



Talking Leaves

The Seasonal Newsletter of Bransfield Tree Company

Fall 2021

Bransfield Tree Company LLC

Precipitation Extremes and Tree Health

2021 was the summer of rain, 2020 was a hard drought, and 2015 in New England was a very severe drought. Somewhere this August we blew past normal levels of precipitation and into water overdose territory. Newly installed trees and shrubs drowned in place, and leaf diseases are the worst I've witnessed in 30 years. I expect we will have a rather lackluster season of fall color as most trees will defoliate spoiled leaves early. What do these extremes mean for overall tree health? Well, it isn't good. Every one of these extreme events stresses the plants which then invite secondary and tertiary pests and diseases — we've seen a proliferation of boring insects in the ubiquitous White Pine, and verticillium wilt always seems to nail Maples after a drought, especially Japanese Maples.



Premature leaf drop

Extreme swings in precipitation brings specific concerns for **tree roots**. Drought causes a retrenchment in roots as the trees must execute a kind of triage to save only the most vital roots, while excess water causes root death from a simple lack of oxygen. All of the major root and stem rot disease are predicated on ponded water and persistent low soil oxygen.

What to do? While every specimen is different and requires a thoughtful, site specific approach, there are some fundamentals to consider.

IRRIGATE: While watering during a drought should be obvious, it is often ignored especially with large trees. Watering trees generally means 'low and slow' drip or sprinkler for several hours per tree, 2-4 times per month until the drought ends.

AERATE: Too much water is much harder to mitigate than not enough, especially if the site has compacted soil or is in a low lying setting. Soil aeration and drainage improvements are applicable in appropriate situations.

PROTECT: Prophylactic systemic pesticides are recommended for special, high value plants that are prone to attack after a series of stresses.

REMOVE AND REPLACE: This is the most difficult but necessary consideration to make. We know these precipitation extremes weaken the foundation of the big trees; we also know that high winds are a part of our new weather reality. The resulting combination of those factors is obvious and unsettling. The decision to remove a tree that has stood for many decades never comes easily, but where an imminent failure threatens physical safety we should remove and replace with a species better suited to the location and climate. So long as we fill the newly opened space with trees or any other ecologically productive planting instead of a turf lawn or a parking space then we are in good shape.



Defoliated Crab Apple

Twisted Catalpa Video up on Youtube



Check out Bransfield Tree on Youtube to see the video we produced for the Twisted Catalpa Preservation Project. We got some very nice footage of the tree from all angles and from above.



BTC is also boarding 29 saplings derived directly from the iconic tree for the next decade to see if any one of them will follow the same pattern and form a spiral trunk. Only time will tell.

Integrated Pest Management Programs

The insults to the trees and plants under our care are at unprecedented levels in my 30 year career. Every year seems to bring a new impact from extreme weather and/or a new invasive pest, disease, or weed. Every year brings a unique set of stresses that are better managed as early as possible. To respond to the new challenges, we are evolving our Plant Health Care programs into an integrated approach where the plant technician can scan the whole property during one of a predetermined amount of visits per year and treat emergent issues on the spot. So instead of trying to predict the stresses in advance and make prescriptions, we will scan and treat as needed and react quickly to emergent issues. Some properties are more complex than others so number of visits will reflect the varying levels of complexity.

Curiosity Corner

I encountered this very curious looking Red Spruce on the south slope of Mt Monadnock this summer, somewhere along the Cliff Walk trail about 1/4 mile below the summit. At first glance I thought for sure it was an artifact of someone having had tied the tree up in knots when it was a pliable sapling several decades ago, but then a closer look around revealed about 8 very similar versions of this tree with those big loops. The number and similarity of these trees has me thinking they are the result of some natural tumult up on the stormy slopes of the mountain. While I really enjoy thinking through what events a trees very shape indicate that it lived through, I cannot for the life of me sort out what is going on with these trees. If you have any theories, please let me hear it.

