THE GARDEN PATH

ROSE TIPS FOR THE MONTH
By: Heidi Moore, Kerr Lake Master Gardener

MAINTENANCE

At this time of the spring all pruning, fertilizing, and mulching should be completed. Any bushes needing to be relocated and any newly purchased roses should also have been planted and fertilized. The weather has provided good growing elements, and all your plants should be well budded and starting to leaf out. Once your roses have begun to show leaf growth, it will be time to start your schedule of spraying for fungi and other diseases. A 7-10 day regimen should be established with a dependable fungicide to hold diseases to a minimum. Alternating fungicides every other spraying will help to insure that fungi do not become immune to their effectiveness. If you see signs of black spot or mildew, the best early defense is to manually remove any affected leaves or canes. Once a disease has become established, it is very difficult to eradicate. Insects should only be treated when evidence of problems can be seen. Do not spray just to try and prevent a problem, as this will have a negative effect upon insects that are beneficial. Some problem insects can be eliminated by hand or with a strong spray with a garden hose.

Keep your roses well hydrated during dry spells. Roses require a minimum of 1-1/2 inches of moisture each week, so if there is not enough rain, you will need to provide supplemental watering. The rewards for all this work early in the season will be beautiful roses which can be cut and enjoyed inside as well. Care should be taken not to damage rose canes when flowers are removed. First year roses should be allowed to bloom and not receive continuous cutting except to deadhead. This will help the plant to establish itself into a strong rose bush which will provide you with many years of beautiful blooms.

ROSE VARIETY: HYBRID TEA ROSES

Hybrid Tea roses are one of the most popular garden rose. They are a result of interbreeding the hybrid perpetual with the tea rose cultivars. The Hybrid Tea roses are typically characterized as bush form with large flowers, borne singly on a stem. Hybrid Teas exhibit traits midway between both parents: harder than the teas but less hardy than the hybrid perpetuals, and less ever-blooming than the hybrid perpetual but more than the teas. Early development of the Hybrid Tea roses showed the plants were resistant to cold weather but were not vigorous growers due to spindly roots. In the late 19th century, nursery workers learned that these roses could be made to grow stronger if grafted onto stocks such as *Rosa multiflora*, a vigorous plant.
with nondescript flowers. This practice continues in the 21st century. Other roses onto whose roots modern roses are grafted include Dr. Huey, *Rosa x odorata*, and *Rose manettii*.

There are many new varieties that have been cross bred to carry a large, disease resistant and fragrant rose. The cultivar that made Hybrid Teas the most popular class of garden rose of the 20th century was the rose “Peace,” introduced at the end of World War II. Most Hybrid Tea roses are more difficult to grow as they require more maintenance than other roses. They are very susceptible to disease and insect infestations. However, with proper maintenance, Hybrid tea plants are quite hardy across North Carolina and bloom throughout the summer and fall until a hard frost.

**ROSE TERMS**

**Bud union:** The swelling on the bottom of a plant stem where the graft is joined with the rootstock.

**Cultivar:** A contraction of the term “cultivated variety.” A plant that has been bred or cultivated by man and is not found growing wild in nature.

**Graft:** When the rootstock of one plant is joined to the top portion of another to form a hardier plant.

**Hardiness:** The resilience of a plant to cold, drought or disease.

**Hybrid:** The offspring that is the result of the crossing of two different species, cultivars or varieties; this is usually produced artificially in cultivation.

**Own-root:** A rose that grows on its own roots, propagated through cuttings or seeds, rather than being grafted onto rootstock.

There seem to be more flowering trees and shrubs at the peak of their glory in March and April than in any other month, but this month’s selection could better be described as weird (in many of its species) rather than beautiful. It is the Jack-in-the-pulpit, or cobra-lily. Our native Jack, *Arisaema triphyllum*, has a leaf that is usually green but can have patterns of variegation. The basal flower consists of the broad spathe (pulpit) and narrow spadix (Jack), which are usually greenish to purple. The spathe forms a hood that hides the spadix, and the spathe can be strikingly striped in maroon or white. The photo of *A. triphyllum* shows one selected for its black stem, so many color variations occur. Species from Asia and other countries vary wildly in shape, form, and color, and some examples are shown below. Our native Jack can grow in deep shade but morning sun is beneficial -- afternoon shade is essential. A moist site results in bigger, more persistent plants. They can reach 3’ tall, but 12-15” is common. They require no garden maintenance. The corms can be purchased from reputable nurseries (ones that do not collect from the wild), and a colony of Jack-in-the-pulpit can be quite spectacular. The mature fruits are in a cluster of from one to five bright red berries.

Pictures from the "JC Raulston Arboretum collection":

**PLANT OF THE MONTH**

**Arisaemas**

By Marty Finkel, Kerr Lake Master Gardener
**GARDEN TO DO**  
*By: Carl Schafer, Kerr Lake Master Gardener*

Maintain your spray program for apples, nectarines, peaches, and plums. Follow label instructions and observe waiting times before harvest. See NC Chem. Manual for more information.

Apples, nectarines, peaches, and pears need to be thinned to produce the best crop of full sized fruit. Fruit should be thinned by the time they are nickel size so that they are spaced 4 to 8 inches apart along the branch.

If you have blueberries, cherries, or strawberries, have bird netting ready unless you want to share your crop.

Avoid working in your garden when the soil is wet. A late planting of cool season vegetables can be tried this month. As long as we do not have an early hot spell, you will get a late harvest. Try to provide partial afternoon shade by planting on the east side of tall plants or by using shade cloth on hoops or other frames.

If possible avoid planting related vegetables in the same location more often than once every three years. This will help prevent the buildup of insect and disease problems.

“Warm weather” vegetables (Green beans, sweet corn, cucumbers, melons, squash, and tomatoes) can be planted after the average last frost date in mid – April. Wait until May for “Hot weather” vegetables (Lima beans, eggplant, okra, southern peas, peppers, and sweet potatoes). See *Home Vegetable Gardening* AG-06 for fertilizing and pest control recommendations.


Wait to fertilize warm season lawns until they have greened up. Do not fertilize cool season
lawns until fall. See NCSU Turf Files for more complete information.

Allow leaves of spring blooming bulbs to mature and die naturally so that you will have good flowering next spring.

If needed, prune spring flowering shrubs as blooms fade.

Three useful books to add to the Jan 2011 list:

**The Successful Gardener Guide: North Carolina** Edited by Leah Chester-Davis and Toby Bost – A selection of articles from 10 years of the Extension’s Successful Gardener newsletter. Just published.

**The Southern Gardener’s Book of Lists by Lois Trigg Chaplin**

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**HERB OF THE MONTH**

By: Ladybug aka Edna Gaston, Kerr Lake Master Gardener

*Foeniculum*

Height: 4 ft. tall, 1 – 2 ft wide.

Flowers: July & September - yellow

Propagation: seeds

Growing conditions: average soil, full sun but tolerates part shade

Cultivation: roots do not like being disturbed, will self-sow

Uses: cooking, chewing seeds as a breath freshener.

**HISTORY** A member of the parsley family, Fennel has been a culinary herbs for thousands of years. Long a favorite of the Greeks and Romans, Charlemagne is given credit for importing the plant into Europe. In the language of flowers, fennel symbolizes flattery and is an emblem for heroism.

There are several varieties that can be grown in our area and into Zone 6 – Bronze Fennel is a variety of *F. vulgare*. The foliage has a beautiful coppery-red color as the name implies. Tall, it makes a wonderful border in the back of a bed. *F. officinalis* is an easily-grown perennial, green in color. The annual variety, *F. dulce*, is lower growing. Another use is a host plant for swallowtail larvae.

All parts of the herb can be harvested and stored. Oven-dry the leaves, store the stems in plastic bags after cutting into pieces. For seeds cut the entire head after the seeds turn from yellowish green to brown, place in a paper bag and hang in a cool, dark place. After the seeds drop off, put in a glass jar and seal tightly. As with all herbs, research carefully and use with moderation. Even great herbs can have adverse effects.

For cooking, use fennel with cabbage, eggs, rice, breads, cookies, salads, sausage, roast pork among others. Experiment and enjoy its anise-like flavor.

**Additional Information:**


VEGETABLE GRAFTING
By: Marty Finkel, Kerr Lake Master Gardener

What is this phenomenon of vegetable grafting? What advantages are there to what would seem to be a tedious, time-consuming, costly process? If a little research is done about the process and the product, you may be surprised, enlightened, perhaps a convert or even enthusiastic.

According to an article in the January 2011, Vol. 43, No. 3 Avant Gardener, the “earliest example of grafting herbaceous plants was the production of giant gourds five centuries ago in China.” The February Vol. 43, No. 4 issue continues “In countries like Japan and Israel, up to 90% of tomatoes, eggplants, melons and cucumbers are grafted, and Ohio State University has said ‘Grafting may be an important component of low-input sustainable and organic horticulture due to increase in vigor and disease resistance.’”

Increased vigor and disease resistance is bred into most hybrid tomatoes, but heirlooms generally lack this protection. With increasing percentages of public interest in and demand for heirloom tomatoes, growers are responding by trying new methods of improving marketable yield.

There was a tomato grafting workshop at WNC Extension in October 2008 and one at the Chatham County Extension in November 2008. There has been extensive research on this subject by Cary Rivard at NCSU with a large body of published results -- just do a WEB-SEARCH for tomato grafting. There are excellent on-line articles with step-by-step pictures of grafting techniques from many other universities as well. There is a video of the grafting process on YouTube.

Closer to home, on March 15 the program “Tomato Grafting with Shawn Banks” was given at the Johnston County Cooperative Extension Service. In a telephone interview with Banks, he stressed the importance of getting a positive identification of the disease problem in order to properly choose a rootstock. Rootstocks that have been developed with increased vigor and resistance to multiple diseases such as bacterial wilt, Fusarium wilt, and nematodes are available from seed companies.

I also asked if the March 15 program was targeted to growers or to just anyone interested in the process, and he replied that it was for general interest. The time involved to graft a tomato is surprisingly short. After the graft is made the plant should be placed in a baggie or under a dome and into medium light. In 3-5 days the cut ends heal together. After healing, the plant should be acclimated to higher light and to less humid air, so over a 3-4 day period the baggie should be opened (or dome lifted) slightly, then more and more until the plant is on its own. If you like to graft or are interested in learning, this would be an inexpensive way to start. It might be well advised to practice on inexpensive seedlings of your own before buying the recommended rootstocks. Information on where to buy grafting tubes, rootstock, or any other supplies can be found at the NCSU tomato grafting internet site. Have fun!

P.S. An experienced tomato grafter can graft 60 to 100 plants per hour.

CHECKLIST FOR THE MONTH
By: Mary Jane Bosworth, Kerr Lake Master Gardener

April showers……
✓ Now is the best time to plant warm-season grasses (Bermuda, centipede and St. Augustine).
✓ Prune Azaleas AFTER flowering.
✓ Prune berry producing shrubs, such as hollies, in flower to prevent removal of all the berries.
Spray roses every 7-10 days until frost, beginning with the onset of new growth.
Control aphids on roses with insecticidal soap.
Lime lightly around newly planted tomatoes to prevent blossom end rot.
Harvest those cool weather vegetables you planted.
Apply pre-emergent herbicides to reduce spring-germinating weeds.
Perennial plants should be planted to become established before hot weather hits.
Once the ground has warmed up you can seed summer annuals.
Mulch well to prepare for summer heat and prevent weeds.
Experiment with watering devices to conserve water. Soaker hoses, drip irrigation systems and timers will help deliver water to plants in an efficient manner.

INTERESTING TID-BITS
By: Marty Finkel, Kerr Lake Master Gardener

The monarch butterfly population is making a comeback after an alarming 75 percent drop was noted last year. The study was conducted by the World Wildlife Fund, the National Commission for Natural Protected Areas of Mexico, and the cellular carrier Telcel. This year, 9.9 acres were occupied with colonies, up from 4.7 acres last year, which is still smaller than expected based on averages for the past 7 years. In 1997, colonies occupied 45 acres. Gardeners can help by avoiding pesticide use and planting a variety of milkweeds such as common milkweed (Asclepias syriacea), showy (A. speciosa), and swamp (A. incarnata.)

A fascinating biocontrol for the peach tree borer (which kills more peach trees in the U.S. than any other insect) has been developed following the USDA’s Agricultural Research Service’s research in making beneficial nematodes even more effective. The nematodes are successful in preying on the underground life stages of the peach tree borer, but once the borers emerge aboveground, the nematodes can’t follow because of the sunlight and heat. “In Byron, Georgia, scientists have created a nontoxic, environmentally-friendly gel that can be sprayed on trees to form a protective barrier so that nematodes can follow the borers. During the first year of testing, 30 per cent of the borers survived; the next year none survived.”

N.C.’s own Richard E. Bir, Extension Horticulture Specialist Emeritus with NCSU in Fletcher, has won the Liberty Hyde Bailey Award, the American Horticultural Society’s most prestigious award. During his 25 years with NCSU, he “worked with county agents and nurserymen to evaluate, select, and grow better plants for the landscape, focusing primarily on shrubs and trees.” The first Cullowhee Native Plant Conference was held in 1984, and “this annual event has become the foremost native plant conference in North America.” Bir was “instrumental in establishing and guiding” its development. He “has been influential in increasing public awareness of American native plants and making them more available through mainstream markets.” His 1992 book, Growing and Propagating Showy Native Woody Plants (U. of N.C. Press) is still considered a classic. A popular speaker and writer, he has won many horticultural awards. This and the above tid-bits are from the March/April 2011 issue of The American Gardener magazine.

If you want to make your own seed strips, or use as a project your grandchildren will have fun with, use toilet tissue, working with a 5-sheet long piece. Cut it into 1” wide strips, lay them on a table and mark the seed spacing suggested by the seed package. Put a small pot of water-soluble glue at each mark and place a seed on the glue. Let it dry before using. It works great with
seeds like carrots and radishes. This tid-bit was found in the *Triangle Gardener*.