
WESTERN NORTH CAROLINA

Blue Ridge Mountains
Part of the Southern Appalachians



JOE PYE WEED

artwork by Randy Burroughs

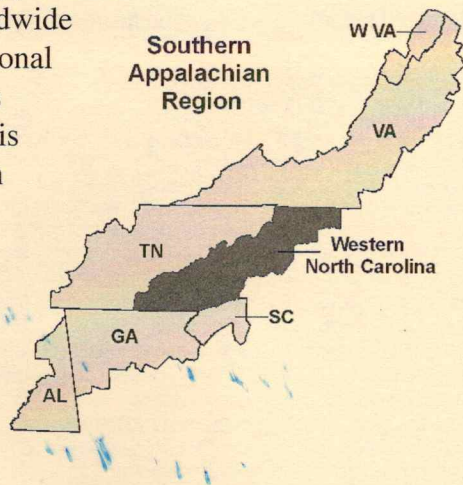
LANDSCAPING WITH NATIVE PLANTS

PROMOTES BIODIVERSITY

*and endorses a land ethic that
celebrates our natural heritage*

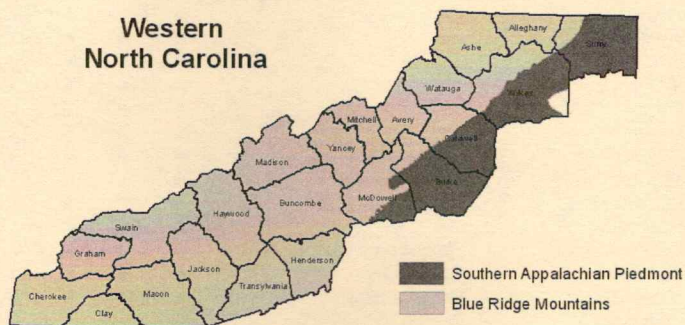
A Unique Region

The Southern Appalachians are known worldwide for their exceptional variety of plants and animals. This mountain region owes its great diversity to the highly variable climate, topography, and its unique geologic past.



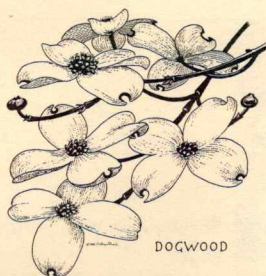
Blue Ridge Mountains

Western North Carolina is composed of 23 counties that lie almost entirely within the Blue Ridge Mountains of the Southern Appalachians. Soils in this region tend to be well drained, loamy, strongly acidic, and low in natural fertility. Site conditions for plants are determined by the topography, soil pH and depth, elevation, amount of sunlight, and availability of water.



These varying site conditions support a mosaic of native plant communities such as:

- ✦ Dry, south-facing slopes have extremely acidic soils that support evergreens such as mountain laurel and pines, as well as oaks, huckleberry, blueberries, and hickories.
- ✦ Moist, north-facing slopes support a mixed evergreen/hardwood community type frequently dominated by hemlock, tulip poplar, and maple.
- ✦ Species-rich hardwood forests dominate lower slopes and creek drainages. These sheltered sites support a broad range of flowering understory trees, showy ferns and wildflowers, and dense stands of rosebay rhododendron.



Celebrate Our Natural Heritage

The use of native plants in landscaping is a celebration of our natural heritage and an awakening of a land ethic first expressed by Aldo Leopold, the father of wildlife conservation, more than 50 years ago.

The natural processes from which native species evolve represent the cog and wheel of a healthy ecosystem sustained by a complex web of biological diversity.

Using native plants contributes to the health and often the restoration of an ecosystem. Landscaping with natives in an urban setting helps restore the character of the land and places fewer demands on resources.

Native plants have many inherent qualities and adaptive traits that makes them aesthetically pleasing, practical, and ecologically valuable for landscaping.



What Are Native Plants?

Native species are those that naturally occur in an area; they have not been introduced by human action. Native species have evolved over time with the physical and biological factors specific to their region, such as climate, soil, rainfall, and interactions with other plants, animals, and insects that live in the area. Thus, native species are uniquely adapted to the local conditions and wildlife, including important pollinators and migratory birds.

Benefits of Native Plants?

- ✦ *Hardy and should withstand regional weather extremes when properly sited and planted.*
- ✦ *Promote wise stewardship of the land and the conservation of natural resources.*
- ✦ *Provide food and shelter for native wildlife.*
- ✦ *Inspire a 'sense of place' and pride in our mountain communities.*
- ✦ *Prevent future invasive plant introductions.*

Native Plants for Wildlife

Using native plants in landscaping helps sustain native butterflies, beneficial insects, birds, mammals, reptiles, and other native species. Spring migrating and nesting birds rely on the insects in our lush forest to give them the energy to travel long distances and raise their young. Fall migrating birds depend on high-energy fruits from flowering dogwood, spice bush, and Virginia creeper. Beech, oak, and hickory trees provide nesting habitat and important nuts and acorns for a variety of wildlife. In the winter, evergreen trees like American holly, white pine, and hemlocks provide important shelter and food.

Don't remove plants from the wild.

Taking wild plants devastates native plant populations and often the plants removed do not survive in backyards.

Basics About Using Native Plants

Maximize your success by matching the right plants with the right site conditions. Do your homework before planting:

-  Assess the available light, moisture, and soil pH at your planting site.
-  Have your soil tested to learn the pH and if the soil needs to be improved.
-  Choose native plants that match your site conditions. Use this list as a guide.

Remember, landscaping with native plants is art imitating nature. For ideas, look to nearby natural areas to observe how native plants occur naturally.

The Invasive Plant Dilemma

A very small number of nonnative plants have become highly invasive and destructive. These are plants that have been accidentally or deliberately introduced by people. The natural controls, such as disease and insects, that normally kept these plants "in check" in their homeland do not exist here. This gives these invasive plants an advantage, making it easy for them to grow out of control and take over the habitat of other plants. These invasions affect native wildlife and insects, too. The balance and diversity of our mountain environment will decline as these invasive plants continue to spread. Some of the invasive plants considered most destructive are:

Japanese honeysuckle – *Lonicera japonica*

Japanese barberry* – *Berberis thunbergii*

Japanese spirea – *Spiraea japonica*

Autumn-olive – *Elaeagnus umbellata*

Chinese Silvergrass* – *Miscanthus sinensis*

Multiflora rose – *Rosa multiflora*

Tree of heaven – *Ailanthus altissima*

Princess tree – *Paulownia tomentosa*

Oriental bittersweet – *Celastrus orbiculatus*

Chinese yam – *Dioscorea batatas*, *D. oppositifolia*,
D. bulbifera

Privet* – *Ligustrum sinense*, *L. obtusifolium* and *L. vulgare*

*Varieties less invasive may be available; talk to your local nursery.

Buy nursery-propagated plant material.

The practice of growing native plants from seeds and cuttings protects wild populations.

Native Plant Recommendations

Common name	Scientific name	type	light	water
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small tree (up to 25 feet)

Serviceberry	<i>Amelanchier arborea</i>	D	☀ → ☂	▲ → □
*Devils-walking stick	<i>Aralia spinosa</i>	D	☀ → ☂	■ → ○
Paw paw	<i>Asimina triloba</i>	D	☂ → ●	▲ → □
American hornbeam	<i>Carpinus caroliniana</i>	D	☂ → ●	▲ → □
Chinquapin	<i>Castanea pumila</i>	D	☀ → ●	□ → ○
Eastern redbud	<i>Cercis canadensis</i>	D	☀ → ●	▲ → ○
Fringe tree	<i>Chionanthus virginicus</i>	D	☀ → ●	▲ → ○
Pagoda dogwood	<i>Cornus alternifolia</i>	D	☂ → ●	▲ → □
Flowering dogwood	<i>Cornus florida</i>	D	☂ → ●	▲ → ○
Washington hawthorn	<i>Crataegus phaenopyrum</i>	D	☀ → ☂	▲ → ○
Persimmon	<i>Diospyros virginiana</i>	D	☀ → ☂	▲ → □
Carolina silverbell	<i>Halesia carolina</i>	D	☀ → ●	▲ → □
Common witch-hazel	<i>Hamamelis virginiana</i>	D	☀ → ●	▲ → □
American holly	<i>Ilex opaca</i>	E	☀ → ●	▲ → □
Eastern red cedar	<i>Juniperus virginiana</i>	E	☀ → ☂	□ → ○
Umbrella tree	<i>Magnolia tripetala</i>	D	☀ → ☂	▲ → □
Hop-hornbeam	<i>Ostrya virginiana</i>	D	☂ → ●	▲ → □
Sourwood	<i>Oxydendrum arboreum</i>	D	☀ → ●	□ → ○
Hop tree	<i>Ptelea trifoliata</i>	D	☀ → ●	▲ → □
American plum	<i>Prunus americana</i>	D	☀ → ☂	□ → ○
Pin cherry	<i>Prunus pensylvanica</i>	D	☀ → ☂	▲ → □
*Common sassafras	<i>Sassafras albidum</i>	D	☀ → ☂	▲ → □
Blackhaw viburnum	<i>Viburnum rufidulum</i>	D	☀ → ●	▲ → ○

large tree (over 25 feet)

Red maple	<i>Acer rubrum</i>	D	☀ → ●	■ → ○
Sugar maple	<i>Acer saccharum</i>	D	☀ → ●	▲ → □
Yellow buckeye	<i>Aesculus flava</i>	D	☂ → ●	▲ → □
Yellow birch	<i>Betula allegheniensis</i>	D	☂ → ☂	▲ → □
Sweet birch	<i>Betula lenta</i>	D	☀ → ●	▲ → □
River birch	<i>Betula nigra</i>	D	☀ → ☂	■ → ○
Bitternut hickory	<i>Carya cordiformis</i>	D	☀ → ●	▲ → □
Pignut hickory	<i>Carya glabra</i>	D	☀ → ☂	□ → ○
Yellowwood	<i>Cladrastis kentukea</i>	D	☀ → ☂	▲ → □
American beech	<i>Fagus grandifolia</i>	D	☀ → ●	▲ → □
Tulip tree	<i>Liriodendron tulipifera</i>	D	☀ → ☂	▲ → □
Cucumber tree	<i>Magnolia acuminata</i>	D	☂ → ●	▲ → □
Black tupelo	<i>Nyssa sylvatica</i>	D	☀ → ●	▲ → ○
Sycamore	<i>Platanus occidentalis</i>	D	☀ → ☂	■ → ▲
Red spruce	<i>Picea rubens</i>	E	☀ → ●	▲ → □
*Black cherry	<i>Prunus serotina</i>	D	☀ → ☂	▲ → ○
White oak	<i>Quercus alba</i>	D	☀ → ☂	▲ → ○
Chestnut oak	<i>Quercus montana</i>	D	☀ → ☂	▲ → ○
Northern red oak	<i>Quercus rubra</i>	D	☀ → ☂	▲ → □
Post oak	<i>Quercus stellata</i>	D	☀ → ☂	□ → ○
American basswood	<i>Tilia americana</i>	D	☀ → ●	▲ → □
Eastern hemlock	<i>Tsuga canadensis</i>	E	☀ → ●	▲ → □
Carolina hemlock	<i>Tsuga caroliniana</i>	E	☀ → ●	▲ → □

K	LIGHT	TYPE
	☀ = full sun	D = deciduous
	☂ = part sun	E = evergreen
E	● = shade	
	SOIL MOISTURE	
	■ = hydric; wet, plants periodically or often inundated by water	
Y	▲ = mesic; moist, adequate soil moisture retention year round	
	□ = sub-xeric; moist to dry, seasonally moist, periodically dry	
	○ = xeric; dry & drought resistant, little moisture retention, excessively drained	

Common name	Scientific name	type	light	water
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low shrub (under 4 feet)

New Jersey tea	<i>Ceanothus americanus</i>	D	☂ → ●	▲ → ○
Sweetfern	<i>Comptonia peregrina</i>	D	☀ → ☂	□ → ○
Wild hydrangea	<i>Hydrangea arborescens</i>	D	☂ → ●	▲ → □
Shrubby St. John's wort	<i>Hypericum prolificum</i>	D	☀ → ☂	■ → ○
Drooping leucothoe	<i>Leucothoe fontanesiana</i>	E	☂ → ●	▲ → ○
Carolina rose	<i>Rosa carolina</i>	D	☀ → ☂	▲ → □
Swamp rose	<i>Rosa palustris</i>	D	☀ → ☂	■ → ▲
Cranberry	<i>Vaccinium macrocarpon</i>	E	☀ → ☂	■ → ▲
Lowbush blueberry	<i>Vaccinium pallidum</i>	D	☂ → ●	▲ → ○
Maple-leaf viburnum	<i>Viburnum acerifolium</i>	D	☂ → ●	▲ → ○

mid-size shrub (4 feet to 10 feet)

Red chokeberry	<i>Aronia arbutifolia</i>	D	☀ → ☂	■ → □
Black chokeberry	<i>Aronia melanocarpa</i>	D	☀ → ☂	■ → ○
Sweetshrub	<i>Calycanthus floridus</i>	D	☂ → ●	■ → □
Cinnamonbark	<i>Clethra acuminata</i>	D	☀ → ☂	□ → ○
Silky dogwood	<i>Cornus amomum</i>	D	☀ → ☂	■ → □
Hazelnut	<i>Corylus americana</i>	D	☀ → ●	▲ → □
Sthm bush-honeysuckle	<i>Diervilla sessilifolia</i>	D	☂ → ●	▲ → ○
Hearts-a-bustin	<i>Euonymus americanus</i>	D	☂ → ●	▲ → □
Large fothergilla	<i>Fothergilla major</i>	D	☀ → ☂	▲ → □
Dense St. John's wort	<i>Hypericum densiflorum</i>	D	☀ → ☂	▲ → ○
Common winterberry	<i>Ilex verticillata</i>	D	☀ → ☂	■ → ▲
Virginia sweetspire	<i>Itea virginica</i>	D	☀ → ●	■ → □
Mountain laurel	<i>Kalmia latifolia</i>	E	☀ → ☂	□ → ○
Spicebush	<i>Lindera benzoin</i>	D	☂ → ●	▲
Sweet azalea	<i>Rhododendron aborescens</i>	D	☀ → ●	■ → ▲
Flame azalea	<i>Rhododendron calendulaceum</i>	D	☂ → ●	▲ → □
Carolina rhododendron	<i>Rhododendron carolinianum</i>	E	☂ → ●	▲ → □
Catawba rhododendron	<i>Rhododendron catawbiense</i>	E	☀ → ☂	▲ → □
Pinxter azalea	<i>Rhododendron periclymenoides</i>	D	☂ → ●	■ → □
Pinkshell azalea	<i>Rhododendron vaseyi</i>	E	☀ → ☂	▲ → □
*Elderberry	<i>Sambucus canadensis</i>	D	☀ → ●	▲
*Coral berry	<i>Symphoricarpos orbiculatus</i>	D	☀ → ●	▲ → ○
*Nthm highbush blueberry	<i>Vaccinium corymbosum</i>	D	☀ → ☂	□ → ○
Deerberry	<i>Vaccinium stamineum</i>	D	☀ → ●	▲ → ○
Hobblebush	<i>Viburnum alnifolium</i>	D	☂ → ●	▲
Witherod viburnum	<i>Viburnum cassinoides</i>	D	☀ → ●	▲ → □

large shrub (over 10 feet)

*Tag alder	<i>Alnus serrulata</i>	D	☀ → ☂	■ → ▲
Mountain winterberry	<i>Ilex montana</i>	D	☀ → ☂	▲ → □
Mock orange	<i>Philadelphus inodorus</i>	D	☀ → ☂	▲ → □
Rosebay rhododendron	<i>Rhododendron maximum</i>	E	☂ → ●	▲ → □
*Smooth sumac	<i>Rhus glabra</i>	D	☀ → ☂	▲ → □
*Silky willow	<i>Salix sericea</i>	D	☀ → ●	■ → □
*Arrowwood	<i>Viburnum dentatum</i>	D	☀ → ☂	▲ → □

vine

Dutchman's pipe	<i>Aristolochia macrophylla</i>	D	☂ → ●	▲ → ○
Crossvine	<i>Bignonia capreolata</i>	E	☀ → ●	■ → □
Trumpet creeper	<i>Campsis radicans</i>	D	☀ → ☂	□ → ○
Virgin's bower	<i>Clematis virginiana</i>	D	☀ → ●	▲ → ○
Climbing hydrangea	<i>Decumaria barbara</i>	D	☀ → ☂	▲ → □
Coral honeysuckle	<i>Lonicera sempervirens</i>	D	☀ → ☂	▲ → □
*Virginia creeper	<i>Parthenocissus quinquefolia</i>	D	☀ → ●	▲ → ○
Passion flower	<i>Passiflora incarnata</i>	D	☀ → ☂	▲ → ○
Fox grape	<i>Vitis labrusca</i>	D	☀ → ☂	▲ → □

* These plants can be vigorous growers and may need more management control.

FERNS

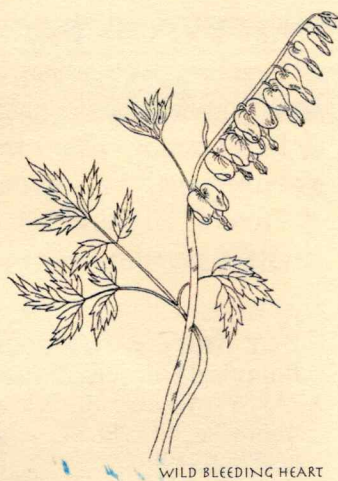
Nihem maidenhair fern	<i>Adiantum pedatum</i>
Ebony spleenwort	<i>Asplenium platyneuron</i>
Lady fern	<i>Athyrium filix-femina</i>
Hay-scented fern	<i>Dennstaedtia punctilobula</i>
Marginal wood fern	<i>Dryopteris marginalis</i>
Sensitive fern	<i>Onoclea sensibilis</i>
Cinnamon fern	<i>Osmunda cinnamomea</i>
Interrupted fern	<i>Osmunda claytoniana</i>
Royal fern	<i>Osmunda regalis</i>
Christmas fern	<i>Polystichum acrostichoides</i>
New York fern	<i>Thelypteris noveboracensis</i>
Netted chain fern	<i>Woodwardia areolata</i>

GRASSES AND SEDGES

Big bluestem	<i>Andropogon gerardii</i>
Broomsedge	<i>Andropogon virginicus</i>
River cane	<i>Arundinaria gigantea</i>
Pennsylvania sedge	<i>Carex pensylvanica</i>
Plantain-leaved sedge	<i>Carex plantaginea</i>
River oats	<i>Chasmanthium latifolium</i>
Oat grass	<i>Danthonia compressa</i>
Bottle brush grass	<i>Elymus hystrix</i>
Switch-grass	<i>Panicum virgatum</i>
Little bluestem	<i>Schizachyrium scoparium</i>
Indian grass	<i>Sorghastrum nutans</i>
Eastern gamma grass	<i>Tripsacum dactyloides</i>

MOSAIC FOR FULL SUN

Butterfly-milkweed	<i>Asclepias tuberosa</i>
New England aster	<i>Aster novae angliae</i>
Rigid whitetop aster	<i>Symphoricarum reticulatum</i>
Hairy coreopsis	<i>Coreopsis pubescens</i>
Joe-Pye weed	<i>Eupatorium fistulosum</i>
Dense blazing star	<i>Liatris spicata</i>
Cardinal flower	<i>Lobelia cardinalis</i>
Scarlet bee balm	<i>Monarda didyma</i>
Wild blue phlox	<i>Phlox divaricata</i>
Blackeyed susan	<i>Rudbeckia hirta</i>



WILD BLEEDING HEART

GROUND COVERS

Pussy's toes	<i>Antennaria plantaginifolia</i>
Wild ginger	<i>Asarum canadense</i>
Green-and-gold	<i>Chrysogonum virginianum</i>
Lobed tickseed	<i>Coreopsis auriculata</i>
Wild strawberry	<i>Fragaria virginiana</i>
Wintergreen	<i>Gaultheria procumbens</i>
Little brown jugs	<i>Hexastylis arifolia</i>
Dwarf crested iris	<i>Iris cristata</i>
Partridge berry	<i>Mitchella repens</i>
Allegheny spurge	<i>Pachysandra procumbens</i>
Fernleaf phacelia	<i>Phacelia bipinnatifida</i>
Hairy phlox	<i>Phlox amoena</i>
Wild blue phlox	<i>Phlox divaricata</i>
Creeping phlox	<i>Phlox stolonifera</i>
Narrowleaved silkgrass	<i>Pityopsis graminifolia</i>
Christmas fern	<i>Polystichum acrostichoides</i>
Oconee bells	<i>Shortia galacifolia</i>
Blue-eyed grass	<i>Sisyrinchium mucronatum</i>
Foamflower	<i>Tiarella cordifolia</i>
Yellow-root	<i>Xanthorhiza simplicissima</i>



WILD COLUMBINE

WILDFLOWERS

Doll's eyes	<i>Actaea pachypoda</i>
Carolina phlox	<i>Phlox carolina</i>
Eastern blue star	<i>Amsonia tabernaemontana</i>
Thimbleweed	<i>Anemone virginiana</i>
Wild columbine	<i>Aquilegia canadensis</i>
Green dragon	<i>Arisaema dracontium</i>
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>
Goat's beard	<i>Aruncus dioicus</i>
Swamp milkweed	<i>Asclepias incarnata</i>
Butterfly milkweed	<i>Asclepias tuberosa</i>
White wood aster	<i>Aster divaricatus</i>
Late purple aster	<i>Aster patens</i>
False goatsbeard	<i>Astilbe biternata</i>
Wild indigo	<i>Baptisia tinctoria</i>
Blue cohosh	<i>Caulophyllum thalictroides</i>
Pink turtlehead	<i>Chelone lyonii</i>
Black cohosh	<i>Cimicifuga racemosa</i>
Coreopsis	<i>Coreopsis pubescens</i>
Bleeding heart	<i>Dicentra eximia</i>
Shooting star	<i>Dodecatheon meadia</i>
Joe-Pye weed	<i>Eupatorium fistulosum</i>
Wild geranium	<i>Geranium maculatum</i>
Resinot sunflower	<i>Helianthus resinosus</i>
Sharp-lobed hepatica	<i>Hepatica acutiloba</i>
Alumroot	<i>Heuchera americana</i>
Jewelweed	<i>Impatiens capensis</i>
Blazing star	<i>Liatris spicata</i>
Turks-cap lily	<i>Lilium superbum</i>
Cardinal flower	<i>Lobelia cardinalis</i>
Blue lobelia	<i>Lobelia puberula</i>
Great lobelia	<i>Lobelia siphilitica</i>
Fringed loosestrife	<i>Lysimachia ciliata</i>
Bishop's cap	<i>Mitella diphylla</i>
Bee balm	<i>Monarda didyma</i>
Carolina phlox	<i>Phlox carolina</i>
Fall phlox	<i>Phlox paniculata</i>
Solomon's seal	<i>Polygonatum biflorum</i>
Blackeyed susan	<i>Rudbeckia hirta</i>
Bloodroot	<i>Sanguinaria canadensis</i>
Fire pink	<i>Silene virginica</i>
Wrinkle-leaf goldenrod	<i>Solidago rugosa</i>
Blue Ridge goldenbanner	<i>Thermopsis villosa</i>
New York ironweed	<i>Vernonia noveboracensis</i>

MOSAIC FOR SHADE

Jack-in-the-pulpit	<i>Arisaema triphyllum</i>
Wild ginger	<i>Asarum canadense</i>
Trout lily	<i>Erythronium americanum</i>
Sharp-lobed hepatica	<i>Hepatica acutiloba</i>
Alumroot	<i>Heuchera americana</i>
Partridge berry	<i>Mitchella repens</i>
Cinnamon fern	<i>Osmunda cinnamomea</i>
Smooth Solomon's seal	<i>Polygonatum biflorum</i>
Christmas fern	<i>Polystichum acrostichoides</i>
Oconee bells	<i>Shortia galacifolia</i>
Foamflower	<i>Tiarella cordifolia</i>

BUTTERNUT HICKORY



What You Can Do:

- ✱ Learn more about native plants.
- ✱ Buy nursery propagated plant material.
- ✱ Don't remove plants from the wild.
- ✱ Protect native plants and natural area habitats.
- ✱ Promote responsible landscaping practices.
- ✱ Avoid planting invasive plant species.

For more information:

Botanical Gardens at Asheville
151 WT Weaver Boulevard
Asheville, NC 28804
828/252/5190

Great Smoky Mountains National Park
107 Park Headquarters Road
Gatlinburg, TN 37738
423/436/1706

North Carolina Botanical Garden
Conservation Curator
CB 3375, Totten Center
Chapel Hill, NC 27599-3375

Southeast Exotic Pest Plant Council
(SE-EPPC)
P.O. Box 50556
Nashville, TN 37205
www.se-eppc.org

Southern Appalachian Man and
The Biosphere Cooperative
www.samab.org

Contact your local County Cooperative Extension
Service Office

Useful Websites:

Plants Database, usda.gov/about_plants/html

NC Native Plant Society-www.ncwildflower.org/

Center for Plant Conservation-www.centerforplant-conservation.org

Plant Conservation Alliance- www.nps.gov/plants/

Going Native (NCSU)-www.ncsu.edu/goingnative

Text, Maps and Plant List by

- Great Smoky Mountains National Park
- Southern Appalachian Forest Coalition
- Southern Appalachian Man and the Biosphere Cooperative.
- Tennessee Natural Areas Program—Natural Heritage Division
- U.S. Fish and Wildlife Service
- U.S. Forest Service

- North Carolina Arboretum
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- Western North Carolina Tomorrow

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- Ron Lance

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