

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

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- Garden Writers Association
- International Association of Business Communicators
- National Association of County Agricultural Agents
- Southern Extension Forest Resource Specialists
- N.C. Association of County Agricultural Agents
- Mecklenburg County Priority Awards

JC Raulston Arboretum Plant Focus

Not-So-Delicate Ferns Add Versatility and Texture

Ferns are one of the most popular and versatile groups of plants. Though many of us may think of the fussy little plants in the plant section at grocery stores or the ones used in hanging baskets, the hardy ferns are quite different. They are as dependable as any perennial.

North Carolina is home to many varieties of hardy ferns. Although they may look delicate and hard to grow, once they become established in the right spot they grow with very little care or maintenance. Most ferns prefer filtered sunlight, though many can tolerate dense shade or direct sun. Keep the soil evenly moist, but not soggy, and rich in organic material – similar to a natural forest habitat.

Hardy ferns come in a large range of colors and textures. They are a good solution when you want to soften the lines of hedges and fences. They provide wonderful backdrops for other plants and can add texture and color underneath existing foundation plantings. Whether in mass plantings or combined with hostas, astilbes and other shade-loving perennials, they make an interesting addition to any North Carolina garden. Most hardy ferns prefer a slightly acidic soil with a pH of 5.5 to 6.5.

One of the finest of the hardy ferns is the Christmas fern, *Polystichum acrostichoides*, an evergreen fern that grows in zones 3 to 9. The hay-scented fern, *Dennstaedtia punctilobula*, does well in zones 3 to 7 and is drought tolerant. It will even withstand salt spray. When its fronds are crushed they emit a smell similar to freshly mown hay.

Find these plants in local garden centers and from numerous catalog sources. Be sure to check your site conditions to ensure the best plant for that location before making a purchase.

To learn more, visit the JC Raulston Arboretum (JCRA) at NC State University. Sheer variety defines the JCRA's fern collections and pure texture typifies their impact in the garden. Meander through the Lath House for some great new ideas!

Donna Teasley



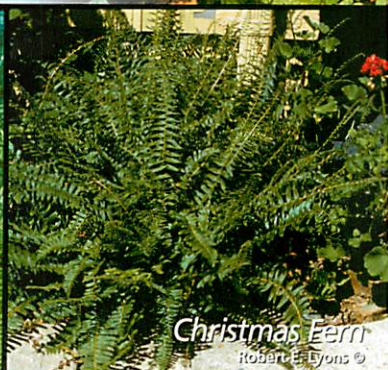
Autumn Fern
Robert E. Lyons ©



Japanese Silver Painted Fern
Robert E. Lyons ©



Maidenhair Fern
Robert E. Lyons ©



Christmas Fern
Robert E. Lyons ©



Robert E. Lyons ©
Black Gum



Robert E. Lyons ©
Red Maple



Robert E. Lyons ©
Sugar Maple

Consider Native Trees for the Landscape

An exciting array of landscape trees is available these days, many of which originated in other countries. Let's not forget, though, about the great native trees we can plant and enjoy.

When it comes to shade trees, the native oaks certainly come to mind. One of the most majestic native trees is the white oak. While it is a slow grower, planting a white oak is a contribution you can make for posterity. Because trees such as the white oak take a long time to reach significant size, it is particularly important to protect native trees during construction projects.

Perhaps the most well-known native oak in the landscape is the willow oak. It can also grow quite large and it grows faster than the white oak. Another popular species is the pin oak. The live oak is an evergreen which can grow well in the Piedmont, though it's native to the warmer regions of the South.

The maples are the other big group of native shade trees. The red maple and its varieties such as 'October Glory' are widely planted and they grow faster than the sugar maple. Keep in mind that with faster growth comes weaker wood, though this should not deter you from enjoying the red maples. They are good choices for shade and beautiful fall foliage. Other trees of varying sizes which provide outstanding fall color are black gum, sourwood and sassafras.

One of the most popular native trees in the landscape is the flowering dogwood. The key to success with dogwoods is good site selection. Try to provide good soil and partial shade if possible. Remember that it is an understory tree in the forest, so try to simulate those conditions.

When you think about native trees with showy flowers, the Southern magnolia has to be on the list. A native of the Deep South, its shiny, evergreen leaves and large, fragrant white flowers are a classic tree in many North Carolina landscapes. There

are many varieties available these days, including some smaller-leaved forms such as 'Little Gem', that are better suited to compact yards.

Mention conifers, and the pines usually come to mind first. Different species of pines perform well in each region. White pines predominate in the mountains but become more problematic as you move east out of the foothills. The longleaf pine does well in the eastern part of the state and is used to a lesser extent in the Piedmont. Check with your Cooperative Extension agent or county forest ranger on which species will perform the best in your area. A conifer that is somewhat unique is the bald cypress. It is one of those rare conifers that loses its leaves in the fall. In spite of the fact that it is native to moist areas in eastern North Carolina, it is an adaptable tree in terms of soil conditions. Its fine-textured foliage is rather distinctive in the landscape.

If you're looking for a native tree with interesting bark, look no further than the river birch. Its peeling bark is its primary ornamental feature. This tree is normally grown as a multi-trunk specimen. Look for varieties like Dura-HeatSM and 'Heritage'. Many good native trees and their varieties are available at nurseries and garden centers in your area.

Another great source of native tree species is the N.C. Division of Forest Resources, which sells bare-root seedlings that are dug and shipped during the colder part of the year when the trees are dormant. The prices are extremely reasonable. A number of species are available. An even greater variety is available if you order one of the special packages. These include the environmental, wildlife and wetland-riparian packs. For information on ordering seedlings from the N.C. Division of Forest Resources, visit www.dfr.state.nc.us/. Click on Tree Seedling Catalog, which is under the Starting a Forest section.

Kevin Starr

Color in the Garden

Many different kinds of flowers are suitable for "colorscaping," with herbaceous perennial flowers topping the list for many landscape designers. The foliage of many plants also adds color. And annuals are popular for many reasons. They usually ensure a long season of bodacious color, dependability, low cost and endless variety in size and texture. How can you not love plants that knock themselves out with blooms from spring until fall?

If you are concerned about your budget, why not try a few bed-

ding plants that are easy to grow from seed? The old standbys like cleome, marigolds, cosmos, zinnia and globe amaranth provide a riot of color. Literally for pennies, your garden will come alive with color.

Plant breeders have worked overtime to produce mixes of common annuals that run the gamut from subtle pastel blends (especially with pansies) to the hot, salsa colors found in the salvia varieties. If

see **Color in the Garden** on page 3 ▶

Q&A

Should I fertilize my landscape trees?

Trees require certain essential elements to function and grow. For trees growing in a forest site, these elements are usually present in sufficient quantities in the soil. Landscape trees or urban trees, however, may be growing in soils that do not contain sufficient available elements for satisfactory growth.

Trees that are growing, and not showing symptoms of nutrient deficiency, may not require fertilization. Trees growing in turf that is fertilized routinely, or where grass clippings are left, may not require supplemental fertilization. Excess fertilizer can lead to an unnecessary increase in growth; it also may leach into lakes and streams,

adversely affecting water quality.

The rate in which to apply fertilizer depends on the age, health and species of the tree, the form of the fertilizer and the site conditions. Younger trees will benefit, but be careful not to apply too much fertilizer since it may damage their roots. Older, more established trees may get by without additional fertilizer because of their extensive root system.

One general recommendation for homeowners is to fertilize in the late spring with a slow-release fertilizer that will carry the plant throughout the summer. Avoid late summer fertilization since it can promote late growth, which is undesirable before winter. Learn more at www.ncstate-plants.net. Click on Consumer Hort Leaflets. **David Barkley**

Color in the Garden

continued from page 2

you are uncomfortable in matching plant varieties to get pleasing color combinations, check a color wheel. Opposites on the color wheel, such as purple and yellow combinations, complement one another. Colors that are next to one another on the color wheel, such as red, orange and gold, harmonize beautifully. Keep in mind that hot colors (red, orange) make a small garden appear smaller. Yellow is a great color to catch the eye and works well as a focal point or accent planting. Pale colors tend to look washed out in the sun but put them in the shade and the effect is quite different. White, silver and gray, whether from flowers or foliage, lead to a quiet, contemplative look.

Clearly, the jewels we call bedding plants are the workhorses in the home landscape. Note your favorite color combinations in others' gardens and in magazines, then try them in your own garden.

Toby Bost

Proper Herbicide Use

Herbicides are powerful tools in the home landscape. The results will be disappointing, however, if the herbicides aren't used properly.

When applying, it's important to get uniform coverage of the site. If you're applying a granular herbicide, evenly distribute the granules. With liquid herbicides, uniform coverage of the leaf surface is the key to success.

When using a product that claims to kill the root, apply it when the weed is growing vigorously so the weed will do a better job of sending the herbicide down to the root. Look for several inches of tender new growth at the tip of each stem or branch.

Never apply liquid herbicides on a windy day. Most herbicides are safe on some landscape plants, but will damage others. It doesn't take much air movement for the spray to end up on the wrong plant.

When applied correctly, pre-emergent herbicides can prevent certain weeds from growing. They often have to be watered in with rainfall or irrigation within a specified time

after application. This disperses the herbicide so that it forms a barrier in the soil where it kills the weed seedlings as they start to germinate.

Few would deny that, in the case of chocolate, more is better. But apply this line of thinking to herbicides and you may run into problems. The company that produced your herbicide spent several million dollars researching exactly how much was needed. Use too much and you may end up damaging your lawn, shrubs or flowers. Even worse, you could contaminate lakes, streams or groundwater.

If a herbicide fails to do the job, then either the weed was misidentified or the herbicide was applied at the wrong time. Adding more herbicide is a waste of your time and money.

Take a sample to your county Cooperative Extension Center for identification. With a knowledge of the weed species and life cycle, you can make a good decision about which product will work best, and when to apply it. As with all pesticides, be sure to read the label. **Paul McKenzie**

ENVIRO-TIP



Robert E. Lyons ©

gardentalk



"Someone's sitting in the shade today because someone planted a tree a long time ago."

— Warren Buffett



'St. Patrick's Day' Daffodil
Robert E. Lyons ©

Garden Spot

Mount Jefferson State Natural Area, located in Ashe County on the New River, is a plant lover's paradise. With the varying altitudes, this national natural landmark, designated by the National Park Service, is home to a wide range of trees, shrubs and wildflowers.

Catawba rhododendrons are one of many featured plants. Sitting nicely under a canopy of various hardwoods, the rhododendrons will be the main attraction in early June on the Rhododendron Trail. In addition to Catawba rhododendrons, you will find mountain laurels, dogwoods and native flame azaleas. Wildflower enthusiasts will delight in the trilliums, pink lady slippers, false lily of the valley and other wildflowers.

The park is open daily, with park hours varying during the year. For more information, call (336) 246-9653 or visit www.ils.unc.edu/parkproject/visit/moje/info.html.

Ben Dungan

Gardening in April

Lawns

- Establish warm-season grass lawns, such as Bermuda, centipede, St. Augustine and zoysia, from mid-April through mid-June.
- Apply fertilizer to warm-season grasses according to soil analysis results. Do not fertilize tall fescue lawns until mid-September.
- Mow grass at the appropriate height for the species: tall fescue at 3 inches, Bermuda at 1.5 to 2 inches, centipede and zoysia at 1 to 1.5 inches and St. Augustine at 2.5 to 3 inches.

Ornamentals

- Clean up after spring-blooming plants. Rake up and remove fallen blooms and leaves. Sanitation is the key to disease management.
 - Prune spring-blooming shrubs following bloom.
 - Fertilize perennials according to soil analysis.
 - Feed roses on a monthly basis and begin a regular spray program to control black spot, aphids, spider mites and other pests.
 - Set out summer annual bedding plants after all danger of frost has passed; begin sowing annuals directly in the garden toward the end of the month.
 - Check woody ornamentals for insects such as aphids, scale and leaf miner. Treat as needed.
- Sow beans and corn at the end of the month in the Piedmont, earlier near the coast and later in the mountains.
 - Transplant tomatoes late in the month. Be prepared to protect in case of frost.
 - Set out perennial herbs like rosemary, thyme and sage. Plant annual herbs like parsley, dill and fennel late in the month.

Royce Hardin



**Friday, April 16 –
Sunday, April 18**

- On the hour and half hour throughout the show
- Southern Ideal Home Show, State Fairgrounds, Raleigh
- Details: (919) 245-2050

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Successful GardenerSM Editor

Department of Communication Services
Box 7603, NC State University
Raleigh, NC 27695-7603

Editor and Project Coordinator: **Leah Chester-Davis**
Extension Communication Specialist

Project Coordinator: **Emily Revels**
Consumer Horticulture Agent, Mecklenburg County

Assistant Editor: **Karen Neill**
Consumer Horticulture Agent, Guilford County

Compilations Editor: **Ben Dungan**
Consumer Horticulture Agent, Gaston County

Contributors:

| County | Name | Phone |
|-------------|---------------------|----------------|
| Brunswick | David Barkley | (910) 253-2610 |
| Burke | Donna Teasley | (828) 439-4460 |
| Cabarrus | David Goforth | (704) 920-3310 |
| Catawba | Fred Miller | (828) 465-8240 |
| Davidson | Amy-Lynn Albertson | (336) 242-2091 |
| Durham | Paul McKenzie | (919) 560-0525 |
| Forsyth | Toby Bost | (336) 767-8213 |
| | J. Stephen Greer | (336) 767-8213 |
| Gaston | Ben Dungan | (704) 922-0301 |
| Guilford | Karen Neill | (336) 375-5876 |
| Henderson | Diane Ashburn | (828) 697-4 |
| Iredell | Donald Breedlove | (704) 873-05 |
| Lincoln | Kevin Starr | (704) 736-8452 |
| Mecklenburg | Emily Revels | (704) 336-2561 |
| Nash | Mike Wilder | (252) 459-9810 |
| Orange | Royce Hardin | (919) 245-2050 |
| Randolph | | (336) 318-6005 |
| Rowan | Darrell Blackwelder | (704) 633-0571 |
| Union | Willie Earl Wilson | (704) 283-3741 |
| Wake | Carl Matyac | (919) 250-1100 |

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