

Trees for the Carolinas

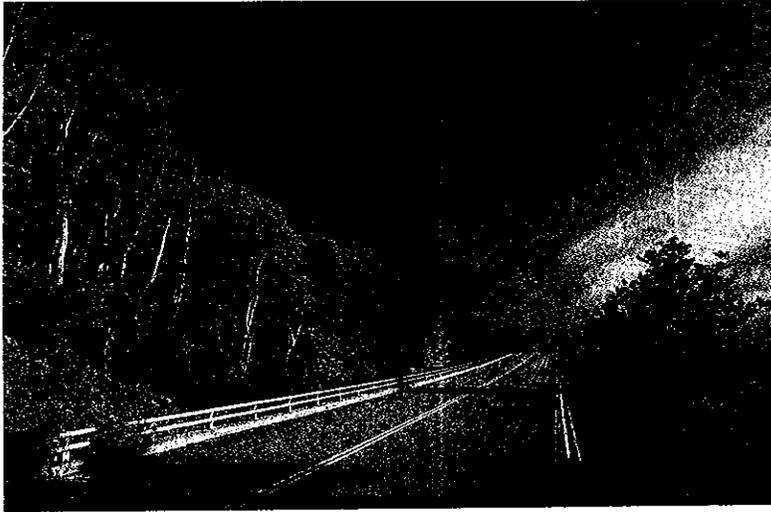


RECOMMENDATIONS
FOR PLANTING TREES
NEAR POWER LINES



TREES. TRADITIONALLY THEY HAVE SYMBOLIZED LIFE, A NEW BEGINNING. THEY PROVIDE SHADE, NOISE SUPPRESSION AND NATURAL BEAUTY TO OUR NOW INCREASINGLY URBAN EXISTENCE. THEY GIVE A PLACE FOR BIRDS TO NEST AND CHILDREN TO CLIMB. THEY BEAUTIFY AND BRING US BACK TO OUR ROOTS. WE AT CP&L SUPPORT HOMEOWNERS' DECISIONS TO PLANT TREES. WE ENJOY ALL THE BENEFITS THAT TREES PROVIDE. HOWEVER, NO ONE LIKES IT WHEN A TREE INTERRUPTS POWER SERVICE AND IT IS TRAGIC TO SEE OLD FRIENDS CUT DOWN BECAUSE THEY INTERFERE WITH POWER LINES. TREESMART HELPS TO SOLVE THESE PROBLEMS.

OUR CITIES ARE BEGINNING TO SPREAD OUT. AREAS THAT WERE ONCE DOMINATED WITH GREEN ARE NOW BECOMING FORESTS OF CONCRETE. THIS TRANSLATES INTO MORE OF THE ARTIFICIAL AND LESS OF THE NATURAL. SO, IN THE INTEREST OF BRINGING NATURE TO THE CITY, TREESMART CHOSE A GROUP OF TREES THAT CAN BE PLANTED NEAR POWER LINES. THESE TREES WILL NOT INTERFERE WITH THE LINES WHILE STILL PROVIDING ALL OF THE BENEFITS OF TREE PLANTING. SO GO AHEAD, PLANT ONE ON US AND SEE HOW BEAUTIFUL A TREE CAN BE.



Many beautiful trees grow in the Carolinas. A wide variety of trees are adapted to the soil, site and climate conditions found here. Some of these are native while others are introductions or cultivars. Choosing that perfect tree can be quite a challenge amid the many choices at the local garden center, nursery or mail order catalog.

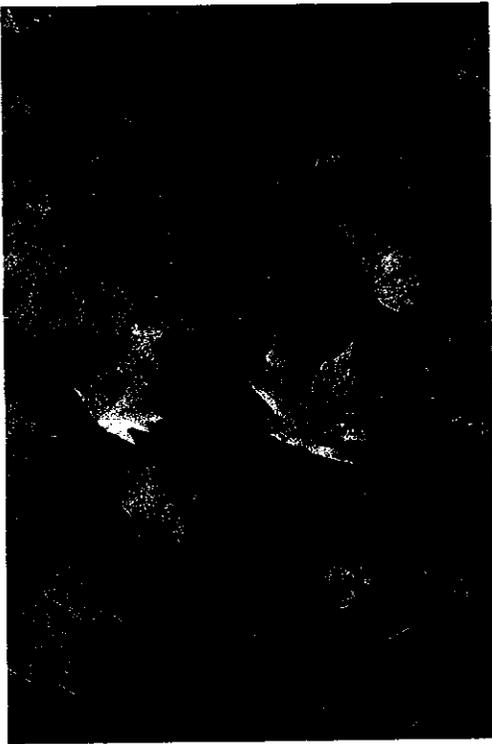
TreeSmart is an urban forestry program intended to encourage everyone to become "tree smart." Through educational materials such as this booklet and other educational opportunities, Carolina Power & Light and the North Carolina Division of Forest Resources hope to increase awareness and knowledge of trees, a critical natural resource. This brochure will help you select "the right tree for the right place" in the city, town or your own yard.

There are many things to consider when selecting and planting a tree. First, observe the specific site. How much space is available for the mature tree? How close are the house, sidewalk and overhead or underground utilities?

Second, decide if you have a specific purpose for this tree. Do you want a specimen tree or tree screening? Do you want something evergreen or deciduous? Do you want a specific color or flower or shape?

Third, note the site's soil type, water availability and local climate. Is the site mostly clay or sand? Is it normally dry or moist? Is the site sunny or shady? Other factors to consider include maintenance requirements and pest or disease susceptibility.

This brochure describes some excellent selections for city and rural landscaping under or near power lines. These pages highlight small trees recommended for the Carolinas. The photographs and illustrations show the plant; the text details the plant's major characteristics as well as cultivation and planting requirements.



CAPE MYRTLE *Lagerstroemia* sp. This recommended tree is striking because of its ruffled flowers of white, lavender or red and yellow fall leaves. It frequently grows multistemmed but can be trained into a single trunk.

It is drought tolerant, does well in limited spaces in urban settings, including along streets and median strips, and grows best in full sun. Crape Myrtles need little or no pruning; however, they bloom best on new wood. They tolerate clays to sandy loam soils.

Many new types have recently become available.

These include:

Cherokee with red flowers (10 to 12 feet tall),
Powhatan with purple flowers (14 to 20 feet) and
Tuscarora with coral pink blooms (up to 16 feet).

Other suggestions include:

Natchez which will grow to 25 feet and Dallas Red
at a mature height of 20 feet. ☼



Lagerstroemia





REDBUD *Cercis canadensis* In the South, Redbuds grow well in light shade to full sun in rich, moist soils from clay to loam. The Redbud is a fairly adaptable plant as evidenced by its wide range of native habitats.

It may grow into multistems but can be trained into a single trunk. The Redbud is used as a street tree and in commercial and residential settings but it generally does not live more than 10 to 15 years.

There are forms whose showy flowers vary from pink to white. These forms include *Alba* (white blooms), *Forest Pansy* (a wonderful purple-leaved form with pink flowers) and *Pink Charm*.

A relative of the common Eastern Redbud is the *Oklahoma* or *Texas Redbud* (*Cercis reniformis Oklahoma*; or also *Cercis canadensis* ssp. *texensis Oklahoma* and *Texas White*). It is highly recommended for its glossy foliage and profusion of flowers. Redbuds may be a little more difficult to find, but it is worth the effort. Availability in local garden centers is increasing. 🌸



Cercis canadensis

JAPANESE MAPLE *Acer palmatum* There are many sizes, shapes and colors for this handsome small maple. The outstanding feature of this tree is the wide range of leaf types and shapes. It grows well in a range of soils if it doesn't become waterlogged. It does well from light shade to direct sun, particularly in protected areas.

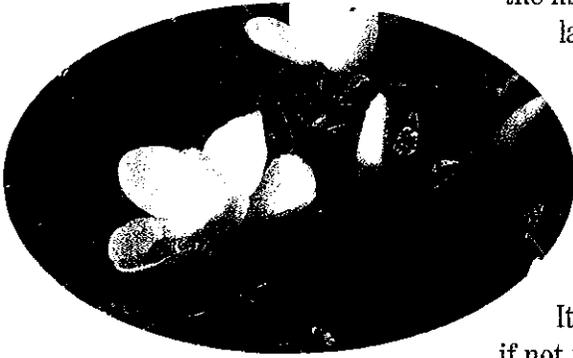
The Japanese Maple is typically a slow-growing tree with bright fall leaf coloration.

There are several forms that are recommended along streets and near power lines. These include Bloodgood, Crimson Queen and Sango Kaku. ♣



Acer palmatum

"DWARF" MAGNOLIA *Magnolia sp.* A grand tree of Carolina gardens is the Southern Magnolia. However, the most common form of this tree is far too large to plant near power lines. A variety called Little Gem is a slow-growing magnolia that flowers when it is only three feet tall.

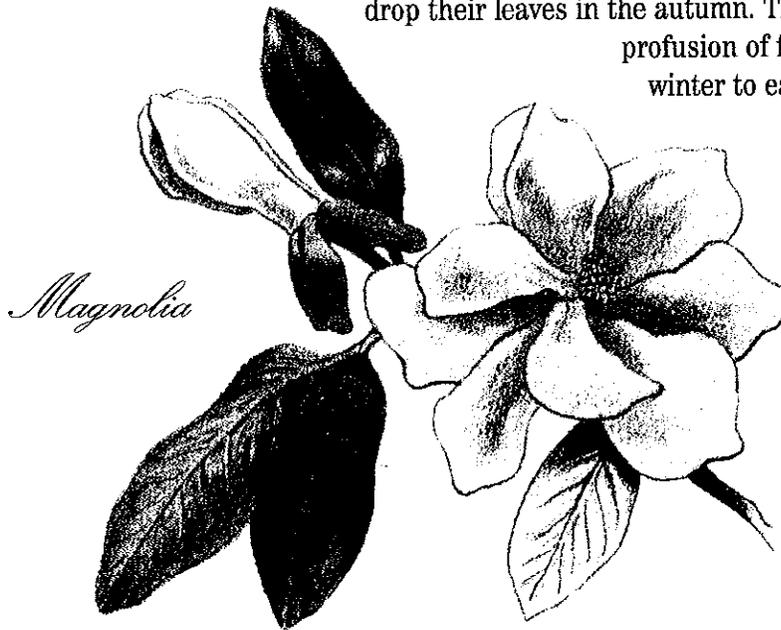


The tree, like its larger cousin, has long, leathery evergreen leaves that drop during the spring as new growth appears. It grows well in clay to sandy and loam soils if not too wet. The white flowers provide a sweet fragrance in late spring.

Another native plant that is a close relative of Little Gem is the Sweetbay Magnolia *Magnolia virginiana* that grows well in moist, acid soils, particularly in our Coastal Plain regions.

Less well-known are the non-native relatives of magnolia. These include the Star Magnolia *Magnolia stellata* and Saucer Magnolia *Magnolia soulangiana*, both of which drop their leaves in the autumn. They provide a profusion of flowers in the late winter to early spring before the leaves appear.

Other recommended deciduous forms include Ann, Betty and Ballerina. 🌸



FRINGETREE *Chionanthus virginicus* Fringetree is often locally called Old-Man's Beard because of the lush hanging white flowers that cover the tree in springtime.

Although it is a native woodland tree, it grows well in residential settings. It does well in a range of soil types if well drained. Fringetree has a purple autumn fruit that attracts birds. The tree grows slowly and prefers moist, acid soils. Fringetree will accept some shading.

A relative of our native American Fringetree is the Chinese Fringetree *Chionanthus retusus*. It is also recommended for planting near power lines. 🌿



The ripe berries of the Fringetree may attract a variety of wildlife like the Eastern Bluebird.

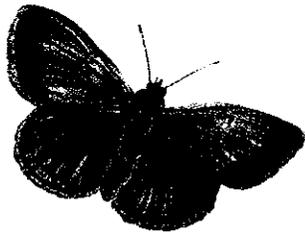
Chionanthus virginicus
with Eastern Bluebird



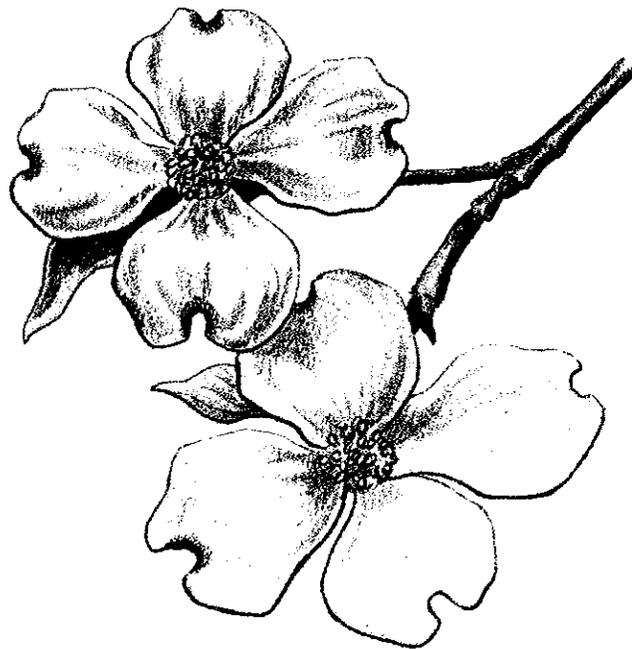
DOGWOOD *Cornus florida* The familiar “flowers” of this native plant fill our neighborhoods in the spring and provide showy red fruit in the fall.

Dogwoods will grow well in a street location if they receive adequate watering. They grow in a range of soil conditions but should be shallowly planted.

A relative of our native Dogwood is the Japanese or Chinese Dogwood *Cornus kousa*. It can generally be substituted for native Dogwoods since it does not appear to be damaged by the Dogwood anthracnose disease which affects stressed trees in our mountain areas. A recommended form of this is Milky Way. ♣



Spring Azure butterfly



Cornus florida

Flowering trees like the Dogwood attract many species of butterflies like the Spring Azure.

SMALL HOLLIES *Ilex sp.* There are several recommended small to medium evergreen forms of the Holly plant. They grow in a wide range of soil types and tend to prefer moist soils. These include the Yaupon *Ilex vomitoria* and Dahoon *Ilex cassine*. Their flowers are inconspicuous but their berries attract birds. You will need to pick a female plant

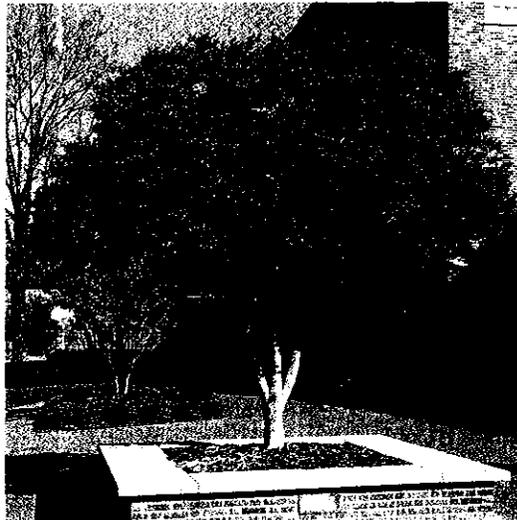
if you want a berry-producing tree. The best way to know which form you are getting is to buy trees that have berries on them.

Hollies are tough trees, native to the South, and will grow in full sun to partial shade.

Other recommendations include Dr. Kassab, Nellie R. Stevens and Foster #2. ♀



Ilex cassine



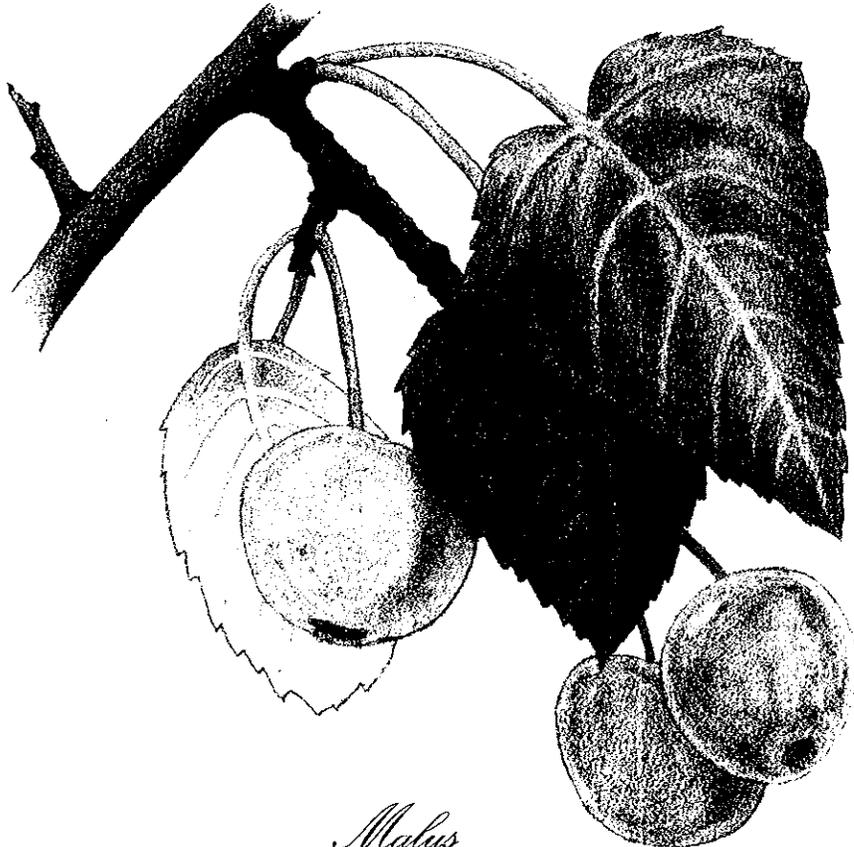
Ilex vomitoria

CRABAPPLES *Malus sp.* The many forms of Crabapple adapt very well to a variety of conditions; they are generally drought tolerant and do well in crowded urban or open suburban settings.



The shape of trees and the color of the flower vary considerably. The fruit is edible and may also attract wildlife. Crabapples grow well in full sun on various soil types if well drained. They require little or no pruning.

Forms that are well suited for use around power lines include **Adirondack** and **David**. 🌳



Malus

PLUMS, APRICOTS AND CHERRIES *Prunus* sp.
The fragrant and showy flowers of these plants appear in late winter or spring. They need full sun and good, well-drained soils.

The Cherry Plum *Prunus cerasifera atropurpurea* has attractive reddish-purple foliage. The Cherry Laurel *Prunus caroliniana* has glossy, evergreen foliage and tiny, creamy flowers. Although generally underutilized in our landscapes, the Japanese Apricot *Prunus mume* is long-lived and there are many cultivated forms to choose from. It has pleasantly fragrant flowers that appear in winter.

The Japanese Flowering Cherry *Prunus serrulata* is a popular tree with double-flower forms of white to pink. There are also hybrid cherries available; these include Accolade, Okame and Snow Goose. ❁



Prunus 'Okame'



Prunus serrulata

SERVICEBERRY *Amelanchier* sp. This native species grows best in partial shade and has white, showy flowers in the spring. They grow well in well-drained and sandy to loamy soils.



Serviceberry has purple-black fruit that attracts birds and has yellow to red autumn coloration. It has a rapid growth rate and often has multiple trunks but can be trained into a single trunk.

A hybrid called Apple Serviceberry *Amelanchier* x *grandiflora* is a recommended form because it is more drought tolerant, has fewer suckers and has larger white flowers than other Serviceberries. 🌸



*Amelanchier with
Cedar Waxwing*

For further information, contact the following:

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Raleigh, NC 27611-7687
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SOUTH CAROLINA FORESTRY COMMISSION

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**DEPARTMENT OF HORTICULTURE
N.C. STATE UNIVERSITY**

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Raleigh, NC 27695
☎ 919 515-3131

Sources of information:

Urban Trees for Use Under Utility Lines.

by Thomas G. Ranney et al.

Horticulture Information Leaflet #616

(November 1993), North Carolina Cooperative Extension
Service, NCSU, Raleigh, NC.

Trees for Use Under Power Lines. by John W. Kelly.

(Fall 1992), Department of Horticulture, Clemson
University, Clemson, SC.

Southern Trees User's Guide. by Edward F. Gilman et al.

(March 1993), Florida Cooperative Extension Service,
University of Florida, Gainesville, FL.

PLANT THESE TREES ON US

NAME	HEIGHT	SPREAD	LIGHT	SOIL	FLOWER	FRUIT	LEAVES	COMMENTS
Buckeye <i>Aesculus pavia</i>	15' - 20'	10' - 15'	part sun to part shade	sandy to loam; well drained	red; very showy in mid spring	brown	handsome green; deciduous	
Crabapple <i>Malus spp.</i>	15' - 20'	10' - 20'	sun	range of soils; well drained	white to rose	red or yellow	little fall color	
Crape Myrtle <i>Lagerstroemia</i> cultivars	10' - 20'	5' - 15'	sun	clays to sandy loam	pink, red and lavender	gray-brown	yellow to red fall color	Choose smaller-growing forms such as 'Tuscarora' and 'Yuma.' 'Hopi' is the hardiest form, suitable for the coldest areas.
Crape Myrtle <i>Lagerstroemia</i> <i>fourieri</i> 'Townhouse'	15' - 20' in mountains	to 20'	full sun	sandy to loam; well drained	white	brown	deciduous	Also recommended for Zone 6 (mountains). Will grow taller in Piedmont and Coastal Plain.
Dogwood <i>Cornus florida</i>	15' - 20'	15' - 20'	part shade	range of well-drained soils	white to dark pink	red	scarlet fall color	
'Little Gem' Magnolia <i>Magnolia grandis flora</i>	15' - 20'	8' - 10'	sun to part shade	clays to sandy loam	creamy-white	red	evergreen	Also choose various deciduous magnolia cultivars such as 'Ann' and 'Jane'.
Fringetree <i>Chionanthus virginicus</i>	10' - 12'	8' - 10'	sun	range of soils; well drained	white	dark blue	yellow fall color	
Hollies including the following: <i>Ilex</i> 'Dr. Kassab', 'Nellie R. Stevens' and 'Foster #2'	15' - 20' in mountains	to 15'	full sun to partial shade	well drained	cream	red, showy	evergreen	Also recommended for Zone 6 (mountains). Will grow taller in Piedmont and Coastal Plain. 'Dr. Kassab' is suitable for coldest areas.
Japanese Maple <i>Acer palmatum</i>	15' - 20'	10' - 15'	part shade to sun	range of soils; well drained	insignificant	insignificant	green to red; scarlet in fall	
Japanese Snowbell <i>Styria japonicus</i> 'Pink Chimes', 'Carillon' and 'Issai'	to 20'	15' - 20'	sun to light shade	sandy to loam; well drained	showy white in spring	green, not showy	deciduous; yellow to red in autumn	Pest free and requires little or no pruning

<i>Osmanthus x fortunei</i>	15' - 20'	10' - 15'	sun to light shade	well drained	white/cream fragrant	black, not showy	evergreen	Suitable for Piedmont and Coastal Plain
Plums, Apricots and Cherries <i>Prunus spp.</i>	15' - 20'	10' - 15'	sun	range of soils; well drained	white to pink	black, purple to red	some fall color	
Redbud <i>Cercis canadensis</i>	15' - 20'	12' - 25'	sun to light shade	well drained	lavender-pink or white	green, turning brown	yellow fall color	
Serviceberry <i>Amelanchier spp.</i>	10' - 20'	8' - 15'	sun to part shade	clays to sandy foam	pink, becoming white	purple-black	red to yellow fall color	
Smoke tree <i>Cotinus coggygia</i> (various green and purple-leaved forms)	10' - 15'	10' - 18'	sun	well drained	white-pink; showy	insignificant	deciduous	Drought tolerant
<i>Viburnum plicatum</i> var. <i>tomentosum</i>	5' - 15'	5' - 20'	partial sun to light shade	well drained	white-cream; showy	black to red	deciduous	Shrub-like growth; <i>V. awabaki</i> 'Chindo' is evergreen and suitable for Coastal Plain and Piedmont.
Wax Myrtle, Northern <i>Myrica pensylvanica</i>	6' - 12'	6' - 12'	full sun to shade	clay to sand; tolerates wet areas	insignificant	white-gray	deciduous to semi-evergreen	Suitable for mountains and western Piedmont. Shrub-like growth.
Wax Myrtle, Southern <i>Myrica cerifera</i>	10' - 15'	to 20'	full sun to shade	clay to sand; tolerates wet areas	green insignificant	blue-gray	evergreen	Suitable for Piedmont and Coastal Plain. Can be limbed up to expose attractive bark.
Witchhazel <i>Hamamelis x intermedia</i> 'Arnold Promise' 'Diane,' 'Jelena' and 'Sunburst'	15' - 20'	15' - 20'	full sun to light shade	clay to sand; well drained	yellow-orange; showy in winter	insignificant	deciduous	Provides strong winter interest

SEE PAGES 3-12 FOR MORE DETAILED INFORMATION ON THESE TREESMART RECOMMENDATIONS.

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