



# Community Forest News

## City of Bath, Maine

The Newsletter of the Bath Community Forestry Committee ♦ 1 Oak Grove Avenue ♦ Bath, Maine 04530 ♦ 1-(207)-443-8345 ♦

Winter - 2014

### Forestry Committee

Notes from a Poet

#### When Great Trees Fall by Maya Angelou

When great trees fall,  
rocks on distant hills shudder,  
lions hunker down  
in tall grasses,  
and even elephants  
lumber after safety.

When great trees fall  
in forests,  
small things recoil into silence,  
their senses  
eroded beyond fear.

When great souls die,  
the air around us becomes  
light, rare, sterile.  
We breathe, briefly.  
Our eyes, briefly,  
see with  
a hurtful clarity.  
Our memory, suddenly sharpened,  
examines,  
gnaws on kind words  
unsaid,  
promised walks  
never taken.

Great souls die and  
our reality, bound to  
them, takes leave of us.  
Our souls,  
dependent upon their  
nurture,  
now shrink, wizened.  
Our minds, formed  
and informed by their  
radiance,  
fall away.  
We are not so much maddened  
as reduced to the unutterable ignorance  
of dark, cold  
caves.

And when great souls die,  
after a period peace blooms,  
slowly and always  
irregularly. Spaces fill  
with a kind of  
soothing electric vibration.  
Our senses, restored, never  
to be the same, whisper to us.  
They existed. They existed.  
We can be. Be and be  
better. For they existed.

## Trees accelerate growth as they get older and bigger, study finds - Findings contradict assumption that old trees are less productive and could have important implications for carbon absorption



Most living things reach a certain age and then stop growing, but trees accelerate their growth as they get older and bigger, a global study has found. The findings, reported by an international team of 38 researchers in the journal *Nature*, overturn the assumption that old trees are less productive. It could have important implications for the way that forests are managed to absorb carbon from the atmosphere.

"This finding contradicts the usual assumption that tree growth eventually declines as trees get older and bigger," said Nate Stephenson, the study's lead author and a forest ecologist with the *US Geological Survey (USGS)*. "It also means that big, old trees are better at absorbing carbon from the atmosphere than has been commonly assumed."

The scientists from 16 countries studied measurements of 673,046 trees of more than 400 species growing on six continents, and found that large, old trees actively fix large amounts of carbon compared to smaller trees. A single big tree can add the same amount of carbon to the forest in a year as is contained in an entire mid-sized tree, they found. "In human terms, it is as if our growth keeps accelerating after adolescence, instead of slowing down. By that measure, humans could weigh half a ton by middle age, and well over a ton at retirement," said Stephenson.

"In absolute terms, trees 39 inches in trunk diameter typically add from 22-440 lbs. dry mass each year averaging 227 lbs. per year. This is nearly three times the rate for trees of the same species at 19.5 inches in diameter, and is the mass equivalent to adding an entirely new tree of four to eight inches diameter to the forest each year," said the report.

The findings back up a 2010 study which showed that some of the largest trees in the world, like eucalyptus and sequoia, put on extraordinary growth as they get older.

"Rapid growth in giant trees is the global norm, and can exceed 1,322 lbs. per year in the largest individuals," say the authors.

The study also shows old trees play a disproportionately important role in forest growth. Trees of 39 inches in diameter in old-growth western US forests comprised just 6% of trees, yet contributed 33% of the annual forest mass growth.

But the researchers said that the rapid carbon absorption rate of individual trees did not necessarily translate into a net increase in carbon storage for an entire forest. "Old trees can die and lose carbon back into the atmosphere as they decompose," says Adrian Das, another USGS co-author. "But our findings do suggest that while they are alive, large old trees play a disproportionately important role in a forest's carbon dynamics. It is as if the star players on your favorite sports team were a bunch of 90-year-olds."

"It tells us that large old trees are very important, not just as carbon reservoirs. Old trees are even more important than we thought," said University College London researcher Emily Lines, another co-author of the paper.

Understanding the role of big trees in a forest is developing rapidly even as they come under increasing threat from the fragmentation of forests, severe drought and new pests and diseases. Research in 2012 showed that big trees may comprise less than 2% of the trees in any forest but they can contain 25% of the total biomass and are vital for the health of whole forests because they seed large areas.

*The Bath Forestry Committee wishes to thank the Guardian (London) newspaper for allowing us to reprint environmental editor's, John Vidal, eye-opening story on the value of trees in our world. Mr. Vidal joined the newspaper in 1995 and has written extensively about the world's forests. (See local story on Oak Grove's old trees on page 2.)*

### JOIN US AT OUR NEXT MEETING!

The Bath Community Forestry Committee meets the first Wednesday of the month, September-June from 7:00 - 9:00 P.M. in the Bath City Hall.

The public is welcome. The Committee meets in the second floor conference room. For more information, call 443-8345. See us at [www.bathforestry.com](http://www.bathforestry.com)



## TREES AROUND BATH – Colorado Blue Spruce

The holidays are a distant memory, but the allure and beauty of a Colorado blue spruce tree lingers on. Because of its cold hardiness, symmetrical pyramidal form, and waxy, blue-hued foliage, the Colorado blue spruce is widely planted in ornamental and general landscape settings. The blue spruce often serves as borders, windbreaks, and screening. However, it needs space to grow out and up (often reaching 70-80 feet high) without being hindered by nearby growth. This is a tree that requires little care other than watering, during dry periods, and pruning to keep it's classic figure.

Belonging to the Pine Family (Pinaceae), the Colorado blue spruce requires rich moist soils and full to partial sun. While it is a relatively slow grower, it is long-lived and can survive for hundreds of years. The tree's unique color is attributed to the white powder that forms on new young needles. These needles are four-sided and have a very sharp point. It is this point which gives the species its name *pungens*, which in Latin means sharp. Needles are attached to the branch by a small peg-like structure called *sterigmata*. The *sterigmata* can persist on the branches even after the needles have fallen off.

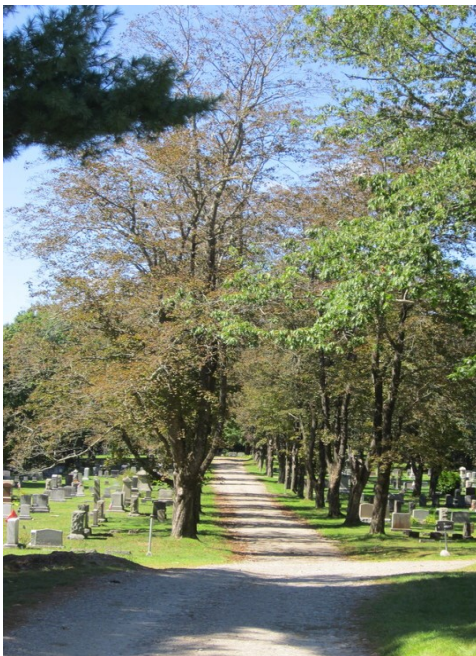
Not all adult trees, however, are blue. In Colorado, where they originated, vast mountainsides can be covered with blue spruce and the ones with blue color stand out as the exceptions. In a seed bed most of the seedlings are blue, but during their early years of growth, many of them turn green (more than half by the time they are seven or eight feet tall). Nurseries selling blue spruce have to start them from cuttings or grafts from adult trees that are blue, if they want to be sure they won't turn green after they are planted. Cultivars, produced in this way, have been developed and promoted for their blue color and other desirable characteristics.

The blue spruce is a very attractive tree, even without pruning. By pruning, however, you can slow growth to conform to a specific space. Pruning is also used to improve the shape and/or density of the tree. It can be pruned easily with hedge shears at any time of year, according to Jim Hummer, a Bath Christmas tree grower on Varney Mill Road. Hummer grew up in Pennsylvania on a Christmas tree farm where his father grew Colorado blue spruce.

*Picea pungens*-'Fat Albert', shown below, was named after Bill Cosby's fictional character and is a popular cultivar with landscape architects.



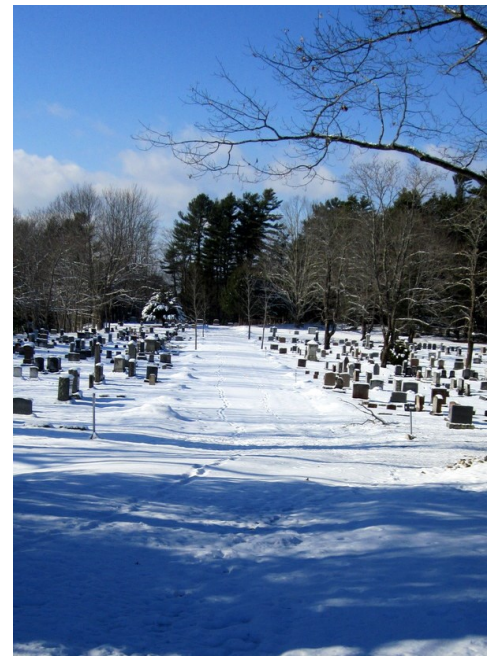
## Saying goodbye to old friends is hard to do



In this 2013 photo of Oak Grove Cemetery, between sectors C & D West, it is evident that the trees are dead or dying.

Bath is not lacking for big, old trees, especially in the City's cemeteries and along Bath's older streets. One only has to stroll through Oak Grove Cemetery to appreciate the stature and dignity of the old pines, maples, and oaks that soothe the soul during times of grief and sadness. Long, harsh winters, ice storms, disease, insect infestation, and age eventually take the trees from us. For safety reasons and to stop the spread of disease, trees eventually must come down.

Such was the case last year for the quintessential aisle of Norway Maples (*Acer planatonioides*) that lined the idyllic path between sectors C & D West at Oak Grove. The 50-70-year old trees were removed because they all had rot columns causing them to lose larger and larger limbs over time presenting a risk to the public. They will be replaced this season with European Copper Beech trees (*Fagus sylvatica*) with funds obtained through a Project Canopy planting grant through the State of Maine. In the coming decade, the City Arborist, Tom Hoerth, the BCFC, and many volunteers will conduct a risk assessment study of all the trees in the City's cemeteries to evaluate the risks to humans and property and document all the findings.



In this 2014 photo of the same sectors, C & D West of Oak Grove, the trees have been removed to make room for new ones.

*"To protect, to expand, to preserve, and use wisely, the forestry resources and green-spaces found within the City of Bath, Maine."*



# Residents submit outstanding forestry photos

The 2013 Bath Community Forestry Committee photography contest was a vibrant display of fall colors and excellent composition from both the adult and student contestants.

Winners in the **Adult Category**: 1st Prize-*Oak Up Close*, Angie Devenney, Bath; 2nd Prize-*Sun Shining Through Bright Colors*, Kim Christensen, Brunswick; 3rd Prize-*Red Velvet*, Angela Alderette, Brunswick; and 4th Prize-*Carpeted Path*, Virginia Campbell, Phippsburg.

Winners in the **Student Category**: 1st Prize-*4 Feet 3 Trees*, Calla Barton, Brunswick; 2nd Prize-*The One & Only One-Way Tree*, Sara Graves, Woolwich; 3rd Prize-*Anybody Home?*, Sierra Merrill, Phippsburg; and 4th Prize-*Fingers*

*of the Tree*, Calla Barton, Brunswick.

The 2013 **Judge's Award** for *A Purpose, Still*, went to Holly Alexander of Woolwich for her perceptive photograph of a dead pine tree giving life support, via a nest, to a family of osprey on Whiskeag Creek in Bath.

Each year the BCFC receives welcome support from consistent donors in the Bath and Brunswick areas including Skillin's Greenhouses, Henry & Marty's Restaurant and Catering, Just Framing, Bull Moose Music, Beale St. Barbecue, Byrnes Irish Pub and Restaurant, Big Top Deli, Bart & Greg's DVD Explosion, Maine Arborist Association, and Now You're Cooking. New to the donor club this year was The Shelter Institute in Woolwich and Tandem Glass in Dresden.

In 2014 the BCFC will be expanding the photography contest to include a black and white category as well as color. The digital age brings convenience, spontaneity, and creativity to many individuals who have never attempted photography in the past. It is your turn to shine—start filling that tree album now for 2014 with tree photos from all seasons of the year!

Special thanks to Weibke Theodore and the Bath Freight Shed members for displaying all contest photographs in their events room during November and December.

Entries were judged this year by Pam Allen of Bath Printing Company, Mike Mahan of Mahan Graphics, and Roger Duncan, a local photographer. This year's win-



**Adult Category: 1st Prize**  
**"Oak Up Close"**  
by Angie Devenney of Bath



**Student Category: 1st Prize**  
**"4 Feet 3 Trees"**  
by Calla Barton of Brunswick



## Avoiding ice and snow damage to your trees

Brittle tree species normally take the brunt of heavy icing after a winter storm. Many of the elms, most true poplars, silver maples, birches, willows and hack-berries are tree species that simply can't handle the weight of ice coated limbs. Brittle trees tend to be fast growers. Because of their desirable growth potential and the prospect of making quick shade, "weak" trees are sought out and planted by homeowners. Planting these trees will only exacerbate the problem of limb breakage. Fast-growing trees often develop weak, V-shaped crotches that easily split apart under the added weight of ice. Because these trees usually take some damage from storms throughout the year, internal rot and decay (some of which you cannot readily see) lead to weakened trunks and limbs.

Multiple leader, upright evergreens, such as arborvitae and juniper, and multiple leader or clump trees, such as birch, are most subject to snow and ice damage. Smaller trees need to be wrapped and larger trees with wide-spreading leaders should be cabled. And be aware that shaking snow off trees can seriously damage branches.

I've picked ten best trees readily available for planting in your yard. Consider these the best trees to plant in a large yard or landscape. For a small yard you might be better served using perfectly beautiful smaller trees. Although there are dozens of great

trees from which to pick, I have taken some of the subjectivity out to give you reasonable choices. I am certain any one of these ten trees will earn itself a place of pride in your yard. Still, you should pay close attention to each tree's characteristics and use my information to make your final selection.

I've reviewed the popular literature for the most popular trees and compiled these frequently requested trees to use as a starting place. By further studying the commercial appeal of each of these individual species and taking into account horticulturists' praise I selected my ten best. One other criterion I set is, the tree has to be native to North America with large ranges and do well in and around those ranges. Exotics tend to have two-edged problems: they either express later health problems (insects, disease, brittle) or quickly become a green scourge that threatens native trees and plants. These trees become very large and require a large yard.

All of the trees selected here have been screened to make a great yard tree within the limits of their potential habit and growth constraints: red maple, yellow poplar or tuliptree; red oak and white oak; flowering dogwood; sycamore; American elm; river birch; American holly; redbud; and most conifers.

by Steve Nix, Forester & Natural Resource Consultant

## Bath Forestry Committee looking toward next 20 years of green growth

by Elizabeth Haskell

The first 20 years of the BCFC brought awareness to the plight of urban forests and the necessity to preserve green spaces for a healthy and vibrant community. Probably designated as "tree huggers" in the 1990's, a few enterprising Bath citizens persisted in developing a community group "to protect, to expand, to preserve, and use wisely, the forestry resources and green-spaces found within the City of Bath, Maine."

Today we can look back on those days and thank the generation of individuals who had the foresight to see the value of an urban forest. And the City of Bath is to be commended for having the forwithall to staff an arborist to look after it's valuable assets. After all, Bath is not only a city of ships, but it is also a city of trees.

Many citizens are still unaware of the BCFC's existence, its goals, and its deeds. Just in the past year, the Committee has planted or replaced over a hundred trees in the south end dog park, along the streets of the City, in Library Park, and in various other locations. Pruning takes place in all seven wards monitored by Committee members who live in those wards. The City's nursery, which is stocked each year through a tree replacement program with Central Maine Power, allows the Committee to give away trees to citizens during the annual tree giveaway which usually takes place in May and/or in October.

The City arborist, Tom Hoerth, is the prime leader in acquiring grants for educational programs throughout Bath's school system,

most recently garnering funds for the sugar maple sap collection project at Butler Head and the orchard planting at the Bath Middle School.

This year the BCFC will be finalizing the signage layout at Butler Head and clearing the hiking trails so area residents will have yet another green space to explore and enjoy. To continue our work, volunteers, donations, and ongoing business support is necessary and greatly appreciated. We strive to remain a *Tree City USA*, as we have done for the past 16 years.

With your help, we will continue to protect and preserve the trees of Bath.



### MARK YOUR CALENDAR Winter 2014

**March 8, 2014 10:00 a.m. - 3:00 p.m. MOFGA, Unity, ME**

**Pruning Fruit Trees** at three locations on the same day! Blue Hill, ME with Phillip Norris; Durham, ME with Dave Colson and C.J. Walke; and location TBD with John Bunker.

Designed for beginner to intermediate orchardists managing backyard and larger orchards. Learn to prune fruit trees to encourage vigorous growth, heavy fruit set, and quality fruit yield. Bring your own bag lunch. Confirmation and directions will be sent a week prior to the start of the workshop. Please keep in mind that pre-registration and payment are required. For registration and fee submission of \$30 see mofga.net or call 207-568-4142. CLASSES FILL UP QUICKLY!

**May 14, 2014 7:00 p.m. Friends of Merrymeeting Bay, Bath City Hall Auditorium, 55 Front St., Bath, ME**

**Forestry in Maine: State & Local Perspectives** - Join Kevin Doran, Natural Science Educator, Maine Forest Service, and Jack Witham, Associate Scientist, Holt Research Forest to discuss the state of forests in Maine. Call the MFS at 207-287-3200 or email kevin.doran@maine.gov.

### Keep Bath Green and Growing!!

**BCFC, 1 Oak Grove Ave., Bath, ME 04530**

This is a landmark year as we establish a conservation easement at Butler Head and begin assessing the trees in Bath's Cemeteries. Your contribution will be used wisely and be greatly appreciated. Forward to the address above. Make checks payable to BCF Trust (investment acct.) or BCFC (operations).

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Town, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

**Bath Community Forestry Trust Levels**

\_\_\_ \$300 Chestnut \_\_\_ \$100 Hickory \_\_\_ \$50 Hazelnut \_\_\_ \$25 Beech  
\_\_\_ Other

**Bath Community Forestry Committee Operations/Tree Care Levels**

\_\_\_ \$300 Oak \_\_\_ \$100 Elm \_\_\_ \$50 Maple \_\_\_ \$25 Pine  
\_\_\_ Other

\_\_\_ Check here if you wish to volunteer on future projects. Thank you.

**2014 Committee Members**  
Elizabeth Haskell, *Chairman*  
Andrea Babbitt-Wood  
Steve Balboni, *Ex-Officio*  
Thomas Barrington  
Bruce Brennan  
Wendy Everham  
Thomas C. Hoerth, *Ex-Officio*  
James Hummer  
Aaron Park  
Mary Earl Rogers  
Margo Smith  
George Waldman  
Lori Harper, *Staff Assistant*

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