Feature

Wise Water Usage

Shawn Banks

Water is a valuable resource. The way prices have been going up on everything it is important to try and save in every way possible. Wise water usage is one way to save a few dollars. It is not necessary to completely do away with watering in the landscape to save money. Here are a few tips to help conserve water in the landscape.

1. When putting in new trees, shrubs, or flowers choose plants with similar watering needs to go in the same bed. The further the bed is from the house the more drought tolerant the plants should be. Also prepare the soil by loosening the soil down to a depth of 8 to 12 inches. Amending the soil with some compost will help loosen clay soils for better water penetration and increase the water holding capacity of sandy soils.

2. Apply a 2 to 3 inch layer of mulch around all plants. Mulch helps retain water in the soil and reduces weed pressure. Organic mulches, such as pine straw or bark will decompose over time and return nutrients to the soil for healthy plant growth, while inorganic mulches, such as crushed brick or rocks don’t fade away and add a nice element to the landscape.

3. Irrigation should be done on an as needed basis rather than on a time schedule. Most plants only need between $\frac{1}{2}$ and 1 inch of water each week in order to grow and thrive. Irrigation systems that have rain sensors reduce irrigation if rain has fallen during the week. A website available to the public for information on when to water is available at www.turffiles.ncsu.edu/tims. TIMS stands for Turf Irrigation Management System. This system uses the regional radar information to help homeowners and irrigation managers know how much irrigation is needed. This site should be visited regularly to adjust the irrigation on an as needed basis.

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Featured Plant

*Myrica cerifera*
Southern Wax Myrtle

Here is a native evergreen that has a pleasant aroma and can prove useful to both man and animal. The gray green foliage has a fragrance when crushed similar to that of bayberry candles. On hot summer days the fragrance is evident even without crushing. The fragrance is said to repel insects, particularly fleas and cockroaches.

![Southern Wax Myrtle photo taken by Shawn Banks](image)

The tiny, yellow flowers are inconspicuous and can be found in the spring. When pollinated they produce a bluish purple berry that is covered in a gray wax. This wax can be boiled off the berry to produce wax that can then be used for candles and soaps. When the berries are left on the plant they are used as a source of winter food for many different kinds of birds.

This plant can grow to reach heights of about 30 feet, it can be pruned as a hedge, or it can be pruned into odd shapes as a specimen plant like a bonsai tree. Its fast growth rate makes it an excellent choice for a screening plant in full sun to partial shade. It can grow in most any soil type and is most often found in the wild near lakes, streams, and swamps. It can also be grown in very dry sites with very little trouble once it has become established. The roots of the wax myrtle can fix atmospheric nitrogen allowing it to grow in very poor soils.

![Leaves and berries of Southern Wax Myrtle picture taken by Shawn Banks](image)

This is truly a wonderful small tree or large shrub that is easy to find at most garden centers.

By Shawn Banks

Upcoming Events

- **Plant Clinic** at Clayton Farm and Community Market Saturday, June 19 from 9:00am until 1:00pm. Master Gardeners will be there to answer gardening questions and identify garden pests, weeds, and disease problems.

- **Pollinator Festival** at Howell Woods Environmental Learning Center on Saturday, June 26 from 9:00am until 4:00pm. Learn about native pollinators and enjoy the activities for all or part of the day. For more information visit the events page at Johnston.ces.ncsu.edu.
Insect Investigator

Ground Beetles

Family: Carabidae
Order: COLEOPTERA

There are over 2200 species of ground beetles in the world. Most ground beetles are predators that feed on other insects such as grubs, slugs, snails, and a wide variety of caterpillars. There are a few species that feed on seeds or pollen.

Most ground beetles are nocturnal, meaning they hunt at night, and may be attracted to porch lights. During the day they most often hide under rocks, logs, or other structures. If they are disturbed they will run. Although they have wings most do not fly. For some the outer set of wings (elytra) are fused together making it impossible to fly.

They are most often black, but some have different colors as markings. As with all members of the order Coleoptera the elytra are hardened to form a shell over the abdomen. Most will have parallel ridges extending the length of the elytra. Another distinguishing feature is the threadlike antennae that most often have eleven segments and extend out in front of the head.

Figure 3 Ground beetle picture provided by NCSU Entomology Department

Sometimes these beetles will get into the house and can be confused with cockroaches or carpet beetles. If they do get into the house they can simply be swept up and put outside where they can do the most good.

What’s in Season?

Eggplant

Solanum melongena

Family: Solanaceae (nightshade)

By Shawn Banks

Eggplants are a fruit recognized as a vegetable. They were so named because the fruit on some varieties looks like small white eggs. Being native to Asia, they are not as familiar to many consumers here in the US. Botanically speaking, eggplants are closely related to tomatoes.

Eggplants are grown as an annual here in North Carolina. Reaching heights of 18 inches to nearly 5 feet depending on the variety grown. Growing them the same as a tomato plant, may reward you with an abundance of white or purple fruit. Here in NC they are available in June and July at local farmer’s markets. Year round produce is available from California, Florida and Georgia.
Eggplants are a good source for many nutrients such as a complex of B vitamins, vitamin C, and potassium. Both the white and purple colored fruits can be prepared in the same manner. White eggplants will typically possess a tougher skin than purple fruiting varieties. Neither type can be eaten raw. It is best to cook, bake or grill them before eating.

Preserve them in a cool, dry location such as the refrigerator. They can last up to four days. Eggplants will become soft and wrinkly if left out at room temperature too long.

Eggplant Parmesan

**Ingredients:**
- 1 large eggplant, about 1 1/2 pounds
- 2 eggs, beaten
- 1 1/2 cups fine, dry bread crumbs mixed with 1/2 teaspoon salt and 1/2 teaspoon ground black pepper
- olive oil
- 2 cans (8 ounces each) tomato sauce
- 1 teaspoon dried leaf basil
- 1/2 teaspoon dried leaf oregano, crumbled
- 16 ounces sliced mozzarella cheese
- 1/2 cup grated Parmesan cheese

**Preparation:**
Directions for Eggplant Parmesan
Wash eggplant and cut crosswise into 1/2-inch thick slices. Dip into beaten eggs then dredge with seasoned bread crumbs. Place slices on a plate and chill for 30 to 45 minutes. Heat about 1/8-inch of oil in a heavy skillet. Fry eggplant on both sides until golden brown and crispy. Drain well on paper towels. In a saucepan, heat tomato sauce, basil, and oregano. Spread 1/3 of the sauce in a greased 12x8x2-inch baking dish. Layer half of the eggplant, half of the mozzarella cheese slices, another 1/3 of the sauce, and half the Parmesan. Repeat layers. Bake at 350° for 30 minutes, or until hot and bubbly.
Eggplant Parmesan serves 6.

**Pre-emergence** *(Cont. from pg 1)*

4. Watering between the hours of 10:00pm and 8:00am will increase the amount of water absorbed into the soil and reduce losses from wind and evaporation.

5. Decide now, before the main summer heat if irrigation will be used on turfgrass or not. It does less damage to let the grass go dormant during the summer heat than to let it begin to go dormant before watering to revive the lawn.


**June Garden Tasks**

**LAWN CARE**
- When do you water your lawn? When the grass blades are just starting to curl and your footprints remain on the lawn when you walk on it. Apply an inch of water in the early morning, this allows the lawn to dry during the day. The ground is dry so cycling the irrigation applying a little at a time will allow the water to soak deep into the soil.
- It's a good time to plant new sod in damaged areas. Get your soil tested first (we have free kits).
- Grasses vary in their needs for nutrients, mowing height and watering. To learn how to best care for your grass type check out the Lawn Maintenance Calendar for your grass and learn how best to care for it, month by month ...
- This is NOT the time for planting or fertilizing fescue! Wait until the fall.
- Mow fescue at a height of 3 - 3 1/2 inches to help it survive hot, dry periods. It’s a
cool season grass that slows down in the summer. If cut too short the tender roots will be exposed to extreme heat which will damage, if not kill, it. It’s also difficult for fescue to recover from being cut too short, as it is not actively growing at this time.

TREES, SHRUBS & ORNAMENTALS

• Prune climbing roses after they bloom. Fertilize them to stimulate new growth. This summer's growth carries next year's buds, so keep the plants growing vigorously! Train long shoots horizontally to stimulate more branching.
• As soon as their foliage dies, dig bulb clumps that have become crowded: daffodils, crocus, Dutch iris, etc. Divide and replant bulbs immediately, or store them in a cool, dry place for planting this fall.
• Give plants room to grow. Pull/transplant excess seedlings of marigold, cosmos, zinnias, etc. Growing plants need room to develop. Spacing plants properly reduces the risk of fungal diseases like powdery mildew.
• Remove faded flowers. Many annuals and perennials will stop blooming once they've started to set seed. Dead heading or removing spent flowers will prolong the bloom period.
• Pinch growing tips of ornamentals. Pinching the growing tips will encourage compact, sturdy, branched growth with lots of blooms.
• Protect plants from dehydration. Transplanting on overcast days, early in the morning, or late in the afternoon will reduce water loss in transplants. Keep newly-planted ornamentals well watered for the first several days. Apply a 2-3" layer of mulch to conserve water and keep roots cool.

EDIBLES

• Squash plants wilting? squash vine borers may be the culprit. Check near the base of the plant for a small hole and a mass of greenish-yellow excrement. Slitting open the stem may reveal the villain: a fat, white caterpillar. It may be possible to save the plant by removing the caterpillar, then covering the injured vine with moist soil to encourage rooting.

LANDSCAPE IDEAS

• Tropical plants make excellent additions to our gardens in the summer, with colorful foliage, bright flowers, and heat-loving constitutions. They can't survive our winters, but we can try over-wintering our favorites indoors. More exotic tropicals, such as Alternanthera (Joseph's Coat), Plectranthus (with lovely gray felty leaves), and Acalypha (Copper Plant), are becoming available. Visit the J.C. Raulston Arboretum at NCSU to see first-hand how tropicals can spice up our summer gardens.
• Mulch flowerbeds and vegetable gardens now to save on watering chores later. The mulch you choose should be one you think enhances the beauty of your garden.
• Keep outdoor potted plants watered; in the heat they lose a lot of moisture. If you're going on vacation, ask a friend to check your plants regularly.

HOUSEPLANT

• Water houseplants as needed. Do not allow them to dry out to the point of wilting, but watering too often will lead to root rot. Watering needs will vary according to the size of the plant and the container it is in.
• If moving plants outside for a summer vacation, move them slowly into the light. If put directly into the light after being in the house all winter the sun will give them a sunburn and could kill the plants.
• Remember to fertilize. This is the time when most houseplants will be doing the most growing and will need the nutrients to stay green and healthy.