



NC STATE UNIVERSITY NORTH CAROLINA COOPERATIVE EXTENSION

Helping
Carolinians
Increase Their
Knowledge of
Gardening,
Manage Their
Landscape
Investment &
Protect the
Environment

JC Raulston Arboretum Plant Focus

Salvias for the Sage Gardener

Salvias are a staple in many gardens, with good reason. Consisting of dozens of species and cultivars, and encompassing annuals and perennials as well as herbs, you are certain to find one that is perfect for your garden.

Most gardeners are familiar with scarlet sage, *Salvia splendens*. This annual bedding plant prefers full sun, but will perform in partial shade. Provide it with well-drained soil and consistent moisture. While most commonly available in a deep red color, newer cultivars give gardeners a choice of lavender, blue and white blooms. The big selling point of scarlet sage is its long blooming season, from late spring through the first frost.

Mealycup sage, *Salvia farinacea*, is another of the annual salvias, unless you're in the eastern part of the state, where it may be winter-hardy. It reaches a height of 2 to 3 feet with blue, purple or white flower spikes. 'Victoria Blue', 'Strata' and 'Empire Purple' are some of the newer varieties.

Garden sage, *Salvia officinalis*, is the choice for herb gardens, with fragrant leaves that can be used fresh or dried for seasoning meats. Many varieties are available, with foliage ranging from gray-green to purple to variegated forms. Garden sage prefers full sun and well-drained soil, but is rather drought tolerant once established. It is winter-hardy through most of the state. Pineapple sage, *Salvia elegans*, is a nice companion, with a scent that lives up to its name.

Mexican bush sage, *Salvia leucantha*, is a tender perennial that reaches 3 to 4 feet and is also drought tolerant. Flower spikes are long, with purple and white blooms in late summer. Plant in full sun as a specimen or accent plant.

The hybrid perennial salvias, *Salvia x superba*, are the best choice if you want perennials and live in the Piedmont or mountain region. Many excellent varieties are available, including 'May Night', 'East Friesland', 'Blue Queen' and 'Rose Queen'.

The JC Raulston Arboretum currently displays more than 20 different salvias. Compare their great diversity in the enormous Perennial Border and within the adjacent annual trials area. *Paul McKenzie*



Mealy Cup Sage
Robert E. Lyons ©

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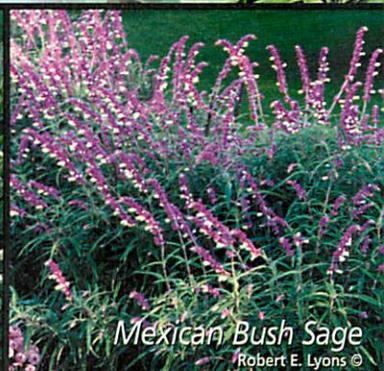
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Scarlet Sage
Robert E. Lyons ©



Silver Mealy Cup Sage
Robert E. Lyons ©



Mexican Bush Sage
Robert E. Lyons ©



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Visit Gardens of Master Gardeners

The Garden Conservancy Open Days Program in Charlotte is a great opportunity to visit seven private gardens that will be open to the public September 14 and 15. The Garden Conservancy is a national nonprofit organization founded in 1989 to preserve America's finest gardens and to open the gates of these gardens for public education and enjoyment. Among the seven private gardens open to the public to benefit these preservation efforts are several belonging to Extension's Master Gardenerssm. For details, call Lindie Wilson at (704) 374-1650 or Ann Armstrong at (704) 366-0954.

Time to Jump-Start Your Cool-Season Grass

The thought of having a lush, green lawn is a nice one. However, perhaps Kermit the Frog said it best when he said it wasn't easy being green. Fortunately, a lush green lawn doesn't have to just be a dream. It can be an attainable goal. With a moderate amount of work, it's possible to establish and maintain one. Timing is the key and the fall season is the time to work on your cool-season lawn. Cool-season grasses, such as tall fescue, perennial rye and Kentucky bluegrass, grow best during the cooler months of the year, going semi-dormant during our hot summers.

The first step, and perhaps the most important one in establishing a new lawn, is to conduct a site analysis. Just because you want a healthy stand of grass doesn't mean you have the growing conditions in which grass can grow.

To begin with, survey what existing grass you have. How much of the existing grass is desirable? If the existing vegetation is mostly made up of weeds, then starting completely over may be the best thing to do. However, if your grass is comprised of less than 50% weeds, then simply seeding over the existing grass may be an option.

It's also important to identify the various insect, disease and weed pests that you find currently in your yard. Knowing what you have and why it is there will help you to put together the appropriate control strategy.

On the other hand, some of the problems with grass are not caused by living pests. Many are abiotic or nonliving factors. Compacted soils make it hard for grass to put down strong, healthy roots. Too much shade or root competition from trees can also make it difficult for your grass to look healthy. Are there areas that stay too dry or too wet? Addressing these abiotic factors before renovating or reseeding will help to go a long way in the success of growing a healthy stand of grass.

Whether you decide to overseed or to start over, you can't go wrong with a soil test. Knowing the fertility needs of your lawn in advance will put you on your way to a healthy and attractive stand of grass. The test results will let you know how much lime, nitrogen, phosphorus and potassium your lawn needs.

Renovating or Planting a New Lawn

When it comes to renovating the lawn, it is very important to emphasize good soil preparation. Till the soil to a depth of 6 to 8 inches. This is

where the majority of the roots will be found. You also can incorporate lime and fertilizer to your soil, based on the results of your soil test. After this has been done, rake the soil in order to form a nice seedbed.

Once your seedbed is formed, then it's time to overseed. Cool-season grasses grow best when the temperatures are cooler, making September and October ideal times to plant. This is the easy part as you will simply spread 6 to 8 pounds of seed per 1000 square feet. The harder part will be keeping water on the newly planted seed in order for it to germinate and grow. You may have to water the new seed about twice a day for the next three weeks in order to ensure uniform germination.

Working with an Existing Lawn

Before you put seed on your existing grass, it is important to address the soil's needs. Many times a poor stand of grass may be due to compacted soil. A core aerator can fix this problem. It pulls out 2- to 3-inch plugs of soil. This will help introduce oxygen into your soil, allowing healthy roots to form.

Before you apply the seed, add the soil amendments that your soil test called for. They can simply be applied on top of the existing soil. After you seed, keep the lawn watered. Water is the most critical factor involved in getting the grass to establish.

For more information on cool-season grasses and their care, contact your local Cooperative Extension Center and request Carolina Lawns or visit the Web at www.turffiles.ncsu.edu/pubs/ag69.html. **Ben Dungan**

Soil Test Kits Available

A soil test is the best way to find out what your soil needs to grow healthy turf or plants. Stop by your county Cooperative Extension Center for a free kit and instructions.

Q&A How can I control kudzu?

Kudzu can be controlled with regular tillage.

Several herbicides will also work. Glyphosate (Roundup and numerous other brand names) is the least expensive. Glyphosate kills kudzu best within two weeks of blooming. Individual patches may bloom at different times but many patches will bloom in August. Sometimes glyphosate kills the kudzu in one year but normally it takes two or three years of treatment. Clopyralid (Lontrel or Transline) works better, but costs more. Late May or June is the best time to use clopyralid. Triclopyr amine (Garlon),

sulfometuron methyl (Oust), metsulfuron methyl (Escort) and fosamine (Krenite) also are effective but are usually not packaged in homeowner-sized containers. If the kudzu is too tall to spray, cut the vine and treat the stump. Triclopyr amine would work best for a stump treatment but the average homeowner will probably use glyphosate. You may get regrowth but it will be low enough to spray. Kudzu can be contained with herbicides containing dicamba (Banvel) although the results don't look very good. Banvel works best early in the year when the kudzu is actively growing. Close mowing will also keep kudzu in check. *David Goforth*

Healthy Pines Best Defense Against Beetles

If you're a homeowner with pine trees, keeping them healthy is the best defense against pine beetles. But just in case, you need to know how to identify and deal with these harmful insects. Many trees are removed unnecessarily because pine beetles were suspected but not found.

Here are some helpful clues. Check for sawdust or "pitch tubes." Pitch tubes are glue-like balls of resin that can be white to reddish and are found in the crevices of the bark. The pitch tubes are caused by the beetle. The adults bore into the wood and carve galleries to lay eggs. In some cases, just one beetle can kill a tree because they may carry a fungus that clogs up water transport.

In other cases, beetles can attack the tree but are repulsed by the tree's defensive systems and the tree survives. Once in the tree, the beetles may or may not kill the tree and nothing can be done. If sawdust or pitch tubes are found, wait until the needles start to turn red. At that point, cut the tree down and have it removed. Do not use any of the tree for mulch.

No sprays effectively prevent pine beetles. The proximity of other trees is another stress factor that may invite pine beetles. Check www.ces.ncsu.edu/depts/ent/notes/O&T/trees/index.html for more information.

John MacNair

ENVIRO-TIP

Sea Oats Help Preserve Sand Dunes

North Carolina's beaches are one of our most valuable natural resources. From the unspoiled beauty of the Outer Banks, to the many developed beaches that are ideal for family vacations, our beaches provide wildlife habitat, relaxation and tourism dollars for coastal communities. The defining feature of our beaches is the sand dunes. For coastal landowners and vacation goers, dunes provide the only protection we have against property damage from our frequent storms. And in spite of their desert-like appearance, the dunes provide habitat for a myriad of plant and animal species.

These dunes, however, are fragile creations, susceptible to the influences of wind, surf, storms and humans. They are held together only by the vegetation that colonizes their surfaces, vegetation that must be adapted to

the harsh coastal environment of wind, sun and salt. When a dune is damaged or destroyed, it

can take years to recover.

In recent years, much effort has been spent on preserving dunes by planting vegetation that is adapted to these conditions. Although American beachgrass has been widely used for this purpose, it tends to be short-lived under harsh beachfront conditions. A better choice is sea oats, a native plant which is long-lived and spreads by both seed and rhizomes (belowground stems). The roots and rhizomes help stabilize the dune, while the leaf blades actually collect blowing sand, helping to build up the dune.

While visiting the coast, take great care to avoid damaging our fragile dunes. Walking on the dunes is illegal in most communities, and with good reason. Dune vegetation should never be disturbed, and this includes cutting down plants and harvesting seed.

If you have beachfront property and are interested in replanting the dune, contact your county Cooperative Extension Center. Extension educators can provide information on planting dates, plant sources and plant care. *Paul McKenzie*



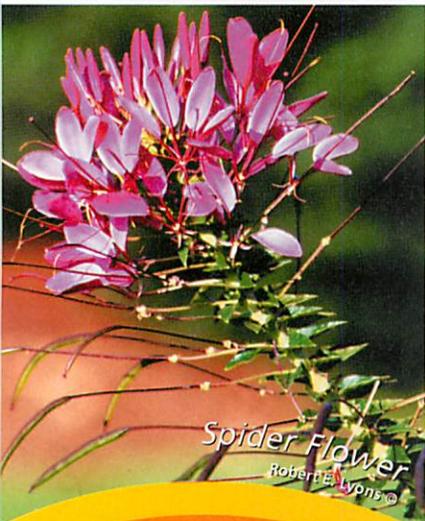
Robert E. Lyons ©

gardentalk

"An optimistic gardener is one who believes that whatever goes down must come up."

— Leslie Hall





Garden Spot

The NC Zoo in

Asheboro has more to offer than exotic animals. Much of the flora can be as fascinating as the fauna. Visit the aviary to see many varieties of tropical plants, from tiny orchids to giant palm trees. The prairie exhibit includes a wide variety of ornamental grasses. The zoo also emphasizes the use of native plants throughout its exhibits. The Schweinitz's sunflower and the cardinal flower, *Lobelia cardinalis*, are just a few of the Southern beauties you will see.

For a look at more domesticated plants, check out the "Touch and Learn Center" to see various herbs, fruit trees and other fruit crops. The TLC also showcases wine grapes, turf varieties and a beautiful array of hanging baskets. Each year the TLC grows a different North Carolina crop such as corn, soybeans, cotton or tobacco. The zoo is open every day from 8 a.m. to 5 p.m. Entrance is \$10 for adults; \$6 for children and seniors over 62. For more information, visit www.nczoo.org or call (800) 488-0444.

Amy Lynn Bartel

Gardening in August

Lawns

- If the weather is very dry, allow fescue lawns to go dormant. An inch of water every 3 or 4 weeks will help ensure that the root system survives.
- Do not apply an insecticide for grubs "just in case." However, if you had grub problems this year, treat the lawn with an insecticide or milky spore bacteria in August and September.
- Warm-season lawns can still be fertilized. Use 1 pound of nitrogen per 1,000 square feet for Bermuda and 1/2 pound for zoysia or St. Augustine. For tips on cool-season lawns, see page 2.

Ornamentals

- Do not prune spring-flowering shrubs such as azalea, forsythia or quince. The flower buds are already formed for next spring's bloom.
 - If houseplants have spent the summer outdoors, inspect them carefully for insects. If they have been attacked by mites, mealybugs or whiteflies, you will want to control these pests early, before bringing them back indoors.
 - Some perennials can be started from seed now for blooms next summer. Sow seeds directly into the garden for Shasta daisies, purple coneflowers, cardinal flowers, lupines and Oriental poppies.
- ### Edibles
- Begin planting the fall garden: cabbage, collards, broccoli, cauliflower.
 - Prune out spent canes from blackberries and raspberries after fruit has been picked.
 - Apply insecticide to the trunks of peach and plum trees, including ornamentals, to prevent attack by peach tree borers.
 - Squash vine borers are active this month. To prevent damage, treat the stems of squash and pumpkin plants weekly with insecticide. Spray in the evening when bees are not active. *Linda Blue*



Extension's *Successful Gardener*SM program provides timely, research-based horticultural information. The newsletter is part of the statewide horticulture program which includes Extension's *Successful Gardener*SM Regional Seminar Series and county workshops. We publish 10 issues per year. Comments concerning *Successful Gardener*SM may be sent to:

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Tune in to "Making It Grow!" – a gardening show featuring Extension agents from the Carolinas. Saturdays, noon, WTVI 42, Charlotte

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