Discouraging Snakes from Residing in Your Home Landscape

There are many methods of repelling snakes from your home or garden, however many of them are actually myths or “wife’s tales.” Mothballs or flakes composed of naphthalene or paradichlorobenzene do not deter snakes from hunting prey or finding a cool resting place. They are however, a potential poisoning hazard to children and pets. Sulfur does not repel snakes and will actually embed under the scales of a snake and cause irritation if they cross over a sulfur barrier. This may make a snake especially ill tempered or aggressive due to its discomfort. Lime is also a dud when used to repel snakes. Hydrated lime or quick lime can cause severe skin burns to wildlife, pets, or humans if it comes in contact with moisture.

The best method to use in deterring snakes is to control the food source they are after. Rodents are the diet of choice for snakes and can be controlled in a variety of ways. By trimming lower branches of shrubs, mowing grass regularly, and removing brush piles or other rodent and snake hiding spots you will have a greatly reduced chance of having a rodent or snake problem. Also make sure to place all rodent food sources such as bird food, grass seed, and flower bulbs in secure containers that cannot be chewed through or broken into.

Remember, most people are bitten while trying to kill or handle a snake. By using caution and good preventative measures you will be safe and snake free.

Tiffany Shepherd, NCSU Graduate 2011, CES Intern

June Featured Plant
Shrub: ‘Lo & Behold Blue Chip’ Butterfly Bush (Buddleja ‘Blue Chip’ PP# 19991)

Few deciduous plants are as colorful in the summer garden as the Butterfly Bush, which is typically 6 to 8 foot tall. Thanks to the plant breeding efforts of Dr. Dennis Werner of North Carolina State University, a hardy miniature Buddleja called ‘Lo & Behold Blue Chip’ is available for Carolina gardens.

‘Blue Chip’ has a symmetrical, compact spreading habit with violet blue flowers. The blossoms are fragrant and possess malformed anthers that produce little to no pollen. Due to the tiny number of seed heads formed, ‘Blue Chip’ blooms prolifically throughout the summer and fall.

Butterfly Bushes require full sun and good soil drainage. Because of the low spreading habit (2 to 3 feet in height) of ‘Lo & Behold Blue Chip’, it is perfect for the use in the front of landscape beds or in mass plantings. As with most Buddlejas, ‘Blue Chip’ will attract butterflies in abundance. It is deer resistant, drought tolerant and compact enough to grow in containers on a sunny patio.

Hardiness Zones: 5 to 10

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Material obtained from the Extension Gardener Show Stopper Plants.
Blossom End Rot on Tomatoes

Are the bottom ends of the tomato fruits on your tomato plants turning black or leathery? This problem, known as blossom end rot, is very common on tomatoes, though it also occurs on peppers, eggplants, melons, cucumbers, and squash. Blossom end rot is not a disease and does not spread from one plant to another. Instead, it is classified as a plant disorder and is caused by a lack of calcium in the developing fruit. It is very common for the first fruit that develops on a tomato plant to have blossom end rot, but for all tomatoes that develop during the rest of the season to be normal. In other cases, gardeners may lose fifty percent or more of their season’s harvest to this problem. There are several factors that can lead to calcium deficiency in tomato plants, all of which must be managed to prevent blossom end rot from developing at anytime during the harvest season.

Another common cause of blossom end rot is over fertilization with high nitrogen fertilizers. Nitrogen promotes rapid, dark green, leafy growth. Plants that are growing very quickly often cannot absorb enough calcium through their roots to supply the needs of the rest of the plant, leading to blossom end rot developing in the fruits of rapidly growing plants. In addition, any conditions that cause root damage will lead to poor nutrient absorption and blossom end rot. The most common causes of root damage in vegetable gardens are wet soils following heavy rainfall and hoeing too close to a plant’s root system.

Preventing blossom end rot relies on testing your soil to make sure calcium and other nutrient levels are adequate and your pH is in the correct range of 6.0 to 6.5, as well as managing growing conditions to maintain even growth of your tomato plants through careful fertilization and watering. Soils can be tested anytime of the year to determine pH and nutrient content. In NC, soil testing is a free service provided by the NC Department of Agriculture. If your tomatoes are developing blossom end rot, you can pick up boxes from any NC Cooperative Extension office, and send it to the soil testing lab in Raleigh. Results will be e-mailed to you within a few weeks. The recommendations made in the results should be followed when preparing your garden next season to help prevent blossom end rot developing on your tomatoes next year.

To prevent blossom end rot on tomatoes growing this year, keep plants evenly moist by watering during dry weather and mulching around plants. Tomatoes require between an inch and an inch and a half of water each week from rainfall or irrigation to grow best. When rainfall is lacking, water tomato plants once or twice a week in the garden. Soaker hoses are wonderful for watering tomato bushes and other plants because they apply water directly to the ground, instead of wetting plant leaves, which can make disease problems worse. Also, do not use high nitrogen fertilizers, in which the first number on the bag is higher than the rest of the numbers. Instead base fertilizer applications on your soil test results using a fertilizer that has more potassium (represented by the last number on the bag) than nitrogen, such as 5-5-15.

Applying lime to the soil to raise the pH and supply calcium will not help this year’s crop because lime takes several months to react in the soil. In addition, lime must be tilled into the soil 6” to 8” deep to provide much benefit, and is best tilled in at least three months before planting. The same is true for gypsum, sometimes referred to as land plaster, a substance that supplies calcium without raising soil pH.

Liquid calcium sprays are available to spray onto tomato plant leaves to prevent blossom end rot. These sprays will not fix the damage done to already developed fruits, but should prevent future fruit from developing blossom end rot. Liquid calcium sprays are sold under names such as Rot Stop and Blossom End Rot Spray. They should be sprayed onto the leaves of tomato plants in the early morning or late afternoon once every five to seven days over the course of three to four weeks. Continuous application of these sprays can damage plant leaves so they should not be used for over four weeks. Applying these sprays on tomato fruits will provide no benefit since nutrients cannot be absorbed through the skin of developing fruits. Read and follow all label directions when using these products.

Recommendations for the use of any chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the North Carolina Cooperative Extension Service nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical. For assistance, contact an agent of the North Carolina Cooperative Extension Service in your county.
Changing the Color of Hydrangeas

Hydrangeas are fascinating plants in that, unlike other plants, the color of their flowers can change dramatically just by changes in soil. This is a matter of pH and aluminum adjustments in the soil they are grown in. Those who have the most control over the color of their hydrangeas are those who grow them in containers. This is due to the ease of controlling or altering the pH of the soil in a container or small area versus soil in the ground, which is a much larger area. Hydrangeas can often change color on their own when they are planted or transplanted because they are adjusting to their new environment. It is not uncommon to see several different colors on one shrub the following year after planting.

Changing hydrangea blooms from pink to blue involves adding aluminum to the soil. Changing blooms from blue to pink involves removing aluminum from the soil or taking it out of reach of the hydrangea.

To obtain a pink hydrangea, the plants must not take up aluminum from the soil. If the soil naturally contains aluminum, the grower must keep it away from the hydrangea’s root system. Below are tips to obtain a pink hydrangea:

- Add dolomitic lime to your soil several times a year; this will help raise the pH. Try to maintain a pH of 6.0 to 6.2. If the pH rises above 6.4, hydrangeas may experience an iron deficiency. Since hydrangeas take up aluminum best at lower pH levels, raising the pH will help to keep the effect of aluminum out of the hydrangea’s system.
- Use a fertilizer with high levels of phosphorus; this helps to prevent aluminum from creeping into the system of the hydrangea. Choose a fertilizer close to the ratio of 25-
- In areas that naturally produce blue hydrangeas, which are soils with aluminum, consider growing pink hydrangeas in large pots. This may be an easier task than trying to remove the aluminum from your soil, and adding lime every year. If hydrangeas are grown in pots, it would be best to use soil-less mixtures, since these mixes would most likely lack aluminum.

To obtain a blue hydrangea, aluminum must be present in the soil. To ensure aluminum is present, aluminum sulfate can be added to the soil around the hydrangeas. Below are tips to obtain a blue hydrangea:

- Authorities recommend that a solution of 1/2 oz (1 Tbsp) aluminum sulfate per gallon of water be applied to plants that are at least 2-3 years old, throughout the growing season. It is important to water plants well before the application and put solution on cautiously, as too much can burn the roots.
- To make the aluminum more available to the plant, the pH of the soil should be low, 5.2-5.5. Adding aluminum sulfate will be likely to lower the pH of the soil. Another method for lowering the pH is to add organic matter to the soil, such as: coffee grounds, fruit, and vegetable peels or grass clippings.
- If the soil naturally contains aluminum and is acidic (low pH), the color of the hydrangea will have a tendency to be shades of blue and purple.
- The choice of fertilizer will also affect the color change. A fertilizer low in phosphorus and high in potassium is helpful in producing blue color; 25-5-30 is good for this. (Potassium is the last number). Superphosphates and bone meal should be avoided when trying to produce a blue color.
- The easiest way to grow blue hydrangeas in an area with alkaline soil would be to grow them in very large pots using lots of compost to bring the pH down. The above suggestions for bluing would also work for a potted plant. Simply reduce the strength of the aluminum sulfate to 1/4 oz per gallon of water. In a pot, it will be much easier to control the requirements for bluing than trying to maintain your outdoor soil with these strict requirements.
- It is important to have your water tested so that it will not contaminate or change the soil you have so carefully balanced. The pH of the water should not be higher than 5.6.

Limitations to Hydrangea color change include the following:

- White cannot be changed to pink or blue by the gardener. As the plant ages naturally, it may rarely develop pink or red blooms.
- In the South, or other hot climates you will never have a true red hydrangea. One can only achieve a deep pink but never a true red, no matter how much lime is added to the soil.
- The intensity of a color can rarely be changed by the gardener. Color intensity develops for reasons including the heredity of a particular variety, weather conditions or health of the plant. By fertilizing hydrangeas once or twice a year, a more saturated color may result due to the health of the plant being improved.
- Certain varieties of hydrangeas tend to be more in the blue or pink range of colors; however, they will not retain this color if the soil conditions do not favor this color.
Calendar of Events

- Fall Gardening Workshop—July 14, 3pm–5 pm Extension Auditorium
- Extension Advisory Council Meeting—July 25, 6 pm Extension Auditorium
- Private Pesticide Recertification Training “X” Category—September 6, 2pm–3pm Extension Auditorium
- Private Pesticide Recertification Training “V” Category—September 6, 6pm–7pm Extension Auditorium

Surry County BeeKeepers Monthly Meeting
July 11, 2011
7:00 p.m. - 9:00 p.m.
Farm Bureau Basement, Dobson
Surry County Beekeepers have monthly meetings which are held on the first Monday of the month. If you are interested in beekeeping, please contact the Extension Office.

Celebrating Agriculture
September 10, 2011
3:00 pm—8:00 pm
Fisher River Park

Master Gardener Meeting
September 22, 2011 @ 5pm
Extension Auditorium

The Surry Farmers Markets open April 16, 2011 from 9:00 am-12:00 pm in downtown Elkin and April 19, 2011 from 3:30 until 6:00 pm at the Andy Griffith Playhouse parking lot in Mt. Airy. More information can be found online at www.surry.ces.ncsu.edu

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Accommodation Statement
If you are a person with a disability or desire any assistive devices, services, or other accommodations to participate in any of our activities, please call 401-8025 during the business hours of 8:15 a.m. to 9:00 p.m. at least two weeks before the event to request accommodations.