WHAT ARE NATIVES?
Native species evolved within specific regions and dispersed throughout their range without known human involvement. They 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.

BENEFITS OF NATIVE PLANTS
Using native species in landscaping reduces the expense of maintaining cultivated landscapes and minimizes the likelihood of introducing new invasive species. It may provide a few unexpected benefits as well.

Native plants often require less water, fertilizer and pesticide, thus adding fewer chemicals to the landscape and maintaining water quality in nearby rivers and streams. Fewer inputs mean time and money saved for the gardener.

Native plants increase the presence of desirable wildlife, such as birds and butterflies, and provide sanctuaries for these animals as they journey between summer and winter habitats. The natural habitat you create with native plants can become an outdoor classroom for children, or a place for you to find peace and quiet after a busy day.

Native plants evoke a strong sense of place and regional character. For example, live oak and magnolia trees are strongly associated with the Deep South. Redwood trees characterize the Pacific Northwest. Saguaro cacti call to mind the deserts of the Southwest.

BUYING AND GROWING NATIVE PLANTS
More gardeners today are discovering the benefits of native plants and requesting them at their local garden centers. Because of this increased demand, retailers are offering an ever-widening selection of vigorous, nursery-propagated natives.

Once you’ve found a good vendor for native plants, the next step is choosing appropriate plants for a project. One of the greatest benefits of designing 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.

If you’re planning a project using native plant species, use the list in this brochure to learn which plants grow in your region of Virginia. Next, study the minimum light and moisture requirements for each species, noting that some plants grow well under a variety of conditions. Many of the recommended species are well-suited to more than one of these categories. For more information, refer to field guides and publications on local natural history for color, shape, height, bloom times and the economic or aesthetic value of the plants that grow in your region. 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.

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 humans. Over time, 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 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 United States since the time of Columbus. 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, fewer than 3,000 have naturalized and become established in the United States outside cultivation. Of the 3,500 plant species in Virginia, more than 800 have been introduced since the founding of Jamestown. The Virginia Department of Conservation and Recreation currently lists more than 100 of these species as invasive.

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. For example, 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. 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. Habitats with a high occurrence of invasive plants become a kind of “green desert.” Although green and healthy in appearance, far fewer native species of plants and animals are found in such radically altered places.
### Herbs

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Uses</th>
<th>Light</th>
<th>Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achillea millefolium</td>
<td>common yarrow</td>
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<tr>
<td>Virginia mertensiana</td>
<td>common precut</td>
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<tr>
<td>Cuphea hyssopifolia</td>
<td>false heather</td>
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<tr>
<td>Heliotropium curassavicum</td>
<td>Arizona heliotrope</td>
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<tr>
<td>Lavandula angustifolia</td>
<td>English lavender</td>
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<tr>
<td>Salvia officinalis</td>
<td>common sage</td>
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<tr>
<td>Thymus vulgaris</td>
<td>common thyme</td>
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<tr>
<td>Tilia americana</td>
<td>American basswood</td>
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### Shrubs & Small Trees

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<th>Scientific Name</th>
<th>Common Name</th>
<th>Uses</th>
<th>Light</th>
<th>Moisture</th>
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</thead>
<tbody>
<tr>
<td>Acer saccharinum</td>
<td>sugar maple</td>
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<tr>
<td>Acer rubrum</td>
<td>red maple</td>
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<tr>
<td>Alnus rubra</td>
<td>red alder</td>
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<tr>
<td>Betula nigra</td>
<td>black birch</td>
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<tr>
<td>Carpinus caroliniana</td>
<td>Carolina hickory</td>
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<tr>
<td>Crataegus crus-galli</td>
<td>crabapple</td>
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<tr>
<td>Fraxinus excelsior</td>
<td>American beech</td>
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<tr>
<td>Malus domestica</td>
<td>apple</td>
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<tr>
<td>Prunus serotina</td>
<td>black cherry</td>
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<tr>
<td>Pyrus calleryana var. calleryana</td>
<td>Callery pear</td>
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### Grasses, Sedges & Rushes

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<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Uses</th>
<th>Light</th>
<th>Moisture</th>
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<tbody>
<tr>
<td>Carex pendula</td>
<td>yellow sedge</td>
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<tr>
<td>Carex stricta</td>
<td>narrow-leaved sedge</td>
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<td>Carex tenera</td>
<td>Korean sedge</td>
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<tr>
<td>Elymus repens</td>
<td>smooth meadowgrass</td>
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<tr>
<td>Festuca arundinacea</td>
<td>tall fescue</td>
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### 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

### Moisture Requirements

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

Some species are marked with the following footnotes:

- May be aggressive in a 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.