### 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 – *Elaegnus 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

Scientific name	type	light	water				
small tree (up to 25 feet)							
Amelanchier arborea Aralia spinosa Asimina triloba Carpinus caroliniana Castanea pumila Cercis canadensis Chionanthus virginicus Comus altemifolia Comus florida Crataegus phaenopyrum Diospyros virginiana Halesia carolina Hamamelis virginiana Ilex opaca Juniperus virginiana Magnolia tripetala Ostrya virginiana Oxydendrum arboreum Ptelea trifoliata Prunus americana Prunus pensylvanica Sassafras albidum	**************************************						
Viburnum rufidulum	D <b>*</b>	<b>→</b> ●					
	feet)  Amelanchier arborea Aralia spinosa Asimina triloba Carpinus caroliniana Castanea pumila Cercis canadensis Chionanthus virginicus Comus altemifolia Comus florida Crataegus phaenopyrum Diospyros virginiana Halesia carolina Hamamelis virginiana Ilex opaca Juniperus virginiana Magnolia tripetala Ostyva virginiana Oxydendrum arboreum Ptelea trifoliata Prunus americana Prunus pensylvanica	feet)  Amelanchier arborea D Aralia spinosa D Asimina triloba D Carpinus caroliniana D Castanea pumila D Cercis canadensis D Chionanthus virginicus D Comus alternifolia D Cornus alternifolia D Crataegus phaenopyrum D Diospyros virginiana D Halesia carolina D Hamamelis virginiana D Hamamelis virginiana D Magnolia tripetala	feet)  Amelanchier arborea D * → D Aralia spinosa D * → D Asimina triloba D D → ○ Castanea pumila D * → ○ Castanea pumila D * → ○ Castanea pumila D * → ○ Chionanthus virginicus D * → ○ Corrus alternifolia D * → ○ Crataegus phaenopyrum D * → D Diospyros virginiana D * → D Diospyros virginiana D * → ○ Castanea D * → ○ Castanea D * → ○ Castanea D * → ○ Diospyros virginiana D * → ○ Diospyros vi				

James tree (ever 05 feet)							
large tree (over 25 feet)							
Red maple	Acer rubrum	D	<b>*</b> → •	$\blacksquare \rightarrow \bigcirc$			
Sugar maple	Acer saccharum	D	<b>*</b> → •	$\blacktriangle \rightarrow \square$			
Yellow buckeye	Aesculus flava	D	<b>)</b> → •	$\blacktriangle \rightarrow \Box$			
Yellow birch	Betula allegheniensis	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \square$			
Sweet birch	Betula lenta	D	<b>*</b> → •	$\blacktriangle \rightarrow \square$			
River birch	Betula nigra	D	<b>*</b> → <b>)</b>	$\blacksquare \rightarrow \bigcirc$			
Bitternut hickory	Carya cordiformis	D	<b>*</b> → •	$\blacktriangle \rightarrow \square$			
Pignut hickory	Carya glabra	D	<b>*</b> → •	$\Box \rightarrow \bigcirc$			
Yellowwood	Cladrastis kentukea	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \square$			
American beech	Fagus grandifolia	D	<b>*</b> → •	$\blacktriangle \rightarrow \square$			
Tulip tree	Liriodendron tulipifera	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \square$			
Cucumber tree	Magnolia acuminata	D	$\rightarrow \bullet$	$\blacktriangle \rightarrow \square$			
Black tupelo	Nyssa sylvatica	D	<b>*</b> → •	$\blacktriangle \rightarrow \bigcirc$			
Sycamore	Platanus occidentalis	D	<b>*</b> → <b>)</b>	■ → ▲			
Red spruce	Picea rubens	Е	<b>*</b> → •	$\blacktriangle \rightarrow \Box$			
*Black cherry	Prunus serotina	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \bigcirc$			
White oak	Quercus alba	D	<b>*</b> → <b>)</b>				
Chestnut oak	Quercus montana	D	<b>*</b> → <b>)</b>				
Northern red oak	Quercus rubra	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \square$			
Post oak	Quercus stellata	D	<b>*</b> → <b>)</b>	$\Box \rightarrow \bigcirc$			
American basswood	Tilia americana	D	<b>*</b> → •	$\blacktriangle$ $\rightarrow$ $\square$			
Eastern hemlock	Tsuga canadensis	Е	<b>*</b> → •	$\blacktriangle \rightarrow \square$			
Carolina hemlock	Tsuga caroliniana	Е	<b>*</b> → •	$\blacktriangle \rightarrow \Box$			

K	LIGHT  * = full sun  ▶ = part sun  • = shade	TYPE D = deciduous E = evergreen	
Е	SOIL MOISTURE ■ = hydric; wet, plants peri	odically or often inundated by	
	▲ = mesic; moist, adequate	e soil moisture retention year	
Y	☐ = sub-xeric; moist to dry dry ☐ = xeric; dry & drought re	s seasonally moist, periodically esistant, little moisture retention,	
	excessively drained		l

UIIII				
Common name	Scientific name	type	light	water
low shrub (under a New Jersey tea Sweetfern Wild hydrangea Shrubby St. John's wort Drooping leucothoe Carolina rose Swamp rose Cranberry Lowbush blueberry Maple-leaf viburnum	4 feet) Ceanothus americanus Comptonia peregrina Hydrangea arborescens Hypericum prolificum Leucothoe fontanesiana Rosa carolina Rosa palustris Vaccinium macrocarpon Vaccinium pallidum Vibumum acerifolium	D D D E D D E D D	<pre>     → □     * → □</pre>	
mid-size shrub (4	Aronia arbutifolia	D	<b>*</b> → <b>)</b>	■ → □
Black chokeberry Sweetshrub	Aronia melanocarpa Calvcanthus floridus	D D	<b>*</b> → <b> </b>	$\blacksquare \to \bigcirc$

Red chokeberry	Aronia arbutifolia	D	<b>*</b> → <b>)</b>	$\blacksquare \rightarrow \Box$
Black chokeberry	Aronia melanocarpa	D	<b>*</b> → <b>)</b>	■ → ○
Sweetshrub	Calycanthus floridus	D	<b>→</b> •	$\blacksquare \rightarrow \Box$
Cinnamonbark	Clethra acuminata	D	<b>*</b> → <b>)</b>	$\Box$ $\rightarrow$ $\bigcirc$
Silky dogwood	Comus amomum	D	<b>*</b> → <b>)</b>	$\blacksquare$ $\rightarrow$ $\square$
Hazelnut	Corylus americana	D	<b>*</b> → •	$\blacktriangle \rightarrow \Box$
Sthm bush-honeysuckle	Diervilla sessilifolia	D	<b>*</b> → •	$\blacktriangle \rightarrow \bigcirc$
Hearts-a-bustin	Euonymus americanus	D	<b>→</b>	$\blacktriangle \rightarrow \Box$
Large fothergilla	Fothérgilla major	D	<b>*</b> → <b>)</b>	$\blacktriangle$ $\rightarrow$ $\square$
Dense St. John's wort	Hypericum densiflorum	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \bigcirc$
Common winterberry	llex verticillata	D	<b>*</b> → •	$\blacksquare \rightarrow \blacktriangle$
Virginia sweetspire	Itea virginica	D	<b>*</b> → •	$\blacksquare \rightarrow \square$
Mountain laurel	Kalmia latifolia	Ε	<b>*</b> → <b>D</b>	$\Box \rightarrow \odot$
Spicebush	Lindera benzoin	D	→ •	<u> </u>
Sweet azalea	Rhododendron aborescens	D	<b>*</b> → •	$\blacksquare \rightarrow \blacktriangle$
Flame azalea	Rhododendron calendulaceum	D	) → •	$\blacktriangle$ $\rightarrow$ $\square$
Carolina rhododendron	Rhododendron carolinianum	Ε	$\rightarrow \bullet$	$\blacktriangle$ $\rightarrow$ $\square$
Catawba rhododendron	Rhododendron catawbiense	Ε	<b>*</b> → •	$\blacktriangle \rightarrow \square$
Pinxter azalea	Rhododendron periclymenoides	D	▶ → ●	$\blacksquare$ $\rightarrow$ $\square$
Pinkshell azalea	Rhododendron vaseyi	Ε	<b>*</b> → <b>)</b>	$\blacktriangle$ $\rightarrow$ $\square$
*Elderberry	Sambucus canadensis	D	<b>*</b> → •	<b>A</b>
*Coral berry	Symphoricarpos orbiculatus	D	<b>*</b> → •	
*Nthm highbush blueberry	Vaccinium corymbosum	D	<b>*</b> → <b>)</b>	$\Box$ $\rightarrow$ $\bigcirc$
Deerberry	Vaccinium stamineum	D	<b>*</b> → •	$\blacktriangle \rightarrow \bigcirc$
Hobblebush	Vibumum alnifolium	D	▶ → ●	<b>A</b>
Witherod viburnum	Viburnum cassinoides	D	<b>*</b> → •	$\blacktriangle$ $\rightarrow$ $\square$

large shrub (over	10 feet)			
*Tag alder	Alnus serrulata	D	<b>*</b> → )	$\blacksquare \rightarrow \blacktriangle$
Mountain winterberry	llex montana	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \Box$
Mock orange	Philadelphus inodorus	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \Box$
Rosebay rhododendron	Rhododendron maximum	Ε	$\rightarrow \bullet$	$\blacktriangle \rightarrow \square$
Smooth sumac	Rhus glabra	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \square$
Silky willow	Salix sericea	D	<b>*</b> → •	$\blacksquare \rightarrow \square$
Arrowwood	Viburnum dentatum	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \Box$

vine				
Dutchman's pipe	Aristolochia macrophylla	D	▶ → ●	
Crossvine	Bignonia capreolata ´	Е	<b>*</b> → •	$\blacksquare \rightarrow \Box$
Trumpet creeper	Campsis radicans	D	<b>*</b> → <b>)</b>	$\square \rightarrow \bigcirc$
Virgin's bower	Clematis virginiana	D	<b>*</b> → •	$\blacktriangle \rightarrow \bigcirc$
Climbing hydrangea	Decumaria barbara	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \Box$
Coral honeysuckle	Lonicera sempervirens	D	<b>*</b> → <b>)</b>	$\blacktriangle \rightarrow \Box$
*Virginia creeper	Parthenocissus quinquefolia	D	<b>*</b> → •	$\blacktriangle \rightarrow \bigcirc$
Passion flower	Passiflora incarnata	D	<b>*</b> → ▶	$\blacktriangle \rightarrow \bigcirc$
Fox grape	Vitis labrusca	D	<b>*</b> → <b>)</b>	$\blacktriangle$ $\rightarrow$ $\square$
• .				

Lady fern Hay-scented fern Marginal wood fern Sensitive fern Cinnamon fern Interrupted fern Roval fern New York fern

Netted chain fern

Adiantum pedatum Asplenium platyneuron Athyrium felix-femina Dennstaedtia punctilobula Dryopteris marginalis Onoclea sensibilis Osmunda cinnamome Osmunda claytoniana Osmunda regalis Polystichum acrostichoide Thelypteris noveboracensis Woodwardia areolata

#### **GRASSES AND SEDGES**

Big bluestem Broomsedae River cane Pennsylvania sedge Plantain-leaved sedge River oats Bottle brush grass Switch-grass Little bluester Indian grass Eastern gamma grass

Andropogon virginicus Arundinaria gigantea Carex plantaginea Chasmanthium latifoli Danthonia compressa Elvmus hvstrix Panicum virgatur Schizachyrium scoparium Sorghastrum nutans Tripsacum dactyloides

#### Pussy's toes

Butterfly-milkweed New England aster Rigid whitetop aster Hairy coreopsis Joe-Pve weed Dense blazing star Cardinal flower Scarlet bee balm Wild blue phlox Blackeyed susan

MOSAIC FOR FULL SUN

Asclepias tuberosa Aster novae angliae Symphyotrichum retroflexun reopsis pubescens Eupatorium fistulosun Liatris spicata Lobelia cardinalis Monarda didyma Phlox divaricata Rudbeckia hirta



#### **MOSAIC FOR SHADE**

Jack-in-the-pulpit Wild ginger Sharp-lobed hepatica Partridge berry Cinnamon fern Smooth Solomon's sea Christmas fern Oconee bells



Arisaema triphyllum

Asarum canadense

Henatica acutiloba

Mitchella repens

Shortia galacifolia

Frythronium americanu

Osmunda cinnamomea

Polygonatum biflorum

Polystichum acrostichoides



#### **GROUND COVERS**

Antennaria plantaginifolia

Chrysogonum virginianun

Coreopsis auriculata

Gaultheria procumbens

Pachysandra procumbe

Phacelia bipinnatifida

Hexastylis arifolia

Mitchella repens

Phlox amoena

Phlox divaricata

Phlox stolonifera

Pityopis graminifolia

Shortia galacifolia

Actaea pachypoda

Anemone viginiana

Arisaema dracontium

Arisaema triphyllum

Aruncus dioicus

Amsonia tahernaemont

Sisyrinchium mucronatun

Xanthorhiza simplicissim

Wild ginger Green-and-gold Lobed tickseed Wild strawberry Wintergreen Little brown jugs Partridge berry Allegheny spurge Hairy phlox Wild blue phlox Creeping phlox Narrowleaved silkgrass Christmas fern Oconee bells Blue-eyed grass

#### **WILDFLOWERS**

Doll's eyes Fastern blue star Thimbleweed Wild columbine Green dragon Jack-in-the-pulpit Goat's beard Swamp milkweed Butterfly milkweed White wood aster Late purple aster False goatsbeard Blue cohosh Black cohosh Coreopsis Shooting star Joe-Pve weed Wild geranium Resindot sunflower Sharp-lobed hepatica Jewelweed Blazing star Cardinal flower Blue lobelia Great lobelia Fringed Joostrif Bishop's cap Carolina phlos Fall phlox

Blackeved susan

Wrinkle-leaf goldenrod

Fire pink

Asclepias incarnata Asclepias tuberosa Aster divaricatus Aster patens Astilbe biternati Baptisia tinctoria Caulophyllum thalictrois Chelone Iyonii Cimicifuga racemosa Coreopsis pubescens Dodecatheon meadia Eupatorium fistulosu Helianthus resinosus Hepatica acutiloba Impatiens capensis Liatris spicata Lilium superbur Lobelia cardinalis Lobelia puberula Lobelia siphilitica Lysimachia ciliata Mitella diphylla

Monarda didyma Phlox carolina Phlox paniculata Polygonatum biflorum Rudbeckia hirta Sanguinaria canadens Silene virginica Solidago rugosa

Vernonia noveboracensi:

<sup>\*</sup> These plants can be vigorous growers and may need more management contro

#### 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:**

NC Native Plant Society-www.ncwildflower.org/ Center for Plant Conservation-www.centerforplantconservation.org

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

#### Other Co-sponsors

· Botanical Gardens of Asheville

Plants Database, usda.gov/about plants/html

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

#### North Carolina Arboretum

- North Carolina State University
- Western North Carolina Tomorrow

Other Plant Artwork by

• Ron Lance

Printing of brochure made possible by

· National Fish and Wildlife Foundation



## WESTERN NORTH CAROLINA

## Blue Ridge Mountains Part of the Southern Appalachians



# **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 Southern for their exceptional Appalachian variety of plants Region and animals. This mountain region owes its great diversity to the highly variable climate, topography, and its unique geologic past.

#### **Blue Ridge Mountains**

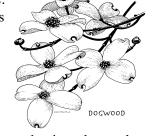
Western North Carolina is composed of 23 counties that lie almost entirely within the Blue Ridge Mountains of the Southern Appalachians. Soils in this region tend to be well drained, loamy, strongly acidic, and low in natural fertility. Site conditions for plants are determined by the topography, soil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

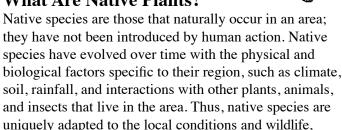
The use of native plants in landscaping is a celebration of our natural heritage and an awakening of a land ethic first expressed by Aldo Leopold, the father of wildlife conservation, more than 50 years ago.

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?



#### **Benefits of Native Plants?**

*Hardy and should withstand regional weather* extremes when properly sited and planted.

including important pollinators and migratory birds.

- 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.