HORTICULTURE TIPS

Division of Agricultural Sciences and Natural Resources * Oklahoma State University **February 2010**

Planting Bare-Root Trees and Shrubs

David Hillock

Bare-root plants can be purchased in winter and should be planted in February or March. Bare-root or packaged plants should be dormant (not showing new growth). The bare-root plant is often prepackaged in a colorful bag. Open the bag immediately and dampen the roots until planting. At planting remove all bags, strings or wires

Never leave roots exposed to air. Very fine root hairs, which are not visible to the naked eye, are responsible for moisture and nutrient uptake and are killed when exposed to dry air for even a very short period. Keep the roots damp and covered while preparing the planting hole to protect the fine root hairs.

Trees and shrubs should be planted at the same depth at which they were growing in the container or field nursery. There is a texture and color change between the trunk or stem and the roots. The base of the plant should not be covered with more than about one inch of soil. Planting too deep is a major cause of plant failure, especially in poorly drained clay soil.

Holes for bare-root plants should be dug large enough to accommodate the roots without crowding or twisting. The hole should be no deeper than the original root depth and at least twice the spread of roots. Broken and badly damaged roots should be removed. A mound or cone may be made in the center of the hole to accommodate the spread of roots and allow the tree or shrub to rest at the proper depth while backfilling the hole.

Work the soil under and around the roots to remove air pockets. Firm the soil while filling until the hole is three-quarters full, and then fill the hole with water. This will settle soil around the roots. After the water has soaked in, finish filling the hole with soil and water again. If the soil around the plant settles, bring it back up to grade with additional soil.

For more information on planting trees and shrubs see OCES fact sheet **HLA-6414 Planting Trees and Shrubs**.

2010 Oklahoma Proven Selections

David Hillock

Collector's Choice – Caddo Sugar Maple, *Acer saccharum* Caddo

Caddo Sugar Maple is a native population of sugar maple found growing in Caddo County in southwestern Oklahoma. The leaves are dark green, deeply lobed and leathery making it more resistant to leaf tatter and scorch. Caddo Sugar Maple is also quite tolerant of high pH soils, extreme heat and drought conditions commonly found in western Oklahoma. It can reach 30' to 50' tall and is a beautiful medium to large shade tree. Fall color is variable, but can range from yellow to golden yellow to orange and sometimes red; cultivars selected for brilliant fall colors as well as outstanding performance are available.

•Exposure: Full sun
•Soil: Prefers well-drained soil; tolerant of dry and high pH soils

•Hardiness: USDA Zone 5-9

Tree – Indian Cherry, *Rhamnus carolinianus*

Indian Cherry is a small tree (or large, multi-stemmed shrub) to 20' tall with a rounded to spreading canopy. It is native to the eastern, southeastern US making it more desirable over its European cousins. The foliage is dark, lustrous green all summer turning yellow to orange yellow in the fall. Probably its greatest asset is the colorful fruits that develop late summer/fall turning red and then to black as they mature. These beautiful, sweet fruit also attract several species of birds and can be used to make jams and jellies.

•Exposure: Full sun to shade
•Soil: Prefers well-drained soil
•Hardiness: USDA Zone 5-9

Shrub – Koreanspice Viburnum, *Viburnum carlesii*

Koreanspice Viburnum is a small to medium sized shrub offering year round interest. In summer the leaves are dark green, fall color can be wine-red. Flower buds are pink to red opening white or pink in spring omitting a wonderful fragrance. In late summer clusters of red fruit that fade to black invite birds to the garden. Once the shrub has become established it is quite heat and drought tolerant and though it prefers moist, slightly acid soils, and sun to part shade, it is tolerant of high pH soils and wind-swept conditions. It grows from 4' to 5' high and just as broad. Valued for its fragrant flowers, this shrub can be used as a foundation planting, specimen, or incorporated into a mixed border. Several improved cultivars are available.

•Exposure: Sun to part shade
•Soil: Moist, well-drained
•Hardiness: USDA Zone 5-7

Perennial – Toad Lily, *Tricyrtis hirta*

Toad lilies are known for their very unique flowers. Flowers are pale lilac with dark purple spots that appear on upright arching stems late summer to early fall when many other plants are beginning to wind down. Though flowers are quite unique, they are small so place toad lily in a spot where the flowers can be appreciated up close. The plant grows 2' to 3' high and about 2' wide with bright green leaves. They are excellent for the woodland garden as understory plants where they will be protected by shade. Toad lily is easy to grow, resistant to deer, somewhat drought tolerant, but grow best in moist soils and will even tolerate wet conditions. Several cultivars with varying flower colors are available.

•Exposure: Shade, partial shade
•Soil: Moist, well-drained
•Hardiness: USDA Zone 4-8

Annual – Silver Falls Dichondra, *Dichondra argentea* 'Silver Falls'

'Silver Falls' Dichondra was selected for its very low growing, creeping trailing habit and beautiful silvery gray leaves that are shaped like miniature lily pads. Silver Falls is actually a selection of a dichondra species native to southwest Texas and Mexico so it is quite heat and drought tolerant. Growing only 2" tall and 3' to 4' wide it is an attractive groundcover, but is also spectacular in a container planting or hanging basket, spilling over a retaining wall, or when used in a rock garden.

•Exposure: Full sun to part shade
•Soil: Well-drained
•Hardiness: Use as an annual

For more information about Oklahoma Proven go to http://oklahomaproven.okstate.edu/ or contact David Hillock, 405-744-5158, david.hillock@okstate.edu.

Garden Tips for February

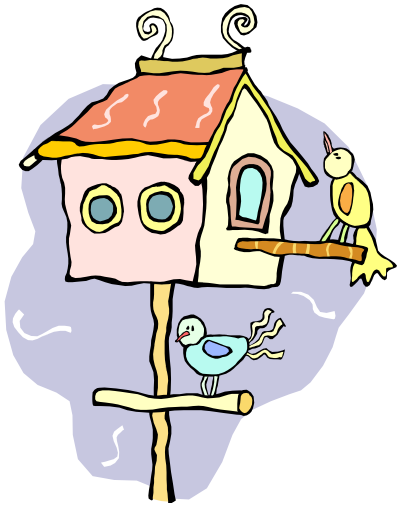
General

- Base any plant fertilization on a soil test. For directions, contact your county Extension Educator.
- Provide feed and unfrozen water for your feathered friends.
- Clean up birdhouses before spring tenants arrive during the middle of this month.
- Avoid salting sidewalks for damage can occur to plant material. Use alternative commercial products, sand or kitty litter for traction.
- Join *Oklahoma Gardening* on your OETA station for the beginning of the new season on February 13, 2010. The show airs on

Saturdays at 11:00 a.m. and Sundays at 3:30 p.m.

Trees & Shrubs

- Fertilize trees, including fruit and nut trees and shrubs, annually. (HLA-6412)
- Most bare-rooted trees and shrubs should be planted in February or March. (HLA-6414)
- Finish pruning shade trees, summer flowering shrubs and hedges. Spring blooming shrubs such as forsythia may be pruned immediately after flowering. **Do not** top trees or prune just for the sake of pruning. (HLA-6409)



- Look for arborvitae aphids on many evergreen shrubs during the warmer days of early spring.
- Gall-producing insects on oaks, pecans, hackberries, etc. need to be sprayed prior to bud break of foliage.
- Dormant oil can still be applied to control mites, galls, overwintering aphids, etc. (EPP-7306)

Fruit & Nuts

- Spray peaches and nectarines with a fungicide for prevention of peach leaf curl before bud swell. (EPP-7319)
- Mid-February is a good time to begin pruning and fertilizing trees and small fruits.
- Collect and store graftwood for grafting pecans later this spring.
- Begin planting blackberries, raspberries, strawberries, grapes, asparagus and other perennial garden crops later this month.
- Choose fruit varieties that have a proven track record for Oklahoma's conditions. Fact Sheet HLA-6222 has a recommended list.

Turf

- A product containing glyphosate plus a broadleaf herbicide can be used on **dormant** bermuda in January or February when temperatures are above 50°F for winter weed control. (HLA-6421)

Vegetables

- Cool-season vegetable transplants can still be started for late spring garden planting.
- By February 15 many cool-season vegetables like cabbage, carrots, lettuce, peas and potatoes can be planted. (HLA-6004)

Flowers

- Force spring flowering branches like forsythia, quince, peach, apple and weigela for early bloom indoors.
- Forced spring bulbs should begin to bloom indoors. Many need 10-12 weeks of cold, dark conditions prior to blooming.
- Feed tulips in early February.
- Wait to prune roses in March.

Controlling Insects in Winter

David Hillock

Many insects such as mites, gall forming insects, aphids, etc., have an overwintering stage or hide out on plants during the winter months in cracks and crevices of trunks and stems. On mild winter days, some of these insects may even become active. One way to control them and keep their numbers to a low roar this growing season is to spray them with horticultural oil during the winter months.

Horticulture Oils – Horticultural oils are petroleum-based products containing certain fatty acids that form layers on plant parts to smother insects or provide a mechanical barrier to prevent damage. There are two kinds of oils: growing season (summer) and dormant. Some common examples include:

•**Sunspray (6E Plus)**: Normal dormant use. Summer use on vegetables, greenhouse ornamentals, flower and foliage plants, some fruit and nut trees, some field crops, blueberries, grapes, olives, and citrus.

•**Ortho Volck Oil Spray**: Dormant and summer use on citrus, fruit and shade trees, evergreens, and some shrubs.

•**Scalecide**: Dormant and summer use on fruit and shade trees,

ornamentals, evergreen, and small fruit. Indoor or outdoor use.

"Dormant" refers to the time of year the application is made. Remember, as a general rule, that oils control insects, not plant diseases. Dormant oil should not be applied when temperature is below 40°F and if there is danger of freezing. **Note: some dormant oil sprays should not be applied to evergreens or to certain deciduous tree species**. Be sure to read and follow the product label.

Rules for Using Dormant Oil

- wear appropriate clothing for protection
- cover all plant surfaces
- spray at the right time
- do not mix chemicals
- use at labeled rates
- do not use when temperature is above 80°F

Camp T.U.R.F. – A Summer Opportunity for Oklahoma High School Students

Shelley Mitchell

Every summer, the Oklahoma State Regents for Higher Education fund several summer academies for Oklahoma high school students. This year one of the academies will be "Camp T.U.R.F. (Tomorrow's Undergraduates Realizing the Future)". Twenty-five high school students from across Oklahoma will be accepted to participate in this two-week residential academy hosted by the OSU Department of Horticulture and Landscape Architecture. Participants will get hands-on experience in a variety of activities in the horticulture and landscaping industries. A few of the planned activities are:

- Touring greenhouses used for commercial and academic purposes
- Climbing trees with a certified arborist
- Participating in a field day at a vegetable research facility
- Hands-on pruning experience
- Assembly of an irrigation system
- Creating terrariums and dish gardens
- Filming a video segment with the host of *Oklahoma Gardening*

In addition to horticulture activities, participants will experience:

- College preparation sessions with Sylvan Learning Center
- Career preparation sessions with Oklahoma CareerTech
- Vermicomposting
- Hands-on experience with exotic insects
- The Challenge Course (ropes course) at Camp Redlands near Stillwater

In the evenings and during the weekend, recreational activities include:

- Bowling
- Canoeing
- Use of the Colvin Recreation Center on the OSU campus
- Movies
- Visits to museums such as the Apothecary Museum, the Sheerar Center and the Washington Irving Trail Museum

Students will stay on campus in the newer deluxe suites. Dates for the 2010 Camp T.U.R.F. are June 20 – July 2, 2010. All expenses are covered by the grant; participants only need to arrange for transportation to and from the academy. Eligible participants are Oklahoma high school students who will be at least 16 years of age at the start of the academy, and have not yet graduated from high school. The camp is geared toward youth who will be first-generation college students. Applications will be accepted starting in March 2010. Contact information for the academy: Shelley Mitchell, OSU Department of Horticulture and Landscape Architecture, Stillwater, OK, 74078; 405-744-5755; shelley.mitchell@okstate.edu.

New Fact Sheet – Managing Turfgrass in the Shade in Oklahoma

Justin Moss, David Hillock and Dennis Martin

A new fact sheet, HLA-6608 – Managing Turfgrass in the Shade in Oklahoma is now posted online at http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-6652/HLA-6608web.pdf.

Handbook of Oklahoma Vineyard Establishment and Management

Eric T. Stafne

The OSU Viticulture and Enology team is pleased to present a new publication, Handbook of Oklahoma Vineyard Establishment and Management. This book will serve as our primary instructional tool in the OSU Grape Management Short Course, but also is available to anyone who would like a copy. It has 212 pages full of information with color photos, figures, tables, and drawings on how to grow grapes.

A sampling of the subjects covered in this handbook include: education and planning, economics, climate, soils, irrigation, anatomy, cultivars and clones, rootstocks, propagation, site selection, trellis systems and training, pruning, vine nutrition, canopy management, disease and insect management, yield estimation, harvest, marketing, and health benefits. by an internal OSU grant (TIP) through the Oklahoma Cooperative Extension Service and the Agricultural Experiment Station. In all, 18 authors contributed to this publication. If county offices would like copies, please let me know and we will attempt to get a box to you at no cost. Ordering through the mail by individuals will incur a nominal cost of $10.00 to cover shipping.

Upcoming Horticulture Events

2009 Grape Management Course
http://www.hortla.okstate.edu/pdf/2010grapemgmt.pdf

2009 Pecan Management Course
http://www.hortla.okstate.edu/pdf/2010pecanmgmt.pdf

For more information about upcoming events, please contact Stephanie Larimer at 405-744-5404 or stephanie.larimer@okstate.edu.

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This newsletter is one way of communicating horticultural information to those interested.

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