

Horticulture Tips

March 2011

Oklahoma Cooperative Extension Service
Division of Agricultural Sciences and Natural Resources
Oklahoma State University

GARDEN TIPS FOR MARCH!

Lawn and Turf

- Remove excessive thatch from warm-season lawns. Dethatching, if necessary, should precede crabgrass control treatment. ([HLA-6604](#))
- Broadleaf weeds can easily be controlled in cool-season lawns at this time with post-emergent broadleaf herbicides. (HLA-6421)
- Preemergent crabgrass control chemicals can still be applied to cool- and warm-season turfgrasses ([HLA-6421](#)). Heed label cautions when using any weed killers near or in the root zone of desirable plantings.
- March is the second best time of the year to seed cool-season turfgrass; however, fall is the best time to plant. ([HLA-6419](#))
- Cool-season lawns such as bluegrass, fescue and ryegrass may be fertilized now with the first application of the season. Usually, four applications of fertilizer are required per year, in March, May, October and November. ([HLA-6420](#))
- Begin mowing cool-season grasses at 1 ½ to 3 ½ inches high. ([HLA-6420](#))

Flowers & Vegetables

- Cultivate annual flower and vegetable planting beds to destroy winter weeds.
- Apply mulch to control weeds in beds. Landscape fabric barrier can reduce the amount of mulch but can dry out and prevent water penetration. Thus, organic litter makes the best mulch.
- Prune roses just before growth starts and begin a regular disease spray program as the foliage appears on susceptible varieties. ([HLA-6403](#) & [EPP-7607](#))
- Avoid excessive walking and working in the garden when foliage and soils are wet.
- Start warm-season vegetable transplants indoors.
- Divide and replant overcrowded, summer and fall blooming perennials. Mow or cut back old liriopse and other ornamental grasses before new growth begins.
- Your cool season vegetables like broccoli, cabbage, carrot, lettuce, onion, peas, spinach, turnips etc. should be planted by the middle of March.
- Watch for cutworms that girdle newly planted vegetables during the first few weeks of establishment. Cabbage looper and cabbageworm insects should be monitored and controlled in the garden ([EPP-7313](#)).

Trees & Shrubs

- Prune spring flowering plants, if needed, immediately following their bloom period.
- Plant evergreen shrubs, balled and burlapped, and bare root trees and shrubs.

- Anthracnose control on sycamore, maple and oak should begin at bud swell. ([EPP-7634](#)).
- Diplodia Pine Tip blight control on pines begins at bud swell. ([EPP-7618](#))
- Chemical and physical control of galls (swellings) on stems of trees should begin now. ([EPP-7168](#) & [EPP-7306](#))
- Dormant oil can still be applied to control mites, galls, overwintering aphids, etc. ([EPP-7306](#))
- The first generation of Nantucket Pine Tip Moth appears at this time. Begin pesticide applications in late March. ([EPP-7306](#))
- Control Eastern tent caterpillars as soon as the critters appear.

Fruits

- Continue to plant strawberries, asparagus and other small fruit crops this month.
- Start your routine fruit tree spray schedule prior to bud break. ([EPP-7319](#)).
- Remove winter mulch from strawberries in early March ([HLA-6214](#)).

Lawn and Landscape Automatic Irrigation Tips for 2011

Justin Quetone Moss

Spring is coming and it's never too early to start thinking about ways to save time and money in the yard. When spring arrives, many homeowners are too busy and forget to check on the lawn irrigation system to ensure everything is working properly and that irrigation water is being utilized efficiently. The National Irrigation Association (www.irrigation.org) offers these water-saving tips to maintain and update automatic irrigation systems.

1. **Adapt your watering schedule to the weather and the season.** Familiarize yourself with the settings on your irrigation controller. Adjust the watering schedule regularly to conform with current weather conditions.
2. **Schedule each individual zone in your irrigation system.** "Scheduling" accounts for the type of sprinkler, sun or shade exposure and the soil type for the specific area. The same watering schedule should almost never apply to all zones in the system.
3. **Inspect your system monthly.** Check for leaks, broken or clogged heads, and other problems, or engage an irrigation professional to regularly check your system. Clean micro-irrigation filters as needed.
4. **Adjust sprinkler heads.** Correct obstructions that prevent sprinklers from distributing water evenly. Keep water off pavement and structures.
5. **Get a professional system audit.** Hire a professional to conduct an irrigation audit and uniformity test to make sure areas are being watered evenly. This can be especially helpful if you have areas being under-watered or brown spots. The Irrigation Association maintains an online list of Certified Landscape Irrigation Auditors.

6. **Consider "smart" technology.** Climate- or soil moisture sensor-based controllers evaluate weather or soil moisture conditions and then calculate and automatically adjust the irrigation schedule to meet the specific needs of your landscape.
7. **Install a rain shutoff-switch - inexpensive and effective.** Required by law in many states, these money-saving sensors turn off your system in rainy weather and help to compensate for natural rainfall. The device can be retrofitted to almost any system.
8. **Consider low volume drip irrigation for plant beds.** Install micro-irrigation for gardens, trees and shrubs. Micro-irrigation includes drip (also known as trickle), micro-spray jets, micro-sprinklers, or bubbler irrigation to irrigate slowly and minimize evaporation, runoff and overspray.
9. **Water at the optimum time.** Water when the sun is low or down, winds are calm and temperatures are cool, between the evening and early morning, to reduce evaporation. You can lose as much as 50% of water to evaporation by watering mid-day.
10. **Water only when needed.** Saturate root zones and let the soil dry. Watering too much and too frequently results in shallow roots, weed growth, and disease.

Horticultural Fallout from Oklahoma's Recent Cold

Albert Sutherland

On Thursday, February 17, 2011 the Nowata Mesonet site reached a high of 79 degrees Fahrenheit. That's high, but not unheard of for an Oklahoma February air temperature. What was significant is that one-week prior to that on February 10, 2011 an all-time record low of -31 degrees was recorded at the Nowata Mesonet site. That makes for a 110-degree swing in air temperature within a week.

With the warmer weather, cold damage from the frigid February 10th temperatures is starting to show up. These early symptoms of plant injury are showing up on evergreens. We'll have to wait to see how deciduous plants fared.

As you are well aware, each plant species is going to respond differently to the extreme cold. Some plants were covered with snow, so they weren't exposed to the severe air temperatures. Older, well-established plants may not show much damage now, but will later in the summer as they need more water.

Plants in the Chickasha (-3°F) and Norman (-4°F) areas are starting to show various cold damage symptoms. Nandina leaves are turning bleached out, brown color. Newly transplanted leaves of live oak have taken on a grey-silver cast, while older trees are showing more browning of damaged leaves. Yaupon leaves on scattered, small branches are turning a transparent, yellowish color. At the base of yaupon branches with leaf discoloration you'll find split bark areas.

Artemisia, a semi-evergreen perennial, has lots of stem splits on stems that stood above the snow level.

Damages noted were on plants predominately considered hardy to zone 7 (average annual minimum temperature 5-0°F). The minimum temperatures they were exposed to were what plants adapted to zone 6 typically endure.

Cold hardiness zone ratings:

Artemisia 'Powis Castle' (*Artemisia x 'Powis Castle'*) – 6, 7, 8, 9

Crapemyrtle (*Lagerstroemia indica*) – 7, 8, 9 10

Live Oak (*Quercus virginiana*) – 8, 9, 10 (7b in protected locations)

Nadinas (*Nadina domestica*) – 7, 8, 9, 10

Yaupon Holly (*Ilex vomitoria*) – 7, 8, 9

It is going to take time to find out how plants survive based on their cold hardiness zone rating. Some plants will be fine, others sustain some level of damage and some die. At this time, plants rated for zone 7 are starting to show damage in central Oklahoma.

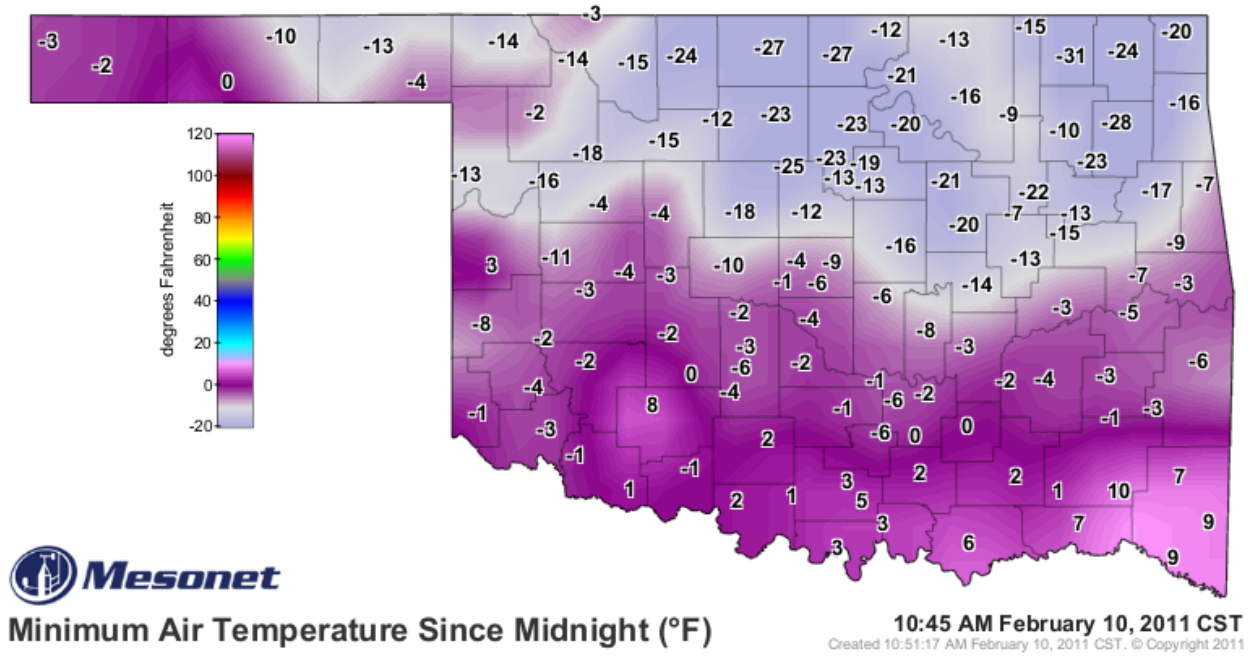
Plant damage or death varies with:

- Plant species and variety – landscape plant varieties are often selected for cold tolerance
- Plant age – younger plants tend to be less cold hardy
- Time since transplanting – newer plants are more susceptible to cold damage
- Soil moisture – plants in dryer soils are more at risk
- Snow cover – snow acts as an insulator to protect stems and foliage and keep soil temperatures close to 32°F, helping protect plant roots
- Plant health – plants stressed by pests or nutrient deficiency are more susceptible to cold injury
- Drought – drought stressed plants produce and store less sugars, making them more susceptible to damage
- Duration of cold temperatures – longer cold periods cause more damage
- Exposure to winter sunlight – plants that are in sunnier locations have more severe injury
- Air temperatures before a cold snap – warm temperatures prior to cold snaps reduce plant dormancy, making them more susceptible to injury

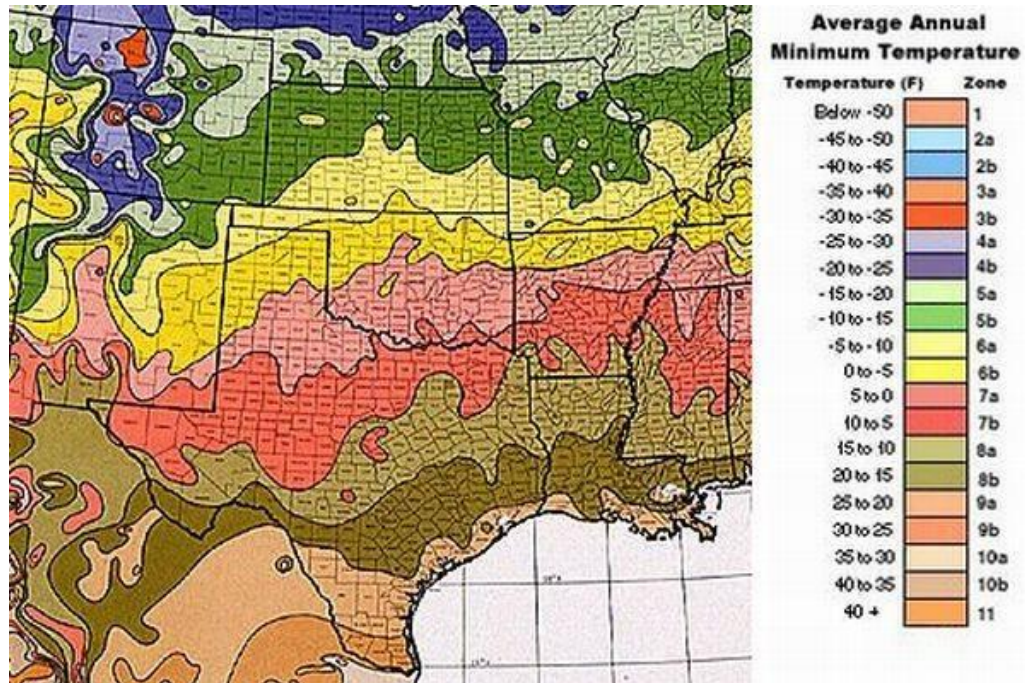
For now, discolored branches can be trimmed from injured plants. If large branches show dieback, more extensive pruning will be needed. The best thing to do is wait until you're sure that a branch or plant will not recover. One horticulturist around for the severe cold in 1983 remembers a crapemyrtle that did not leaf out until July. Other crapemyrtles had to be cut back to ground level. The older stems died out and new stems came up from the roots.

The following are cold temperature maps and landscape plant damage images. The pictures were taken the morning of February 18th in Chickasha (-3°F) and Norman (-4°F) eight days after the February 10th lows.

No. 1 – Mesonet map of Minimum Air Temperatures for February 10, 2011.



No. 2 – South Central Cold Hardiness Zone Map of Average Annual Minimum Air Temperatures



No. 3 – Yaupon Holly leaf damage



No. 4 – Artemisia split stem



No. 5 – Nandina plant damage



No. 6 – Nandina leaf damage



No. 7 – Live Oak leaf damage



Training Young Shade and Ornamental Trees

David Hillock

Proper pruning when a tree is young will ultimately result in a tree that is structurally stronger, longer-lived, and less costly to maintain.

Training a tree early in its life may prevent storm damage when the tree approaches maturity in 15 to 20 years. Training young trees should help reduce storm damage and expensive pruning operations when the tree is mature.

There is no need to prune a newly-planted tree unless branches have been damaged. It has been found that removing tips and buds of young trees slows root growth. If trees are left unpruned, expanding buds and new leaves help root expansion and tree establishment. Damaged branches can be removed at their point of origin, or they can be cut back to a lateral branch that will yield foliage and bolster establishment the first season.

Training begins the year after transplanting, continues through the next three to five years, and should be complete within eight to ten years. Following the training period, only maintenance pruning should be needed.

At planting, decide on the system of guidance or training you will follow based on the tree species' growth habits. For instance, most oaks and sycamore develop a central leader, whereas species such as elm and mulberry will always fork somewhere in the main trunk. For these spe-

cies, develop a modified central leader. The modified central leader is the most desirable system for fruit trees doubling as yard trees.

Walk around the tree before making any cuts and inspect the overall branching structure. Remove branches that are rubbing, shooting inward, or competing too closely to another branch. Narrow branch angles may also need to be removed as they can be weak joints susceptible to breakage. However, some species have narrow branch angles and still have strong joints such as zelkova.

Early in the tree's life, decide which closely spaced scaffold branches to keep. Scaffold branches are large branches that form the main structure of the tree. Try to visualize how the tree will look as it thickens in years to come. Know the natural form of the species. Remember — branches do not slowly rise above the ground! As a tree grows, branches retain their position on the trunk, though they increase in diameter and become more crowded. Spacing scaffold branches radially and vertically allows growth to be channeled where it will be more effective. Major shade tree branches should be 18 to 24 inches apart and spiral around the trunk. Branches of small trees should be 8 to 12 inches apart and spiral around the trunk. Five to nine major scaffold branches are normally selected for shade trees. No more than 1/4 of the canopy should be removed at any one time. Depending on the tree's growth rate and branching structure, this training may take several years.

During the training years, frequent inspections must be made to channel growth in desirable directions. The more vigorous species require closer attention. At the end of the season after leaf fall, inspect the tree and make any necessary corrective cuts.

The tip of the main trunk of a young shade tree should not be cut back. Heading back, as is practiced, is not beneficial to most trees and often results in undesirable forks in the main trunk. This is especially true of species that already fork, such as elm and maple. Side branches, however, can be shortened at planting if desired.

Street tree limbs should not be closer than eight to 10 feet to the ground. Fruit trees and ornamental species should not have branches closer than four or five feet above ground, or they should be planted where their lower branches will not interfere with routine activities such as recreational activities or mowing.

For more information about training shade and ornamental trees see OSU fact sheet [HLA-6415 Training Young Shade and Ornamental Trees](#).

Master Gardener Corner

David Hillock

2011 State Master Gardener Continuing Education Conference – June 2-3, 2011.

This year's State Master Gardener Conference is shaping up nicely. The conference theme is "*The Role of the Master Gardener in the Farmland*".

The Garfield County Master Gardeners will host the conference in Enid at the Autry Technology Center. Thursday, June 2 will be an evening social at the Cherokee Strip Regional Heritage Village (<http://www.csrhc.org/>). Regular conference activities will begin on Friday, June 3.

We are encouraging each Master Gardener group to set up a booth so they can share the exciting projects and activities that have been successful in their counties. We hope that you will mark your calendars and plan to attend!

Upcoming Horticulture Events

April 14, 2011

Gardening with Disabilities
Stillwater, OK

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