# Missouri Environment & Garden

## Dogwood: Nature's Little Show-off

by David Trinklein

Few spring scenes are as spectacular as the annual display provided by dogwood trees in the Ozark woodlands. Inconspicuous for most of the year, these diminutive denizens of our forests outdo their towering neighbors by providing a spectacular exhibition of color before most other species leaf out. This provides for an unobstructed view of nature at its finest. The idiom "every dog has its day" could easily be applied to dogwood whose day(s) usually occur in April in our state.



The name "dogwood";

was first recorded in England in the early 16th century. Some historians believe the name was derived from the English "dagwood"; which, in turn, was a shortened version of "daggerwood."; The latter term made reference to the tree's very hard, close-grained wood which, in medieval times, was used to make daggers, arrows and other weapons. Another theory suggests the name stems from the fact that the bark of the tree, which is rich in tannin, was a key component of a solution used for curing mange in dogs.

Flowering dogwood (Cornus florida) is the state tree of Missouri and has been designated as the state flower of both Virginia and North Carolina. Dogwood's true flowers are rather inconspicuous, clustered tightly together in a tiny yellow bundle in the middle of the four showy, petal-like bracts. The latter are usually white in color although pink and red cultivars do exist.

Dogwood is adapted to a wide variety of climates and soils, however, they naturally grow in moist, fertile soils high in organic matter. It is generally considered best to treat dogwood as an understory tree. This means it performs best when it receives some shade during the hottest part of the day. However, it also may be grown in full-sun exposures, given

(continued on pg. 2)

### In This Issue

Dogwood: Natures Little Showoff
Raise the Deck to Make Your Turf the Trees of Your Lawn
May Gardening Calendar



(continued from page 1)

proper care. Dogwood is tolerant of cold weather, but can be damaged and does not grow well where winter temperatures frequently fall below -15 degrees F. Although dogwood is fairly tolerant of dry soils in the summer, it cannot endure poorly drained, wet sites.

In the landscape, dogwood is a ubiquitous small tree that is attractive during all seasons of the year. Many cultivars have been developed which tend to provide better flowering and adaptability to home landscapes, when compared with native types. However, many gardeners still find 'volunteer' seedlings to be quite satisfactory for the landscape.

White-flowered cultivars available from nurseries and garden centers include 'Cloud 9' which blooms heavily and starts blooming early, and 'Cherokee Princess' which has fairly large flowers. Seedlings of native trees are also available at retail outlets but are sold without cultivar name. They usually are less expensive and tend to be more variable in growth and flowering pattern than the named cultivars.

Pink dogwoods occur naturally and have been given the scientific name Cornus florida var. rubra. Named cultivars of pink dogwoods, usually with more intense color, have been selected for landscape use. One of the most popular is 'Cherokee Chief' which has deep, ruby-red bracts. 'Red Beauty®' is relatively new cultivar that produces dark, rosy-red bracts on a semi-dwarf tree. Several other cultivars lighter pink in color are commercially available.

Other dogwood cultivars have been selected for their variegated foliage. Examples include 'Cherokee Daybreak', 'Cherokee Sunset', 'Hohman's Gold' and 'Golden Nugget'. There even is a weeping form of Chinese dogwood, but it is slow-growing and rather difficult to find in commerce.

When planting dogwoods, it is suggested to plant them no deeper than they grew in the nursery, and into a soil that has been loosened 8 to 12 inches deep. This area should be equal to two to three times the diameter of the tree's soil ball or production container. Organic matter (e.g. compost or peat moss) can help create a favorable root growth environment when mixed with the soil around a new tree. However, take care not to add too much for fear of creating a micro-environment that the tree's roots will not want to leave.

As with the establishment of any newly planted tree, adequate water during the first two growing seasons is very important for survival. Water trees thoroughly once or twice a week during dry periods. However, avoid watering too frequently, since dogwood does not fare well in wet soils.

A common mistake made by many novice gardeners is to apply abundant amounts of fertilizer to a landscape tree in an attempt to accelerate growth. A newly-planted dogwood requires only about ¼ cup of a complete fertilizer fairly high in nitrogen (e.g., 12-4-8 or 16-4-8) in March and again in July. Evenly broadcast the fertilizer on the soil surface covering a radius two feet from the trunk

Dogwood anthracnose (Discula destructiva) is a relatively new, serious problem with flowering dogwoods, especially in the eastern and southeastern states. Typical symptoms include medium-large, purple-bordered leaf spots and scorched tan blotches that may enlarge to kill the entire leaf. Dogwood anthracnose currently is not a significant problem in the Midwest and should not discourage gardeners from planting dogwoods. It appears that well-tended trees in the landscape which are not under stress are unlikely to develop dogwood anthracnose. However, gardeners should be discouraged from bringing in trees from eastern forests into Missouri.

Other species of dogwoods exit which do not seem to be as susceptible to anthracnose. The afore-mentioned Chinese (or Kousa) dogwood is being used more frequently as a replacement in states where the disease is a problem. Kousa dogwood flowers about a month later than flowering dogwood and is quite showy. However, it must be watered during periods of drought in order to survive in the landscape. The cultivar 'Milky Way' seems to be one of the more desirable Kousa dogwoods for our climate.

Dogwood borer is the most common insect pest on established trees. The larvae of the borer, which gains entry through the bark, lives in the cambial area and can kill branches or entire trees. Avoiding damage to the bark with equipment such as lawn mowers or weed eaters is the best prevention borer.

April is a beautiful, colorful time of the year in Missouri. Take time this month to enjoy the spectacle that "nature's little show-off"; and other flowering trees and shrubs put on.

# Raise the Deck to Make Your Turf the Trees of Your Lawn

by Lee Miller

Spring mowing is often an exciting enterprise at first, but tends to wear thin as the novelty recedes and the smell of freshly cut grass only reminds of the chore's monotony. Many just want to get it over with, without much thought for what the practice means for the overall health of the plant, and overall appearance of their yard. Mowing is essential for turfgrasses as it forces tillering and lateral spread, allows for a uniform surface, and removes weeds that have their growing point above the cutting line.

According to our observations, many tall fescue lawns are being mowed considerably too short this spring, and not frequently enough. Over 10 separate studies since 1958 have found a direct correlation between mowing heights below 3.5 inches for tall fescue or Kentucky bluegrass lawns and a substantial increase of weeds such as dandelion, white clover, and crabgrass. Mowing too low therefore results directly in more annual weed invasion and a reduction in the turf stand over the summer. How? As the popular song by the band Rush states it's all about the sunlight.

# The Maples want more sunlight, but the Oaks ignore their pleas.

- From the Rush song "The Trees"

In quite a few ways, mowing turfgrasses to their adapted height (see table) allows them a competitive advantage over weed species. Higher cut lawns will exclude sunlight, heat and eventually space to annual weeds. The current bank of weed seeds in your lawn need sunlight to heat the soil surface for germination and aid young seedlings in growth. Growing tall, tall fescue robs them of this sunlight and doesn't allow weeds to establish and compete. More importantly, tall fescue lawns are simply healthier at this height.

Mow frequently and high enough to avoid clumping of clippings. A rule of thumb to avoid scalping and clipping accumulation is to never remove more than 1/3 of the leaf blade at one time.

Try to connect the height of the turfgrass with the depth of the rootzone. At this time of spring, tall fescue is getting its last few weeks of luxury growth in perfect temperatures that it can use to build a dense root system. The more leaf blade the plant has now, the more sunlight it can harvest and the more food it can make for itself.



Mow frequently and high enough to avoid clumping of clippings. A rule of thumb to avoid scalping and clipping accumulation is to never remove more than 1/3 of the leaf blade at one time.

When the heat of summer hits in June-August, that luxury will be long gone, and the plant will be subjected to a number of stresses including heat, drought, and disease. The root system built now is analogous to a car you're about to take on a cross-country trip. Would you rather a newer model that has just been tuned or an old car that hasn't had an oil change in 5 years?

Mowing frequency is also an issue. To avoid scalping at taller mowing heights or excessive clumping of clippings, mowing may need to be done every 5-7 days when tall fescue or Kentucky bluegrass is really growing during the spring. Additionally, pay attention when weed eating around roads, sidewalks, and lawn margins. The tendency is to cut these areas shorter and scalp the turf, which allows weed emergence and a "ring around the collar" appearance of weeds in a lawn.

Runners carb load prior to a race, and your tall fescue lawn is on the cusp of running the marathon that is a Missouri summer. Mow your lawn often and raise your mower deck to the top notch. In doing so, your desired turfgrass will become trees which hog the sunlight, making ambitious weeds scream oppression.

Lawn Species	Recommended Mowing Height
Tall Fescue	3.5 - 4 inches +
Tall Fescue/Kentucky Bluegrass Mix	3.5 - 4 inches +
Zoysiagrass	1 - 2 inces

### MAY GARDENING CALENDAR

Category W			eek		Activity	
	1	2	3	4		
Ornamentals	х	Х	Х	Х	Apples, crabapples and hawthorns susceptible to rust disease should have protective fungicidal sprays applied beginning when these trees bloom.	
	х	X	Х	Х	Pinch azaleas and rhododendron blossoms as they fade. Double flowered azaleas need no pinching.	
	х	Х	Х	Χ	If spring rains have been sparse, begin irrigating, especially plants growing in full sun.	
	х	Х	Х	x	Fertilize azaleas after bloom. Use a formulation which has an acid reaction.	
	х	Х			Canker worms (inch worms) rarely cause permanent damage to ornamentals. Use Bt if control is deemed necessary.	
	х	Х			Don't remove spring bulb foliage prematurely or next year's flower production will decline.	
	х				Continue monitoring pines, especially Scotch and mugo, for sawfly activity on new shoots.	
	х				Begin planting gladiolus bulbs as the ground warms. Continue at 2-week intervals.	
	х				Plant hardy water lilies in tubs or garden pools.	
		Х	Х	X	Scale crawlers are active now. Infested pines and euonymus should be treated at this time.	
		Х	Х		Plant summer bulbs such as caladiums, dahlias, cannas and elephant ears.	
		Х			Begin planting warm-season annuals.	
			Х	X	Begin fertilizing annuals. Continue at regular intervals.	
			Х	Χ	Trees with a history of borer problems should receive their first spray now. Repeat twice at 3-week intervals.	
			Х	x	Bulbs can be moved or divided as the foliage dies.	
				x	Pinch back mums to promote bushy growth.	
Lawns	х	Х	Х	Х	Keep bluegrass cut at 1.5 to 2.5 inch height. Mow tall fescue at 2 to 3.5 inch height.	
		Х	Х	Х	Mow zoysia lawns at 1.5 inch height. Remove no more than one-half inch at each mowing.	
		Х	Х	Х	Apply post-emergence broadleaf weed controls now if needed.	
	x	Х	Zoysia lawns may be fertilized now. Apply no more than 1 pound of actual nitrogen per 1000 square feet.			
				Х	Watch for sod webworms emerging now.	
Vegetables	х	Х	Х	Х	Place cutworm collars around young transplants. Collars are easily made from cardboard strips.	
	х	х	Х	X	Growing lettuce under screening materials will slow bolting and extend harvests into hot weather.	
	х	X	Х	Х	Slugs will hide during the daytime beneath a board placed over damp ground. Check each morning and destroy any slugs that have gathered on the underside of the board.	
	х	Х			Plant dill to use when making pickles.	
	х				Keep asparagus harvested for continued spear production. Control asparagus beetles as needed.	
	х				Begin planting sweet corn as soon as white oak leaves are as big as squirrel ears.	
	х				Isolate sweet, super sweet and popcorn varieties of corn to prevent crossing.	
	х				Thin plantings of carrots and beets to avoid overcrowding.	
	х				Control caterpillars on broccoli and cabbage plants by handpicking or use biological sprays such as B.t.	

continued on pg. 5

Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)

# Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)

### MAY GARDENING CALENDAR

Category		W	eek		Activity
	1	2	3	4	
	X				Set out tomato plants as soils warm. Place support stakes alongside at planting time.
		Х	Х		Place a stake by seeds of squash and cucumbers when planting in hills to locate the root zone watering site after the vines have run.
		Х	Х		Remove rhubarb seed stalks as they appear.
		х			Watch for striped and spotted cucumber beetles now. Both may spread wilt and mosaic diseases to squash and cucumber plants.
			Х	х	Set out peppers and eggplants after soils have warmed. Plant sweet potatoes now.
				Х	Make new sowings of warm-season vegetables after harvesting early crops.
Fruits	х	Х	Х	X	Mulch blueberries with pine needles or sawdust.
	x				Don't spray any fruits while in bloom. Refer to local Extension publications for fruit spray schedule.
				Х	Prune unwanted shoots as they appear on fruit trees.
Miscellaneous	х	Х	Х	X	Birds eat many insect pests. Attract them to your garden by providing good nesting habitats.
		x	х	Х	Herbs planted in average soils need no extra fertilizer. Too much may reduce flavor and pungency at harvest.
			Х	Х	Take houseplants outdoors when nights will remain above 50 degrees. Most prefer only direct morning sun.
			Х	Х	Watch for fireflies on warm nights. Both adults and larvae are important predators. Collecting may reduce this benefit.
			X	Х	Sink houseplants up to their rims in soil or mulch to conserve moisture. Fertilize regularly.