Big Cottonwood, NC

by jamesrobertsmith » Sun Mar 25, 2012 6:12 pm

I had heard that there was a very big cottonwood tree in a county park about 60 miles north of Charlotte. So I drove up there to see if it's true. The park is called Boone's Cave Park and was once a part of the North Carolina state park system. But the park's fate was based on it being the location of a home of Daniel Boone, but when there was nothing but circumstantial evidence that this was so, the state ceased to treat the property as a state park. In 2003 they finally sold the acreage to the county where it's located and it's now a county park.

I wanted to see the cave that is claimed was the temporary home of Boone, and I did that, but it wasn't the main reason I went. What I wanted to see was billed by the county park service as the "tallest cottonwood in North Carolina". They claim that it's over 157 feet tall. My gut feeling is that it's not that tall, but I have no way of measuring it. It did seem to have lost part of its crown recently, but when I looked at the snag, which is still nearby, it didn't seem to me to have been higher than any of the limbs currently standing tall.

Still and all, it's an impressive tree. And I'm very glad that I got out to see it. The river was flooded, so I had to take an alternate route to reach the tree without having to get wet. The park supervisor had told me that the first route I wanted to take was probably so far underwater that trying it would have been dangerous. So I didn't even try. The other route was a little longer but a lot of fun.
Re: Big Cottonwood, NC

by jamesrobertsmith » Mon Mar 26, 2012 8:34 pm

Steve Galehouse wrote: James, NTS- That's a really nice cottonwood, but I would be surprised if it really is its advertised height---there don't seem to be many tall trees nearby for it to compete with, and I think competition from other trees would be needed for a cottonwood to get to 157'.

No, there are not a lot of other big trees near this one. There aren't very many big trees at all in the vicinity. There were some decent oaks nearby but they've fallen over. Looks like a lot of the more mature trees on the ridge leading down to the cottonwood were lost in either a big windstorm or an ice storm. But there was nothing at all on the scale of the cottonwood. It would be really difficult to shoot with a rangefinder in there when the leaves finish budding out, I would think. The cottonwood is in bottomlands just above the Yadkin River.

Here was the lay of the land within a hundred yards or so of the cottonwood:

And about a half mile from the tree, this spring emerges from the side of a very steep hill leading up from the bottomlands.
Re: Big Cottonwood, NC

by dbhguru » Tue Mar 27, 2012 8:06 pm

Robert, Steve, et al.,

The eastern cottonwood is probably one of the most mis-measured trees in terms of height. The crowns of big cottonwoods are often very wide and it isn't obvious where the top is. Using the dumbed-down approach of applying the tangent method, we've see extremely large height errors coming from folks we would otherwise consider to be competent professionals. Poor measurements are published and republished in sources that are supposed to be authoritative and we end up with the situation we now have. An amateur comes along and mis-measures a tree without suspecting it, and if challenged, can turn to the assumed authoritative sources to justify the offending measurement. Outsiders have no way of knowing or reason to suspect that large errors exist in authoritative appearing sources. Alas, it is the measuring world in which we live.

One reason that Will Blozan, Dale Luthringer, and I have pushed tree measuring workshops at Cook Forest and MTSF in recent years is to try to bring forestry professionals who certify tree measurements for champion tree lists into the inner circle of competent measurers. But it has proven a tough sell for a variety of reasons including misplaced pride, lack of interest, lack of time, and inadequate math skills on the part of potential attendees.

Robert T. Leverett
The Chaco forest in Paraguay being razed

by michael gatonska » Sun Mar 25, 2012 7:45 am

I read this article in today's NY Times, and thought it might be of interest. There is a video as well...

A Forest Under Siege in Paraguay
Huge sections of the Chaco forest are being razed by local Mennonite farmers and Brazilian cattle ranchers amid a surge in the global demand for beef.


Re: The Chaco forest in Paraguay being razed

by Bart Bouricius » Mon Mar 26, 2012 9:47 am

Bob and Robert,

James Robert Smith wrote: There’s nothing to be done for it. This kind of shit will only end with the extinction of the human race. If you want to see what remains of wilderness, you’d best hurry your ass and get there. Because tomorrow it will be freaking gone. This is why I have been spending as much time as possible in wild places, and will continue to do so until I croak. You can't stop the human race from raping Mother Earth.

Robert Leverett wrote: Tragically, paradoxically, and fatalistically you are right. Our species will never be the custodians of the Earth that we ought to be. We can blame it on religion, politics, greed, whatever, but the simple truth is that our evolutionary path has not predisposed us to think about the big picture and long term needs of the planet. And then there is the unbelievable ignorance factor. Here we are in 2012, having gone to the moon over 40 years ago, and we still have people in this country who are one step removed from believing that the Earth is flat. Go figure.

In the broad sense you are right about the demise of forests, and the proclivities of humanity, however, having worked on tropical deforestation issues for decades, I see some of the usual mythology being perpetuated in this story. As we saw in a previous post, the US and Canada are deforesting faster than Brazil and most Latin American Countries, I am not sure about Paraguay. The first myth is that the only tribe worth caring about is of course the least impacted by outsiders and hence one that is more noble and pure. This romanticisation does no one any good, but is a way of saying that, just like the forest, these people will fall rather than trying to do anything about either situation while not allowing or helping people to determine their own destiny. I remember a Brazilian shaman raging at a reporter who pointed out that he was wearing a modern watch that he needed to keep on schedule while at a conference on indigenous peoples land rights at Smith College. The reporter was implying that the shaman was tainted by modernity and hence impure and hypocritical because he owned a watch. It is obvious even from this story that relatives of people in this "uncontacted" tribe are clearly in contact with their own relatives in the forest. Though they were documented fairly recently, it is probable that they have had to be intentionally in hiding for a long time to remain uncontacted. Fortunately this view was considered an option by the articles author.

Another myth is that the forests are being cut simply for cattle ranching which is actually secondary to the land speculation which is actually driving the push towards ranching. Often the ranching has not even profitable on it's own, however legally it shows that someone is "making use" of the land, and therefore allows the owner to hang on to it and initially lay claim to it. This process was extensively documented in the 1989 book The Fate of the Forest by Susanna Hecht and Cockburn. It is speculators around the globe who are making money off of this tragedy, probably some in the same wall street banks that brought us this wonderful economic situation and are now speculating in oil and gas and every other thing that can be glommed together to create a derivative security to trade in the global stock market casino. You will notice that while the article focuses on the
Mennonites who have, in my opinion, done serious environmental and cultural damage in the Central American country of Belize through missionary and deforestation activities there, are only part of the problem in Paraguay. Large Brazilian companies such as River Plate and others are very important in the deforestation process, and both Mennonites and international companies are making money from the speculation and consequent increase in land prices in this region. Sorry I guess this was not a “quick reply”.

Bart Bouricius

Landscape in the Chaco, Paraguay, May 2004. Photo by Ilosuna

'Hunger Games' forest scenes

by Steve Galehouse » Mon Mar 26, 2012 7:57 pm

NTS- Saw the movie yesterday, I recommend it. Much of the film was shot in western North Carolina, and most of the action takes place in a forest.

Steve Galehouse

Re: 'Hunger Games' forest scenes

by jamesrobertsmith » Mon Mar 26, 2012 8:22 pm

One of the local stations did a piece about the forest scenes shot here. I think some of them were done in DuPont State Forest for the streams and waterfalls. Of course the forests there are not impressive at all. I think they went elsewhere to find mature forests. I didn't watch the piece, but my wife told me about it.

James Robert Smith
Cooper Creek WMA, GA

by eliahd24 » Mon Mar 26, 2012 7:39 pm

On Sunday, March 25th, I took advantage of the gorgeous spring weather by traveling the 2 hours from my home in Atlanta to Cooper Creek Wildlife Management Area in North Georgia's Chattahoochee National Forest. I had previously read about the area in one of the great online "Sherpa Guides" that cover many different natural areas in Georgia. I knew Jess Riddle had been to the area in the past, so I also was able to consult with him to devise a "plan of action" for the day. To say I was excited about the trip is a major understatement. The daily grind of full time work and full time grad school was getting to me and I very much needed some "forest time". I couldn't convince any other (human) friends to go with me, so alas it was just the puppy and me. All the better :)

Cooper Creek topo

Those who know Cooper Creek will tell you that there is a chunk "old growth" forest there. The more years I get under my belt as a naturalist, the less I know what those words actually mean. I expected a couple of remnant (old) trees and knew of some "huge" tuliptrees from online postings, but again, until I saw it for myself I wasn't fully convinced. Boy oh boy was I in for a wonderful surprise.

Cooper Creek is a classic rich mountain cove forest.

The area I explored is on a north facing slope above Cooper Creek at about 2500' elevation.

The trail system in this area is mostly old dirt logging roads, but thankfully those loggers left a good deal of this cove as God intended it. I should really call this trip report the "Day of the Tuliptrees" as that's where my focus was and that's mostly what I measured and gawked at the whole day. It was truly amazing. Now on to the data....

*Liriodendron tulipifera (smallest to largest measured):*

- 11'4.5"
- 11'10"
- 11'11" (huge fire cave)
- 12'2.5"
- 12'8" x 129.4'
- 13'2" (huge fire cave)
- 13'10"
- 14'7"
- 15'5" x 114.2' (blown out top)
- 15'10"
- 16'1"
- 16'3.5" x 127.3' (blown out top, multiple reiterations)
- 17'5.5" x 157.2' x 91' = **390 Big Tree Points**
  (GIANT! - I will nominate as new state co-champion)
- 19'3" x 132.2 x 71' = **381 Big Tree Points** (I believe this is currently listed as state co-champion)

Tuliptree pictures:

![Tuliptree pictures](image)
14'7” LiTu with blown out crown

381 pointer - gnarly giant

15'11” LiTu

midslope CBH of "biggest tuliptree"
imagine all the past storms....

Now the above tuliptree is the one many online sites (including Sherpa Guides) claims to be the "biggest in Georgia". It's not the tallest (not by far), it doesn't have the most total points (about 20-30 short), and I know Jess Riddle has documented a few Tulips around 20' CBH and over, so it's not the fattest... so it ain't the biggest, right?

This next tree is likely overlooked by many visitors as it is up the slope and a bit off trail from the "biggest". It's smaller in CBH (though 17'+ ain't nuthin' to sneeze at!), but much taller, with a crown that's still intact. I took very careful measurements of both Tulips to get accurate point totals with the suspicion that the "skinnier" one would outpoint the "biggest"... I was right :)

17'5.5" x 157 x 91' = 390 Point LiTu

midslope CBH
Other tree species measured:
Betula lenta 4'0.5" x 85.7'
Betula lenta 11'1" x 102.8' x 56' ("walking" birch, exaggerated CBH)
Carya spp. 111.1'
Magnolia fraseri (probably) 2'9" x 85.3'
Oxydendron arboreum 3'8" x 82.2'
Oxydendron arboreum 5'0.5" x 94.9'
Pinus strobus 10'6"
Tilia spp. 111.9'

And more pictures...

Sourwood pictures:
Wildflowers and such:

Squawroot or "bear corn"

rue

This gnarly "walking tree" was a beauty. Now how would YOU measure the CBH? From the midslope at the ground it's 11'1" and total points = state champ

yellow violet

walking birch, roots exaggerate CBH
This is *Betula lenta*, right?

That is all for now. On my way out on Forest Service Road 33, I passed a nice double trunk hemlock (9'3" and 11'3" CBH's x 140') and a 4'5" x 100'+ double trunk Virginia pine as well... I'll post about those under my forthcoming Sosbee Cove report... also a fantastic site!

~Eli Dickerson

Re: Cooper Creek WMA, GA

Made a stitch of one of the big tulips for you:

Rand Brown
Newberry National Monument, OR
(Re: Triple Twist Pine, Craters of the Moon, ID)

I saw some similar dwarfed trees growing on the Big Obsidian flow in Newberry National Monument.

First a couple of dwarfed trees:

The lava flow is interesting in its own right. Apparently when the cooling rate and silica content is just right you get obsidian. It tended to form in layers of varying thickness. So you get regular lava blocks shot through with glass. The thickest were ~2' thick.

(In November of 1990, Newberry National Volcanic Monument was created within the boundaries of Deschutes National Forest. Managed by the U.S. Forest Service, this monument provides a unique opportunity to view the Lava Lands of central Oregon. Newberry National Volcanic National Monument includes 50,000+ acres of lakes, lava flows, and spectacular geologic features in central Oregon. The highest point within the Monument is the summit Paulina Peak (7,985 ft.), showcasing views of the Oregon Cascades and across the High Desert.

It is hard to fathom as you drive through the summit area that you are within a 17 square mile caldera at the summit of a 500 square mile volcano, a volcano that remains very active to this day. Newberry is both seismically and geothermally active. Geologists believe the caldera sits over a shallow magma body only 2 to 5 kilometers deep. Visitors see numerous cinder cones (over 400 throughout the area), miles of basalt flows, as well as rhyolite flows of obsidian.

**Sosbee Cove, Chattahoochee NF**

* by eliahd24 » Tue Mar 27, 2012 3:06 pm

On Sunday, March 25th after spending about 5 hours at the old growth of Cooper Creek, I headed towards Sosbee Cove for a quick stop on my way home. On the way two nice trees caught my eye on the side of USFS road 33.

First- a double trunked hemlock. It was located down a steep slope from the dirt road along the banks of Cooper Creek.

From the road, this is what I saw:

A quick scramble down the hill led me to this:

9'3" x 140' hemlock on right

9'3" and 11'2" twin hemlocks

Twins and me
Sadly, most of the lower and middle branches were dead and leafless (needle-less?) from adelgids. I saw many adelgids all over the hemlocks in this area, though all the trees did seem to have some green needles and some looked rather healthy. It’s probably just a matter of time until these trees fall victim like those in NC, however.

The next thing that caught my eye was the cinnamon-red bark of a tall double trunked 4'5" x 104.1' Virginia Pine in the campground area along Cooper Creek. By total points, this would qualify as a state champion, but I know that Jess Riddle and Will Blozan have found some bigger Pinus virginiana along Warwoman Rd in Clayton, GA.

Now on to Sosbee Cove. This spot is perched just below hwy 180 near Vogel State Park and Blairsville, GA. It's a little over 3,000' elevation and faces due north. Classic cool, moist cove forest with the most rich herb layer I have ever seen. You CANNOT take a step without crushing dozens of wildflowers! Simply stunning. Here resides 2 current GA state champion trees (Tuliptree and Yellow Buckeye) and 1 former champ (Northern Red Oak). My main goal was to find Georgia's first documented 170 foot Tuliptree. A previous (short) trip had resulted in a 164' specimen. With only an hour or so to spend, I knew I'd be hard pressed to do a thorough searching.

First, the data:

- Prunus serotina 10'4" x 104.2'
- Prunus serotina 107.0'
- Liriodendron tulipifera 141.8'
- Liriodendron tulipifera 142.8'
- Liriodendron tulipifera 144.4'
- Liriodendron tulipifera 153.2'
- Liriodendron tulipifera 160.9'*
- Liriodendron tulipifera 163.4'*
- Liriodendron tulipifera 164.3'*
- Liriodendron tulipifera 11'5.5" x 164.6'*

*note- all of the 160'+ trees were on the west side of the cove as viewed from the slopeside trail

Well... I didn't break 160', but I did confirm multiple in the mid-160's. More searching is certainly necessary and deserving.

Next, the wildflowers:
Trillium luteum (or a yellow cuneatum?)

spring-beauty, *Claytonia virginica*

trout lily

very pale Trillium cuneatum
A big black cherry - 10'4" x 104.2'... notice it's right beside the highway!

This is the state co-champion *Liriodendron tulipifera*. I have visited and measured this tree multiple times. It sits on a slope and the CBH has been quite exaggerated by low tape wraps in the past. I tried very hard to get the midslope on my last measurement.

Right now it stands at 18'4" x 155' x 56' = **391 Total Points**

(these pictures were taken last winter):
GA co-champion LiTu from afar

The incredible canopy at Sosbee:

Sosbee winter canopy

Yellow Buckeye state champion- a truly magnificent giant! covered in moss and a full 5’ in diameter!
Stats: 15’9” x 133.5’ x 60’ = 338 Total Points
GA champion Yellow Buckeye

buckeye budburst

AeFl crown

Eli Dickerson
Re: Pinus strobus in Meshomasic State Forest

by michael gatonska » Wed Mar 28, 2012 4:25 pm

Hi Bob, Andrew, and Monica,

I would love to get up to the William Cullen Bryant Homestead! - in 2008 I wrote a work for chamber orchestra with baritone/tenor, and I used his great poem *Inscription fo the Entrance to a Wood*. The homestead sounds like the perfect spot to capture some audio, and for the reasons you mentioned. I hope there is still a possibility, and Andrew and I in the process of setting a date to 's-cool' me in how to climb - very exciting

Monica, I have just posted a solo piano work of mine in the section on Music - it is an older piece, from when I was still a student titled *Thoughts on Fall Foliage and the Life of Colours*.

In the meantime, I am currently working on a composition for the Hartford Symphony's Violoncello Quartet that will be paired with my soundscape recording of hemlocks (the extended version, not the youtube version). This is my real 'pilot' into composing music with tree sounds, and the premier will be this coming May so i will keep everyone posted. Right now we are trying to figure out a good venue/location for the concert. Anyway, I plan on eventually composing a whole series of musical works using the soundscape in combination with various instrumental combinations.

As you probably are aware, the first composer who made systematic compositional use of bird song was the French composer Oliver Messian. He was extensive, and he notated bird song directly onto manuscript paper while 'out in the field'. The material he collected was crucial in forming the shape and character of many of his pieces, the two most well-known being his *Catalogue d'oiseaux* and his *La fauvette des jardins*. He did not try to use bird song as a source of just melody, but he also tried to compose through sounds a portrait of each birds habitat as well.

Here is Messian:

http://www.youtube.com/watch?v=xKkrD9knBvU

Michael Gatonska

Pinus resinosa in Hebron, CT

by michael gatonska » Wed Mar 28, 2012 4:31 pm

This red pine soundscape was captured in unusual conditions; the wind speeds ranged from 11-20 mph, with gusts reaching up to 37 mph. Typically, I have been capturing other tree songs in 3-10 mph winds.

However, today, I decided to head out and try to record anyway, particularly since the red pine is harder to capture in sound and it does not have the ebullient song that, for example, white pines will have in lesser winds. In the background of this audio, a huge roaring can be heard. This ‘drama’ was the sound of the wind moving through the naked tree branches of the surrounding forest (it is still only March in this part of the world, so there are still yet no leaves). Still, the melancholic swish of the red pine can be heard, with a distinctive somber crispness that pans in and out of this soundscape.

Here is a photo of the red pine, with the Eastern red cedars behind (I made a separate recording of the cedars):
Compensating for tripod arm swivel

by dbhguru » Wed Mar 28, 2012 4:38 pm

NTS, To achieve better accuracy, putting an instrument on a tripod to eliminate handshake is the preferred route. Most of the time, we don't worry about swiveling the tripod from pointing toward to crown to the base. But if we want to take the effect of moving the centroid of the measuring instrument, the following diagram shows how to make the calculation to adjust the height. In the diagram $h_3$ is the correction to total height. It is either added or subtracted based on whether the absolute value of the angle to crown is greater or lesser than the absolute value of the angle to the base. Note that the adjustment is made to the height calculation regardless of whether it is sine or tangent based.

$$h_0 = R \cos(\theta)$$

$$h_1 = h_0$$

$$h_2 = h_1 - h_1$$

$$h_3 = R \cos(\beta) - R \cos(\theta)$$

$$h_4 = h_3 [\cos(\theta) - \cos(\beta)]$$

$$r = 1 \quad [\cos(\alpha) - \cos(\beta)]$$

$$r = 1 \quad [\cos(\alpha) - \cos(\beta)]$$

Robert T. Leverett

Here is the audio:

http://www.youtube.com/watch?v=ngyDMGc9BhI
ID?

by jamesrobertsmith » Wed Mar 28, 2012 11:41 am

What is this stuff? The first photo there is some kind of orange slime on a vine (unknown vine) that I encountered in Boone's Cave Park:

maybe dormant) on one of the dogwoods in my mother-in-law's yard:

Re: ID?

by Steve Galehouse » Wed Mar 28, 2012 6:28 pm

Looks like slime flux, a bacterial disease that infests a number of different species:
http://aces.nmsu.edu/ces/plantclinic/do ... _final.pdf

Steve Galehouse
Maple Leaves, a song from my Soft Echoes cycle

by michael gatonska  » Thu Mar 15, 2012 4:50 pm

Hi ENTS;
I am finishing up a cycle of 8 songs for voice and piano that will be recorded this coming May 2012. As part of the commission, I had to compose songs that echo the American sentimental song tradition, (Foster, Ives). The words of each song either celebrate or lament our natural world.

I dont know if any of the songs will make the Hit Parade, but I thought to include one here as a PDF attachment.

Anyone who feels like tickling the keys, or exercising the vocal chords may print out a copy and give it a try.

Maple Leaves for voice & piano, composed in February 2012:

MGatonska Songs Maple Leaves March 2012.pdf

Thoughts on Fall Foliage and the Life of Colours, for Piano

by michael gatonska  » Wed Mar 28, 2012 4:35 pm

Here is a score of my short 4’ solo piano piece Thoughts on Fall Foliage and the Life of Colours, which I composed while still a student in 1999.

Colours for piano MGatonska 1999.pdf

Walker Calhoun has crossed over

by edfrank  » Wed Mar 28, 2012 8:40 pm

From Sky Davis: Walker Calhoun, Eastern Band Cherokee Elder, who participated in ceremony with Jani Leverett, Robert T. Leverett and Will Blozan in 1996 has crossed over. Please keep his community, family and friends in your thoughts and prayers. This is a monumental loss for those of us who knew and loved him.

Standing Giants of Cataloochie
http://www.ncnatural.com/NCNatural/trees/bigtrees.html

CATALOOCHEE VALLEY - Mother Nature may have trimmed its crown by 35 feet, but at 170 feet, the white pine in Cataloochee Valley is still a majestic sight to behold.... (continued)

Here is a link to a biography and some other links about Walker Calhoun:


Some other notes about Walker:

http://www.ncarts.org/artist_page.cfm?ser=13591&num=13091&

http://ncartstrails.org/cherokeeheritage/featuredstories/walkercalhoun.aspx

http://www.cherokeeheritagetrails.org/elderart/eld02.html
Re: Walker Calhoun has crossed over

by sky » Wed Mar 28, 2012 9:02 pm

He passed away this morning. Ceremony is ongoing until burial on Saturday. I'm making a donation to the Cherokee Trail Project in Walker's memory on behalf of Native Tree Society. Personally I would like the funds to go toward the continued documentation of the marker/thong trees.

Founding Giants - Pennsylvania’s Champion Trees

by edfrank » Wed Mar 28, 2012 9:15 pm

Founding Giants
Pennsylvania’s Champion Trees

From being one of the original 13 colonies and the site of the Battle of Gettysburg to becoming an industrial powerhouse in the 20th century, Pennsylvania has played a key role in shaping America’s story. It’s no wonder that Scott Wade enjoys studying genealogy and the history of the commonwealth.

As a stay-at-home dad and a certified arborist, he finds time to balance his family life with working part time at Longwood Gardens and running Pennsylvania’s Champion Tree Program. Scott has been the state coordinator of the program since 2006 and works diligently in recognizing the state’s biggest and culturally significant trees….

(Continued)
Jabba the Hutt Oak, CT

by RyanLeClair » Thu Mar 29, 2012 9:36 am

Here are two shots of an exceptionally gnarly oak Bart and I found in Newtown, CT. It was 22'3” around @ breast height, and 19'3” around at its skinniest point. Measuring at ground level probably would have gotten us a 30' circumference. The height was unexceptional, maybe 70'. The spread was around the same.
Richardson: Hollywood Cemetery

by Barry Caselli » Thu Mar 29, 2012 1:36 am

My father and brother and I just came home from a 5 day trip down to Greeneville, Tennessee and back. We went to a funeral in Tennessee, but made several stops along the way down and on the way back to see big trees and historic places. The last stop on the way home was this cemetery. All through this cemetery there are giant American Hollies and Southern Magnolias. Plus there are a few giant Tuliptrees, Bald Cypresses, White Oaks and Willow Oaks. All except the white oaks were the biggest I had ever seen of each species. I will try and post some photos later, maybe tomorrow. I will also post about our other stops later. But I couldn't let this one wait.

If any of you is ever in or near Richmond, you must visit this cemetery! Some of the trees were mind-blowing, to me. I think my brother read about the cemetery in the Remarkable Trees book (which I think is an awesome book).

P.S.- none of us brought any tapes to measure with. We never gave it a thought. But as far as I know all the big trees in this cemetery are inventoried, and who knows, maybe they have been measured. I don't know.

Barry Caselli

Re: Richmond: Hollywood Cemetery

by edfrank » Thu Mar 29, 2012 11:13 am

NTS, from Wikipedia:

Hollywood Cemetery was opened in 1849, constructed on land known as "Harvie's Woods" that was once owned by William Byrd II. It was designed in the rural garden style, with its name, "Hollywood," coming from the holly trees dotting the hills of the property.
See also:
http://www.hollywoodcemetery.org/index.html

Re: Jabba the Hutt Oak, CT

by Larry Tucei » Thu Mar 29, 2012 5:01 pm

Ryan, Super cool tree, I love the name. The road for sure played an important role in the trees disfiguration. Soil compaction, water runoff, chemicals in the asphalt etc. Years ago when it was a wagon trail I bet everyone stopped under that great tree and had a picnic, party whatever. So many times I see roads right up to the roots of trees no buffer zone. I've seen Live Oaks with the same type of characteristics. Also the tree could have been damaged by something- maybe road construction. Trees with burls all over the trunk are unusual but I have seen them. I was wondering if those types of figures were caused by a Cancer or Disease. I really like Jabba its got lots of Character. A live Oak example. :) Larry

Attachments

Re: Jabba the Hutt Oak, CT

by tomhoward » Sat Mar 31, 2012 3:26 pm

The Northern Red Oak at North Syracuse Cemetery that Elijah refers to is actually a double, and a very impressive one at that. It's a gnarly, burly combination of 2 trees that I think are about 150 years old or so. One of the trunks loses its leaves later than the other half. The lower trunks of both of these trees are among the gnarliest I've ever seen. Both trees are open-grown and not more than 55 ft. tall. Here is a photo of the double Red Oak. I don't have a closeup of the huge burls on the lower trunk.

Tom Howard
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I want to encourage NTS Members to submit more formal site descriptions and scientific research reports to Don C. Bragg for consideration for inclusion in future issues of the Bulletin of the Eastern Native Tree Society. This is a wonderful resource for our group and we should be giving it our fullest support and effort.

Edward Frank
Indian Well, CT - New Tuliptree Site

by dbhguru » Fri Mar 30, 2012 8:23 pm

NTS, Today Bart Bouricius and I went Indian Well State Park in Shelton, CT. The park borders the Housatonic River. Here is an aerial view of the part of the park. It is the green strip following the river.

Our quarry was tuliptrees and they are there in numbers. Here is a look at a beauty along the first trail we took. Its stats are girth = 10.6 feet, height = 144.2 feet.

All together, we confirmed at least 8 tulips over 140 feet. There are more, but not a lot more. However, the prize of the day was this beauty.
This tuliptree measures 10.0 feet around and is 152.5 feet tall. Yes, another Connecticut site with 150s. We were understandably pleased. Bart located the tree with his eagle eye and I went up slope and worked to find the top. He got a 50-yard bounce from beneath, lying on the ground and looking up. I confirmed 152.5 as the tip top.

We measured other species and got some decent numbers. Here is a look at a double-stem sycamore measuring 14.75 feet around and 122.0 feet in height. We will return and do justice to the other species.

Near the end of our trek, we saw several trees that looked like sassafras. Here are three views. Any ideas?
We tried to find leaves in the leaf layer, but couldn't make a positive identification.

I believe that Indian Well SP has an RHI of around 115. We'll see. It definitely justifies several return trips. Thanks, Ryan, for your prior scouting. We would have no clue about this location were it not for Ryan LeClair.

Robert T. Leverett

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Re: Indian Well, CT - New Tuliptree Site

by edfrank » Fri Mar 30, 2012 10:11 pm

Bob, Bart, Looks like a great site. Tuliptrees continue to surprise in terms of size. For what it is worth, I think the tree in question is a sassafras. Generally you can scratch the bark in the grooves between plates and get that sassafras smell even on older specimens and get that sassafras smell.

FYI: Here is a fossil of a sassafras leaf (Sassafras hesperia) from the Eocene Period 36-55 million years ago) from the Klondike Mountain Formation of Washington and British Columbia:


Edward Frank
Re: Indian Well, CT - New Tuliptree Site

by dbhguru » Sat Mar 31, 2012 9:47 am

NTS, I neglected to mention that in the Google image of Indian Well State Park, the park is on the left side of the river. Here is a map of Indian Well.

Robert T. Leverett

Introduction – Joe Reynolds

by joeyjoejoe » Sat Mar 31, 2012 11:28 am

hello to all,
I would like to introduce myself as I am new to this site. My name is Joe Reynolds and I live in North Western Ontario very close to the Minnesota Border. I am 44 years old, married, and have two children. I have a degree in forestry and work at a mill in Fort Frances Ontario. I am currently working toward obtaining my ISA arborist certification and it is this pursuit that led me here through internet searches. I am pleased to be here and thank you all for providing this opportunity and opening. Thank You

Joe Reynolds
The Don Bragg Papers

by edfrank » Sat Mar 31, 2012 4:44 pm

Dr. Don Bragg is a research forester and longtime NTS member. He also serves as editor of the Bulletin of the Eastern Native Tree Society. He works at the US Forest Service, Southern Research Station, PO Box 3516, University of Arkansas at Monticello, Monticello, AR 71656.

Don submitted for inclusion on the NTS website and the BBS six papers he has authored or co-authored with other NTS members to be included as part of our Special Publication Series. He writes: "Because I am a federal employee and have written these materials on official time, they become part of the public domain and hence can't be copyrighted, even by the private journals that publish them."

The NTS Publication Series will contain both peer reviewed and non-peer reviewed papers. We will make every effort to ensure the scientific, technical, and editorial quality of all of the papers being distributed. Papers marked as peer reviewed have undergone a review process in the strictest scientific sense of the word including the use of anonymous reviewers on paper with a realistic chance of being rejected for publication is considered the scientific standard.

Sine Method as a More Accurate Height Predictor for Hardwood

by DonCBragg » Sat Mar 31, 2012 3:38 pm

The Sine Method as a More Accurate Height Predictor for Hardwoods


Abstract—Most hypsometers apply a mathematical technique that utilizes the tangent of angles and a horizontal distance to deliver the exact height of a tree under idealized circumstances. Unfortunately, these conditions are rarely met for hardwoods in the field. A “new” predictor based on sine and slope distance and discussed here does not require the same assumptions for accurate height determination. Case studies using a sycamore (Platanus occidentalis L.), a water oak (Quercus nigra L.), and a southern red oak (Q. falcata Michx.) from southern Arkansas are presented to emphasize the sensitivity of the tangent method to erroneous measurement procedures. When heights were measured properly the sine method delivered results that were different by less than 1 percent. Under more challenging conditions, however, errors ranged from 8 to 42 percent. These examples also highlight a number of distinct advantages of using the sine method over the tangent method.
method, especially when exact tree height is required.

Available for download as part of the Native Tree Society Special Publication Series: NTS SP #17

An Improved Tree Height Measurement Technique Tested On Mature Southern Pines

by Don C. Bragg


Practical Extension of a Lake States Tree Height Model

by Don C. Bragg, NORTH. J. APPL. FOR. 25(4) 2008, pp. 186-194

By adapting data from national and state champion lists and the predictions of an existing height model, an exponential function was developed to improve tree height estimation. As a case study, comparisons between the original and redesigned model were made with eastern white pine (Pinus strobus L.). For example, the heights predicted by the new design varied by centimeters from the original until the pines were more than 25 cm dbh, after which the differences increased notably. On a very good site (50-year base age site index [SI50] 27.4 m) at the upper end of the range of basal area (BA; 68.9 m²/ha) for the region, the redesigned model predicted a champion-sized eastern white pine (actual measurements: 97.0 cm dbh, 50.9 m tall) to be 51.3 m tall, compared with 38.8 m using the original formulation under the same conditions. The NORTWDS Individual Response Model (NIRM) individual tree model further highlighted the influence of these differences with long-term simulations of eastern white pine height. On a moderate site (SI50 18.7 m) with intermediate (BA 15 m²/ha) stand density, NIRM results show that the original model consistently predicts heights to be 20–30% lower for mature white pine.

Many models to predict tree height from diameter have been developed, but not all are equally useful. This study compared a set of height-diameter models and found that the NORTWDS Individual Response Model (NIRM) individual tree model further highlighted the influence of these differences with long-term simulations of eastern white pine height. On a moderate site (SI50 18.7 m) with intermediate (BA 15 m²/ha) stand density, NIRM results show that the original model consistently predicts heights to be 20–30% lower for mature white pine.
for loblolly (Pinus taeda) and shortleaf (Pinus echinata) pines from Ashley County, Arkansas. Almost 560 trees ranging in diameter at breast height (DBH) from 0.3 cm (both species) to 91.9 cm (for shortleaf) or 108.2 cm (for loblolly) were chosen for measurement. Height equations were then fit to four different functions (Chapman-Richards, modified logistic, exponential, and Curtis-Arney) with weighted nonlinear least squares regression using DBH as the only predictor. Models were evaluated using a series of goodness-of-fit measures, including fit index (R2), root mean square error (RMSE), bias, and corrected Akaike information criterion (AICc). All of the models fit the data very well, with 96 to 98% of the variation explained for loblolly pine, and 96 to 97% explained for shortleaf pine. Similarly, few differences were apparent in RMSE, bias, and AICc, although it was clear that the Curtis-Arney function fit both pine species slightly less well across the upper range of the diameters. Only subtle differences appeared in curve shape for small- to moderate-sized pines, with increasing departures predicted above 75 cm DBH. Given their overall similarity in performance, the modified logistic function was the preferred height-diameter model because of its more intuitive allometry at the upper extreme of pine size, especially when compared to the original FVS height dubbing equation. A unified height-diameter model capable of predicting total tree height for either pine taxa was also developed with a modified logistic function.

Available for download as part of the Native Tree Society Special Publication Series: NTS SP #20

Abstract.—This paper describes a new approach for deriving height-diameter (H-D) equations from limited information and a few assumptions about tree height. Only three data points are required to fit this model, which can be based on virtually any nonlinear function. These points are the height of a tree at breast height (dbh), the predicted height of a 10-inch dbh tree from an existing H-D model, and the height at species maximum dbh. Several examples are presented, with comparisons to other height equations available for the species. The model was then tested with a unified height-diameter model capable of predicting total tree height for either pine species and compared to other height models.

3-Point Derivation of Dominant Tree Height Equations

by Don C. Bragg


The Sine Method: An Alternative Height Measurement Technique


Height is one of the most important dimensions of trees, but few observers are fully aware of the consequences of the misapplication of conventional height measurement techniques. A new approach, the sine method, can improve height measurement by being less sensitive to the requirements of conventional techniques (similar triangles and the tangent method). We studied the sine method through a couple of comparisons. First, we demonstrated the validity of the sine method under idealized conditions by comparing tangent and sine measurements on a stationary object of a known height. Then, we compared heights collected via climbing and lowering a tape from the highest point of a number of forest-grown trees with heights measured with the sine method. The sine method offers a viable, cost effective alternative to traditional measurement approaches, especially for large or leaning trees, and for trees with broadly spreading crowns.

Available for download as part of the Native Tree Society Special Publication Series: NTS SP #22

North Syracuse Cemetery Oak Grove Mar. 2012

by tomhoward » Sat Mar 31, 2012 3:46 pm

NTS, the North Syracuse Cemetery Oak Grove has many of the characteristics of old trees as documented in Neil Pederson, External Characteristics of Old Trees in the Eastern Deciduous Forest. The old trees of this small and extremely dense grove have the following characteristics referenced by Neil Pederson: spiral grain, balding bark, loss of apical dominance (on some trees), crown dieback (on some trees), crowns with few large crooked limbs, low stem taper, high stem...
sinuosity (on several of the old White Oaks and especially on Black Gum #34), low crown volume, low ratio of leaf to trunk volume. No other site in this area has so many trees with all these characteristics. Many of the older trees are over 200 years old and the oldest could be 300 years old. I am enclosing 2 pictures that illustrate some of these characteristics.

White Oaks #25 (left), #23 taken Dec. 10, 2011

Black Gum #34 from north, showing stem sinuosity, taken Dec. 10, 2011

The huge gnarled crowned tree to the right of Black Gum #34 is White Oak #33, 38.5” dbh, 89 ft. tall, est. 250 years old (it is one of the trees cored in 1996 and the age is an extrapolation from an incomplete core).

Tom Howard
External Links:

Earthworms to Blame for Decline of Ovenbirds in Northern Midwest Forests  
http://www.sciencedaily.com/releases/2012/02/12029142225.htm

Sturdy Scandinavian Conifers Survived Ice Age  
http://www.sciencedaily.com/releases/2012/03/12031143737.htm

A land lost to time is big find for museum  
Scientists say world’s oldest forest in Gilboa predates dinosaurs  

Tree Council of Ireland  
http://www.youtube.com/watch?v=tJ2X5bLqx7A

Dardanelle, Arkansas is Home of the Biggest Arkansas Trees  
http://www.youtube.com/watch?v=sBkg4gdXy6Q

AR State Historic Tree Program  
http://www.arhistorictrees.org/

Kerry McLeod Memorial Mug Tree  
http://www.arhistorictrees.org/historic_trees_details.php?id=45

Video: The Art of Okeechobee  
http://www.audubonmagazine.org/articles/nature/video-art-okeechobee

Forestwatch - Ancient Trees with Sarah Rees  
http://www.youtube.com/watch?v=YQH0cwF82As

Weakley's Flora  
http://www.herbarium.unc.edu

10 World Famous Trees  

My Own Hands  
http://vimeo.com/38103421

TEDxJacksonHole - David Milarch - Ancient Trees For The Future  
http://www.youtube.com/watch?v=y069UFbk11s

TEDxNASA@SiliconValley - David Milarch - Ancient Trees Archive  
http://www.youtube.com/watch?v=3DsHHfu4_co

Lyme Disease Surge Predicted for Northeastern US: Due to Acorns and Mice, Not Mild Winter  
http://www.sciencedaily.com/releases/20094452.htm

Culture Aspects of the Tree in Selected European Countries  

The 5 Most Spectacular Landscapes on Earth (That Murder You)  
http://www.cracked.com/article_19705_the-5-most-spectacular-landscapes-earth-that-murder-you.html

Saguaro National Park Using New Technology to Deter Cactus Rustlers  

CanopyMeg on Community - The TV Show - Feb, 3, 2012  
http://www.youtube.com/watch?v=DrvfnqooT9A

Adirondack Almanack: State Law Would Ban, Regulate Invasives Species  


400-Year-Old Bonsai Survived Hiroshima Bombing  
http://www.youtube.com/watch?v=NYPeNcnyZ6g

Reading Between the Tree Rings (Guatemala) by Kevin Ananchukaitis  
The Tools of Tree-Ring Research (Guatemala) by Kevin Ananchukaitis

Climbing a Volcano in Search of Old Trees (Guatemala) by Kevin Ananchukaitis

Atop a Volcano, the Ages of Red Pines (Guatemala) by Kevin Ananchukaitis

Our Philippine Trees: Flowering Dipterocarp!

Symphony of Science - The Greatest Show on Earth!
http://www.youtube.com/watch?v=wxDOpAM2FrQ

A Forest Under Siege in Paraguay
Huge sections of the Chaco forest are being razed by local Mennonite farmers and Brazilian cattle ranchers amid a surge in the global demand for beef.

REI Blog: My 30-Year Plan to Hike the John Muir Trail by CK Cragg
http://findout.rei.com/blog_detail/?contentid=7447658904675425031

Manmade Noise Affects Plant Dispersal and Flower Pollination, by Anna Sanders, 03/20/2012.

Patrick Dougherty – Installations
http://www.stickwork.net/installations3.php
About:  eNTS: The Magazine of the Native Tree Society

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

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

Edward Frank – Editor-in-Chief

Indian Well State Park, CT waterfall – photo by Robert Leverett