Plant propagation can be easy, fun, and rewarding for home gardeners. Vast knowledge is not necessary. No specialized equipment is needed. High energy is optional. Only the desire to create new plants from existing plants is mandatory.

**Use reference materials:** Do not worry about what you do not know. Books and the Internet provide information on how and when to propagate most everything growing in your garden. There are even streaming videos that teach techniques for taking cuttings and making divisions.

**Minimal purchases:** The one thing you must buy is quality potting soil. Sterile and loose, a good potting medium promotes quicker root development with fewer insect and disease problems. If your enthusiasm for propagation results in dozens of potted starts heading unprotected into winter, consider acquiring next year’s supply of potting soil and bagged mulch in the fall. Stacking the bags in a rectangle and covering the center opening with an old window or door makes an excellent cold frame.

Rooting hormone can be helpful but it is not necessary. If you plan to take a large number of stem cuttings, investing in rooting hormone will increase your chances for success.

An inexpensive, long, serrated knife is a terrific tool for cutting through plant crowns and severing offsets from the parent plant.

Pots can be as simple as used milk cartons, vacuum seal coffee bags, and fast food drink cups. Make sure all containers have drainage holes at the bottom. If someone is kind enough to gift you with used pots, washing them before planting is recommended to reduce the chance of infections. Using dirty pots does introduce an element of risk but often yields a new plant.

**Seeds:** Collect seeds on a dry day. Look for them where a flower formed. You will find a brown, spent flower, capsule, pod, fruit or vegetable. Seeds must be gathered when they are ripe. While a dark color signals maturity for many seeds, it is not a reliable indicator. Seeds are ripe when they are ready to fall to earth.

(Continued on page 3)
Featured Plant

Pinus palustris
Longleaf Pine

“Here’s to the Land of the Longleaf Pine........”
The North Carolina Assembly adopted this poem as the official toast and song of the State of North Carolina by Leonora Martin and Mary Burke Kerr.

At one time the longleaf pine’s range extended from the Southeastern Virginia coastal plain, through nine Southern States to Eastern Texas. The species also can be found in the Piedmont and mountain areas of Alabama and Georgia. The tree can live to be over 250 years with some trees documented in excess of 450 years.

During the time of the Indians, the longleaf pine forests were burned to create a habitat for plants and animals the Indians needed for survival. Over time, the frequent fires created a forest comprised of fire –tolerant long leaf pine. This was the forest that the American settlers first found.

The tree was found to be rich in gummy resin that produces tar, pitch and turpentine. Pitch was important for use in caulking wooden ships. Most of the virgin longleaf pine forests were cut prior to 1930 for use in building navel ships.

Howell Woods, a recreational and woodland area owned by Johnston Community College and located south of Smithfield, has planted a number of longleaf pines.

The longleaf pine has another distinction. The Order of the Longleaf Pine is the highest civilian honor presented by the State of North Carolina to individuals who have shown dedicated service to North Carolina.

By John G. Lampe

Upcoming Events

Fruit Tree Training and Pruning Workshop will be held Saturday, March 6th at Central Crops Research Station located on Highway 70 business near the Wal-Mart in Clayton. The class will begin at 10:00 am and lasts for about 2 to 3 hours. Please contact Shawn Banks by phone 989-5380 or e-mail shawn_banks@ncsu.edu to preregister for this free workshop.

Master Gardener Plant Sale is going on now. Orders need to be in by March 22 with the pick up date of March 27. For more information call 989-5380.
Upcoming Events (continued)

Growing Muscadine Grapes in NC will be held March 19th at 10:00am until 12:00pm at the Wayne County Cooperative Extension Center, 208 West Chestnut Street, Goldsboro, NC. Connie Fisk, NC State Muscadine Grape Specialist, will be giving the presentation. Space is limited so preregistration is required. Contact Diane at (919) 731-1525 to register by March 17th.

Living Legends: Plants of the Southern Garden is part of the JCC Arboretum lecture series and will be held March 23 from 5:30pm until 8:00pm at the Arboretum Mobil Unit. This is part of the Southern Garden program and will focus this year on the plants in the gardens. It will start with a tour of the arboretum plants and conclude with a presentation. There is a cost of $15.00 for this event. Preregister by calling 209-2052 or 209-2184.

Pesticide Disposal Day will be held on March 25th from 10:00am until 2:00pm at the Johnston County Livestock Arena located at 520 County Home Road, Smithfield, NC. Bring any banned, out dated, or unwanted pesticides to the livestock arena on this day to have them properly disposed of by the North Carolina Department of Agriculture and Consumer Services. For more information call 989-5380.

Insect Investigator

Lacewing
Chrysoperla carnea
Order:

The common green lacewing (Chrysoperla carnea) occurs throughout North America, while other species are more restricted in distribution. Green lacewing adults are around 1/2 to 1 inch long and light green with netted wings that are held roofoilike over their bodies at rest. This slow-flying, nocturnal insect feeds on nectar and pollen, and emits a foul-smelling fluid from special glands if captured.

An adult female may lay up to 400-500 eggs. The oval, pale green eggs are attached to the end of a hair-like stem. In a few days they hatch. Larvae develop in about two weeks, but two months may be needed before the next generation of adults appears. There are usually 2-4 generations per year.

The larva, commonly called an aphidion, resemble a green-gray alligator with mouthparts like ice tongs. An aphidion seizes its prey with long, sickle-shaped jaws, injects paralyzing venom, then sucks out the body fluids of its prey. After 2-3 weeks of feeding the larva reaches ½ inch in length. The larva then spins a spherical, white silken cocoon in which it pupates. The adult emerges in about 5 days through a round hole that it cuts in the top of the cocoon. Lacewings may overwinter as a pupa within its cocoon or as an adult, depending on the species.

Propagation (Cont. from pg 1)

Some plants like Cardinal flower and foxgloves have tiny seeds that are most easily collected by shaking them into a paper envelop. In contrast, rain lilies, palms, and alliums have large, easily visible seeds. There are plants whose seeds become apparent only after the spent blossom is plucked and crushed. Seeds encased within wet flesh require cleaning and drying before storage. Over time, experience teaches you how and when to gather seed. In the meantime, the books and the Internet can guide you.
Doing nothing can be an excellent method of propagating plants by seed. If your garden soil is broken or mulched, seeds may flourish where they contact ground. Sprinkling a bit of gravel around a seedy plant increases the likelihood of seeds staying in the vicinity of the mother plant.

The do-nothing approach eliminates the need for storage or special handling. Tiny new plants do not require special winter protection as the soil insulates their roots. Verbena-on-a-stick, lantana, palms, and melampodium are just a few of the plants that volunteer readily by seed. Just dig up the new volunteers when you have the time and materials to deal with them.

Starting seeds in pots or flats can be done indoors or outside. If you have a sunny window or grow lights, there is an advantage to starting many types of seeds indoors—heat may speed germination and reduce chances of squirrels digging in the trays, infections and forgetting to water. Outdoor seed starting is an advantage when seeds need chill time or there isn’t suitable indoor space. In both situations, remember to keep the soil moist.

**Division:** Separating new plants from the parent plant is probably the simplest method of propagation. Most easily divided are plants that grow wider by sending out runners above or below soil. Strawberries, itea, coreopsis, and iris are examples of these types of plants. A sharp shovel or spade pressed straight downward will cut off a new start ready for replanting. Make sure each division has both roots and a top.

Plants having an ever-broadening crown like bananas, ornamental grasses, daylilies, and yuccas may also be divided with a sharp shovel. Be careful not to cut the top off the roots. Most gardeners discover that removing the soil from around the plant and then using a saw or serrated knife to cut off a clump offers the greatest insurance that both roots and top are included on all divisions.

No cutting is involved when dividing bulbs. Simply dig up the cluster and pull the bulbs apart. Reset bulbs wherever desired.

**Layering:** Trees, shrubs, and vines are often propagated using this simple technique. On a flexible branch of a tree or shrub, scrap off a small area of the thin bark layer and bend the branch until the wounded area touches the ground. Use a rock or pin to hold the branch tight to the soil. Give the branch at least three months before checking for root development. Do not worry if you forget about it for a year. When you find a significant root system has developed, cut the connecting branch and dig up the new plant.

Ivies, spider plants, and strawberry begonias are just a few of the plants that do not need a wounding before layering. Just use a pin or weight to force contact with soil. Many plants, like forsythia are notorious for layering themselves into any soft soil—you need do nothing but dig-up the volunteers.

If it is more convenient for you, layer plants directly into potting soil filled containers. Remember to water when the soil dries out.

**Cuttings:** Stem cuttings are likely to be your favorite method of propagation. They produce exact replicas of the parent plant in a relatively short time and successfully reproduce a wide variety of plants. Many vines, houseplants, perennials, shrubs, trees, and herbs root readily from stem cuttings.

To take a stem cutting, start at the tip of a branch and work down 2-4 inches. Make a clean cut slightly below a leaf node. Pull off the bottom leaf. Stick the cut end in rooting hormone (if using) and stick it in a container of moist, fresh potting soil. Gently water in the cutting. Cover with glass or plastic using some supports that keep the covering from touching the plants. Place in a shady location. Several cuttings can be started in the same pot.
Cuttings of woody ornamentals can be a tad trickier than those of perennials and houseplants. Check the Internet or a reference book to find out the best time of year to take cuttings. Also check to see if the cuttings should be taken from green, semi-ripe, soft, or mature wood.

On cuttings, strip off all but 3 or 4 leaves. If the leaves are especially large, cut each leaf in half. These steps keep the inside of the cutting moister.

You can tell when roots have formed by lightly pulling on a cutting. There will be slight resistance when the cuttings are rooted. At this point you can remove the plastic covering and move the plants into more sunlight.

Leaf cuttings work well for African violets, air plants, begonias and many succulents like sedums and jade plants. Break off a leaf and stick the wounded end into the soil. Sedums and cacti will root if laid atop soil. A new plant will form at soil level.

Not all seeds or cuttings will survive. Even professional growers have failures. As long as the mother plant is alive, you can try again. As you gain confidence, you might try root cuttings, air-layering, spores, bulb scaling, and grafting. Good luck and have fun.

### March Garden Tasks

#### Lawn Care

- **REMEMBER**, the best defense against weeds is a healthy lawn. Learn how to care for your lawn throughout the year. Visit [TurfFiles](http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html) and click on Turf Tips to learn more about your lawn type. Keep it happy, healthy and weed free.
- Control existing weeds now, before they get large and/or set seed. A little work now will save a lot of trouble later.
- For yards with an established weed problem, use pre-emergent herbicides to kill seedlings as they germinate. Pre-emergent herbicides can be used to control crabgrass and annual broadleaf weeds. Pre-emergent herbicides (according to label directions) should be applied while the forsythia is in bloom, late February to mid-March.
- Sharpen mower blades! A sharp blade cuts. A dull blade tears - making grass susceptible to diseases.

### Trees, Shrubs, and Ornamentals

- Divide fall-blooming perennials that are overgrown, such as asters, primrose, irises, violets, shasta daisies and mums. This is an easy way to enlarge your garden.
- Control leaf gall on azaleas and camellias. Leaf gall, a fungal disease, shows up as swollen leaves covered with a white powdery material. It is unsightly but generally not harmful to the plant. Pick off the affected leaves and dispose of them to avoid spreading the fungus.
- Do not compost diseased plant material.
- Remove protective winter mulch from tender perennials in early March to warm the soil and stimulate the plant to grow.
- Apply fresh mulch in April after perennials have emerged. Mulch helps with water conservation and weed control. [http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html](http://www.ces.ncsu.edu/depts/hort/hil/hil-608.html)
- Spring flowering shrubs such as quince, spirea, forsythia, azalea, Camellia japonia, Carolina Jessamine, viburnum, mock orange, weigela, Oriental magnolia and Indian Hawthorn flower on old growth. Prune them soon AFTER they bloom.
- Time for heavy, rejuvenation pruning of summer-blooming shrubs. Prune holly, Nandina and Beautyberry before new growth begins.
- Althea, Buddleia, Vitex, Crape Myrtle and Pomegranate can be pruned at the beginning of March to stimulate more flower production later.
- For a better show next spring, let the foliage of spring-flowering bulbs die back naturally.
- Are you fighting to keep grass growing under your trees? Or is there bare ground that erodes in heavy rains? Trees usually win in any competition for moisture and nutrients, and turfgrass is not well adapted to life in the shade. Mulch or living groundcovers are better choices than grass under large trees.
Ground covers act as "living mulch." Low-maintenance, shade-tolerant ground covers include pachysandra, periwinkle (vinca), ajuga (bugleweed), liriope or mondo grass.

- A 2-3” thick layer of composted mulch conserves moisture, reduces erosion and provides nutrients to the tree. Keep mulch away from the trunk of the tree to discourage rodents and rot.
- Protect shade tree roots from injury. Remember that most of a tree's feeder roots are near the soil surface, under and just outside the tree canopy. If digging, foot traffic, or vehicles injure roots then damage to the tree can range from slowed growth (minor) to the death of the tree (major!). Some trees, such as dogwoods, are very susceptible to root damage; others, like maples, are more tolerant.

**Edibles**

- Plant cool-weather vegetable crops such as lettuce, mustard greens, sugar snap peas, radishes, onions, potatoes, spinach, and cole crops (such as cabbage and collards) as soon as soil can be worked. [http://www.ces.ncsu.edu/depts/hort/hil/hil-8016.html](http://www.ces.ncsu.edu/depts/hort/hil/hil-8016.html) If a ball of soil crumbles when squeezed in your fist, the soil is workable.

- Take a soil test (we have free kits here) to see how much fertilizer to apply around pecan trees. It's time!
- Beets, broccoli, cauliflower and Chinese cabbage can be started by the third or fourth week of March.
- Now is the time to start seeds indoors for vegetables such as tomato, pepper, eggplant, and others to get a jump-start on the summer growing season.

**Wildlife and Insects**

- Install houses for martins and bluebirds by mid-March. Learn how to build a nest box at [http://nabluebirdsociety.org/plans.htm](http://nabluebirdsociety.org/plans.htm)
- Clean nesting materials out of last year’s bluebird house to make it more attractive to house hunting birds.

**Houseplants**

- Repot houseplants in fresh potting mix.
- Before reusing old pots, clean them with detergent and water, or use a 10% chlorine bleach solution, to remove salts and disease causing microorganisms.
- Wait a month after repotting before fertilizing.