Re: Washington Grove City Park, NY

by **lucager1483** » Sat Nov 24, 2012 8:33 pm

NTS, I made a clandestine visit to the Washington Grove Friday, November 23, to measure a few more trees and to re-measure some from my previous outing with Larry Champoux. I apologize for not giving a heads-up to Larry and Tom Howard, and, for that matter, any ents who may have wanted to join me, but this was an unplanned visit. Please, ents, if and when you are in the Rochester area, take some time and walk through this forest. It is a special place, and you will not only see some of the largest oaks and northern hardwoods in this part of the country, but probably some of the oldest, as well. Balding bark and windswept, gnarled crowns abound.

Anyway, here are the numbers I came up with, using my Nikon Prostaff 440, Suunto clinometer, scientific calculator, and metal tape. Sorry, no pictures – I had my camera with me but forgot to use it – oops!

Common Name	Height	Girth
Scots pine	66.0’	3’10”
Hophornbeam	56.7’	3’3”
Sassafras	99.9’	4’11”
Sassafras	101.9’	4’10”
Sassafras	104.7’	5’
Butternut	110.1’	5’10”
Tuliptree	121.0’	
Tuliptree	125.5’	8’7”
(126’ in earlier visit)		
Northern Red Oak	110.2’	8’3”
Northern Red Oak	120.8’	10’3”
Black Oak	114.6’	
White Oak	115.5’	6’11”
White Oak	120.2’	7’5”
Sugar Maple	112.1’	7’4”
Black Cherry	120.3’	6’4”
Exotic cherry	109.7’	5’2”

Rucker 10 Height Index: 110.4’
Rucker 5Height Index: 120.2’
Rucker 10 Girth Index: 6.3’

The tallest tree measured was a tuliptree, and I do not think it is likely to be topped. All three species of oaks appear to be older, but also seem max out around 120’. I am guessing that the wind and winter weather are the main reasons for this. Though the tallest black oak I measured came in at 114.6’, I expect at least one will top 120’. The tallest trees seem to be grouped either near the Nunda Blvd. entrance or in the vicinity of the outer trail near the tennis court, which is not far from the entrance.

Elijah Whitcomb

Re: Washington Grove City Park, NY

by **tomhoward** » Sun Nov 25, 2012 11:36 am

11/25/2012 – Washington Grove truly is a fantastic place. The heights you got are extraordinary for upstate NY. I’m especially impressed by the Sassafras over 100 ft. tall – Washington Grove is the only place in upstate NY I know of where Sassafras reaches 100 ft. Here, in central NY, Sassafras doesn’t quite reach 90 ft. The Butternut at 110.1 ft., is, as far as I know, the tallest of its species in the state. It is close to a height record for the species. 120 ft. is an exceptional height for Oaks in upstate NY. The White Oak at 120.2 ft. is the tallest in upstate NY, and Black Oaks above 110 ft. are the tallest in the state as far as I know. Oaks in the old growth groves here in North Syracuse barely get to 110 ft.

Fantastic report! My brother and I have to get back to Washington Grove in the spring.

Tom Howard

Bear and Salmon: Humboldt Redwoods State Park

by **Mark Collins** » Mon Nov 26, 2012 1:55 am

The salmon are running up the Eel River and it's tributaries at the moment.

Above is a bear that lumberered out of the forest onto the rocks first thing Saturday morning. Maybe he was looking for a salmon (or human) breakfast? The bear was walking towards me so I didn't wait around to find out.

Lake Champlain, NY

by **dbhguru** » Mon Nov 26, 2012 1:35 pm

NTS, Here are some images from my just concluded visit to lake Champlain. The weather was blustery and cold. It was a somber day, but sometimes that works for the light.

The Lake Champlain Valley has many faces and moods. It is a challenge to photograph them in a way that captures the feeling one gets when in their presence. I'm learning. I love the relative isolation, the space, and I appreciate the history that took place here. Monica and I will return in late December or January.

Robert T. Leverett

Skull Valley Cottonwood, etc., AZ

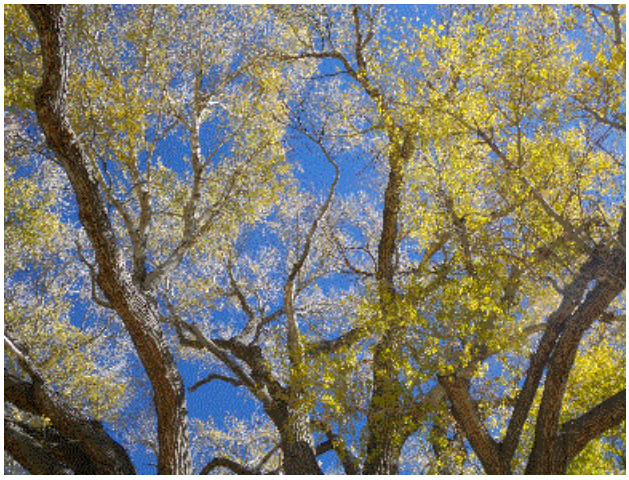
by **EMorgan** » Sun Nov 25, 2012 1:15 am

Hello, I moved to Arizona from Massachusetts a few weeks ago. I now live in Flagstaff, at the foot of Mount Elden. Upon arrival, I immediately began my big tree searches. Since, this entire area was logged in the late 1800s/early 1900s, there aren't many large trees left. The large trees that are left in Flagstaff are mostly Ponderosa pines.

I expanded my search outward and learned that a former national champion cottonwood tree died in Patagonia, AZ. See the article http://azstarnet.com/news/science/environment/landmark-southern-arizona-cottonwood-tree-topples/article_6b999e0e-fe7b-58f2-957e-beb067789306.html.

It fell literally 2 days before I arrived. However, the reigning champion cottonwood tree is alive and well in Skull Valley, AZ, about 20 miles southwest of Prescott. First, if you want to see some pictures of the tree go to my GMail drive: https://docs.google.com/folder/d/0Bw1ZerQEvrM0YnhYUWFKcVNOWjA/edit

It's a colossus. The official measurements are in the Register of Big Trees. I didn't measure it today. Twas a family outing, and my kids are too young to wait around for me to measure it. The measurements are here: http://www.americanforests.org/bigtree/populus-fremontii-ssp-fremontii-3/
It was hard to find, because nowhere are its coordinates stated. Here they are:
Latitude: 34°30'42.60"N
Longitude: 112°40'55.23"W
I found it on Google Earth using the picture from the AZ Star article. Technology is amazing. Oh, and BTW, this is the largest flowering plant in North America!



The GMail folder includes another cottonwood that was located nearby (1 pic). It looked to be roughly in the 35' circumference range. Also, there are some pictures of another giant that I may nominate, if I get the time and the equipment. It's the one near the bench. Enjoy,

Eric Morgan

Re: Skull Valley Cottonwood, etc., AZ

by **Will Blozan** » Mon Nov 26, 2012 11:57 am

E, Welcome to NTS and thanks for the links to the photos. Indeed an impressive specimen but a fusion of several stems. I am puzzled by the "largest flowering plant" statement??? There are many thousands of larger trees in the US of several species...

Will Blozan

Re: Skull Valley Cottonwood, etc., AZ

by **EMorgan** » Mon Nov 26, 2012 12:53 pm

Hi Will, The largest flowering plant statement actually came from an Arizona field guide website: http://www.arizonensis.org/sonoran/fiel ... emont.html
I assume that they meant some narrow instance of "flowering", since redwoods also flower, and are clearly larger. Perhaps they meant the largest trunk diameter of a deciduous tree in the US? Anyway, I retract that statement.

Looking at the tree it definitely looked like a fusion of stems. It's pretty impressive though. Cheers,

Eric Morgan

Re: Skull Valley Cottonwood, etc., AZ

by **dbhguru** » Mon Nov 26, 2012 1:28 pm

Eric, Glad you are getting settled in out there in northern Arizona. As soon as you acquire a clinometer and laser rangefinder, I look forward to your tree measurements. I think you will be the only member of NTS located in the southwestern US with a bonafide interest in measuring trees, and with your doctorate in mechanical engineering, we can be comforted in knowing that you possess the background to be able to measure trees to the levels of accuracy that we strive for in NTS. I wish we had had more time to get to know one another here in western Mass.

I agree with Will Blozan, the Skull Valley cottonwood is a fusion of stems. Cottonwoods are highly subject to that form as are silver maples. Old cottonwoods along stream beds that are subject to flooding and damage around the lower trunk and roots naturally coppice. Here in NTS, we've discussed how to treat the multi-stem forms, and I think the majority of us believe that they should not be ignored, nor should they be lumped together with single-trunk forms. Over the weekend, I was in the Lake Champlain Valley. I was taken to a large cottonwood in a yard that was approaching 20 feet in girth and reached 100 feet in height. It was in the middle of a snow squall, so I deferred getting good measurements for another day. But its appearance was the fusion of two trunks from a common base. If you were to view the form from positions 90 degrees apart, the shape would be oval. That is usually the signature of the fusion of two trunks, which is then easily confirmed by following the trunk upward to the split.

I have become increasingly interested in the more challenging tree forms and how to measure them in a comparative way. On Wednesday, Monica and I will fly to Hawaii where I will be introduced to a panoply of bizarre tree forms that render standard DBH measurements virtually meaningless. I have no idea how I'll deal with the highly variant forms of the ohia tree, but solve the puzzle, I must - at least to my personal satisfaction. I'll be posting a lot of images and asking for ideas and help.

Robert T. Leverett

Re: Skull Valley Cottonwood, etc., AZ

by **tsharp** » Mon Nov 26, 2012 11:03 pm

Eric: I will be in Flagstaff in mid February and if you have not acquired a rangefinder & clinometer by then you can borrow mine for about a month. I have measured some Arizona trees and posted them on the Trees Database but have been negligent about posting on the BBS. I will correct that sometime in December. You have also discovered why serious big tree people criticize American Forests on how they handle or I should say do not handle multi-stem trees in their national listing.

T. Sharp

Tallest Eucalypts in Santa Cruz County

by **yofoghorn** » Tue Nov 27, 2012 2:13 pm

The tallest hardwoods in North America are the *Eucalyptus globulus* located in California. The tallest on this list of groves I discovered is not the tallest eucalypt in North America or the Northern or Western Hemispheres, for that matter. The tallest eucalypt in the Northern and Western Hemispheres is a tree on Santa Cruz Island, part of the Channel Islands in Southern California. This tree was last measured to be 246.2 feet (75 meters) tall. For everyone's information, the tallest eucalypt in Europe, a *Eucalyptus diversicolor*, stands 236.2 feet (72 meters) in height. The tallest eucalypt in Northern California is the 241.2-foot (73.5-meter) *Eucalyptus globulus* that I discovered in December 2011. It was recently measured, on November 20, 2012, to be 241.27 feet tall (73.53 meters), using a tripod-mounted Impulse 200 LR and prism. To be thorough, in the Southern Hemisphere, the tallest eucalypt in the world is the *Eucalyptus regnans*, last measured at 99.6 meters (326.7 feet) in Tasmania, Australia. The tallest tree in Africa is a *Eucalyptus saligna* at 79 meters (259 feet), though a tree in the area, which fell in 2006, was 81.5 meters (267.3 feet). To be clear, in the Northern Hemisphere, the tallest angiosperm is not a eucalypt. It is a *Shorea faguetiana* in Borneo that measures 88.1 meters (289.0 feet) tall.

Eucalyptus globulus Groves in Santa Cruz County* (as measured by laser rangefinder) - 200'+
Height (ft.), DBH (ft.)
241.27', 5.17'
235.67', 4.25'
232.76'
228.8'
219.4'
208.0', 4.78'
206.7'
204'
203.5', 6.34' *

*tallest known grove in Santa Clara County (to the north of Santa Cruz County)

As a note, in 2012, the Santa Cruz Island *Eucalyptus globulus* (the tallest eucalypt outside of the Australian mainland, Tasmania, and Africa) was scheduled to be cut down because it was a non-native species. This was revoked recently due to a lack of governmental funds. However, if this tree gets cut, then the tallest known eucalypt in the Northern Hemisphere will be the tallest I found in Santa Cruz County, California. The tallest tree on this list is not right next to a road and will most likely not be cut down anytime soon. Based on its smaller DBH and the availability of water in the area, I believe that this tree will grow quite rapidly in the next few years.

Zane J. Moore

Amazon Giants Trip Report from Peru

by **Bart Bouricius** » Mon Nov 26, 2012 6:50 pm

From the Peruvian Amazon Part 1: Notes on two giant lowland tree species, *Ceiba pentandra* and *Ceiba samauma*

Having returned from Peru 10 days ago, I have finally compiled the data from two separate trips to the Peruvian Amazon during which I spent several days each time searching for notable trees in the Seasonally Flooded Forest and in the higher Terra Firme Forest where annual flooding does not occur. Accompanying me was my friend of 15 years Weninger Pinedo Flores who had scouted out promising locations ahead of time. Weninger works as a guide at the Tahuayo Lodge on the Tahuayo River where I had built a zip line platform system in the trees several years ago and where I make annual trips for safety inspections and maintenance work. On the most recent trip and on a trip In September of 2011 we located several impressive trees by following "restingas" in swampy areas in flood forest environments. Restingas are low ridges that follow the edges of swamps and often run between small rivers and swamps.

This sort of environment which floods for 2-3 months each year, is the home of both the "Giant Lupuna Tree and the "Wimba" (formerly spelled Huimba) tree. These two trees are respectively *Ceiba pentandra* and *Ceiba samuama*. They are two of the most massive trees in the Amazon basin and are treated as sacred by many peoples in both Central and South America. Only *C. pentandra* however, is found in most of Central America and Mexico. From the research I was able to do I have a hunch that the Wimba tree gets a bit taller, while the Lupuna tree may get a slightly larger crown spread which, in my experience and according to some accounts, can reach a little over 200' at its greatest spread. Measuring crown spread in a closed canopy forest at all can definitely be a challenge, and difficult to do accurately, as the tips of the longest horizontal branches are often obscured by the foliage on lower mid canopy trees. I believe both of these two closely related giants have the potential to exceed a 200' height as well, at least in exceptional individuals. The more obvious differences between the *C. samauma* and the *C. pentandra* are that *C. pentandra* has more spines on its branches than *C. samuama* which also has somewhat rougher darker bark at it's base than does *C. pentandra*. These are useful distinctions because the leaves, and flowers or fruits if any, are often far away and hard to see well.

Why we wear gloves when climbing the Lupunas

Interestingly there is a lot of confusion surrounding the name "Kapok Tree". Recently, my friend Lynn Cherry who wrote the wonderful 1990 children's book "The Great Kapok Tree: A Tale of the Amazon Rainforest" was surprised to hear that the term Kapok refers to several species of trees in the Bombacaceae family rather than just the single species *Ceiba pentandra*. I, like Lynn and many others had also assumed that this name referred only to the single species until I discovered that the "Kapok" trees that had been pointed out to me over the years were actually of several different species. When you ask a local Amazonian in Peru "is that a Kapok tree" he or she assumes you are asking if the tree in question produces the cottony substance kapok, which is still collected and used to stuff pillows and mattresses, and was historically used to stuff most life vests. This kapok material is produced from large seed pods and floats on the wind, dispersing the seeds

contained individually in the center of each fluffy floating ball of cottony silk.

Compacted kapok silk with single Wimba seed

The kapok producing species are in the Bombacaceae family along with the famous balsa tree *ochroma pyramidale* and the also impressive green striped *Pseudobombax septanatum* "punga tree" as well as four other members of this Ceiba genus of lesser stature than the two giants, but all of them produce the silky cotton which permits the wind to disperse their seeds. Wimba, by the way, means kapok in a local dialect, and the confusion surrounding kapok has lead to a total mess on the internet regarding local names, however I am using the terms used by the locals I work with which are consistent with Pennington and his fellow authors in the Illustrated Guide to the Trees of Peru (2004).

I have been back almost two weeks from my last trip, and I was pleased to discover on this trip to Peru, that our tallest previously measured tree, not a Ceiba species, had grown a few feet. I was also thrilled to discover the largest Wimba tree yet for me and Weninger.

The tree images I am including are only of the two largest ceiba species, but I will have further posts of taller and stranger species in the follow up posts. These Ceiba trees have been awe inspiring for those that have seen them and though these are from past posts, I want to mention that my friend Phil Wittman measured the Iconic Ceiba pentandra which is the mascot for the "Ceiba Tops" lodge directly on the Amazon at 183' in height using the Nikon 440 rangefinder and a clinometer, though it's circumference above the buttresses was not measured. I estimate that it is around 20' in circumference at minimum. See my previous posts for images. Generally, once you are over the buttresses of either of these trees, the trunk is rather cylindrical with little taper. Also in a previous post I measured two separate large C. pentandras over 33' in circumference, though neither was over 150' in height. I have a lead on several others in Central America which I will visit this Summer. I responded to these trees much the way that people of some of the Central and South American tribes have, feeling that the true monarchs of this species should be regarded as sacred, and that any attempts to turn them into commercial products should be considered a Sacrilege.

Young Lupuna tree in my zip line platform system. Weni takes it easy.

Javier with Lupuna 141' high by 14' 1' circumference

Weni heads up young Lupuna 135' high by 14' 11" circumference

Smiling while sitting on thorns of this young Lupuna

View past the spiny upper trunk of the Lupuna

View from Lupuna tree with Aguaje Palm crown

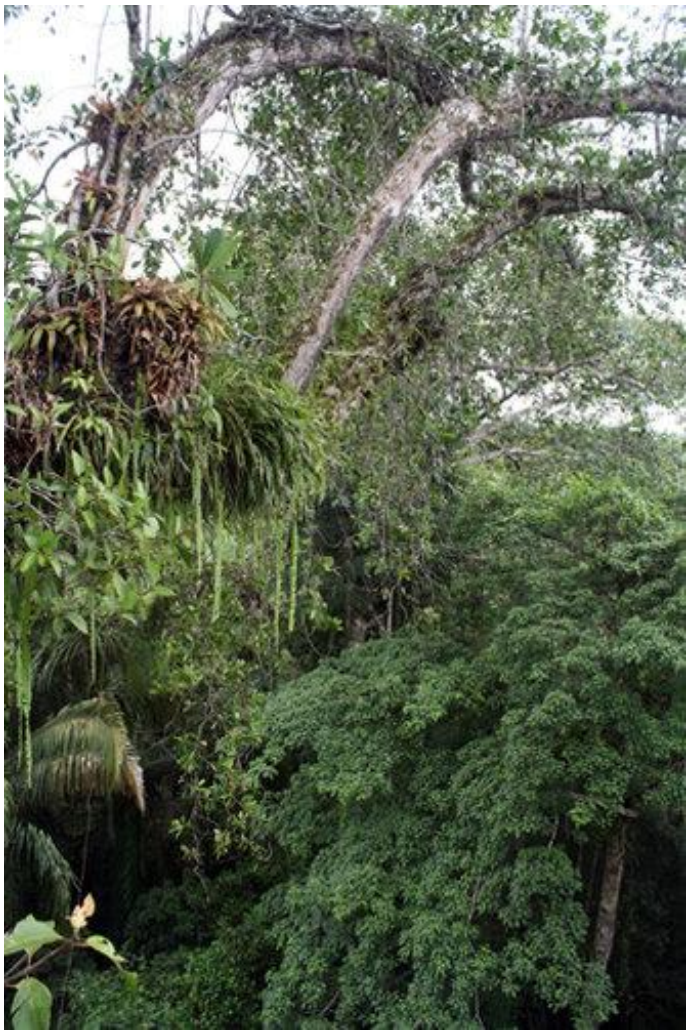
3 inch long Ceiba Beetle Euchroma gigantea excavates dead or fallen Ceiba Tree logs.

Wimba 156' high with circumference 14' 7"

Same Wimba Tree reaching into the sky

Me enjoying the idyllic ambiance in the Wimba Tree

View of the horizon from the crown of the Wimba



Hanging gardens in the Wimba Tree canopy

Yours truly by 144' high 15' 7" Wimba Tree

Another Wimba towers into the canopy

Weny and Segundo at base of massive Wimba I call Monarch. The tree was 165' high and 22' 9" above the buttresses 36' above the ground. Largest Wimba any of us had ever seen.

Vertical view of Wimba Monarch, you can see a harmless termite nest on the trunk actually no danger to the tree

Different smaller Wimba and adjacent tree reaching into the canopy

Fer-De-Lance guarding large Wimba tree from loggers? This snake was curled at the base of the Monarch Wimba tree.

All the tree circumferences are measured above the buttresses which is a pain in the butt process. Also the Bart Simpson logo might be better than what I have, actually the image of me in the Wimba tree would work even better if I ever get to it.

Re: Amazon Giants Trip Report from Peru

by **Bart Bouricius** » Thu Nov 29, 2012 12:16 am

Larry Tucei asked: What do you think the ages of trees of that size would be?

Larry, I am going to speak to a dendrochronologist about figuring this out. I understand that there have been advances in methodology for estimating ages of tropical trees that do not have clear annual rings, though some do based on wet and dry seasons. I will be posting images for other species of trees that may be older, as they are slower growers, but still massive. One that is 22' in circumference appears to break the 190' height based on a 188' straight up shot with the 440 rangefinder. Anyway, this is a big question for me as well. I will try to get the others posted as soon as I can. I plan to do one posting of just fig trees and another one of miscellany including the tallest ones.

Bart Bouricius

Re: Pictures of Fungi in the Redwood Forest

by **Mark Collins** » Sun Nov 25, 2012 10:43 pm

Humboldt Redwoods State Park 11/24/12

Re: Pictures of Fungi in the Redwood Forest

by **mdvaden** » Tue Nov 27, 2012 2:33 am

The one with the keys, I've seen and taken a photo of the same at Redwood National. Thought it was pretty awesome looking, especially in groups.

I just happened to be adding a mushroom page to my redwood pages collection tonight, and put together this quad image showing some from Jedediah Smith and Prairie Creek.

North Syracuse Oak Groves Fall 2012

by **tomhoward** » Sun Nov 25, 2012 11:43 am

NTS, Here are reports about the North Syracuse Oak Groves in the Fall of 2012.

The high wide crowns of the Oaks in both groves are difficult to measure, as it is hard to find the highest points. The laser rangefinder-clinometer-scientific calculator combination I use now is, I think, more precise than the Nikon Forestry 550 I used from 2009-2011. The laser rangefinder I use now (Nikon Prostaff 440, along with the clinometer loaned to me by Ed Frank), sees through forest clutter a lot better than the 550, and this accounts for more precise measurements.

The measured increases in height with the current equipment over the 550 are not reflections of height growth since 2009-2011. These old Oaks (especially the much older trees in the North Syracuse Cemetery Oak Grove) are growing very slowly. The measured height increases are due to the 440 finding higher points in these big, complex crowns.

I am enclosing the reports and new height measurements first from the North Syracuse Cemetery Oak Grove, and then from the Wizard of Oz Memorial Oak Grove.

North Syracuse Cemetery Oak Grove
Oct. 20, 2012

On this very cool (cooler in grove than outside it), partly cloudy, windy day I had a magical visit to the old growth North Syracuse Cemetery Oak Grove. The sound of the wind blowing through the lofty crowns of the Big Oaks was like the sound of the sea; these high leafy crowns waved back and forth in the wind. Many of the Big Oaks (especially Red Oaks) are still green, but some of the White Oaks are turning to deep colors, with White Oak #32 already its deep purple. There is a lot of yellow in the understory with Red Maple (yellow in the shade), Witch-hazel causing the lower levels of the Grove to glow with inner light, even under an overcast sky. I have always sensed that this is a holy place, a site with powerful and peaceful spiritual energy. The “Old Growth Air” (to use Joan Maloof’s term) in the grove felt especially fresh, and a wonderful fragrance of damp freshly fallen leaves permeated the grove.

North Syracuse Cemetery Oak Grove
Nov. 12, 2012

I spent a magical one hour and 45 minutes or more in the North Syracuse Cemetery Oak Grove on this

mild, cloudy, windy day. The temperature was 68 degrees Fahrenheit when I was in the grove. The sound of the wind in the lofty treetops was like the sound of the surf on the seashore, an ancient timeless sound. The tops of the Big Oaks rocked back and forth in the wind, and many brown and russet leaves rained down. There is no more perfect time than this to be in this old Oak Grove; it is the November woods at perfection. Most of the White Oaks and Black Oaks are bare (but there are still a few leaves on White Oak #22), but the Red Oaks still have most of their brown and russet leaves. Several jetliners making landing approaches flew low and fast over the tops of the Big Oaks. I also saw a huge hawk soar majestically over the tops of the Big Oaks.

The ancient vernal pool (or "swale") in the center of the grove is dry as it has been a very dry year. The area southeast of the swale, where the White Oaks grow densest and tallest, has the feeling of a "holy of holies", the most sacred part of a sacred site. It is utterly magical there with massive old Oaks close together with their crowns forming mazes of crooked limbs high in the sky. The air in the Grove was wondrously fresh, fragrant with fallen leaves, and with the fragrance of White Pine among the tall Pines in the 2nd growth just north of the Grove.

North Syracuse Cemetery Oak Grove
Nov. 23, 2012

I spent a magical one hour and 45 minutes or more in the North Syracuse Cemetery Oak Grove on this mild, cloudy, breezy day. The fresh air had a spring like feel and fragrance, freshened by falling leaves that still rained down from the mostly bare canopy. The sun briefly and gloriously illuminated the grove, but as I stayed there, the clouds thickened, and the sky darkened. A light rain began to fall before I left. While I was there measuring trees, I had the deep sense of being in a holy place, where Earth energies are balanced.

North Syracuse Cemetery Oak Grove (and Surrounding Area) Official Tree Heights as of 2012-2013

All heights are in feet, measured by sine method used by NTS with laser rangefinder, clinometer, scientific calculator. Trees with numbers are on the tree list of the 1999 brochure about the North Syracuse Cemetery Oak Grove.

	Height	Dbh (in.)	
Red Oak #13	102.7	31.3	11/12
White Oak #14	101.2	24.6	11/12
White Oak #15	107.3	26.3	11/12
White Oak #16	109.2	31.7	11/23
Red Oak #17	105.42	31.9	11/23
White Oak #19	98.8	33.7	11/12
White Oak #22	105.6	21	11/12
White Oak #23	108.94	31.4	11/23
White Oak #24	109.45	24.9	11/23
(tallest tree in Grove as of 11/23/2012)			
White Oak #25	109.3	23.5	11/12
Red Oak #26	105.44	31.1	11/23
(crown regenerated after July 1994 storm damage)			
White Oak #31	93	26.3	11/23
White Oak #32	98.3	23.6	10/20
Black Gum #34	82	20	11/12
Red Oak north of #13	104.1	19.7	11/12
Red Oak east of #23	101.8	26.4	11/23
2-trunked Red Oak north of #27	91.3 slender		10/20

The White Pines below are in the 2nd growth that adjoins the old growth Oak Grove. The Pines are only about 90 years old, compared to over 200 (and more) years for the Oaks.

White Pine north of #12	102.5 slender		11/23
White Pine 2nd growth north	98.1	slender	11/12
White Pine 2nd growth north	105	N/A	11/23
(tallest of 2 trunks, large Poison Ivy vine on trunk)			

Wizard of Oz Memorial Oak Grove Nov. 3, 2012, Nov. 7, 2012

11/3/2012 - On this cold windy cloudy day with frequent light rain and sleet (but with some peaks of sunshine that gloriously illuminated the grove), I had a magical visit to the old growth Wizard of Oz Memorial Oak Grove near North Syracuse Junior High School. Most of the trees are bare, but the crowns of many tall Oaks are still covered with russet leaves, and the lower Beech trees are covered with bronze leaves. A few small Red Oaks by the south edge have deep red leaves. There are some fallen deep red Red Maple leaves on the ground, and beneath the bare Anne Frank Black Gum are some deep red leaves. A Red Maple snag fell onto the lawn south of the Grove, and there are a few branches down in the Grove, and that is the extent of the damage from the storm Sandy, a storm that did little in this area.

11/7/2012 – On this very cold cloudy morning I briefly visited the Wizard of Oz Oak Grove. The remains of the fallen giant Red Oak (fell 9/7/1998, cored tree #5, about 230 years old, and until the 1998 storm the largest tree in the Grove) have been burned down recently and mostly removed.

The Forest Cathedral was magical, cold, still, sublime, a magnificence that goes beyond words. Trees are barer than they were 11/3, and many Oaks have lost their leaves; only some Oaks still have russet leaves.

There are about 20 large tall forest-grown White Oaks in the Forest Cathedral, which covers about 1.5 acres, and is the densest part of the Wizard of Oz Oak Grove.

Wizard of Oz Memorial Oak Grove Nov. 17, 2012

On this cold calm day with clouds giving way to sunshine that gloriously illuminated the grove, I had a magical visit to the old growth Wizard of Oz Memorial Oak Grove near North Syracuse Junior High School. Most of the trees were bare, and even the Oaks had only a few leaves, so conditions were ideal for measuring heights.

Wizard of Oz Memorial Oak Grove Official Tree Heights as of 2012-2013

All heights are in feet, measured by sine method used by NTS with laser rangefinder, clinometer, scientific calculator. Trees with numbers (like "Red Oak #14") are trees cored with increment borer and without dedicatory plaques; named trees (like "Baum Red Oak") have (or had, as several of these plaques have fallen off the trees) dedicatory plaques.

	Height	Dbh (in.)	
Baum Red Oak	112.27	49.1	11/3
(as of 11/3/2012 tallest tree in Grove, possible tallest tree in North Syracuse, largest tree in Grove)			
Red Oak #14	92.6	31.6	11/3
White Oak #4	105.7	22.6	11/3
White Oak NE Cathedral	96.5	27.8	11/3
Lennon White Oak	106.8	30.1	11/3
White Oak between Lennon and Einstein	109.2	25.9	11/17
Einstein White Oak	110	24.9	11/17
9/11 White Oak	110	27.2	11/17
White Oak NE Cathedral	110.2	29.65	11/17
(as of 11/17/2012 tallest White Oak Central NY)			
John Muir White Oak	100.6	38.3	11/17
(largest White Oak in Grove)			
Harriet Tubman Black Oak	99.6	39	11/17
(largest Black Oak in Grove)			
Black Oak #12	100.3	30.1	11/17
Black Oak SE corner	99.4	29.6	11/17
Red Maple NE Cathedral	111.6	18.8	11/17
(as of 11/17/2012 2nd tallest Red Maple Central NY, 2nd only to 111.8 ft. Red Maple measured by Jess Riddle at Green Lakes State Park May 1, 2011)			
Red Maple SE Cathedral	110.5	26.7	11/3
Rosa Parks Black Gum	88.5	21.6	11/17
Beech north Cathedral	89.5	under 20	11/17
Beech south	88.5	20.6	11/17

Tom Howard

Beginner Tree Climbing certifications

by **eliahd24** » Sun Nov 25, 2012 10:09 pm

Hi NTS,
It is with great pleasure that I announce my completion of the Tree Climbers International Beginner's Tree Climber Course (BTCC)... and it was AWESOME! Patty and Peter Jenkins (TCI owners/operators) have long insisted that I get officially trained and I'm so glad they pushed me to do it. It's such a wonderful, unique, liberating, and calming experience to be dozens of feet up in large tree. I can't even imagine what it's like to be in a 192' Tuliptree like Will's crew did in the Smokies or 300+ feet up in the redwoods like Dr. Sillett and his crew. 50 feet seems pretty dang high to me!

At any rate, the course was amazing and I highly recommend it to any NTS interested in getting trained. No experience or equipment is necessary and TCI has a great "clubhouse"/hostel/guest house here in Atlanta where you can stay during your course. It's quite nice.

Check them out for yourself:
http://www.treeclimbing.com

Cheers,
Eli Dickerson

Re: Beginner Tree Climbing certifications

by **Will Blozan** » Mon Nov 26, 2012 9:17 pm

Eli, Very cool! The highest I have been able to climb in the eastern forests is 175' in the Fork Ridge Tuliptree (actual tie-in point). This is likely to be unmatched anywhere since taller trees are likely to be skinny-ass second-growth. Out west I have tied-in at 305 feet in the second tallest sequoia (311'). For the record I have maximum tie-in points for a few eastern species;

Eastern hemlock 167'
Tuliptree 175'
Eastern white pine 165'

It is unlikely that these numbers will be broken.

Will Blozan

Re: Maple Height Record - Humboldt Honey - 157.8 ft.

by **yofoghorn** » Tue Nov 27, 2012 8:57 pm

Michael, Mario, Will Blozan,

Maples=next on my list

I will be wildly searching for very tall maple trees in my four solid weeks of winter break. I'll be in California then and be hiking all over the place. I am not sure if the maple species can be taller than the 178' California sycamore, but after finding that specimen, I assume deciduous trees can reach incredible heights like that. I also have to keep up my reputation. I was looking around and I bet there are a few 170' maples but a 190' tree will be hard to come by. I will be first working to beat this tree's height and then go for taller.

Just letting you all know that Zane Moore's on the case. And Will, 196' is the height to beat! I'll have plenty of time to explore.

Oh, and as I've told you personally, Mario, congratulations on the find. If we don't end up searching together, our separate efforts will size up this species.

Zane J. Moore

Re: Maple Height Record - Humboldt Honey - 157.8 ft.

by **mdvaden** » Tue Nov 27, 2012 9:30 pm

Hi Zane. Last trip down I was sizing up more of the area, and my observation was that finding something taller than 157.8 ft. in Humboldt was probably going to be a more challenging task than expected. On that visit, I hoped to maybe even find something near that height, but learned that even 130 feet is not easy to breach.

I drove across from the Eel River and looked across at some really tall maples and other deciduous trees. Against the redwoods, and anchored just above the river bank, I'd swear they might be like 140 feet to 150 feet. But the laser said they were just 100 footers. That was surprising. Those were about 600 feet away from me on the opposite side of the river.

Did find a 143 foot bigleaf maple though, also in the midst of coast redwoods. So I'm thinking more and more that record bigleaf maples will end up being in the midst of coast redwoods.

Checked out Tall Trees Grove too, and nothing among the giant maples there came close. Most of those biggies are on the edge of the redwoods and in the 80 foot tall range. Big yes ... tall no.

This is on species that I'm really interested to learn which is the tallest specimen found in each of the redwood parks. The last leaves were dropping recently, so I'm guessing maples may be a tough hunt in winter. I couldn't even spot a taller leader on Humboldt Honey even with a better window and autumn color. Leaves fell off the tip I hit last time and it couldn't be spotted.

So any maple in the next few months would be purely an incidental find. I'm planning no major maple searching until leaves fully emerge again in spring to get the most evidence displayed overhead.

M. D. Vaden of Oregon

Hello from Cincinnati, Ohio

by **pitsandmounds** » Sun Nov 25, 2012 4:44 pm

Hi All!

I'm really enjoying the site and I think I'll be spending a lot more time browsing through more topics.

I grew up in a small town and had complete freedom to explore my surroundings, which fostered my love for exploring new areas and becoming familiar with the natural environment. Today I make a living in the investment world, but still find time to get out and enjoy the gifts of conservation that so many have given. I hope that someday, I too will find some way to make a meaningful contribution.

Over the last few years, I've become more aware of Old Growth Forests and tree identification in general, beyond my current location near the Little Miami River. I've visited old growth forests in OH, KY, PA, IN, IL, WI, TN, and NC. Check out my youtube page if you'd like to see what I've been up to . . . http://www.youtube.com/user/pitsandmounds. Some of my favorite books are Old Growth in the East, A Survey, Among the Ancients, and Ancient Forests of the Northeast (thank you Robert Leverett!).

The idea of tree measurement is interesting. Are there any pages that show some of the basics for a beginner?

Thanks,
Matt

Tallest Eucalypts in Santa Cruz County

by **yofoghorn** » Tue Nov 27, 2012 2:13 pm

The tallest hardwoods in North America are the *Eucalyptus globulus* located in California. The tallest on this list of groves I discovered is not the tallest eucalypt in North America or the Northern or Western Hemispheres, for that matter. The tallest eucalypt in the Northern and Western Hemispheres is a tree on Santa Cruz Island, part of the Channel Islands in Southern California. This tree was last measured to be 246.2 feet (75 meters) tall. For everyone's information, the tallest eucalypt in Europe, a *Eucalyptus diversicolor*, stands 236.2 feet (72 meters) in height. The tallest eucalypt in Northern California is the 241.2-foot (73.5-meter) *Eucalyptus globulus* that I discovered in December 2011. It was recently measured, on November 20, 2012, to be 241.27 feet tall (73.53 meters), using a tripod-mounted Impulse 200 LR and prism. To be thorough, in the Southern Hemisphere, the tallest eucalypt in the world is the *Eucalyptus regnans*, last measured at 99.6 meters (326.7 feet) in Tasmania, Australia. The tallest tree in Africa is a *Eucalyptus saligna* at 79 meters (259 feet), though a tree in the area, which fell in 2006, was 81.5 meters (267.3 feet). To be clear, in the Northern Hemisphere, the tallest angiosperm is not a eucalypt. It is a *Shorea faguetiana* in Borneo that measures 88.1 meters (289.0 feet) tall.

Eucalyptus globulus Groves in Santa Cruz County* (as measured by laser rangefinder) - 200'+
Height (ft.), DBH (ft.)
241.27', 5.17'
235.67', 4.25'
232.76'
228.8'
219.4'
208.0', 4.78'
206.7'
204'
203.5', 6.34' *

*tallest known grove in Santa Clara County (to the north of Santa Cruz County)

As a note, in 2012, the Santa Cruz Island *Eucalyptus globulus* (the tallest eucalypt outside of the Australian mainland, Tasmania, and Africa) was scheduled to be cut down because it was a non-native species. This was revoked recently due to a lack of governmental funds. However, if this tree gets cut, then the tallest known eucalypt in the Northern Hemisphere will be the tallest I found in Santa Cruz County, California. The tallest tree on this list is not right next to a road and will most likely not be cut down anytime soon. Based on its smaller DBH and the availability of water in the area, I believe that this tree will grow quite rapidly in the next few years.

Zane J. Moore

Welcome to the WNTS (Re: Skull Valley Cottonwood, etc., AZ)

by **Don** » Wed Nov 28, 2012 6:50 pm

Eric
Welcome to the Southwest, I hope you'll take advantage of the opportunity to contribute to ENTS' (Eastern Native Tree Society) sibling WNTS (Western Native Tree Society), we're much newer than ENTS and reaallly encourage new members, we need you all!

While I haven't looked into the 'calculator' apps of the Smartphones, I have explored other aspects of the iPhone (currently using a 4S model) that make it an interesting field candidate.

First, the iPhone has had, and currently has a calculator...when viewed vertically, it is the basic arithmetic calculator (add, subtract, multiply, divide), but when it is held horizontally, a rather fully featured trig calculator displays (also squares, square routes, y to the x and y to the x route) and can be used for the sine-sine method successfully.

Second, the iPhone has an app available called "Clinometer" which I have been working with and feel it will MATCH OR EXCEED ANY other

available handheld clinometer for accuracy. It needs only a sighting mechanism/device.

Finally, the mechanism/device I've been working with to really bring it in to its own is the addition of a rather small telescope or macroscope, for a sighting device. I've located a rudimentary 'telescope' with 8x and focusing objective, but lacks the cross hairs. And a satisfactory means of attaching to the iPhone. The latest version of the Clinometer app includes a verbal readout of the angle (can be percent or degrees, an array of colors, and other controls). Advantages include easily pocket-able, many helpful apps, tunes, internet and phone where signals are accessible, reflective surface for improved laser reflection. Disadvantages include initial cost if solely used as clinometer, not waterproof (although Otter cases and other waterproof cases are available), it's slim elegant finish can be difficult to handle.
I'd be interested in your SmartPhone findings!

-Don

By the way, we lived in Flagstaff until 2007 when I retired from the Grand Canyon National Park, officed up on N. San Francisco Street. Great place to live, betting you've had more snow than we have (Anchorage Alaska) this Fall !

Mt. Logan Natural Area

by **djluthringer** » Thu Nov 29, 2012 10:34 am

Folks, Finally getting back to a little data entry. The following is a brief overview of Mt. Logan Natural Area in Bald Eagle State Forest, Clinton County on 5/25/10. Mt. Logan Natural Area is located on Bald Eagle Mountain along a southerly ridge overlooking Lock Haven.

To date, I've catalogued a minimum of 7 acres of medium to dwarf stature old growth E. hemlock on this site. The oldest core I pulled puts hemlock definitely into the 260 year class, with another that went to ~225 rings. I wouldn't be surprised if hemlock in the 300 year range exist here. I didn't core any chestnut oak, black gum, or black birch, but would expect these species to go over 200 years as well. A fire scar was noted on one old hemlock trunk.

No heights were taken, since I regretably FORGOT the laser in the car (hasn't been the first time I've done this). This is not a site you'll want to do any backtracking to get in to. It took me 45minutes to get from the parking area to the hill top. It's a two mile jaunt in, with a 1,028ft elevation change, see attached map. You first drop down 360ft, then go back up 668ft. It was toward the end of the day anyway, and getting heights would've just slowed me down. I'd estimate most trees here wouldn't go much over 60ft in height.

Mt. Logan Natural Area.pdf

I'd suggest a "park & walk" is the best way in. The road gets rough from my suggested parking spot, and only gets worse the further you get in. The map suggests an old jeep road, well, I guess you could call it that.

HWA was present, but noted no canopy die-off then. Since it's been over two years when I was there, the entire site would likely be more heavily affected now.

Here's the core stats:

E. hemlock 8.4ft CBH, ~225 rings at 5.1ft up to solid center, 41 07.668N x 77 21.997W
E. hemlock 5.8ft CBH, ~260 rings at 4ft up at 5.9ft circ, 41 07.683N x 77 21.959W

The rock outcrops here are worth the walk alone. Dwarf stature trees are the norm here. Again, no other cores were pulled, but would expect the majority of trees to go to the ~125 year age class, with select ancient chestnut oak, black gum, and black birch to go much older, pre-dating the logging boom of this area.

Dale Luthringer

Travelogue Part 6: the Perućica Forest Reserve

by **Michael J Spraggon** » Thu Nov 29, 2012 8:28 am

This week's installment is 2 days early as I'm away this weekend. It covers our most intensive tree hunting of the expedition in one of the finest pristine forests in Europe. Until next week...

Michael

Balkans 2012 Travelogue Part 6.docx

Balkans Tree Expedition Travelogue: Part 6 - the Perućica Forest Reserve

Day 10 continued: Sutjeska National Park.

Back in Bosnia once more, we arrive in Tjentište on June 28th, the 623rd anniversary of the most important date in Serbian history: Vidovdan.

On June 28th 1389 at the epic battle of Kosovo, Saint Prince Lazar and the Serbian army (which included armies from Bosnia and part of what is now Croatia) fought the invading Ottomans led by Sultan Murad I in a fight that would see both leaders killed and massive losses of soldiers on both sides. There were no winners in this battle but for the small region of Serbia who had defended itself against the giant Ottoman Empire, a loss of life on this scale was a devastating blow. This moment is thought of as the beginning of the on-going fight for Serbian independence, a fight which continued for five centuries. The sacrifices made at this battle and the legends that grew around it have become part of Serbian culture and the same unbreakable spirit which enabled them to defend their independence against a much larger oppressor remains to this day in the Serbian consciousness.

As we drive along the valley between steep forested slopes what strikes me is that there are very few buildings and even fewer people around. As we near our destination we pass a deserted triangular building with a glass front, mostly intact but with some broken or boarded-up panels. Jeroen says that this was the visitor centre when he came here in 1976 and 1985.

We pull up outside Hotel Mladost, another sloping modernist building in the old Communist style, run by the Sutjeska National Park. Unlike the similarly styled Hotel Zabljak in Durmitor, this building is far less obtrusive against the backdrop of the steep, forested hillsides. Apart from an elderly lady who is watching us from one of the balconies as we pull our packs out of the car, the hotel appears to be empty. The reception area has some 70's style seating in the far corner and on the walls, in contrast to the sparse décor, there are poster-sized photographs of beautiful natural scenes from the park. One recurring image is that of a huge waterfall plunging hundreds of feet from amongst the trees.
Our rooms are on the third floor and tucked under the sloping roof, each with a large skylight. I soon join the handle of this skylight to the wardrobe near the door with a length of my tree-climbing throwline to make a Heath Robinson-style washing line as I am again running out of clean clothes. I have a shower before dinner. The water is slightly brown and there is no hot water. I decide that the best (and most cowardly) way to proceed is to apply the soap first and then quickly rinse it off in one quick blast, shrieking like I'm on a rollercoaster – I'm such a wuss!

On the way down to the restaurant we ask the man on reception about the water: he is confident it will be fixed by tomorrow. We order Wiener schnitzels and the local pivo (beer). Both are very good and the waiter is friendly (as was the man at reception). Maybe Hotel Mladost isn't as austere as my first impressions had led me to believe. Afterwards I retire to my room for an early night but end up watching the film footage Jeroen has taken of my climb of Sgerm Spruce. It was little more than a week ago but it seems like last year.

Day 11

Kouta says he is feeling very excited this morning. While researching this trip, he had found a report from 1954 by the Swiss ecologist Hans Leibendgut of a 63m (207ft) tall Norway spruce growing in the Perućica Forest Reserve, where we will be surveying over the next two days. There are lots of uncertainties though: we don't know his measuring methods or the exact location of the tree or if it is still standing after 58 years. If we do find the tree and it is 63m tall (or even taller by now) then it will be a monumental find, surpassing the current tallest Norway spruce in the world, the Sgerm spruce, which I climbed and measured only 9 days ago. I will definitely have to climb this one with a tape!

The national park is sending a guide to meet us at 08:00 in the hotel foyer. Vladimir, or Vlado for short, is the ranger for all 1434 hectares of the Perućica virgin forest reserve, and one of just 10 rangers covering the entire national park. He is, I think, in his late twenties, the perfect stereotype of the strong, physically robust, laconic Serb. Unlike many of his compatriots, though, he doesn't smoke. He speaks only a little English and tells us that Miriana, our translator in our communications with the park so far, is on holiday. Before driving to the Forest Reserve, we go to the National Park Office to meet Mr Zoran Čančar, the Director of the Sutjeska National Park. Vlado shows us into the foyer. There is a row of photographs above a table. Each one is of an employee of the park who was killed in the Bosnian War 1992-95.

As we wait a constant stream of people come and go from the Directors office -he is obviously a very busy man. Finally we are shown in. Mr Čančar enters from a side door. He has a brisk intelligent manner and speaks to us via one of the attendant staff who can speak fairly good English. Our spokesman, Jeroen explains the purpose of our trip and we tell him about Professor Leibendgut's report of the 63m spruce. Mr Čančar has not seen this tree but draws on a map some possible locations of the tree. Then on a blank sheet of paper he draws two long triangles and then a third triangle at right angles to the other two, before writing numbers beside them. Finally we realise what these hieroglyphics mean: they are the Three Sisters, the tallest known trees in Perućica. Two are still standing but the largest of the three has fallen and is decaying. The second sister was measured some time ago at 54 metres tall but the fallen sister was measured long ago at 62 metres. Could this have been Leibendgut's tree?

The three of us and Vlado drive up the bumpy track which climbs steeply for a couple of miles up to a parking area high up on the ridge at Dragos Sedlo. The first place Vlado shows us is a viewpoint from the near vertical hillside, looking out through black pines and beech across the steep-sided Perućica valley in the morning sunlight. There, far below on the opposite side of the valley is the 75m (250 ft) Skakavac waterfall, which we saw in the pictures by the hotel reception.

The spectacular Perućica valley and the Skakavac waterfall (centre). L to R: Vlado, J, K

One of the mountains in this panorama is the Maglić massif consists of 2 summits, each in a different country. Veliki Maglić is the highest peak in Bosnia Herzegovina at 2386m, and Crnogorski Maglić on the Montenegrin side is just 2 metres higher. Vlado explains that every year hundreds of Serbs from several countries make the steep and difficult ascent of Maglić on the anniversary of Vidovdan. There will be many people on the mountain making this pilgrimage as we speak.

After taking us to a water source to refill our bottles (it's surprisingly hot this high up), Vlado leads us down the hillside. The forest here is a mixture of beech interspersed with silver fir and to a lesser extent Norway spruce. Apart from fallen trunks and the steepness of the slope, the undergrowth is sparse and the going is easier than in Biogradska Gora. Soon Vlado points out two tall trees close together and a huge rotting trunk lying beside them: they are the Three Sisters.

The fallen trunk is clearly the thickest of the three. Kouta measures the two standing Sisters. One is only 47m tall and the other, which was reportedly 54m tall, has died back to 49.5m. The girths were 4.34m and 4.61m respectively. There were some other trees we had seen which looked like they could actually be bigger than the two remaining Sisters and we will measure these and others as we move further along the hillside after lunch.

Vlado and Jeroen measuring one of the remaining Three Sisters.

Picnicking on a fallen tree, we are becoming increasingly aware of the cloud of flies who have for some reason adopted Kouta as their leader. He was already popular with their Montenegrin relatives in Biogradska Gora but here he has achieved an almost iconic status and we make him sit on his own while we eat. Kouta has a theory that they might be attracted by the face moisturiser he uses but I think he's just being modest.

During the afternoon we measure one spruce at 52.0m and another at 49m with a huge girth of 5.34 metres. Perhaps even more surprisingly, I find a thin silver fir of 52.9m (174ft) and another of 52.0m with a girth of 5.26m – I thought silver firs were supposed to smaller than Norway spruces!

The largest-girthed spruce we found in Perućica (5.34m).

By the time we get back to the car it is already past the time that Vlado should have been back at Tjentište. The drive back down the track into the valley seems to go on forever and incredibly I manage to fall asleep as the car rattles and bounces its way down the track. We decide to travel in Vlado's company 4x4 tomorrow, as Kouta's car still has to get us back to Slovenia.

We arrive back at the hotel at about 5:30. Vlado has called his wife to say he would be late but we all feel slightly guilty for having kept him from his domestic responsibilities, that is, until he says he's going to stop for a beer on the way home. I'm not sure if he's joking either.

There has been a lot of activity at Hotel Mladost today: the water is off and is being fixed at the

moment: it will be back on later this evening, and a team of men have almost finished building a wooden pergola covering the dining terrace on the front of the hotel, which this morning had not even been started. Over our pivos on the side terrace, J, K and I watch one of the workmen walking casually across the wooden beams on the edge of the structure, 20 feet above the lawn carrying an electric saw which he is using to cut the ends off the new beams. He would make a good tree climber.

We reflect on the day's tree hunting. Whilst we have yet to see anything like the 63 metre spruce that Leibendgut had written about, so far in the small area we have surveyed high up on the hillside we have already measured spruce and even some firs which were bigger than the remaining two of the Three Sisters, the biggest trees that the employees of the National Park were aware of up to now.

After dinner we go for a walk along the grassy flood plain beyond the hotel. Up on a hillside terrace is the Tjentište Monument – one of the stark, modernist sculptures commissioned by Tito in the 1960s and 70s. It resembles a pair of giant concrete angel's wings and commemorates the battle of Sutjeska, which took place here in June 1943. The German-led Axis, consisting of 127,000 troops and 300 aircraft, outnumbered the partisan Yugoslav National Liberation Army by nearly 6 to 1 and completely encircled them on the land between the Tara and Piva Rivers in an offensive lasting a month. Tito was leading the partisans and was himself nearly killed, sustaining an injury to the arm.

Against all odds, starving and short of supplies, the partisans managed to break out and push the Axis back across Eastern Bosnia, with the same determination as their ancestors had shown 554 years earlier at the Battle of Kosovo. Jeroen thinks that the monument may be abandoned now but I climb the steps onto the terrace and am pleasantly surprised to find the steps leading up to the monument covered with bouquets of flowers.

Art of the Tito era: the Tjentište Monument.

Back at the hotel the restaurant is empty now except for the hotel staff. They are glued to the television. There is another Wimbledon match on. This time it's Federer and he's having a nightmare in his 4th round match: down two sets and a break in the third. While J & K go to bed, I join them to watch the great man claw his way back. At two sets all I decide to get to bed. Good news: the water is back on and it's clear. The bad news: it's still cold – but I'm starting to enjoy the challenge!

Day 12

The workmen are arriving to finish the pergola as we eat breakfast. I get a text from my dad: Federer won.

After a much easier drive than yesterday up the long mountain track, thanks to Vlado's 4x4, we start as we had done yesterday morning: a visit to the water source and another, even more impressive viewpoint. Vlado points to a large white house at least a couple of miles up the valley. He says he can see Michelle Obama waving to us from the front lawn.

Today we set off in the opposite direction from the parking area, heading further up the valley to explore the area around the confluence of the Perućica and Prijevorski Rivers. A small path takes us down the hillside and we begin finding red ribbons tied to the branches of young beech trees. Someone has been marking their path, leaving a man-made trail in this

otherwise pristine forest. Vlado is visibly annoyed. "If we catch up with them we tie THEM to a tree" he says, taking out a hunting knife and cutting the ribbon free. We continue descending the path and I help Vlado remove more ribbons as we go.

The slope levels out for a moment and Vlado points to an almost imperceptible disturbance in the undergrowth, and some mature cherry trees, which are definitely not indigenous to this pristine forest. This was once the humble dwelling of Drago, the old man after whom Dragos Sedlo, where we parked, was named. Jeroen remembers seeing the remains of this hut in 1985. It was long abandoned then but more of it remained. Now, nature has reclaimed this human's attempt to create order and has all but erased any traces of Drago, except for the living evidence – the cherry trees which would have been the old man's garden.

Vlado shows us some scratch marks on a trunk by the path. These, he says, were made by a bear. He estimates there are 100 bears and 40 wolves in the Sutjeska National Park but they would most likely stay out of our way so these marks are all we are likely to see.

Kouta begins to stretch ahead, aware of the fact that our visit will soon be over with so much more forest still to survey. Jeroen comes over to me and points to a fat and very tall trunk below us, far thicker and taller than the lesser trees around it. I too have been looking at this tree. It surpasses anything we've seen so far and I think of Leibendgut's 63m spruce again. Jeroen measures it with the laser: 56.6m (186ft). However the top has been broken off and this tree would have certainly been over 60m originally. We scramble down the slope to measure its girth: 5.28m. This is now the largest tree known in Perućica at the moment in terms of height and volume.

Jeroen beside the largest known tree in Perućica (56.6m x 5.28m).

We catch up with Kouta again and cross the Perućica River, precariously on stepping stones. I untie the last of the red ribbons from a beech on the opposite bank. The path levels out soon afterwards and we sit down for lunch. As an experiment, Kouta has not put any moisturiser on today. The result: no difference whatsoever. All day he has been walking along with a halo of winged admirers, like a cartoon character in a daze after someone has dropped an anvil on his head. Again we make the Bluebottle King dine alone.

After lunch we are finding many spruces between 52m and 55m. Tree hunting on slopes this steep is surprisingly energetic as every time we measure a tree from the path one of us has to scramble down the hillside to help the man with the laser sight the base. He then does the same to measure the girth and take a photo of the discoverer by the trunk and then we both scramble back up again through fallen branches and trunks to the best vantage point to spot the next giant. Kouta teaches Vlado how to use the laser rangefinder and soon he's measuring everything in sight. I can already see Jeroen and Kouta's addiction to lasering developing in him! This is his office and thanks to our rangefinders we are finding trees bigger and taller than anyone had previously known.

On the land between the Perućica and Prijevorski Rivers we find the tallest trees so far: the tallest fir (54.0m) and tallest spruce (57.4m) growing close

together. The spruce is exceptionally thin with a diameter of little over a metre. Jeroen also finds the tallest beech which is very well spotted, the top being almost impossible to pick out amongst a mosaic of leaves, lit from behind. It is 44.2m (145ft) tall, the 3rd tallest beech measured in Europe and nearly half as tall again as the beeches in the sprawling hillsides of the Chiltern Hills where I grew up and learned my climbing skills.

Kouta decides to head down the hillside to see what the land lower down holds. This will give us an idea of what we might find in the rest of the reserve in future visits. The rest of us cross the Prijevorski River on fallen trunks and find more trees around 55m tall.

I drop back and find a tall scraggly tree of 56.5m, the third tallest in Perućica so far beside a huge broken trunk, balancing 15 feet off the ground on its branches and spot another 56m tree upstream as I cross a small tributary. Vlado has taken Jeroen futher uphill to see a tall stand of beeches. They are now out of sight. I make a high pitched "woo hoo!" and seconds later hear a copycat reply from Jeroen which leads me to them. The beech trees are impressive, again much taller than the ones in the Chiltern Hills but not as tall as the tallest we found earlier.

We have now run out of time and have to turn back. We meet Kouta again. He hasn't found a taller spruce or fir further down the hillside but has found a very impressive sycamore maple of 39.0m.

Walking back along the path between the two rivers I get a phone call from my dad. My neighbour's wife has gone into labour and they also mentioned that some men arrived in a white van outside my house yesterday and had the patio doors open! Fearing I had been burgled I ask my dad to find out what has happened. During the next 20 minutes all kinds of scenarios run through my mind but there's nothing I can do from here. Finally my dad calls back: It was a carpenter who had met my landlord to work on the French doors. My landlord had emailed me about it but I had no way of reading it out here. I can relax again!

As we get back to the car, Kouta's popularity with the flies of Perućica is at an all-time high. The rest of us get in the car and in an attempt to lose his winged entourage, Kouta takes a run-up at the vehicle from several metres away, jumping in and slamming the door behind him. Only a few of his more dedicated fans have managed to keep up with him and we drive off, listening to Serbian folk music accompanied by the drone of tiny wings.

Our two days spent at Perućica seem to have lasted a week. We never did find Leibendgut's legendary 63m spruce and I didn't get to climb anything – there was far too much ground to cover for that. But what we did discover was that there are trees here bigger and taller than anyone had previously thought and we've covered only a tiny fraction of the reserve.

A giant double-trunked, 56.35 meters tall, Norway spruce I found on day 2.

Back at the Hotel Mladost for the third and final time, we buy Vlado a well-deserved pivo. He has been a brilliant guide and hopefully our discoveries will also be of some benefit to the National Park. This evening the hotel, which has been empty so far, is packed with people of all ages, all smartly dressed. The celebration resembles a wedding reception. A large, kind-looking man in his 60's with an air of authority about him is sitting at the table beside us signing books beside a young boy who I think is his grandson. People are coming up to him and shaking hands or hugging him with affection.

He turns to me and begins talking passionately about the book. Unable to understand a word he is saying but not wanting to interrupt, I gesture awkwardly to Vlado, who with the help of Kouta explains to me that this man was a former police officer who has written a book of twelve poems. During the Bosnian War supplies to the local hospital were cut off and the baby care unit ran out of oxygen. Twelve babies died. Each poem in the book is dedicated to one of those babies. Some girls in their late teens arrive outside the hotel. Had the twelve babies lived they would have been about the same age today. Now I understand the emotion and respect everyone is showing to the author.

My impressions of Sutjeska National Park are of a majestic, unspoiled wilderness, steeped in history and with an overwhelming scale and beauty…but with no one to see it. There have been very few tourists since the war and consequently there is no money, but the employees of the park and the hotel are working hard to restore everything to the way it was. I hope that soon tourists will once again come to experience some of the most impressive virgin forest in Europe. As a climber, I would quite like to come back and climb Maglić…

Michael J. Spraggon

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The Perućica Forest reserve in Bosnia Herzegovina

by **Jeroen Philippona** » Thu Nov 29, 2012 7:30 pm

Perućica virgin forest reserve in Sutjeska National Park

In the National Park »Sutjeska« (17,250 ha) the strict forest reserve »Perućica« (1,434 ha) is located. Sutjeska can be found in the southern Dinaric Mountains in Bosnia and Herzegovina, near the border with Montenegro. In this mountainous area altitudes range from 500 m in the Sutjeska river valley to the top of Mount Maglic, 2386 m, the highest peak in Bosnia and Herzegovina. The climate is a mixture of Mediterranean and continental, with high precipitation of 1400 - 2000 mm, depending on altitude and exposition. The Perućica forest reserve mainly lies in the Perućica river basin at the NW slopes of Mount Maglic, between the Sutjeska Canyon at 600 and 1800 m.a.s.l. near Prijevor. Geology is dominated by limestone on the slopes and cliffs surrounding the reserve and acidic sandstone and shale in the central area. Soils are also diverse and may be derived from a mixture of parent materials, especially were calcareous soils have eroded down slopes. Depending on altitude, slope position and soil conditions different forest associations have developed, different forest associations developed here (more than twenty), ranging from Carpinetum orientalis to Pinetum mughi.

In the lower parts of the reserve, below the Skakavac waterfall, the terrain is very steep. Here at altitudes below 1000 m grow forests of more warmth loving broadleaved trees like eastern hornbeam (Carpinus orientalis), hop-hornbeam (Ostrya carpinifolia), Turkey oak (Quercus cerris), downy oak (Q. pubescens) and other oak species, silver lime and large leaved lime (Tilia tomentosa and T. platyphyllos), manna ash (Fraxinus ornus) and common whitebeam (Sorbus aria). Because of lack of

time and the steep terrain alas we did not visit this part of the reserve.

The largest and central part of the reserve, between 1000 and 1600 m.a.s.l. is covered by oldgrowth beech - fir forests, European beech (Fagus sylvatica) and European silver (Abies alba) here dominate heavily. Other species growing here are Norway spruce (Picea abies), sycamore maple (Acer pseudoplatanus), wych elm (Ulmus glabra), European ash (Fraxinus excelsior) and near rivers black alder (Alnus glutinosa). Parts of the forest with deep soils are very dense, with large canopy trees up to over 40 m (broadleaves) and 50 m (conifers) and diameters to over 1 meter. In Perućica the famous Swiss forest researcher Hans Leibundgut in 1954 found a Norway spruce of 63 m tall, the tallest reported of this species in Europe.
We concentrated on this part of the reserve as here most record heights could be expected.

At high outcrops and cliffs black pine (Pinus nigra) is the most important tree but also mountain pine (Pinus mugo) is present. More than 170 species of trees and shrubs and over 1,000 species of herbaceous plants have been registered in Perućica.

Perućica is allowed to enter with a guide only. In the reserve there are no landmines from the the Bosnian War, the only area where they may occur is the lower end of the reserve (in Sutjeska Canyon, near the road). We visited Perućica for two days, led by our guide Vlado (Vladimir) Lalović.

The first day we started with the magnificent view over the Perućica valley with its great forest and the Skakavac waterfal from a ridge near Dragos Sedlo.

View over the Perucica Forest from Dragos Sedlo to the east with Mount Maglic (left) and Skakavac waterfall (centre right).

Perucica forest overview from Dragos Sedlo to the south

The area southeast of Dragos Sedlo and just south of the forest road from Dragos Sedlo to Prijevor was appointed to us by Vlado as the part of the Perućica primeval forest with the largest and tallest trees and the highest volume of the stands, up to more than 1000 cubic metre per hectare.

The fir-spruce-beech forest along the road

At a small plot Leibundgut found even as much as 1870 m3/ha of living wood. This forest is dominated by silver fir. Also important are beech and Norway spruce.

Canopy of white fir, Norway spruce and beech along the forest road

Other tree species are scarce, we saw a few wych elms as well as sycamore maples along the road. In this part of the forest also stand the "Three Sisters", a group of Norway spruces said to be the largest and tallest trees in Perucica. Actually, the largest of the three had fallen several years ago. According to the director of the Sutjeska National Park, mr. Zoran Čančar, this tree formerly had a height of 62 m (203 ft) and a diameter of 1.7 m / 5.6 ft (girth 5.34 m / 17.5 ft).

Vlado at the fallen Sister, said to have been 62 m tall

The second tallest Sister had been measured in 2005 and then was 54 m tall with a dbh of 1.55 m. Mr. Čančar ensured us there were no silver firs in the Perucica forest of this size.

Kouta at the largest of the Three Sisters still standing

The top of the second Sister is now dead and we found the tree only 49.5 m tall with dbh of 1.47 m, but we found several other spruces as well as firs which were larger and taller than the Two Sisters. In this area we found a maximum height of 52.0 m for spruce and even 52.9 m for silver fir and girths up to 5.3 m (17.4 ft) for both species.

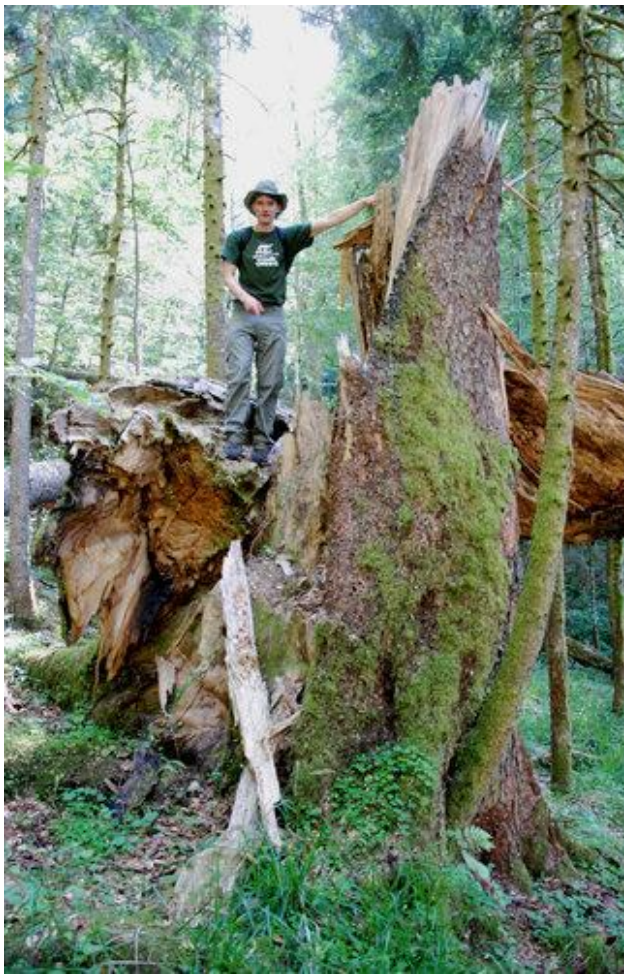
The largest silver fir we measured

Next day we went to the area near the confluence of the Perućica and Prijevorski river (1000 - 1100 m a.s.l.); there we found very tall trees of four species. Most slopes here are facing north to northwest and are relatively cool and moist. There are several sources and small rivers, so the trees have shelter and good water supply.

We found a maximum height of 57.4 m (188.3 ft) for Norway spruce (the second tallest of 56.6 m had a broken top and in the past it may have been a few meters taller) and 54.0 m (177.2 ft) for European silver fir. We think the greater hights here compared to the other area can be explained by the exposition: the area near the forest road is on a slope facing southwest to south while the area with the tallest trees is on a west to north facing slope. The tallest trees we find are nearly always on north facing slopes, while

these are cooler and less dry in summer. Additionally, the altitude (around 1400 m) of the area near the road is probably too high for record breaking trees.

In the same area we measured for beech heights up to 44.2 m (145 ft), for sycamore maple to 39 m (128 ft).



Michael at a broken double Norway spruce

Largest trees we saw were the second tallest Norway spruce of 56.6 m (185.7 ft) with cbh of 5.28 m (17.3 ft) and a European silver fir of 52.0 m (170.6 ft) with cbh of 5.26 m (17.26 ft).

Michael near the largest and 2nd tallest Norway spruce, once perhaps over 60 m

The volume of both trees we estimated as around 35 cubic m (over 1200 cubic feet).

The largest silver fir, 52 m tall, 5.26 m cbh

We had possibility to explore only a small part of the potential record tree groves, so it is possible larger and taller trees can be found in the forest. To find this out several days of exploration of the forests along the Perućica river and the Prijevorski river from 1600 m downwards to the Skakavac waterfall should be necessary. Very helpful should be if there was done LiDAR research from a small airplane.
A few small clearings are scattered in the forest where localized cutting and grazing occurred in the past, but the influence of these areas on the surrounding stands seems to be rather localized.

Jeroen, Kouta & Michael

Literature.
Leibundgut, H. (1982). Europäische Urwälder der Bergstufe. Dargestellt für Forstleute, Naturwissenschaftler und Freunde des Waldes. Verlag Paul Haupt, Bern und Stuttgart, ISBN 3-258-03166-5.
Nagel and Svoboda (2008). Gap disturbance regime in an old-growth Fagus–Abies forest in the Dinaric Mountains, Bosnia-Herzegovina.

Konrad Pintarič. Forestry and forest reserves in Bosnia and Herzegovina.

Perucica-Tree-list2012.doc

List of trees measured in Perucica forest reserve

Re: Small Sugar Maple rich NJ forest patch

by **greenent22** » Thu Nov 29, 2012 6:08 pm

Well one of the oaks, half of which fell onto a lawn, since it was at the border of the patch, got sawed so I got a ring count on this one (not as large as the other one) and it was not cut at the base so I'm sure some years are lost on it because of that. The count I got was about 15' up from the base of the tree, not sure how many years of ring count that means I missed out on, but I got 166 rings 15' above the base of the tree.

So as I've thought this patch is definitely not the 75-80' as some think from trees like this (I still think that many patches of trees in the rocky, nasty soil in upland parts of the Northeast are getting underestimated, people are too use to how quickly trees grown in wide open grass lawn parks, down South and in richer pockets of lowland soil) but at least 170 years could easily be 180 year old patch.

Extremely likely it is not an old-growth patch, unless I ever end up getting a count on one in the 250-350 year range (and the few very biggest I have not gotten a count on yet, but it still seems very unlikely) but very mature all the same, far older than most patches of trees left anywhere (and by anywhere I sadly mean anywhere, not just NJ). Assuming it doesn't all get blown down by then :(in another 100 years or so it might be classified as full on old-growth forest 100% if obviously not virgin forest.

No stumps apparent, lots of pit and mound, tons of rocks. Soils seem a bit thin. Deer have eaten lots of undergrowth. Sugar maple dominated by far, but with a mix of some other species here and there, beech, yellow-birch, one hemlock before it got knocked over 15+ years ago, at least one tulip, a few white ash, a couple ironwood, a few oaks and . Trees of all ages from a few years old to 170+.

I will put up more photos and point out which tree this oak was.

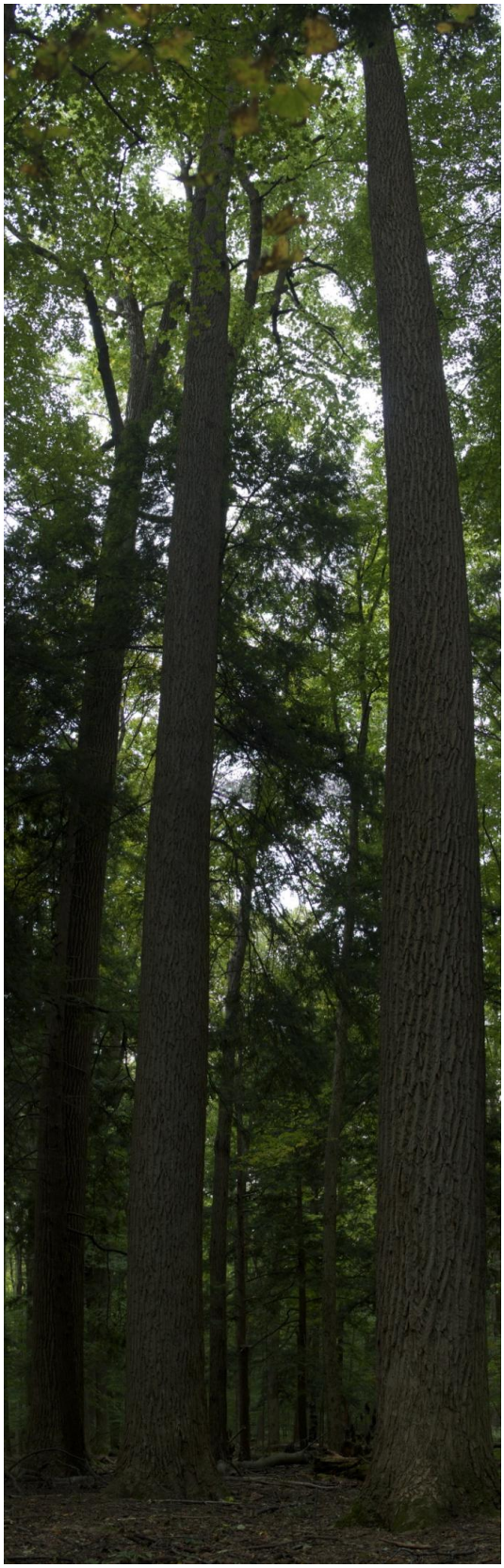
Larry Baum

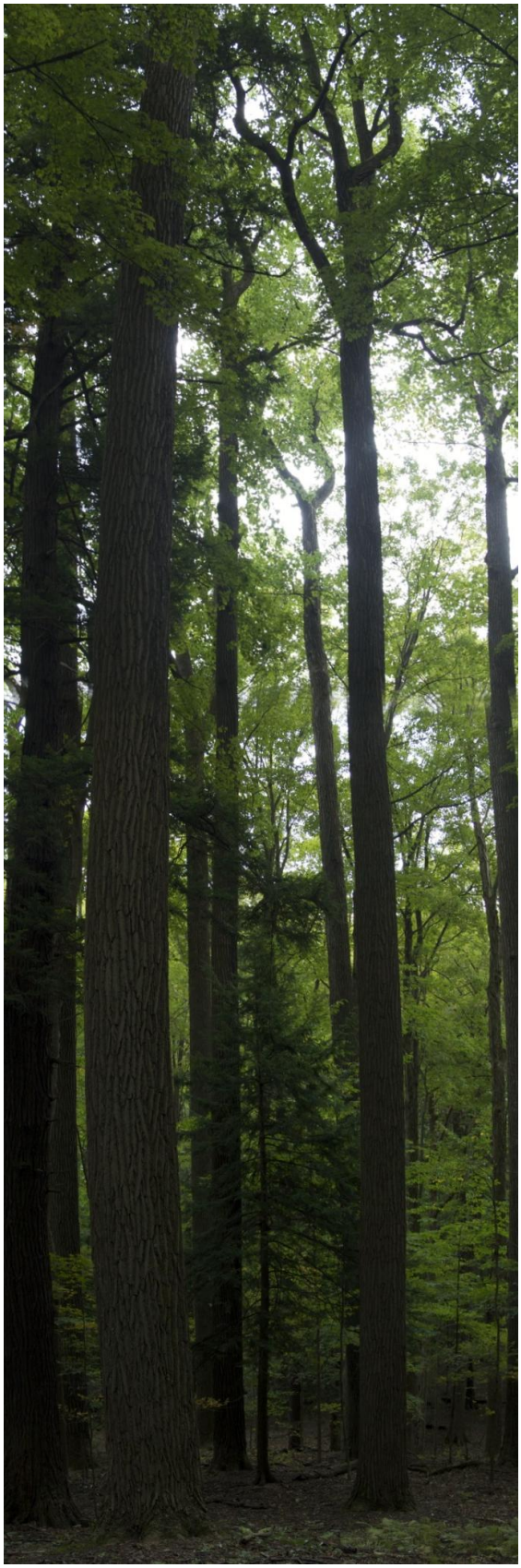
Re: Green Lakes State Park 4/24/2011

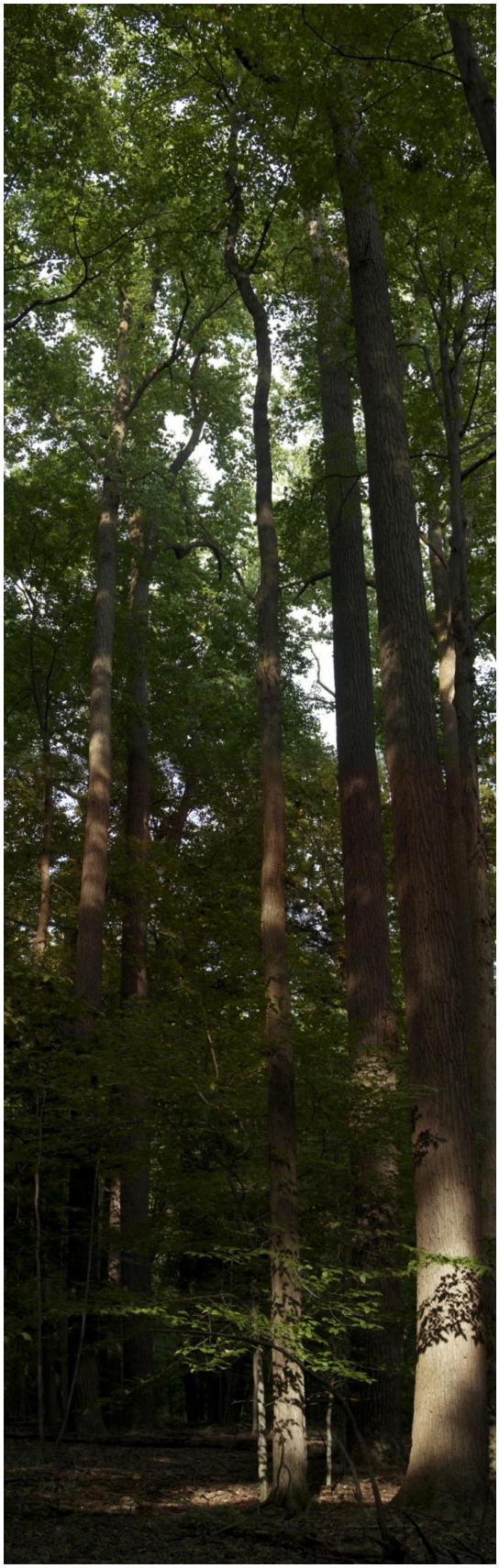
by **Rand** » Thu Nov 29, 2012 7:32 pm

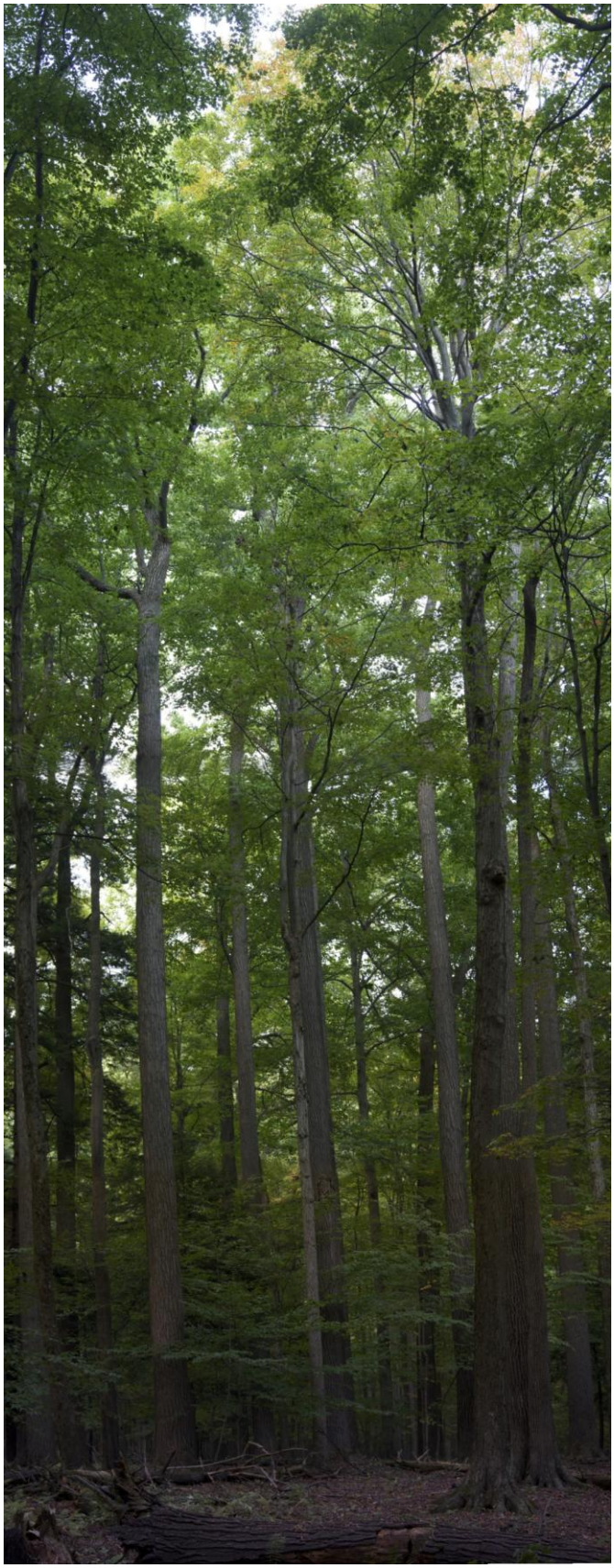
I got a couple of good shots of green lakes on September 21rst of this year. First, the obligatory Google Earth shot of the Lakes. The Tuliptree Cathedral is circled in red.

Rand Brown







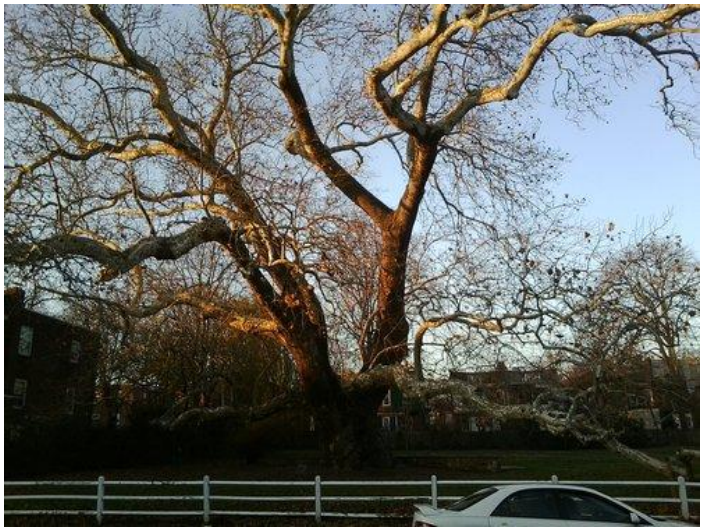


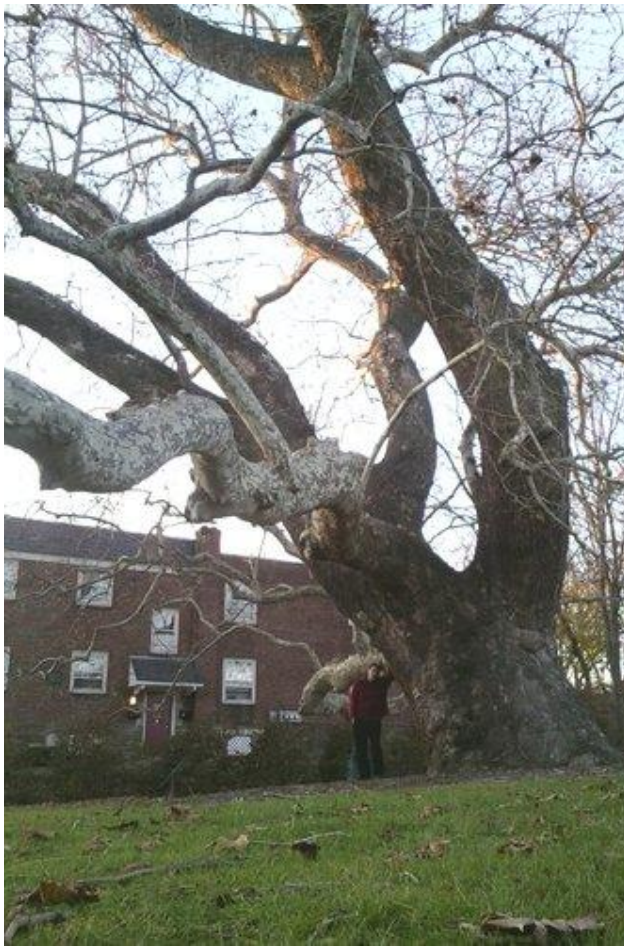
Historic Lansdowne Sycamore, a true beauty, PA

by **JohnnyDJersey** » Thu Nov 29, 2012 9:21 pm

I went and saw this tree today for the first time and it really is amazing. I've seen most of the largest Sycamores in PA and NJ and this is one of my top 3 favorites. . I wrapped a tape around it, 24'3" CBH.

John Harvey





No recognition for this old growth forest (patch) in NJ

by **JohnnyDJersey** » Thu Nov 29, 2012 9:44 pm

Its not really a forest, more like a patch of woods, but it holds quite a few old growth trees and never gets mentioned. Its the patch of woods behind the Wal-Mart in Deptford NJ. Below I'm attaching its largest trees with measurements. Worth a visit. A lot of big trees in a small area including the Clement Oak.

White Oak 20'1" CBH
Swamp Chestnut Oak 19'2" CBH
Southern Red Oak 17'0" CBH
Red Oak 13'5" CBH
Unidentified Tree over 17' CBH
and many old, large beech ect

Red Oak

Southern Red Oak

Broken old tree

Clement Oak (white oak) The Clement oak is a white oak, site of the first hot air baloon flight in America. Has a small plaque there. I do need to get a clinometer, I've been using the old ruler/distance trick to get estimates of height but not a very accurate method. The swamp white Oak is two stems I, I will post another pic from a different angle. Measurement was taken at 3.5' above ground I believe.

Swamp chestnut Oak

Another angle, Swamp Chestnut Oak. This was a tricky tree to measure because its on the edge of a drop off, I almost fell into the water below about 35 feet trying to wrap my tape around it.

Cathedral Pines Wisconsin

by **Larry Tucei** » Thu Nov 29, 2012 11:54 am

NTS, I traveled up to my annual hunting trip to northern Wisconsin on the 13 of November but this year I decided to do a little sightseeing. Once I got in to southern Wis., I turned northeast and went through Milwaukee, then stopped at Port Washington to see Lake Michigan and a Lighthouse. Next it was on to Lambeau Field in Green Bay. I then stopped at Crivitz Wis., a small town 20 miles from the U.P. The next morning it was on to the real purpose of my visit, the Cathedral Pines near Townsend Wis. One of our members Paul Jost from Wis., has reported on this grove of 200-400 year old White Pine, mixed with Hemlock and Red Pine back in 2010. His post inspired me to visit this one of a kind place.

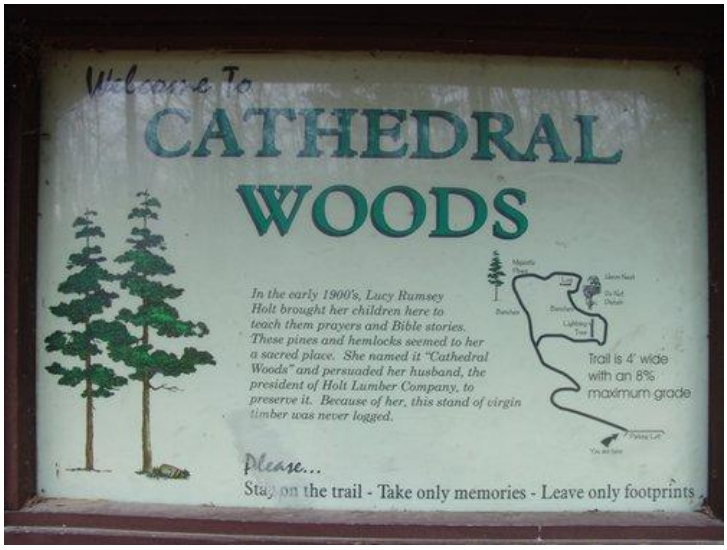
"On September 4, 2010, my wife, my son, and I visited the Cathedral Pines grove in the Nicolet National Forest near Lakewood in north eastern Wisconsin's Oconto County. I intended to re-measure the two tallest known eastern white pine trees in the grove. The area is a virgin grove that was set aside by the Holt and Balcom Logging Company around 1880 when Lucy Rumsey Holt, the wife of W.A. Holt, the company president, asked that the tract be spared so that she could continue to conduct bible study classes with her children there. Pines are now reported in the 200-400 year old range.

The grove is a part of a larger State Natural Area and has a popular hiking trail looping through it. It is the largest dense white pine grove in Wisconsin and is dominated by eastern white pine with many in the range of 9-10 feet in girth and 125-135 feet tall. There are some red pine to 90-100 feet tall and many hemlocks under 100 feet. The forest also contains a significant beech-maple-yellow birch component along with some red oak, aspen, as well as some other trees. The entire approximately 22 acre virgin pine grove is at an elevation of approximately 1340 feet, plus or minus 10 feet. With over 100 nests, a great blue heron rookery's droppings are killing off the taller trees on the highest ground but make for an enhanced experience during visits in May and June before the fledglings leave the nests in early July. It

is a nesting site for ovenbirds, blackburnian, magnolia, and pine warblers; the best time to visit for tall tree hunting is mid-October through the first week of May when the deciduous sub-canopy is not a visual obstacle. On the coldest winter days, visitors are virtually nonexistent while the grove effectively tames light winds so that the bitter temperatures are more tolerable."
http://dnr.wi.gov/Org/land/er/sna/index.asp?SNA=496
http://wpt.org/inwisconsin/onthetrail.cfm

I spent about 2 ½ hours at this fantastic place a must visit for all if in that area. I parked at the Trailhead and walked up onto the small hill of the largest White Pine grove that one could imagine. I measured several Whites to 120's – 130's, Hemlocks to 96' and Red Pine to 126'. Like Paul reported in his earlier post most Pines are in the 8'6"- 10' 4" CBH range with heights to 140'. It was such a beautiful serene place that I could have stayed there forever. The grove was located on and around two small hilltops with drainage on the west and northern edges. The two taller Whites are growing in the drainage just west of the first hillside. Wow was I excited when I shot straight up on the first one and got 150'. I then backed away and using the NTS measuring method I got a height of 154.8' on the first tree nearest the hill and 156.2' on the second tree which is leaning slightly to the east. Wow was it thrilling to measure White Pines with such height. The CBH were also impressive the first at 12' 2" and the second 10'. The larger Pines had the deeply furrowed bark characteristics and the first limbs were at over 100 feet above the ground. The temperature was in the mid 30's that morning with a light north wind and perfect for tree hunting. I took several photos on the hill of White Pine, Hemlock, and Red Pine. The last photos are of the two big boys.

Larry Tucei



9 hours of Sleep Relaxation Sounds of Allegheny Forest Night

by **edfrank** » Fri Nov 30, 2012 9:43 am

Published on Sep 10, 2012 by best333WillC

Sleep well 9 hours of Sounds from the Allegheny National Forest in Tidioute Pennsylvania.

http://www.youtube.com/watch?v=p2skv9kuzTw

Re: Cathedral Pines Wisconsin

by **DonCBragg** » Fri Nov 30, 2012 1:50 pm

I have visited Cathedral Pines for years--I think state law required foresters from Wisconsin to visit this stand of timber!! And Lambeau Field, too! The few remaining stands of old white pine helped me get interested in forestry as a career...as did pictures like the one I've attached to this message, which was apparently taken in Marathon County, Wisconsin, before 1900...

Virgin white pine, probably from Marathon County, Wisconsin

Don Bragg

Guilford Courthouse-Greensboro, NC

by **bbeduhn** » Fri Nov 30, 2012 5:18 pm

I'd visited the site before but just covered a small amount of it. I noticed some unbelievably tall Virginia pines so I had to measure further. Previously, a pure stand of VA pines averaged about 90' with two over 100'. This time, 100' was fairly common.

quercus alba white oak NLT 114'
quercus rubra red oak 112.0'
quercus x rubra/velotina red/blk oak 97.1'
quercus macrocarpa bur oak NLT 96'
platanus occidentalis sycamore 116.3'
110.8'
liquidambar styraciflua sweet gum NLT 114'
115.7'
fraxinus pennsylvanica green ash NLT 114'
carya ovata shagbark hickory NLT 108'
NLT 108'
carya glabra pignut hickory 119.2'
114.4'
liriodendron tulipfera tuliptree 133.5'
pinus strobus white pine 105.3' 105.2'
pinus taeda loblolly pine 116.1'
109.8' 107.9' 107.8'
pinus echinata shortleaf pine 106.8' 101.4'
100.4' 119.5' cbh ~9' this is potential state champ for points
pinus virginiana virginia pine 100.9'
102.5' 102.8' 102.9' 104.7' 111.0' 115.9'

Rucker 10 = 117.62' sycamore and sweet gum undoubtedly go higher so it may approach 120'

115.9' is the new state champ for height. State co-champs were discovered a couple of weeks ago, in Asheville by our Prez at 114.9' and along Lake Jocassee by me at 115.0'. This species is undermeasured. Greensboro won't hold the record for long.

Brian Beduhn

External Links:

Mountain Meadows Dwindling in Pacific Northwest, U.S. Due to Climate Change, Study Suggests
http://www.sciencedaily.com/releases/2012/11/121102205141.htm

A world of life in a single cubic foot
http://www.guardian.co.uk/science/2012/nov/11/world-in-cubic-foot-david-liittschwager

Antarctic lake find pushes known boundaries of what life can endure. Discovery of organisms in –13C waters under frozen surface could inform search for life on other worlds Ian Sample, science correspondent,The Guardian, Monday 26 November 2012,
http://www.guardian.co.uk/world/2012/nov/26/antarctic-lake-vida-find-life?fb=native&CMP=FBCNETTXT9038

American chestnut tree believed largest in Maine
http://www.sunjournal.com/news/oxford-hills/2012/11/21/american-chestnut-tree-believed-largest-maine/1281101

Doing Battle with Cedars (to benefit oaks) , NE
http://beneficiallandscapes.blogspot.com/2012/11/doing-battle-with-cedars-to-benefit-oaks.html

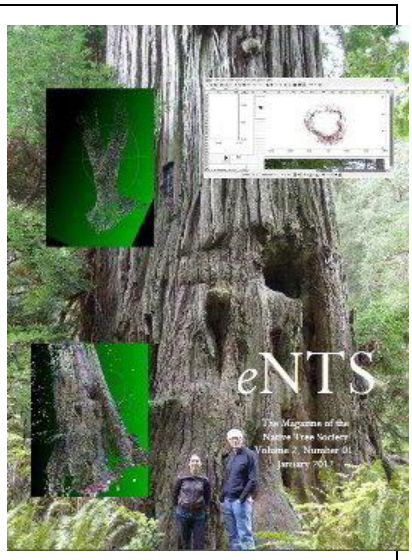
"Champion" trees archive in Oregon, by Archangel. Redwoods.
http://www.oregonlive.com/environment/index.ssf/2012/11/clones_of_ancient_redwoods_gia.html

Grand Canyon as Old as the Dinosaurs: Dates for Carving of Western Grand Canyon Pushed Back 60 Million Years
http://www.sciencedaily.com/releases/2012/11/121129143301.htm

Newly Discovered Chestnut in Hebron, Maine Is Tallest in the State, Possibly the East Coast
http://www.acf.org/newsletter11.21.12mainetree.php

9 hours of Sleep Relaxation Sounds of Allegheny Forest Night
http://www.youtube.com/watch?v=p2skv9kuzTw

Back Issues of *e*NTS: The Magazine of the Native Tree Society



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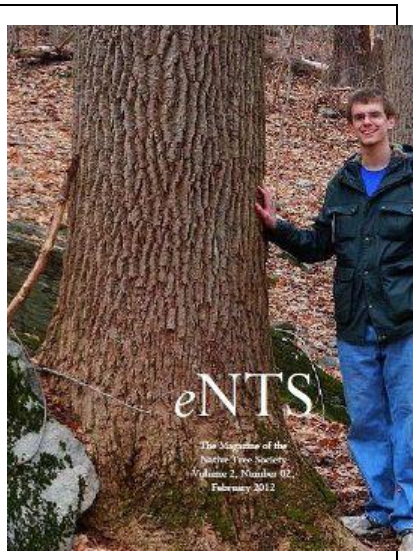

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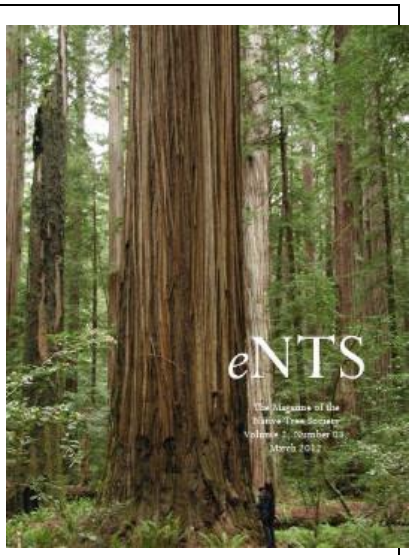

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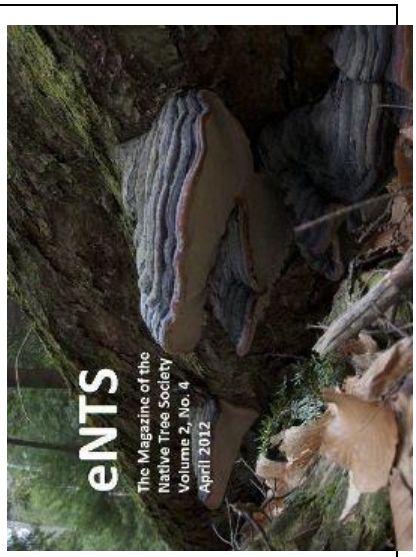

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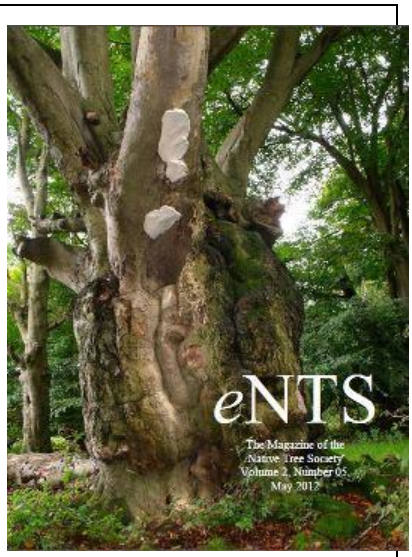

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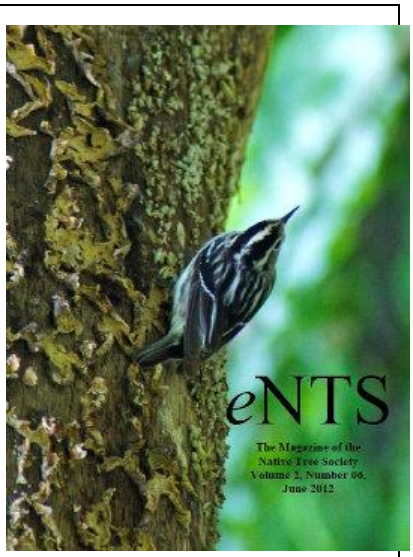
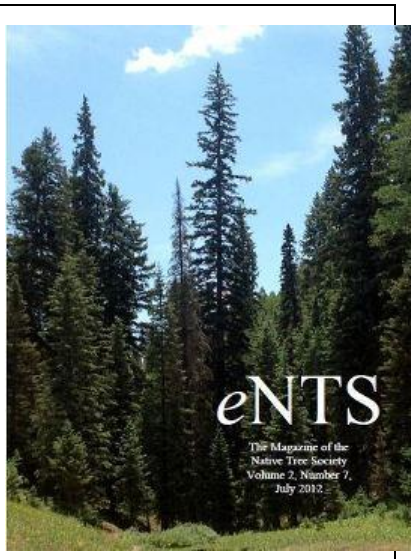


eNTS Magazine June 2012 8.7 MB



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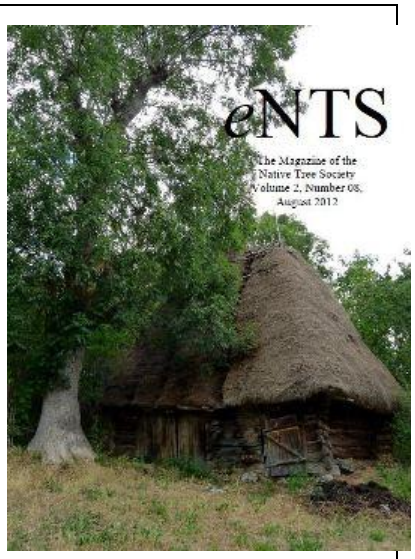

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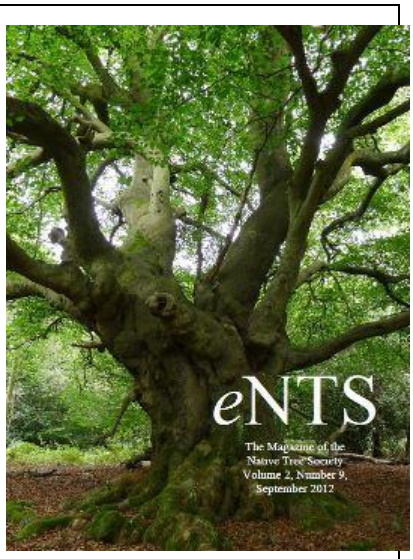

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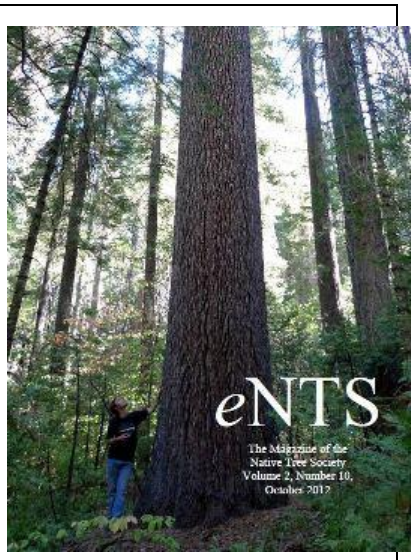

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2011

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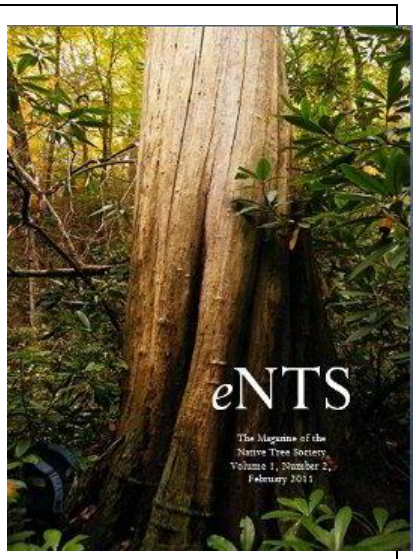

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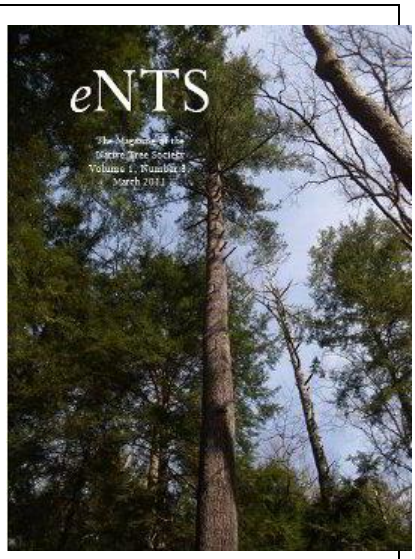

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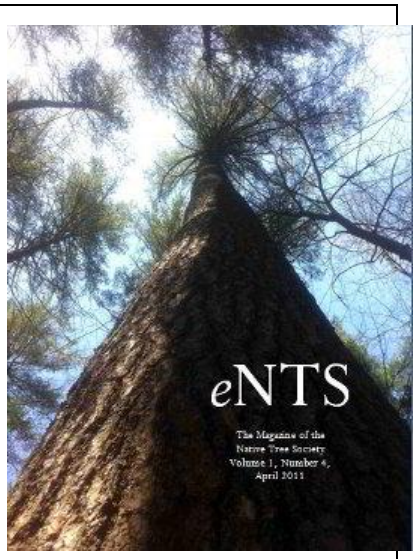

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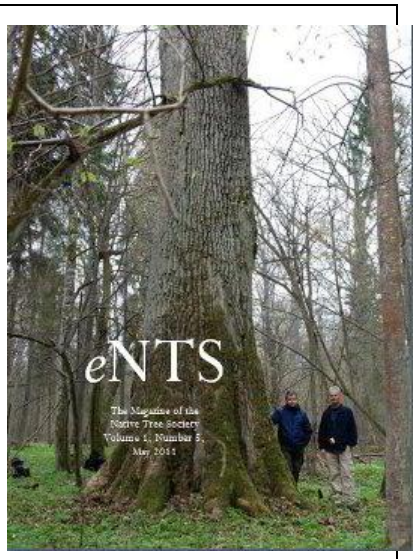

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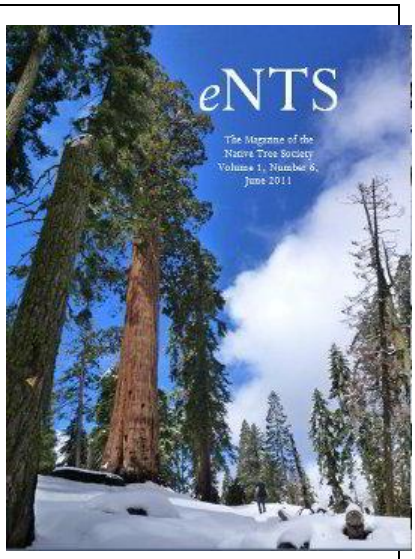

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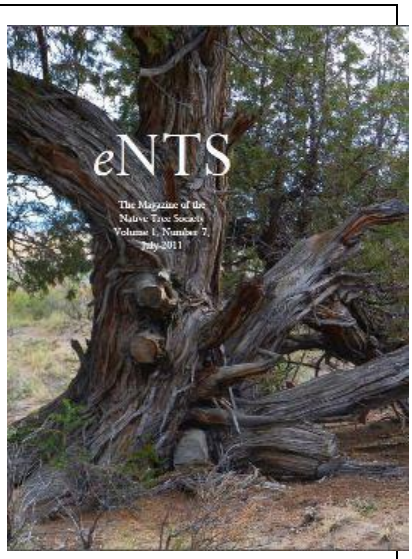

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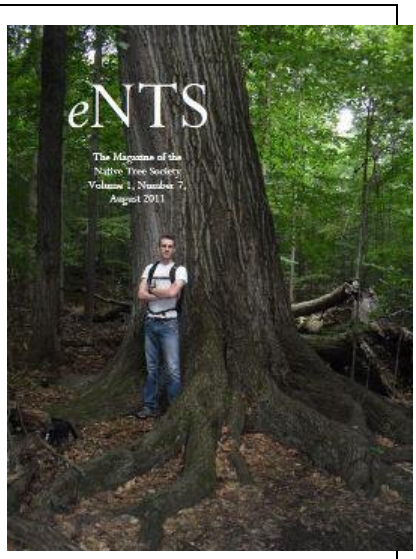

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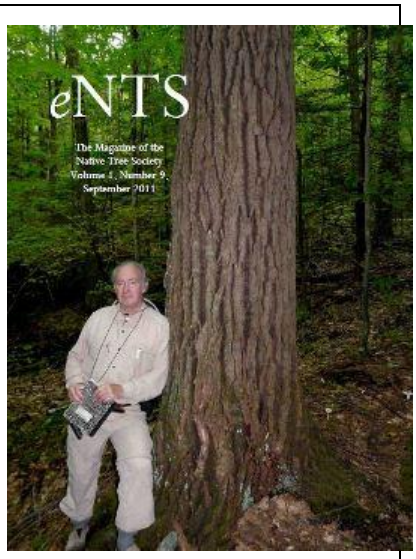

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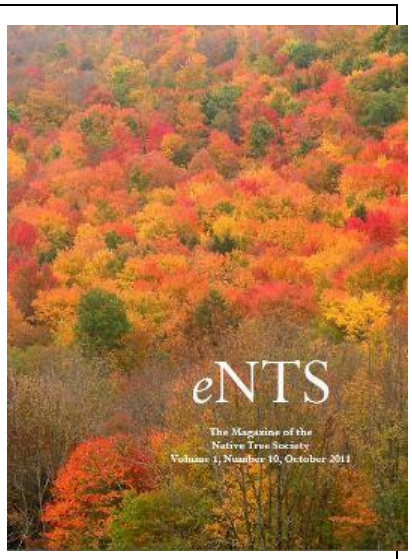

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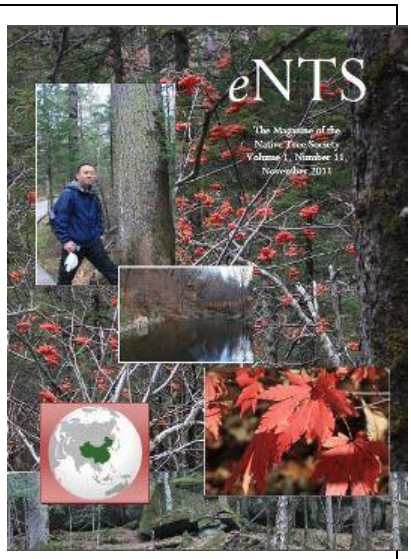

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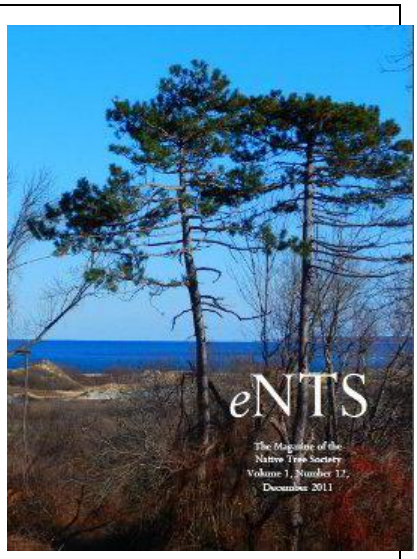

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About: *e*NTS: The Magazine of the Native Tree Society

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

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

Edward Frank – Editor-in-Chief