THE FOUR LEAF CLOVER...A SYMBOL OF ST. PATRICK’S DAY

The four-leaf clover is an uncommon variation of the common, three-leaved clover. According to tradition, such leaves bring good luck to their finders, especially if found accidentally. According to legend, each leaflet represents something: the first is for faith, the second is for hope, the third is for love, and the fourth is for luck. Another Irish legend tells that the three leaf clover, or "Shamrock", was what Saint Patrick used to represent the Holy Trinity.

Covers can have more than four leaflets. It has been estimated that there are approximately 10,000 three-leaf clovers for every four-leaf clover, however this probability has not deterred collectors who have reached records as high as 160,000 four-leaf clovers. It is debated whether the fourth leaflet is caused genetically or environmentally. Its relative rarity suggests a possible recessive gene appearing at a low frequency. Alternatively, four-leaf clovers could be caused by somatic mutation or a developmental error of environmental causes. They could also be caused by the interaction of several genes that happen to segregate in the individual plant. It is possible all four explanations could apply to individual cases.

SIGNS OF SPRING IN THE GARDEN

Budding crocuses, longer days and pond ice melting are all signs that spring is upon us! As you come out of hibernation and head into the garden, remember these important steps for another healthy and successful gardening season. Start winter cleanup of the lawn when the grass or garden is no longer sopping wet and planting beds are no longer a sea of mud. Rake your lawn to get rid of dead growth, leaves, twigs and winter debris and let light and air to the soil level, encouraging the grass to grow.

Do not be in a hurry to remove winter mulch or cut back perennials such as roses until temperatures are reliably warm. A Master Gardener from Macon County once told me to really be on the safe side with roses, you should wait until April 15 to do any major pruning. You can cut back ornamental grasses and other hardy perennials though, in mid to late March.

Freeze and thaw cycles over the winter may have heaved some of your plants out of the ground. Replant any perennials that the frost has heaved out as soon as you can. Resist the urge to start digging in your flower beds too early. You can damage the soil's structure. If you pick up a
handful of soil, it should fall apart, not stick together like glue. When it’s dry enough, you can start to dig beds and add compost or manure in preparation for planting.

Get on top of the weeding now for a lot less work later. Weeds start growing vigorously early, so when you spot them, go to it because they are easier to pull out while their roots are still shallow in early spring. Chickweed and henbit are two of the earliest weeds you will see in your garden and flower beds. If you choose to apply a crabgrass preventer to your lawn, you need to get it on by mid-April.

If you didn’t have your mower blades sharpened this winter, or your mower or tiller still need a tune-up, you should get this done right away. If you plan to take the mower or tiller to a garden center to be worked on, plan on several weeks before getting it back possibly, as most people wait until right up until they need it to have it worked on.

Apply dormant oil spray to fruit trees, magnolias, crabapples and shrubs such as euonymus to control scale insects and other overwintering pests. Use this organic pest control method when the buds are swelling but the leaves haven’t opened yet. Apply when temperatures are between 40 and 70 degrees F (4-21 degrees C).

Toward the end of March, remove tree guards or burlap winter protection from any young trees or shrubs. Do not leave tree wrap or guards in place over the summer. They keep rabbits and mice from nibbling on the bark over the winter, but trees don’t need them in the summer. They don’t allow enough air movement around the base of the trunk and that can promote rot of the bark.

As the weather warms and we move into late March, April, and May spring bulbs will make their showing. Tulips, daffodils, and hyacinths as well as flowers such as peonies and iris will also provide a beautiful display of color in spring gardens. Spring just wouldn’t be spring without these beauties.

**PRUNING FRUIT TREES & OTHER SMALL FRUITS**

If you haven’t already pruned your fruit trees or small fruits, March is a good time to do that. Late winter is the best time to prune fruit trees such as apples, pears, peaches, apricots, and others, as well as your grapevines.

The day fruit trees are planted is the day to begin to train and prune for future production. Too often backyard growers plant apple trees and leave them untended for several years. This neglect results in poor growth and delayed fruiting. Apple trees are trained to a modified leader system. The tree should be trained with one central leader or main trunk in the center, with several wide-angled limbs spaced around the leader. The tree should mature to a pyramidal shape. Pruning bearing trees is critical to maintain healthy fruiting wood. Remove weak, “shaded-out” wood, diseased or dead wood, water-sprouts and root suckers.

Many people will purchase a house where an apple tree was planted on the property several years ago. Often, the previous owners did not take the time to properly prune the tree. The tree has become bushy and weak and will produce very poor quality apples. Such a tree requires extensive corrective pruning.

The main objective in pruning such a tree is to open up the interior to allow good light penetration. The first step is to remove all the upright, vigorous growing shoots at their base that are shading the interior. As with the young apple trees, it is necessary to select 3 to 5 lower scaffold branches with good crotch angles and spaced around the tree. Limbs with poor angles, and excess scaffold limbs, should be removed at their base. In some cases it is advisable to spread the corrective pruning over two to three seasons.

Pruning is one of the most important and most neglected practices in home plantings of grapes. Grapes need some form of support, and pruning (training) is necessary to develop the plant and to maintain it on the support provided. Regular, purposeful pruning is essential for controlling the number, position and vigor of fruiting canes and the yield and quality of the fruit.

Grapevines should be pruned during the dormant season, late November to March. Since winter injury of fruiting canes will occur to some extent, late winter pruning generally is preferred. If pruning is delayed until near bud swell, the cuts commonly ooze sap abundantly. Though not desirable, "bleeding" seems to be of minor importance. More information on pruning grapes and grape training systems can be found in MU Guide 6090. This is in the Grounds For Gardening Manual that Master Gardeners receive during training.

For information on pruning blackberries, raspberries and gooseberries see MU Guide 6000.
FOOD FOR THOUGHT...WHY EAT LOCALLY?

In the next several issues of this newsletter I will include an article on why we should buy and eat locally produced foods.

**TEN REASONS TO BUY LOCAL FOOD**

From: Organic Consumers Association, Published 10/17/08 ([http://www.enn.com/agriculture/article/38431](http://www.enn.com/agriculture/article/38431))

1. *Locally grown food tastes better.* Food grown in your own community is usually picked within the past day or two. It’s crisp, sweet, and loaded with flavor. Produce flown or trucked in from Florida, Chile, Mexico, or Holland is, quite understandably, much older. Several studies have shown that the average distance food travels from farm to plate is 1,500 miles. In a weeklong delay from harvest to dinner plate, sugars turn to starches, plant cells shrink, and produce loses its vitality.

2. *Local produce is better for you.* Studies showed that fresh produce loses nutrients quickly. Locally grown food, purchased soon after harvest, retains its nutrients.

3. *Local food preserves genetic diversity.* In the modern industrial agricultural system, varieties are chosen for their ability to ripen simultaneously and withstand harvesting equipment; for a tough skin that can survive packing and shipping; and for an ability to have a long shelf life in the store. Only a handful of hybrid varieties of each fruit and vegetable meet those rigorous demands, so there is little genetic diversity in the plants grown. Local farms, in contrast, grow a huge number of varieties to provide a long season of harvest, an array of eye-catching colors, and the best flavors. Many varieties are heirlooms, passed down from generation to generation, because they taste good. These old varieties contain genetic material from hundreds or even thousands of years of human selection; they may someday provide the genes needed to create varieties that will thrive in a changing climate. Local food preserves genetic diversity.

4. *Local food is GMO-free.* Although biotechnology companies have been trying to commercialize genetically modified fruits and vegetables, they are currently licensing them only to large factory-style farms. Local farmers don’t have access to genetically modified seed, and most of them wouldn’t use it even if they could. A June 2001 survey by ABC News showed that 93% of Americans want labels on genetically modified food – most so that they can avoid it. If you are opposed to eating bio-engineered food, you can rest assured that locally grown produce was bred the old-fashioned way, as nature intended.

5. *Local food supports local farm families.* With fewer than 1 million Americans now listing farming as their primary occupation, farmers are a vanishing breed. Local farmers who sell direct to consumers cut out the middle man and get full retail price for their crops – which means farm families can afford to stay on the farm, doing what they love.

6. *Local food builds a stronger community.* When you buy direct from the farmer, you are re-establishing a time-honored connection between the eater and the grower. Knowing the farmers gives you insight into the seasons, the weather, and the miracle of raising food. In many cases, it gives you access to a farm where your children and grandchildren can go to learn about nature and agriculture. Relationships built on understanding and trust can thrive.

7. *Local food preserves open space.* As the value of direct-marketed fruits and vegetables increases, selling farmland for development becomes less likely. You have probably enjoyed driving out into the country and appreciated the lush fields of crops, the meadows full of wildflowers, the picturesque red barns. That landscape will survive only as long as farms are financially viable. When you buy locally grown food, you are doing something proactive about preserving the agricultural landscape.

8. *Local food helps to keep your taxes in check.* Farms contribute more in taxes than they require in services, whereas suburban development costs more than it generates in taxes, according to several studies.

9. *Local food supports a clean environment and benefits wildlife.* A well-managed family farm is a place where the resources of fertile soil and clean water are valued. Good stewards of the land grow cover crops to prevent erosion and replace nutrients used by their crops. Cover crops also capture carbon emissions and help combat global warming. According to some estimates, farmers who practice conservation tillage could sequester 12-14% of the carbon emitted by vehicles and industry. In addition, the habitat of a farm – the patchwork of fields, meadows, woods, ponds, and buildings – is the perfect environment for the many species of wildlife including owls, hawks, blue herons, bats, and rabbits, and foxes.

10. *Local food is about the future.* By supporting local farmers today, you can help ensure that there will be farms in your community tomorrow so that future generations will have access to nourishing, flavorful, and abundant food.
GARDENING TIPS FOR MARCH

VEGETABLES ALL MONTH:
• Fertilize the garden as the soil is being prepared for planting. Unless directed otherwise by a soil test, 1-2 pounds of 12-12-12 or an equivalent fertilizer per 100 square feet is usually sufficient.
• Cultivate weeds and remove old, dead stalks of last year’s growth from the asparagus bed before new spears emerge.
• Delay planting if the garden soil is too wet.
• Asparagus and rhubarb roots should be planted as soon as the ground can be worked.
• Plant peas, lettuce, radishes, mustard greens, turnips, Irish potatoes, spinach, and onions (seeds and sets) outdoors.
• Plant beets, carrots, parsley, and parsnip seeds outdoors. Set out broccoli, cabbage, Brussels sprouts, Chinese cabbage, and cauliflower transplants into the garden.
• Start seeds of tomatoes, peppers, and eggplants indoors.

ORNAMENTALS:
• To control Iris borer, clean up and destroy old foliage before new growth begins.
• Fertilize bulbs with a “bulb booster” formulation broadcast over the planting beds.
• Loosen winter mulches from perennials cautiously.
• Dormant mail order plants should be unwrapped immediately. Keep roots from drying out.
• Seeds of hardy annuals such as larkspur, bachelor’s buttons, Shirley and California poppies should be direct sown in the garden now.
• Heavy pruning of trees should be complete before growth occurs. Trees should not be pruned while the new leaves are growing.
• Summer and fall blooming perennials should be divided in spring.
• Apply sulfur to the soils around acid-loving plants such as Azaleas, Rhododendrons, Hollies, and Dogwoods. Use a granular formulation at the rate of ½ pound per 100 square feet.
• Apply a balanced fertilizer such as 6-12-12 to perennial beds when new growth appears.
• Plant Spring bedding plants such as pansies and toadflax now.
• Ornamental grasses should be cut to the ground just as the new growth begins.

FRUITS:
• Continue pruning grapes. Bleeding causes no injury to the vines.
• Continue pruning apple trees. Burn or destroy all prunings to minimize insect or disease occurrence.
• Apply dormant oil sprays now. Choose a dry day when freezing temperatures are not expected.
• Spray peach trees with a fungicide for the control of peach leaf curl disease.
• Aphids begin to hatch on fruit trees as the buds begin to open.
• Peaches and nectarines should be pruned just before they bloom.
• Mulch all bramble fruits for weed control.

-Missouri Botanical Garden-

UPCOMING EVENTS

March 1: Fabius MG mtg, 6:30 Presbyterian Church, Memphis.
March 2: Salt River MG mtg, 7 p.m., 2nd Floor Courtroom, Marion Co. Courthouse, Program-Missouri Master Gardener Online Reporting Form Tutorial.
March 2: Heartland MG mtg.
Time, location, program, TBA.
March: Sullivan County MG meeting, TBA.
March 9: Magic City MG mtg, 6:30 pm, Randolph County Extension Center.
March 13: Spring Gardening Seminar, Kansas City Zoo, Swope Park, 8:30 a.m.–3:20 p.m.
March 16: Kirksville Area MG club meeting, 7:00 pm, Adair County Extension Center.
March 19-20: All Iowa Horticulture Exposition, Bridge View Center, Ottumwa. Educational sessions, keynote speakers and trade show exhibitors. See website for details http://www.iowahort.org/. Cost $10/day or $15 for two days.
March 20: Maple Sugaring Open House at Sandhill Farm, 1-5 pm, featuring tapping maple trees, collecting sap, and boiling the sap into syrup and/or candy; tour greenhouse and see shiitake mushroom logs. 660-883-5543 or mail@sandhillfarm.org
March 22: Macon-Shelby MG mtg; 7 pm, Macon County Extension Center.