Spring Is Here

Spring is finally here and aren’t we thankful for April Showers bring May flowers!! It is time to gear up for another gardening and planting season. Inside this issue you will find helpful hints on container vegetable gardening, landscaping ideas for North Carolina, and tips for maintaining the lawn.

Low Impact Living

Workshop Series

Madison County Cooperative Extension Staff will be conducting a series of workshops on various topics. Listed are dates and topics. All events will be held at the Madison County Cooperative Extension Office. If interested please call 828-649-2411 for more information.

- **April 22**: Youth Mini Garden Project  
  4pm – 5:30pm
- **May 26**: Growing a Vegetable Garden  
  1pm – 2:30pm and 6pm – 7:30pm
- **July 28**: Wildlife Habitat Management  
  6pm – 8pm
- **August 20**: Detoxify Your Home  
  1pm – 2:30pm and 6pm – 7:30pm
- **September 24**: Creating a Backyard Habitat  
  6pm – 8pm
- **September 15**: Composting/Vermiculture  
  1pm – 3pm and 6pm – 8pm
- **September 17**: Ecological Landscaping  
  1pm – 3pm and 6-8pm
- **October 17**: Solar Energy for the House and Farm  
  9am – 4pm
NATIVE NOOK

**Scientific Name:** Lobelia cardinalis  
**Common Name:** Cardinal flower

**Characteristics**

**Season:** Late summer
**Height:** 36-48 inches
**Hardiness:** USDA Hardiness Zone 3-9
**Flower Color:** Cardinal red
**Soil:** Moist soil high in organic matter
**Exposure:** Partial shade
**Propagation:** Remove offshoots in late summer, seed, cuttings

**North Carolina Regions:** Mountains, Piedmont, Coastal Plain

**Comments:** A number of hybrid cultivars of Cardinal flower have been produced; the most popular is ‘Queen Victoria’ with blood red flowers and bronze foliage.

**Origin:** Eastern USA, North Carolina

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**Spotlight on Insects**

**Corn Earworm** (Also called Tomato Fruitworm and Bollworm)

This caterpillar feeds on a wide range of vegetables and, as a result, is known by several names. It may attack almost any vegetable but does the most serious damage to corn and tomatoes. Other vegetables attacked include peppers, eggplant, beans, okra, sweet potatoes, lettuce, and cabbage.

Fresh corn silk is preferred by this pest as a location to deposit eggs. Eggs may hatch as soon as two or three days from the time they were deposited. Newly hatched larvae feed on buds and leaves or on corn silks. When they are four or five days old, larvae travel down the silks and feed on kernels at the end of the corn ear. If fresh corn silk is unavailable, moths prefer laying their eggs on tomato foliage, especially when plants are flowering. Larvae attack tomatoes from the time the fruit forms until it ripens, boring into the sides of the fruit and near the stem. Sometimes a small, black entrance hole is the only visible sign that a large worm is inside a tomato. Injury to tomatoes is most severe in the late summer and fall.

When full-grown, larvae are about 1-1/2 inches long. They may be brown, green, or pink, with lighter colored longitudinal stripes. The head is yellow, and the underside of the body is always lighter than the back. Larvae enter the soil to pupate.

Moths are cream to grayish-brown, have green eyes, and are marked with a dark spot near each wing tip. They have a wingspread of about 1-1/2 inches. Hind wings are light colored with darker areas near the edges. Moths deposit yellow eggs one at a time on plants. One female can lay as many as 3,000 eggs. There are usually three and sometimes a partial fourth generation of earworms each year in North Carolina.

Control methods: For best results spray with Sevin when tassel shoots appear, 3 days later, then daily for 5 applications. Then apply at 2-3 day intervals until harvest. Corn tasseling from mid-July on will require daily.

Apply carbaryl 50% wettable powder 4 tablespoonfuls or carbaryl 80% wettable powder 2 1/2 tablespoons per gallon of water. Thoroughly wet the silks of all ears until harvest is completed.

Dusts containing Sevin may also be used. They can be applied to the silks of each ear with a paint brush or hand duster.

Organic methods: Mineral oils, Bt materials (Bacillus thuringiensis), or botanical insecticides
Lawn Care of Tall Fescue Grasses and Mixes

**March – May**

**Mowing** - Mow lawn to 3 inches in height. Mow at least once a week. Mow before grass gets above 5 inches tall. Then practice grasscycling. Grasscycling is simply leaving grass clippings on your lawn. Grass clippings decompose quickly and can provide up to 25 percent of the lawn's fertilizer needs. If prolonged rain or other factors prevent frequent mowing and clippings are too plentiful to leave on the lawn, they can be collected and used as mulch. Whatever you do, don't bag them! Grass clippings do not belong in landfills.

**Fertilization** - DO NOT fertilize tall fescue after March 15.

**Irrigation** - Tall fescue needs 1 to 1 1/4 inches of water every week, ideally all at once. A dark bluish-gray color, footprinting, and wilted, folded, or curled leaves indicate that it is time to water. Water until the soil is wet to a depth of 4 to 6 inches. Use a screwdriver or similar implement to check. Sandy soils require more frequent watering (about 1/2 inch of water every third day). Because clay soils accept water slowly, irrigate just until runoff occurs, wait until the water has been absorbed, and begin watering again. Continue until the desired depth or amount is applied. Proper irrigation may prevent or reduce problems later in the summer. Watering between 2 and 8 a.m. decreases the incidence of certain diseases.

**Weed Control** - Apply preemergence herbicides to control crabgrass, goosegrass, and foxtail. Apply by the time the dogwoods are in bloom. See Pest Control for Professional Turfgrass Managers, AG-408.

**Insect Control** - Check for and control white grubs in April and May. (See White Grubs in Turf, ENT/ORT-67, AG-366).

**Aeration** Delay aeration until fall.

**Thatch** - It is generally not necessary to remove thatch.

**June – August**

**Mowing** - Raise mower height to 3 1/2 inches. Mow before the grass gets above 5 inches tall. Remember grasscycling and leave clippings on the lawn.

**Fertilization** - DO NOT fertilize tall fescue at this time. Submit a soil sample for analysis to determine nutrient requirements. (Contact your county Extension Center for details.)

**Irrigation** - Either water as needed to prevent drought or allow the lawn to go dormant. About 1 inch of water per application each week is adequate for irrigated lawns. Sandy soils often require more frequent watering, or about 1/2 inch of water every third day. Do not discontinue irrigation in midsummer. Water dormant lawns every three weeks in the absence of rain.

**Weed Control** - Avoid the use of herbicides at this time. See Pest Control for Professional Turfgrass Managers, AG-408.

**Insect Control** - Check for and control white grubs in July and August.

**Disease Control** - Check for brown patch disease. (See Diseases of Cool-Season Grasses, AG-361.)

**Aeration** - Avoid coring tall fescue lawns at this time.

**Renovation** - Overseed thin, bare areas as grass begins to respond to cooler temperatures; about August 15 to September 1. Use a blend of tall fescue cultivars at 6 pounds per thousand square feet. Apply a starter-type fertilizer at the time of seeding. Keep the seedbed moist with light, frequent sprinklings several times a day to ensure good germination.

**Thatch** - It is not necessary to remove thatch.
Mulches

M. A. (Kim) Powell, Extension Horticultural Specialist

Homeowners and professional landscapers depend on mulch in the ornamental plantings for several reasons. Functionally, mulches discourage weeds from growing, conserve moisture during drought periods, allow better use of water by controlling runoff and increasing water-holding capacity of light, sandy soils. Mulches help maintain a uniform soil temperature. A 3- to 4-inch layer of mulch can add to the aesthetic value of a garden while protecting the base of plants from being injured by mechanical equipment.

Many organic materials can be used as a mulch. North Carolina gardeners use pine needles, pine bark, compost, peat moss, and decayed sawdust. Most of our landscape plants benefit from working organic matter into the root zone area. This could include all the previously mentioned materials (except pine needles) and also manure, composted wood shavings, tobacco stems, and lawn clippings.

Mulch can be applied just about any time of the year when trees and shrubs are being planted. The best time, however, to apply mulch in established bed areas would be in mid-spring when soil temperature has warmed up enough for sufficient root growth. If applied earlier, the mulch will keep the soil temperature lower and root growth possibly delayed.

Mulches should be applied 3 to 4 inches in depth over relatively clean, weed-free soils. Don't make the mistake of just covering Bermuda grass, nutgrass or other perennial garden weeds with a layer of mulch. Identify and eradicate the weeds before the mulch. Use a directed spray of a recommended herbicide and then apply the organic material. It will not be necessary to pull the mulch back every time you fertilize or water. If the mulch you use is not completely decayed incorporate 2 to 4 lb of 10-10-10 per 100 ft² of mulched area. This is especially true for wood chips, sawdust and shredded bark.

Several inorganic materials are often used as mulches. These might include gravel, rock or black plastic. Be certain that the gravel, stones or lava rock coincide with the overall design. Often they are not compatible landscape components. Black plastic will discourage weeds but at the same time interfere with the normal oxygen and water supply to the roots. When the plastic is used a very shallow root system is created and during drought periods the plants may not withstand the stress. Therefore, it is recommended not to use black plastic around ornamentals. There are, however, several landscape fabric mulch products available that will function the same as plastic, but allow for normal water and oxygen exchange. These materials are placed on bare soil around trees and shrubs with the mulches used on top. There are many brands and types of materials from which to choose. They have proven to be beneficial in discouraging weeds and holding soil moisture. Test plots using landscape fabric in conjunction with organic mulch materials were rated the best of other mulch treatments. A 3- to 4-inch layer of organic matter maintained on weed-free soil will be both functional and aesthetically pleasing.

Table 1. Relative value of mulches.

<table>
<thead>
<tr>
<th></th>
<th>Aesthetic Value</th>
<th>Source of Weeds</th>
<th>Resists Wind Blowing</th>
<th>Resists Compaction</th>
<th>Availability</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic Materials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compost</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>Depends on ingredients</td>
</tr>
<tr>
<td>Lawn Clippings</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>Should be composted</td>
</tr>
<tr>
<td>Leaves</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>Should be composted</td>
</tr>
<tr>
<td>Manure</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Good only for incorporation into soil</td>
</tr>
<tr>
<td>Peat Moss</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>Readily available; expensive</td>
</tr>
<tr>
<td>Pine Needles</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>Excellent mulch; easy to handle</td>
</tr>
<tr>
<td>Bark Granules</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Excellent mulch; generally used in large amounts</td>
</tr>
<tr>
<td>Wood Shavings</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>Good for incorporation; add nitrogen</td>
</tr>
<tr>
<td>Sawdust</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>Should not be too deep; beware of crusting over</td>
</tr>
<tr>
<td>Waste Paper</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>Not recommended when used alone</td>
</tr>
<tr>
<td><strong>Inorganic Materials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Plastic</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>Must anchor but not recommended</td>
</tr>
<tr>
<td>Gravel</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Must be compatible with design</td>
</tr>
<tr>
<td>Crushed Rock</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Must be compatible with design</td>
</tr>
<tr>
<td>Lava Rock</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>Must be compatible with design</td>
</tr>
</tbody>
</table>
Many people who live in an apartment, condominium, or mobile home do not grow a vegetable garden because space is not available for a garden plot. Lack of yard space is no excuse for not gardening, since many kinds of vegetables can be readily grown in containers. In addition to providing five hours or more of full sun, attention must be given to choosing the proper container, using a good soil mix, planting and spacing requirements, fertilizing, watering, and variety selection.

Containers are available in many different sizes, shapes, and materials. All containers, whether clay, wood, plastic, or ceramic, should have an adequate number of holes in the bottom for proper drainage. Additional holes should be drilled or punched in containers that do not drain quickly after each watering. Drainage is reduced when the container is set on a solid surface such as a cement or patio floor. Raising the container one or two inches off the floor by setting it on blocks of wood will solve this drainage problem.

The size of the container will be determined by the vegetable grown. Generally, most vegetables grown in the soil can be grown in containers as long as ample space is provided for root development. Shallow rooted crops like lettuce, peppers, radishes, and herbs need a container at least 6 inches in diameter with an eight-inch soil depth. Bushel baskets, half barrels, wooden tubs, or large pressed paper containers are ideal for growing tomatoes, squash, pole beans, and cucumbers.

The ideal planting medium for containers should provide rapid drainage with sufficient water retention to keep the root zone uniformly moist. Most container gardeners have found that a "soilless" potting mix works best. In addition to draining quickly, "soilless" mixes are lightweight and free from soil-borne diseases and weed seeds. These mixes can be purchased from garden centers in various sizes under many different brand names.

The do-it-yourself individual can make a planting medium by mixing equal parts of sand, loamy garden soil, and peat moss. The mix should be heated in an oven for 1 hour at 210o F to kill any bacteria, fungi, insects, or weed seeds.

Planting and spacing requirements for most vegetables can be found on the seed packet or plant tag. A container can sustain only a certain number of plants, therefore, it is important to limit the number of plants based on the container size and the eventual size of the plant at maturity. Always plant more seed than needed in each container, because there is seldom 100% germination and emergence. After the seeds have sprouted and foliage of seedlings is touching, thin plants to the desired number.

Regular fertilization applications using a complete analysis should be followed closely since soilless mixes contain little if any nutrients. There are many kinds of specially formulated fertilizers available. The most common N-P-K formulations are 5-10-10 and 10-10-10. Time-release fertilizer (Osmocote 14-14-14) that releases nutrients over a period of time can also be used. Since many gardeners are heavy-handed when it comes to applying fertilizer, it might be to the plant’s advantage to apply fertilizer at half the label’s recommendation twice as often.

Watering is one of the most important jobs a container gardener will perform. Some vegetables need watering every day, depending on container size and weather conditions. The best way to water is with a watering can or sprayer attachment on a garden hose. Be sure the water is cool before applying it to the vegetables, particularly if the hose sits in the sun. Hot water does not stimulate root development. Plant breeders have helped to make container vegetable gardening more practical by breeding plants with compact growth habits and relatively high crop yield. Almost any vegetable can be adapted to container culture. The following is a listing of some of the common container-grown vegetables, container sizes, and recommended varieties:

Continued on the next page
<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Type of Container</th>
<th>Recommended Varieties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, Snap</td>
<td>5 gal window box</td>
<td>Bush Romano, Bush Blue Lake, Tender Crop</td>
</tr>
<tr>
<td>Beans, Lima</td>
<td>5 gal window box</td>
<td>Henderson Bush, Jackson, Wonder Bush</td>
</tr>
<tr>
<td>Beets</td>
<td>5 gal window box</td>
<td>Little Egypt, Early Red Ball</td>
</tr>
<tr>
<td>Broccoli</td>
<td>1 plant/5 gal pot; 3 plants/15 gal tub</td>
<td>Green Comet, DeCicco</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>1 plant/5 gal pot; 2 plants/15 gal tub</td>
<td>Jade Cross</td>
</tr>
<tr>
<td>Cabbage</td>
<td>1 plant/5 gal pot; 3 plants/15 gal tub</td>
<td>Dwarf Morden, Red Ace, Early Jersey Wakefield</td>
</tr>
<tr>
<td>Chinese Cabbage</td>
<td>1 plant/5 gal pot; 3 plants/15 gal tub</td>
<td>Michihili, Burpee Hybrid</td>
</tr>
<tr>
<td>Carrot</td>
<td>5 gal window box at least 12 inches deep</td>
<td>Short &amp; Sweet, Danvers Half Long, Tiny Sweet</td>
</tr>
<tr>
<td>Cucumber</td>
<td>1 plant/gal pot</td>
<td>Patio Pik, Spacemaster, Pot Luck</td>
</tr>
<tr>
<td>Eggplant</td>
<td>5 gal pot</td>
<td>Slim Jim, Ichiban, Black Beauty</td>
</tr>
<tr>
<td>Lettuce</td>
<td>5 gal window box</td>
<td>Salad Bowl, Ruby</td>
</tr>
<tr>
<td>Onion</td>
<td>5 gal window box</td>
<td>White Sweet Spanish, Yellow Sweet Spanish</td>
</tr>
<tr>
<td>Pepper</td>
<td>1 plant/2 gal pot; 5 plants/15 gal tub</td>
<td>Sweet Banana, Yolo Wonder, Long Red Cayenne</td>
</tr>
<tr>
<td>Radish</td>
<td>5 gal window box</td>
<td>Cherry Belle, Icicle</td>
</tr>
<tr>
<td>Spinach</td>
<td>5 gal window box</td>
<td>Dark Green Bloomsdale</td>
</tr>
<tr>
<td>Squash</td>
<td>2 gal pot</td>
<td>Scallopini</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Bushel baskets; 5 gal pots</td>
<td>Tiny Tim, Small Fry, Sweet 100 Patio, Burpee's Pixie, Toy Boy, Early Girl, Better Boy VFN</td>
</tr>
</tbody>
</table>

**Container Vegetable Gardening – cont’d**

*Image from: extension.oregonstate.edu/*
UPCOMING EVENTS

Low Impact Living Series (see article in this newsletter and the enclosed brochure)

Asheville Herb Festival
What: The 20th Annual Asheville Herb Festival
When: Friday, May 1, 9 a.m. - 5 p.m.
Saturday, May 2, 9 a.m. - 5 p.m.
Sunday, May 3, 10 a.m. - 3 p.m.
Where: WNC Farmers Market, Asheville, North Carolina
Who: More than 55 herb businesses from North Carolina and the southeast. The festival is sponsored by the North Carolina Herb Association and the North Carolina Department of Agriculture.
What you’ll find
Products: The largest selection of herb plants anywhere, plus herbs, herb books, herbal soaps, crafts, vinegars, medicinal herbs, lotions, tinctures, teas, dried flowers, herbal baked goods, herbal gifts
Info Booth: NC State University herb specialists and Master Gardeners from Asheville area are on duty to answer your gardening questions
Food: Herbal and fresh-made lunches, herbal baked goods
More info at ashevilleherbfestival.com

Pesticide Recertification Classes
June 2, 2009 - 5:30pm – 7:30pm at Madison County Extension Office
2 hours of “X” credit

June 16, 2009 - 5:30pm – 7:30pm at Madison County Extension Office
2 hours of “V” credits

June 9, 2009 - 3:00pm – 5:00pm in Asheville, NC
2 hour credit A B G H I K L M N O T D X
Contact: Amanda Stone - (828) 255-5522

September 1, 2009 - 3:00pm – 5:00pm in Asheville, NC
2 hour credit V
Contact: Amanda Stone - (828) 255-5522

September 1, 2009 - 6:00pm – 8:00pm in Asheville, NC
2 hour credit A B G H I K L M N O T D X
Contact: Amanda Stone - (828) 255-5522
If you would still like to receive this newsletter, please call our office at 828-649-2411. We can send via snail mail or email, specify your preference when you call. Thank you!!

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