

ABOUT THE NATIVE PLANTS FOR CONSERVATION, RESTORATION AND LANDSCAPING PROJECT
This project is a collaboration between the Virginia Department of Conservation and Recreation and the Virginia Native Plant Society.

The following partners have provided valuable assistance throughout the life of this project:

- Virginia Master Naturalists
- Virginia Native Plant Society
- Virginia Nursery and Landscape Association
- Virginia Tech Department of Horticulture
- Virginia Department of Agriculture and Consumer Services
- Virginia Department of Environmental Quality
- Virginia Coastal Zone Management Program
- Virginia Department of Forestry
- Virginia Department of Wildlife Resources
- Virginia Department of Transportation

Project partners share a commitment to protect native plant habitats that support rare, threatened or endangered species. The use of native plant species in land management, conservation, restoration and horticultural projects maintains the ecological integrity of natural areas and preserves native biodiversity.

FOR MORE INFORMATION AND THE DCR NATIVE PLANT FINDER
Virginia Department of Conservation and Recreation
Natural Heritage Program
804-786-7951
www.dcr.virginia.gov/natural-heritage/nativeplants

FOR A LIST OF NURSERIES THAT PROPAGATE NATIVE SPECIES, CONTACT:
Virginia Native Plant Society
400 Blandy Farm Lane, Unit 2
Boyce, VA 22620
540-837-1600 | info@vnps.org
www.vnps.org/

FOR COLORFUL GUIDEBOOKS ON VIRGINIA NATIVE PLANTS FOR GARDENING, VISIT:
www.plantvirginianatives.org/

FOR A LIST OF NURSERIES IN A PARTICULAR REGION OF VIRGINIA, CONTACT:
The Virginia Nursery and Landscape Association
5101 Monument Avenue, Suite 203
Richmond, VA 23230
804-256-2700 | info@vnla.org

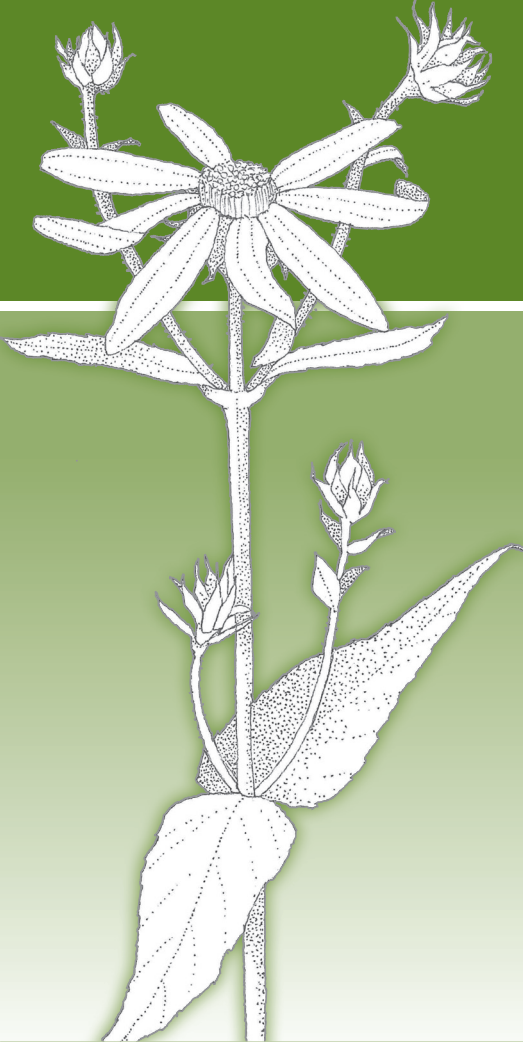
SEARCH FOR NURSERIES BY SPECIES USING THE VNLA GROWERS GUIDE:
www.vnla.org/growers-guide/

LEARN MORE ABOUT VIRGINIA'S NATIVE PLANTS
See the Flora of Virginia, available as a book or an app:
www.floraofvirginia.org/



Native Plants

FOR CONSERVATION, RESTORATION & LANDSCAPING



Virginia Grasslands

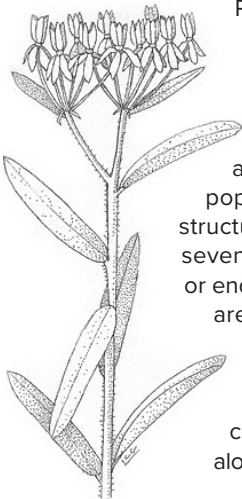
WHAT ARE NATIVE PLANTS?
Native species evolved within specific regions and dispersed throughout their range without known human involvement. Native plants form the primary component of the living landscape and provide food and shelter for native animal species. Native plants co-evolved with native animals over many thousands to millions of years and have formed complex and interdependent relationships. Our native fauna depend on native flora to provide food and cover. Many animals require specific plants for their survival.

WHAT ARE NON-NATIVE PLANTS?
Sometimes referred to as “exotic,” “alien,” or “non-indigenous,” non-native plants are species introduced, intentionally or accidentally, into a new region by human activity. Over the millennia, many plants and animals have expanded their ranges slowly and without human assistance. As people began cultivating plants, they brought beneficial and favored species along when they moved into new regions or traded with people in distant lands. Humans thus became a new pathway, enabling many species to move into new locations. What had once been accomplished by the winds and tides or by luckily hitchhiking on, or inside, far-ranging animals, began to take place more frequently through human travel. Species have moved into new ranges in higher numbers and at faster rates as trade and transportation expanded in the last few centuries.

WHAT ARE INVASIVE PLANTS?
Invasive plants are introduced species that cause health, economic or ecological damage in their new range. More than 30,000 species of plants have been introduced to the North America since European colonization. Most were introduced intentionally, and many provide great benefits to society as agricultural crops and landscape ornamentals. Some were introduced accidentally, for example, in ship ballast, in packing material and as seed contaminants. Of these introduced species, approximately 5,000 have naturalized and become established outside cultivation. About 1,000 naturalized plant species have become invasive pests that interfere with agriculture, forestry, transportation and utility infrastructure, lawn and garden maintenance, and natural ecosystem processes. Of the 3,200 plant species in Virginia, more than 600, or 19 percent of our flora, have been introduced since the founding of Jamestown.

The Virginia Department of Conservation and Recreation currently lists 90 of these species as invasive, following a rigorous risk assessment.

IMPACTS OF INVASIVE SPECIES
Invasive species are a major threat, second only to habitat destruction, to native plants and wildlife. They can reduce habitat and population size of native species, alter habitat structure and change ecosystem properties. Fifty-seven percent of plant species listed as threatened or endangered by the U.S. Fish and Wildlife Service are directly threatened by invasive species. In the United States, invasive species cause an estimated \$120 billion in annual economic losses, including costs to manage their effects. Annual costs and damages arising from invasive plants alone are estimated at \$34 billion.



NATIVE PLANTS VS. INVASIVE PLANTS
Invasive plants have competitive advantages that allow them to disrupt native plant communities and the wildlife dependent on them.

- Examples:**
- Kudzu (*Pueraria montana*) grows very rapidly and overtops forest canopy, thus shading other plant species from the sunlight necessary for their survival.
 - A tall invasive wetland grass, common reed (*Phragmites australis* ssp. *australis*), invades and dominates marshes, reducing native plant diversity and sometimes eliminating virtually all other species.
 - The invasive plant autumn olive (*Elaeagnus umbellata*) has the ability to fix nitrogen, allowing it to invade sites with nutrient-poor soils and displace native species.
 - Tree-of-heaven (*Ailanthus altissima*) also grows rapidly and releases a chemical compound that suppresses the growth of other plant species.

Invasive species can marginalize or even cause the loss of native species. With their natural host plants gone, many insects disappear. And since insects are an essential part of the diet of many birds, the effects on the food web become far-reaching.

- BY PLANTING NATIVES, YOU CAN:**
- save time and money – native plants often require less water, fertilizer and pesticides
 - help birds and pollinator species, including butterflies and bees – native gardens provide sanctuaries for migratory birds as they journey between summer and winter habitats
 - attract desirable wildlife, such as natural predators of the pests that harm plants in our gardens
 - reduce the likelihood of introducing new invasive species
 - create an outdoor classroom for children of all ages

BUYING AND GROWING NATIVE PLANTS
Purchasing native plants from specialty growers and nurseries is preferable to taking them from wild places. The collection of wild plants threatens the existence of native species by causing net losses in population size and genetic diversity.

Use local growers and nurseries that offer nursery-propagated native species, especially plants propagated from local populations. One of the greatest benefits of landscaping with native plants is their adaptation to local conditions. However, it is important to select plants with growth requirements that best match conditions in the area to be planted.

- TIPS TO GET STARTED**
- Use the list in this brochure to learn which plants grow in your region of Virginia.
 - Study the minimum light and moisture requirements for each species, noting that some plants grow well under a variety of conditions.
 - Refer to field guides and publications on local natural history for color, shape, height, bloom times and specific wildlife value of the plants that grow in your region.
 - For help in designing native plantings with combinations of species that would occur together naturally, visit a nearby park, natural area preserve, forest or wildlife management area to learn about common plant associations, spatial groupings and habitat conditions.
 - For specific recommendations and advice about project design, consult a landscape or garden design specialist with experience in native plants. See also the [DCR native plant finder online](#) for a customized list for your site.

