

Wilmington Tree Press

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The mission of the Delaware Center for Horticulture is to improve the quality of life in Delaware by promoting knowledge and appreciation of gardening, horticulture, and conservation.


For more Tree Program information contact: Patrice Sheehan ? 658-6262 ext. 112 ? psheehan@dehort.org or Andrea Mosher ? 658-6262 ext. 115 ? amosher@dehort.org or Adira Riben ? 658-6262 ext. 113 ? treevista@dehort.org

TREEminders

MARCH

15	20	24	
Tree Steward & Bare Root Training Workshop 5:45-8:15pm at the Delaware Center for Horticulture. This free event counts toward becoming a Tree Steward. A light dinner will be served.	First Day of Spring Before nature fully thaws it is a great time to wash road salt off of and away from trees. Also finish any pruning before the new leaves arrive and make it more difficult to see the branches.	Bare Root Tree Planting Day Join us from 9 am—1 pm to plant 45 bare root trees and enjoy a picnic lunch! For details contact: Andrea Mosher (amosher@dehort.org)	Trees for Wilmington will meet this month. Anyone interested may join this working group of the Wilmington Beautification Commission and should contact: Vikram Krishnamurthy (vkrishna@udel.edu)

APRIL

10	24	27	
Urban Forestry Grant Workshop Come to DCH from 6:00-7:30 p.m. To get expert advice on filling out and managing an urban forestry grant project for your neighborhood.	Wilmington celebrates Arbor Day at Kosciuszko Park! Ceremony begins at 12:45 p.m. Volunteers are needed for various tasks. Please contact: Adira Riben (treevista@dehort.org)	Celebrate Delaware's official Arbor Day!	

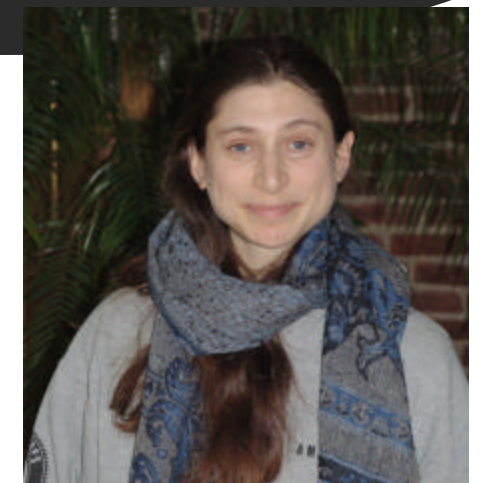
If you want to be happy for a year, plant a garden. If you want to be happy for a lifetime, plant a tree.

—Unkown

Last but not Least:

Adira Riben, Tree Program VISTA

The Delaware Center for Horticulture (DCH) has partnered with the national service program, Americorps VISTA, since 2003.. Through the VISTA program, DCH has had 6 volunteers spend a year or more in Wilmington promoting urban greening. The DCH Tree Program has been able to reach many more people in the community, thanks to the VISTA partnership and we are excited to welcome Adira Riben as the seventh VISTA at DCH and third and final VISTA in the Tree Program trilogy!



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Growing up in the woods in Central New Jersey, my home and street were a living playground. I was privileged to spend my days climbing white pines, making apple blossom bouquets during spring, and mounding up fall leaves for the pure joy of jumping into the leaf pile.

Back then, I was unaware of the many other benefits trees provide, such as, holding back soil from eroding, cleaning the air, providing oxygen for us to breathe, filtering the water and preventing or lessening floods. The Tree Program is an amazing resource that can potentially bring the benefits of trees to underserved communities in Wilmington.

A life long environmentalist, I studied Environmental Engineering at Rutgers University and since then I have had various paid and unpaid jobs in and out of the environmental field from tutoring in Jersey City to doing wilderness restoration in Hawaii. It is from an earnest desire to help people and the planet that I began my job as Tree V.I.S.T.A. at Delaware Center for Horticulture. V.I.S.T.A. or Volunteer in Service to America is a national government sponsored program that places individuals in positions with non-profits, community organizations and government agencies to create and expand programs that help alleviate the effects of poverty in low-income areas. Although I have lived in low-income neighborhoods in high school and college, I am eager to learn more about the communities served by the Tree Pro-

gram. Every place has its own influences and history with regard to both its financial and environmental wealth. I am eager to help improve the Tree Program so that it can serve the people of Wilmington for a long time to come.

The Scoop on Bare Root Trees

?By Andrea Mosher, Urban Forestry VISTA?

Planting Trees Bare Root

What kind of a garden would you have if you hacked off about two-thirds of the roots each time you transplanted a clump of your favorite perennial?—likely sparse, brown, and pitiful. It is surprising, then, to see plants transplanted in that way, surviving and growing along our streets and in our yards. Trees can lose up to 96 percent of their roots when dug from the field for transplanting, and certain transplanting methods can be more stressful to the tree than others (Watson). The age old practice of bare root tree planting, used historically by nursery professionals before the advent of mechanized balled and burlapped (B & B) equipment, is regaining popularity for urban tree planting, in part because of its ability to avoid extensive root damage, which is a main cause of transplant shock. The bare root tree planting method is showing promise as a less traumatic, less expensive, and more practical way to green our yards and communities. This is encouraging as the need for more trees in the urban environment is realized.

Could bare root planting help to reach tree canopy goals?

Trees have a place in treating many of the major problems that come with the urban environment—reducing flooding, screening harsh views, cleaning our air and water, lowering energy costs, increasing property values, promoting neighborliness and curbing violence. Currently *Trees for Wilmington*, a working group of Mayor Baker's Wilmington Beautification Commission, is working to develop a plan to increase tree canopy in the city. The ability of the urban forest to function as a natural utility (as opposed to manmade systems, like large stormwater holding tanks) in treating the environmental dilemmas of the city is reinforcing a case for more trees. Urban forest movements are gaining momentum all across the country as the realities of pollution and



A tree's fine absorbing roots, through which the tree uptakes most of its water and nutrients, are more likely to survive when using the bare root transplanting method.

need for solutions are recognized. Places like Los Angeles and Baltimore have committed to doubling their tree canopy over the next 30 years—both cities have been working on such efforts for at least 10 years. Based on a growing collection of data supporting the claims that trees positively impact the social, environmental, and economic health of cities, these ground-breaking efforts to 're-tree' our cities are looking smart. Preliminary data analysis of Wilmington's urban forest using the Urban Forest Effects (UFORE) model shows that existing canopy in Wilmington (~18%) is lower than comparable eastern cities like Baltimore or Annapolis, whose base canopy coverages were 25 and 40 percent respectively, at the start of their tree campaigns (for more information about the UFORE study, visit www.ufore.org).

Another local canopy expansion effort, TreeVitalize—a partnership initiative of the Pennsylvania Horticultural Society, the City of Philadelphia, and the State of Pennsylvania—offers bare root trees to community groups as part of their effort to increase forest cover in southeastern Pennsylvania. The result: over 6,000 bare root trees planted since 1998. With proper planting, maintenance and preservation, a similar effort in Wilmington could work to double our canopy in the next 30 years!

So how could bare root trees facilitate

our work to expand the tree canopy in Wilmington? It all stems from the roots...

The way the tree makes its way from the nursery and into the ground outside your house can be stressful enough, but whether the tree has a viable root system is the primary determining factor of whether the tree will survive and thrive in its new location. Current research by Nina Bassuk at Cornell University's Urban Horticulture Institute indicates that many

tree species fare better when transplanted bare root as opposed to B&B or containerized (grown in pots). When properly handled, it seems the bare root method is less traumatic for the trees' roots, and can lessen transplant shock and recovery time.

The bare root method respects the fact that trees have shallow and wide-spreading root systems. The digging machinery disturbs a wider and shallower profile of soil than a tree spade used for digging B & B trees. The soil is shaken from the roots and the result is a transplant with a much greater percentage of roots remaining. The conventional argument for B & B trees over other methods is that the roots are protected by a soil ball when harvested and in transit. However, when harvested, the tree spade used to dig the B & B tree greatly reduces the root system. Root systems of container grown trees aren't likely to be lost at the time of transplant, but are often put under extreme stress because the artificial media used in the container loses moisture too easily to the surrounding soil at the tree's newly transplanted location. Containerized trees are also likely to have circling roots found to be highly detrimental, and often fatal, as the tree attempts to develop.

Time sensitivity is the major challenge of bare root tree planting. Trees must be dug and planted when they are dormant, typically between late November through March. Additionally, once the trees have been dug at the nursery, there is a limited shelf-life. Because the roots are exposed to air and not protected by soil to keep them moist, the roots can easily dry out and become desiccated. Therefore, bare root trees should be re-planted soon after harvesting, and when the trees are out of

the ground the roots must be kept moist and cool to prevent desiccation.

Another major reason for tree failure is improper planting depth (Bassuk and Buckstrup 3). The fine absorbing roots are unable to access oxygen when a tree is planted too deep. Bare root trees are easier to plant at the correct depth. The root flare, the important interface between soil and air, is obvious on bare root plants and not as obvious on B & B or containerized plants, whose flares are often buried. When planting a tree bare root, it is also easier to prevent loss due to circling roots. The circling roots common in containerized and B & B trees are easily spotted on bare root trees and can be pruned or straightened before planting.

Of the three tree planting methods, bare root is the least expensive. In Bassuk's studies, bare root trees were between one-third to one-half as expensive as B & B trees or containerized trees. Bare root trees are lighter and cheaper to ship than B & B trees of the same age/caliper, and they are also typically easier and less expensive to plant. One bare root tree can be lifted and moved by a single person, while a B & B tree can require two to three able adults plus powered equipment to maneuver. Consequently, bare root trees make for ideal community and volunteer planting events; on average a contractor-planted B & B tree will cost \$500.00, whereas volunteers planting bare root trees will be able to plant 5-10 trees for the same price.

Although bare root planting promises to be a practical method for many planting circumstances, it is yet to be widely used. As trees gain more attention for the environmental benefits they provide in this age of climate change, and the demand for planting trees in the urban environment intensifies, the bare root method should be an effective way to expand the urban forest canopy.

Sources:

Bassuk, Nina and Buckstrup, Michelle. *Creating the Urban Forest: The Bare Root Method*. Ithaca: Urban Horticulture Institute. 2003.

Watson, Gary. "Tree Transplanting and Establishment". *Arborist News*. June 2000. Morton Arboretum. 30 Jan. 2007. <<http://www.mortonarb.org/research/rootpdf/TransplantandEstablishment.pdf>>

Dear Trish...

An occasional column by Patricia Hotchkiss DeBrassey for tree lovers, lovers, and loving couples

Dear Trish,

Until a few weeks back, our quaint old house had a sugar maple in front. It was so gorgeous and I brought back many fond childhood memories for me. I was raised in New England, and I can so vividly recall the gorgeous autumn foliage amidst the gradual shortening of the days and crisp bracing air. Those days are so precious to me! They remind me of tart Northern Spy apples, hot cider on a cold night, and, the poignant aroma of the fires on moody, cloudy days. I used to roll and play in the golden, carmine, and ash brown leaves when I was a little girl. Yes, days and hours and moments to be cherished. And as the first snows fell, I knew that deep beneath the Earth's frozen bosom, life was stirring. And that following a full and glorious summer, I'd once again frolic on the wavy carpet of leaves.

So it was a virtual tragedy when our stately old sugar maple had to come down. It had simply become a hazard. It was really hard to say goodbye, and I wept a few tears when the arborists' saws amputated the boughs of My Old Friend. Our home looks so naked now! I want to replace my dear departed tree immediately.

A neighbor told me that there's a tree called the Bradford Pear. It doesn't bear fruit, and -- now here's the important part -- it grows FAST. I just don't think I can live through a year without a tree out front to welcome us home.

It all seemed so simple! Then, you guessed it, my husband got involved. He is a wonderful guy, but, like a lot of men, he can be kind of negative. He said the Bradford Pear was prone to all kinds of problems, and basically vetoed the whole idea. I was so heartbroken, I ran to the medicine cabinet for my medication, took more pills than usual, and fell right to sleep.

This tree question has harmed our relationship. Now there's a big, ugly gap between my husband and me. And that stump out front just glares at me, witnessing and mocking my distress and loss.

What can we do? Trish, save my marriage!

Yours,
Grieving in Greenville

Dear Grieving,

You have my deepest sympathy. The loss of an ancient, majestic tree is often hard to bear. It can sometimes provoke post-traumatic-arboreal-loss disorder (PTALD). But don't run to the medicine bottle! I can

tell you love your husband deeply. Yes, I can read between the lines of your letter, and I can sense the warmth, closeness, trust, and passion that bonds you two, and makes for a complete and fulfilling relationship. There is no reason on earth why this arboreal crisis should damage your marriage for one minute.

First off, you call the contractor who removed Your Old Friend, and have him tear up that stump. He should have done it anyway. That grimacing, ugly old thing is casting bad vibrations. Let's have some respect for the dead. If you cremated a deceased loved one, you wouldn't leave them out by the mailbox!

Now, let's heal those wounded hearts. Make sure you and your husband have a little special, quiet time together. Turn off the phones. If you have a fireplace, build a fire. Make up some tasty, warmed spiced wine. It's perfect for these chilly nights, and let me tell you, it goes to your head like an express train. Dress nicely for your little interlude. Stylish, elegant, but not too provocative. Play some relaxing music, light some (unscented) candles.

Next is the most important part. Every woman since the beginning of time has known what to do next. Make your guy feel like a king: Tell him he's right! That's what most men need more than anything else. And guess what, he does have a point!

Yes, the Bradford Pear is a fast grower. And those orange and mahogany leaves are real beauties in the Fall. But this tree is cursed with branches that snap off, and often they split right down the middle. Their nemesis is the ice storm. And, golly, don't get me more than our share of those around here!

After you and your husband have reconciled, and he's feeling in a cuddly, relaxed, friendly mood, (don't let him fall asleep), suggest a compromise tree. But kind of make him think it was his idea. Tell him you were leafing through one of his gardening books (even if he doesn't have one, he likely won't remember), and you noticed that he'd folded down the page with the Red Maple.

The Red Maple is a tree that does well near the street, grows reasonably fast (not too fast), is resistant to a lot of bugs and blights, and has a gorgeous appearance all year round. In Fall, it's breathtaking. You can plant one now, just so long as the ground isn't frozen.

Contact your arborist, who may have other suggestions, but the Red Maple would be my call.

Forever yours,
Trish

P.S. Patricia DeBrassey is a pen name known to be used on occasion by Wilmington Tree Steward Clark Greisman.

P.P.S. This column is based on fictional characters; however, arboricultural recommendations are accurate.