

2019 Arborist Work Report



January 29, 2020

Grant Jones
City Arborist

Status of Bowling Green’s Urban Forest

Currently, the City of Bowling Green has 7,605 city-owned trees. Our tree inventory estimates the environmental benefits provided by the City’s trees using iTree Streets. The current tree population provides over \$557,000 in environmental benefits including 5.3 million gallons of stormwater that is intercepted prior to run off. The trees have a replacement value of \$6.7 million. For every \$1 the City allocates to tree care, the City’s trees provide \$1.43 in benefits.

2019 Tree Maintenance

Electrical Line Clearance

Last year, Pennline performed contracted electrical line clearance for Bowling Green’s Electric Division. Ward 4 was the focus of our line clearance activities. Including work by city crews, trees were pruned and/or removed to achieve adequate clearance from electric lines at 355 addresses.

Right-of-Ways, Parks, and Cemetery

In 2019, on city property 173 trees were planted; 207 trees were removed; 1,503 trees were pruned; and 4,377 trees inspected (**Table 2**). More trees were removed than normal in 2019.

Table 2. Tree work in the city right-of-way, cemetery, parks, and other City property.

	Planted	Removed	Pruned	Inspected
# of Trees	173	207	1,503	4,377

We experienced several storms in 2019 that resulted in considerable tree work. We had a minor ice storm on February 12 and severe thunderstorms on May 23 (straight line winds) and July 2 (microburst). These storms along with tree removal for the construction of the new City Park building resulted in more trees being removed in 2019 than normal.

Silver maples continue to be one of our more problematic tree species when storms occur. We removed 23 silver maples in 2019. Seventeen of these were identified during routine inspection that are part of our tree risk management plan and were removed by City crews. Three were removed due to construction at City Park and three failed during storms.

City Park Construction

Prior to the start of construction for the new City Park building, we transplanted seven trees to other locations in the park. These were Memorial trees small enough to transplant with a tree spade (**Photo 1**). Five oak trees were removed due to their proximity to construction activity. During removal the contractor cut the trunks to lengths appropriate for milling into lumber. The nine resulting logs were then sold to a sawmill with the proceeds returning to the City. Finally, ten oaks near the construction site were treated with a root stimulant to help them recover from the nearby construction. These trees will continue to be monitored.



Photo 1. Tree spade transplanting a memorial tree in City Park.

Policy and Management

iTree Canopy Analysis

iTree is a suite of software applications available through the US Forest Service used to assess the urban forest. One of these programs is iTree Canopy which is a tool to estimate tree canopy cover. The last two years I had interns estimate canopy cover for each of Bowling Green’s four political wards and overall for the community. This includes both public and private property. Overall, 15.6% of Bowling Green is covered by trees; however, these totals varied considerably by Wards (**Table 3**).

Table 3. Tree canopy cover for Bowling Green estimated using iTree Canopy

Area	Canopy Cover
Ward 1	3.6
Ward 2	6.7
Ward 3	21.4
Ward 4	15.6
Entire City	15.6

There is no ideal canopy cover percentage for a community, but it can be a helpful tool to monitor if the tree canopy is growing, remaining constant, or declining over time. Wards 1 and 2 have the lowest canopy cover; however, they also include large areas of undeveloped, unforested land. In Ward 1, there is considerable canopy cover in plantable spaces (at the cemetery, and within the area from Main to Thurstin and E Wooster to E Poe). In Ward 2, canopy cover is concentrated in areas closest to S Main and E Wooster. Outside these areas tree canopy cover is much less. Focusing only on the City’s right-of-way, this often is due to the tree-lawn being too narrow (<4 feet) to support trees. However, in an attempt to increase

canopy cover in Ward 2 over time, we have been planting more trees in areas with wider tree lawns. The total number of trees planted in Ward 2 had increased by 69% and 175% the last two years (**Table 4**).

Table 4. Number of trees planted annually in Ward 2 since 2017.

Year	Trees Planted	% Increase Since 2017
2017	13	-
2018	22	69
2019	34	175

Public Relations

Photo Contest

The Tree Commission held their second annual photo contest in 2019. This contest was started to make residents more aware of the urban forest around them. They asked Bowling Green residents to submit photos of trees found within the city limits (**Photo 2**). Twenty-nine photos were submitted. Commissioners selected the top photos and the public voted for their favorite by “liking” their favorite photo for each season on the City’s Facebook page. In total there were 610 “likes.” The contest will continue in 2020.

Tree City USA and Growth Award

On April 17 Bowling Green was named a Tree City USA for the 39th consecutive year. In addition, the city also received their 25th Growth Award for growing their urban forestry program. Bowling Green has received the more Growth Awards than any other community in Ohio.

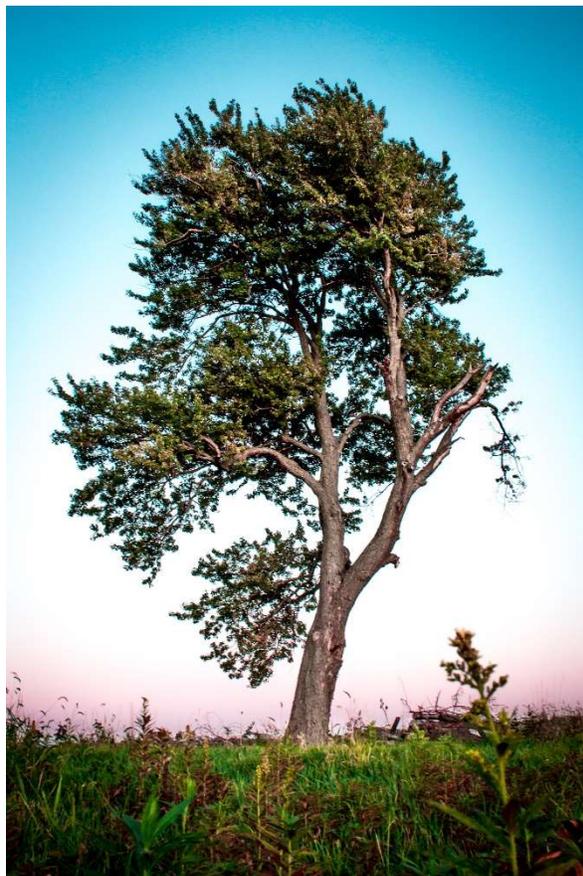


Photo 2. Winning photo in the fall category and submitted by Holli Gray-Luring.

Arbor Day

On May 9 the Bowling Green Tree Commission celebrated Arbor Day at Conneaut Elementary with the Fifth-Grade classes. Students created posters based upon the theme “My Favorite Tree in Bowling Green” (**Photo 3**). Thayer Family Dealerships donated Downtown Dollars that were awarded to the top three artists in the poster contest. A sugar maple was planted near the school’s playground.

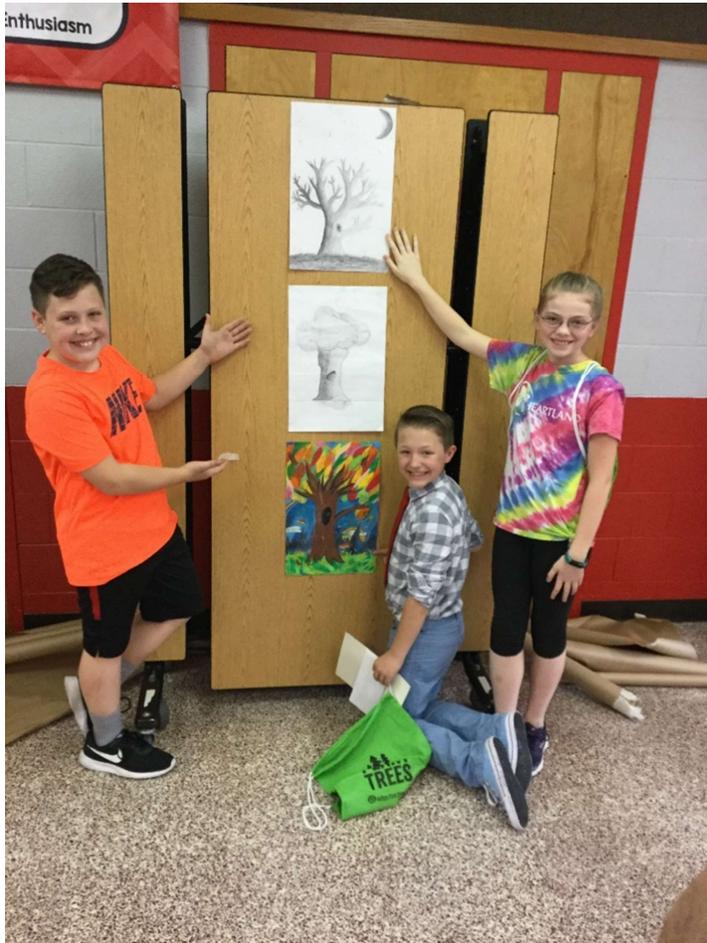


Photo 3. Fifth Grade students at Conneaut Elementary with displaying their winning Arbor Day posters.

Plans for 2020

Below are several key projects and goals we will focus on in 2020:

- We will remove several overmature silver maple trees in poor condition and replace them with appropriate tree species.
- We will clear trees from the City’s electrical lines in Ward 3 and along their rural electric lines. This will help reduce electric outages caused by trees contacting electric lines.
- Bowling Green will host the Tree City USA awards for NW Ohio.
- We will begin routine street tree maintenance pruning in Ward 4.
- We will monitor the condition of trees Downtown and in City Park that were impacted by construction.