March 2003

EXTENSION'S Successful Gardener sm

NC STATE UNIVERSITY NORTH CAROLINA COOPERATIVE EXTENSION

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

inside

TOP AWARDS RECEIVED FROM:

- 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
- Printing Industry of the Carolinas

JC Raulston Arboretum Plant Focus

Serviceberry, Drought-Tolerant Tree for North Carolina

The serviceberry (*Amelanchier* spp.) is a small tree or shrub with white airy blooms that make it a desirable landscape plant. In the Piedmont, *Amelanchier arborea* beats other spring beauties to the punch, blooming earlier than dogwoods and often earlier than redbuds.

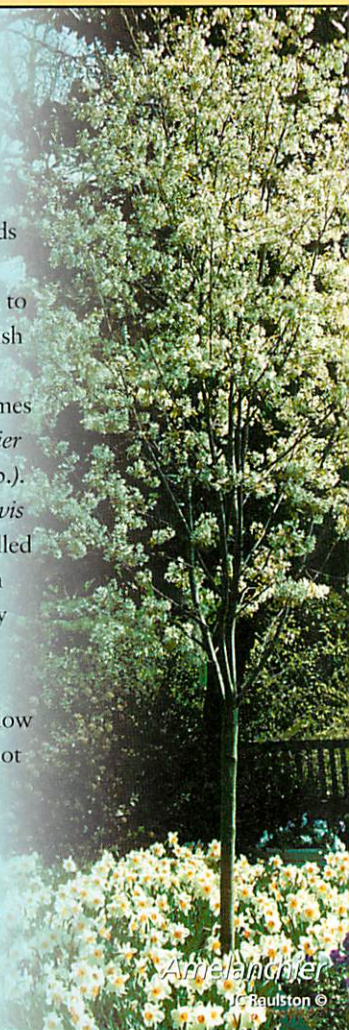
The berries are the size and shape of a blueberry with a distinct taste and can be eaten fresh or used in pies and jams. If you prefer feeding wildlife, birds seem to consider the berries fine cuisine.

The species and most cultivars have good fall color which also contributes to its landscape appeal. Fall foliage varies from yellow to red. The smooth, grayish white bark of young trees and the reddish purple buds add winter interest.

When looking for this tree for your landscape, be aware that common names include serviceberry, sarvisberry, shadbush, shadblow and juneberry. *Amelanchier* is sometimes called a currant by people unfamiliar with real currants (*Ribes* sp.). The names can be confusing, but most named hybrids have *A. arborea* or *A. laevis* in their parentage. These perform well in North Carolina. A natural hybrid called *A. x grandiflora* is good for edible landscaping. *A. alnifolia* is a more northern species and won't do as well in North Carolina. *A. arborea* is often incorrectly sold as *A. canadensis*, which is a small suckering shrub.

Amelanchier does well in full sun to partial shade and thrives in most landscape situations. In nature, *A. arborea* often grows on dry ridges with shallow soils which means it is drought tolerant once established. Insects usually are not a problem. Overfertilization may cause some fireblight. Rust may sometimes occur, which may reduce the yield but will not kill the plant.

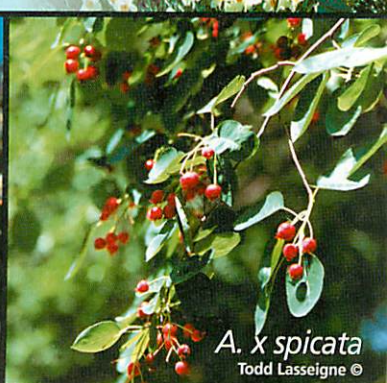
At the JC Raulston Arboretum (JCRA), you will find *Amelanchier* 'Princess Diana' in the White Garden. The flowers are a fitting complement to this garden devoted to the purest of colors. The White Garden is one of the most formal areas within the JCRA. To learn more, visit www.ncsu.edu/jcraulstonarboretum. ***David Goforth***



Amelanchier JC Raulston ©

A. x grandiflora Todd Lasseigne ©

A. arborea Todd Lasseigne ©



A. x spicata Todd Lasseigne ©

Underwriter ▸ Duke Energy

Narrow-Leaf Zinnia

Moss Rose

Globe Amaranth

Conserve Water with Drought-Tolerant Annuals

Warm-weather annuals are durable plants that continue to bloom for months in heat that drives most people indoors. There are a few that perform well even in dry conditions. These are the annuals to consider if you wish to conserve water or have little time for watering. Besides selecting drought-tolerant plants, consider the soil. Conditioning the soil with organic matter helps to retain moisture. All of the following drought-tolerant annuals will require water initially to establish a good root system. Once established, however, they require little watering. All perform best in full sun.

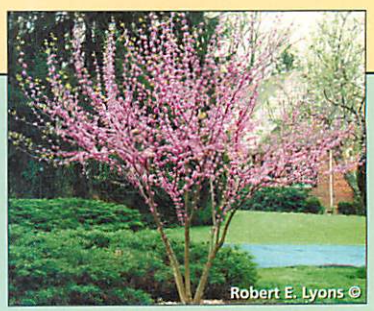
- *Gomphrena globosa*, globe amaranth, is available in purple, white or red. This heat- and drought-tolerant selection is ideal for Southern gardens. *Gomphrena globosa* has a half-inch cloverlike flower that blooms from June through September. The plant matures at a height of 18 inches to 3 feet tall with a 2-foot spread. The globe amaranth is excellent for mid-border or mass planting in a bed. Enjoy the blooms as fresh-cut flowers or dried.
- *Portulaca grandiflora* or rose moss is a low-growing, drought-tolerant annual often called moss rose. Flowers range from white, pink and yellow to red and purple and are found on the terminals. These plants, which bloom all summer, are suitable for dry banks, rock gardens and containers.
- A third heat-tolerant annual to consider is *Zinnia angustifolia*, or the narrow-leaf zinnia. This plant blooms consistently through the heat of the summer and has a yellow-orange daisylike flower with a similar colored center. The narrow-leaf zinnia is ideal for a bed or mass planting because it spreads to fill in the growing space quite well. The plant reaches a height of 18 inches to 36 inches with an 18-inch spread.
- *Tithonia rotundifolia*, or Mexican sunflower, has large, daisy-like flowers up to 3 inches across, resembling zinnias. It makes a nice background plant, standing 4 feet to 5 feet in height. Native to Mexico and Central America, this is one of the most heat-resistant flowers.
- *Gaillardia pulchella* is the annual gaillardia that's known for its low-growing, warm-colored flowers that appear fringed. Also known as Indian blanket, this annual bears flowers with yellow or yellow and red centers and petals that are solid yellow, solid red or red at the base and yellow at the tips.
- *Verbena x hybrida*, clump verbena, is a superb groundcover or a good choice in baskets or in beds. It has a multi-stemmed, weeping-growth habit with a red, pink or white flower. It can be cut back to stimulate additional growth if it becomes too long or leggy. It is more heat tolerant and has fewer problems than many of the verbena hybrids.
- *Melampodium paludosum* has an abundance of small, yellow daisy-like flowers that it retains throughout the summer and well into fall.
- Let's not forget dusty miller, *Senecio cineraria*, the attractive foliage plant that works well in the foreground. Its gray foliage makes it a good plant for bringing other plants together.
- A plant that already has been adopted because of its performance under heat and drought conditions is *Catharanthus roseus*, the Madagascar periwinkle or annual vinca. The newer cultivars of the annual vinca have become quite popular since they bloom well under the heat and drought stress conditions of the South. These vincas come in a variety of colors, including pinks, purples and white.

Plant these drought-tolerant annuals and enjoy their beauty later this summer, when the heat and drought is taking a toll on other plants. **Karen Neill**

Planting Under Power Lines

The ice storm of 2002 and its resulting power outages served as a strong reminder that special precautions need to be made when planting trees or tall shrubs under or near utility lines. Planting trees directly under overhead utility wires often can become a serious problem as the trees grow to maturity. Many power failures experienced during ice or high winds are caused by tree limbs breaking off and becoming entangled in the power lines. Also, trees that have grown up into power lines have the potential to become indirect conductors of electricity, making them harmful or even fatal if people come into contact with them.

When planting a new tree, it is difficult to judge how far the tree's branches will spread at maturity. The result is often a beautiful tree that requires expensive pruning which compromises its natural form. The other option, removal, is also expensive and, of course, the whole tree is sacrificed.



Redbud

see **Power Lines** *on page 3* ▶

Q&A What do the three numbers on a fertilizer bag mean?

Easy as 1, 2, 3, the numbers on the fertilizer bag tell you the percentage of nutrients in the fertilizer and each is important to basic plant nutrition.

Both processed organic fertilizers, such as fish meal, and synthetic fertilizers, such as 10-10-10, are identified by their "analysis," that is, the three numbers on the bag or container. The numbers refer to the percentage of nitrogen, phosphorus and potassium, respectively, in the fertilizer. For example, a bag of 10-10-10 contains 10% nitrogen, 10% phosphorus and 10% potassium.

Nitrogen (N) is essential for green growth such as leaves and shoots, and provides proteins needed for plant growth and development. It is also part of the green pigment, chlorophyll, which is necessary for the process of photosynthesis that uses energy from light to make the compounds required for plant growth. Phosphorus (P) is essential for root development but is really needed for any process in the plant that requires energy such as bud formation and root and shoot growth.

Potassium (K) along with phosphorus is essential for flower and fruit formation, and is important to the overall well-being of the plant. Potassium is particularly important in helping plants to withstand and recover from stress such as that caused by cold temperatures. ***Carl Matyac***

ENVIRO-TIP Rain Barrels Save Water

The drought over the past few years, particularly last year, has many of us thinking about ways to conserve water, and rain barrels can be a big part of the effort. Did you realize that it only takes about 1/10 of an inch of rain to collect 60 gallons of water from an average roof?

Although rain barrels would be easy enough to construct from large drums, the manufactured variety will look better and be easier to install. Many come with an attachment that connects directly to your downspout. A spigot allows you to attach a standard garden hose. Also be sure it has some type of overflow system to direct water away from your house if the barrel fills before the rain stops.

You won't be able to irrigate your whole landscape with water from rain barrels, but combined with other water-saving techniques such as mulching and drought-tolerant plants, you should be able to make a big dent in your water usage. Ideally, place one at each downspout, though only one can be of great benefit. Just keep in mind that you'll have to rely on gravity to move the water, so make sure the spigot of the rain barrel is higher than the bed or plants you'll be watering. The biggest problem is mosquitoes, but these are easily controlled with a fine screen over the barrel. Otherwise, treat the water with a pelleted insecticide containing Bacillus thuringiensis (Bt).

During a dry spell, use the stored water strategically on plants that are most susceptible to drought. These would include flower beds, potted plants or recently planted trees and shrubs.

Last year, some county Extension Centers sold rain barrels to help the public with water conservation. Contact your county Cooperative Extension Center for information on where to purchase barrels. ***Paul McKenzie***

gardentalk

"The frog does not drink up the pond in which he lives."
– American Indian saying

Power Lines

continued from page 2

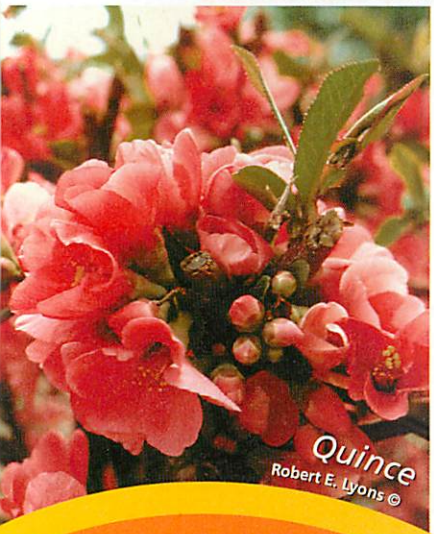
Consider the following criteria when choosing trees to plant under or near power lines.

- Attractiveness and appropriateness for city neighborhoods
- A height of 25 feet or less at maturity
- Low maintenance requirements
- Trees that have no serious insect or disease problems
- Local availability

Trees also are much more than just what you see overhead. Often, the root area is larger than the branch spread aboveground. Much of the utility service provided today is buried below ground. Tree roots and underground lines often coexist without problems. However, trees planted near underground lines could have their roots damaged if the lines need to be dug up for repairs. The biggest danger to underground lines occurs during planting. Before you plant, be sure to contact local utilities finders to locate underground utilities.

Check with your local Cooperative Extension agent, nurseryman or arborist to discuss tree selection before planting. At your county Cooperative Extension Center, ask for the leaflet "Urban Trees for Use Under Utility Lines" or find it at www.ncstate-plants.net. Click on Consumer Horticulture Leaflets. Another helpful Web site is www.duke-energy.com. Click on Customer, then Residential, then Vegetation Management. In addition, many municipalities have tree ordinances with tree boards that have suggestions for planting trees and shrubs under or near utility lines.

Darrell Blackwelder



Gardening in March

Lawns

- Scout your lawn for weeds and identify them for proper chemical control.
- Apply preemergent herbicide for crabgrass control around the time that native dogwoods bloom.
- Reseed bare spots of cool-season grasses such as fescue, before the hot summer temperatures.

Ornamentals

- Divide and transplant perennials such as daylilies, daisies and hostas.
- Prune plants that bloom on current season's growth (summer bloomers such as butterfly bush).
- Prune spring-flowering shrubs this month and in April after they have finished blooming.
- Apply a fresh layer of aged mulch to flower and shrub beds if needed.
- Do not plant tender annuals until the danger of frost has passed for your area. Check with your local Extension Center for frost date for your county.
- Plant container trees and shrubs now so the roots can get established before hot, dry weather.

Edibles

- Plant home garden fruits such as fruit trees, blueberries, grapes and brambles. Your Cooperative Extension Center has a list of fruit varieties for your region.
- Fertilize asparagus early in March before the spears begin emerging. Add a layer of compost if you have not already.
- As your apple, pear and quince trees begin to bloom, spray them with Agri-mycin (streptomycin) to control fire blight.
- Plant spring vegetable transplants of cabbage, broccoli, cauliflower and onions. Plant seeds for lettuce, carrots, beets, spinach, radishes and peas. ***Craig Mauney***

Garden Spot

The Botanical Gardens at Asheville highlight the tremendous diversity of plants found in our Appalachian Mountains. These gardens focus on the native diversity with over 700 species of plants on display. If you want to see wildflowers, try to go in the spring but there will be something to see anytime of year. Among the rare plants the garden contains are the mountain camellias, Oconee bells, mountain sweet pitchers and many terrestrial orchids.

A half-mile walking trail leads visitors across streams, through meadows and over a woodland ridge to a wildflower cove. The gardens are open every day. There is no admission fee, but as a nonprofit organization the Botanical Gardens appreciate donations from visitors. A visitors center and gift shop are open from mid-March through mid-November. For more details about the gardens, visit www.ashevillebotanicalgardens.org. If you don't have access to the internet, give them a call at (828)252-5190.

Kevin Starr

Successful Gardener℠ Regional Seminars 2003

March 7 - 9 ▪ Raleigh Home and Garden Show
▪ Details: (919) 250-1084

March 8 ▪ Hickory Metro Convention Center
▪ Details: (828) 465-8240

March 29 ▪ Southern Ideal Home Show
Greensboro Coliseum ▪ Details: (336) 375-5876

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NC STATE UNIVERSITY A&T STATE UNIVERSITY COOPERATIVE EXTENSION
Helping People Put Knowledge to Work

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

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