

FROM THE HEAT

**TREEMASTERS** 

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**WELLS FARGO** 

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### **SOCIAL MEDIA**

- facebook.com/treescharlotte
- twitter.com/treescharlotte
- instagram.com/treesclt

#### CONTACT

Dave Cable dave@treescharlotte.org www.TreesCharlotte.org

## **ADDRESS**

701 Tuckaseegee Road Charlotte, NC 28208

# Arbor Week

The first-annual Charlotte Arbor Week was a huge success. From neighborhood and school plantings to our first networking event to a film screening to the Citywide Free TreeStore, we were thrilled to connect with so many Charlotte residents and students throughout the week. In the course of eight days, with the help of 780 volunteers, we planted or gave away 1,200 trees and another 2,500 seedlings.







# **MARCH 12**

DEVONSHIRE ELEMENTARY & COCHRANE COLLEGIATE ACADEMY TREEDAY

Volunteers and funding from Rotary District 7680 helped plant 328 trees at two CMS schools in East Charlotte.

# **MARCH 15**

BRANCHING OUT NETWORKING EVENT

Our first networking event, in partnership with the U.S. Green Building Council Emerging Professionals, was held at Wooden Robot Brewery in South End.

# **MARCH 16**

RENAISSANCE WEST TREEDAY

Sixty-three volunteers helped plant 161 trees at the West Charlotte community. Crescent Communities sponsored and provided volunteers for the event.





# **MARCH 18**

NORTH CAROLINA ARBOR DAY SCHOOL PLANTINGS

We provided educational programming, planted a tree and handed out seedlings to students at seven Charlotte schools: Oakhurst Elementary, Hawk Ridge Elementary, Cotswold Elementary, Hornets Nest Elementary, Shamrock Elementary, Marie G. Davis Military & Global Leadership Academy and Kennedy Middle School.





# **MARCH 19**

30TH ANNUAL ELIZABETH 8K ROAD RACE

Known as the "Run for the Trees," the Elizabeth 8k is the oldest road race in Charlotte. 10% of its profits are donated back to TreesCharlotte. We also held a mini TreeStore, giving away 35 trees to Charlotte residents.







# **MARCH 19**

"END OF SEASON" CITYWIDE TREESTORE

Charlotte residents lined up at Landscape Management to receive up to three free trees per household from about 30 different species. More than 900 trees were given away within two hours.



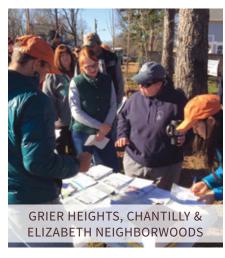
**Jan. 30 -** Neighbors were excited and happy to participate in TreesCharlotte's mission.



**Feb. 20** - 110 trees were planted at Stone Creek Ranch and an additional 186 trees were given away to residents.



**Feb. 21** - TreesCharlotte partnered with the Hebrew Cemetery to plant 35 trees as a celebration of Tu B'Shvat, or "New Year for Trees."



**Feb. 27** - 240 trees were given away to 91 residents of the Grier Heights, Chantilly and Elizabeth neighborhoods.



March 3 - TreesCharlotte was able to plant 91 trees at Winterfield Park thanks to the help of 40 Duke Energy employees.



March 5 - 230 trees planted with 275 volunteers and sponsor Keep America Beautiful. CMS Superintendent Ann Clark and City Council Rep. Ed Driggs were present.

# Honoring Bill

A PLANTING AT WINTERFIELD PARK SERVES AS A WAY FOR DUKE ENERGY EMPLOYEES TO REMEMBER A COLLEAGUE DEDICATED TO CONSERVATION

On Thursday, March 3, 50 Duke Energy volunteers helped plant 120 trees at Winterfield Park in East Charlotte. The event marked the launch of Duke Energy's Care4Environment program in 2016, in which employees and retirees participate in major projects that make an impact on the environment and local community.

"The trees we have planted in this park will be here for many years to come," says Duke Energy sustainability director Hilary Davidson at the TreeDay event. "They will be enjoyed by families who live in this neighborhood and community as well as the children and parents and teachers at the school."

After the trees were planted, Davidson led the ceremonial memorial planting of a Japanese maple tree honoring Bill McCabe, a 40-year-old Duke Energy employee who recently passed away.

"Conservation was really important to my dad so we're appreciative of Duke Energy coming out and volunteering with TreesCharlotte today to plant all these trees in his honor," says Jennifer McCabe. "This is something that he would have loved to be involved with – he would have been out here digging and planting trees with the best of them. It was something he cared about and he passed that on to me, so we're really happy to be out here volunteering today."

Known for his commitment to nature conservation, McCabe spent much of his career in the Environmental Department at Duke and was one of the leaders who helped with the conservation of the Jocassee Gorges lands in South Carolina. He was also active on the board of the S.C. Wildlife Federation. At the base of the maple tree, a brick marker recognizes McCabe.

"This tree is a reminder that each of us can make a difference – at work and in our personal lives," says Davidson.

For more information about TreesCharlotte memorial trees, visit **TreesCharlotte.org/Gift**.



# LOOKING AHEAD

DIRECTOR OF OPERATIONS STACI CLARK TALKS ABOUT
WHY NOW IS THE TIME FOR ACTION

# IN WHAT WAYS IS CHARLOTTE UNIQUE WHEN IT COMES TO TREES?

It was the foresight of our city's founders to plant trees in order to create a robust urban forest. For it to continue to exist, we must keep replenishing, caring for and diversifying the forest. Charlotte is unique in that her residents continue to care about trees. Through TreesCharlotte, private citizens have planted and stewarded more trees than many cities across the nation.

# WHAT SHOULD THE AVERAGE CHARLOTTE HOMEOWNER KNOW ABOUT HOW TO CARE FOR TREES?

Trees are living beings, just like pets, and they need food, water, care and space to thrive throughout their lifetime, which can vary from 15 to 200 years. This requires time and attention beyond just planting. Trees need mulching, pruning, watering and long-term care to thrive. A healthy urban forest calls for broad community engagement and participation.



# WHAT IS THE GREATEST THREAT TO THE URBAN TREE CANOPY IN CHARLOTTE?

Unfortunately, our urban forest is old, fragile and depleting. The greatest threat is if we each don't do our part to care for, replenish and protect it. It's our responsibility to protect and restore it so our children too can have the experience of swinging, climbing and loving trees, and they can benefit from the plethora of benefits trees provide.

## HOW CAN TREESCHARLOTTE ACCOMPLISH THE COMMUNITY'S GOAL OF REACHING 50% TREE CANOPY BY 2050?

Through inspiring the people of Charlotte to love our trees, each citizen – landowner, park patron, school student – can play a role in caring for our trees. Residential subdivisions hold the most planting potential. Look around your neighborhood and find spaces with the potential to plant trees and enroll in our NeighborWoods program. All NeighborWoods trees are





Olde Providence Elementary School planting event in April.

purchased by TreesCharlotte with donations. Your work, school or faith campuses may be a potential planting spot for trees. Maybe you can donate money to help us plant more trees. We are a nonprofit that is fully supported by donations of private individuals and corporations. Only by enlisting the help of all of Charlotte's stakeholders will we be able to accomplish our goal.

# IN WHAT WAYS IS EDUCATION KEY TO YOUR MISSION?

Just as forest engineer Baba Dioum said, "In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught." Educating residents and students on the value of trees to the urban environment and how to plant and care for trees is integral to preserving the urban forest.

# WHAT NEW INITIATIVES DO YOU HAVE PLANNED FOR THE UPCOMING TREE PLANTING SEASON?

One exciting thing we're working on is expanding our partnership with Habitat for Humanity. We're also looking forward to increasing the number of plantings with various faith communities

in Charlotte and enhancing the NeighborWoods TreeStewards program to help ensure better planting quality and tree care. Kicking off the TreeMaster 2.0 program is also important, as we'll train already-certified TreeMasters to help lead community planting events, which will allow us to efficiently get more trees in the ground. We're also formalizing our procedures around Eagle Scout projects.

# WHY IS IT IMPORTANT FOR PEOPLE TO ACT NOW — TO DONATE MONEY, VOLUNTEER, CARE FOR TREES, ETC.?

Faced with rapid tree loss and an aging and vulnerable forest, the best time to plant a tree was 20 years ago. The second best time is now. Community support is critical to our success. We depend on private and corporate donations to buy trees and mulch, provide tools and materials, and support educational programs to meet the 50% by 2050 goal. It's well known that trees clean our air and our water, but did you know that trees help clean our minds too? In a tree-scaped area, workers feel less stress and less violence and crime occur. Charlotte's tree canopy creates a sense of place, which is why so many of us transplants now call the Queen City home.



The Pisgah National Forest is one of the most biologically diverse places on earth.

# The Cradle of FORESTRY

RECOGNIZED AS A PIONEER IN THE CONSERVATION MOVEMENT, DR. CARL A. SCHENCK ESTABLISHED THE FIRST FORESTRY SCHOOL

When George
Washington Vanderbilt
visited Asheville in 1888,
he fell in love with the
mountain landscape that
provided endless outdoor
adventure. He decided to
build his country home
there – a 250-room French
Renaissance chateau
called Biltmore that took
six years to build and still
remains the largest private
home in the country.

Vanderbilt also purchased 125,000 acres surrounding the estate, the majority of which we know today as Pisgah National Forest, one of the most biologically diverse places on earth with more than 100 different species of trees. He hired landscape architect Frederick Law Olmsted, designer of Central Park and Golden Gate Park, to design the grounds and gardens.

Vanderbilt's vision was that Biltmore Estate would be self-sustaining. The land would provide resources, particularly lumber, that could be sold to pay for day-to-day operations of the massive estate.

At the time, the lumber industry's cut-and-slash methods had decimated the nation's forest without recognizing

the need for replantation, let alone the effect on streams or erosion.

Recognizing the importance of conservation. Vanderbilt hired German forester Dr. Carl A. Schenck to restore and preserve the forest while still providing a revenue stream from lumber. Although the terrain, tree species and people were foreign to him, Schenck embraced his new position, using trial and error to discover the best methods for preserving the forest and hiring locals to help with the work.

# Great trees are interesting. So too are great men, and the greatest of the great men are those who are unconscious of their greatness. – Dr. Carl Schenck

After the vast majority of seeds he planted were dug up and eaten by wildlife, Schenck implemented a brandnew idea in forestry: setting up tree nurseries, seed extraction and regeneration efforts, as well as establishing logging areas and splash dams for transporting logs downstream.

Schenck established the Biltmore Forest School in 1898 - the first forestry school in the country educating students about how to properly plant and care for trees using methods that ensure the renewal of the forest. His one-year courses involved lectures in the mornings and working the land in the afternoons. "My boys worked continuously in the woods, while those at other schools saw wood only on their desks," Schenck said.

In 1909 after a falling out with Vanderbilt, Schenck was dismissed



The boss of the woods and the boss of the Biltmore Forest School [Carl Alwin Schenck, left] are leaning against the big end of the giant [Douglas-fir] tree.



Three forestry students constructing volume tables as they measure logs felled in a forest.

from Biltmore Estate. He then took the Biltmore Forest School on the road, teaching his students on trains traveling across the country. Losing money, Schenck shut down the school in 1913 and returned to live in Germany.

After Vanderbilt's death in 1914, his wife Edith sold 86,700 acres to the federal government to be part of the Pisgah National Forest.

In 1951, Schenck's former students brought him back to the United

States to tour the forests they had grown together. Schenck died in 1955 at the age of 87.

Today, the Cradle of Forestry is a 6,500-acre national historic site that lies in the heart of the Pisgah National Forest. The site commemorates Schenck and the beginning of forest conservation in the United States.

For more information about the Cradle of Forestry, visit CradleOfForestry.com.

## AMERICA'S FIRST FOREST

The film America's First Forest: Carl Schenck and the Asheville Experiment captures the life and legacy of Dr. Carl A. Schenck and is currently being shown on PBS stations throughout the country. For more information, including updated TV listings, visit **AmericasFirstForest.org.** 



Managing more than 23,000 acres of land, Mecklenburg County also boasts the largest tree canopy of any other entity in the area. And with plenty of open space along parks and greenways, it also offers great potential for future tree plantings.

"Our mission to protect trees is the same as TreesCharlotte," says Jim Garges, director of Mecklenburg County Park & Recreation.

"TreesCharlotte is trying to broaden the scope, and we work with them to find locations to plant trees and ways to protect trees."

Over the past few years, TreesCharlotte has worked on 12 different projects on Mecklenburg County green space, including Renaissance Park, Park Road Park, Shuffletown Park and the McMullen Creek Greenway, for a total of 637 trees planted.

TREESCHARLOTTE WORKS WITH MECKLENBURG

COUNTY TO PLANT TREES IN PARKS

Additional projects are planned for the upcoming 2016-2017 tree planting season.

"Any piece of property that we manage that makes sense to plant trees, we do it," Garges says. "Our staff comes up with a list of spots and Dave gets it in the queue."

Garges was
instrumental in identifying
a location for the
TreesCharlotte Honorary
Garden at Freedom
Park, which came from a
breakfast meeting with
TreesCharlotte executive
director Dave Cable.

Located on the former site of the concession

stand on the hillside adjacent to the bandshell, the Honorary Park will celebrate the city's tree canopy and recognizes the nonprofit's major donors. It will feature a large gingko tree as the centerpiece surrounded by a circular shaped seating area. The unveiling is expected for next month.

"More gardens and more trees: that's what people want to see at Freedom Park," Garges says. "TreesCharlotte has done an absolutely wonderful job – they are a true conservation partner with us."



Jim Garges, Director of Mecklenburg County Park & Recreation

# Summer Tree Care

PROTECT YOUR TREES FROM THE DOG DAYS OF SUMMER



As the days get hotter and the threat of summer storms increases, it's important to make sure your trees are properly cared for. Here's a checklist to prepare your trees for summer:

## WATER MORE

Water your tree once a week during normal weather conditions and twice a week during dry spells. Provide 5 or so gallons, applied slowly.

## INSPECT

Check trees for damage and warning signs, such as wilted foliage, yellowing leaves, infestation from insects and drought stress.



Invite a professional arborist to evaluate your trees and remove trees or limbs that may be unsafe.

## **PRUNE**

Cut down branches that are dead, diseased or unsafe. Monitoring the structure of your trees can encourage healthy growth.

## **FERTILIZE**

Fertilize trees and shrubs as part of your annual program.

## PRFPARE

Cable, brace or remove weak limbs before the heavy winds and rain from summer storms cause further damage.

For more information about tree care, visit TreesCharlotte.org/tree-education-resources



## **ASK TREESCHARLOTTE**

Have a question about tree care, Charlotte's tree canopy or specific trees? Email your question to **chuck@treescharlotte.org** and your question and answer could appear in the next TreesCharlotte newsletter!



Last month,
TreesCharlotte launched
its TreeMaster 2.0 course
– a series of advanced
training classes for
certified TreeMasters to
teach them how to lead
community tree care
events. Covering a broad
tree care curriculum over
three Saturdays in April
and May, the classes
involve a mix of classroom

"The ultimate intent of TreeMaster 2.0 is for TreeMasters who complete the program to have practical knowledge in young tree maintenance so they can coordinate and run tree stewardship events in their communities," says Patrick Anderson, a certified arborist and

and hands-on learning.

TreesCharlotte volunteer who heads up the TreeMaster 2.0 training.

Twenty-five
TreeMasters opted to take
the training in preparation
for the 2016-2017 planting
season, which starts
in October. Attendees
are currently certified
TreeMasters looking for the
next level of involvement
with TreesCharlotte
who want to learn more
about trees and make a
difference in the Charlotte
community by leading tree
stewardship events.

During the course, TreeMasters learn about tree biology, identification, health factors, tree/site maintenance and pruning, as well as how to be leaders.

"Trees provide untold cultural, aesthetic and environmental benefits for our urban and suburban landscapes, but are generally not adapted to be growing in these conditions," says Anderson. "Because of this, we need to offer some care to trees, especially when they are young, to maximize their long-term health. Having a team of trained individuals that can offer this care is essential to maintaining Charlotte's canopy."

of trees on Arbor Day

For more information about the TreeMaster program, visit TreesCharlotte.org/ volunteer/treemaster.

# AMBROSIA BEETLES

# in the Urban Forest

AMONG MORE THAN 3,200 SPECIES OF WOOD-BORING BEETLES IN THE WORLD,
AMBROSIA BEETLES ARE A NOTED PEST OF MANY LANDSCAPE TREES IN NORTH CAROLINA



By Patrick Anderson

Ambrosia beetles have a symbiotic relationship with certain species of fungus they farm for sustenance.

An adult beetle finds a susceptible host and bores into the tree, pushing packed sawdust out of its narrow chambers. This packed sawdust often extends out of the tree and appears like a toothpick stuck into the bark of the plant.

Ambrosia beetles don't actually feed on the wood. As they are creating these chambers, they are introducing a nutritional fungus that the beetles use as a food source.

Native ambrosia beetles are typically only attracted to dead, dying or stressed trees, though newly planted trees can be susceptible to attack. Ambrosia beetles are often blamed for killing trees when in actuality



Sawdust tubes produced by ambrosia beetles.

the tree is suffering from some predisposing stress factor, such as construction damage or drought. That being said, ambrosia beetles may unwittingly vector a pathogenic complex of fungithat can damage a tree's vascular system, hastening its decline.

Exotic ambrosia beetles differ from native beetles in they may attack healthy trees. In the Southeast, the Asian ambrosia beetle and black twig borer are examples of introduced species. Again, the beetles and their symbiotic fungus do little harm to the tree, but the pathogens they vector may cause tree injury.

The red bay ambrosia beetle, introduced in the early 2000s, only infests trees in the Lauraceae family, such as red bay and avocado. These beetles vector red bay wilt, which has killed thousands of red bays in North and South Carolina, Georgia, Florida, Alabama and Mississippi, and threatens avocado crops in Florida.

If you have concerns about ambrosia beetles on your trees, contact a qualified arborist. You can find a list of local arborists by visiting TreesCharlotte. org/arborists.

The prevalence of invasive pests that target particular species highlights the need to diversify our tree canopy. TreesCharlotte plants more than 50 different species of trees to enhance the diversity of Charlotte's canopy.

# Tree FOR A KEY

CRESCENT COMMUNITIES DONATES A TREE TO TREESCHARLOTTE FOR EVERY APARTMENT LEASE SIGNED

In January, Crescent Communities launched its Tree for a Key program, an initiative in which a tree is donated to TreesCharlotte for every apartment leased signed at one of the company's select multifamily properties.

The program began at Crescent Dilworth, a 296-unit apartment community in Charlotte, and will eventually expand to other markets.

"This innovative new program represents Crescent's commitment to the environment and to improving communities where we develop," said Jenny Vallimont, director of stewardship and innovation at Crescent.

"Trees are a vital component of any thriving community; they are particularly meaningful in challenged communities because the outdoor environments aren't usually welcoming or inviting,"

says Laura Clark, chief executive officer of the Renaissance West Community Initiative. "The work that TreesCharlotte does helps create outdoor spaces that nurture children, families and neighborhoods."

On Wednesday, March 16, during TreesCharlotte's Arbor Week celebration, 63 volunteers from Crescent Communities



# TREEFORAKEY....



helped TreesCharlotte plant 161 trees at the The Renaissance community in West Charlotte.

Crescent's partnership with
TreesCharlotte aligns with the company's
commitment to the environment,
particularly balancing the environmental
impact tied to each development. The
Tree for a Key program is part of Crescent's
company-wide stewardship initiative,
which launched in 2015 with the goal of
doing business the right way, building
communities, being stewards of the
environment and bettering people's lives.

To learn more about the Tree for a Key program, visit **www.TreeForAKey.com**.

# **IN MEMORIAM**

TREE PLANTING AT CHARLOTTE'S HEBREW CEMETERY CONNECTS THE JEWISH COMMUNITY WITH TREESCHARLOTTE'S MISSION

North of Uptown Charlotte off of Statesville Road, the Hebrew Cemetery offers a peaceful respite as the final resting place of more than 1,000 Jews from across North Carolina, including 14 Civil War veterans.

In February, TreesCharlotte partnered with the Hebrew Cemetery to plant 35 hawthorn and witch hazel trees as a celebration of Tu B'Shvat, or "New Year for Trees." This is the second year TreesCharlotte has partnered with the Hebrew Cemetery for the holiday.

"Our area, north of Uptown, is mostly known for industrial buildings and warehouses. Our cemetery is a beautiful and verdant oasis amidst the industry," says Brian Yesowitch, president of the Hebrew Cemetery. "The TreesCharlotte partnership has been one way we've been able to meet our beautification goals."

Founded in 1867, the Hebrew Cemetery Association is the oldest institution in continuous service for



Lynn Calnek, the education director from Temple Kol Tikvah in Davidson, teaches a Jewish lesson about trees before the planting

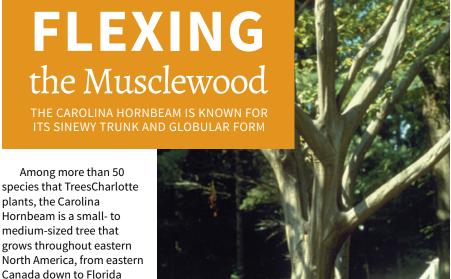
the Jewish community of Charlotte and the surrounding region. The private, member-run, not-for-profit cemetery receives support from the Jewish community and area synagogues.

At the event, Rabbi Tracy Klirs spoke about how trees need attention and care, and how this is a metaphor for how people should take care of each other. Children were involved in the cemetery planting, which Yesowitch says is a way for kids to overcome the fear of death as well as learn about the importance of trees.

"We hope that the positive memories they have made at the cemetery will support them emotionally when they are dealing with grief during the loss of a loved one in their family," Yesowitch says. "The kids can be proud they planted a tree that they can watch grow as they grow."

To see a video of the Hebrew cemetery planting, visit our YouTube channel at YouTube.com/ TreesCharlotte.

TreesCharlotte is currently scheduling plantings for the 2016-2017 season, which runs from October until early April. If your faith campus is interested in partnering with us, please contact Staci Clark at staci@treescharlotte.org or 980-221-7323.



Bill Cook, Michigan State University, Bugwood.org



Richard Webb, Bugwood.org

and as far west as Texas. Known as an excellent street tree, the Carolina Hornbeam can tolerate a wide variety of conditions but grows best on rich, wetter sites and is often found along stream banks. Typically growing between 20 to 35 feet tall and wide. the Carolina Hornbeam's globular form features a smooth, gray trunk sometimes multiple trunks about a foot wide - and a sinewy, muscular appear-

Its extremely hard and heavy wood, resilient to cracking and splitting, was used by American pioneers to make bowls and dishes. The Carolina Hornbeam's simple leaves feature a pointed tip and teeth on the edges. They grow to about four inches wide and

ance, giving it the nickname

of musclewood, as well as

ironwood or

blue beech.

two inches long and turn orange-red during the fall. Tiny greenish flowers bloom in early spring, and their hairy, green, ovalshaped fruits hang in clusters.

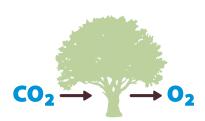
Considered an understory tree, or a smaller tree that grows under the canopy of taller trees, the Carolina Hornbeam also provides good cover and shelter for animals, as well as a source

of food, particularly for gray squirrels, songbirds and deer. Red-spotted purple and eastern tiger swallowtail butterflies use the Carolina Hornbeam as a host plant.

For more information about the Carolina Hornbeam and other tree species, visit the N.C. Cooperative Extension website at http://plants.ces.ncsu.edu.

# BY THE NUMBERS

TREES GREATLY IMPACT OUR LIVES AND THE PLANET WE LIVE ON, READ THE FACTS TO LEARN MORE ABOUT THE EVERYDAY BENEFITS OF TREES



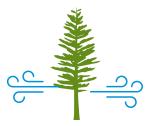
One tree can absorb 48 pounds of carbon per year, and sequester one ton of carbon by the time it reaches 40 years old.



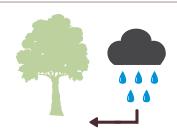
One large tree can provide a daily supply of oxygen for **four people**.



Trees properly placed around buildings can reduce air conditioning needs by 30%.



The net cooling effect of a young, healthy tree is equivalent to 10 room-size air conditioners operating 20 hours a day.



For every **five percent** of tree cover added to a community, stormwater runoff is reduced by approximately **two percent**.



www.treescharlotte.org