Lawn and Garden Update

TEXAS AGRICULTURAL EXTENSION SERVICE
THE TEXAS A&M UNIVERSITY SYSTEM

A PUBLICATION OF THE DEPARTMENTS OF SOIL AND CROP SCIENCES & HORTICULTURAL SCIENCES

APRIL 2000 COLLEGE STATION, TEXAS

April Plant of the Month

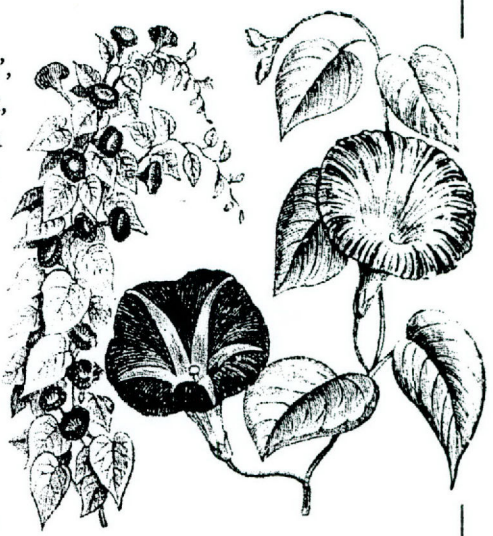
MOONFLOWERS AND MORNING GLORIES

Ipomea

By Cynthia W. Mueller, Galveston County Master Gardener

Moonflowers and Morning Glories are vines which have been favorites in Texas gardens for many years. Although they are closely related, moonflowers (*Ipomea alba)* come only in white, bloom at night, and are scented to draw night-flying moths for pollination purposes. They are easily grown from large seeds, which appeal to children. Heart-shaped dark green leaves contrast with the six-inch waxy white blooms which are produced through the summer. The vines are usually 6-foot mannerly climbers, but can reach to 30 feet in areas with a long growing season. They are especially nice for evening gardens, scented, or white garden plantings. Children also enjoy watching for moonflowers to burst open in the evening, usually all at the same time, with a small audible pop. They will succeed in ordinary soil and full sun. Protect them from strong breezes which might cause tattered leaves.

Morning glories are day bloomers without a noticeable scent, and can be found in many colors ranging from white to red, blue shades or streaked color patterns. Several varieties are so dark as to appear almost black.. The standard old-fashioned favorites, a mix of several species of *Ipomea* such as *purpurea, tricolor* and *Nil,* include 'Pearly Gates', white with blue shades, 'Crimson Rambler', a deep bright pink, 'Scarlet O'Hara', a cherry red, 'Grandpa Ott', which has very dark, smaller blooms on a less rampant vine suitable for porch posts, 'Blue Star' and 'Flying Saucers', with streaked shades of blue. These varieties are vigorous and easily grown. They also will thrive in ordinary garden soil with full sun. Do not over-fertilize morning glories or there will be too much foliage and too few blooms.



Some morning glories take a little more care to get going, including 'Mount Fuji', with variegated splashes of cream on green, heart shaped leaves and blooms of streaked and mottled colors on white or other backgrounds. Another Japanese strain of great color appeal is the Silk Series, which has flowers up to six inches in diameter in soft pastels with white throats and picotee edging.

Lawn Care

Adapted from articles by Joe Provey which appeared in Lawn Boy magazine.

SIMPLIFYING TURF FERTILIZATION

Grasses require at least 16 different essential elements in their diets. Most of these are available from the surrounding environment, but the growth demands we put upon the typical suburban lawn are difficult ones. Having healthy grass usually entails helping Mother Nature along. Even if you are dedicated to having a low-maintenance lawn, you will need to fertilize with nitrogen to sustain thick, vigorous turf. In addition to bringing on deep green color, nitrogen is responsible for the sturdy growth and shoot density needed to fight off weeds and stand up to diseases, bugs, and traffic.

All of these positive effects can easily turn into negatives if excess fertilizer is used or if it is applied at the wrong time. The commonly followed practice of fertilizing in the early spring is actually not the way to go. It not only encourages excess blade growth, which means more mowing; it gives your weeds a boost and increases thatch! Excessive spring growth also produces thin-walled grass blade cells that are more prone to injury and disease. Mid-spring is the preferred time for feeding southern grasses.

In addition to nitrogen, your lawn may need phosphorus and potassium. Depending on where you live, your soil may naturally contain adequate levels of these elements. Aiding in root growth and improving germination rates, phosphorus (or phosphate) is needed in small amounts, and tends to remain in the soil. Potassium (or potash) is more prone to leaching, and plays an important role in enhancing your grass's resistance to cold, disease, drought, and wear.

A fertilizer containing all three of these nutritional elements is called "complete." The percentage of the bag that is made up respectively of nitrogen, phosphorus, and potassium can be found by looking at the fertilizer grade. These three prominent numbers also tell you the ratio of nitrogen to phosphorus to potassium. For example, in a 50-pound bag of 20-10-10 grade, the ratio is 2:1:1 and you will have 20 percent of the 50 pounds, or 10 pounds of the bag as actual nitrogen; 10 percent or 5 pounds as phosphorus, and 10 percent or 5 pounds as potassium. The remaining 30 pounds in the bag may contain additional elements such as iron and sulfur, as well as organic material known as "filler."

In considering which bag of fertilizer is most appropriate for your yard, it is important that you read the back label for the guaranteed analysis of the contents. If your soil test indicates that you don't need to add phosphorus or potassium, choose a bag where the grade has a low numeral or zero for that element. Aside from checking the grade, you should also determine whether the nitrogen is "water-soluble" or "water-insoluble." Grass plants can immediately use water-soluble nitrogen, once watered into the soil. Man-made ammonium nitrate, ammonium sulfate, and urea are examples of such quick-release forms of nitrogen. These provide a rapid green-up but have drawbacks. To spread the release of nitrogen over time, fertilizer companies manipulate the size of particles, and sometimes coat them as well. Because these forms take longer to dissolve, they release nitrogen at varying rates. While still water-soluble, they are called "slow-release." Soil microbes must first break down water-insoluble nitrogen into forms grass plants can use. These truly slow-release sources include synthetic organics, like ureaforms, or those derived from natural organic materials, such as composted manure. When buying fertilizer, opt for the water-insoluble types or other slow-release forms. Using slow-release fertilizers will allow you to minimize the amount of time spent behind your spreader. They last much longer and don't have to be applied as frequently. ***Caution:*** many fertilizers have a combination of both fast- and slow-release types of nitrogen; check carefully to find products that derive a majority of their nitrogen from slow-release sources.

For low-maintenance lawns, you should be applying 1 to 4 pounds of actual nitrogen per 1,000 sqare feet per year. This may require adjustment given your specific growing environment, soil test results, the lawn's condition, and type of fertilizer (slow- or fast-release). The fertilizer bag directions take into account what type of

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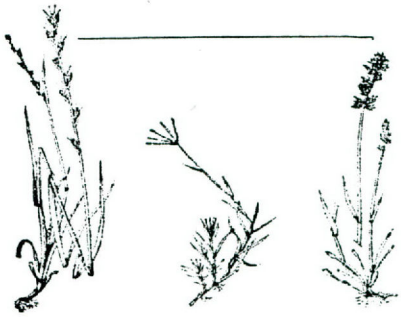
Lawn Care (Continued from Page 2)



nitrogen is being used and the rate at which it should be applied. Follow the manufacturer's instructions, and check the square footage of your lawn to ensure you are applying the appropriate amount. Remember, more is not better with fertilizers, as applying too much may "burn" your lawn as well as promote thatch formation and diseases. Leaving mulched clippings on the lawn over the course of a year will add about 1 pound of nitrogen per1,000 square feet, so figure accordingly.

TRIM TIME WHILE CUTTING YOUR GRASS

The amount of time and money you spend maintaining your lawn depends a lot on what your idea of a lawn should be – not necessarily what your lawn actually needs. Early lawns of the Middle Ages did not require much maintenance. That's because they were inspired by glades or grassy openings in the forest (not pictures in magazines or golf courses). These lawns were meadow-like mixtures of grasses and flowers that were planted amongst fruit trees, vines, flowers, and herbs, and enclosed by fences or courtyards. There was no mowing. Grass was kept from growing too tall by trampling it into a soft, woven, mat-like surface. If you too can adjust your expectations to taller grass, a mix of other plants in your turf, such as clover, and mid-summer periods when your grass temporarily turns brown, you can achieve a low-maintenance lawn – and one that's closer to the original spirit of the lawn.

The right height. There are several reasons not to cut your grass too short. First, grass grows from the crown, not the blade tips. This trait makes grasses ideal for lawns because they keep on growing despite the regular mowing off of their upper stem, leaf sheath, and blades. This is also why it's important not to damage grass crowns by accidental scalping with the mower. No crown, no grass! Second, keeping grass on the longer side also allows it greater surface area to carry out photosynthesis. This in turn results in healthier plants. Third, taller grass grows slower than shorter grass. You can use this simple fact to eliminate up to 20 percent of the mowing you do annually. That's a savings of about 8 hours for the average lawn owner, not to mention a savings of gasoline and wear and tear on equipment. Finally, by keeping your grass at the high end of its recommended mowing height, you can prevent 90 percent of all weeds from germinating – and thereby eliminate the need for herbicides.

When to mow. Most cool-season grasses should be cut when they reach heights of 3 to 3-1/2 inches – typically once a week. Warm-season grasses should be mowed when 2 to 2-1/2 inches tall. Cut no more than 1/3 of the grass height at each mowing to avoid damage to plants. If the lawn grows too high for you to cut off 1/3 the height and have an acceptable length, cut off 1/3 now, and mow 1/3 off again in two or three days. Cutting more than 1/3 the height will cause grass clippings to lay on top of the lawn and decompose more slowly, and will give the grass a more open, bristly appearance. In addition, short cutting will stunt or slow root growth and weaken the grass plants.

What to do with your lawn clippings. Today's advice, contrary to 20 or 30 years ago, is to leave clippings on the lawn. The old belief that clippings contribute to thatch build-up is false. Thatch is a build-up of roots and stems, not grass blades. Use a mulching mower, and leave clippings where they fall. It not only saves the labor of collecting and composting them, it also reduces the need for adding fertilizer to your lawn, and helps to conserve soil moisture. There are exceptions, however, to this advice. If you have neglected your mowing or must mow in wet conditions, the long clippings are likely to form heavy, soggy clumps that cover the grass. In such cases, the clippings should be removed so they do not smother the grass.

The idea of leaving clippings on the lawn is not new. In 1859, Henry Winthrop Sargent, a garden book writer and editor, wrote that "except during May and June when the growth of grass is more rampant, and has to be gathered, we have removed our box for catching the grass as it falls from the rollers, and permit it to fly in a little shower all over the lawn as the cutting progresses. In this way, the lawn-top dresses itself, by returning all that it produces." Today's new mulching mowers, also called recycling mowers, make it even easier to leave clippings where they fall. The deck and blade designs enable these mowers to cut each blade several times, producing a finely chopped clipping.

For further information on lawn care, contact Steve McCarthy Section Editor, ***Lawn Boy*** *magazine, at mccarthy@skypoint.com, or at (612) 861-5230, extension 14.*

'Top Eight' Crape Myrtle Cultivars

By Allen D. Owings, Associate Specialist (Horticulture) and
Gordon E. Holcomb, Professor (Plant Pathology), Louisiana State University, Baton Rouge.

Crape myrtles (*Lagerstroemia indica, Lagerstroemia indica x faurei*) continue to be one of the most widely used landscape trees in the southeastern United States. Over the last several years, the Louisiana State University Agricultural Center has evaluated numerous cultivars for susceptibility/tolerance to powdery mildew and *Cercospora* leaf spot, two of the most prevalent diseases of crape myrtles in Louisiana and Texas. Flower performance and growth habit also have been observed. The following is a list of the "top eight" crape myrtles for Texas and Louisiana, as recommended by the Louisiana Cooperative Extension Service:

Natchez

Natchez is recognized as the top performing crape myrtle in the southeastern United States. It was introduced by the U. S. National Arboretum in 1987. White flowers and exfoliating bark are characteristic of this cultivar, which reaches heights of 30 feet at maturity. Bloom period is about 110 days in Louisiana, starting in early June. Very large blooms.

Muskogee

Muskogee was introduced in 1978, and has medium-size, light lavender flowers. Blooming period is excellent, beginning in mid-June, and lasting 110 to 120 days. Some years, flowers are as early as late May in Baton Rouge. Good tolerance to powdery mildew and leaf spot. Exfoliating bark is grey-tan to medium brown. Bark characteristics are desirable, but not as good as Natchez and Tuscarora. Reaches a mature height of over 20 feet.

Tuscarora

This cultivar was introduced in 1981, and is characterized by coral pink flowers. It is less susceptible to powdery mildew and leaf spot than most cultivars. Flowering begins in late June or early July, and will continue for 70 to 80 days. The trunk has mottled, light-brown bark that exfoliates increasingly as the tree ages. This cultivar can easily reach heights of 25 feet in the landscape, and has performed well in landscape plantings across Louisiana.

Tonto

Tonto is a semi-dwarf to medium crape myrtle, reaching heights of 12 to 14 feet. It was released by the U. S. National Arboretum in 1990, and has been recognized as a Georgia Gold Medal winner (1996) and Mississippi Medallion plant (1999). Excellent resistance to leaf spot and powdery mildew. Good foliage retention into the fall months. Flowers are deep red. Satisfactory exfoliating bark.

Basham's Party Pink

Basham's Party Pink is a tall-growing hybrid cultivar introduced to the nursery trade by Texas nurseryman Lynn Lowery in 1965. Blooms are lavender-pink, and compete with Natchez for size. Very comparable and similar in performance to Muskogee. Good resistance to leaf spot and powdery mildew in LSU Agricultural Center evaluations. Cold hardiness is not as good as Muskogee.

Acoma

Acoma was introduced by the U. S. National Arboretum, and reaches a height of 10 to 14 feet, similar in size to Tonto. Weeping/cascading type growth habit. White flowers appear in mid to late June, and last around 90 days. Powdery mildew resistance is good. Some years, leaf spot is observed on this cultivar; defoliation is not a problem.

Sioux

Sioux has been recognized as a Georgia Gold Medal winner (1996) and Mississippi Medallion plant (1999). Good powdery mildew resistance in LSU Agricultural Center trials. Some susceptibility to leaf spot. Flowers are vivid pink, and last from June through September. Mature height ranges from 10 to 15 feet, but can be widely variable.

Tuskegee

Tuskegee was introduced in 1986. Flowers are dark pink. Typical average height is 15 to 20 feet. Excellent resistance to powdery mildew and *Cercospora* leaf spot.

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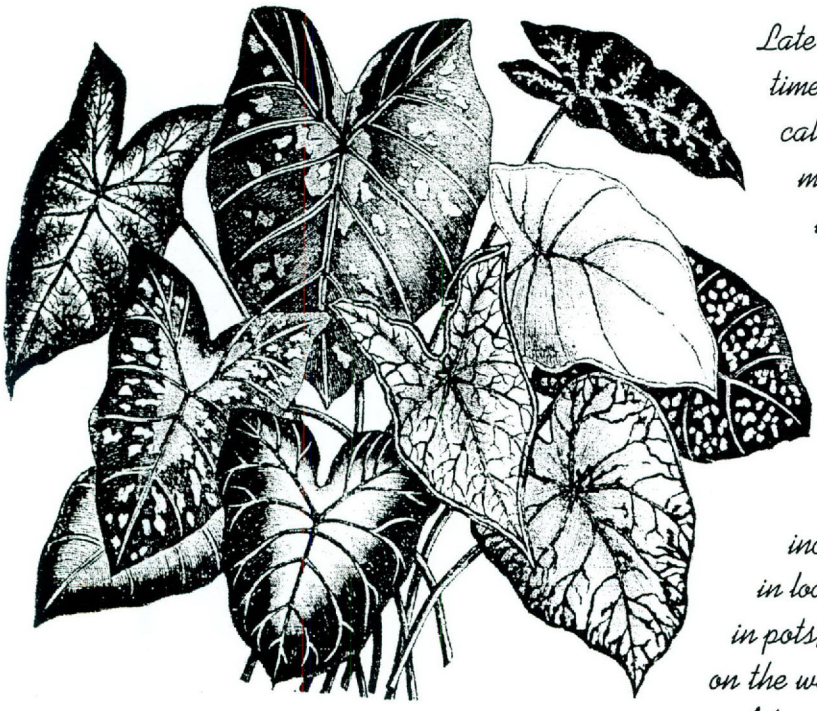
Time to Plant Caladiums

By William D. Adams, Harris County Extension Horticulturist, Houston, Texas



Late April or early May is caladium planting time. Whether in pots or shaded garden beds, caladiums add a vivid richness to any summer garden. The caladium is a warm weather plant, and does best when planted after the soil warms up to 70 degrees F. or more. Even though Caladiums like warm temperatures, they prefer cool, moist, well-drained soils in the landscape. The tubers should be planted approximately 1-1/2 to 2 inches deep, and from 12 to 18 inches apart, in loose, organic, rich soil. They are excellent in pots, tubs, and planters. You can get a jump on the weather by planting in mid April in pots, and transplanting to the garden in early May

Top Eight Crape Myrtle Cultivars (Continued from Page 2)

Table 1. Review of reaction of landscape-planted crape myrtle cultivars for susceptibility to powdery mildew and *Cercospora* leaf spot.

Cultivar	Powdery Mildew Rating			*Cercospora* Leaf Spot Rating		
	1996	1997	1998	1996	1997	1998
Natchez	1.0	1.0	1.0	3.0	2.0	3.3
Muskogee	1.0	1.7	1.8	3.7	2.4	3.8
Tuscarora	1.0	1.3	2.0	2.4	2.0	3.7
Tonto	1.0	1.0	1.2	2.0	1.0	2.0
Basham's Party Pink	1.1	1.7	2.0	3.4	2.1	2.0
Acoma	1.0	1.0	1.0	4.0	3.5	2.0
Sioux	1.0	1.0	1.0	3.3	2.0	3.5
Tuskegee	2.0	1.0	2.0	1.9	2.0	2.0

Note: Powdery mildew ratings based on a scale from 1 to 6, where 1=0%, 2=1-10%, 3=11-35%, 4=36-50%, 5=51-75%, and 6=76-100% of occurrence of powdery mildew. *Cercospora* leaf spot ratings based on a scale from 1 to 6, where 1=0%, 2=1-10%, 3=11-35%, 4=36-50%, 5=51-75%, and 6=76-100% of foliage having leaf spot or defoliation (ratings taken annually during the peak occurrence of *Cercospora* leaf spot).

Our Vegetables' Ancestors Were Also Foreigners

This article by Dr. William M. Johnson, Galveston County Extension Agent and Master Gardener Coordinator, appeared in the March 1999 Master Gardener Network Newsletter.

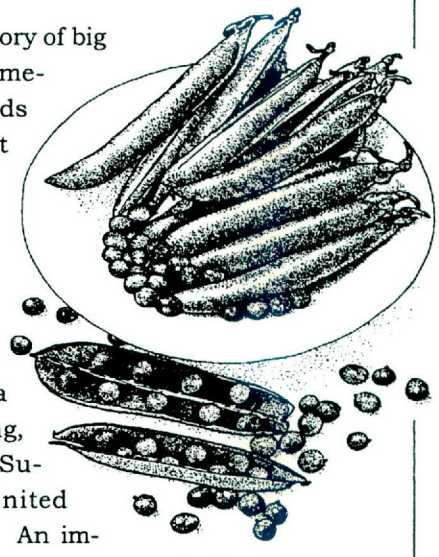
North Americans, and most of the vegetables they eat, have one thing in common -- most of their ancestors were foreigners. Even the name by which vegetables are identified on the market -- 'truck crops' -- is foreign, and has nothing to do with transportation.

Only nine of the nearly fifty vegetables which have become common to the American table are natives of the Americans, and they (corn, white potato, sweet potato, lima bean, common bean, tomato, squash, summer squash, and pepper) all originated in Central and northern parts of South America. Those requiring colder climates, like the white potato, originated in the Andes mountains, while the sweet potato developed in hot, moist climates at sea level.

The list of vegetables that North Americans have adopted is long (numbering at least thirty-eight), but their everyday names conceal the faraway places of their origin: the eggplant and cucumber come from India; spinach and muskmelons from Persia; watermelon from Africa, which also sent okra; radishes and Chinese cabbage from China; asparagus, kale, and collards from the lands of the Mediterranean, which also sent us cabbage; garden peas from Asia; and kohlrabi and Brussels sprouts from northern Europe. Other 'foreigners' now in our diet are broccoli, cauliflower, artichoke, beet, rhubarb, parsnip, salsify, celery, parsley, leek, Swiss chard, turnip, rutabaga, cowpeas, Indian mustard, Chinese mustard, lettuce, carrot, onion, garlic, and chive.

'Truck crops' is the commonly heard expression to cover all vegetables, but it has no connection with the fact that a good many of them are hauled to market on trucks. An old meaning of the word 'truck' (derived from the French word *troquer*) is 'to barter or exchange'. The word developed a special meaning as a synonym for vegetables in general because of the practice of bartering or dealing in small lots of them in the marketplace.

The growing, marketing, and consumption of vegetables in the United States today has come a long way since small lots were bartered. The field-to-table story of today's vegetables is a story of big business, and it is sometimes because of the needs of commerce that a fruit is a vegetable, or a vegetable is treated as a fruit.



The tomato is an example. Botanically speaking, the tomato is a fruit, but legally speaking, it is a vegetable; the Supreme Court of the United States said so in 1893. An importer had argued that tomatoes were fruit and, therefore, not subject to a duty in effect at that time. The Court held that the tomato is a vegetable because it was usually served at dinner in, with, or after the soup, or with fish or meats that constitute the main part of a meal. This is less true now than it was then, for today, a much larger part of our tomato crop is made into juice; however, the tomato remains, legally, a vegetable. Botanically speaking, snap or green beans, the pods of peas, the garden pepper, the okra pod, and many others, are also fruits. But no one doubts that they are vegetables. The cucumber and muskmelon are closely-related fruits; both are the genus *Cucumis*. They are similar in habits of growth and in structure, both are grown by truck farms using similar methods, they move through the same channels of trade, and both are eaten raw. Yet we always think of cucumbers as vegetables and of muskmelons as fruit.

While it is custom which seems to dictate which plants are treated as vegetables and which as fruit, regardless of how they may be classified, they all taste great when grown in, and harvested fresh from, the home garden!

This article originally appeared in the section contributed by Dr. Jerry Parsons of PLANTanswers at the aggie-horticulture web site:
http://aggie-horticulture.tamu.edu/

✔ Garden Checklist for April

By Dr. William C. Welch, Landscape Horticulturist

✔ Prune spring-flowering shrubs soon after flowering. Keep the natural shape of the plant in mind as you prune, and avoid excessive cutting except where necessary to control size.

✔ Roses have high fertilizer requirements. For most soils, use a complete fertilizer for the first application just as new growth starts; then, use ammonium sulfate or other high-nitrogen source every 4 to 6 weeks, usually just as the new growth cycle starts following a flowering cycle.

✔ Continue to spray rose varieties susceptible to black spot, using a spray containing triforine or, as it is more commonly known, Funginex. Use every 7 to 10 days.

✔ Climbing roses may be pruned as soon as they complete flowering.

✔ Removing spent flowers, trimming back excessive growth, and applying fertilizer to an established annual bed can do wonders towards rejuvenating and extending the life of the planting.

✔ As soon as azaleas have finished flowering, apply an acid type fertilizer at the rate recommended. Don't over fertilize, as azalea roots are near the surface and damage can occur. Water thoroughly after fertilizing.

✔ Seeds of amaranthus, celosia, cosmos, marigold, portulaca, zinnia, and other warm-season annuals can be sown directly in the beds where they are to grow. Keep seeded areas moist until seeds germinate. Thin out as soon as they are large enough to transplant. Surplus plants can be transplanted to other areas.

✔ It will soon be time for bagworms to attack junipers and other narrow-leafed evergreens. Control measures, such as Sevin dust or spray, should be applied while the insects and the bags are about one-half inch in length.

✔ For instant color, purchase started annual plants. Select short, compact plants. Any flowers or flower buds should be pinched, to give plants an opportunity to become established.

✔ Check new tender growth for aphids. A few can be tolerated, but large numbers should be controlled. Always follow label instructions on approved pesticides for control.

✔ Many flower or vegetable seeds left over after planting the garden can be saved for the next season by closing the packets with tape or paper clips, and storing in a sealed glass jar in your refrigerator.

✔ Start weeding early in the flower garden. Early competition with small plants can delay flowering. A mulch will discourage weed growth, and make weeds that do come through easier to pull.

✔ Soil purchased for use in beds, low areas, and containers should be examined closely. Often, nut grass and other weeds, nematodes, and soilborne disease are brought into the yard through contaminated soil sources.

✔ Watch newspapers and other publicity for information regarding wildflower trails, and plan to take a trip to enjoy this beautiful natural resource.

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In this issue . . .

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William C. Welch, Editor April 2000