

GARDENING/HORTICULTURE NEWSLETTER April 2005

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MASTER GARDENERS ANNUAL PLANT SALE

Baxter County Master Gardeners (BCMgers) will hold their annual plant sale on Saturday, May 7 from 9:00 a.m. - noon at Cooper Park

(on Spring St., east of Cardinal) in Mtn. Home. BCMgers will be

annuals, perennials, bulbs, herbs, shrubs, trees, ground covers and vegetables. Not only will there be nice plants to purchase, but the BCMgers also provide information on how to grow the plants as well.

THINGS TO DO

- Cool season vegetables can still be planted early this month.
- Plant warm season vegetables after mid-month when frost danger is past.
- Spray hybrid tea roses weekly to prevent black spot.
- Fertilize bermuda and zoysia lawns after they fully green up and start growing.
- Prune and fertilize spring blooming trees and shrubs immediately after bloom.
- Replace pansies as they play out with summer annuals.
- Watch for slugs on strawberries and cover with bird netting to protect from birds.
- As flowering bulbs fade, allow 6-8 weeks of green growing time for bulbs to replenish their nutrients. Crocus and daffodils do not have to have their flower heads removed, but it is beneficial with hyacinths and tulips. Fertilize with complete fertilizer.
- Begin setting summer bulbs in mid-month.
- Spray apples for apple scab and cedar apple rust in pink stage-just before blossoms open.
- Spray apples and pears just before blossoms open for fire blight.
- Begin cover sprays on fruit when $\frac{3}{4}$ of petals are off and every 7-14 days till harvest to control diseases and insects.
- Watch for spider mites and bagworms.
- Continue to divide summer and fall blooming perennials.

- Keep mulch on hand for a possible late frost.

SARVIS, SERVICE BERRY, JUNE BERRY, SHADBUSH

Gardeners know when spring arrives - we can tell by the blooming of daffodils, forsythia, and Bradford pear. All these plants come to us from Europe and Asia. Can we trust these foreigners to decide when winter is over and another garden season is beginning?

Over the years I have noticed that plants don't bloom at the same time every year and there is anywhere from no difference to two weeks between north and south Arkansas. One of our natives, Sarvis, is one of the most erratic plants with regard to bloom date, but one of the most reliable predictors of the arrival of spring.

Sarvis is a 25-foot tall deciduous tree that produces an abundance of 5-petaled white blooms in terminal clusters. It occurs as a scattered tree in the woods as an understory plant, often in higher, better drained sites than where dogwood or redbud would grow.

Spring blooming woody plants develop flower buds in the fall, but these flowers are dormant and must undergo chilling to break dormancy. Orchardists, primarily working with apples and peaches, have developed models to determine when particular fruit cultivars will bloom based on the concept of accumulation of "chill hours." The optimum temperature for accumulating chill hours to break flower bud dormancy lies between 35° and 45°. When the temperature falls below freezing or above 55°, no chill hours are accumulated. For temperatures that are less than optimum but below 55° and above freezing, hours accumulate at half the rate of the optimum range. Once the chill hours have been accumulated, blooming will commence provided the weather is warm enough for flower buds to grow. Forsythia requires about 800 hours of chilling to break flower bud dormancy, while Bradford pear requires about 900 hours. Sarvis requires about 1,000 chill hours, and if it has received that amount of chilling, blooms appear very quickly. But if it has not had enough chilling it will still flower, but the flowers are slow to appear. In the typical winters of two decades ago, Sarvis was the first to bloom, often appearing in late February or early March. It seemed to miss late spring freezes every year. In the past few winters it has been blooming in late March and still is missing the late spring freezes. I noticed some in bloom Easter weekend. Therefore, if one goes by the Sarvis tree, spring is here.

Sarvis is an excellent landscape tree suitable for locations where a small specimen tree is needed. It will bloom in some shade, so is a good choice for those with tree-

covered lots. Once established, plants have good drought tolerance. Plants are available from nurseries that carry a diverse line of trees, but are not common in the mass market garden center stores. They are not susceptible to any serious insect or disease pests, but poor drainage can cause plant loss

REDBUD (*Cercis Canadensis*)

As spring moves into full swing, the purple pea-flowers of redbuds dot the roadsides and landscapes. As one of our most familiar spring blooming trees, it precedes dogwoods by a week or so and is usually in full bloom by the middle of April here in the Ozarks.

Redbuds (*Cercis Canadensis*) are native to most of the eastern woodlands from south Texas to the Great Lakes and east to the Atlantic coast. Because they don't like boggy ground, they're missing from the gulf coastal plains from east Texas to the Virginia tidewater region.

As a tree, the redbud never gets large enough to make saw logs or old enough to form deep emotional attachments. It's usually somewhat vase shaped, like an American elm but seldom over 30 feet tall and wide. It's notoriously short-lived, seldom surviving more than 35 to 40 years.

Redbud leaves are easy to identify, looking as close to a Valentine's day heart as any of our native trees. The usual color is a flat green, but a purple leafed variant called 'Forest Pansy' is common from nurseries. A white variegated form called 'Silver Cloud' is also available.

Some redbuds seen in the landscape have a smaller, shiny leaf. These are a subspecies of the more common form found in drier parts of Texas and Oklahoma called *C. c. subsp. texensis*. The most common of these is the deep purple-flowered selection called 'Oklahoma,' probably the most common of the grafted redbuds in the nursery trade. Fall color on redbuds is yellow, but seldom rating much more than a second glance.

Redbuds are in the pea family and show most characteristics of that family. The flowers have the typical form of the pea and arise directly from branches. The blossoms are followed by clusters of 3-inch long legume pods that hang on the tree all winter, producing the least desirable feature of the tree. Unlike most legumes, redbuds do not fix their own nitrogen.

Most nurserymen still grow seedling redbuds that produce purple flowers. Others refer to

redbud blossom color as "rosy pink with purple tinge," "magenta," "pinkish-purple" or "purplish-pink." Take your choice. Whatever you call it, the redbud has the potential for some ghastly color combinations in the garden. Also, flower color in redbuds has a natural range of variation.

Redbuds are easy to grow in the landscape, being adapted to about any soil type provided it is not swampy. Container grown plants often establish better than balled and burlapped trees. They flower well in moderate shade but at their best in full sun. Watch the trees while young for narrow crotch angles, because they are prone to produce a lot of branches that become susceptible to ice-breakage as the trees age.

HOME LAWN WEED CONTROL

Good cultural practices account for 60 to 70 percent of turfgrass weed control. Maintaining a dense, vigorous lawn is essential to prevent lawn weeds. Herbicides should be considered a supplement, not a stand-alone weed control practice. If herbicide use is not accompanied by proper cultural practices, the weed problem will return because the deficiency, which led to the weed invasion, has not been corrected. When herbicides alone are used, the symptoms, not the cause, of a weedy lawn are being treated.

Weeds are often indicators of specific problems. Soil compaction may lead to encroachment of species like knotweed, annual bluegrass, path rush and goosegrass. Poor drainage favors invasion of sedges, rushes and Virginia buttonweed. Saturated soil places the turf grass under stress because roots need oxygen, which is not available in continually wet soils. The presence of legumes such as white clover and lespedeza is often an indication of low nitrogen levels. Cultural and environmental problems should be corrected before embarking on a program of herbicide use.

Water deeply and infrequently. Light, frequent irrigation encourages shallow rooting. Early morning is a good time to water because evaporation loss is minimal, the wind is usually calm and early watering allows the grass foliage to dry during the day.

Patch bare areas as soon as they appear to prevent invasion by weeds. Stoloniferous grasses such as bermuda, will readily fill in bare spots if a few plugs or sprigs of healthy grass are planted in these areas. Re-seeding is an option with common bermudagrass and tall fescue. Slow growing grasses such as zoysia may be sprigged or plugged but it is much faster to sod the bare areas.

Soil test and lime, if necessary, to bring pH within soil test recommendations. Fertilize according to soil test recommendations to encourage vigorous turf. Do not

add additional phosphorous if soil test levels exceed 150 lb/acre. Additional potash is not needed if potash levels are at 450 lb/acre or more.

Mechanical control methods such as digging and pulling can be useful when dealing with small number of weeds. Hand pull or dig new or exotic weeds to prevent their spread. Mowing is another method of mechanical weed control. Follow recommended mowing guidelines for the various types of grasses. Keep the mower blades sharp and avoid excessively low mowing. Do not remove more than 1/3 of the grass height at any one mowing. Scalping puts the grass under stress. Another point to consider is, how weed-free does your lawn have to be? Weeds bother some people more than others. Look at the lawn from the street, if it is acceptable; do not waste your time going after those last few weeds. Excess herbicide use designed to eliminate a few stubborn weeds does more harm than good. A 100 percent weed-free lawn is not a practical goal.

For more information on weed control visit the Baxter County Cooperative Extension office.

HEARTWORMS CAN SHORTEN A PET'S LIFE

Dog and cat owners must be careful to prevent their pets from becoming infected with heartworms, a potentially fatal parasite, says a veterinarian with the University of Arkansas Cooperative Extension Service. Dr. Jeremy Powell blames heartworm disease on long white worms, which bear the daunting scientific name of *Dirofilaria immitis* (dir-roh-fill-air-iah im-mit-iss).

"Adult worms live in the right side of the heart in the adjacent large blood vessels. Heartworms typically reach a length of 6 to 14 inches when they're mature adults. A dog may have several hundred of them in its system at one time, although the total number is usually less."

Heartworms cannot complete the entire life cycle inside a dog's body Powell claims. A mosquito is required for some stages of the heartworm life cycle. Mature female heartworms release their offspring (microfilariae), into the blood stream of the infected dog. When an infected dog is bitten by a mosquito, these offspring will be ingested by the mosquito during its blood meal.

As these offspring develop inside the mosquito into infective larvae, they can be transmitted to a new susceptible host. When a mosquito carrying heartworm larvae bites a dog and transmits the infection, the larvae grow, develop and move around in the body over a period of several months and become mature male and female worms. Then they reside in the heart and adjacent blood vessels. Powell notes, "It's important to point out that this disease is not spread directly from dog to dog."

Many heartworm-infected dogs are free of symptoms for a long period of time after they have been infected. Clinical signs of heartworm disease can depend on the number of worms and the response of the infected dog. Dogs can be infected with one to 300 heartworms at a time. The higher the number of worms, the more severe the case will be.

The most common symptoms associated with clinical heartworm disease include a soft, dry, chronic cough; shortness of breath; weakness; poor appetite and loss of stamina. Fluid accumulation can build up in the lungs and abdomen. There are also signs of weight loss, poor condition and anemia.

"Unfortunately, by the time clinical signs are noted, the disease is typically well advanced," says Powell. "In advanced cases, congestive heart failure will occur." Severely infected dogs can die from circulatory failure.

If you suspect your pet may be infected with heartworms, Powell suggests seeing a veterinarian. Heartworms can be detected by blood test. They are most common in dogs than cats. If your dog tests positive for the disease, your veterinarian can help you choose the best treatment options.

The good news for pet owners is that heartworms can be prevented with a monthly pill. "Monthly preventatives are extremely safe and easy to use," says Powell. "Both ivermectin and milbemycin oxime are effective preventatives for heartworms, as well as good dewormers for roundworms and hookworms. Milbemycin oxime is also effective against whipworms.

For more information on any of the above topics, please feel free to contact me at the University of Arkansas Division of Agriculture - Cooperative Extension office at 425-2335.

Sincerely,

Mark D. Keaton,
County Extension Agent-
Staff Chair

MDK/sa
Enc.