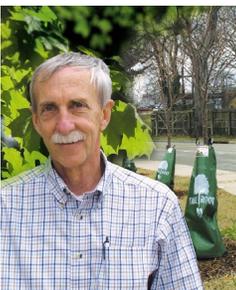


2018 State of the Trees Report

Department of Public Works Division of Urban Forestry

2018 – A Forester’s Perspective

All three of our operational areas—Forestry, Emergency, and the Central Business District Cleanup Crew work outdoors every day. To the men who work in these operations the weather is a major factor in both comfort and safety. The year 2018 was the 13th wettest year on record. Average annual precipitation is just over 52 inches and the final total was just under 66 inches. So how has that impacted operations? Much of the precipitation came during storm events that not only



Gene Hyde is editor of this publication.

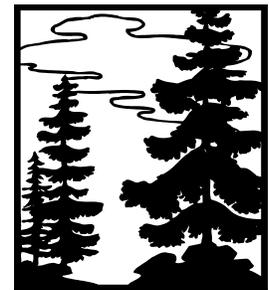
resulted in more fallen trees and branches but also slowed down workers and kept them indoors to some degree. But at least being indoors and awaiting calls for downed trees allowed us to provide some of the new hires with lots of classroom training on tree biology,

tree identification and safety standards which is crucial information for safe and effective operations. Fallen trees blocking streets require immediate attention and both Forestry and Emergency crews must clear streets in all kinds of weather at any time of day or night and must do so safely. Also dealing with extra storm damage meant that there was less time available for routine tree maintenance. I have worked an array of storms over the years including tornadoes, hurricanes, blizzards, derechos, and flood events and can personally attest to the dangers involved. High voltage electricity, errant drivers, and heavy falling objects can hurt, kill or cripple a person in a moment of inattention. Our crews have demonstrated their willingness to rise to the challenge and have performed their assigned duties with the highest degree of professionalism and dedication. And for this I salute them.



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Special Points of interest in 2018:

- *Chattanooga was a ‘Tree City’ for the 28th year.*
- *Arbor Day was held at The Bessie Smith Cultural Center.*
- *The backlog of Service Requests awaiting inspection is zero!*

Arbor Day at The Bessie

On a bright, sunny but cool day in March of 2018 two Japanese Zelkova trees were planted on the grounds of the Bessie Smith Cultural Center. These two trees were planted in honor of Mr. Moses Freeman. Mr. Freeman was born and raised in that neighborhood and was selected as the honoree because of his tireless efforts to serve the community as a resident, advocate, city employee, and City Councilman. His efforts were key in making the area cleaner, safer, and welcoming to all. Mayor Andy Berke joined the celebration which also saw Chattanooga recertified by the Division of Forestry as a Tree City Community for the twenty-eighth consecutive year. Chattanooga was able to

meet the four standards for recertification: 1. Have a Tree Board or Department. 2. Have a Tree Care Ordinance. 3. Have a Community Forestry Program With an Annual Budget of at Least \$2 Per Capita.



Members of the M.L. King Neighborhood Association plant a Zelkova.

Standard 4. Have an Arbor Day Observance and Proclamation. The next day 19 street trees were planted in the immediate area by the M.L. King group and the Volkswagen Volunteers as

part of a neighborhood building event.

Tree Planting in 2018

A total of 288 trees representing 29 species and varieties were planted by in-house and contract crews in 2018 as street and park trees. They are:

1. Overcup Oak	24 ea.	13. Goldenrain Tree	13 ea.
2. Yoshino Cherry	82 ea.	14. 'Prairiefire' Crabapple	3 ea.
3. Redbud	6 ea.	15. Chinese Pistache	3 ea.
4. 'Princeton' American Elm	6 ea.	16. Foster Holly	14 ea.
5. 'Bosque' Elm	2 ea.	17. Willow Oak	3 ea.
6. Trident Maple	5 ea.	18. Blackgum	8 ea.
7. 'Autumn Gold' Ginkgo	16 ea.	19. American Hornbeam	3 ea.
8. Tulip Poplar	9 ea.	20. Chinese Fringetree, Happidaze Sweetgum, Legacy Sugar-maple, and Regal Prince Oak	1 ea.
9. Various Serviceberries	34 ea.		
10. Yellowwood	5 ea.		
11. 'Winter King' Hawthorne	11 ea.		
12. Zelkova cultivars	7 ea.		

Thirty bare-root trees were also planted: 10 each 'Rising Sun' Redbud, 'Green Gable' Blackgum, and 'Golden Globe' Ginkgo.

SUMMARY

Cost of 288 trees: \$27,050. Cost of Shipping: \$1,775

Cost of Planting 288 trees: \$17,360

Total Cost of Planting: \$46,185.

Gateways and a New State Arboretum

The Broad Street Gateway is an important initiative for the Urban Forestry operations. The goal in January 2018 was to develop a meaningful plan that would identify a pallet of appropriate species and a funding mechanism to replace many of the existing 300 trees along Broad Street from The TVA building down to the foot of Lookout Mountain. Some of the trees were underneath energized lines and were topped. Some have lived their useful lives and need to be replaced. The Character of this corridor has evolved since the first trees were planted there in 1995 and new plantings are needed to reflect this change. Any plantings should serve as an enhancement to this rapidly changing and growing section of town. Most of the stakeholders want the area to be a destination as opposed to a high speed connector. In November City Forester Gene Hyde worked with the Chattanooga Department of Transportation to select nine species of trees representing small, large, and columnar trees for use in this area.

Now comes the difficult task of developing funding for the replacements. Hyde believes this will be a long term project.

Tree Commission member Dr. Hill Craddock, arborist Scott Woods, and City Forester Gene Hyde worked with Diana Davies of the Fort Wood Neighborhood Association to identify approximately 31 trees in the immediate area. These trees were listed in an application to the Tennessee Urban Forestry Council application requesting the Fort Wood neighborhood be declared an official state arboretum. In late 2018 the Tennessee Urban Forestry Council approved the application and tree identification tags were placed on all 31 trees. The district is listed on the National Register of Historic Places and is also a local historic district. The homes and trees in Fort Wood are protected under Historic District Guidelines, making the community a natural location for an arboretum. With the addition of Fort Wood there are currently three active arboreta in Chattanooga.



Status of Service Requests

Responding to service requests is the single most time consuming and expensive aspect of our urban forestry operations. These requests pour in from the general public as well as from various departments within the city. In 2018 the 311 Call center records indicate that we received 1,217 requests and that all of them have been inspected and closed. One measure of operational efficiency is how quickly we are able to inspect a request and either create a work order or deny service. Each category of request has a time deadline for inspection and the clock begins to tick as soon as the Service Request is received. Shown below are the number of requests

received by category in 2018, the allotted time for inspection, and the percentage of requests inspected and closed on-time. These stats do not include the time it takes to actually perform the on-site service. Those figures are not available.

General Tree Problems	153	5 days	82% on-time
Fallen Trees and Branches	533	5 days	82% on-time
Tree Removal/Hazard	164	35 days	95% on-time
Tree Trimming	368	25 days	88% on-time
Totals	1,217		

Lecanium Scale in Downtown Oaks

Lecanium Scale have been attacking over 500 oaks in the Central Business District for several years according to City Forester, Gene Hyde. And these trees are in need of immediate treatment. In a 2005 article by Lee Townsend, Extension Specialist with the University of Kentucky College of Agriculture, "Several species of soft scales, referred to as Lecanium scales feed on sap from shade trees and woody ornamentals. They are more or less hemispherical or turtle-shaped, brown, and range in size from 1/8 inch to 1/6 inch.



Lecanium Scale poses a serious threat to the health of downtown oaks.

While there are several very similar species, all have one generation a year and a general set of recommendations can be used to manage them. Lecanium scales spend the winter on twigs and branches in an immature or nymphal stage. Development resumes in the spring and mature females produce large numbers of eggs which are protected by their soft waxy covering. Crawlers that

hatch from these eggs move to leaves, settle, and feed on sap during the rest of the summer. They move back to twigs and branches prior to leaf drop and settle for the winter.

As with many species of soft scale, these insects produce large volumes of a liquid waste called "honeydew". Deposits of this sugar-rich material gives leaves a shiny appearance. Limbs of heavily infested trees may be blackened by the growth of sooty mold fungus.

Scale control can be challenging and may need to be repeated over several seasons. Proper timing of insecticide applications is a major key to success. Applications must target newly hatched scale crawlers which are active in June and July. They are very susceptible to control measures while moving over plant surfaces to find a feeding spot. Once settled, they begin to secrete a waxy covering that shields them from sprays."

Bids were taken for the treatment of these pests and a contract was awarded to the firm of ABC Tree Company for the application of Transtect insecticide to the trunks of 562 mainly willow oaks in June at a cost of \$17,711. Hyde intends to monitor the results but is also searching for natural solutions for population control.

The Role of the Tree Commission

In 1989 a group of concerned citizens approached Mayor Gene Roberts with the position that as an up-and-coming city Chattanooga needed a professional City Forester to manage the valuable leafy resource. Mayor Roberts championed the cause and the end result was the passage of the "Tree Ordinance" which created the five-member Tree Commission and established the position of Municipal Forester. By city code the Tree Commission is tasked with the following duties:

1. Study the problems and determine the needs of the City in connection with its urban forestry program and report from time to time to the Governing body of the City as to desirable legislation concerning the tree program and related activities for the City.
2. Recommend candidates for the office of Municipal Forester.
3. Assist the properly constituted officials of the City, as well as the governing body and citizens of the City in the dissemination of news and information regarding the selection, planting and maintenance of trees within the corporate limits, whether they be on private or public property.
4. Provide regular and special meetings at which the subject of trees, as it relates to the City, may be dis-

cussed by the members of the Commission, officers and personnel of the City and its several divisions, and all others interested in the urban forestry program.

In 2003 the Commission was expanded to seven members and in 2012 the number was again expanded—this time to nine members. The Commission has excelled in focusing on these four core tasks. Consider the results:

The Commission was recognized as the Tree Board of the Year by the Tennessee Urban Forestry Council in 1996, 2009, and 2016. In 2007 The Commission received the Gold Leaf Award for Outstanding Arbor Day Activities at Coolidge Park. The Commission has regularly held Citizen Forester educational classes since 2008. In 2006 a very comprehensive Best management Practices Guide for Contractors and Builders was written at the request of the Commission. In 2016 The Notable Tree Register was developed to recognize special trees within the city. The Commission has been very active with Arbor Day activities by holding a tree planting project in a different neighborhood each year. The goal is to involve local residents with volunteers from the Volkswagen assembly plant in tree planting as a means of both increasing tree canopy and building stronger neighborhoods through team building.

Chattanooga, Department of Public Works

Our Business Address:
Department of Public Works
900 East 11th Street
Chattanooga, TN 37403

Phone: (423) 643-6839
Fax: (423) 643-6876
Email: ghyde@chattanooga.gov

Visit our website:

<http://www.chattanooga.gov/public-works/urban-forestry>

Chattanooga Tree Commission Members:

Erica Lewis, Chair
B.J. Absher
Bruce Blohm
Glen Craig
Dr. Hill Craddock, Vice Chair
Michael Strok
Craig Walker
Sally Wencel
Carol White

Administrator of Public Works:

Justin Holland

Deputy Administrator of Public Works:

Donald Stone

Director of City-Wide Services:

Rick Colston, Jr.

The Urban Forestry program functions as a separate operation within City Wide Services. Its mission is to provide the City with a safe and attractive urban forest, and to educate citizens about the benefits and proper care of trees. It is guided by the nine-member Tree Advisory Commission as appointed by the Mayor. The Forestry Division draws on other elements within both Public Works and Parks and Recreation to assist with tree planting, solving service requests, and other missions. The program's main operating budget for FY '16-'17 of \$968,815 is derived strictly from annual appropriations.

This report is prepared annually at the request of the Tree Advisory Commission.

Forestry and Emergency Staff

In 2008, the Urban Forestry operations were expanded to include the Emergency Department and in 2014 the Central Business District Crew was created.

Listed below are the current employees in their assigned sections:

Urban Forestry:

Tree Trimmers: Wayne Pinkerton, and Dwight Sweatt

Equipment Operator 4: Bruce Johnson, Dexter Joshen,

Crew Supervisor 2: Mike Richie, Ross Petty, and Tommy Harris

Forestry Supervisor: Milton Stewart

Emergency:

The Emergency Department has the responsibility for the removal of chemical spills along roadways as well as dead animal pick-ups, litter pick-up, and discarded tires. They also are on-call at night for fallen trees, pothole repair, and other mishaps that present a hazard to travelers along City streets. There is always an around-the-clock Emergency Department worker on duty every day of the year!

Workers include:

Equipment Operator 1: Alvin Thomas and Warren Tillison
Equipment Operator 3: Unfilled
Equipment Operator 4: Sherman Sales, David Lanford, Rich Jeckel, Michael Blassingame, Steve Harrelson, and Clarence Shepherd

The Central Business District:

These crew workers are responsible for the cleanup of leaves, litter and making the downtown area clean and attractive.

Workers include:

Crew Worker 1: Kendrick Heathington, Robert Eppinger, Rodney Jackson
Equipment Operator 3: Van Johnson
Crew Worker 2: Bradley Bardin
Crew Supervisor 2: Terry McCullough

