

PRUNING TREES & SHRUBS

How to Prune Specific Plants

This final publication in the "Pruning Trees & Shrubs" series gives tips for pruning specific plants.

The plants listed in Tables 4.1 through 4.8 (pp. 2 – 5) are some of the most commonly used shrubs, trees, subshrubs, and vines of the Southeast. We have listed them alphabetically within the group that best describes their primary characteristics. The tables include each plant's function in the landscape, tips on what type of pruning the plant can tolerate, and the best time to prune in the Southeast. In addition, we have included bloom times for flowering plants and indicated each plant's primary feature. To learn more about pruning, including techniques and tools, see the other publications in the "Pruning Trees & Shrubs" series:

Before the Cut (AG-780-01)

Tools to Make the Cut (AG-780-02)

General Pruning Techniques (AG-780-03)

This series is a revision of a previous publication:

Powell, M.A. (1998.) *Pruning Trees & Shrubs: A Guide for Grounds Managers* (AG-071). Raleigh: NC State University, NC Cooperative Extension. Available from: <http://www.ces.ncsu.edu/depts/hort/consumer/agpubs/ag-071.pdf>

Important Terms (Know these before making the first cut!)

Here are some basic terms you must know before picking up the pruning tools.

crown thinning—Removing crowded growth from the crown of a tree or shrub to allow more light in and promote healthy growth.

deadheading—Removing spent flowers from a plant to make it tidier, promote continued bloom production, or prevent fruit and seed production.

espalier—A plant trained through pruning to grow in a formal two-dimensional form.

heading cut—A pruning cut that removes only a portion of a stem, often at an intermodal area (a cut made between two buds or nodes).



pinching—Nipping out the tip of a growing shoot with your fingers,

rejuvenation (renovation) —Revitalizing a plant, often through rejuvenative pruning back to nearly ground level; can be accomplished in one year or over several years depending on the species.

shearing—Tip pruning without selecting individual laterals or buds (topiary or hedge maintenance).

thinning cut—Removing branches at the branch collar, typically done to open the canopy to air movement and increase light penetration.

tip pruning—Pinching out or cutting back the growing tip of a shoot either to encourage sideshoots or to remove damaged growth.

topiary—The practice of pruning a shrub or tree to create a shape or living sculpture; typically accomplished with shearing or heading back cuts.

watersprout—A vigorous vertical shoot growing from a branch.

xylem—Wood cells that move water and dissolved nutrients through the plant.

NC State University
A&T State University
**COOPERATIVE
EXTENSION**

Empowering People • Providing Solutions

Table 4.1. Deciduous Shrubs

Function: H – Hedge, Sc – Screen, S – Specimen, Sb – Shrub border, W – Wildlife, T – Topiary, E – Espalier, Ed – Edible, Rg – Rain gardens, G – Ground cover, F – Foundation planting (main part of landscape)

Primary Feature and Timing: In – Inconspicuous, EW – Early winter, LW – Late winter, W – Winter, SP – Spring, S – Summer, F – Fall, NI – Not important

Pruning Time and Type: Th – Thinning, H – Heading, R – Rejuvenation, R3 – Rejuvenate over three or more years, Dh – Deadheading

Species	Bloom Time		Function	Primary Feature		Pruning Time and Type			
	Old Growth	New Growth		Flower	Fruit	Spring	Summer	Fall	Winter
<i>Berberis thunbergii</i> , Japanese barberry		√	H, Sc, Sb, W	In	F				Th, H, R
<i>Callicarpa</i> sp., beautyberry		√	H, Sc, S, Sb, W, F	In	S–F–EW	R		Th	R
<i>Calycanthus floridus</i> , Carolina allspice	√	√	S, Sb, F	SP–S	S–F–W	Th	Th		
<i>Chaenomeles</i> sp., flowering quince	√		Sc, S, Sb, E, Ed, G	W–LW	S–F	Th, R3	Th, R3		
<i>Clethra alnifolia</i> , summersweet clethra		√	Sc, S, Sb, Rg, F	S	F–EW	Th, H, Dh			Th, H, Dh
<i>Deutzia</i> sp., deutzia	√		Sc, S, Sb, F	S	NI	H, R			H, R
<i>Edgeworthia papyrifera</i> , edgeworthia	√		S, Sb	LW	In	Th			Th
<i>Ficus carica</i> , fig	√	√	S, E, Ed	In	S–F	Th, H			Th, H
<i>Forsythia</i> × <i>intermedia</i> , forsythia	√		H, Sc, Sb	LW–SP	NI		R, Th, H		
<i>Hamamelis</i> sp., vernal witchhazel	√		Sc, S, Sb, F	LW–SP	S–F	Th	Th		
<i>Hibiscus syriacus</i> , rose–of–Sharon		√	H, Sc, S, E, F	S–F	F–W	Th, R	H		Th, R
<i>Hydrangea arborescens</i> , smooth hydrangea		√	S, Sb, F	S	NI	Th, H, R	Dh		Th, R
<i>Hydrangea macrophylla</i> , bigleaf hydrangea	√	√	S, Sb, F	SP–S	NI	H, Dh	Dh		
<i>Hydrangea paniculata</i> , panicle hydrangea		√	S, Sb, F	S	NI	Th, H, R	Dh		Th, R
<i>Hydrangea quercifolia</i> , oakleaf hydrangea	√		H, Sc, S, Sb, F	SP–S	NI	Th, Dh	Th, Dh		
<i>Ilex verticillata</i> , winterberry holly		√	Sc, S, Sb, Rg, W, F	In	F–W–SP	Th			Th
<i>Itea virginica</i> , itea or sweetspire	√		S, Sb, Rg, F	SP–S	S–F	Th, R	Th, R		
<i>Jasminum nudiflorum</i> , winter jasmine	√		Sc, Sb, F	W–LW	NI	Th, H, R			
<i>Kerria japonica</i> , Japanese kerria	√		H, Sc, Sb, F	SP	NI	Th, R			
<i>Lagerstroemia indica</i> , crape myrtle		√	Sc, S, Sb, F	S	S–F	Th, H		Dh	Th, H, Dh
<i>Lonicera</i> sp., shrub honeysuckle	√	√	H, Sc, S, W, F	SP–S	S–F	Th, R			Th, R
<i>Loropetalum chinense</i> , loropetalum	√	√	H, Sc, S, Sb, F	SP, F	NI	Th, H	Th, H		Th, H
<i>Physocarpus opulifolius</i> , ninebark	√		Sc, S, Sb, W, F	SP–S	S–F	Th, R			
<i>Rosa</i> sp., landscape roses		√	H, Sc, S, Sb, W, G, F	SP–F	F–W	R	H, Dh	H, Dh, R	R
<i>Spiraea</i> × <i>bumalda</i> , Bumald spirea	√	√	Sc, S, Sb, F	S–F	NI	Th, H, R	Dh	Dh	Th, H, R
<i>Spiraea</i> × <i>vanhouttei</i> , Vanhoutte spirea	√		H, Sc, S, Sb, F	SP	NI	Th, H, R			
<i>Viburnum dentatum</i> , arrowwood viburnum		√	H, Sc, S, Sb, W, F	SP–S	S–F				Th, R
<i>Viburnum macrocephalum</i> , Chinese snowballbush viburnum	√	√	Sc, S, Sb, F	SP–F	NI	Th, R			
<i>Viburnum plicatum</i> , doublefile viburnum		√	Sc, S, Sb, F	S	NI				
<i>Vitex agnus–castus</i> , chaste tree		√	H, Sc, S, Sb, F	S	F				H, R

Table 4.2. Broadleaved Evergreen Shrubs

Function: H – Hedge, Sc – Screen, S – Specimen, SB – Shrub border, W – Wildlife, T – Topiary, E – Espalier, Ed – Edible, Rg – Rain gardens, G – Ground cover, F – Foundation planting (main part of landscape)

Primary Feature: In – Inconspicuous, EW – Early winter, LW – Late winter, W – Winter, SP – Spring, S – Summer, F – Fall, NI – Not important

Pruning Time and Type: Th – Thinning, H – Heading, R – Rejuvenation, R3 – Rejuvenate over three or more years, Dh – Deadheading

Species	Bloom Time		Function	Primary Feature		Pruning Time and Type			
	Old Growth	New Growth		Flower	Fruit	Spring	Summer	Fall	Winter
<i>Abelia</i> × <i>grandiflora</i> , abelia	√	√	H, Sc, Sb, F	S–F	In	R	Th, R		
<i>Aucuba japonica</i> , aucuba		√	H, Sc, Sb, F	In	F	Th	R3		
<i>Berberis julianae</i> , wintergreen barberry	√		H, Sc, Sb, W, F	LW–SP	S	Th, H			
<i>Buxus</i> sp., boxwood	NI		H, Sc, Sb, T, F	In	In	Th, H, R	H	H	R
<i>Camellia japonica</i> , Japanese camellia	√		H, Sc, S, Sb, E, W, F	EW–SP	In	Th, H, R3			
<i>Camellia sasanqua</i> , Sasanqua camellia	√		H, Sc, S, Sb, E, W, F	F–EW	In	Th, H, R3			
<i>Elaeagnus</i> sp., elaeagnus	√		H, Sc, Sb, E, W, F	In	S–F		Th, H	Th, H	
<i>Fatsia japonica</i> , fatsia		√	S, Sb, F	F	F–EW	Th, H, R3			
<i>Gardenia jasminoides</i> , gardenia		√	H, Sc, S, Sb, F	S	S–F	Th, H, R3			Th, H, R3
<i>Ilex</i> sp., holly		√	H, Sc, S, Sb, W, F	SP–S	F–W	Th, R	H		Th, R
<i>Kalmia latifolia</i> , mountain laurel	√		S, Sb, F	SP	NI	Th, R3	Dh		
<i>Ligustrum</i> sp., privet		√	H, Sc, Sb, T, E, F	SP–S	F–W	Th, R	H	H	Th, R
<i>Mahonia</i> sp., mahonia	√		Sc, S, Sb, F	EW–SP	Sp–S	R3			
<i>Myrica cerifera</i> , wax myrtle	√		H, Sc, S, Sb, W, F	SP	S–W	Th, H	H		
<i>Nandina domestica</i> , nandina or heavenly bamboo		√	H, Sc, S, Sb, F	S	F–W	Th, H, R3			
<i>Nerium oleander</i> , oleander		√	H, Sc, S, Sb, F	SP–S	F		Th	Th, R3	
<i>Osmanthus</i> sp., osmanthus		√	H, Sc, S, Sb, F	F–W	In	Th, H	Th, H		
<i>Pieris japonica</i> , Japanese pieris	√		Sc, S, Sb, F	SP	In	Th	Dh		
<i>Pittosporum</i> sp., pittosporum	√		H, Sc, S, Sb, F	SP	F	Th, H	Th, H		
<i>Pyracantha</i> sp., pyracantha	√		H, Sc, S, Sb, E, W, F	SP	F–W	Th	Th, H		
<i>Rhododendron catawbiense</i> , Catawba rhododendron	√		H, Sc, Sb, S, F, W	SP–S	NI	Th, H, R3	H, Dh		
<i>Rhododendron</i> sp., azaleas	√	√	H, Sc, S, Sb, F	SP	NI	Th, H, R, R3	Th, H, R, R3, Dh		
<i>Sarcococca</i> sp., sarcococa	NI		H, S, Sb, F	NI	NI	Th, R	Th		
<i>Viburnum</i> sp., evergreen or semi-evergreen viburnum	√		H, Sc, S, Sb, W, F	SP–S	S–EW	Th	Th		

Table 4.3. Needled Evergreen Shrubs

Function: H – Hedge, Sc – Screen, S – Specimen, SB – Shrub border, W – Wildlife, T – Topiary, E – Espalier, Ed – Edible, Rg – Rain gardens, G – Ground cover, F – Foundation planting (main part of landscape)

Species	Function	Primary Feature		Pruning Time and Type			
		Flower	Fruit	Spring	Summer	Fall	Winter
<i>Chamaecyparis</i> sp., false-cypress	Sc, S, Sb, W, F	Inconspicuous	Fall–Winter	Thinning, Heading	Heading	Thinning	Thinning
<i>Juniperus</i> sp., junipers	H, Sc, S, Sb, W, G, F	Inconspicuous	Fall–Winter	Thinning	Thinning	Thinning	Thinning
<i>Thuja</i> sp., arborvitae	H, Sc, S, Sb, W, F	Inconspicuous	Fall–Winter	Thinning	Thinning	Thinning	Thinning

Pruning Trees & Shrubs

Table 4.4. Deciduous Trees

Function: Sh – Shade, S – Specimen, St – Street tree, W – Wildlife, E – Espalier, Ed – Edible, Rg – Rain gardens

Species	Function	Primary Feature			Pruning Time			
		Flower	Fruit	Color	Spring	Summer	Fall	Winter
<i>Acer</i> sp., maples	Sh, S, St, W	Early Winter–Spring	Spring–Fall	Good	✓	✓	✓	✓
<i>Amelanchier</i> sp., serviceberry	S, St, W, Ed	Spring	Summer	Good		✓		
<i>Betula nigra</i> , river birch	Sh, S, St, W, Rg	Spring–Summer	Inconspicuous	Good–Fair	✓	✓	✓	
<i>Carya illinoensis</i> , pecan	Sh, S, W, Ed	Inconspicuous	Fall	Good–Fair	✓		✓	✓
<i>Cercis</i> sp., redbud	S, St, W, Ed	Spring	Summer–Fall	Good	✓	✓		
<i>Chionanthus</i> sp., fringetree	S	Spring	Summer–Fall	Fair	✓	✓		
<i>Cornus</i> sp., dogwood	S, W, Ed	Spring, Summer	Fall–Winter	Good	✓	✓		
<i>Diospyros virginiana</i> , persimmon	S, Sh, W, Ed	Inconspicuous	Fall–Winter	Fair				✓
<i>Ginkgo biloba</i> , ginkgo	S, Sh, St, Ed	Inconspicuous	Fall	Good	✓	✓	✓	✓
<i>Halesia carolina</i> , Carolina silverbell	S	Spring–Summer	Fall	Fair		✓		
<i>Koelreuteria paniculata</i> , goldenrain tree	Sh, S, St	Summer	Summer–Fall	Fair–Bland	✓			✓
<i>Liquidambar styraciflua</i> , sweetgum	Sh, St	Inconspicuous	Fall–Winter	Good	✓	✓	✓	✓
<i>Liriodendron tulipifera</i> , tulip tree	Sh, St	Spring–Summer	Fall–Winter	Good	✓	✓	✓	✓
<i>Magnolia</i> sp., flowering magnolia	Sh, S, Rg	Spring, Summer, Fall	Summer–Fall	Bland		✓		
<i>Malus</i> sp., crabapple	S, W, E, Ed	Spring–Summer	Fall–Winter	Fair–Bland	✓			
<i>Prunus</i> sp., flowering cherry	S, Sh, W	Spring, Summer, Fall	Fall–Winter	Good–Fair	✓	✓		
<i>Pyrus calleryana</i> , Callery pear	S, Sh, W	Spring	Fall–Winter	Good	✓	✓		✓
<i>Quercus</i> sp., oak	S, Sh, St, W, Ed	Inconspicuous	Fall–Winter	Good–Bland	✓	✓	✓	✓
<i>Styrax japonicus</i> , Japanese snowbell tree	S	Spring	Fall	Fair	✓	✓		
<i>Taxodium distichum</i> , bald cypress	S, Sh, St, Rg	Inconspicuous	Fall	Good	✓	✓	✓	✓
<i>Ulmus parvifolia</i> , Lacebark or Chinese elm	S, Sh, St	Inconspicuous	Summer–Fall	Good	✓	✓	✓	✓
<i>Zelkova serrata</i> , Japanese zelkova	S, Sh, St	Inconspicuous	Summer–Fall	Good	✓	✓	✓	✓

Table 4.5. Needled Evergreen Trees (The primary feature of these plants is their needle–like foliage.)

Function: Sh – Shade, S – Specimen, W – Wildlife, H – Hedge, Sc – Screen, E – Espalier, and Rg – Rain garden

Species	Function	Primary Feature	Pruning Time			
			Spring	Summer	Fall	Winter
× <i>Cuprocyparis leylandii</i> , Leyland cypress	H, W, Sc	Year-round form and color	✓	✓	✓	✓
<i>Cedrus deodara</i> , deodar cedar	Sh, S	Year-round form and color; interesting cones	✓	✓	✓	✓
<i>Cupressus arizonica</i> , Arizona cypress	Sh, W, Sc	Year-round form and color; interesting cones	✓	✓	✓	✓
<i>Juniperus</i> sp., juniper	S, W, H, Sc	Year-round form and color	✓	✓	✓	✓
<i>Pinus</i> sp., pine	Sh, S, W	Year-round form and color, interesting cones	✓	✓	✓	✓
<i>Thuja</i> sp., arborvitae	S, W, H, Sc	Year-round form and color	✓	✓	✓	✓
<i>Tsuga</i> sp., hemlock	S, W, H, Sc	Year-round form and color; interesting cones	✓	✓	✓	✓

Table 4.6. Broadleaved Evergreen Trees (These trees produce broad evergreen leaves that provide year–round interest in the landscape. They also have showy flowers and/or fruits in late spring or summer.)

Function: Sh – Shade, S – Specimen, St – Street tree, W – Wildlife, E – Espalier, Ed – Edible, Rg – Rain gardens

Species	Function	Primary feature			Pruning Time			
		Flower	Fruit	Color	Spring	Summer	Fall	Winter
<i>Magnolia grandiflora</i> , southern magnolia	Sh, Sc, E	Spring–Summer	Summer–Fall	Good		✓		
<i>Magnolia virginiana</i> , sweetbay magnolia	Sc, Rg	Spring–Summer	Summer–Fall	Fair		✓		
<i>Photinia</i> sp., photinia	H, S, Sc	Spring–Summer	Summer–Fall	Good		✓		✓
<i>Ternstroemia gymnanthera</i> , Japanese ternstroemia or cleyera	H, S, Sc	Inconspicuous	Summer–Fall	Good	✓	✓	✓	✓

Table 4.7. Subshrubs. Woody older growth gives rise to herbaceous growth each year.

Pruning Time and Type: R – Rejuvenate, H – Head back to new growth, T – Tip back old flowers or growth, Th – Thinning, and DH – Deadheading

Species	Primary Feature		Pruning Time and Type		
	Flower	Fruit	Spring	Summer	Fall
<i>Buddleia davidii</i> , butterflybush	Summer–Fall	Not important	R	DH	DH
<i>Caryopteris clandonensis</i> , blue mist spirea	Summer–Fall	Not important	H	DH	
<i>Lavendula angustifolia</i> , lavender	Spring–Summer	Not important	T	DH	T, DH
<i>Perovskia atriplicifolia</i> , Russian sage	Summer–Fall	Not important	H	H	
<i>Rosmarinus officinalis</i> , rosemary	Fall–Spring	Not important	T, Th	Th	

Table 4.8. Vines

Pruning Time and Type: R – Rejuvenate, H – Head back to new growth, T – Tip back old flowers or growth, Th – Thinning, and DH – Deadheading

Species	Primary Feature		Pruning Time and Type		
	Flower	Fruit	Spring	Summer	Fall
<i>Bignonia capreolata</i> , cross vine	Spring–Summer	Inconspicuous	H	H	
<i>Clematis</i> × <i>jackmanii</i> , Jackman clematis	Spring	Inconspicuous	R		R
<i>Clematis terniflora</i> , sweetautumn clematis	Summer–Fall	Inconspicuous	R	T	R
<i>Gelsemium sempervirens</i> , Carolina jessamine	Spring, Fall	Inconspicuous	T	T	
<i>Hydrangea anomala</i> subsp. <i>petiolaris</i> , climbing hydrangea	Spring–Summer	Inconspicuous	Th, H	Th, H	
<i>Jasminum officinale</i> , common white jasmine	Spring–Summer	Inconspicuous	R (one-third)	T	
<i>Trachelospermum jasminoides</i> , Confederate jasmine	Spring–Summer	Inconspicuous	T		
<i>Wisteria</i> sp., wisteria	Spring	Fall		H	



wisteria



**Prepared by
Barbara Fair**

Associate Professor, Landscape Extension Specialist & Certified Arborist

Lucy Bradley

Associate Professor & Extension Specialist, Urban Horticulture
and

Anthony LeBude

Associate Professor, Nursery Production
Department of Horticultural Science, NC State University

All photographs and illustrations are courtesy of Associate Professor Barbara Fair.

**Published by
North Carolina Cooperative Extension**



COLLEGE OF
AGRICULTURE & LIFE SCIENCES
ACADEMICS ▲ RESEARCH ▲ EXTENSION

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, veteran status or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.