

- **Do not 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:**

Virginia Department of Conservation and Recreation
Natural Heritage Program
217 Governor Street
Richmond, VA 23219
(804) 786-7951
www.dcr.state.va.us

For a list of nurseries that propagate native plants:

Virginia Native Plant Society
400 Blandy Farm Lane, Unit 2
Boyce, VA 22620
(540) 568-8679
vnpsoc@shentel.net
www.vnps.org

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

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

Native Plants for Conservation, Restoration and Landscaping

Celebrate and Preserve Our Natural Heritage



Grasslands



Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

OUR NATURAL HERITAGE

Native plant species and natural communities provide many important values to human society. Erosion and flood control, animal habitat and nitrogen fixation are but a few of these values. On another level, native plants and the communities they form help create the unique character of a region. Cypress trees and magnolias evoke the South, just as Douglas-fir and redwoods call to mind the Pacific Northwest. By including native plant species in our land management and our gardens, we can contribute to the conservation of native species and ecosystems. We also preserve the charm and character that makes Virginia like no other place.

DCR's Natural Heritage Program works to identify, protect and restore Virginia's rare plant and animal species and natural communities. Natural Heritage scientists collect and manage information on the location, life history and ecology of Virginia's 1,650 rare plant and animal species and natural communities. This is part of our effort to carry out a continual inventory and assessment of Virginia's natural heritage. The state's Natural Area Preserve System now includes 33 preserves and protects more than 20,000 acres. Natural Heritage biologists provide stewardship on DCR preserves, other public lands and private lands to conserve and enhance natural heritage resources.

WHAT ARE NATIVE PLANTS?

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. This selective development is a response to physical and biotic processes characteristic of that region: climate; soils; seasonal rainfall, drought and frost; and interactions with other species occupying those habitats. Native plants therefore possess certain traits that make them uniquely adapted to local conditions.

In North America, plants are considered native if they were present here before European settlement. This distinction is made because of the many changes to the flora that have occurred since the arrival of Europeans. Since then, many non-native plants have been deliberately and accidentally introduced to North America from distant shores. Such plants are termed "aliens."

Alien species do not come only from distant countries. They may also be introduced from a different region of the same country. For instance, a species native to the west coast of North America would be considered alien if it became established on the east coast where it had not previously been a constituent of the regional flora.

NATIVES VS. ALIENS

While many alien plants are beneficial and do not adversely affect the natural environment, many invasive alien species pose a serious threat to both natural communities and rare species. Because of a lack of natural controls such as insect pests and competitors, some alien plants escape cultivation, establish in a new area and displace the native plant species. What was a finely woven and diverse natural community may become a monoculture dominated by the invasive alien plant. Along with the displacement of

Scientific Name	Common Name	Uses				Region			Light			Moisture		
		W	H	C	D	M	P	C	S	P	F	L	M	H
Medium & Large Trees														
<i>Diospyros virginiana</i>	persimmon	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Liquidambar styraciflua</i> +	sweetgum	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Nyssa sylvatica</i>	black gum	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Pinus serotina</i> +	pond pine	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Prunus pennsylvanica</i>	pin cherry, fire cherry	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Prunus serotina</i> +	wild black cherry	•	•	•	•	•	•	•	•	•	•	•	•	•
<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 stellata</i>	post oak	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Quercus velutina</i>	black oak	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Robinia pseudoacacia</i>	black locust	•	•	•	•	•	•	•	•	•	•	•	•	•
<i>Sassafras albidum</i>	sassafras	•	•	•	•	•	•	•	•	•	•	•	•	•

+ May be aggressive in garden setting.



Scientific Name	Common Name	Uses			Region			Light		Moisture				
		W	H	C	D	M	P	C	S	P	F	L	M	H
<i>Viola pedata</i>	bird's foot violet	•	•			•	•	•	•	•	•			
<i>Yucca filamentosa</i>	common yucca	•	•			•	•	•	•	•	•			
<i>Zephyranthes atamasco</i>	Atamasco lily	•	•					•	•	•	•			
Ferns														
<i>Onoclea sensibilis+</i>	sensitive fern		•	•		•	•	•	•	•	•		•	•
<i>Osmunda cinnamomea</i>	cinnamon fern		•	•		•	•	•	•	•	•		•	•
<i>Woodwardia virginica+</i>	Virginia chain 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>	broomsedge			•		•	•	•	•	•	•		•	•
<i>Arundinaria gigantea</i>	wild cane, river cane	•	•			•		•	•	•	•		•	•
<i>Calamagrostis canadensis</i>	bluejoint reedgrass	•	•			•		•	•	•	•		•	•
<i>Carex crinita var. crinita</i>	long hair sedge	•	•			•		•	•	•	•		•	•
<i>Carex lurida</i>	sallow sedge	•	•			•		•	•	•	•		•	•
<i>Carex stricta</i>	tussock sedge	•	•			•		•	•	•	•		•	•
<i>Danthonia sericea</i>	silky oatgrass	•	•			•		•	•	•	•		•	•
<i>Danthonia spicata</i>	poverty oatgrass	•	•			•		•	•	•	•		•	•
<i>Dichanthelium clandestinum</i>	deer-tongue	•	•			•		•	•	•	•		•	•
<i>Dulichium arundinaceum</i>	dwarf bamboo	•	•			•		•	•	•	•		•	•
<i>Elymus hystrix</i>	bottlebrush grass	•	•			•		•	•	•	•		•	•
<i>Festuca rubra</i>	red fescue	•	•			•		•	•	•	•		•	•
<i>Juncus canadensis</i>	Canada rush	•	•			•		•	•	•	•		•	•
<i>Juncus effusus</i>	soft rush	•	•			•		•	•	•	•		•	•
<i>Leersia oryzoides</i>	rice cutgrass	•	•			•		•	•	•	•		•	•
<i>Panicum virgatum</i>	switch grass	•	•			•		•	•	•	•		•	•
<i>Saccharum giganteum</i>	giant plumegrass	•	•			•		•	•	•	•		•	•
<i>Schizachyrium scoparium</i>	little bluestem	•	•			•		•	•	•	•		•	•
<i>Scirpus cyperinus</i>	woolgrass bulrush	•	•			•		•	•	•	•		•	•
<i>Sorghastrum nutans</i>	Indian grass	•	•			•		•	•	•	•		•	•
<i>Tridens flavus</i>	redtop	•	•			•		•	•	•	•		•	•
<i>Tripsacum dactyloides</i>	gama grass	•	•			•		•	•	•	•		•	•
<i>Zizania aquatica</i>	wild rice	•	•			•		•	•	•	•		•	•
Shrubs														
<i>Aronia arbutifolia</i>	red chokeberry		•	•		•		•	•	•	•		•	•
<i>Aronia melanocarpa</i>	black chokeberry		•	•		•		•	•	•	•		•	•
<i>Baccharis halimifolia</i>	high tide bush		•	•		•		•	•	•	•		•	•
<i>Ceanothus americanus</i>	New Jersey tea	•	•			•		•	•	•	•		•	•
<i>Cornus amomum</i>	silky dogwood	•	•			•		•	•	•	•		•	•
<i>Myrica cerifera</i>	Southern wax myrtle	•	•			•		•	•	•	•		•	•
<i>Myrica heterophylla</i>	Southern bayberry	•	•			•		•	•	•	•		•	•
<i>Myrica pennsylvanica</i>	Northern bayberry	•	•			•		•	•	•	•		•	•
<i>Rhododendron catawbiense</i>	Catawba rhododendron	•	•			•		•	•	•	•		•	•
<i>Rhododendron prinophyllum</i>	rose azalea	•	•			•		•	•	•	•		•	•
<i>Rhododendron viscosum</i>	swamp azalea	•	•			•		•	•	•	•		•	•
<i>Rubus allegheniensis</i>	Alleghany blackberry	•	•			•		•	•	•	•		•	•
<i>Salix humilis</i>	prairie willow	•	•			•		•	•	•	•		•	•
<i>Salix sericea</i>	silky willow	•	•			•		•	•	•	•		•	•
<i>Sambucus canadensis</i>	common elderberry	•	•			•		•	•	•	•		•	•
<i>Spiraea alba</i>	narrow-ld meadowsweet	•	•			•		•	•	•	•		•	•
<i>Spiraea latifolia</i>	broad-leaved meadowsweet	•	•			•		•	•	•	•		•	•
Small trees														
<i>Amelanchier arborea</i>	downy serviceberry	•	•			•		•	•	•	•		•	•
<i>Amelanchier canadensis</i>	Canada serviceberry	•	•			•		•	•	•	•		•	•
<i>Cercis canadensis</i>	redbud (Eastern)	•	•			•		•	•	•	•		•	•
<i>Chionanthus virginicus</i>	fringetree	•	•			•		•	•	•	•		•	•
<i>Rhus glabra</i>	smooth sumac	•	•			•		•	•	•	•		•	•
<i>Rhus hirta</i>	staghorn sumac	•	•			•		•	•	•	•		•	•

native plant species from these natural habitats comes the loss of many flying, crawling and burrowing creatures that relied on the original diversity of plants for food, cover and shelter.

In contrast to invasive alien species, some non-native plants are unable to thrive without extra effort by gardeners. Such plants may have originated in regions with abundant rainfall and soils rich in nutrients. When introduced into a drier region with less fertile soil, they require additional water and fertilizer. Natural defenses plants evolve in their original habitats may not protect them in a new environment where the application of pesticides may be required to aid their growth. Native plants, on the other hand, are more likely to thrive under the local conditions and require less attention, labor and expensive additives.

NATIVE PLANTS AND 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 butterflies emerge simultaneously. Later, the flower goes to seed just when songbirds are fattening for the autumn migration. Gorging themselves, the birds scatter much of what they fail to digest, thus helping disperse the plant's seed.

Alien plant species rarely keep time according to the internal clocks of our native wildlife. 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 feeder to probe, and their smell and texture unrecognizable to a butterfly in search of a host plant on which to lay her eggs.

GRASSLANDS IN VIRGINIA

Grasslands, natural communities dominated by grass species, are of wide-ranging character and distribution in Virginia. From barrier island dunes to mountain balds, grasslands occupy unusual places in our landscape. Some of these places are unique because of harsh or extreme environmental conditions. Examples include tidally influenced areas behind barrier islands where extensive salt-marsh and saltmeadow cordgrass communities thrive; dry, sunbaked southwestern slopes of mountains; and diabase glades, which have very shallow soils. These conditions thwart most woody species and allow sun-loving grasses and herbs to flourish. Grasslands also arise where recurring disturbance, such as drought, flood or fire, removes woody overstory species. These types of disturbance-dependant grasslands are sometimes called successional grasslands and are inevitably replaced by shrubs and trees unless maintained by a regular cycle of disturbance.

This brochure focuses on successional grasslands. Successional grasslands and closely related savannas were once much more common in Virginia. Savannas are open-canopy woodlands with a grass-dominated herb layer. Natural grasslands and savannas were maintained by lightning-set fires and human-set fires. Native Americans used fire routinely to clear land for agriculture and to enhance habitat for game.

