

- Don't collect plants from the wild
- Buy nursery propagated plant material
- Help prevent establishment of non-native species in natural communities

FOR MORE INFORMATION ON NATIVE PLANTS

Department of Conservation and Recreation
 Division of Natural Heritage
 217 Governor Street
 Richmond, VA 23219
 (804) 786-7951
<http://www.state.va.us/~dcr/vaher.html>

For a list of nurseries that propagate native plants:

Virginia Native Plant Society
 Blandy Experimental Farm
 400 Blandy Farm Lane, Unit 2
 Boyce, Va 22620
 (540) 837-1600
<http://www.vnps.org>

For a list of nurseries in a particular region of Virginia contact:

The Virginia Nurseryman's Association*
 383 Coal Hollow Road
 Christianburg, VA 24062-0278
 (540) 382-0943
vna@swva.net

* List includes association members only.

ABOUT THE PROJECT

This project is the result of a collaboration between the Virginia Department of Conservation and Recreation and the Virginia Native Plant Society and was made possible by a grant from the National Fish and Wildlife Foundation. Funds were also contributed by the Virginia Nurseryman's Association, the Virginia Chapter of the American Society of Landscape Architects and the Lewis Ginter Botanical Garden. In addition to those three organizations, the sponsors extend their considerable appreciation to the other collaborators who provided valuable advice and assistance throughout the life of the project:

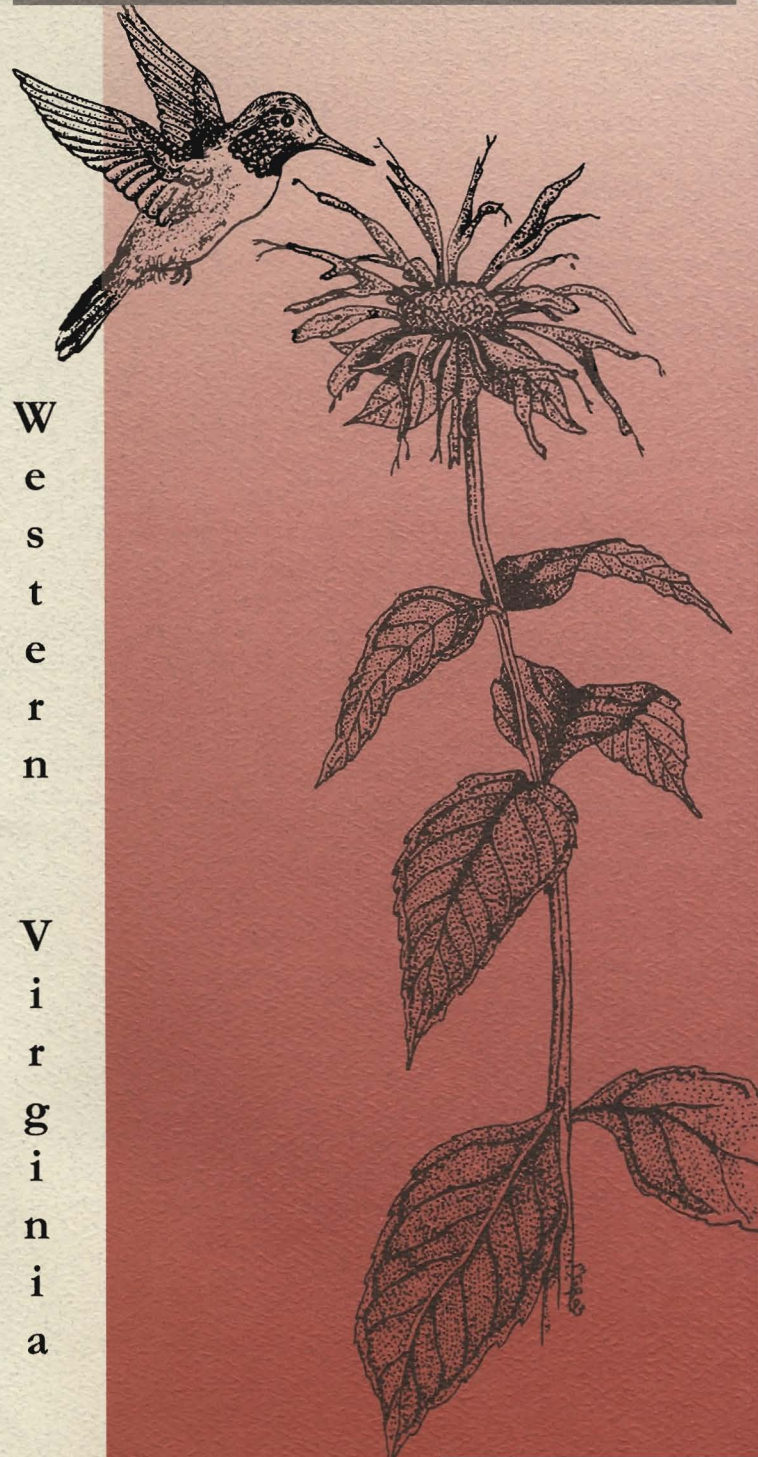
The Nature Conservancy-Virginia Chapter
 Virginia Polytechnic Institute and State University,
 Department of Horticulture
 Virginia Department of Agriculture and Consumer Services
 Virginia Department of Forestry
 Virginia Department of Game and Inland Fisheries
 Virginia Department of Transportation

Project participants share a commitment to protect native plant habitats, especially those that support rare, threatened or endangered species. The use of native plant species—especially plants propagated from local populations—in land management, conservation, restoration and horticultural projects will help maintain the ecological integrity of natural areas and preserve native biodiversity.

James S. Gilmore, III, Governor
 John Paul Woodley, Jr.,
 Secretary of Natural Resources
 David G. Brickley, Director
 Department of Conservation and Recreation

Native Plants for Conservation, Restoration and Landscaping

Celebrate and Preserve Our Natural Heritage



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Our Natural Heritage

Native wildflowers, shrubs and trees are natural heirlooms handed down to us from a time before recorded history. Using native plants in even the smallest garden can create miniature landscapes possessing the charm and character unique to a region's natural history. With some simple changes, our traditional lawns and gardens can expand to include these local heirlooms, providing us with beauty, solace and conversation, as well as contributing to the conservation of native species.

Indeed, landscaping with native plants, whether in a private garden, on commercial property or public parks, will help to preserve species. Natural habitats for some of our native plants are rapidly being lost. But there are other reasons for planting native wildflowers, grasses, ferns, shrubs and trees: They can match the finest cultivated plants in beauty and may surpass them in ruggedness and resistance to insects and diseases.

What Are Natives?

Native species are those that occur in the region in which they have evolved. Plants and animals evolve in specific habitats over extended periods of time in response to physical and biotic processes that are characteristic of that place: the climate; the soils; the seasonal rainfall, drought and frost; and interactions with other species occupying those habitats. They thus possess certain traits that make them uniquely adapted to local conditions.

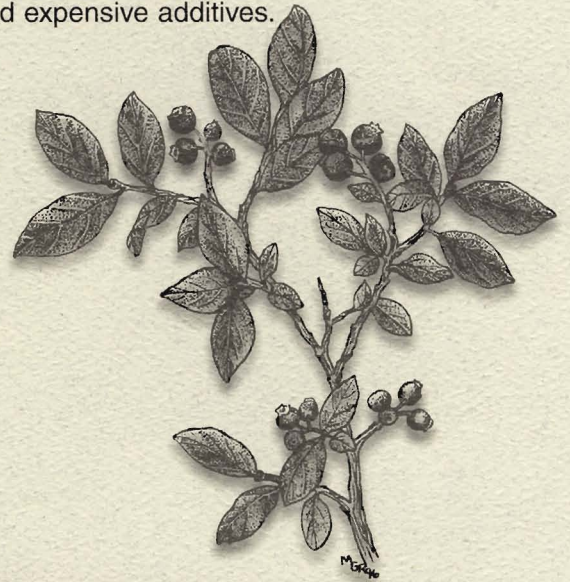
In North America, plants are considered to be native if they occurred here prior to European settlement. This distinction is made because of the many changes in the flora that have occurred since the arrival of European settlers. Since then many plants from distant and exotic shores have been deliberately and accidentally introduced to North America. But alien species do not only come from distant countries; they may be introduced from a different region of the same country. For instance, a species native to the forests of the West Coast are considered alien if found on the East Coast where it is not a constituent of the regional flora.

Natives vs. Aliens

While many alien plants are beneficial and have little or no effect on the natural environment, a few invasive alien species pose serious threats to both natural communities and rare species. Because of a lack of natural controls like insect pests and competitors, some alien plants are able to escape our gardens, establish in a new area, then displace the native plant species growing there. What was a finely woven and diverse natural community may become a monoculture dominated by the invasive alien plant. Along with the displacement of native plant species from these natural habitats, comes the loss of many flying, crawling and burrowing creatures that relied on these plants for food, cover and shelter.

In contrast to invasive alien species, other non-native plants are unable to thrive without extra effort by gardeners.

tional watering and fertilizer. The natural defenses plants evolve in their original habitats may not protect them in a new environment, requiring the application of pesticides to aid their growth. The benefit of growing plants within the region in which they evolved is that they are more likely to thrive under the local conditions, requiring less attention, labor and expensive additives.



Basics About Landscaping with Natives

When landscaping with natives, match the plants to the correct region, moisture and light conditions. Start with this brochure by studying the names of the plants native to your region, and the sunlight and moisture regimes they prefer. Refer to field guides and books of natural history to learn which plants fit within your planting scheme and provide specific benefits to the wildlife in your area. Plan to texture your landscape with a combination of flowers, shrubs and trees that would occur together naturally. Visit a natural area in your region and observe common plant associations, spatial groupings and habitat conditions. Whether you start small or go all out, always purchase your native plants and seeds from a reputable source that propagates their own plants, preferably from local sources.

Natives for Wildlife

Plants and animals evolve together to create unique natural communities, weaving a complex web of interrelationships. Flowers often bloom and fruits ripen in synchrony with the needs of the animals that pollinate the flowers and disperse the seeds. A butterfly feeds on the nectar of a certain flower and in turn pollinates the plant. To reap the greatest benefit, the flower must bloom and the butterfly emerge simultaneously. Later the flower goes to seed, coincidentally when songbirds are fattening for the autumn migration. Gorging zestfully, the birds scatter much of what they fail to eat, thus helping disperse the plant's seed.

But alien plant species rarely keep time according to the internal clocks of our native wildlife nor conform in shape and size as neatly as native plants. Their flowers may bloom too early or late, their fruits grow too large for resident birds to carry, their petals too long for a local nectar

The greater the variety of plants, the more likely uncommon species will be attracted to your yard. Certain butterflies will only hatch and feed on one type of host plant. When you plant a variety of host and nectar plants, you may see the entire life cycle of several species of butterflies. And keep in mind butterflies and hummingbirds prefer different flowers. Songbirds too will visit wildflowers during the spring and summer nesting season to feed on insects and spiders and carry them back to their young. Later, they will visit for the dried seeds to fuel them for long journeys to southern wintering grounds. Trees for nesting, shrubs for shelter and water for bathing further enhance a backyard wildlife preserve.

Mountains



■ Mountain Provinces

Virginia is divided into several physiographic provinces based on their geologic history. Each province is unique in topography, soil pH, soil depth, elevation, availability of light and hydrology. These characteristics all combine to influence the species of plants and animals found there. Virginia is unique, encompassing parts of five of these provinces and thus a greater variety of natural landscapes than any other eastern state.

The Mountain Region of Virginia actually includes parts of three provinces; the Blue Ridge, the Ridge and Valley, and the Appalachian Plateau Physiographic Provinces. The Blue Ridge encompasses the Blue Ridge Mountains, a wedge of ancient rock that was uplifted over younger rocks when the Appalachian Mountains were formed. A narrow system of peaks in the north, the Blue Ridge widens south of Roanoke Gap into a broad plateau topped by the highest peaks in Virginia – Mount Rogers and Whitetop. The Ridge and Valley Province is characterized by long, even-crested, parallel ridges rising above intervening valleys of various size. The Valley of Virginia, which lies between the Blue Ridge Mountains and the Allegheny Mountains, is included in this province. The ridges of the Appalachian Plateau in far southwestern Virginia were not as folded and faulted as those of the Ridge and Valley, but formed from a high, unified plateau of nearly horizontal rock layers. The modern mountainous topography was created by streams cutting deeply through the plateau, forming an intricate network of narrow, steep valleys. The diversity in topography and geologic history of this region of Virginia gives rise to a rich array of natural communities and native species.

Recommended Uses

W=Wildlife
H=Horticulture & landscaping
C=Conservation & restoration
D=Domestic livestock forage

Minimum Light Requirements

S=Shade
P=Partial sun
F=Full sun

Native Regions

C=Coastal
P=Piedmont
M=Mountains

Moisture Requirements

L=Low moisture
M=Moderate moisture
H=High moisture

Scientific Name	Common Name	Uses			Light			Moisture			
		W	H	C	D	S	P	F	L	M	H
Herbaceous plants											
<i>Acorus americanus</i>	sweet flag	.	.			.	.				.
<i>Aquilegia canadensis</i>	wild columbine	.	.					.	.	.	.
<i>Anisaema triphyllum</i>	Jack-in-the-pulpit	.	.			.				.	.
<i>Aruncus dioicus</i>	goatsbeard	.	.			.	.			.	.
<i>Asarum canadense+</i>	wild ginger	.	.			.				.	.
<i>Asclepias incarnata</i>	swamp milkweed	.	.			.	.			.	.
<i>Asclepias tuberosa</i>	butterfly weed	.	.			.	.			.	.
<i>Aster divaricatus</i>	white wood aster	.	.			.	.			.	.
<i>Aster novae-angliae</i>	New England aster	.	.			.	.			.	.
<i>Aster pilosus</i>	white heath aster	.	.			.	.			.	.
<i>Aster umbellatus</i>	flat-top white aster	.	.			.	.			.	.
<i>Baptisia tinctoria</i>	yellow wild-indigo	.	.			.	.			.	.
<i>Caltha palustris</i>	marsh marigold	.	.			.	.			.	.
<i>Chelone glabra</i>	white turtlehead	.	.			.	.			.	.
<i>Chrysogonum virginianum</i>	green and gold	.	.			.	.			.	.
<i>Chrysopsis mariana</i>	Maryland golden aster	.	.			.	.			.	.
<i>Cimicifuga racemosa</i>	black snakeroot	.	.			.	.			.	.
<i>Convallaria majuscula</i>	American lily-of-the-valley	.	.			.	.			.	.
<i>Coreopsis verticillata</i>	threadleaf coreopsis	.	.			.	.			.	.
<i>Delphinium tricorne</i>	dwarf larkspur	.	.			.	.			.	.
<i>Dicentra eximia</i>	wild bleeding heart	.	.			.	.			.	.
<i>Dodecatheon meadia</i>	shooting star	.	.			.	.			.	.
<i>Eupatorium coelestinum</i>	mistflower	.	.			.	.			.	.
<i>Eupatorium fistulosum</i>	Joe Pye weed	.	.			.	.			.	.
<i>Geranium maculatum</i>	wild geranium	.	.			.	.			.	.
<i>Helianthus decapetalus</i>	ten-petaled sunflower	.	.			.	.			.	.
<i>Helianthus divaricatus</i>	woodland sunflower	.	.			.	.			.	.
<i>Heliopsis helianthoides</i>	oxeye sunflower	.	.			.	.			.	.
<i>Hepatica acutiloba</i>	sharp-lobed hepatica	.	.			.	.			.	.
<i>Hibiscus moscheutos</i>	Eastern rosemallow	.	.			.	.			.	.
<i>Iris cristata</i>	dwarf crested iris	.	.			.	.			.	.
<i>Lespedeza capitata</i>	round-head bush clover	.	.			.	.			.	.
<i>Liatris spicata</i>	spiked blazing star	.	.			.	.			.	.
<i>Lilium canadense</i>	Canada lily	.	.			.	.			.	.
<i>Lilium philadelphicum</i>	wood lily	.	.			.	.			.	.
<i>Lilium superbum</i>	Turk's cap lily	.	.			.	.			.	.
<i>Lobelia cardinalis</i>	cardinal flower	.	.			.	.			.	.
<i>Lobelia siphilitica</i>	great blue lobelia	.	.			.	.			.	.
<i>Maianthemum racemosum</i>	false Solomon's seal	.	.			.	.			.	.
<i>Mertensia virginica</i>	Virginia bluebells	.	.			.	.			.	.
<i>Mimulus ringens</i>	monkeyflower	.	.			.	.			.	.
<i>Monarda didyma</i>	bee balm	.	.			.	.			.	.
<i>Monarda fistulosa</i>	wild bergamot	.	.			.	.			.	.
<i>Nymphaea odorata</i>	American water lily	.	.			.	.			.	.
<i>Oenothera fruticosa</i>	sundrops	.	.			.	.			.	.
<i>Opuntia humifusa</i>	Eastern prickly-pear	.	.			.	.			.	.
<i>Phlox divaricata</i>	woodland phlox	.	.			.	.			.	.
<i>Phlox stolonifera</i>	creeping phlox	.	.			.	.			.	.
<i>Phlox subulata</i>	moss phlox	.	.			.	.			.	.
<i>Physostegia virginiana</i>	obedient plant	.	.			.	.			.	.
<i>Podophyllum peltatum+</i>	mayapple	.	.			.	.			.	.
<i>Polygonatum biflorum</i>	Solomon's seal	.	.			.	.			.	.
<i>Porteranthus trifoliatum</i>	bowman's root	.	.			.	.			.	.
<i>Pycnanthemum incanum</i>	hoary mountain mint	.	.			.	.			.	.
<i>Pycnanthemum tenuifolium</i>	narrow-leaved mtn. mint	.	.			.	.			.	.
<i>Rudbeckia hirta</i>	black eyed Susan	.	.			.	.			.	.
<i>Rudbeckia laciniata</i>	cut-leaved coneflower	.	.			.	.			.	.
<i>Rudbeckia triloba</i>	three-lobed coneflower	.	.			.	.			.	.
<i>Sagittaria latifolia</i>	broadleaf arrowhead	.	.			.	.			.	.
<i>Sanguinaria canadensis</i>	bloodroot	.	.			.	.			.	.

Scientific Name	Common Name	Uses			Light			Moisture			
		W	H	C	D	S	P	F	L	M	H
<i>Silene virginica</i>	fire pink	.	.	.	.	.	.	.	.	.	.
<i>Solidago puberula</i>	downy goldenrod	.	.	.	.	.	.	.	.	.	.
<i>Solidago rugosa</i> +	rough-stemmed goldenrod	.	.	.	.	.	.	.	.	.	.
<i>Thalictrum dioicum</i>	early meadowrue	.	.	.	.	.	.	.	.	.	.
<i>Tiarella cordifolia</i> var. <i>collina</i>	clumping foamflower	.	.	.	.	.	.	.	.	.	.
<i>Tradescantia virginiana</i>	Virginia spiderwort	.	.	.	.	.	.	.	.	.	.
<i>Trillium erectum</i>	wakerobin	.	.	.	.	.	.	.	.	.	.
<i>Trillium grandiflorum</i>	white trillium	.	.	.	.	.	.	.	.	.	.
<i>Uvularia grandiflora</i>	bellwort	.	.	.	.	.	.	.	.	.	.
<i>Verbena hastata</i>	blue vervain	.	.	.	.	.	.	.	.	.	.
<i>Vernonia noveboracensis</i>	New York ironweed	.	.	.	.	.	.	.	.	.	.
<i>Viola pedata</i>	bird's foot violet	.	.	.	.	.	.	.	.	.	.
<i>Viola pubescens</i>	yellow violet	.	.	.	.	.	.	.	.	.	.
<i>Yucca filamentosa</i>	common yucca	.	.	.	.	.	.	.	.	.	.
Ferns and fern allies											
<i>Adiantum pedatum</i>	maidenhair fern	.	.	.	.	.	.	.	.	.	.
<i>Athyrium asplenoides</i>	Southern ladyfern	.	.	.	.	.	.	.	.	.	.
<i>Dryopteris intermedia</i>	evergreen wood-fern	.	.	.	.	.	.	.	.	.	.
<i>Dryopteris marginalis</i>	marginal shield-fern	.	.	.	.	.	.	.	.	.	.
<i>Osmunda cinnamomea</i>	cinnamon fern	.	.	.	.	.	.	.	.	.	.
<i>Osmunda regalis</i>	royal fern	.	.	.	.	.	.	.	.	.	.
<i>Polystichium acrostichoides</i>	Christmas fern	.	.	.	.	.	.	.	.	.	.
Grasses, sedges, rushes											
<i>Agrostis perennans</i>	autumn bentgrass	.	.	.	.	.	.	.	.	.	.
<i>Andropogon gerardii</i>	big bluestem	.	.	.	.	.	.	.	.	.	.
<i>Andropogon glomeratus</i>	bushy bluestem	.	.	.	.	.	.	.	.	.	.
<i>Andropogon virginicus</i>	broomseede	.	.	.	.	.	.	.	.	.	.
<i>Calamagrostis canadensis</i>	bluejoint reedgrass	.	.	.	.	.	.	.	.	.	.
<i>Carex crinita</i> var. <i>crinita</i>	long hair sedge	.	.	.	.	.	.	.	.	.	.
<i>Carex lurida</i>	sallow sedge	.	.	.	.	.	.	.	.	.	.
<i>Carex pensylvanica</i>	Pennsylvania sedge	.	.	.	.	.	.	.	.	.	.
<i>Carex plantaginea</i>	plantain-leaved sedge	.	.	.	.	.	.	.	.	.	.
<i>Carex stricta</i>	tussock sedge	.	.	.	.	.	.	.	.	.	.
<i>Chasmanthium latifolium</i>	river oats	.	.	.	.	.	.	.	.	.	.
<i>Danthonia sericea</i>	silky oatgrass	.	.	.	.	.	.	.	.	.	.
<i>Danthonia spicata</i>	poverty oatgrass	.	.	.	.	.	.	.	.	.	.
<i>Dichanthelium clandestinum</i>	deer-tongue	.	.	.	.	.	.	.	.	.	.
<i>Dichanthelium commutatum</i>	variable panicgrass	.	.	.	.	.	.	.	.	.	.
<i>Dulichium arundinaceum</i>	dwarf bamboo	.	.	.	.	.	.	.	.	.	.
<i>Elymus hystrix</i> (<i>Hystrix patula</i>)	bottlebrush grass	.	.	.	.	.	.	.	.	.	.
<i>Elymus virginicus</i>	Virginia wild rye	.	.	.	.	.	.	.	.	.	.
<i>Festuca rubra</i>	red fescue	.	.	.	.	.	.	.	.	.	.
<i>Juncus effusus</i>	soft rush	.	.	.	.	.	.	.	.	.	.
<i>Leersia oryzoides</i>	rice cutgrass	.	.	.	.	.	.	.	.	.	.
<i>Panicum virgatum</i>	switch grass	.	.	.	.	.	.	.	.	.	.
<i>Schizachyrium scoparium</i>	little bluestem	.	.	.	.	.	.	.	.	.	.
<i>Scirpus cyperinus</i>	woolgrass bulrush	.	.	.	.	.	.	.	.	.	.
<i>Sorghastrum nutans</i>	Indian grass	.	.	.	.	.	.	.	.	.	.
<i>Sparganium americanum</i>	American bur-reed	.	.	.	.	.	.	.	.	.	.
<i>Tridens flavus</i>	purpletop	.	.	.	.	.	.	.	.	.	.
<i>Tripsacum dactyloides</i>	gama grass	.	.	.	.	.	.	.	.	.	.
Vines											
<i>Celastrus scandens</i>	climbing bittersweet	.	.	.	.	.	.	.	.	.	.
<i>Lonicera sempervirens</i>	trumpet honeysuckle	.	.	.	.	.	.	.	.	.	.
<i>Parthenocissus quinquefolia</i>	Virginia creeper	.	.	.	.	.	.	.	.	.	.
Shrubs											
<i>Alnus serrulata</i>	common alder	.	.	.	.	.	.	.	.	.	.
<i>Aronia melanocarpa</i>	black chokeberry	.	.	.	.	.	.	.	.	.	.
<i>Castanea pumila</i>	Allegheny chinkapin	.	.	.	.	.	.	.	.	.	.
<i>Ceanothus americanus</i>	New Jersey tea	.	.	.	.	.	.	.	.	.	.
<i>Cephalanthus occidentalis</i>	buttonbush	.	.	.	.	.	.	.	.	.	.
<i>Cornus amomum</i>	silky dogwood	.	.	.	.	.	.	.	.	.	.
<i>Gaultheria procumbens</i>	wintergreen	.	.	.	.	.	.	.	.	.	.
<i>Gaylussacia baccata</i>	black huckleberry	.	.	.	.	.	.	.	.	.	.
<i>Hamamelis virginiana</i>	witch hazel	.	.	.	.	.	.	.	.	.	.
<i>Ilex verticillata</i>	winterberry	.	.	.	.	.	.	.	.	.	.
<i>Kalmia latifolia</i>	mountain laurel	.	.	.	.	.	.	.	.	.	.
<i>Pieris floribunda</i>	evergreen mtn. fetterbush	.	.	.	.	.	.	.	.	.	.

Scientific Name	Common Name	Uses			Light			Moisture			
		W	H	C	D	S	P	F	L	M	H
<i>Rhododendron calendulaceum</i>	flame azalea	.	.	.	.	.	.	.	.	.	.
<i>Rhododendron maximum</i>	great rhododendron	.	.	.	.	.	.	.	.	.	.
<i>Rhododendron prinophyllum</i>	rose azalea	.	.	.	.	.	.	.	.	.	.
<i>Rosa carolina</i>	pasture rose	.	.	.	.	.	.	.	.	.	.
<i>Rubus allegheniensis</i>	Allegheny blackberry	.	.	.	.	.	.	.	.	.	.
<i>Salix humilis</i>	prairie willow	.	.	.	.	.	.	.	.	.	.
<i>Salix sericea</i>	silky willow	.	.	.	.	.	.	.	.	.	.
<i>Sambucus canadensis</i>	common elderberry	.	.	.	.	.	.	.	.	.	.
<i>Spiraea alba</i>	narrow-ldv meadowsweet	.	.	.	.	.	.	.	.	.	.
<i>Spiraea latifolia</i>	broad-ldv meadowsweet	.	.	.	.	.	.	.	.	.	.
<i>Vaccinium angustifolium</i>	N. lowbush blueberry	.	.	.	.	.	.	.	.	.	.
<i>Vaccinium corymbosum</i>	highbush blueberry	.	.	.	.	.	.	.	.	.	.
<i>Viburnum dentatum</i>	S. arrow-wood viburnum	.	.	.	.	.	.	.	.	.	.
<i>Viburnum prunifolium</i>	black-haw viburnum	.	.	.	.	.	.	.	.	.	.
Small trees											
<i>Amelanchier arborea</i>	downy serviceberry	.	.	.	.	.	.	.	.	.	.
<i>Amelanchier canadensis</i>	Canada serviceberry	.	.	.	.	.	.	.	.	.	.
<i>Amelanchier laevis</i>	smooth serviceberry	.	.	.	.	.	.	.	.	.	.
<i>Asimina triloba</i>	paw paw	.	.	.	.	.	.	.	.	.	.
<i>Cercis canadensis</i>	redbud (Eastern)	.	.	.	.	.	.	.	.	.	.
<i>Chionanthus virginicus</i>	fringetree	.	.	.	.	.	.	.	.	.	.
<i>Cornus alternifolia</i>	alternate-leaf dogwood	.	.	.	.	.	.	.	.	.	.
<i>Cornus florida</i>	flowering dogwood	.	.	.	.	.	.	.	.	.	.
<i>Crataegus crus-galli</i>	cockspur hawthorn	.	.	.	.	.	.	.	.	.	.
<i>Euonymus atropurpureus</i>	wahoo	.	.	.	.	.	.	.	.	.	.
<i>Halesia tetraptera</i>	common silverbell	.	.	.	.	.	.	.	.	.	.
<i>Morus rubra</i>	red mulberry	.	.	.	.	.	.	.	.	.	.
<i>Ostrya virginiana</i>	Eastern hop-hornbeam	.	.	.	.	.	.	.	.	.	.
<i>Prunus virginiana</i>	choke cherry	.	.	.	.	.	.	.	.	.	.
<i>Rhus glabra</i>	smooth sumac	.	.	.	.	.	.	.	.	.	.
<i>Rhus hirta</i> (<i>R. typhina</i>)	staghorn sumac	.	.	.	.	.	.	.	.	.	.
<i>Salix nigra</i>	black willow	.	.	.	.	.	.	.	.	.	.
Medium to Large Trees											
<i>Acer rubrum</i>	red maple	.	.	.	.	.	.	.	.	.	.
<i>Acer saccharum</i>	sugar maple	.	.	.	.	.	.	.	.	.	.
<i>Aesculus flava</i> (<i>A. octandra</i>)	yellow buckeye	.	.	.	.	.	.	.	.	.	.
<i>Betula alleghaniensis</i>	yellow birch	.	.	.	.	.	.	.	.	.	.
<i>Betula lenta</i>	sweet birch, black birch	.	.	.	.	.	.	.	.	.	.
<i>Carya alba</i>	mockernut hickory	.	.	.	.	.	.	.	.	.	.
<i>Carya glabra</i>	pignut hickory	.	.	.	.	.	.	.	.	.	.
<i>Carya ovata</i>	shagbark hickory	.	.	.	.	.	.	.	.	.	.
<i>Diospyros virginiana</i>	persimmon	.	.	.	.	.	.	.	.	.	.
<i>Fagus grandifolia</i>	American beech	.	.	.	.	.	.	.	.	.	.
<i>Fraxinus americana</i>	white ash	.	.	.	.	.	.	.	.	.	.
<i>Fraxinus pennsylvanica</i>	green ash	.	.	.	.	.	.	.	.	.	.
<i>Juglans nigra</i>	black walnut	.	.	.	.	.	.	.	.	.	.
<i>Juniperus virginiana</i>	red cedar (Eastern)	.	.	.	.	.	.	.	.	.	.
<i>Liquidambar styraciflua</i>	sweetgum	.	.	.	.	.	.	.	.	.	.
<i>Liriodendron tulipifera</i>	tulip-tree, tulip poplar	.	.	.	.	.	.	.	.	.	.
<i>Nyssa sylvatica</i>	black gum	.	.	.	.	.	.	.	.	.	.
<i>Oxydendrum arboreum</i>	sourwood	.	.	.	.	.	.	.	.	.	.
<i>Pinus strobus</i>	white pine	.	.	.	.	.	.	.	.	.	.
<i>Prunus serotina</i>	wild black cherry	.	.	.	.	.	.	.	.	.	.
<i>Quercus alba</i>	white oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus coccinea</i>	scarlet oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus falcata</i>	Southern red oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus ilicifolia</i>	bear oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus montana</i>	chestnut oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus rubra</i>	Northern red oak	.	.	.	.	.	.	.	.	.	.
<i>Quercus velutina</i>	black oak	.	.	.	.	.	.	.	.	.	.
<i>Thuja occidentalis</i>	white cedar	.	.	.	.	.	.	.	.	.	.
<i>Tilia americana</i>	American basswood	.	.	.	.	.	.	.	.	.	.
<i>Tsuga canadensis</i>	Eastern hemlock	.	.	.	.	.	.	.	.	.	.
<i>Tsuga caroliniana</i>	Carolina hemlock	.	.	.	.	.	.	.	.	.	.

+ May be aggressive in garden setting.

* Due to the rarity and sensitivity of habitat in Virginia, these species are recommended for horticultural use only. Planting these species in natural areas could be detrimental to the survival of native populations.