

**Town of Canandaigua
Tree Committee Notes
Survey of Town Hall Grounds, Outhouse Park, Blue Heron Park
17 October 2020**

Present:

Dennis Brewer
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Town Hall Grounds:

Ash trees denoted by orange tape are severely damaged by Emerald Ash Borer. Sub-bark examination showed extensive damage through the cambium and xylem layers of the tree. Removal and replacement with suitable species trees is recommended.

Mature ornamental specimens of *Pyrus calleryana* (Callery pear) cultivars 'Bradford' and 'Cleveland Select' are present here and at many of the town parks. Callery pears are non-native, invasive and prohibited in many states. The seeds are widely dispersed by birds, grow rapidly in open spaces and can form dense thickets outcompeting native species in grass lands and forested areas. Callery pears and its cultivars have weak narrow branch attachments with included (ingrown) bark and deep debris pockets making them subject to substantial limb breakage during high winds, or heavy snow/ice loading. Support cables placed 2/3 of the way to the canopy would extend the life of mature specimens. Priority should be given to pear trees with tight angles in their branching patterns.

Outhouse Park:

Leaning evergreen trees near Building 400 are diseased and should be removed and replaced. As the site is subject to both inundation from Sucker Brook and drought conditions, Colorado Blue Spruce is not likely to prosper. Other species should be considered.

It was noted that extensive tree disease and death has been experienced at this park. The trees and bushes in this park have been surrounded by a heavy grade of woven black plastic that was covered originally by a few inches of mulch. Examination of the viburnum bushes and a tree near Building 400 revealed dry, compacted soil beneath the plastic that water had not reached in the recent rainfall.

The non-permeable plastic not only impedes water but the natural nutrient cycling which takes place in the mulch when it is in contact with the soil. The plastic had begun to girdle many of the shade trees we observed causing compression of the trunk xylem which can lead to canopy dieback and general weakening of the trees. Many tree roots had started to grow in the mulch on top of the plastic barrier, thereby exposing these roots to excessive heat, drought and disease. Removal of the plastic and proper use of mulch to moderate temperature and moisture will be necessary to prevent continued tree death and replacement.

Extreme environmental conditions and the possible presence of a heavy plow pan soil layer dating from prior agricultural usage will make careful choosing of replacement trees and regular watering of young trees essential and in the long run, more economical than continually replacing plantings.

Blue Heron Park:

Soils at this park are known to contain spoil from Route 332 expansion and resurfacing. Tree survival has been problematic due to soils, and extreme fluctuations between standing water during rainfall (slow infiltration) and excessively dry conditions. Buck rubbing on trees has also presented problems.

It was noted that this park is used by local high schools for science class purposes and for students with disabilities who enjoy the disc golf circuit. Local usage of the disc golf circuit is noted, as is enjoyment of the park for wildlife watching and quiet conditions. Selection for soil condition -tolerant trees will be important for this park.

General Recommendations:

1. A list of recommended tree species should be created for consultation when trees are being planted or replaced. Different species have different needs, attributes and uses.
2. Soil analysis of planting sites would help determine appropriate species selection.
3. The Park Master Plan should be consulted to guide choices for species selection.
4. Plastic barriers should be removed and appropriate mulching practices utilized to moderate temperature and moisture stresses.
5. Watering young trees during dry conditions is necessary for tree survival. Although watering (Gator bags) devices have been used, they must be refilled when empty. As noted above, this is more productive and cost-effective than replacing plantings. Tree death is often noted during the growing season after water shortage.
6. Monocultures should be avoided. Given the constant onslaught of tree pests and diseases entering this ecosystem, more diversity of tree species would be beneficial in slowing the spread of diseases and in ensuring that there is no total loss of canopy or ornamental trees if one particular species (such as was experienced with American Elm, chestnut and ash) becomes a casualty.