

# ~ From Roots to Shoots ~



**SHREINER**  
TREE CARE

FALL '18 / WINTER '19  
NEWSLETTER

610-265-6004 • [shreinertreecare.com](http://shreinertreecare.com)



**A Spring and Summer of**  
***Blooms & Booms***

- *Healthy Soil*
  - *Invasive Pests*
  - *Pruning Tips*
- & more inside!**

# Happy Roots, Happy Shoots

## Maintaining Healthy Soil

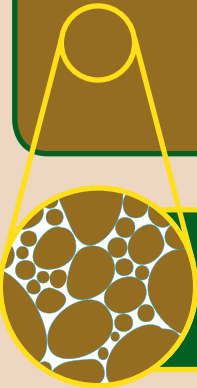
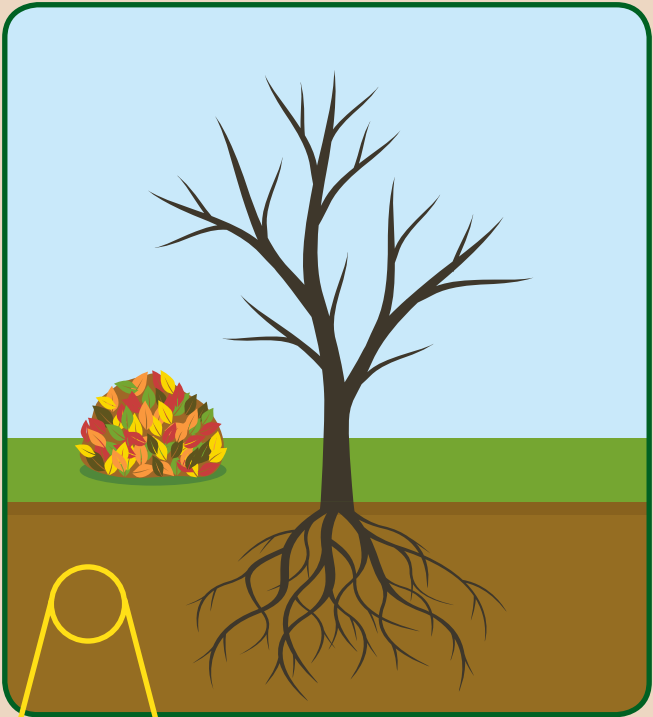
When we think about trees, often we only consider the beautiful flowers, the graceful architecture or the shade they provide. Little do we consider the workhorse of the tree – the root system. Instead, we walk on it, we dig through it, we pour asphalt on it, and generally forget about it. If the grass is green the tree must be happy too, right? *Wrong.*

Since the beginning of time, trees have relied on themselves and their surrounding plant community to provide the needed nutrients in the soil. They are excellent recyclers. However, each fall when we dutifully rake the leaves off the lawn, we are robbing trees of critical nutrients which would otherwise breakdown and re-enter the soil as organic matter. As time passes, little by little, the soil nutrients slowly deplete. The natural compost which creates rich, dark soil is lost, and the remaining soil composition has reduced nutritional value.

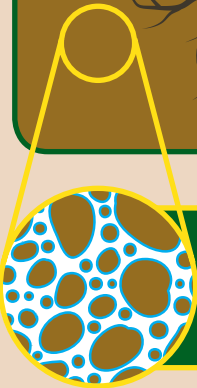
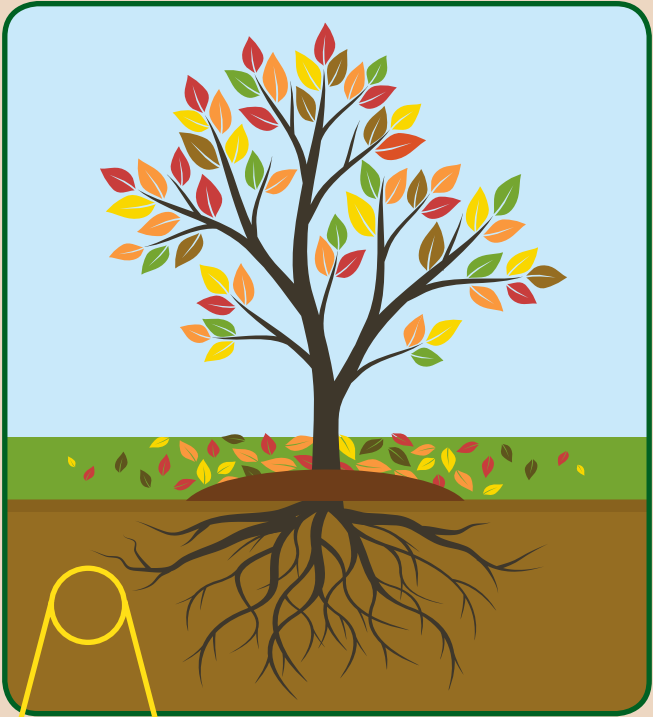
The constant nutrient depletion takes away another important benefit of organic matter – pore space for oxygen and water. Trees rely on these voids in the soil as areas for roots to grow and absorb vital water and nutrients. Other man-made disturbances further impact the root system causing compaction and reduced pore space in soils.

As arborists, we have several tools available to help maintain happy root systems. Liquid fertilizers applied under pressure below the soil surface help break up areas of light compaction while simultaneously introducing pockets of nutrients into the soil. In more extreme cases, truck loads of compost are brought in and mixed into the soil using compressed air. This action allows us to reintroduce a layer of organic matter into the soil without injury to the root system. This has the added benefit of breaking up areas of extreme compaction.

Of course, each tree and landscape is different. Not every tree needs leaf compost tilled in. Most trees will benefit from a layer of mulch and supplemental fertilization. Finding the solution and correcting the problem begins with a visit from one of our arborists. Knowing what the root system needs and mimicking a more natural setting for roots to thrive will help maintain a happy tree canopy.



Organic matter is removed from yard. Soil pore space is reduced, making it difficult for air and water to pass through.



Decomposing matter allows soil respiration. Soil pore space is regular. Air and water can pass through.

**KEY:**  Soil Particles  Water  Air

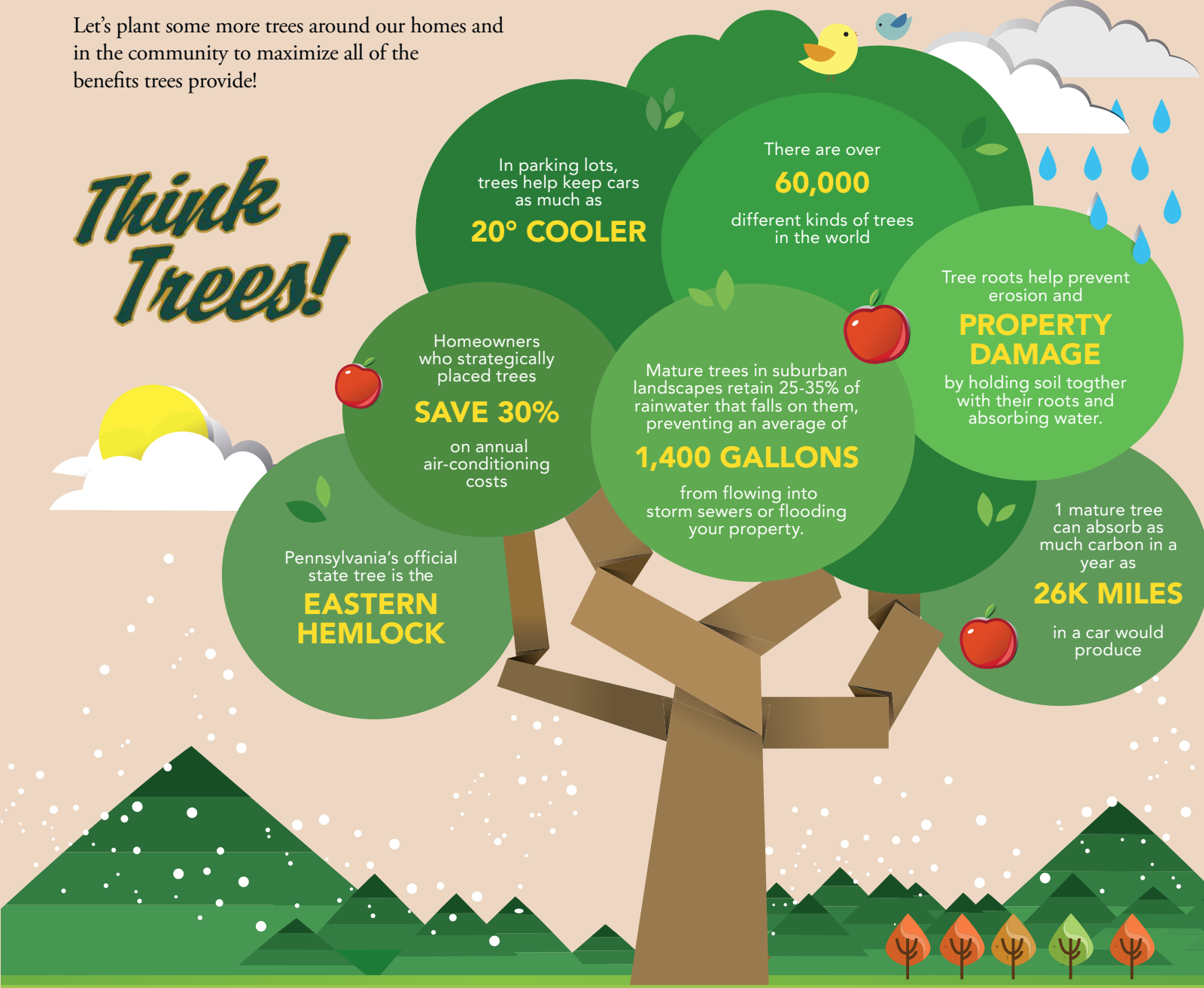
# The Many Benefits of Trees

During the early days of our nation, trees were given reverence and their benefits were utilized everyday. Even today when driving through farm country, consider the old farmhouse sitting in the middle of its fields surrounded by numerous trees. They were not planted just for form, but also function. Rural living has understood that trees provide shade, beauty, bounty and protection.

Have you ever stopped to consider the value of trees growing around your home? Trees offer many benefits. Not only do they enhance your home’s landscape and add curb appeal, they also add a protective layer against strong winds in the winter and a cooling benefit in the summer. It’s well documented that neighborhoods and individual properties that have a healthy and attractive treescape often sell at higher prices.

Trees are an essential part of the natural infrastructure managing storm water in our community. Their expansive root systems stabilize soil, slow water flow, absorb ground water, and reduce runoff. A healthy tree canopy around your home and in your neighborhood will improve water quality, drainage, and increase the water holding capacity of soil. All these positive effects of nature’s living sponges reduce erosion and soil displacement.

Let’s plant some more trees around our homes and in the community to maximize all of the benefits trees provide!



# Blooms & Booms

## Philadelphia's Explosive Flora

The weather of 2018 has been something of an anomaly. As of this publication, we are on track for the 7th highest rainfall in the past 100 years. Above average temperatures in February were quickly followed by deep freezes and snow storms in early March. Thunderstorms disrupted weekends, heat waves tested the strongest of air conditioners, and a few wind storms brought down trees on otherwise beautiful days.

In spite of the stormy weather, trees and shrubs have thrived in 2018. The rainfall to date is nearly equal to the annual totals for each of the previous 5 years. With an abundance of rain comes an abundance of growth. The bloom and boom of flora across the Delaware Valley is partly responsible for the numerous storm damage events we are seeing this year.

Excessive growth in trees is rarely a good thing. With heavy canopies and long, overextended

limbs, trees become more susceptible to storm damage. Thick, dense tree canopies catch like a sail in the wind, putting undo stress on the trunk and branches. Large diameter limbs can break or worse, entire trees can uproot. The same concerns apply as we move into the winter season. With more surface area for snow and ice to sit on, trees bend and snap. Think back to the wide-spread damage during the Ice Storm of 2014.

Preventive maintenance goes a long way addressing potential problems in your landscape and around your house. Long limbs on white pines can be trimmed back into the canopy profile, trees pruned to reduce weight, dead limbs removed and cables installed to help support multi-stemmed trees.

Remember, tree pruning is not only important for tree health, but also for the safety of your property.

## Invasive Insects

### Borers, Beetles, and... *Lanternfly*?

#### 1. Emerald Ash Borer

By now, everyone has heard of the invasive Emerald Ash Borer. In our last newsletter we spoke about the dilemma facing homeowners and property managers across the state. This pest is here to stay and has the potential to kill every ash tree it encounters. It may still be possible to save your ash tree. Call us today to speak with an arborist to determine what options are available for your trees.

#### 2. Asian Longhorned Beetle

The Asian Longhorned Beetle is a second invasive pest brought over in shipping containers to the United States. To date, it has been located in Ohio, New Jersey, and New York. While it has not yet been identified in Pennsylvania, our team of arborists is keeping a vigilant eye on your landscape.

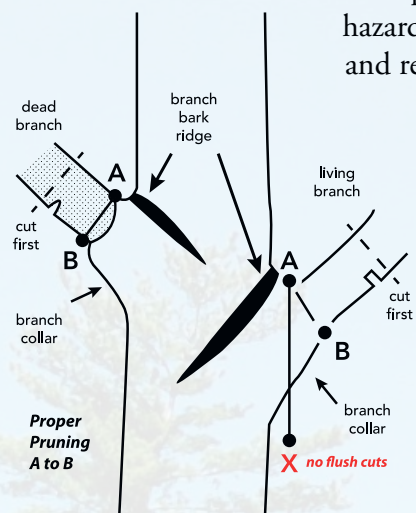
#### 3. Spotted Lanternfly

The insect creating the most buzz in the landscape recently is the Spotted Lanternfly. This pest is an excellent hitchhiker and has moved rapidly through the state since first being identified in September, 2014. Spotted Lanternfly looks similar to a moth but cannot actually fly. It climbs to the top of a tree and glides to a nearby tree, shrub, house, car.... you name it. Although their preferred hosts are the Tree of Heaven and fruit trees, Spotted Lanternfly will indiscriminately feed on any tree and is a real nuisance in the landscape. Their large numbers and sugary excrement make them particularly troublesome, attracting wasps and other stinging insects to the area. Late Season scouting and treatment is the best way to protect your trees from this invasive pest.



# Our Arborists Keep Your Trees in *Tip-Top Shape*

Our ISA Certified Arborists employ a pruning method of trimming starting at the ends of the branches, selectively thinning and lightening the tips first. This overall thinning process better balances a tree's canopy. This method is the best way to maintain the natural appearance, health and strength of trees. Our skilled and experienced arborists will first remove the tree's dead, broken or diseased limbs. They prune these problem areas back to a strong lateral branch or shoot. Removing those hazardous limbs can open up the canopy permitting more internal sunlight, and reduces the potential for damage in the future.



Pruning trees from the tips can also help develop a desired form or reduce the overall size of the tree. When pruning a tree it is important to have an understanding of the tree's natural growth habit. Removing certain branches can reduce the tree's weight and the chance of wind and storm damage. Raising a tree's canopy by removing low hanging branches improves sunlight to lawn areas and eliminates obstruction from walkways, streets, and structures. Beyond understanding the biology and physiology of your trees, our arborists understand the importance of artistry when pruning as well, revealing the attractive form of your trees and shrubbery.



## Think Trees!

### White Oaks Through the Ages

The White Oak tree (*Quercus alba*) is native to the Northeastern region of the United States. They are one of the longest living trees in Pennsylvania and can live to be 400 years old. When comparing other oak species to the White Oak, the White Oak is considered the king of kings. White Oaks get their name from the whitish color of the underside of their leaves, setting them apart from other oak trees. When the seasons change the White Oak's leaves will change to a striking red and or deep burgundy.

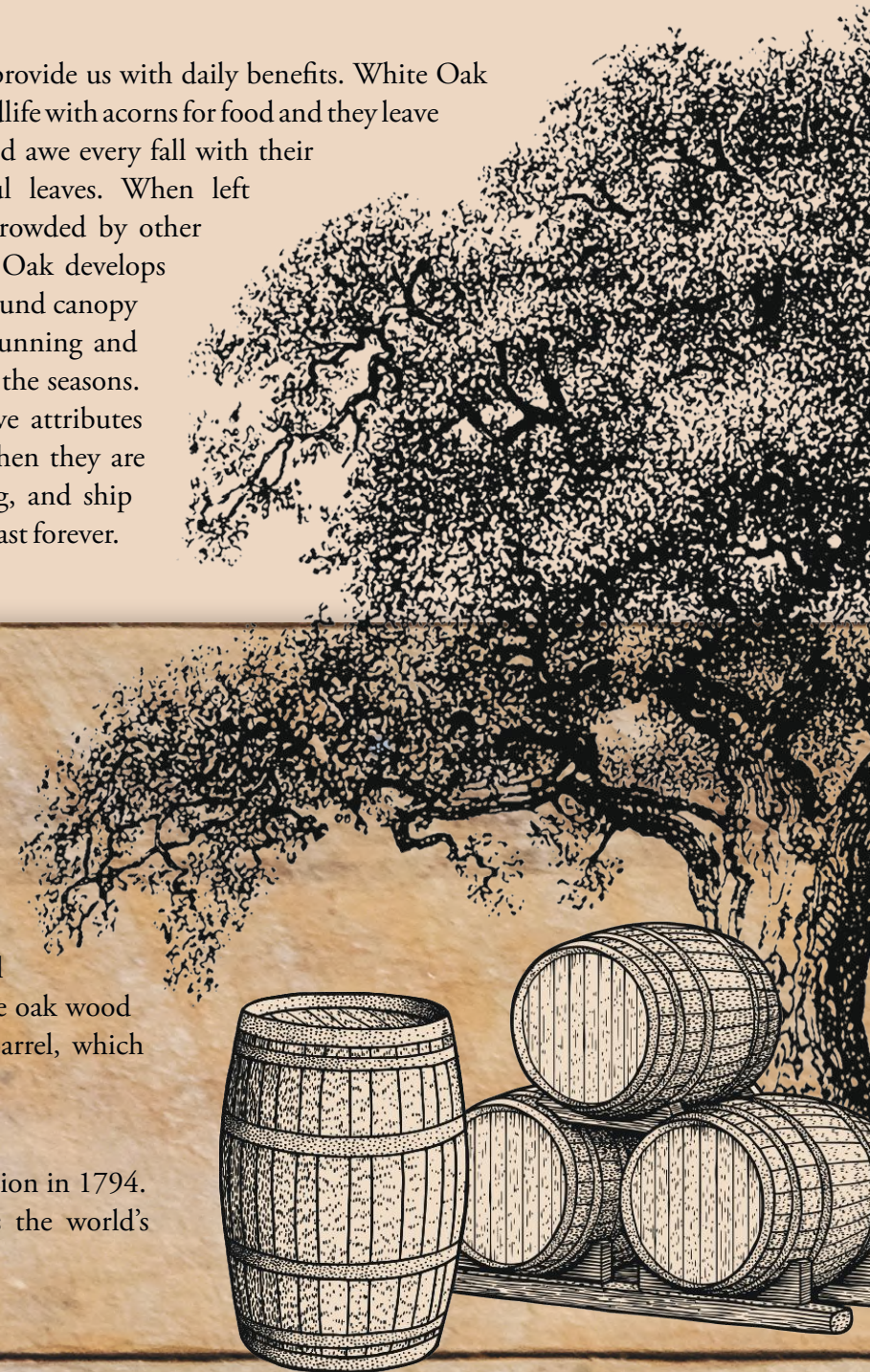
Trees in general provide us with daily benefits. White Oak trees provide wildlife with acorns for food and they leave us in wonder and awe every fall with their dazzling colorful leaves. When left alone and not crowded by other trees, the White Oak develops a very large and round canopy which is visually stunning and attractive throughout the seasons.

Besides all of the positive attributes that White Oaks provide, when they are reborn again into furniture, flooring, and ship building, their quality wood grain can seemingly last forever.

### Did you know...

Your favorite wine and whiskey ages in barrels made from White Oaks. The wood contains a microscopic tissue called tyloses which clogs up the dead cell structure, stopping water movement through the wood. This naturally occurring characteristic is ideal for barrel construction. This unique quality of white oak wood allows for small amounts of oxygen to enter the barrel, which helps in the aging process of wine and spirits.

White oak was also used to build the USS Constitution in 1794. Thanks to the lumber's incredible durability, it is the world's oldest commissioned naval vessel still afloat.



# The Science of Autumn Leaf Color

One of nature's most spectacular events is about to unfold in the Northeast. Autumn is the season that brings us cooler nights, shorter days and an abundance of breathtaking colors.

## Chlorophyll

Warm temperatures and sunlight allow plants to produce this green pigment. In fall, the amount produced decreases & the green color begins to diminish.

## Carotenoids & Flavonoids

These pigments are always present in leaves, but as the chlorophyll breaks down, they become visible. A subclass of carotenoids, xanthophylls are responsible for the yellow in autumn leaves.

## Carotenoids

Beta-carotene absorbs green & blue light, reflecting red & yellow light to create the orange pigment we see. Carotenoids break down at the same time as chlorophyll but at a much slower rate.

## Anthocyanins & Carotenoids

Anthocyanins synthesis begins at the start of autumn. Sugar concentrate in the leaves increases and the sunlight initiates anthocyanin production.



## Congratulations, Team Shreiner!

Tree climbing competitions are held across the state annually. Three Shreiner arborists competed at the event this year. Rachel Brudzinski competed strong all day and qualified for the International Masters event this coming spring. Michael Shreiner, a first timer at the event scored well as he is "learning the ropes" every day. Kyle Hawk, a 15 year Shreiner veteran, caught the attention of climbers half his age for his skill and speed moving through the tree canopy. We are incredibly proud of each of their performances and look forward to next year's event.

## We are *Mother Nature's First Responders*™

### 24/7 Emergency Storm Damage Cleanup and Tree Removal

To better serve our clients we bring to you our 24/7 Emergency Storm Damage service. Along with your contact information, just indicate the level of service you need by sending a text, email, or telling our receptionist the number that corresponds to your situation. We will dispatch a crew with the right resources to quickly handle the clean up. With this rating system, you can let us know if a tree is on your house, blocking your driveway, or if it is a non-emergency. This allows us to prioritize damage based on severity and handle the damage in a quick and efficient matter.



Call



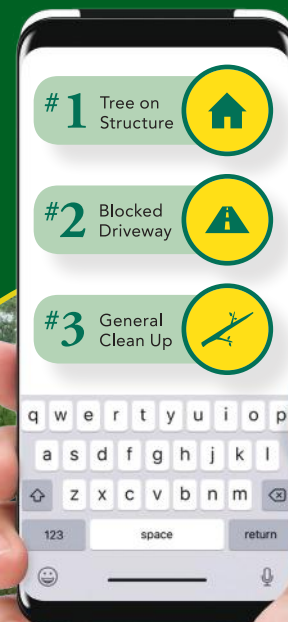
Text



Email

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**Simply** text, email or tell our receptionist the number that corresponds to your situation.