

TREE TIPS

TREE & SHRUB CARE FROM BARTLETT TREE EXPERTS

Root Invigoration™ by Thomas Smiley, PhD

One of the most effective ways to treat soil compaction and tree decline is with Root Invigoration™, a treatment that was developed and patented by the Bartlett Tree Research Laboratories. The treatment program begins with an evaluation of the tree and its site.

Soil conditions can be optimized, and a tree's water uptake can be improved as well.

If the tree is thought to be capable of responding to treatment, samples may be collected to determine the exact needs of the tree. A Bartlett Arborist Representative will determine the size of the treatment area and which soil amendments are needed.

When the crew arrives, they will remove any turf that remains in the treatment area. Soil will be tilled using high pressure air with a tool called an AirSpade™. The beauty of this tool is

that it tills the soil without damaging roots. Once the area is tilled, organic amendments including biochar and fertilizer will be applied and then incorporated into the soil. Next, mulch is applied over the root-invigorated soil. This reduces the soil temperature, reduces water evaporation, and provides a future source of organic matter. All that is left to do is to water the area each day for the next week or so to activate the full potential of the treatment.

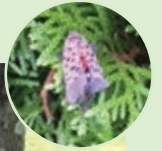
Root Invigoration is one of the unique services provided by Bartlett Tree Experts. Contact your Bartlett Arborist Representative to find out if your trees are suitable candidates for the Root Invigoration process.



Spotted lanternfly is a growing threat

by Chad Rigsby, PhD

The spotted lanternfly (SLF) is actually not a fly, but a planthopper, and it feeds on trees using its needle-like mouthpart, called a “stylet”. Tree of heaven is the preferred host tree for this invasive insect, but there are more than 100 known host species, including hickory, maple, pine,



A tree with a spotted lanternfly infestation.

poplar, red oak, walnut, willow, apple, and *Prunus* spp. (which includes plums, cherries, peaches, nectarines, apricots, and almonds). First discovered in Pennsylvania in 2014, the main populations have spread to Delaware and Virginia. SLF has, however, been detected in states beyond this immediate area, such as Connecticut, New York, and Massachusetts.

If egg masses are detected they can be scraped off, double-bagged, and thrown away. Also, several systemic and contact products can

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Emerald ash borer continues to be a threat

Researchers believe that emerald ash borer (EAB) became established in Southeastern Michigan sometime during the 1990s or perhaps even earlier. After its initial detection in the Detroit area, the invasion radiated out into the rest of the Midwest and

to the East Coast, and has been confirmed in 34 states and three Canadian provinces. Through the years this insect has left a trail of dead ash (*Fraxinus* spp.) in its wake, estimated at tens, if not hundreds, of millions of trees. Some communities took a proactive approach during these years and were able to save upwards of 90% of their pre-EAB ashes, whereas other communities

were caught off guard and now not a single ash can be found. Still, there are parts of the Midwest and New England where EAB is relatively new or slow-moving, and these areas are just beginning to experience the mass elimination of ash from the landscape.

For communities ravaged by EAB, the insect is sadly here to stay, and the scientific community recommends that EAB treatments not stop for the remaining ash trees. If treatments were to stop, remnant EAB in the area will exploit the suddenly defenseless tree and kill it. In areas experiencing the initial stages of an EAB invasion, the time is now to make decisions regarding your tree(s), not when tree decline becomes evident. Treatment to protect trees against EAB are highly effective: ask your Bartlett Arborist Representative for a complimentary inspection this spring.

Spotted lanternfly

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be used to effectively manage SLF. If you find SLF in an area where it has not yet been reported, please report it immediately to aid in the control of this invasive pest.



An example of a spotted lanternfly egg mass.

Bartlett office helps animal shelter

Arborist Representative Doug Bocchino from Bartlett's Denville, New Jersey, office organized a volunteer day of tree pruning and removal at Eleventh Hour Animal Rescue. This non-kill shelter focuses on "saving death row animals from kill shelters; fostering them in a home; providing them with all the love and medical attention they require until they find their forever homes; educating the community about the animal overpopulation problem and the importance of spaying and neutering."

Doug identified some potentially hazardous trees in close proximity



to the kennels and assembled a volunteer team that included Bartlett employees Gerber Coreas, Cesar Portillo, and Carlos Santamaria, and crane service from Mike Schondel. They removed seven trees and pruned four others to mitigate risk around the high-use areas. A previously fallen tree on the hiking paths in the woods where the dogs get their routine exercise was also removed.

The men were all glad to use their skills to help animals in need.



Fun with trees

Ladybug rocks – Add some fun under a tree or in your garden!

This easy project requires smooth oval rocks, outdoor craft paint, a few small paint brushes, and enough patience to wait for the paint to dry between each step. First, make sure your rock is clean and dry, and use red to paint all but the bottom, where the "bug" will rest on the ground. Second, paint a black head and a line down the middle. Third, use the end of a paintbrush handle to dot on black spots and white eyes. Fourth, add smaller black dots onto the white eyes. Finally, if desired, paint your bug with a coat of clear craft outdoor sealer. If you have more paint colors, standard red and black ladybugs may be only the beginning!



TREE FOCUS:

Littleleaf linden (*Tilia cordata*)

History

Although native to Europe and southwestern Asia, littleleaf linden has become a very popular street tree in North America because it tolerates urban conditions. This tree has attractive foliage and fragrant yellow flowers in summer. Littleleaf linden is important for bees and other pollinators. Common cultivars of littleleaf linden include Chancellor, Corinthian®, Greenspire, Glenleven, Shamrock® and Summer Sprite®.

Culture

- Can be grown in hardiness zones 3-7
- Tolerant of urban conditions
- Tolerant of acidic and alkaline soils
- Moderately tolerant of poorly drained soils
- Grows best in full sun

Concerns

- Susceptible to powdery mildew
- Although infrequent, Verticillium wilt can cause mortality
- Pest associations include aphids, borers, lace bugs, leaf miners, Japanese beetles and scales
- Spider mites can be problematic during periods of drought

Bartlett Management Practices

- Treatments may be necessary for aphids and Japanese beetles during years of heavy infestation
- Early application of fungicide will prevent powdery mildew
- Predatory mites are effective in reducing large spider mite populations




WONDERS OF NATURE

A plant that can grow up to 35 inches a day!?

Yes! There is a species of bamboo which has been found to grow up to 35 inches (91 cm) per day. Bamboo produces new canes (culms) in the spring. For 60 days these new shoots grow in height and diameter, and produce limbs and leaves. After the 60-day growth period, a bamboo cane never grows in height or diameter again. It will put out new foliage each year, however; bamboo is a colony plant, so it uses energy from an existing plant to produce more plants and to expand the root system.

For more about the anatomy and growth of this fascinating plant, visit www.lewisbamboo.com/how-bamboo-grows.





Make sure your trees and shrubs are ready for the spring season.

Reeves-Reed Arboretum in Summit, New Jersey

Listed on both the National and the State Registers of Historic Places, Reeves-Reed Arboretum estate and gardens represent design trends by prominent landscape architects of the late 19th and early 20th centuries.

Reeves-Reed Arboretum is dedicated to preserving the past and imagining the future of American gardening. Landscapes include natural woodlands and open vistas developed from the creative vision of 19th century designers such as Andrew Downing and Frederick Law Olmsted. The ground's formal gardens exemplify the Country Place movement of the early 20th century.

The Arboretum's features include historic gardens, contemporary gardens, horticultural highlights and woodland trails for visitors of all types to enjoy.

Plan a visit at www.reeves-reedarboretum.org.



Photo credit: New Jersey Monthly Magazine.



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