgrading their tree measuring standards. This is an important opportunity for NTS to be providing input, for as Bob/Ed would say, we are the premier tree measuring group, uniquely focused to provide input. Having been selected as a member of the Measuring Guidelines Working Group (MGWG), I'm honored to provide NTS input.

Your comment about a PR exercise for the Forest Service is however without basis. AF's primary support source is from a private enterprise called Davies Tree Expert Company, and has not direct ties to the USFS. As just one man's opinion, one of AF's missions is to involve the public in the conservation and restoration of forests, and in keeping with that mission they were often willing to accept the public's measurements, relying on volunteers (often state forestry programs) to verify or confirm. AF's current effort to form the MGWG reflects their serious intent to upgrade this aspect of their Big Tree Program. As a member of MGWG, I will advocate for "tree...iage" approach where initial public input is accepted, but as the champion candidate rises to state and national levels, the requirements for accuracy also rise...for example, measuring equipment at the national level should include laser rangefinders and clinometers, and measuring techniques include the sine-sine formula calculations, or better.

While we in NTS don't have members in every state, I'd like to think that NTS could establish a cadre of national level Big Tree Registry volunteers willing to offer to measure national contenders?

-Don

Re: American Forest's Measurement Group

by **Don** » Sat May 18, 2013 6:19 pm

Will-

I did get selected for the AF's MGWG and would be very surprised if you were not selected, as your expertise speaks for itself! I don't yet know the entire makeup of the group, but I think there are a few NTS/Big Tree State Coordinators on it. I know you're well respected by the AF Big Tree Program folks, and I'll be happy to 'channel' your input, if you end up not being selected. The same goes for Ed, you guys both have been tireless advocates for improved tree measurement accuracy.

I do believe that AF is doing their dead level best to upgrade their tree measurement guidelines and that they value NTS input.

-Don

Re: American Forest's Measurement Group

by **dbhguru** » Sun May 26, 2013 5:50 pm

NTS,

I just received a letter from American Forests announcing my selection as one of 3 principal members of the American Forests Measuring Guideline Working Group. I had expected the appointment from an earlier phone call, but was asked to wait until getting the official word before announcing it. The other two principal members include the Texas champion tree program coordinator and a person from Virginia Tech Forestry Dept. There are 3 additional members of the working group who will act as advisors to the principal three to lend their expertise and to insure the needs of state coordinators are properly addressed. Don Bertolette and Scott Wade, both NTS members, are two of the three. So in terms of the 6 members, 3 are in NTS. That is pretty fair representation for us.

I, as the rest of you, am disappointed that Ed wasn't selected. I think it came down to a flip of the coin. I have had significant dealings with American Forests back to 1992, including being on a prior AF working group with Colby Rucker to develop better measuring guidelines. That effort was abandoned for reasons unknown to either Colby or myself. That said, Ed's direct contribution would be invaluable, but rest assured that he and Will will be adequately represented through myself and Don Bertollette. In fact, all of you will. There will be a collective NTS brain. We will make it work.

Despite the past abortive attempts by AF to improve measuring discipline, I take this new appointment very seriously as proof that AF wants to tighten the measurement guidelines in ways that not only correct past deficiencies, but also reflects the equipment advances that we enjoy today. I think some of Don Bertollette's thinking has already penetrated in terms of the emphasis trees in the National Register should receive. In addition, the Big Tree Program coordinator, Sheri Shannon has taken it on herself to learn how to measure trees. She has made rapid progress. Her predecessors found themselves getting conflicting advice from ostensibly equally qualified sources. The AF coordinators had no diplomatic way of moving forward. They didn't want to alienate big supporters of the National Register, plus staff turnovers were frequent.

Overall, time has been an ally for us. It has allowed time for us to gain this mountain of experience and for new ideas to take seed. The Measuring Guidelines Working Group will rewrite the tree measuring guidelines. That will be our function. I promise to keep everyone informed and regularly seek input.

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **dbhguru** » Thu May 30, 2013 9:49 pm

Thanks Joe, Bryan, Larry,

Be assured that all of you will have a voice as a consequence of the three NTS members who are in the Working Group. We should be having our first meeting of the group before long. I'll keep you all posted.

It will be a challenge to figure out how to craft guidelines that don't exclude beginners, but also don't allow obviously mis-measured trees to get and stay on the list. Ed will have a major voice in my vote. All his fine work in putting together the Wikedianarticles will not have been for naught.

I spend a good part of my time testing equipment, thinking about new measurement methods, and comparing the results attained from applying different methods. I realize that the methods and procedures have not always been clear in their mathematical derivations and the accompanying spreadsheets. However, for a new technique to be valid, the underlying mathematical model must be valid. It isn't just a case of presenting a set of steps that can be followed. The instructions accompanying clinometers, the use of the stick method, and the 3-point hypsometer method are usually quite clear. Beginners can follow them, but they don't lead to accurate height measurements. Don Bertollette and I have been working on more understandable presentations. More to come.

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **Will Blozan** » Fri May 31, 2013 11:02 am

Bob,

A great starting point for the group would be to through the current list and reject the multiple stems

and flag the questionable heights and spreads. These trees should be put on a probationary period (as well as those with no photos) to received verification by credible methods. Our MAXLIST would be a great way to screen the process and justify the probation. You all could reach out to the scattered NTS members and have them verify as time permits.

Will

[Re: American Forest's Measurement Group](#)

by **dbhguru** » Fri May 31, 2013 1:37 pm

Will,

In spirit I'm with you. However, it is going to be a challenge. I don't know how sensitive the other two primary members are or how knowledgeable or experienced they are. So, I must proceed with caution. Getting things turned around in American Forests is like turning the S.S. Queen Elizabeth around. Were she a dingy, we could whirl around and head in a new direction, but I have a feeling that we'll have to overcome a lot of inertia and reluctance to exposing certain nominators to even indirect criticism. We'll find a way to get there, but we'll likely have to overcome some road blocks.

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **Joe** » Sat Jun 01, 2013 6:17 am

Well, Bob, if anyone can- you can--- I recall that day in the late '90s when I brought you to a farm to show you an old growth hemlock stand- one of the family "youngins" showed up with his rifle cocked asking what we were doing on HIS land- you started talking about the good old days down in the mountains, and

you had him eating out of your hands.... nice talent to have- one I respect since I don't have it.

Joe

[Re: American Forest's Measurement Group](#)

by **dbhguru** » Sat Jun 01, 2013 7:24 am

Joe,

Yes, I remember that day. The 'good ole boy' instincts kicked it. I'd encountered plenty of situations growing up in the mountain South. The early training served us well.

When Monica and I take one of our trips down South, I revert to being a good ole boy, and chew the fat with my southern brethren. Monica is from New Jersey and on our first trip South, she couldn't understand all the comradery between people who didn't officially know one another. She fits in well now. When we head south, I call her Baby Bell.

As part of the working group, I will have to keep in mind that American Forests has always worried about losing popular support. So, they have intentionally kept guidelines and measuring methods as simple as possible. That has led to errors of epic magnitude such as the mis-measured trees we've discussed in the past, including a former national champion red maple in Michigan and a pignut hickory in North Carolina. The former was mis-measured by a staggering 60 feet and the later by an even more staggering 67 feet. Other so-called national champions are routinely mis-measured by 20 to 30 feet.

I think we can change this situation, but there's going to be lots of state coordinators who are going to resist the solution. And that solution includes guidelines on how to apply methods so that such errors are avoided. These latter methods will have a numerical component, which must be simplified to avoid the appearance of mathematical equations. Boy, have I ever learned that lesson! This is where my Alaska buddy Don Bertolette is going to be worth

his weight in gold (and that's a lot of gold). Don has been keeping after me to find better ways of dealing with the mathematics to shield the general user. from the deluge of formulas that usually comprise my approach. We're thinking of trying out new approaches to explaining measuring techniques using PowerPoint presentations.

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **Joe** » Sat Jun 01, 2013 7:58 am

dbhguru wrote: So, they have intentionally kept guidelines and measuring methods as simple as possible.

Bob, this gets back to the periodic discussion of exactly why this type of work is so important. I believe that definite essay has yet to be written.

but, it should include:

- * good measurements will be a foundation for other ecosystem research
- * trust in good measurements may spur competition to find even bigger/older trees
- * scientific measurements will be valuable for silvicultural and forest economics research
- * changes in rates of growth may tell us something about climate change
- * understanding the full potential of all life forms is essential for our species to rightfully claim being the stewards of the Earth
- * finding ever bigger/older trees for each species is mind blowing and recording them for posterity with photos, videos, soundscapes, art is a tremendous contribution to human culture and the sustainability of the Earth, something doubted by many but which we are obligated to accomplish

Joe

[Re: American Forest's Measurement Group](#)

by **dbhguru** » Mon Jun 17, 2013 9:43 am

NTS

I echo what Don has said. I'd like to think that choosing one of us is equivalent to choosing all of us. Don and I certainly intend to follow that path and consult with the rest of you and Ed, Mike, and Will in particular. NTS is a heck of a brain trust and this is an excellent opportunity to exercise it for good cause. American Forests has made some critical decisions on moving forward and deserves to be given the benefit of the doubt. With Don, Scott, and me as Group members, NTS has substantive representation. We can hardly accuse AF of bypassing us.

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **edfrank** » Sat Jun 29, 2013 9:50 pm

Bob and Don,

With regard to the Measurement group. I want to see all kinds of changes implemented. There are three main areas that I think can be addressed.

1) Multitrunk or Single trunk - There needs to be a place to indicate whether or not the submitted champion is a single trunk tree or multiple tree. This should be defined as whether or not the tree would have multiple piths at ground level. Ideally, AF would keep duplicate lists and have a champion for single trunk trees and one for multitrunk trees. This would fit with their purpose of engaging the public. If they are to be lumped together, there should at least be an indication of what form that particular tree has. To facilitate this a photo of the lower portion of the trunk should be submitted.

2) I also would like to see a photo of the overall tree

submitted, in addition to that of the lower portion of the trunk. With digital cameras built into almost every cell phone, and stand alone cameras for less than \$20, it is ridiculous to not require a photo or photos of the tree be included in the submission.

3) I would like to see the methodology of the measurement be a field. It could be a simple check box with values like: a) climb and tape drop, 2) pole measurement, 3) clinometer and distance tangent method, 4) laser range finder sine method, 5) laser rangefinder tangent method, 6) professional survey, 7) other - describe. For the definitions of these different methods refer them to the Wikipedia article on tree height measurement. I am not as hopeful for this suggestion, but I feel it is critical.

Edward Forrest Frank

[Re: American Forest's Measurement Group](#)

by **dbhguru** » Sat Jun 29, 2013 10:59 pm

Ed, Will, et. Al.,

We have met twice and are dealing with the simpler issues first. One issue is if a champion has not been re-measured within 10 years, should it be removed from the list. The consensus is yes with some exceptions. The exceptions need not be spelled out prematurely, but I doubt any one is going to disagree with the 10-year rule. Many of the state programs have considerably shorter windows. Thoughts?

The current issue under consideration is whether to include only the live parts of the tree or to measure to the end of the dead parts. In the case of the trunk and species like bristlecone pines, the dead part of the trunk is, of course, included. But height to a dead top, crown spread to the end of dead branches? What are your thoughts?

Robert T. Leverett

[Re: American Forest's Measurement Group](#)

by **edfrank** » Sun Jun 30, 2013 12:37 am

Bob,

My opinion would be to include the dead wood.

They were alive not that long ago. As you mention the case of the Bristlecone pines the dead wood is almost all that is showing. The process should be consistent. We include dead wood in volume measurements, so it should be included in the height and spread measurements. For many measurements, such as amount of defoliation, crown dieback and so forth, the dead branches are measured in order to compute the amount of dieback.

I think the 10 year rule should be abandoned. It is hard to get back to all of the trees in remote areas for a handful of people actually doing the measurements on a 10 year schedule.

Ed

Re: European beech forests

□ by **hamadryad** » Mon Jun 04, 2012 4:06 am



Pholiota aurivella (Golden scaly cap)



Volvariella bombycina



Inonotus cuticularis



Helvella lucanosa



Clavulina coralloides (mycorrhizal)



Fomes fomentarius



Hericium erinaceus

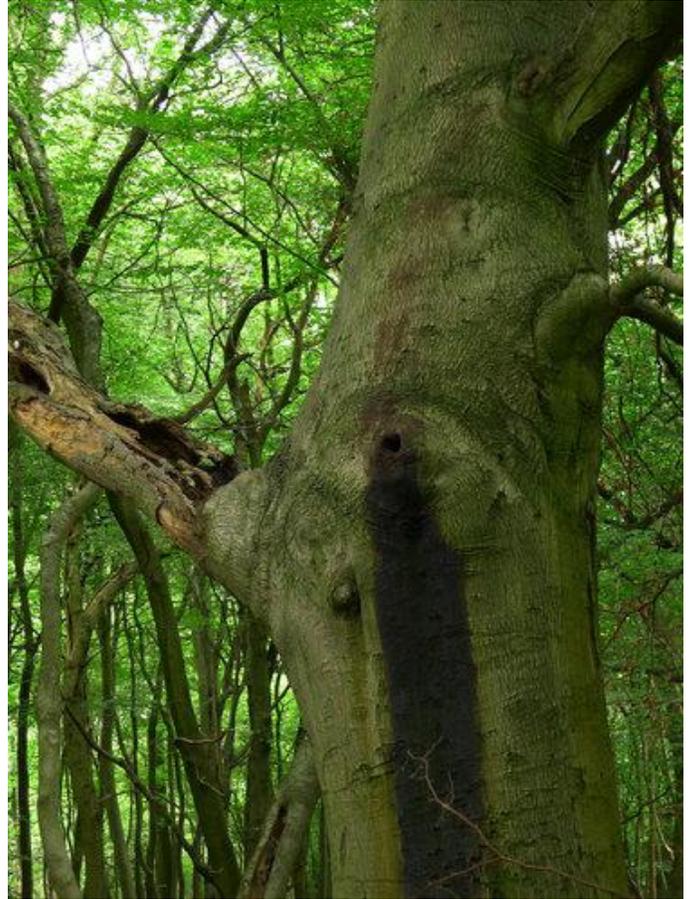


Hericium coralloides



Hericium cirrhatus

Beech have the second highest associated bio diverse ecology of our natives (U.K) I go out in search of their associated fungal partners regularly. I am most fortunate to live so close to so many great Beech and Oak woods, Epping Forest, Burnham Beeches, Ashridge Park, Knole house etc. Here are a few more images from our U.K Beechwoods.



Bat roost in hollow Beech, note the brown stain above the hole consisting of moth dust!







Anthony Croft

[Re: European beech forests](#)

□by **hamadryad** » Sat Jun 16, 2012 7:31 pm

Corrrr blimey guvnor, its lonely in ere innit!

Heres another beechwood fungi Coprinopsis picaceus



[Re: European beech forests](#)

▣ by **hamadryad** » Mon Jun 17, 2013 2:58 pm

I thought it was time I added a few more English Beeches to this thread.

As you can see in one image sunburn is a common problem, your beech bark disease can also be sunscald if the woodland is thinned too much and in

hot weather.

I re inspected some old friends over the weekend, sadly I missed the *Laetiporus* while it was in its prime, the tree has failed within the last few days the bracket must have been over 50lbs in weight!

In one image you can see the Lion of Buckinghamshire carved into the chalk hills of the Chilterns, beech habitat, this landscape is full of beech woodland







[Corner trees on the Monongahela National Forest](#)

by **tsharp** » Sun Jun 16, 2013 8:48 pm

NTS:

I thought this abstract may be of interest to some ENTS and WNTS:

Forest restoration would be greatly helped by understanding just what forests looked like a century or more ago. One source of information on early forests is found in old deeds or surveys, where boundary corners were described by noting nearby trees known as witness trees. This paper describes the creation and analysis of a database of witness trees from original metes and bounds surveys of what became the Monongahela National Forest in West Virginia. We include an estimate of positional error from the conversion of paper maps to digital format. The final database contains 15,589 corners and 22,328 trees of 49 species from deeds dating

from 1752 to 1899. White oak was the most frequent witness tree, followed by sugar maple, American beech, and American chestnut, and distribution patterns were recognizable across the study area. In early forests of the study area, magnolia, sugar maple, and black cherry were found on high-elevation ridges. Red spruce, hemlock, birch, and American beech were found on high-elevation toe slopes. Basswood was found in high-elevation coves, and red oak was associated with bench landforms at high elevations. At moderate elevations American chestnut and chestnut oak were associated with ridges, white pine and yellow pine occurred on benches, and an unknown species called spruce-pine was found on valley landforms. Blackgum was associated with toe slopes on low elevations, and black walnut was found on low-elevation benches. Low-elevation valleys contained white oak, elm, and sycamore. An important finding from this analysis is that some associations between species and environmental variables differed based on the ecological setting. Indicator kriging, using presence-

absence data, resulted in probability of occurrence maps for selected species. We estimate that white oak covered 26 percent of the study area, sugar maple 19 percent, American chestnut 3 percent, and red spruce 2 percent. For some reason I could not get a working link embedded in this message for the entire PDF file but if one searches for "**European settlement-era vegetation of the Monongahela National Forest**" you should be able to download it." I would think other National Forests have done similar studies.

TS

[Re: Corner trees on the Monongahela National Forest](#)

by **edfrank** » Sun Jun 16, 2013 9:41 pm

Title: European settlement-era vegetation of the Monongahela National Forest, West Virginia
Author: Thomas-Van Gundy, Melissa A.; Strager, Michael P.
Year: 2012
Publication: Gen. Tech. Rep. NRS-GTR-101. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 39 p.

<http://www.nrs.fs.fed.us/pubs/41448>

http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs101.pdf

[Re: Corner trees on the Monongahela National Forest](#)

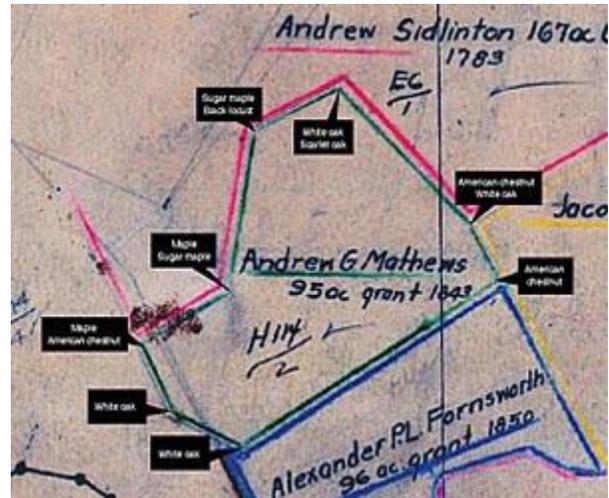
by **edfrank** » Sun Jun 16, 2013 9:44 pm

Old Deeds, Witness Trees Offer Glimpse of Pre-settlement Forest in West Virginia

by Staff Writers

Parsons WV (SPX) Sep 17, 2012

http://www.terraily.com/reports/Old_Deeds_Witness_Trees_Offer_Glimpse_of_Pre_settlement_Forest_in_West_Virginia_999.html



[Re: Corner trees on the Monongahela National Forest](#)

by **Don** » Sun Jun 16, 2013 11:49 pm

Turner/Ed-

While working at Northern Arizona University, one of my colleagues (Terry Arundel) was doing his MS thesis on a Western equivalent of the paper you cite.

I got to thinking about the differences that would come out of the two different survey techniques (metes, bounds and a Cadastral grid).

From my original corner/property line restoration work with the Redbird Purchase Unit on the Daniel Boone National Forest, the metes and bounds were almost exclusively landscape-based such as ridgelines, creeks, and other topographic features (elevation, slope, aspect).

From my earliest work with original corner restoration with the Burns District of the Bureau of Land Management in eastern Oregon that began in the 1880's, surveying was done on a grid system. With respect to topographic/ecologic features, the Cadastral gridding "systematizes" the data, with a tendency towards random selection (it does pay attention to cardinal direction/aspect).

While I no longer recall statistical techniques that

Terry used to offset any bias the gridding system introduced, I suspect that analogous statistical techniques were employed by your cited paper.

VERY interesting stuff...in the west, it seems that surveyors developed a preference for some species over others in terms of 'scribe-ability' of bearing/reference trees. Perhaps a similar predilection existed in eastern surveys?

Don Bertollette

[Re: Corner trees on the Monongahela National Forest](#)

by **Will Blozan** » Mon Jun 17, 2013 4:47 pm

Spruce-pine= hemlock. Sometimes Carolina hemlock is called spruce-pine down here.

[European Chestnut](#)

by **Jeroen Philippona** » Tue Mar 30, 2010 8:29 am

James,

You asked Kouta about measuring European Chestnut, *Castanea sativa*. I have measured a lot of them, although not in really native forest stands, which are in S.E. Europe. In the Netherlands it was introduced by the Romans, so not native but naturalised. The tallest measured here is 33,0 m (108 ft), in tall forest in Arnhem surrounded by European Beech up to 42,6 m (139,76 ft), European Larch up to 39,0 m (127,95 ft) and English Oak up to 37,5 m (123 ft). Normally in closed forest the height of Chestnuts is between 20 and 28 m, rarely above that. The largest in the Netherlands has a cbh of 850 cm (27,9 ft), the largest cbh of all trees in Holland. The largest Chestnuts are in the warmer Mediterranean

countries like Spain and Italy. Also in the western parts of France near the Atlantic and in the UK (where winters are very mild) there are very large (but not very tall) chestnuts. There are Chestnuts with cbh of 10 to 14 metre (33 to 46 ft), most of these are open grown with a height of about 15 to 25 m (50 - 80 ft).



largest European Chestnut in the UK-2



largest European Chestnut in the UK-1 CBH 39 ft

The largest Chestnut of the UK has a height of 25 m (82 ft) and CBH of 12 m (39 ft). See two attached photos



European Chestnut CBH 34 ft

and one of another Chestnut of CBH of 10,3 m (34 ft). Both are in Cowdray Park, West Sussex, England.

In Sicily, Italy, there are even larger Chestnuts, but while still alive their trunks have been rotting and falling apart in several pieces. Tallest in the UK is 35 m (114,8 ft). Even in the south European countries I have never seen taller Chestnuts and I doubt if they ever reach 40 m.

So European Chestnut is amongst the largest trees in trunk-diameter in Europe, but not one of the taller species.

In Germany and more to the east there are fewer large Chestnuts because of the colder, more continental winters.

Jeroen

[Re: European Chestnut](#)

by **James Parton** » Wed Mar 31, 2010 6:36 pm

Jeroen.

Awesome chestnuts! They are huge! Our Live Oaks may be even second to these giants. Long ago our American Chestnuts were said to be giants but not anymore. I am glad European scientists were able to defeat the blight there. Hypovirulence worked like magic there.

Ed,

I would love to see Jeroen's part of this post w/photos included on the American Chestnut Project page. While they may not be eligible for the spreadsheet list, the post itself with photos would be a welcome addition to the Chestnut Project Page. It shows how big a *Castanea* species can really get! *Castanea Sativa* to the best of my knowledge is the closest in appearance to *Castanea Dentata*.

James E Parton

[Re: European Chestnut](#)

by **Larry Tucei** » Thu Apr 01, 2010 8:29 am

Jeroen, Wow that is a huge tree! I'm curious to know how old would that tree be? 200-300 years maybe? I'd love to measure and photograph some of the European tree species some day. Larry

Re: European Chestnut

by **Jeroen Philippona** » Sat Apr 03, 2010
8:01 am

Larry,

About the age of these two chestnuts I know little. Dr. Owen Johnson of the Tree Register of the British Isles writes about the largest of them in their book "Champion trees of Britain and Ireland" (Whittet Books, 2003) "this gigantic but relatively youthful Sweet Chestnut grows in the same field at Cowdray Park, W. Sussex, as the well-known Queen Elizabeth Oak."

This relatively youthfull is when compared with two other chestnuts with even larger circumference but wich are very hollow, burred and with complex trunks with parts decaying away and new growths. Hereby I send a few photos of such chestnuts. One of them, the Tortworth Chestnut, in the 18th century had a bigger circumference than it has now due to this decay.

These kind of chestnuts are said to be very old, even a thousand years, but litle can be proven.

The oldest chestnut (and tree!) in the UK with a known planting date is the Castle Leod Chestnut in Strathpeffer, Scotland, wich was planted in 1550 and has a girth at 5 ft of 8,10 metre / 26 feet 7 inches. So it is far from the biggest in girth, but it has a rather long trunk and a height of 28 m / 92 ft. It has known girth-measurements since 1867 when it was 18 feet 2 inches; in 1908 it was 21 ft 6 inches, in 1938 23 feet 3 inches. This is a relative slow rate of growth of less than an inche a year, probably because of the shorter cool growth-season in Scotland. Most chestnuts grow faster in Southern England with warmer summers, I know when young between 1 and 2 inches girth increment a year, but slowing down to about one inche a year when older.

In another park nearby, Petworth Park, I have ringcounted a cutted chestnut with a cbh of about 23 feet wich was 230 years. This is very normal for the species.

The huge chestnut of Cowdray Park will have grown fast, the girth is extra large because of root-swell. So the lifelong growth in cbh could be 3 to over 4 cm a year. I think it will be about 300 years old, 200 years

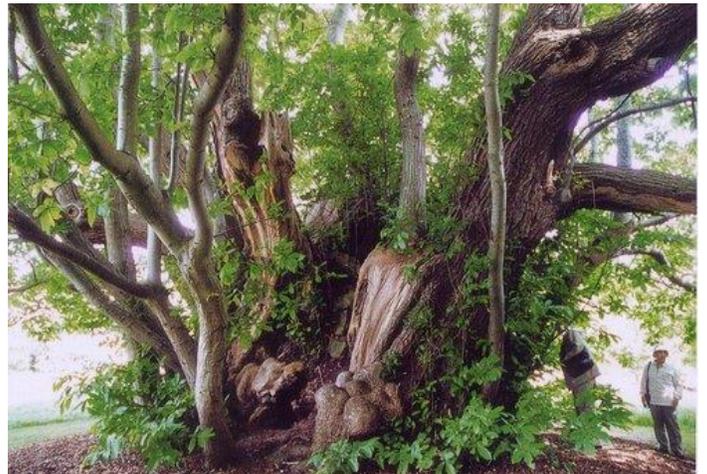
seems to be very young for such a large tree of perhaps 4000 cubic feet, wich would be 20 cubes a year.

Conclusion: the oldest known chestnut in the UK for sure is 460 years now. Several extreme big chestnuts are thought to be older, but there is little proof. The huge chestnuts of Cowdray Park are probably around 300 years.

Jeroen

PS Larry, you reacted before I had completed this post. I agree that probably few of the big Live Oaks are over 400 years. It is interesting if the largest of them will live on for several decades or more. The Locke Breaux Oak was said to have died of poison, could it not have died from great age?

When comparing great ages the oldest trees are often not the biggest, for example the oldest found white and chestnut oaks in the US till now are not very big. They have grown slow and have very narrow rings.



The Canford School Chestnut, Dorset, England. Girth about 45 feet.



The Torthworth Chestnut, Glostershire, England.
Girth about 36 feet.

[Re: European Chestnut](#)

by **James Parton** » Sat Apr 03, 2010
10:46 am

Jeroen & Kouta,

Have you heard of the " Tree of a Hundred Horses " in Italy. It is supposedly the largest girthed tree in the world with a cbh of 190 feet and diameter of over 60 feet. This chestnut rivals the Tule Tree (A Montezuma Cypress) and the giant Baobabs of Africa in size. It is true that the Hundred Horses Chestnut is a multi-trunked tree but it is counted as one because all trunks grow off the same root system.

http://en.wikipedia.org/wiki/Chestnut_Tree_of_a_Hundred_Horses

http://wapedia.mobi/en/Chestnut_Tree_of_a_Hundred_Horses

The tree also is believed to be of great age. 2000 years or more.

James E Parton

[Re: European Chestnut](#)

by **Jeroen Philippona** » Sat Apr 03, 2010
1:19 pm

James,

Yes, I have heard about it. It could be that the rootsystem is of one genetic individual, but still the extreme large circumference was of several stems together. The trunks have decayed a lot and now there seem to exist a few seperate trunks. The largest of them seems to have a circumference of about 22 m, 70 feet, but strange is that I have never seen a really good photo of it. I think each of these trunks has decayed in itself also a lot. So in my opinion it does not rival the Tule Tree and the largest Baobabs in size, while these have rather complete trunks of over 30 m / 100 ft girth.

About the age there is a lot of speculation, but while the old information of the huge tree is of the 18th century, I don't think there is proof of a historical, tree-ring, Carbon-dating or other scientific kind which gives proof to such a great age. I think that with several (12 or so) trunks growing from a common rootsystem such a great size could be reached within 1000 years. I hope some scientific research shall be done.

Jeroen

[Re: European Chestnut](#)

by **Rand** » Sat Apr 03, 2010 9:06 pm

Thomas Pakenham includes this tree in his book 'Remarkable Trees of the World'. If I remember correctly he said only a few of the original trunks that formed the original 18th century ring survive. I believe he said they used to pen livestock up inside of it, causing much of the damage.

<http://www.amazon.com/Remarkable-Trees-of-the-World-Thomas-Pakenham/dp/0393325296>

Re: European Chestnut

by **Jeroen Philippona** » Mon Apr 05, 2010 4:51 pm

Hereby some photos of the trunks of the " Castagno dei Cento Cavalli / Tree of a Hundred Horses " I found on internet as well as three more old drawings / paintings of the tree, to see the separate trunks.

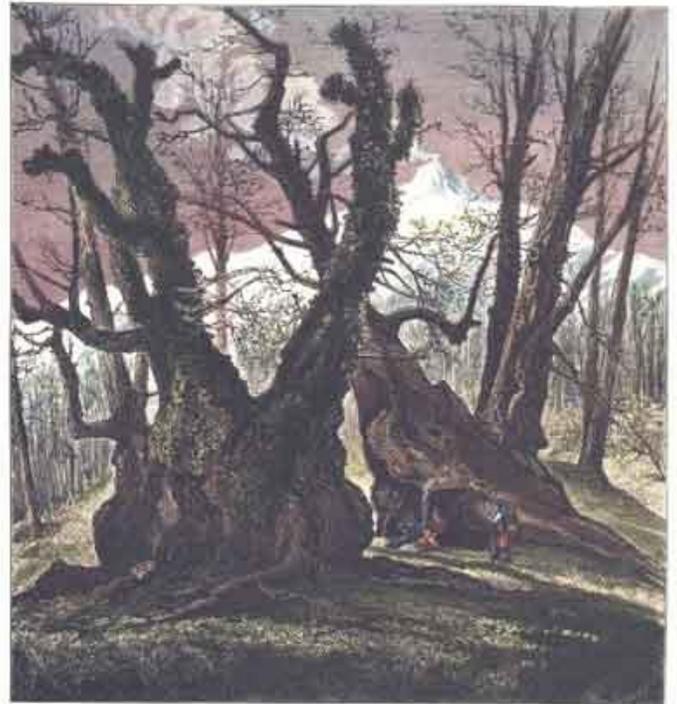
Jeroen



Castagno dei Cento Cavalli02.jpg



Castagno dei Cento Cavalli01.jpg



Castagno dei Cento Cavalli03.jpg

Re: European Chestnut

by **edfrank** » Sat Jun 29, 2013 10:41 pm

Photos of a Tree of a Hundred Horses



The chestnut tree today



The tree in a gouache by Jean-Pierre Houël ca. 1777.



Pencil sketch from Popular Science monthly, circa 1872

[Re: European Chestnut](#)

by **hamadryad** » Mon Jun 17, 2013 4:58 pm

Some very large Sweet Chestnuts (*Castanea sativa*) from Croft Castle, Herefordshire, U.K





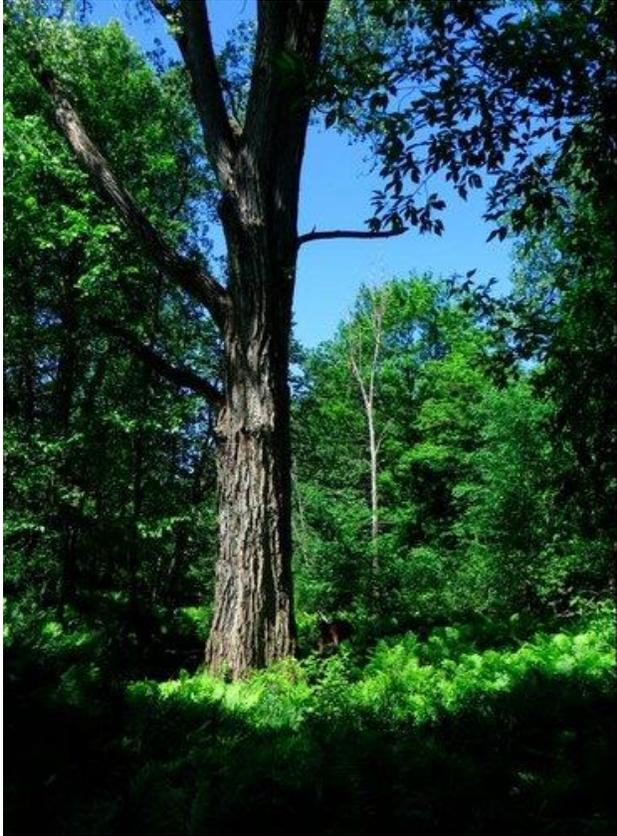
[Ausable River Marsh Wildlife Sanctuary](#)

by **dbhguru** » Tue Jun 04, 2013 7:17 am

Folks,

The Ausable River empties into Lake Champlain near Keesville, NY. Most people visiting the area stop by Ausable Chasm. Others canoe the river out to Lake Champlain. My son Rob and I floundered around in the marsh looking for big trees. Here are some images of what we found.





Needless to say, we were not disappointed. Cottonwood, silver maple, green ash, chinquapin oak, hackberry, boxelder, red elm, northern red oak, and red maple make up the majority of trees. I spent a lot of time plowing through ferns that had already reached head height. It was challenging.

The big news is that I measured an old cottonwood to 134 feet. That sets a height record for the species for the latitude - I think. More later.

Robert T. Leverett

[Re: Ausable River Marsh Wildlife Sanctuary](#)

by **dbhguru** » Wed Jun 05, 2013 4:45 pm

Howard, Elijah, et al.'

Here are 3 more images from the Champlain area

White cedar roots



Tom, Monica and I are presently at Golden Lake in Ontario. Tomorrow we'll be at Algonquin Provincial Park. Here are two shots from Golden Lake.

Monica and a black willow



A 20.1-foot girth chinquapin oak



This Internet connection is painfully slow. I'll stop here.

Robert T. Leverett

[Big Butt Mountain trees...what gives?](#)

by **jamesrobertsmith** » Mon Jun 17, 2013 3:21 pm

Okay. We all know that the Black Mountain range is shaped like a giant "J" or fish hook. I had been rambling all over the main ridge in my days as a hiker/backpacker/camper. But I'd never hiked the other, smaller side of that "J". Yesterday, I did. And what floored when when I got to the highest point of land on the highest mountain in that part of the range (Big Butt Mountain) is that the high ridge is dominated by rhododendron shrubs and hardwoods. Hardly an evergreen to be seen! No spruce. No balsams. What gives? Why is this nearly 6,000-foot chunk of real estate so different than 6,000-foot terrain on the other side of the range?

<http://tilthelasthemlockdies.blogspot.com/2013/06/i-ended-up-doing-easy-hike-as-day-trip.html>



Old yellow birch

[Re: Big Butt Mountain trees...what gives?](#)

by **bbeduhn** » Tue Jun 18, 2013 8:46 am

It looks just like the Craggies to the south. Patches of spruce exist in the Craggies but spruce are not dominant there. Yellow birch, beech and sugar maple are all very common at the highest elevations, along with hawthorn and Catawba rhododendron.

The spine of the Craggies runs directly into the Big Butt spine. Perhaps Big Butt is really a part of the Craggies.

[Re: Big Butt Mountain trees...what gives?](#)

by **Josh Kelly** » Tue Jun 18, 2013 9:42 am

JRS et al.

Great question! Why isn't there more spruce in the "western Blacks", a.k.a., the Craggies? Why isn't there spruce west of Siler's Bald in the Smokies? These are interesting biogeography questions.

In many parts of the range of red spruce, logging and burning in the historic period have decreased spruce dominance at high elevations. That is not the case in the Craggies. With the exception of the spruce around Point Misery, the Craggies are and have been dominated by hardwoods up to their highest elevations throughout the historic period. There are big differences between the geology in the Craggies and the Blacks. The Craggies are gneiss, and a fairly base-rich (mostly magnesium) variety at that. The summit of the Blacks and east are composed of acidic Metagreywacke, a metasedimentary rock of totally different composition and origin than the gneiss of the Craggies.

That's about all I have to share. Interesting to contemplate.

Cheers,
Josh Kelly

[Variation on External Baseline method from Germany](#)

by **dbhguru** » Tue Jun 18, 2013 12:56 pm

NTS

Kouta recently received information on a measurement of Germany's tallest tree. A team over there using a Theodolite measured a Doug fir to a height of 64.83 meters. They drew extensive diagrams and documented every step of their measurement process. Kouta was interested in Will's and my take on their process. In particular, Kouta wanted to know the process would lead to an accurate determination and if he should follow up with a measurement using the Nikon Forestry 550.

From their diagram and distances and angles, I was able to derive the equations they used. It is a variation of the Extended Baseline method. It represents a different approach, but completely valid. I have a spreadsheet showing the derivation and calculations, which I will post if Kouta authorizes it. At any rate,

we can say that the Doug fir is 212.7 feet in height, assuming the measured distances and angles are accurate, and we have no reason to doubt them.

As an interesting variation on the theme, they measured the angle from the vertical down to the top of the tree and used the cotangent function instead of measuring the angle above the horizontal and using the tangent function. Their process is trigonometrically equivalent. Additionally, they used angle measure of gradians instead of degrees. I missed that point initially until Kouta pointed it out. Nine degrees equals ten gradians. So, conversions between systems is very simple. I had to use degrees because all my trigonometric tables are based on degrees.

What impresses me most is that they recognize what they need to do to get the horizontal distance of the top from either of their measuring stations. They didn't just assume the top was vertically over the point on the trunk at the level of a measuring station. Kudos to them. It offers hope that our European counterparts understand what needs to be done to accurately measure the height of a tree that isn't perfectly vertical and are willing to go to the effort needed. Of course, the method they used isn't a field method intended to be efficient for the measurement of lots of stems. But I'm sure they recognize what is needed in different situations and for different purposes. One size does not fit all. Quite refreshing.

Robert T. Leverett

[Re: Variation on External Baseline method from Germany](#)

by **KoutaR** » Wed Jun 19, 2013 1:18 pm

Bob, Note that the tree was measured by the land survey office of Freiburg municipality, not by foresters.

A photo:



Kouta

[McNeil River Bear Sanctuary, South Central Alaska](#)

by **Don** » Tue Jun 18, 2013 6:46 pm

Noting Bob's fine floral images as he and Monica traverse Wyoming, it occurred to me that I should put up some images that Rhonda and I captured last week when we had the good fortune to spend five days at the McNeil River Bear Camp.

For more than thirty years, the Sanctuary has provided a special environment for Alaskan brown bears, free of human/food conditioning, and full of respect for the bruins and THEIR way of life.

As a result, we were fortunate that the bears let us share some of their space. Images that follow range from 300 yards away to 30 feet away, and were captured by a Sony point and shoot, pocket-sized travel zoom (DSC HX9V 24mm-360mm). Most images were Auto-enhanced, straightened but otherwise appear as taken. I'll attach a few here and now, and if requested, more in a later posting.

{Double click for actual image size, for this one only...apologies for submitting such a large file size!}



Don Bertollette

[Re: McNeil River Bear Sanctuary, South Central Alaska](#)

by **Don** » Wed Jun 19, 2013 2:58 pm

Bob-

They are, as they say in Alaska, the most 'charismatic of mega-fauna'! Our guides had (yep) guidebooks that identified many of the bears we saw, and knew them often by name. The third day out, Boog and a young challenger began what we soon recognized as a 'space recognition' issue (not so much territory in the geographic sense, but in a here and now chronological sense...guides referred to it as bubbles, and saw bear bubbles bouncing off of other bear bubbles). The two continued "compressing bubbles" until the bubble 'popped' in a pretty dramatic altercation. In their approach, they both practiced what the guides called "the Cowboy Walk" (essentially the wide-legged stance that cowboys develop after years of horseback riding). During this walk they'd urinate, essentially 'drawing the line'. [Males urinate down to forward, females urinate down to behind them, sometimes the only way to be sure of gender ID]

They were no more than 50 yards away from us, over a slight hill. They rose up on two legs (both formidably 8' or taller) and swiped each other with clawed paws (claws longer than Arsenio Hall's fingers!) before things got serious. They began a Sumo Wrestler kind of shoving match (they're still on two legs), until Boog decided to raise the stakes.

With a firm bite on the massive neck of his younger challenger, Boog eventually took him down and wreaked a little havoc on him. Boog released him, backed away, turned his back on the challenger (a show of dominance) as he walked away. With a Cowboy Walk. The young challenger remained motionless (on all fours), looking down, for several minutes, then set off in another direction, casually grazing, with noticeable blood in his neck fur. We sat transfixed, silent until a near simultaneous "phew!" kind of a sigh of relief (I think we were probably all holding our breath, apprehensive about what might come next). Five minutes later, we continued our journey, boldly enough walking by the site of the altercation, viewing the strewn sedges (*Carex* spp).



The next day, the young challenger is just another bear, this time having just crossed the creek to cool off (unusually warm weather while we were there, returned Saturday to Anchorage to 80 degree temps!)



The young challenger, surprisingly non-plussed grazes his way towards an eventual creek crossing...

Don Bertollette

[Re: McNeil River Bear Sanctuary, South Central Alaska](#)

▣by **jamesrobertsmith** » Tue Jun 18, 2013 9:14 pm

One of my former pals went there two years ago before he went into Katmai. He had some pretty dicey encounters with some bears while he was at McNeil.

He and his wife were walking back from the river to the campground. They got cornered by a mother bear with two huge cubs (all but grown). They had to back into the trees (shrubs, really, from the way he described them) to get out of their way (cubs coming down one side of the trail, momma the other. It was a nervous moment for them but the bears met up and passed them by without paying much attention to them.

Later, in Katmai they had an even more frightening encounter with a bear which also turned out okay.



Augustine Volcano, here not active, but upon our return displaying a column of steam...most recently active four years ago...pilot aimed at it from Homer, then turned SW while along side of it, towards the Bear Camp...

Don Bertollette

[Re: McNeil River Bear Sanctuary, South Central Alaska](#)

▣by **Don** » Wed Jun 19, 2013 4:09 pm

Part of the McNeil River Bear experience is the journey, and taking a float plane ride (Cessna 206) is a tried and true Alaskan adventure. The plane is sitting on water when you get into it, it takes off on it, flies above it for an hour or more, and lands on it. During that experience, there might be views of interest, such as the one below, taken by my better half (Rhonda) in the back seat (best for viewing, taking photos):

[Re: McNeil River Bear Sanctuary, South Central Alaska](#)

▣by **Don** » Wed Jun 19, 2013 4:44 pm

JR-

Wise decision by your friends! And one that works both at McNeil and with bears in general. Heck, animals in general.

We came to a different way of viewing bears while at McNeil...these are different bears. What I mean to say is that they behave differently than bears in other locations. The McNeil bears have had a consistent human behavior to deal with for the almost 40 years they've been in the sanctuary. Through one man's consistent behavioral philosophy (Larry Aumiller), these bears haven't come to associate humans with food (their words are more like, not food-conditioned). They don't raid the camp, although to

the uninitiated camper's horror, their footprints occasionally do appear within the camp per se. The outhouses (brand spanking new after 40 years) are about 50 yards out of camp, and unless you're in a hurry, one usually takes a good long look at the immediate vicinity. The bears I'm told are liking the new edges on the new outhouses and like to rub their backs on them.

Thursday, we ventured out further and stationed ourselves on this 'driftwood island', about 100' from a cliff that ran for several miles along the far side of Mikfik Creek. We'd seen "following behavior" for several days, and were getting good at identifying it. Boy follows girl. Girl plays hard to get. Boy follows girl more ardently. Girl plays harder to get, and actually gives him a piece of her mind. Boy is non-plussed, definitely gonna stay close to her as he can.

So after one complete circle of the immediate geography (some several square miles) in the morning, we're watching a younger girl taking a nap, halfway down the cliff/bluff, when boy and girl bear burst upon the scene, dropping from top of cliff to base of cliff a small distance before us, and the younger girl bear...she see's the advantage of exiting stage left, climbs up and over the cliff/bluff and is outta there. Another bear enters the driftwood island from the Southeast, all three now in front of us about 100 yards out. Girl Bear in the lead heads away from them, and towards us at a rapid clip. There are five of us, rotating on large driftwood logs trying to take all of this in...I sensed the wrongness of my position, turned to face the girl bear, our guide (Dru) behind me and slightly to the side. Dru simply stood tall, opened up his arms and pointedly stared at the girl bear who promptly zagged to the right of us, the new boy bear returned from where he came, and the pursuing boy bear continued his 'following behavior', and off they went.

At the point of nearest proximity, all three were briefly within 50 feet of us. I would have liked to have had the wherewithall to have set my camera on video and captured this scenario. But I found that having jaw dropped interferred with my photo shooting! I did take a photo of the younger girl bear,

in her siesta not long before all the action, and it follows:



Don Bertollette

[Re: Albino Redwoods](#)

by **SteveH** » Thu Jun 20, 2013 2:15 am

This is a slightly different angle of the one Mark posted that I took while on an albino search.



[Greater Everglades Question](#)

by **ESH** » Tue Jun 18, 2013 3:07 pm

Hi there,

With the disclaimer that I'm a fairly new member of NTS who's eager to post more often & plow through the archives (in other words, apologies if this is an already-covered topic), I wondered whether anyone had any information on notable individual trees of the Greater Everglades. While I'm based in Oregon, I'm a

frequent visitor to & devoted fan of the South Florida backcountry, and I've begun venturing more deeply into the outstanding Everglades wilderness. I'm aware of the huge, famed centerpiece West Indian Mahogany of Mahogany Hammock, and I know many trees of similar stature were logged out of the more accessible hammocks in the region (and that the pine rocklands of the Miami Rock Ridge, including Long Pine Key, were analogously harvested), but I just wondered whether any big-tree or old-tree surveys had been conducted either in the Everglades N.P. or associated locales (Big Cypress, etc., not necessarily counting the well-described Corkscrew Swamp with its Bald-cypress behemoths). I'm thinking of everything from champion Live Oaks to big old-growth mangroves & buttonwoods along the Everglades/Ten Thousands Islands coast. The Coastal Prairie Trail stretching from Flamingo to Cape Sable sure passes some nice Buttonwood & Black Mangrove veterans (and plenty of beautiful hurricane-killed snags).

Anyhow, just thought I'd throw it out there. As a naturalist & writer, I'm really interested in old-growth--including "hidden" old-growth of those ecosystems in which the concept has only lately been given attention. Thanks for any ideas, counsel, etc.

Cheers,
ESH

[Bannock Range - Clouds and Shadows](#)

by **dbhguru** » Thu Jun 20, 2013 11:06 am

NTS,

Pocatello is in the Basin and Range province of Idaho. As you drive through the countryside, small mountain ranges appear on the horizon, appear closer, and fade as they are bypassed. Most travelers don't have any interaction with them, but they define the scenic backdrop that defines the region. Here are

four scenes that reflect what can be so compelling about this country - the interplay of sky and mountain shadows.



The mountain in the last scene is Chinese Peak. Its modest elevation is 6,700 feet and it rises from the Portneuf River basin at about 4,300 feet. I look off toward this mountain from my daughter's front doorstep.

Robert T. Leverett

[Badlands of South Dakota](#)

by **dbhguru** » Tue Jun 18, 2013 9:13 pm

NTS, While the Internet is working for me, here are some images of the Badlands.





Robert T. Leverett

[Black Hills](#)

by **dbhguru** » Tue Jun 18, 2013 9:18 pm

NTS,

One final image: Elkhorn Mtn in the South Dakota Black Hills.



Robert T. Leverett

[More of the Tetons](#)

by **dbhguru** » Wed Jun 19, 2013 5:06 pm

NTS,

Here are 4 more images from Grand Teton NP. The first shows a field of arrowleaf balsam root, a prolific bloomer on the slopes and meadows.



The next image shows 12,325-foot Mount Teewinot, companion to the Grand. It rises between 5,400 and 5,500 feet from the location of the image. As can be seen, the eastern side of the Tetons



The third image shows 12,645-foot Mount Moran, named for Hudson River School of Art painter Thomas Moran.



The last image may be the South Teton. I'm unsure.



Robert T. Leverett

extreme differences in flora between this peak and the one at the far end of the ridge.



<http://youtu.be/WXOpFrEDcRY>



[In contrast: Point Misery](#)

by **jamesrobertsmith** » Fri Jun 21, 2013 1:42 am

In contrast to Big Butt Mountain, which has almost no spruce trees, Point Misery is covered with them. Both mountains lie on the same hiking trail. Point Misery is close to the main and highest ridge of the Blacks...not far from Blackstock Knob, actually. Again, I must assume that there is something in the chemical makeup of the soil that accounts for the

[Oh crap!](#)

by **Will Blozan** » Thu Jun 20, 2013 11:48 am

NTS,

This report is dangerously close to the Fork Ridge Tuliptree last measured at 17.8' X 191.8' tall (tallest eastern tree), as well as the HUGE Poke Patch Tuliptree last measured at 21' X 179'.

THE NATIONAL WEATHER SERVICE IN GREENVILLE-SPARTANBURG SC HAS CONFIRMED A TORNADO IN THE BIG CREEK AREA OF THE GREAT SMOKY MOUNTAINS NATIONAL PARK IN HAYWOOD COUNTY NORTH CAROLINA ON JUNE 13 2013.

A SURVEY TEAM THAT INCLUDED REPRESENTATIVES FROM THE NATIONAL WEATHER SERVICE AND THE UNC-ASHEVILLE ATMOSPHERIC SCIENCES DEPARTMENT INVESTIGATED A REPORTED DAMAGE AREA IN THE BIG CREEK REGION OF THE GREAT SMOKY MOUNTAINS TODAY. THE SURVEY TEAM FOUND AN AREA OF EXTENSIVE TREE DAMAGE ABOUT 3.5 MILES UP THE DEEP CREEK TRAIL FROM ITS TERMINUS AT DEEP CREEK CAMPGROUND. THIS APPEARED TO BE THE END OF A DAMAGE PATH. HUNDREDS OF SMALL TREES WERE SNAPPED 10 TO 20 FEET ABOVE THE GROUND...AND DOZENS OF LARGE TREES UPROOTED ALONG A ONE-HALF MILE SECTION OF THE TRAIL. THE DAMAGE PATH MORE OR LESS PARALLELED DEEP CREEK...SUGGESTING THE FLOW WAS CHanneled DOWN THE VALLEY...WITH ALL THE DAMAGE BEING BLOWN TOWARD THE NORTH OR NORTHWEST. CONSIDERING A PARENT STORM MOTION FROM THE NORTHWEST...THE DAMAGE PATTERN WAS HIGHLY CONVERGENT...WHILE THE DAMAGE PATH WAS VERY CONCENTRATED ACROSS A WIDTH OF ABOUT 100 YARDS. THESE FACTORS WERE CLEARLY INDICATIVE OF A TORNADO. THE SURVEY TEAM VIEWED A DAMAGE PATH THAT EXTENDED UP TO A RIDGE TOP ABOVE /LOW GAP/...AND DISCUSSIONS WITH A TRAIL MAINTENANCE CREW INDICATED THAT THE DAMAGE PATH EXTENDED WEST/NORTHWEST TO AT LEAST THE TENNESSEE LINE. HOWEVER...DOWNED TREES AND THE RUGGED TERRAIN MADE A COMPLETE SURVEY IMPOSSIBLE. THE SURVEY TEAM HOPES TO USE HIGH RESOLUTION SATELLITE DATA TO PRECISELY MARK THE BEGINNING AND ENDING LOCATIONS OF THIS TORNADO IN THE DAYS AHEAD.

Will

[Re: Oh crap!](#)

by **Josh Kelly** » Fri Jun 21, 2013 9:38 am

Relax! The damage is 3.5 miles up from the campground and the super trees are 10 miles up from the campground. Several friends stayed at Poke Patch last weekend and I heard no stories of damage. Those trees are so tall in part because they are in such protected locations. It's possible that a they lost a limb or two, but I'm sure the Poke Patch tree is still standing and I bet the Unagudaguda tree (or whatever Ian named it) is too. It's good to keep an eye on things. It's also good to temper concern with a bit of calm. Anyway, that's my perspective. Otherwise, every time a powerful thunderstorm goes through the NC section of the park, big tree lovers will be ringing their hands. Wasn't there a similar post last year?

Rationally,
Josh

[Re: Oh crap!](#)

by **Will Blozan** » Fri Jun 21, 2013 5:09 pm

Josh,

I am glad to hear the area was not smashed! The NWS report did note damage to the TN line- thus my concern. I do hope no damage occurred- but, that is what it is.

Back in the eighties I worked on a historic estate in Maryland pruning state record trees; black walnut, white ash, and shagbark hickory. All were lost in the derecho of 1988 just weeks after our pruning. Champions come and go but when you get a personal attachment and life experience in them their well-being seems more important.

Will

[Re: Tree Maximums - Genus of the Week: Asimina \(Pawpaw\)](#)

by **Will Blozan** » Mon Jun 17, 2013 6:16 pm

Species (Scientific): *Asimina triloba*
Species (Common): common paw paw
Height (ft): 62.2'
CBH (ft): 2.5'
Maximum Spread (ft): 18
Average Spread (ft): 16
Volume (ft³):
Site Name: Great Smoky Mountains National Park (TN)
Subsite Name: Abrams Creek Campground
Country: USA
State or Province: Tennessee
Property Owner: USDOJ
Date of Measurement: 4-30-2011
Measurer(s): Will Blozan
Method of Height Measurement: ENTS sine; Nikon 440 + Suunto clinometer
Tree Name: George
Habitat: Riparian flat near creek
Notes: <http://www.ents-bbs.org/viewtopic.php?f=74&t=2487&hilit=+paw+paw> Same tree listed as measured on 8/1996 in 2004 MAX LIST. (CBH a typo). This tree was supposed to replace a triple stem coppice on the National Register but so far it is not listed.

[Re: Tree Maximums - Genus of the Week: Asimina \(Pawpaw\)](#)

by **tsharp** » Wed Jun 19, 2013 8:47 pm

Matt: Submission for Pawpaw - Crown Spread
Scientific name: *Asimina triloba*
Common name: Pawpaw
Height: 28.3'
CBH: 33.3"
Crown Spread: 34.3' maximum, 28.7' average
Volume:

Site name: Blennerhasset Island State Historical Park
Subsite:
Country: USA
State: West Virginia
County: Wood
Property owner: State of WV
Date of measurement: 11/11/2010 by Turner Sharp
Method of measurement: Sine method using handheld Nikon 440 laser rangefinder and Suunto clinometer
Tree name:
Habitat: Tree located in an open area in a mowed section of the park.

[Re: Tree Maximums - Genus of the Week: Asimina \(Pawpaw\)](#)

by **edfrank** » Thu Jun 20, 2013 4:21 pm

Matt,

These are the largest Paw Paws in this neck of the woods:

May 16 - Paw Paw seeds which I planted months ago have finally sprouted. I have four of the seven seeds up. I hope the others grow also. They aren't producing fruit yet...

