



Hort Notes[©]

An educational newsletter with research-based information for businesses and individuals involved in selling, planning, designing, servicing, and enjoying landscapes and gardens.

New BMP for Cabling

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In 2013, the Tree Care Industry Association published a revised ANSI A300 (Part 3) *Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices for Supplemental Support Systems*, commonly called the “Cabling Standard”. Whenever there is an update to an A300 Standard, the International Society of Arboriculture publishes an updated Best Management Practices to complement the Standard. The **BMP TREE SUPPORT SYSTEMS-Cabling, Bracing, Guying, and Propping**, third edition 2014, was written by E. Thomas Smiley, Bartlett Tree Experts Company, and Sharon Lilly, ISA. This special publication is a companion to the A300 and is available from the ISA at www.isa-arbor.com/store/shop.aspx.

There has been a considerable amount of controversy in reference to cabling. One issue has been the issue of liability - it is assumed that when you install a brace or a cable that you are doing so to add strength to a weak point in the tree, such as a weak fork with included bark. The key in avoiding liability is to install the system according to specifications and to have a periodic inspection plan that has been explained, in writing, to the client.

A copy of the *BMP for Tree Support Systems* should be in every toolbox of bracing and cabling supplies. We strongly suggest that special attention be given to Table 4 that outlines the “Minimum hardware size requirements for cabling trees (adapted from ANSI A300 Part 3, Table A-1)”. Table 4 outlines the size and type of hardware that should be used for cabling branches of a variety of diameters. What you would not want to do is to use a cabling system that is not strong enough for the size of the branch being cabled. If your system were to fail and it did not meet the Table 4 requirements, you would most likely be held

responsible for the branch failure and any resulting injury or damage. Always follow the minimum hardware size requirements for the size of the tree that you are working on. By the same token, bigger isn’t always better; dead-end hardware like j-lags should not get too close to the opposite side of the branch into which they are inserted.

Another cabling debate has been the use of dynamic, or synthetic, cabling systems. A dynamic cabling system is a system that uses a synthetic rope-like material instead of the 7-strand steel cable. This rope-like cable is more elastic than steel cables and is supposed to reduce shock loads in the cable and allow the cabled branches to sway naturally. Neither of these advantages has been experimentally documented (see a recent publication in *Urban Forestry & Urban Greening* (Vol. 13, pp. 443-449)). There are several very important considerations to keep in mind before using a dynamic synthetic rope for cabling that are outlined in the new BMP.

The dynamic systems that “wrap around the stem” have the “potential for girdling” the tree. There are dynamic systems that use traditional anchors of lags and eyebolts that will eliminate the problem of girdling damage and we would recommend these when choosing a dynamic system.

Two other considerations that affect the longevity of the synthetic cables is UV (sunlight) degradation and small animals that may chew on the synthetic cable. While steel cables will last for many years, the synthetic rope-cables have a much-shortened lifespan and need to be inspected more frequently.

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Monitoring Checklist for October

V25, #10 October, 2014

PLANT PHENOLOGY: OVER 2800 GROWING DEGREE DAYS

PLANT	PEST OR PROBLEM	GDD OR ENVIRONMENTAL CONDITIONS	WHAT TO LOOK FOR	WHAT TO DO
Hemlocks	Hemlock Woolly Adelgid <i>Adelges tsugae</i> p. 78	Generally starting in mid-October.	Has been dormant since mid-July and settled as a tiny flat-black, oval-shaped nymph with a ring of white wax around its body on hemlock stems. Is now out of its summer dormancy and feeding at the small stems at the base of needles. Will continue to feed and grow from now until next March, when they will mature and begin to produce eggs. At that time, they will be the most noticeable because the eggs are deposited in piles under a mass of white waxy strands.	Inspect with a hand lens for these tiny nymphs. Live nymphs should be somewhat plump and exude liquid when punctured with a small sharp-pointed object, such as a pin. Dead nymphs will be dry and brittle. If live nymphs are found, make note of these and treat next year during the late-winter / early spring with a horticultural oil spray or wait until early May (approximately) to apply a systemic application of imidacloprid. Unfortunately, it is too late now to treat this pest this year.
Numerous landscape deciduous hardwoods (native)	Foliar spots, blotches, scorch and browning on deciduous trees Examples include: Cherry leaf spot <i>Mycosphaerella cerasella</i> pp. 20-23, Hawthorn leaf spot <i>Entomosporium mespili</i> pp. 78-79, Phyllosticta leaf spot and blotch <i>Phyllosticta</i> spp. pp. 42-43, Tar spot on maple and holly <i>Rhytisma</i> spp. pp. 66-67, and Leaf spot of birch and aspen <i>Marssonina</i> spp. pp. 82-83	Cool and wet weather in the spring. However, these fungi overwinter on dead leaves and, in some cases, dead shoots. In the spring, spores are dispersed via rain, wind, and splashing water to newly developing leaves and shoots. When cool and wet periods persist in the spring, spores land on wet, immature leaves of susceptible host plants, germinate and begin to establish an infection.	Symptoms are most conspicuous late in the growing season, specifically in mid-August through September. Symptoms of foliar pathogens typically include circular leaf spots, irregular blotches and marginal scorch. Foliage with moderate to severe infections can become yellow to brown in color, may curl irregularly, and can be shed prematurely. Symptoms may have appeared early in the season but are easily missed without close inspection. In addition, many pathogens go dormant during hot and dry stretches in mid-summer. Once cooler temperatures and rains return in autumn, these fungi reemerge to continue disease development. Try to distinguish the difference scorch induced by drought, root disease and mechanical root damage compared to symptoms caused by foliar disease pathogens.	Because the majority of annual growth occurs early in the growing season, little overall damage is done to the tree or shrub when foliage is blighted late in late summer and early autumn. Therefore, active management is not usually required. The best way to combat these diseases is to remove fallen leaves from the site, thus reducing overwintering inoculum that initiates infections in the spring. This is especially important where susceptible trees and shrubs are grouped together and fallen foliage may avoid typical yard clean-up. Another option is to prune very dense branches to increase air-flow and reduce leaf wetness. Fungicides are not likely to be necessary if cultural controls are diligently addressed. If landscape trees border forest edges, then control will be more difficult. The bottom line is that many foliar diseases are mostly cosmetic and do not pose a serious threat to the health of the plant.

The page numbers in the second column, after the pest, refer to the texts *Insects That Feed on Trees and Shrubs, 2nd ed.*, Johnson and Lyon, and *Diseases of Trees and Shrubs*, Sinclair, Lyon and Johnson, Cornell University Press.

Bob Childs, Extension Entomologist (retired)
Nick Brazeel, Extension Plant Pathologist

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Lastly, dynamic systems should never be used to cable a tree that has a weak fork or attachment. When cabling a weak attachment, we do not want to have the junction of the fork moving; in this case a steel cabling system should be used.

Bracing and cabling have a place in many tree preservation programs. Yes, there are limitations, but a well designed and installed cabling system can preserve a significant tree for many additional years.

2015 Award Winning Plants

Deborah C. Swanson, Extension Horticulturist, retired, UMass Extension/Plymouth County

Each year, members of the Perennial Plant Association (PPA), a trade association composed of people professionally involved in the herbaceous perennial plant industry, vote to select the *Perennial Plant of the Year*. The winning perennial must meet certain criteria including: suitable for a “wide range of growing climates, low maintenance, have multiple-season interest, and be relatively pest-free”. Recently, the Perennial Plant Association members voted *Geranium xcantabrigiense* ‘Biokovo’ as the 2015 Perennial Plant of the Year.

Geranium xcantabrigiense ‘Biokovo’ is a naturally occurring hybrid between *Geranium macrorrhizum* and *Geranium dalmaticum* and was found in the Biokovo Mountain Range in Croatia. *Geranium xcantabrigiense* ‘Biokovo’ produces ¾ - 1 inch white flowers with pink stamens and pink centers. Flowers are produced in late spring and reportedly last a long time, as seed production is reduced. The flowers contrast nicely with the medium green, rounded, lobed foliage. The foliage often turns a reddish, orange, burgundy in the fall. Plants are usually 6 - 8 inches high and 10 - 12 inches wide and spread by rhizomes or underground stems. Because of its size, it is often used as a front of the border plant, as an addition to a rock garden, or as a ground cover. *Geranium xcantabrigiense* ‘Biokovo’ will grow in full sun to light shade in an organic, well-drained soil and is hardy to zone 5. This lovely geranium has no significant insect or disease problems and is a low maintenance, welcome addition to the Perennial Plant Association’s Plant of the Year list of winning plants.

We are fortunate here in Massachusetts to live in an area with numerous public and private gardens, botanical gardens, arboreta, etc., and the Tower Hill Botanical Gardens, located in Boylston, MA, is certainly one of our terrific horticultural resources. Tower Hill sponsors the Cary Award Program that promotes outstanding plants for New England and each year the Cary Award Program committee of green industry professionals selects the Cary Award winning plants that meet certain criteria. A

Cary Award winning plant must be:

- a woody shrub, tree, vine or ground cover that is especially appropriate for New England
- hardy within at least 2 of the 4 USDA Hardiness Zones in New England (Zones 3-6)
- a season-extender, with priority given to notable winter features
- available in the nursery industry
- have significant resistance to pest problems

For 2015, the Cary Award Winning Plants are:

Clethra barbinervis (Japanese Clethra)

Fagus sylvatica ‘Rohan/Red Obelisk’ (European Beech)

Clethra barbinervis (Japanese Clethra) is a beautiful and not very well-known, and therefore often underused, small tree or shrub which is deserving of greater use in the landscape. *Clethra barbinervis* produces numerous, small (1/3 inch diameter), white, slightly fragrant flowers on 4 - 6 inch long terminal racemes in late July-August. The leaves are dark green and approximately 2 - 5 inches long and 1 - 2 inches wide. Fall color reportedly can be variable from little color, to yellow or a mixture of maroon, bronze, red. One of this clethra’s outstanding features is its beautiful smooth, sometimes slightly exfoliating, bark which has been compared to the bark of *Stewartia pseudocamellia*. The bark provides multi-seasonal appeal with its rich mottled tones of gray, brown and cinnamon which is prominent, especially in the winter landscape. Growing to a height and width of 10 - 20 feet, *Clethra barbinervis* may be used in many landscape settings, especially in a mixed shrub border, as an accent to a pond or water garden, or in a mixed woodland garden. Hardy to zone 5, this 2015 Cary Award winner grows well in morning sun and afternoon shade in an organic, well-drained soil and has no significant insect or disease problems.

The European Beech (*Fagus sylvatica*) is one of Dr. Michael Dirr’s “great plant loves” and there are certainly
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UMass Extension's 2014 Green School

Location: Holiday Inn, Marlborough, MA

October 29 - December 11, twice weekly from 9:00 a.m. to 3:30 p.m.

Green School is a comprehensive certificate 12-day short course for Green Industry professionals taught by UMass Extension specialists and University of Massachusetts faculty. It is designed for horticultural practitioners such as landscapers, lawn care specialists, and arborists wishing to gain an understanding of plant care fundamentals and strategies and their relation to environmental quality, but who can't fit a full academic course into their schedules. **DEADLINE FOR APPLICATIONS: October 24th.**

THREE SPECIALTY TRACKS TO CHOOSE FROM

- Landscape Management
- Turf Management
- Arboriculture

For the complete schedule or a registration form, go to www.umassgreeninfo.org or call (413) 545-0895.

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numerous cultivars to choose from. The 2015 Cary Award winner, *Fagus sylvatica* 'Red Obelisk' ('Rohan Obelisk') European Beech, is one of the numerous purpled-leaved cultivars. 'Red Obelisk' is a beautiful, elegant cultivar, and is known and grown for its narrow, upright columnar form and its reddish-purple, serrated foliage. Landscape designer Gary Koller believes that *Fagus sylvatica* 'Red Obelisk' is the narrowest and most upright, purple-leaved beech cultivar currently available. The new leaves of 'Red Obelisk' emerge a reddish-pink and mature through the summer to a purplish-green. Reaching a height of

30 - 40 feet and a width of 8 - 10 feet, *Fagus sylvatica* 'Red Obelisk' may be used in landscapes with limited space' as a specimen plant, or as a grouping for special impact. *Fagus sylvatica* withstands heavy pruning or shearing and a group of *Fagus sylvatica* 'Red Obelisk' makes an impressive hedge, with or without shearing. Like other European Beeches, the smooth, silvery-grey bark of 'Red Obelisk' is an outstanding feature and provides elegant and attractive landscape interest, especially in the winter. Hardy to zone 5, *Fagus sylvatica* 'Red Obelisk' prefers growing in full sun in an organic, well-drained soil with a slightly acid soil pH of 5 - 6.5.

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