ARBOR VITAE

NEWSLETTER OF **TREES FOR CAPTIOL HILL, INC.** ----2019



2018 Fall Tree Planting

Beth Purcell, President, TFCH

Trees for Capitol Hill (TFCH) continues to augment Capitol Hill's tree canopy in cooperation with the Urban Forestry Administration (UFA) and Casey Trees. TFCH volunteers are working toward the shared goal of adding diversity to our urban forest. Planting a wide range of tree species along our streets ensures that some trees will survive if a species-specific disease appears (e.g., Dutch elm disease). A diversity of trees also serves an educational purpose -- the UFA is educating residents by leaving the ID tags on newly planted trees. Photos and detailed descriptions are available on-line at ddot.dc.gov/page/ddot-urban-forestry.

This past year's selections included an Eastern Redbud (Cercis canadensis) on the 200 block of 14th Street, NE, an American Basswood (Tilia americana) at 1300 Constitution Avenue, NE, a Styrax obassia, at 1805 A Street, SE, and a black gum (Nyssa sylvatica) and Kentucky Coffee Tree (Gymnoclaudus diocus) on the 100 block of 13th Street, NE. We also planted a pink dogwood (Cornus florida), a Black Diamond crape myrtle (Lagostromia), and an Edgeworthia (Edgeworthia chrysantha) in private yards, plus Magnolia (M. mcacrophylla) in the Congressional Cemetery.

We had wonderful weather - could not have been more conducive to tree planting - not too hot, not too cold and soil nicely softened from recent rainfall. And we had a wonderful contingent of volunteers - including new neighbors and two members from the Rotary Club. Many thanks to each and every one of them. We couldn't have managed without them and we're hoping to see them again this year on November 23, 2019. Our planting date is traditionally the Saturday before Thanksgiving. Volunteering for the fall planting is a fun family activity!



A Styrax Obassia for first-time tree-sponsors on A Street SE

Cutting the roots to promote proper development



What a day! What a crew! The last tree is in the ground at Congressional Cemetery!





Black gum on 100 block of 13th St. NE

Nick Alberti with Tony Lopez from Merrifield Garden Center





Rotary Club volunteers

Trees for Bees

Toni Burnham - president and founder of the DC Beekeepers Alliance. This is her 15th summer keeping bees in DC.

In the MidAtlantic region, tree species are critically important for pollinators, as forage and home sites, whether the bees in question are native or managed honey bee colonies. More than 400 species of bees are native to our region and most have co-evolved with indigenous plant and tree species.

Most people do not think of trees as blooming plants, though they represent by far the largest source of nectar and pollen for honey bees in Washington, DC. Three species in particular, the Black Locust (Robinia pseudoacacia), the Tulip Poplar (Liriodendron tulipifera), and the American Basswood (*Tilia americana*), are the main sources of nectar collected for honey in our region. During the bloom period of these three species (typically early April through mid-June), a single mature specimen can produce the equivalent of 2 acres of blooming forage for honey bees. Interestingly, Basswood (Tilia americanais) is far more prevalent in downtown Washington than in the suburbs, and makes DC honey distinctive and wonderfully delicious!

Both native and managed bees energetically pollinate native species such as Persimmon (Diospyros virginiana), Paw Paw (Asimina triloba), Holly (Ilex spp.) and Hawthorn (Crataegus) species. In early spring, my bees deeply appreciate my front yard Eastern Redbud (Cercis canadensis).

Honey bees are cavity nesters, and feral colonies preferentially select voids at 20 feet up or higher in hardwood trees as nesting sites. Other species such as Bald Faced Hornets build paper-like nests in tree branches at similar altitude.

While hornets are less popular than honey bees and native bee species, traditional farm wisdom says "the farmer who kills a hornet's nests sacrifices a harvest" due to their voracious predation of garden pests. Hornets in their preferred tree locations are unlikely to sting beyond a ten-foot radius of their nest (if not stimulated to do so by human interactions), and provide all-natural, beneficial pest control without chemical damage to our green spaces, streams, and families.

Native bees nest in a wide variety of locations, and differ from honey bees in that they are generally active only while the native plant species with which they coevolved is in bloom. Many tunnel nesting species (Osmia, for example) will seek out woodpecker and other holes in trunks and branches for producing young that will remain dormant most of the year-these are the same bees for which nesting block "bee hotels" are designed.

One less-comfortable secret about trees and honey bees, however, is that they seek out and benefit from many invasive tree species, as well. The Golden Rain Tree (Koelreuteria paniculata) is one example of an attractive tree which has become a problem. Tree of Heaven (Ailanthus altissima) is another pollen and nectar source from a "junk" tree, but not one we are likely to place intentionally. One non-native, non-invasive tree which beekeepers are happy to see in the downtown landscape is the Japanese Pagoda Tree (Sophora japonica), because its late-summer bloom provides a rare source of abundant, healthy forage at an otherwise difficult time for bees.

Pollinator Partnership Ecoregional Planting Guides are free from www.pollinator.org, look for the Southeastern Mixed Forest Province Guide. There is also an app you can download to your phone! The free downloadable Native Plants for Wildlife Habitat and Conservation Landscaping / Chesapeake Bay Watershed from the Fish and Wildlife service includes a section on trees with a chart that lays out planting advice and which wildlife species (including pollinators) benefit from each. fws.gov/Chesapeakebay/pdf/NativePlantsforWildlifeHa bitatandConservationLandscaping.pdf

Common Native Trees of Virginia is another free online publication with great guidance on pollinator friendly tree plantings. dof.virginia.gov/infopubs/Native-Tree-ID-spreads_2016_pub.pdf

Learn more about the varied and beautiful native pollinator species who can benefit from your treescape by checking out the work of internationally renowned local bee researcher, Sam Droege of the USGS Native Bee Inventory and Monitoring Program, based at the Patuxent Wildlife Research Center. flickr.com/people/usgsbiml/



Bee-friendly Sophora Japonica in Lincoln Park

Please Water Trees

Beth Purcell, President, TFCH

We are fortunate to have received so many new street trees this year, both through our own efforts and those of the Urban Forestry Administration (UFA). A good tip for spotting the "newbies" is to look for stakes with wires attached to them; they should be sporting a green "tree-gator" tree-watering bag.

- These trees will need supplemental water for at least their first three summers if they are to survive.
- The District government plans to water twice a month. Even if they follow this schedule, it may not be enough water so we all need to help. We estimate that it costs less than \$10 to water a tree for an entire summer

A quick blast from a hose encourages poor root development. Instead, let the water trickle for 20 to 30 minutes - or better still, use a watering bag or basin. A garden hose connected to a nearby water source makes this job easy and it provides a useful way to measure the amount of water you are delivering.

- Fill the green tree-gator bag once a week.
- The hole for the hose is a slit under the paper tag at the top of the bag. See how-to water video on www.caseytrees.org
- The water will gradually drip out over 24-48 hours.

The trees will need an absolute minimum of 10 gallons each week from spring bloom until winter freeze - but as much as 20-30 gallons may be needed in very hot, dry weather. Even if you think that Mother Nature has been providing enough rain, it doesn't pay to be over-confident. By the time a tree looks like it needs water (is shriveled or drops leaves), it has already been damaged. Don't wait. Be proactive!

- If there has been less than 1.5 inches of rain in the last week, new trees need water.
- Check the "Watering Alerts" on www.caseytrees.org.
- Casey Trees offers a free rain gauge to people who take the "25 to stay alive" pledge to water new street trees.
- A note of caution: watering bags must be removed as soon as they are no longer needed. If left on over the winter, they prevent proper bark development and can cause permanent damage.

Watering basins are a good alternative but can be difficult to find. The advantages are that they are easier to fill with a bucket, where hoses won't reach, and they aren't easily damaged by mowers. The disadvantage is that the holes may become clogged, preventing the water from draining into the ground. In very light rain, they can block water from reaching the tree.

Mulch is also important in keeping a tree hydrated. A 2-4 inch layer is sufficient but the mulch must be kept away from the trunk. Cleaning weeds and debris from the planting space helps in two ways. First, the tree will not have to compete with the weeds for precious water. Second, water bags are far less likely to be punctured by mowers if there is no vegetation to mow.

Trees for Capitol Hill has a few bags and basins that can be borrowed for the season. If you want one, contact Elizabeth Nelson, Elizabeth knits@yahoo.com. Service requests can be made on dc.gov or by calling 311. The UFA (part of the District Department of Transportation) can be reached at 202 673-6813 or www.ddot.dc.gov > Tree Services.



Treegators are easiest to fill by hose



Jack Montgomery and Margaret Missiaen filling Treegator with bucket



No hose? Basins may be easier to fill

Preventing Mower Damage to Tree Bark

Elizabeth Nelson, Vice-President/Treasurer, TFCH

It's Biology 101; damage to the bark is harmful, if not fatal, to the tree. The tree's "circulatory system" is located in the cambium layer between the wood and the outer bark. But the contractors hired by the City to mow public greenspaces, especially pocket parks, don't seem to know this. All too often they run the blades of the mowers into the trunk of the tree a few inches above the ground. If the tree is lucky, it may be just a nick; all too often, a chunk of bark is torn off or the tree may be completely girdled. In most cases, the wound will not heal over. The tree may survive the initial attack but will not thrive as it would have with intact bark. Trees in areas that are maintained by residents are at less risk partly because their neighbors are looking out for them but also because lawn mowers designed for home use, have the blades recessed. However, even these trees can be damaged through inattention.

Plastic trunk-protectors are very helpful and inexpensive, and they should be used whenever possible. But they are not fool-proof; they too are easily shredded by high powered mowers. Keeping weeds and tall grass away from tree trunks reduces the temptation to mow too close. It is recommended that a wide circle of mulch be used, as it discourages unwanted vegetation and preserves moisture. Best of all, it keeps those mowers away from the trees. To request a bark protector from TFCH, email Elizabeth_knits@yahoo.com with 'bark protector' in the subject line.



Plastic bark protector



Nick Alberti and Mark Grace create a



A Tree of One's Own - "Friends & Family" Program

Elizabeth Nelson, Vice-President/Treasurer, TFCH

TFCH assists neighbors wanting trees for their own yards. They are required to prepare a hole on their property and pay the cost of the tree (at our discounted price) plus a pro-rated share of the shipping costs. TFCH selects a specimen of the preferred species at the nursery, purchases the tree, arranges delivery and assists in planting. These trees are quite large, usually 1-2" caliper, and not inexpensive. Still, they are typically a more mature tree than what you could bring home and plant by yourself; the discount makes them much more affordable; and you pay much less in shipping and installation costs than if you purchased those services directly from a nursery. If you are interested in this program, email elizabeth_knits@yahoo.com with 'Friends & Family Tree' in the subject line.

Tree Space Beautification Best Practices

Steve Kehoe, reprinted courtesy of the Capitol Hill Restoration Society

Residents are encouraged to adhere to these best practices, which will contribute to the robust growth and general health of Capitol Hill's public space trees.

DO	DON'T
If adding soil amendments or replacing some soil in a tree space, work must be done prior to tree planting. After planting, only periodic light cultivation is advised.	Never try to replace soil around a tree after it has been planted. Trying to replace soil around a tree usually results in a dead tree within 1 or 2 years—particularly for trees that are just becoming established.
need 10 - 20 gallons of water once a week from spring	Don't use gravel as a groundcover or deposit soil to increase the grade of a tree space. Both are is prohibited (24 DCMR 109.10). Piling on additional soil exposes the tree bark to soil borne diseases and robs the roots of oxygen.
Any temporary barrier or fencing must allow the free flow of rainwater from the sidewalk into the tree space. This applies to permanent tree fences too. DC Dept. of Transportation (DDOT) requires a \$50 permit for a permanent tree fence (24 DCMR 225.1(h)).	Don't install any solid border or edging around a tree space. This practice prevents or impedes the flow of rainwater from the sidewalk into the tree space. DDOT has been enlarging tree spaces in an effort to increase the amount of rainwater runoff available to trees.
	Don't use plants that grow via a deep root system, spread by underground shoots or runners, that climb or intertwine, or that are invasive.
Black-Eyed Susan, and flowering annuals that grow no more	Don't plant bamboos and <u>dark green</u> Liriope, which spread by underground shoots to form an impenetrable root layer, or English Ivy, which climbs. Vegetable plants are not flowers and are prohibited (24 DCMR 109.11).



Excessive shrubbery crowds the tree stealing nutrients and water



Raising the soil level will smother the roots and kill the tree



This planting box restricts free flow of rainwater, raises the soil level and creates a tripping hazard

Tree of the Year (Not!) - Ailanthus Altissima

Elizabeth Nelson, Treasurer, TFCH

Also known as "tree of heaven", "stink wood" and "ghetto pine", this decidedly notheavenly invasive species is ubiquitous in the District. Like zombies in Grade B horror films, they are persistent as heck, difficult to kill (resprouting vigorously when cut) and multiply the minute your back is turned. Their root toxins kill competing plants. You gotta give them props, though: they can make a living in any crevice and do not require supplemental water. Frequently seeding themselves in a mortar joint or roof seam, they send their roots on a path of destruction to the distress of the unwary homeowner.

In China – where it belongs - the tree enjoys a better reputation. Once believed to cure a multitude of ailments, it is still used in traditional medicine. It is also cultivated for silk production.

It was introduced to the United States in the late 18th Century as an "oriental" garden specimen but is now considered a particularly noxious weed. In fact the District government, which requires special permits* for the removal of large trees, even on private property, exempts the Ailanthus.

So whack this scourge when you can and replace it with something less scary. It won't be easy and persistence will be required. You'll need to cut it down entirely and dig up the roots, getting every last scrap. If they re-sprout, the new shoots must be removed as soon as possible, wearing down the tree's reserves over time until it eventually gives up. Try to do the cutting before it flowers and sets seed. In extreme cases, herbicides may be necessary but this should only be used as a last resort due to environmental impacts.

* In order to protect the District's canopy and its largest trees, individuals must receive a permit to remove any tree in the public parking dimension and/or on private property between 44 inches and 99.9 inches circumference (measured around the trunk at 4.5 feet from the ground). Trees 100 inches circumference or larger are considered Heritage Trees and cannot be removed unless they are deemed diseased or hazardous.





Newsletter Editor Needed

Elizabeth Nelson, Vice-President/Treasurer, TFCH

TFCH is in dire need of a newsletter designer. We are limping along (or you would not be receiving this publication) but we're eager to find a more permanent solution. If you have publishing skills and can help with this annual effort, please let us know.



Sweet gum on the 1300 Block of North Carolina Avenue NE

Trees For Capitol Hill



Who we are:

Trees for Capitol, Inc., a DC

nonprofit corporation founded in 1991, is dedicated to enhancing our neighborhood by planting and caring for trees in public spaces. Our funding comes from generous grants from the Capitol Hill Community Foundation, the National Capital Bank and individual donors. We are a 501(c)(3) corporation.

To make a contribution, send a check made out to "Trees for Capitol Hill" to 1330 North Carolina Ave., NE, Washington, DC 20002

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