

White Pines on non-DCR Massachusetts Properties with big tree points of 290 or more							
Hgt	Girth	Spread	Points	Property	Name	Summary	
142.4	14.8	69	337	Howland Cemetery, Conway	Unnamed	Property	# >= 290
122.7	16.0	58	329	Howland Cemetery, Conway	Unnamed	Bryant	10
156.2	13.2	49	327	Ice Glen, Stockbridge	Ice Glen	Howland C.	2
128.0	15.4	50	325	Stanley Park, Westfield	Unnamed	Ice Glen	2
147.7	13.0	50	316	Jay Healy Farm, Shelburne, Falls	Unnamed	Healy Farm	2
141.5	13.3	50	314	Bryant Homestead, Cummington	Walt Whitman	Belchertown	1
106.0	16.0	55	312	Sheffield	Unnamed	Harvard Forest	1
140.1	13.1	50	310	Jay Healy Farm, Shelburne, Falls	Unnamed	Look Park	2
148.5	12.4	47	309	Ice Glen, Stockbridge	Monarch	Sheffield	1
150.1	12.1	46	307	Bryant Homestead, Cummington	Centaurion	Ransford Property	1
151.0	11.9	46	305	Bryant Homestead, Cummington	Below Maloof	Quabbin	1
151.8	11.4	48	301	Bryant Homestead, Cummington	Burl	Stanley park	1
150.8	11.5	47	301	Bryant Homestead, Cummington	Mary Davis	Total	24
152.0	11.4	44	300	Bryant Homestead, Cummington	Amy Beach		
154.7	11.1	47	300	Bryant Homestead, Cummington	Robert Frost		
150.0	11.5	45	299	Bryant Homestead, Cummington	Joan Maloof		
135.0	12.6	50	299	Belchertown	Belchertown Bully		
139.0	12.2	46	297	Harvard Forest, Petersham	Unnamed		
131.5	12.6	54	296	Bryant Homestead, Cummington	Wall		
118.0	13.7	55	296	Ransford	Rusty		
128.0	12.7	50	293	Look Park, NH	Unnamed		
157.7	10.3	46	293	Bryant Homestead, Cummington	Bryant		
122.5	13.1	50	292	Look Park, NH	Unnamed		
123.0	12.7	58	290	Quabbin	Spencer	Total	59
Test							
123.0	12.7	58	290				

## Burbank Park, Pittsfield, MA

by dbhguru » Sat Sep 22, 2012 8:36 pm

NTS,

Today Bart Bouricius and I participated in a bioblitz in Burbank Park, Pittsfield on Onota Lake. I had no idea of what to expect. I'll first let some images do the talking. We found a beautiful grove of white pines. I got them to 134.5 feet. I couldn't see the crowns very well because of the hardwood canopy. They may be taller.



Grove of white pines to 134.5 feet tall, possibly taller



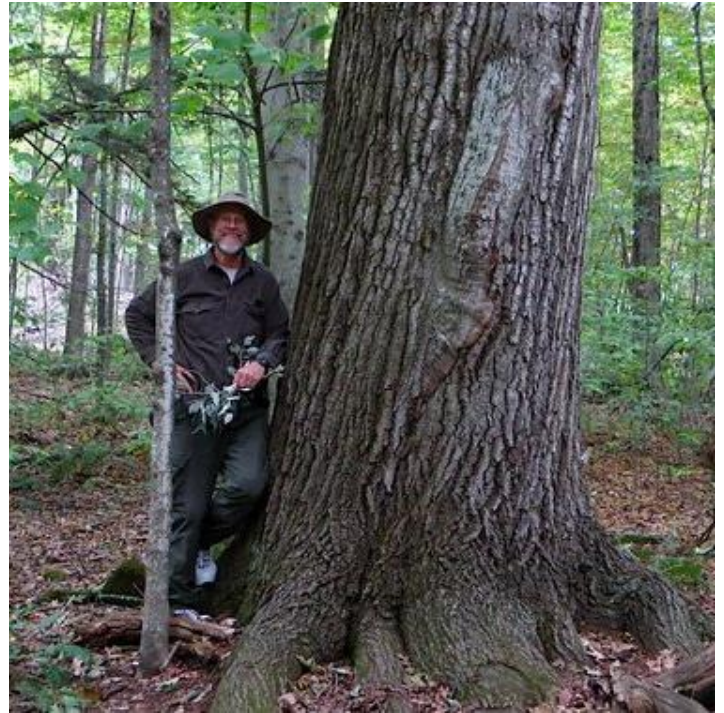
Black cherry anyone? This one is 106 feet tall, and is one of several in that height range.



This is a mystery tree. We couldn't positively identify it. Some kind of cherry, I think.



How about some really good-sized oaks? First a 12.2-foot girth oak.



A 16-foot girth NRO. Yeeehaaa. All are between 100 and 105 feet as best as I can determine at this point.



More oak beauties.





More white pines.



Some shots of the lake.





And one surprise.



We have lots of work to do in this park when the leaves fall. I'll be returning tomorrow to finish up. Another report to follow. I'm pooped. Going to hit the hay.

Robert T. Leverett



## [Re: Burbank Park, Pittsfield, MA](#)

by **dbhguru** » Sun Sep 23, 2012 4:06 pm

Will, Joe, The leaves appear too fat to be black birch. I couldn't retrieve any good leaves, but as they drop, I will get some. I see hundreds of old black birch and am very familiar with the bark patterns of the oldest trees. The trunk looks a little different, but not much. Looking into the canopy, the leaves are fatter than what are clearly recognizable as black birch in the area. There are non-native species in the area, e.g. white poplar.

Here are some more images of the park.



Robert T. Leverett

## **Re: New record European larch**

by **KoutaR** » Sun Sep 23, 2012 3:01 pm

*Chris Morris wrote: Very nice! Do you know the history (or current status) of the Grand Germans stand. If outside native range, I assume originally planted as a plantation, but later not logged? Could there be future logging or is it all "preserved" now?*

I discussed this with Karlheinz before replying. Yes, the larch forest was originally a plantation. Difference should be made between the whole 400 ha larch forest and the stand where we measured (probably less than 10 ha). The latter includes the Grand German stand and the neighboring seed collection site where the tallest trees are located. The local forestry officials know they may have the tallest European larches in the world and they are very proud of them. Thus, they won't certainly cut the tallest stand, although it is not legally protected. We don't know if larches have been felled in the past in this stand. Beeches have certainly been felled, you can see beech stumps in my photos, too. However, this all is not the case for the whole 400 ha forest. There is logging in other parts of the forest. We don't know if there are other super tall stands. We don't even know if the "55-meter" tree is located in the stand where we measured. Karlheinz will try to contact forestry authorities. He is also planning to go to measure there again.

KoutaRasanen

## **Re: New record European larch**

by **Karlheinz** » Thu Sep 27, 2012 10:04 am

Hello, greetings to the forum!

After contacting the forest office I can tell you now some more details: This one respectable tree, shown by the Photo with Kouta and me, is the most formidable larche in the area of Schlitz and in Hessen (federal state in Germany). The age is defined to 190 years. Local press in former years covered this tall

tree and made overdrawn statements and created the name "Grand German". Perhaps, when forest officer during a guided tour said: This is the "General Sherman" of Schlitzerland, local press coined the similar sounding phrase "Grand German". Across the years other papers and also the regional government press office reprinted and grow up the dimensions. Forestry Commission never corrected, but they did not spread or use this name and they will not name the tree. Confusion with other trees are excluded.

Aside from this overstatement it is undoubted that about 120 m behind this described big one there is the stand with the highest yet known larches of Germany. But they are not so eye-catching and do not stand so close to the way as this big one, its trunks are less thick and its crowns look less extended. The extremely height of this trees (by European standards) I only realized by measuring. The age is well-defined to 180 years by increment boring method. Growth in girth is 1,5 mm per annum on average of last years, that is remarkable. Growth in heights is expected not much more.

The conditions for growth at this stand are estimated by Forestry Commission to be particularly favorable. The natural ground is loess soil with optimal water saturation, situated on slightly hillside to the north. Also the beeches here are remarkable tall-growing (>40 m) with regard to this region. You will not find any other similar stand in the region.

In the near future it is planned to take out some beeches that are thronging and deforming the larches too much.

This commercial forest here was under the ownership of the "Count of Schlitz" until 1977. Assumedly the larches were not logged because Professor Dr. Reinhard Schober, a former German forestry scientist, made scientific observations here. He published a monograph about larches. Since 1978 the federate state of Hessen is the owner and the stand is left to its own resources. No commercial interests are tracked. The state of Hessen has assumed a self-commitment not to log off this larches.

Karlheinz



## Re: Marsh-billings-Rockefeller National Historic Park Project

by dbhguru » Wed Sep 26, 2012 8:45 pm

Today, Monica and I spent the day in Marsh-Billings-Rockefeller National Historic Park with the ranger staff. Last night we stayed at a nearby B&B so we would be positioned to get right to work. Here are some images from the front of the B&B. Gorgeous place.

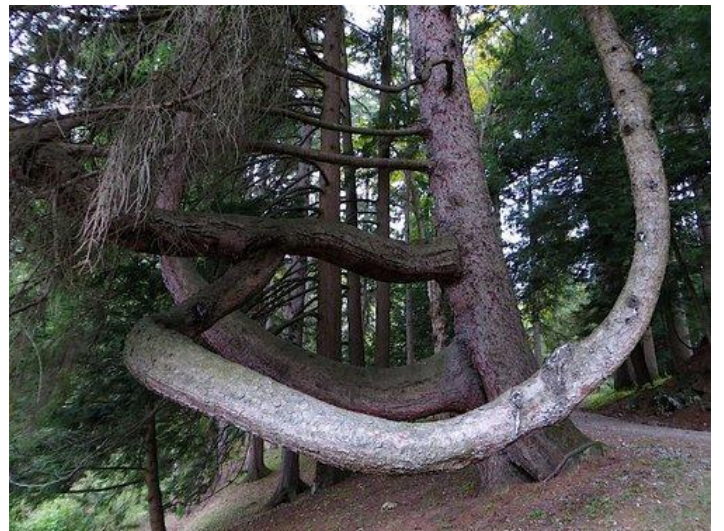


And now to the catch of the day.

Species	Girth-ft	Height-ft
Norway Spruce	9.5	95.0
E. hemlock		99.5
White Pine	11.2	114.5
White Pine	11.8	120.5
Norway Spruce	11.1	120.5
Norway Spruce		124.5
Norway Spruce	7.9	127.5
Norway Spruce	12.5	128.0
European Larch		130.5
White Pine	12.2	132.5
Norway Spruce	10.2	140.0
Norway Spruce	9.7	140.5
White Pine	11.5	142.0
White Pine	10.0	142.0
White Pine	10.1	145.9
White Pine	10.8	146.9
White Pine	13.0	150.5

I measured about twice as many trees as shown above. Most were Norway spruces between 110 and 120 feet. Folks, I haven't even begun to exhaust the resource. Here are some images.









This is the behemoth, the 13 x 150.5 footer



To say that the trip was a success would be something of an understatement. NTS now holds the records for the tallest European Larch, Norway Spruce, and White Pine in Vermont. We also know when these trees were planted. The huge white pines is 138 years old. It has a big crown. Lots of growing left to do. It's a honker.

We are laying the groundwork for a long term partnership between the NHP and NTS. The huge pine will be modeled and tracked. All the legacy trees will be measured and mapped.

Folks, this is one class-act Park. It has been a long time since I've gotten so excited about a New England property.

Robert T. Leverett

## [Re: Marsh-billings-Rockefeller National Historic Park Project](#)

by dbhguru » Thu Sep 27, 2012 8:08 am

Joe, Marsh-Billings-Rockefeller National Historic Park is drop dead gorgeous. It has lots of research going on, lots of visitors looking at the management that has been the hall mark of property since the mid-1870s. What a difference when things are done right!

The Norway spruce are incredible. Here are three more images, two of Norways and one of white pines.







I saw some horse logging going on while there yesterday. It fit in well. Monica got an fine tour of the mansion and a real education on the history of the property and the role of the Billings women.

Interestingly, the huge 13 x 150.5 x 55-foot white pine is almost dead center on a study plot maintained by researchers to monitor what is going on with the forest. What do you want to bet that they don't have a clue as to what kind of growth that white pine is enjoying? Well, we're going to change that. The behemoth is packing on the wood and has a big broad crown with lots of growth candles. I've approached them about a possible climb and trunk modeling project. Some of them are definitely interested. It will all work out in time. But in the interim I have a veritable playpen filled with gorgeous Norway spruces and great whites. I'm happy as a pig wallowing in mud.

Joe, ya gotta see this place.

Robert T. Leverett

## [Re: Marsh-billings-Rockefeller National Historic Park Project](#)

by **Larry Tucei** » Thu Sep 27, 2012 10:16 am

Bob, I went to the Marsh-Billings-Rockefeller NHPP website to read about this fantastic place. The images you posted are very beautiful and after learning more about MBRNHPP it is on my places to visit in the future. The Forests are awesome and what really talked to me was the size a White Pine can become in just 138 years. HUUUUUGE!!

<http://www.nps.gov/mabi/index.htm> Larry

## [Re: Marsh-billings-Rockefeller National Historic Park Project](#)

by **dbhguru** » Thu Sep 27, 2012 12:40 pm

Larry, MBRNHP is pure class - vintage New England. And the Norway spruce there are off the charts. Two at 140 feet! The big pine falls into a very, very exclusive club, pines in the 13 x 150 club. Here is another image from MBRNHP. More gorgeous Norways.

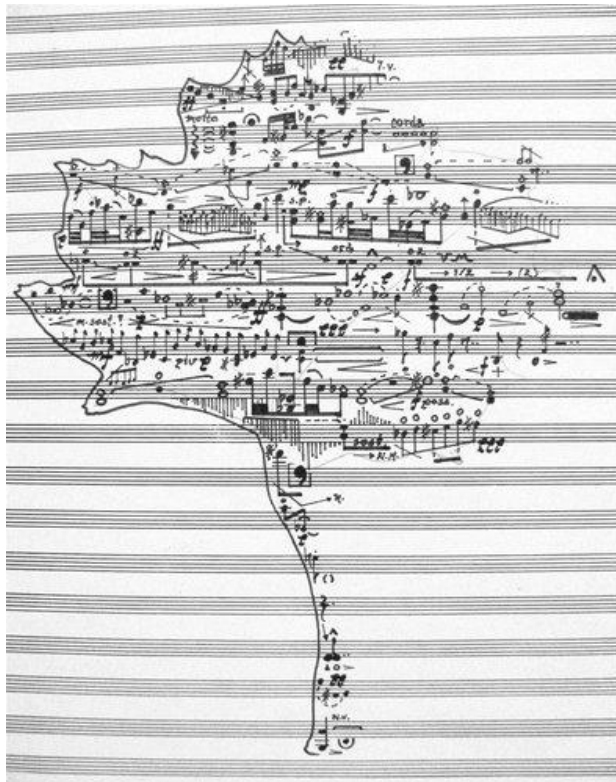


Robert T. Leverett

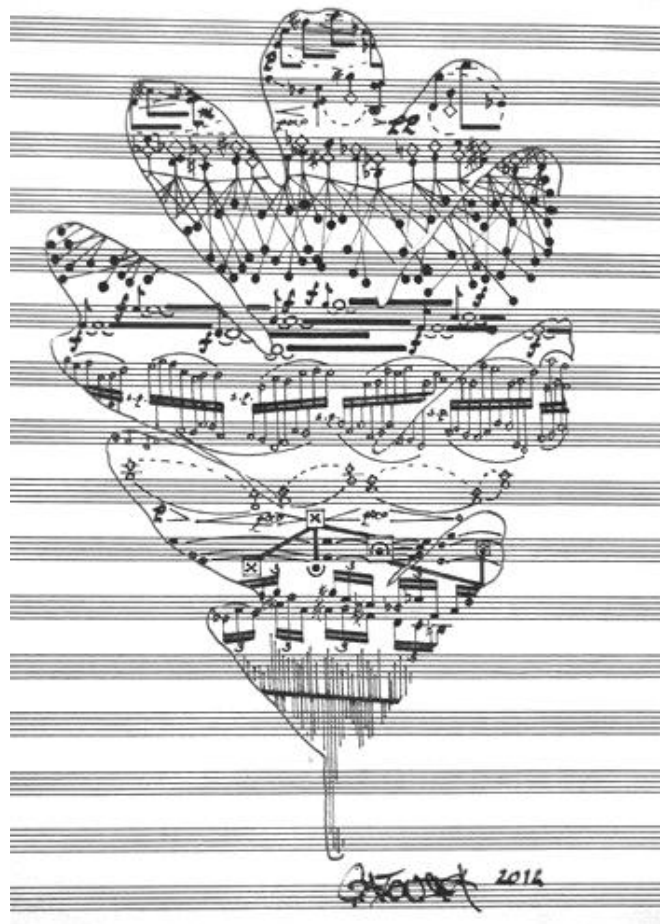


## Graphic Leaf Music Scores

by **michael gatonska** » Mon Sep 24, 2012 6:36 pm



Norway Maple Leaf Music

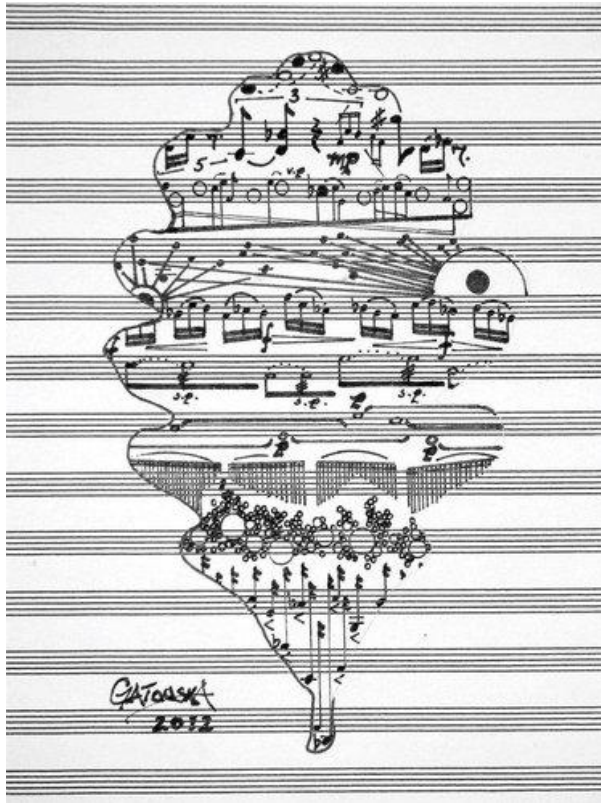


Overcup Oak Leaf Music

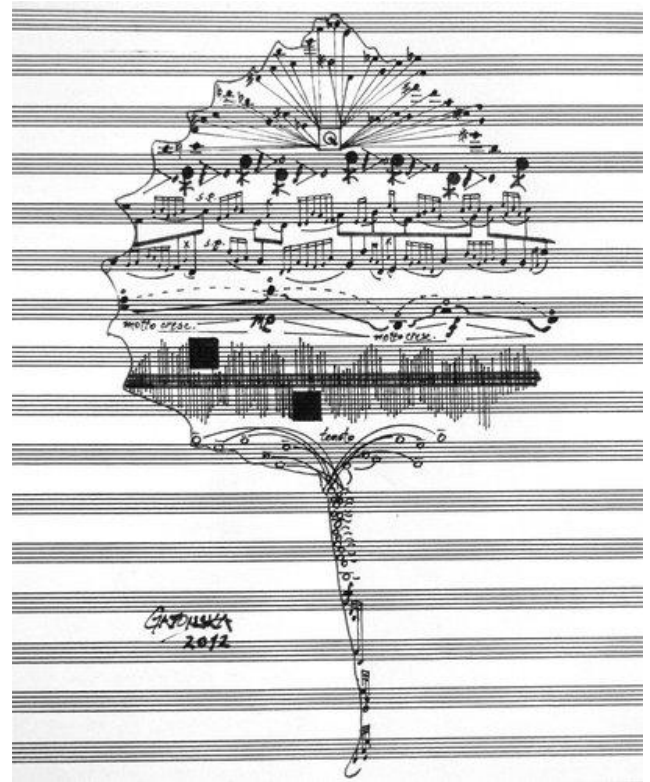


Yellow Birch Leaf Music

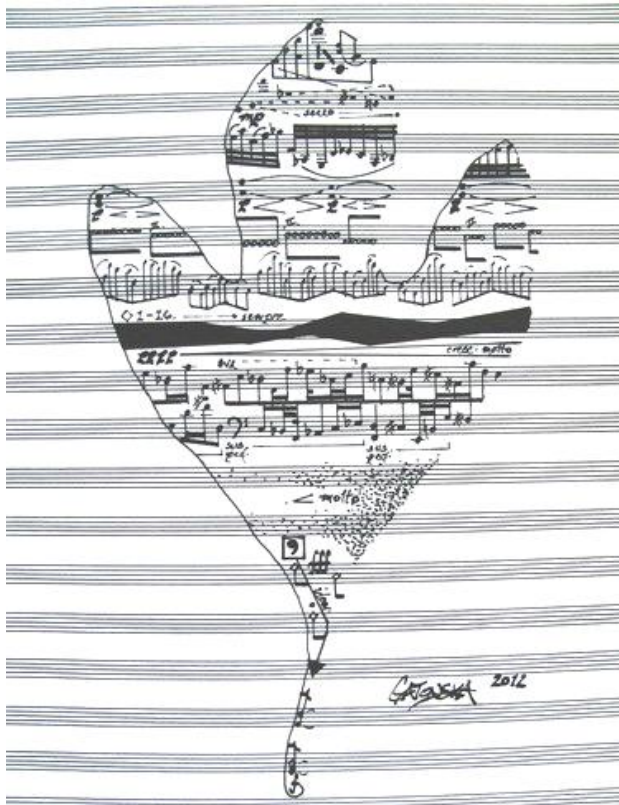




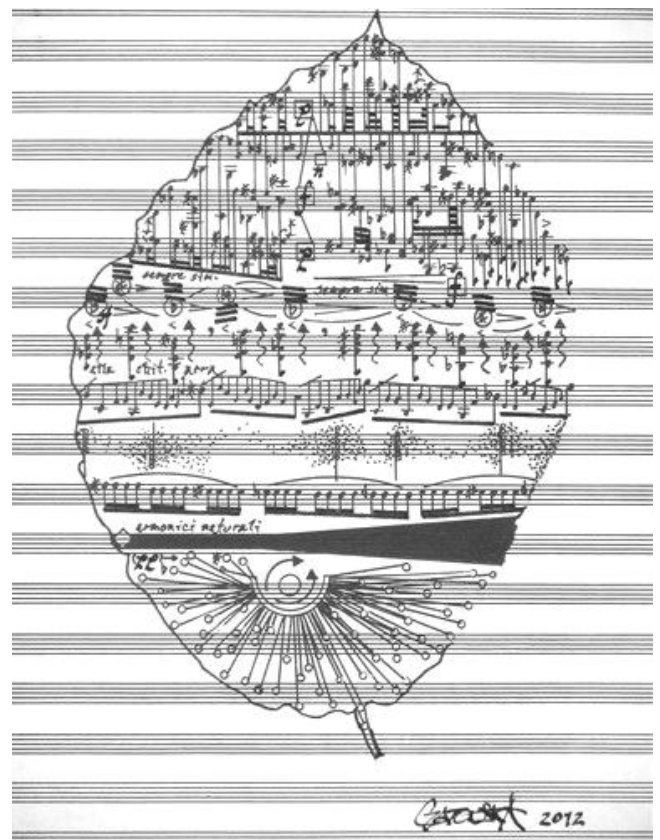
English Oak Leaf Music



Bigtooth Aspen Leaf Music

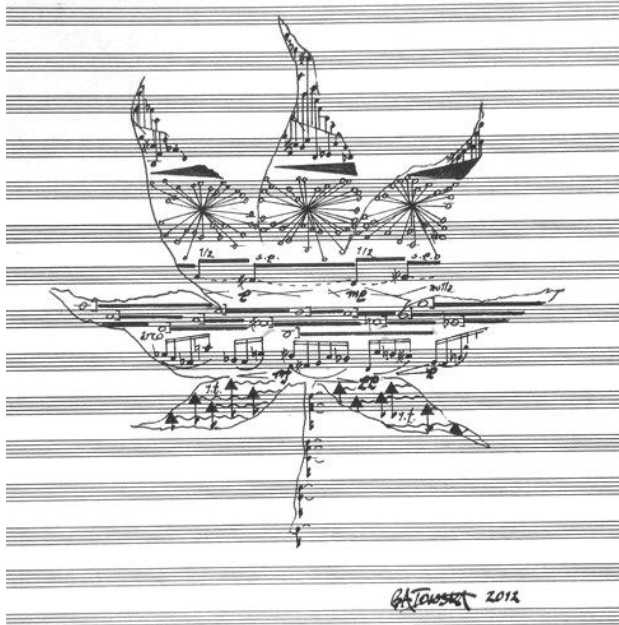


Sassafras Leaf Music

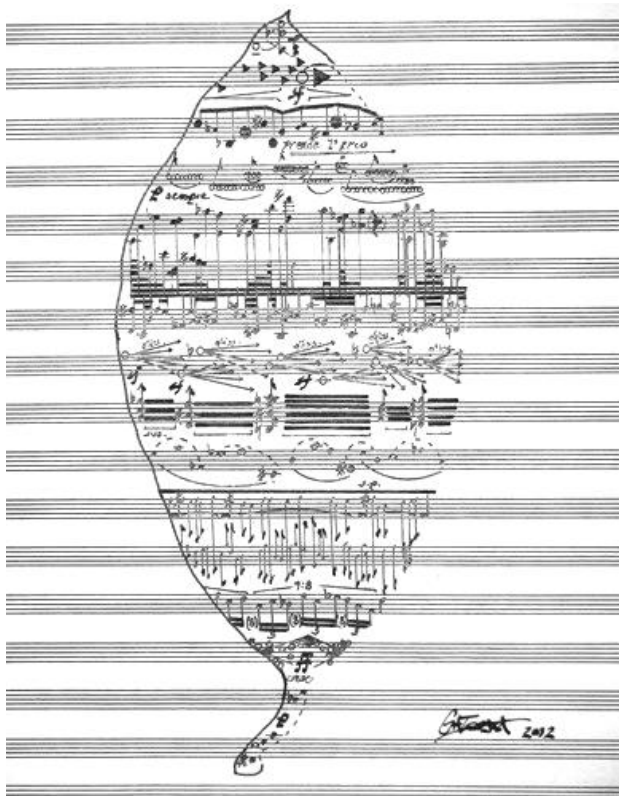


Camperdown Elm Leaf Music

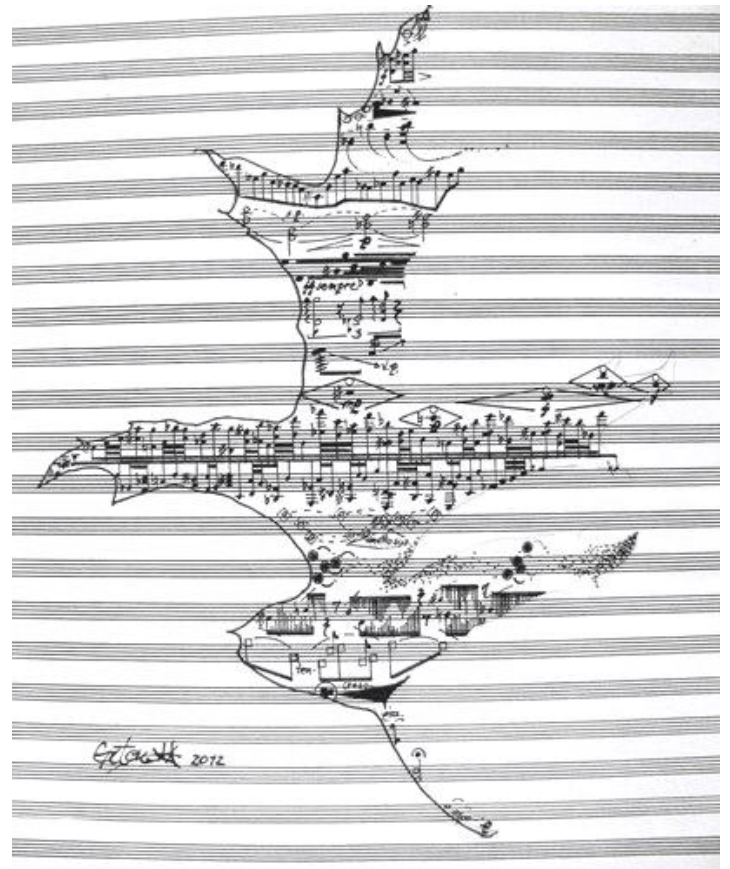




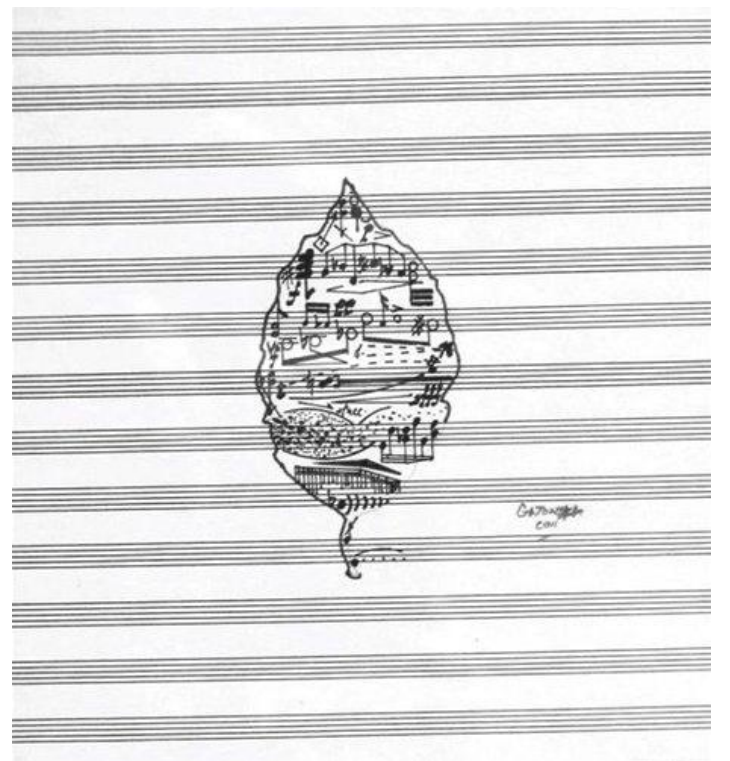
Japanese Maple Leaf Music



Saucer Magnolia Leaf Music

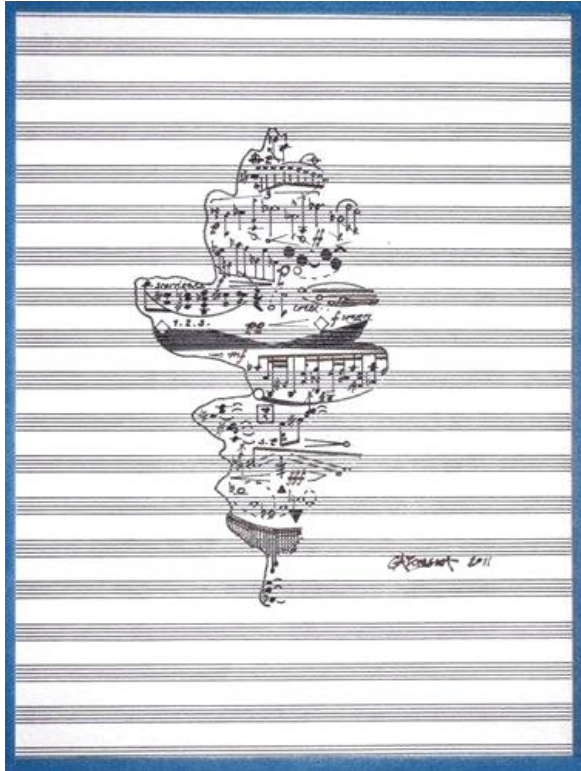


Pin Oak Leaf Music

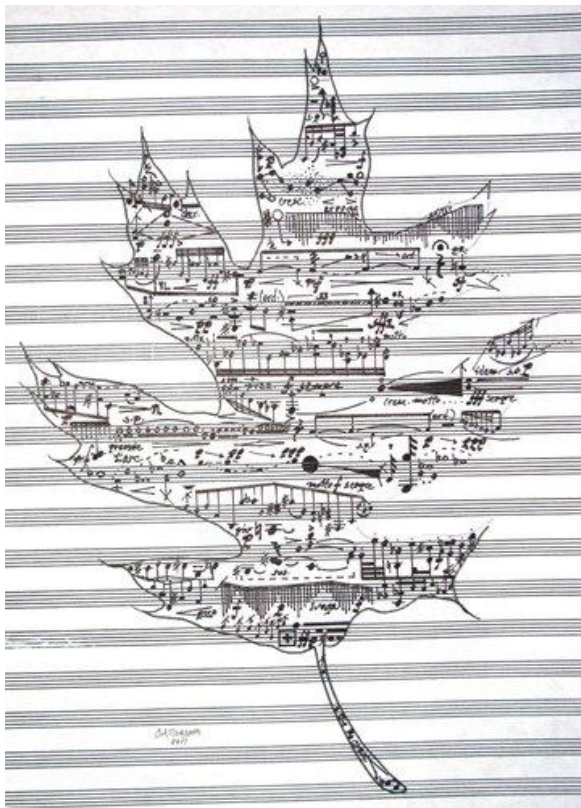


American Beech Leaf Music

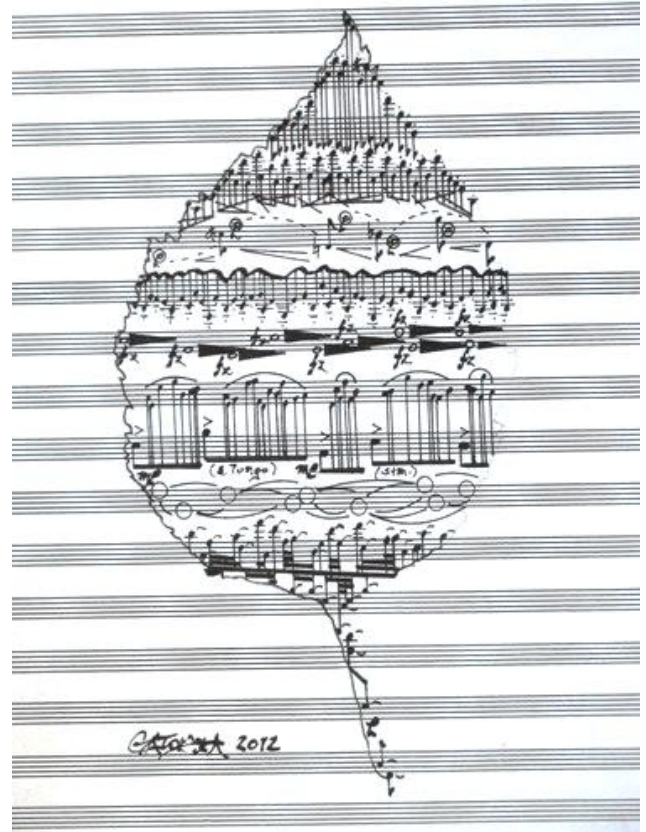




Turkey Oak Music

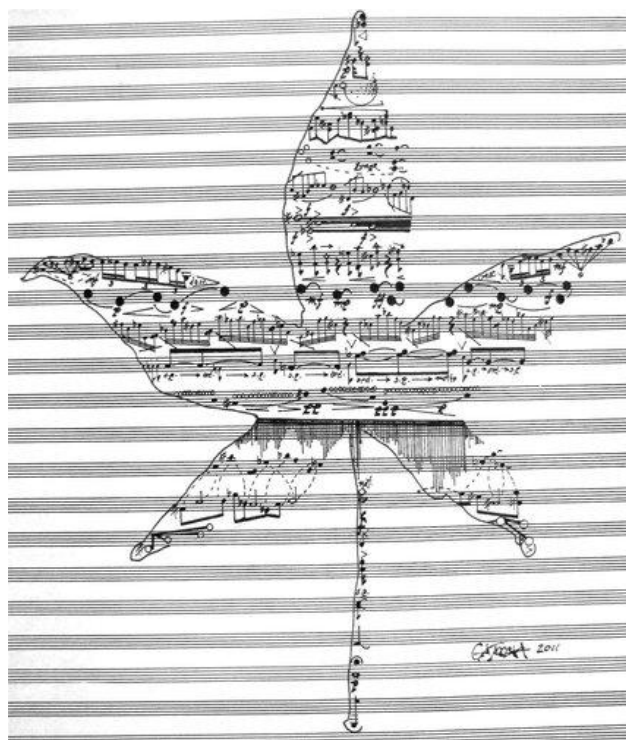


Scarlet Oak Leaf Music



American White Birch Music





Sweetgum Leaf Music

Michael Gatonska

## [Re: Graphic Leaf Music Scores](#)

by **michael gatonska** » Thu Sep 27, 2012 4:32 pm

*Andrew Joslin wrote: Great work Michael. Is any of the notation related to the sound the leaf makes in the wind? Sassafras is my favorite.*

Thank you Andrew!

Actually, I started this project to create graphic music scores of all the leaf types that are growing in Connecticut, including some other places I have traveled to, or that I will may visit in the future. They are not related to the sound they make in the wind, but you gave me great idea in regards to that... In meantime, I suppose I am just trying to warp the familiar -creating small scores that go 'outside the standard musical lines'.

Michael Gatonska

## [NTS Partnerships](#)

by **dbhguru** » Tue Sep 25, 2012 9:10 pm

NTS, Marsh-Billings National Historic Park is the second National Historic Park that NTS has supported. The list of partnerships for us has grown impressively. Here are the ones that come to mind.

Great Smoky Mountains NP  
Blue Ridge Parkway  
Congaree National Park  
Morristown National Historic Park  
Marsh-Billings National Historic Park  
Nantahala National Forest  
San Juan National Forest  
Mass Department of Conservation and Recreation  
Cook Forest State Park, PA  
Mass Audubon  
Trustees of Reservation  
Laurel Hill Association  
Biltmore Estate  
Holyoke Community College  
City of Northampton, Look Park  
Harvard Forest  
Great Old Broads for Wilderness  
American Forests

There are other organizations that Will Blozan could add and Michael Taylor no doubt has some groups as well. But the role that NTS is playing in support of other organizations is growing. Not a bad record.

Hopefully, others have done programs or collected data for an organization under at least an informal agreement. If so, we would like to know the names of the organizations. By the first post, I was hoping to get the ball rolling. It is through recognition by others who represent important organizations that our story is best told.

Robert T. Leverett



## [Re: NTS Partnerships](#)

by **edfrank** » Thu Sep 27, 2012 2:09 pm

Bob, Here are some other places to be added or considered for a listing:

Middleton Place, SC

You should specifically list the William Cullen Bryant Estate in addition to the Trustees of the Reservation (which doesn't mean anything to the average reader)

Jefferson's Poplar Forest (The Corporation for Jefferson's Poplar Forest)

James Madison's Montpelier Estate (Montpelier Foundation and the National Trust for Historic Preservation)

McConnells Mill State Park, PA (not just mapping, Anthony Kelly and I had a research permit to collect a basswood cross-section)

Winterthur Museum, Garden and Library, Wilmington, Delaware (I am not sure we had any kind of a formal arrangement).

I would encourage Larry to add any sites where he presented himself as a representative of the Native Tree Society as part of his Live Oak Project.

Edward Frank

## [Re: NTS Partnerships](#)

by **eliahd24** » Thu Sep 27, 2012 4:08 pm

You could add the following from the Atlanta area (plus one in NC):

Highlands-Cashiers Land Trust  
Fernbank Museum  
Trees Atlanta  
The Frazer Center and Frazer Forest

South Fork Conservancy  
Piedmont Park Conservancy  
Atlanta Botanical Gardens  
Woodland Gardens  
Brookwood Hills Community Club  
Chastain Park Conservancy  
Chattahoochee National Forest  
Chattahoochee River National Recreation Area

.... mostly informal agreements or organizations we've shared data with (trees on their property)

Eli Dickerson

## [Black Walnut Soundscape, Part I](#)

by **michael gatonska** » Thu Sep 27, 2012 6:26 pm

This is a 2'35" soundscape made in the morning underneath a black walnut tree in South Windsor, CT. Taken from the info found below.

Location: South Windsor  
Date: September 22, 2012  
Time: 8:30 a.m.  
State: CT  
Description: morning soundscape recording underneath black walnut tree  
Habitat: agricultural/along Connecticut River/deciduous along river  
VoxType: morning  
Category: soundscape  
Sample rate: 48k 24 bit  
Microphone pattern: Double MS stereo-2 channel; 150 °  
Take# 2  
Anthrophony: automobile (1:20), airplane (1:45), gunshots (1:50)  
Geophony: the sound of tree leaves in moderate wind conditions  
Biophony: Eastern Phoebe (*Sayornis phoebe*), American Crow (*Corvus brachyrhynchos*), Ring-billed gull, *Larus delawarensis*, field crickets (*Gryllus pennsylvanicus*)  
Weather: sunny



Temp: 68 fahrenheit

Humidity: 70%

Wind: 8-12 mph

GPS: Lat/Lon: Lat/Lon: 41.79°N 72.63°W

Elevation: 59 ft

Recordist: Michael Gatonska

Notes: homemade Mic suspension with windjammer  
and Canon tripod/monitored with headphones



<http://www.youtube.com/watch?v=QWF5Y3GN0T8>

Michael Gatonska

## **Re: 'Big Bob' - a giant eucalypt - Queensland's tallest tree**

by **edfrank** » Sun Sep 16, 2012 7:31 pm

NTS, David Pennisi reported today that they had measured it on September 17, 2012 at 72.84m tall and 1.44 DBH. It is *Eucalyptus grandis* [http://en.wikipedia.org/wiki/Eucalyptus\\_grandis](http://en.wikipedia.org/wiki/Eucalyptus_grandis) and was measured via climb/tape drop.

<http://www.facebook.com/photo.php?fbid=486621121355586&set=a.415513815132984.100898.183153528369015&type=1&theater> The post is by Tree Tech (David and Julia Pennisi) who were amongst the party of tree climbers who did the measurement.

The team:

<http://www.facebook.com/photo.php?fbid=488675434483488&set=a.415513815132984.100898.183153528369015&type=1&theater>

The top

<http://www.facebook.com/photo.php?fbid=488675971150101&set=a.415513815132984.100898.183153528369015&type=1&theater>

## **Ponderosa Pines (Highway 50 Sierra Nevada)**

by **Mark Collins** » Sun Sep 23, 2012 10:37 pm



I spent Saturday in South Lake Tahoe and part of Sunday exploring a small patch of forest along highway 50 in the Sierra Nevada.





Again, there were tremendous Ponderosa Pines to be found.



Traffic was very heavy along the 50 again this weekend, which made it difficult to stop the car and turn around after seeing large trees growing in the forest. These two Pondy's were the highlights.

### Re: Ponderosa Pines (Highway 50 Sierra Nevada)

by **M.W.Taylor** » Fri Sep 28, 2012 1:36 pm

Wow Mark !

Those are beastly huge pondys. Were you able to get a dbh on them ? If you give me a location I'll measure the volumes soon. How tall are you (or the person in the picture) ? That one in pic#3 looks 8'dbh +

In return for directions to find, I'll give you a complete volume report of the trunk diameters at height intervals, all the way to the top, for the 2 big pondys you found and also the GPS of the world's tallest sugar pine, which I found yesterday. Thanks for the report. Those are super impressive trees. The 1st picture looks more jeffrey to me in color. Did you give it the smell test or find a cone for verification ? Sometimes big pondys look jeffreys like when they grow in serpentine soils. So maybe that is what makes tree#1 look a little different in color.

Michael Taylor

WNTS VP

<http://www.landmarktrees.net>

Cal Big Trees Coordinator



## [Big Pines Along Highway 4 Sierra Nevada](#)

by **M.W.Taylor** » Fri Sep 28, 2012 1:52 pm

I did some exploring (with friend John) off Highway-4 a few days ago. Perhaps on the same day and time Mark Collins was exploring Highway 50 ? The area between Dorington and Bear Valley has some very large ponderosa pine, sugar pine, white pine and jeffrey pine near the highway. Some of these big trees are right off the road side. See attached pictures.

Michael Taylor

WNTS VP

<http://www.landmarktrees.net>

California Big Trees Coordinator



big sugar off Highway 4



same big sugar further back

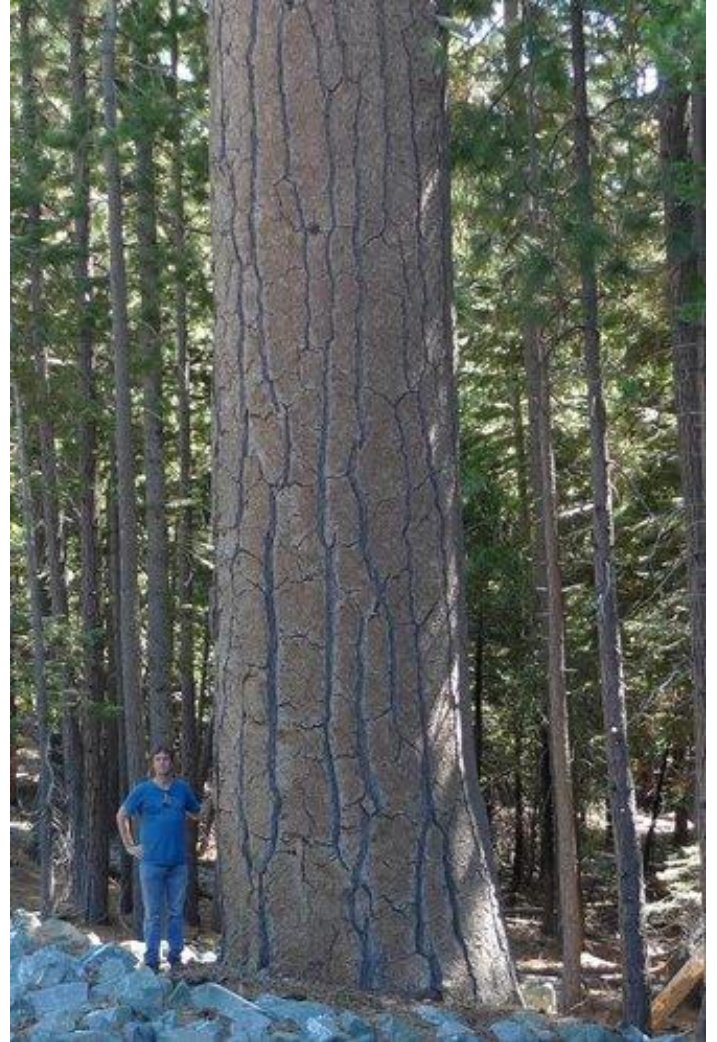


big pondy full trunk view





big pondy futher back



big pondy with slow taper right off Hwy4



7.1' dbh jeffrey near Bear Valley Highway 4

Michael Taylor

## **Tallest Known Sugar Pine Now Back In California**

by **M.W.Taylor** » Fri Sep 28, 2012 3:10 pm

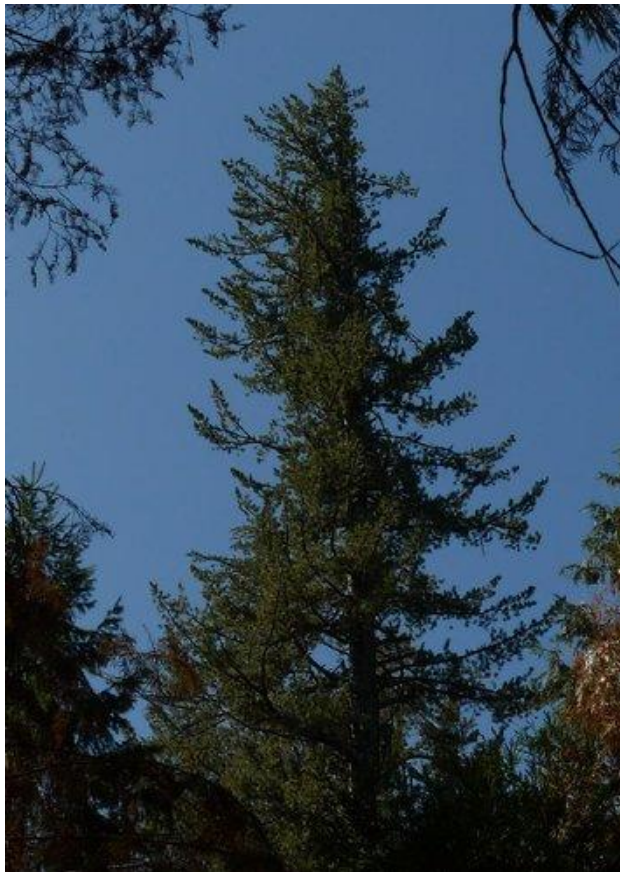
Yesterday I did a little exploring in Yosemite National Park. About 1,200 feet from a "close road", I found a tall sugar pine. Very tall. Here are the statistics on this tall sugar pine.

Height: 261 ft (79.5m)

Dbh: about 7 ft

Location: Yosemite National Park

The tree appears young and to be growing very fast with a pointy "rocket top". It will make 80m+ soon if the tree stays healthy and undamaged.



New tallest known sugar pine with "Rocket Top" grows in Yosemite National Park

The tallest sugar pine, Yostemite Giant, died a few years ago. The current height champion, 255 ft specimen in Umpqua National Forest - Oregon has been dethroned by a California sugar pine. I believe 270' class or maybe even 280' sugar pine are out there somewhere.

The search continues....

M. W. Taylor



## [Re: Ponderosa Pines \(Highway 50 Sierra Nevada\)](#)

by **Mark Collins** » Fri Sep 28, 2012 6:36 pm

Michael, I did not do the smell test or pick up a cone for the tree in the first and second picture. It could be a Jeffrey Pine, I'm not really sure though. Usually I just do a quick cbh, grab a photo, and continue looking. It's cbh was approximately 22 feet, 8 in.

The third tree had a cbh of approximately 20 feet, 2 in. I'm about 5' 8." Here's another photo of the third three from a distance, it's a real beauty...



I send you the information after I get off from work tonight. Congrats on the California Sugar Pine find!

Mark Collins

## [Valley Oak, Covelo, CA](#)

by **Mark Collins** » Sun Sep 30, 2012 11:09 pm

A friend of mine invited me to go on a hike just outside of the town of Covelo yesterday. Just before we entered Round Valley, she mentioned that the country's tallest Valley Oak was located in the valley. It was then (having never been to Covelo before), that I remembered seeing the pictures of the tree in Michael Taylor's post "Taking The Survey Into The Sky" in the Measurement and Dendromorphometry section back in June. Just when I thought I was going to go on an ordinary hike, all of a sudden, the day took on greater significance! As soon as we entered the valley, we saw the enormous oak tree scraping the sky.



It's a beast!

Mark Collins



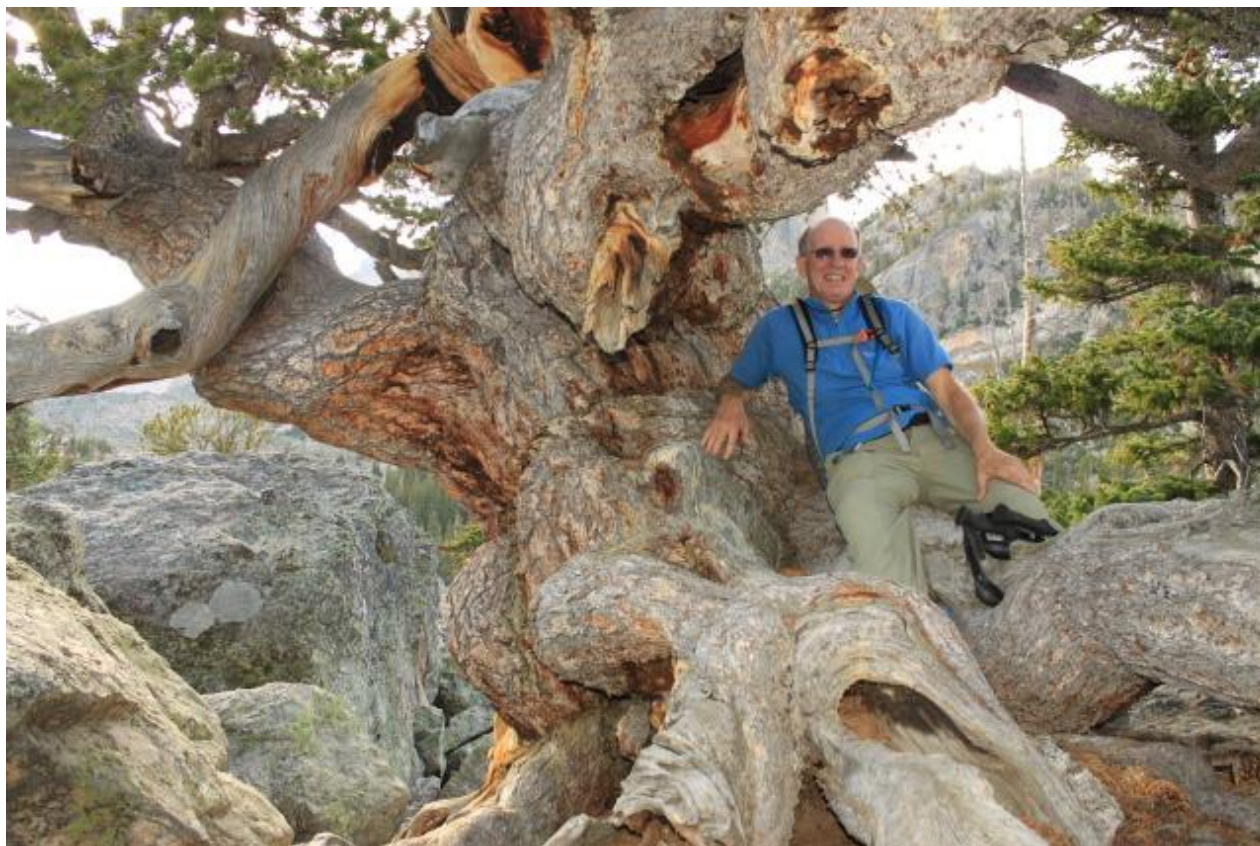
## [Limber Pine, RMNP, CO](#)

by **jamesrobertsmith** » Sun Sep 30, 2012 9:03 pm

An ancient Limber pine we encountered in Rocky Mountain National Park. My pal Bob Johnson posing

with the old tree for reference.

I took about 4,000 photos on my trip into the Park and to the Weminuche Wilderness Area. I'll post them as I can find the time to sort through them. I was there for two weeks, including eight days in the very deep back country of the Weminuche.



James Robert Smith



## [Mount Sneffels Wilderness Aspens](#)

by **jamesrobertsmith** » Sun Sep 30, 2012 9:12 pm

Some aspens I saw in the Mount Sneffels Wilderness  
Area in Colorado:



The color that day was prime.



Tall, old aspens.



Bark detail of old aspen.

James Robert Smith



## Deer 'cool' response of trees to warming climate

by **Lee Frelich** » Sun Sep 30, 2012 1:20 pm

NTS members: A paper recently published in *Global Change Biology* (2012, doi: 10.1111/j.1365-2486.2012.02785.x, paper online now, likely to come out in print in the October or November issue) by my recently graduated PhD student Nick Fisichelli, myself and Peter Reich show that deer are likely to alter the invasion of temperate tree species like sugar maple and red oak into boreal forests of spruce and fir. The study was done in northern Minnesota--plots with high and low levels of browsing by deer were surveyed along a climate gradient from boreal (very northern edge of the range of temperate species) to temperate (southern edge of the range of boreal species), thus including the zone of overlap in temperate and boreal species ranges, where the two species groups grow together within one stand of trees.

Sapling radial and height growth responses to temperature and browse pressure

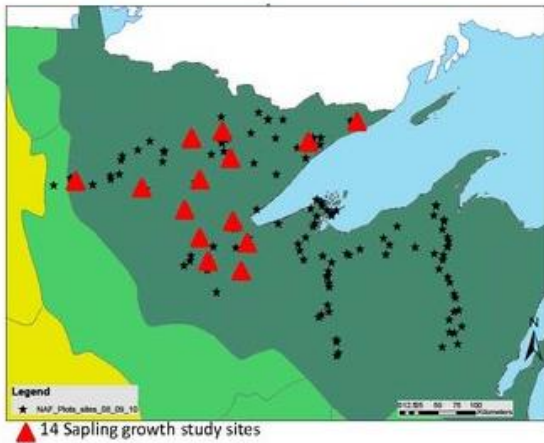


Figure 1. Locations of study plots in northern Minnesota (red triangles). Black points represent location of other study plots for upcoming publications.

Hundreds of saplings were destructively sampled in the field. 'Cookies' were cut from the stems throughout their height so that age, radial increment

and height growth could be reconstructed for each sapling. Summer temperature and precipitation, and a measure of deer browsing pressure were estimated for each plot. The temperature gradient was about 2.5 degrees C or 4.5 degrees F.



Figure 2, cutting a balsam fir in the field.



Figure 3. A sugar maple #818--forks in the stem indicate the sapling had been browsed by deer several times over a period of several years.





Figure 4. A repeatedly browsed northern red oak--clearly the favorite of deer.



Figure 5. A white spruce--notice lack of deer browsing on their least favorite species.

The key results are shown in Figure 6. On plots with low deer browsing pressure (upper graph), boreal spruce and fir height growth was consistently less as summer temperature increased, while temperate species sugar maple and red maple grew more with warmer summers, and red oak did not respond to temperature. Most importantly, maple and oak growth rates were higher than boreal sapling growth rates at warm temperatures. On plots with high browsing pressure, however (lower graph), spruce and fir growth rates were about the same as low deer plots (reflecting the unpalatable nature of those species), while growth rates of the three temperate species was lowered compared to low deer plots, so that they all grew less than boreal species. Moreover, the positive temperature response of the maples was flattened by the deer: in warmer areas deer simply ate more. Results for radial growth were very similar.

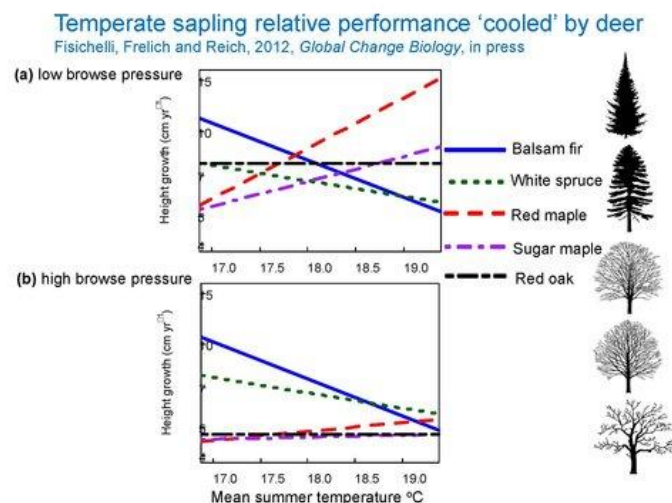


Figure 6. Height growth of boreal and temperate saplings across the temperature gradient with low (upper) and high (lower) deer browse pressure.

We think this phenomenon will prevent temperate tree species from increasing their growth rates as the climate warms at the northern edge of their range in areas with high deer populations. This could prevent them from responding to climate change by invading the boreal forest, since boreal saplings will likely continue to grow more than temperate saplings, even when the temperature becomes less than optimal for boreal tree growth. One possible implication would



be that boreal species will persist until a threshold temperature is reached, and die suddenly, rather than being gradually replaced by temperate species.

Lee E. Frelich  
University of Minnesota Center for Forest Ecology

Fisichelli, N., L.E. Frelich, and P.B. Reich. 2012. Sapling growth responses to warmer temperatures 'cooled' by browse pressure. *Global Change Biology*, in press, doi: 10.1111/j.1365-2486.2012.02785.x

### [Re: Deer 'cool' response of trees to warming climate](#)

by **dbhguru** » Sun Sep 30, 2012 3:51 pm

Lee, Wow! Outstanding. Thanks for sharing. In terms of latitudes such as here in western Mass, I presume the maples will grow faster with the extra CO<sub>2</sub>, providing more deer food. Standoff? Any predictions? BTW, my friend Tom Tynning from Berkshire Community College has been seeing more young tuliptrees in the Housatonic Valley. The climate seems to be increasingly favorable for their spread. No surprises there. I have no idea how deer see young tuliptree leaves - probably as a delicacy.

Robert T. Leverett

### [Re: Deer 'cool' response of trees to warming climate](#)

by **Lee Frelich** » Mon Oct 01, 2012 10:54 am

Bob: I think that most of the enhanced growth caused by increasing CO<sub>2</sub> is in the past--the steepest part of the response curve for rate of photosynthesis being from 180-380 ppm CO<sub>2</sub>, which is the trajectory we have been on since 18,000 years ago. Additional CO<sub>2</sub>

beyond 380, will result in only a modest increase in growth, perhaps 10-15% as we go on to 500+ ppm CO<sub>2</sub>.

Its more likely that variations in other factors and predators that control deer populations will determine sugar maple growth rates. In western Mass, I have seen a lot of variation in levels of deer browsing--almost none in some areas, so that the plant community will be able to respond. More on this in a few weeks when my next paper on trophic interactions across the temperate-boreal ecotone from MN to New England is published in the *Philosophical Transactions of the Royal Society*.

Also, it will be the tension between maple and oak that is most important in western Mass as climate warms. In areas with lower deer populations, oaks will be able to replace maples, but perhaps not in areas with higher deer populations.

Lee Frelich

### [Re: Deer 'cool' response of trees to warming climate](#)

by **Joe** » Mon Oct 01, 2012 11:53 am

*Lee Frelich wrote: Also, it will be the tension between maple and oak that is most important in western Mass as climate warms. In areas with lower deer populations, oaks will be able to replace maples, but perhaps not in areas with higher deer populations.*

I think, in addition to deer population, and maybe more so, what distinguishes an oak site from a maple site is soil fertility and past harvesting practices. Sugar maple is more competitive than oak on rich sites.

Joe Zorzin

## External Links:

### **Tree's leaves genetically different from its roots**

Cottonwood trees show genetic differences across individuals as well as within populations.

Ed Yong, 10 August 2012

<http://www.nature.com/news/tree-s-leaves-genetically-different-from-its-roots-1.11156>

### **The world's oldest clove tree**

By Simon Worrall Ternate, Indonesia

<http://www.bbc.co.uk/news/magazine-18551857>

### **They're lumberjacks and they're OK! The magical photos that show brave men who felled California redwoods by HAND**

By Daily Mail

Reporter PUBLISHED: 22:22 EST, 4 September

2012 <http://www.dailymail.co.uk/news/article-2198481/Magical-photos-lumberjacks-California-redwoods.html>

### **Owners of landmark tree face fines if it is not cut down**

By Claudine Zap | The Lookout

<http://news.yahoo.com/blogs/lookout/owners-landmark-tree-face-fines-not-cut-down-201544270.html> NTS discussion: <http://www.ents-bbs.org/viewtopic.php?f=69&t=4496>

### **The Poetry in Tree Care**

September 7th, 2012 by Michelle Werts  
<http://www.americanforests.org/blog/the-poetry-in-tree-care/>

### **Treatment With Fungi Makes a Modern Violin Sound Like a Stradivarius**

<http://www.sciencedaily.com/releases/2012/09/120908081611.htm>

**Bark Canoe Construction:** In this Spanish language video there is a nice section from 12:40 to 19:14 showing natives along the Orinoco River in Venezuela cutting the bark from a tree and sewing a bark canoe.

<http://www.youtube.com/watch?v=0Fj15xU8nds>

### **Newman puts flying fox cull back in farmers' hands,**

The World Today, By Caitlyn Gribbin

Posted Wed Apr 4, 2012 6:06pm AEST

<http://www.abc.net.au/news/2012-04-04/queensland-puts-flying-fox-cull-back-in-farmers-hands/3932598>

### **Flying foxes under threat in QLD**

Petitioning Queensland Premier

This petition will be delivered to:

Campbell Newman and the LNP QLD Queensland Premier

<http://www.change.org/petitions/flying-foxes-under-threat-in-qld>

### **'Alien mammal' invasion of Europe**

by Matt Walker By Matt Walker Editor, BBC Nature

<http://www.bbc.co.uk/nature/19474287>

### **Leave Nature Alone?**

Posted by Stephen Packard at 6:04 PM

<http://vestalgrove.blogspot.com/2012/09/leave-nature-alone.html>

**Big Bob' - a giant eucalypt that stretches up more than 70 meters (229 feet) or about 21 storeys high is believed to be Queensland's tallest tree.** Grow Big Bob!

<http://www.esri.com/news/arcwatch/0812/tallest-tree-recorded-in-queensland-found-with-gis.html>

### **Saving the rainforest: Why human rights is the key**

Rainforest Foundation Norway: "Why securing the rights of forest peoples is the right way to save the forest" By Chris Lang, 6th September 2012

<http://www.redd-monitor.org/2012/09/06/rainforest-foundation-norway-why-securing-the-rights-of-forest-peoples-is-the-right-way-to-save-the-forest/>

Download here: Rights-based rainforest protection (2.2 MB).

[http://www.regnskog.no/languages/english/\\_attachme nt/35434?\\_ts=13996420cd0](http://www.regnskog.no/languages/english/_attachme nt/35434?_ts=13996420cd0)

### **Leveling Appalachia: The Legacy of Mountaintop Removal Mining**

<http://e360.yale.edu/content/feature.msp?id=2198>

### **World Heat Record Overturned--A Personal Account**

<http://www.wunderground.com/blog/weatherhistoria n/comment.html?entrynum=89>

### **'A great silence is spreading over the natural world'**

<http://www.guardian.co.uk/environment/2012/sep/03/bernie-krause-natural-world-recordings>



**The Internet Pulses With the Rhythms of Human Life**

<http://blogs.discovermagazine.com/crux/2012/09/11/the-internet-pulses-with-the-rhythms-of-human-life/>

**At Edge of Peruvian Andes, Tracking Impacts of Warming** by Elizabeth Kolbert

[http://e360.yale.edu/feature/at\\_edge\\_of\\_peruvian\\_andes\\_tracking\\_impacts\\_of\\_warming/2570/](http://e360.yale.edu/feature/at_edge_of_peruvian_andes_tracking_impacts_of_warming/2570/)

**HIGH ART | How climbing photographers get the shots that make us gasp** by Jonathan Thesenga

<http://www.sierraclub.org/sierra/201203/high-art/default101.aspx>

**A Thousand Invisible Cords...Connecting Genes to Ecosystems** <http://athousandinvisiblecords.org/>

**Century-old trees near Yellowstone yield clues about human, forest histories**

<http://www.yellowstonegate.com/2012/08/centuryold-trees-near-yellowstone-yield-clues-about-human-forest-histories/>

**Shropshire Apple Trust**

<http://www.shropshireappletrust.co.uk/orchards.php>

**Giant sequoia to go on display again**

<http://www.kltv.com/story/19393648/giant-sequoia-familiar-to-many-tucsonans-will-go-on-display-again>

**SAY GOOD BYE TO THE WHITE ASH TREE - Death Knell By Ash Borer** (09/21/2012) by Russ

Richardson

[http://www.hurherald.com/cgi-bin/db\\_scripts/articles?Action=user\\_view&db=articles\\_hurherald&id=49623](http://www.hurherald.com/cgi-bin/db_scripts/articles?Action=user_view&db=articles_hurherald&id=49623)

**Ecologists convert wildlife professor's notes into soundscape of 1940s Wisconsin** by Liat Clark, 19 September 12

<http://www.wired.co.uk/news/archive/2012-09/19/aldo-leopold-birdsong>

**New Cloud Variety on the Horizon?** by Doyle Rice, Gannett News Service Updated: Sep 20, 2012

<http://www.weather.com/news/new-cloud-variety-on-horizon-20120920>

**Ancient Forests of Nunavut May Return within a Century** by: David A Gabel, ENN

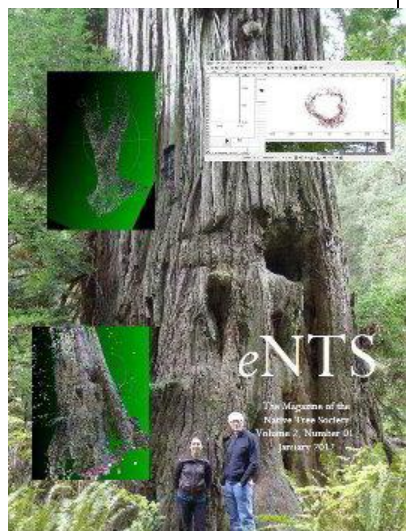
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[http://www.enn.com/top\\_stories/article/44986](http://www.enn.com/top_stories/article/44986)

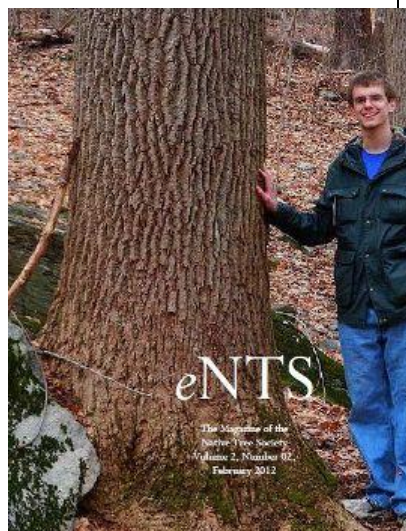
**Automatic Building Mapping**

<http://web.mit.edu/newsoffice/2012/automatic-building-mapping-0924.html>  
<http://www.youtube.com/watch?v=SY7rScDd5h8>

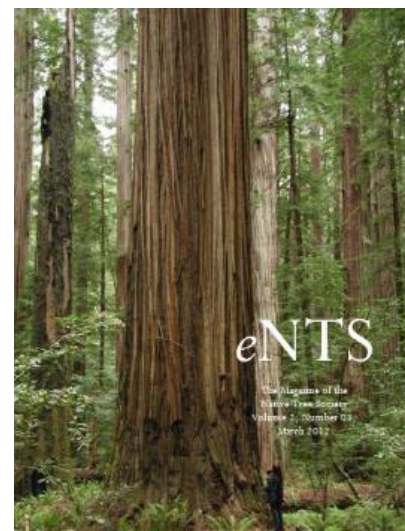
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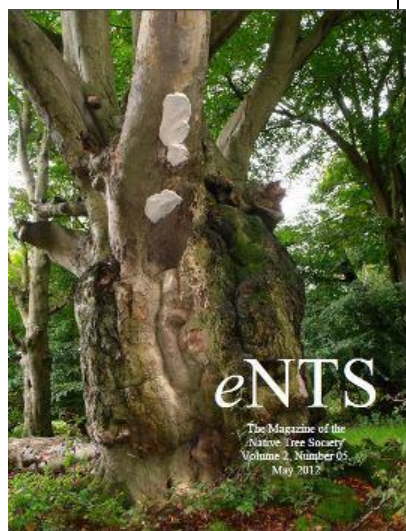
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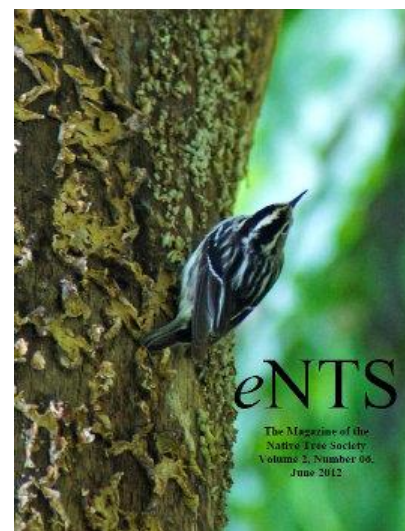
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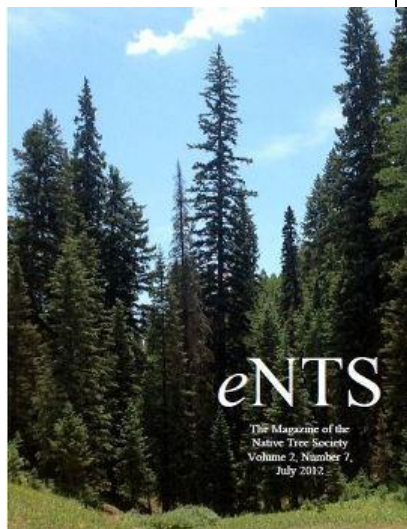


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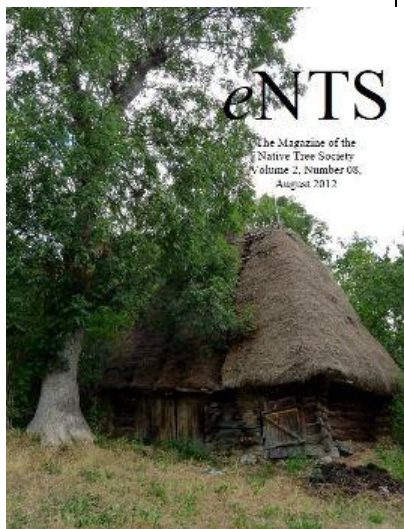


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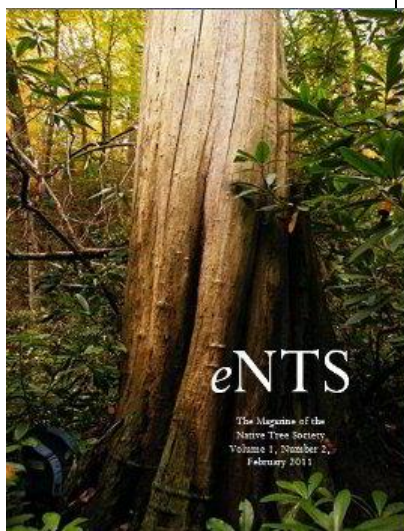


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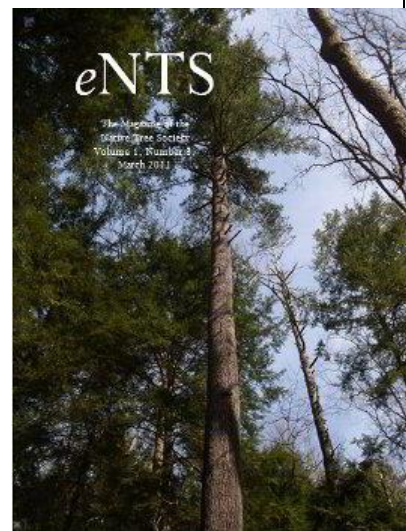
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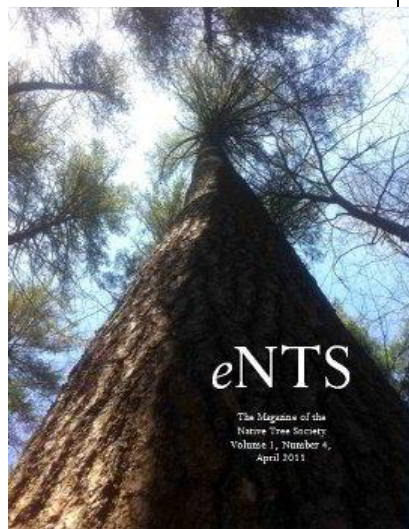


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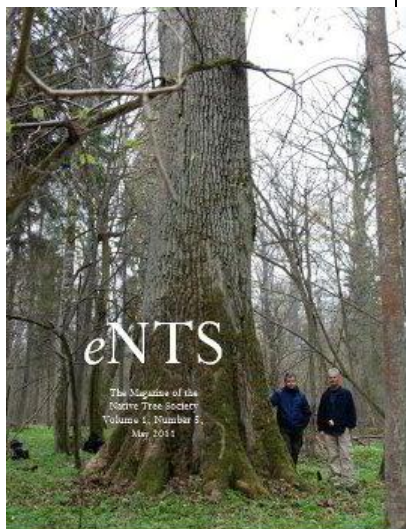


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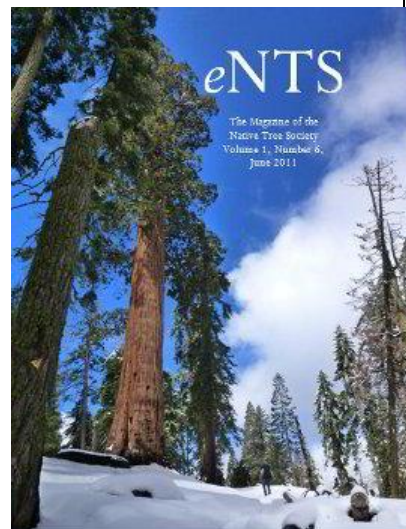




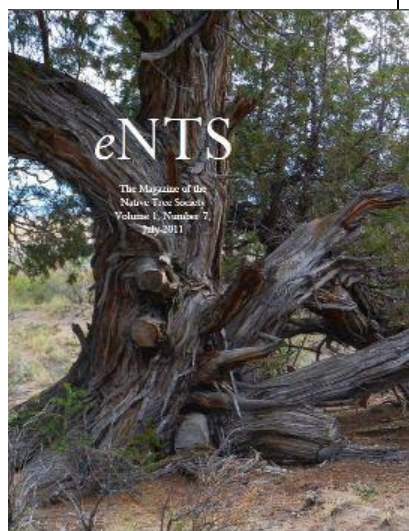
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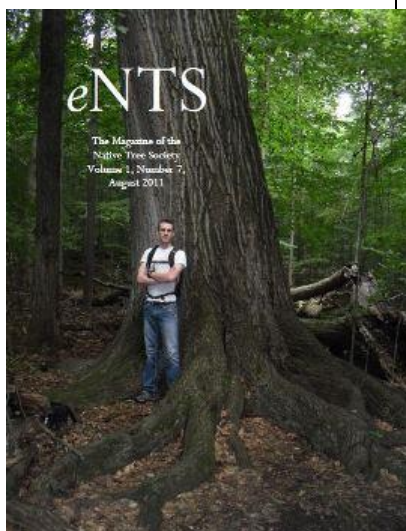
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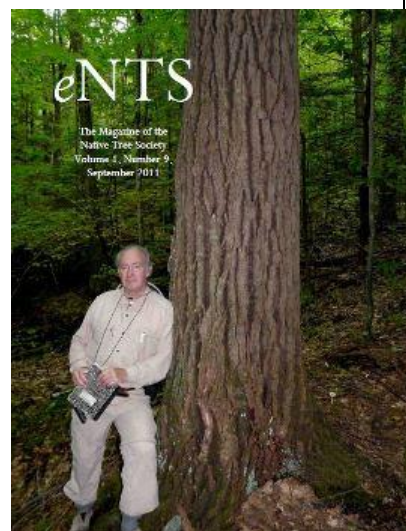
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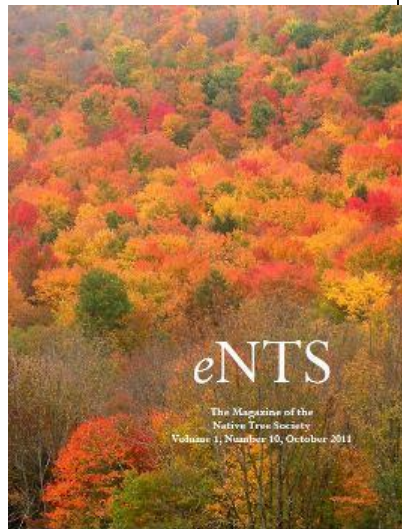


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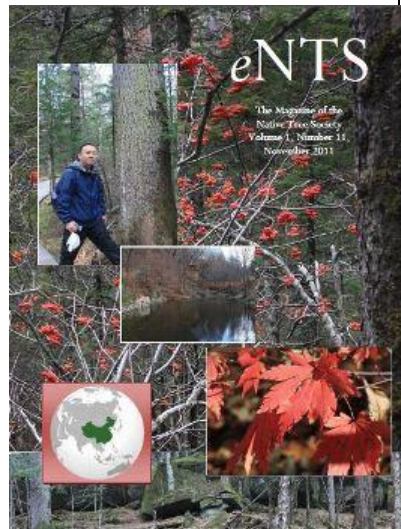
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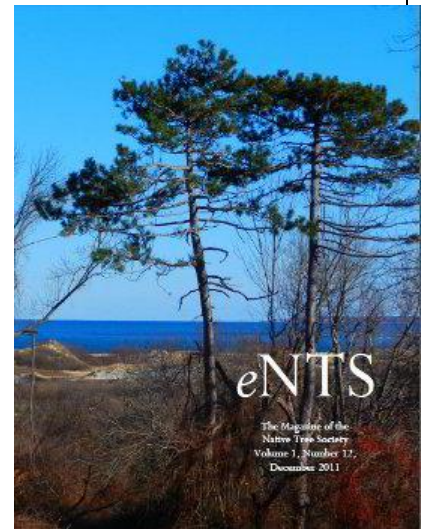
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## About: eNTS: The Magazine of the Native Tree Society

This magazine is published monthly and contain materials that are compiled from posts made to the NTS BBS <http://www.ents-bbs.org>. It features notable trip reports, site descriptions and essays posted to the BBS by NTS members. The purpose of the magazine 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