



Homeowners' Guide to Designing Your Property

This guide is designed to help you implement the concepts of BayScaping in your own yard. The enlargements on the inside pages show plant types and quantities for different areas of the property. The back page features a plant list for you to use to install this design.

Many BayScapes principles are illustrated in the features of this yard design.

1. Streambank Plantings:

water-loving trees, shrubs and perennial plants protect streambank from soil erosion.

2. Dry Laid Stone Wall:

provides habitat for small mammals.

3. Buffer Plantings:

screen winter winds; create wildlife habitat and corridors.

4. Water Garden:

provides water for wildlife.

5. Trees:

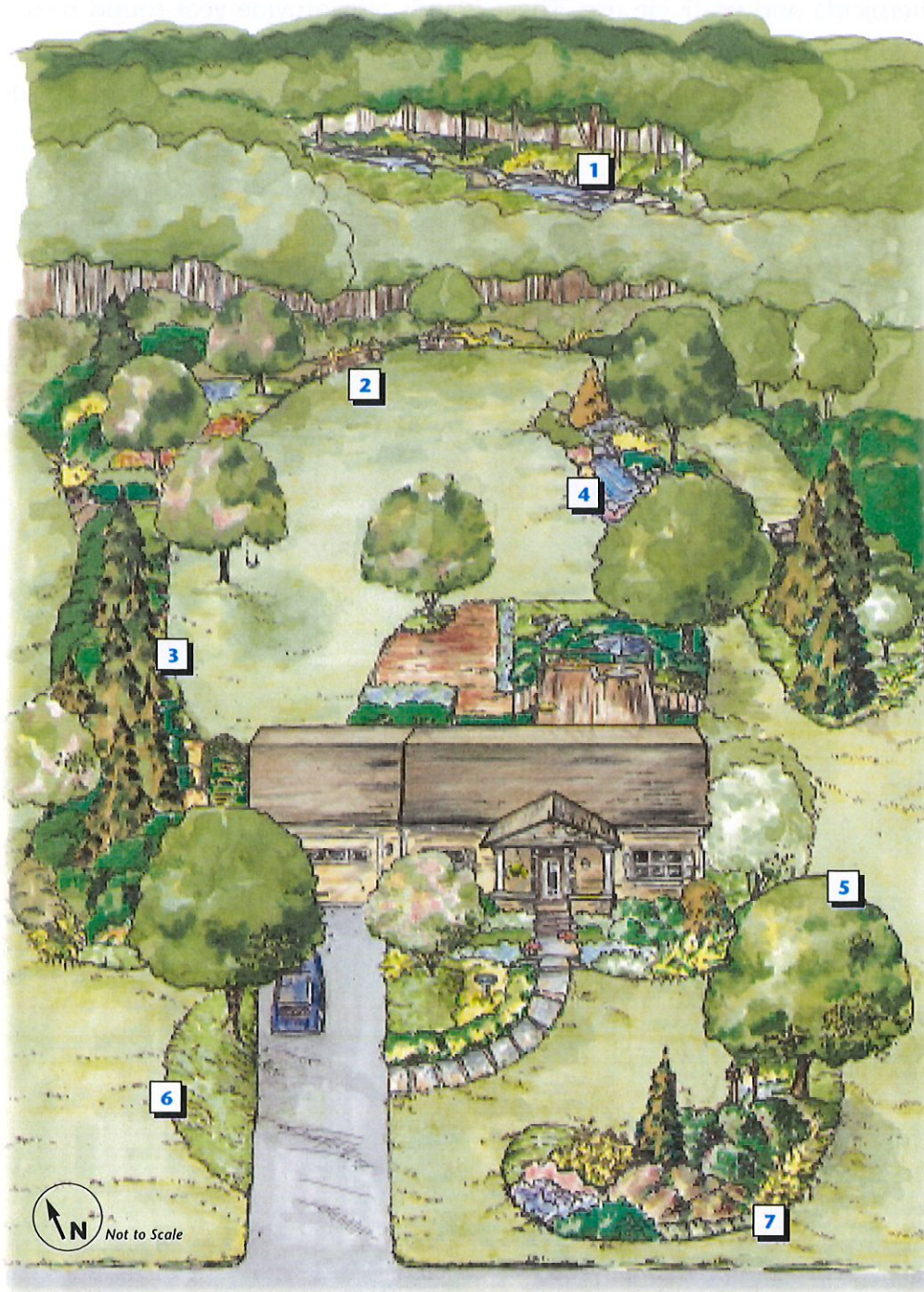
provide shade, reduce water runoff and clean the air.

6. Groundcovers:

reduce lawn and are perfect for sloped and rarely utilized areas.

7. Planting Islands:

add privacy and habitat, reducing high-maintenance lawns.



1/4 – 1/2 acre lot

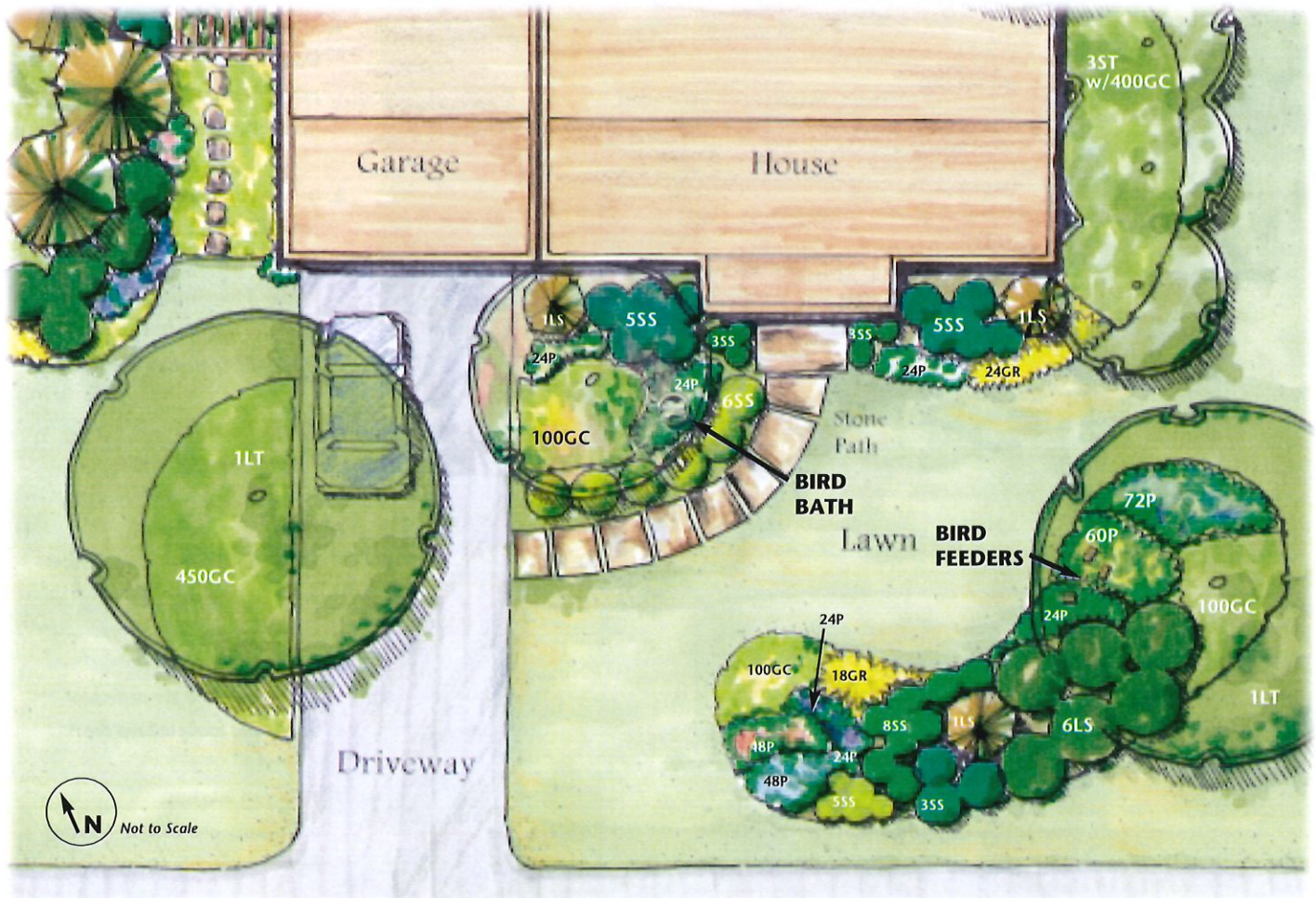
These planting plans are examples of how to landscape using BayScapes principles.

BayScapes Principles

Plan for the Long Term • Create Diversity • Use Beneficial Plants • Conserve Water • Practice Conservation Landscaping

Front Yard

Planting islands feature plantings layered or integrated with a mix of trees, shrubs and groundcovers to reduce lawnmowing, fertilizer, herbicide and pesticide use. These islands also provide year-round beauty and homes for birds and other wildlife. A variety of native trees and shrubs should be used in combination with long-blooming perennials and groundcovers. *Bird feeders* and *bird baths* can be added to attract birds.



LEGEND

LT = Large Tree
ST = Small Tree
ET = Evergreen Tree
LS = Large Shrub

SS = Small Shrub
P = Perennial
GC = Groundcover
GR = Grass

- The numbers indicate a general quantity of plants to be installed.
- Use the spacing chart to determine the exact quantity of plants for your garden area.
- Use the plant list to help you choose your plants.

Side Yard Planting Screen

Groupings of beneficial plants create a privacy screen while blocking cold winter winds. The evergreen plantings provide nesting habitat. Consider teaming with your neighbors to plant a wider border to increase these benefits and make a corridor for wildlife to move between the properties. **Stepping stones** allow you to walk among the groundcovers. The **arbor** provides a place for climbing vines, which attract bees, butterflies and hummingbirds.

Reduce lawn areas with the use of groundcovers such as moss for shady areas or thyme for sunny areas.

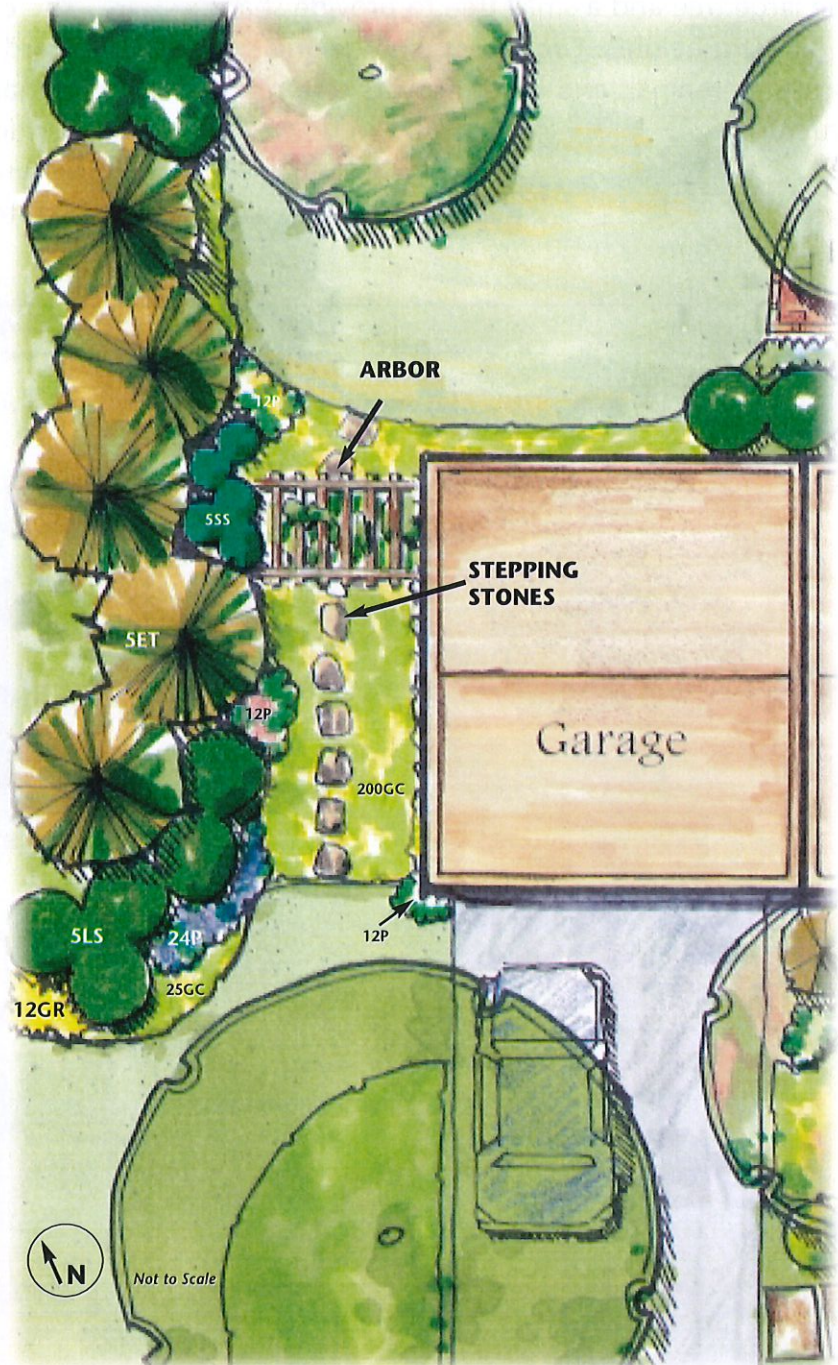
Tree and Shrub Spacing

When planning for tree and shrub plantings, consider their ultimate spread. Allow that distance between the trunks of the two plants.

Perennial and Groundcover Spacing

Perennials and groundcovers need to be spaced according to their ultimate size. To determine how many plants you will need, multiply the number of square feet by the number of plants required per square foot using this table. Distance apart is measured from the center of the plant.

| Distance Apart | Plants/Sq. Ft. |
|----------------|----------------|
| 4" | 9.1 |
| 6" | 2.5 |
| 8" | 2.25 |
| 9" | 1.77 |
| 10" | 1.44 |
| 12" | 1.00 |
| 18" | 0.45 |
| 24" | 0.24 |
| 36" | 0.11 |



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Back Yard and Water Garden

The back yard features spaces for human enjoyment as well as wildlife habitat:

The **deck and patio** provide seating space for enjoyment of the back yard. Plantings include one large tree and a small tree to provide shade at differing heights. Groupings of large and small shrubs, perennials and groundcovers soften the structures.

The **water garden** is a visual focal point and a water source for wildlife. Groupings of evergreen and deciduous plants ensure interest in every season.

The **compost bin** allows recycling of kitchen and yard waste (including leaves), creating homemade organic fertilizer. Adding compost to planting beds replenishes nutrients without using synthetic fertilizers. Compost also enriches the soil to better support plants.

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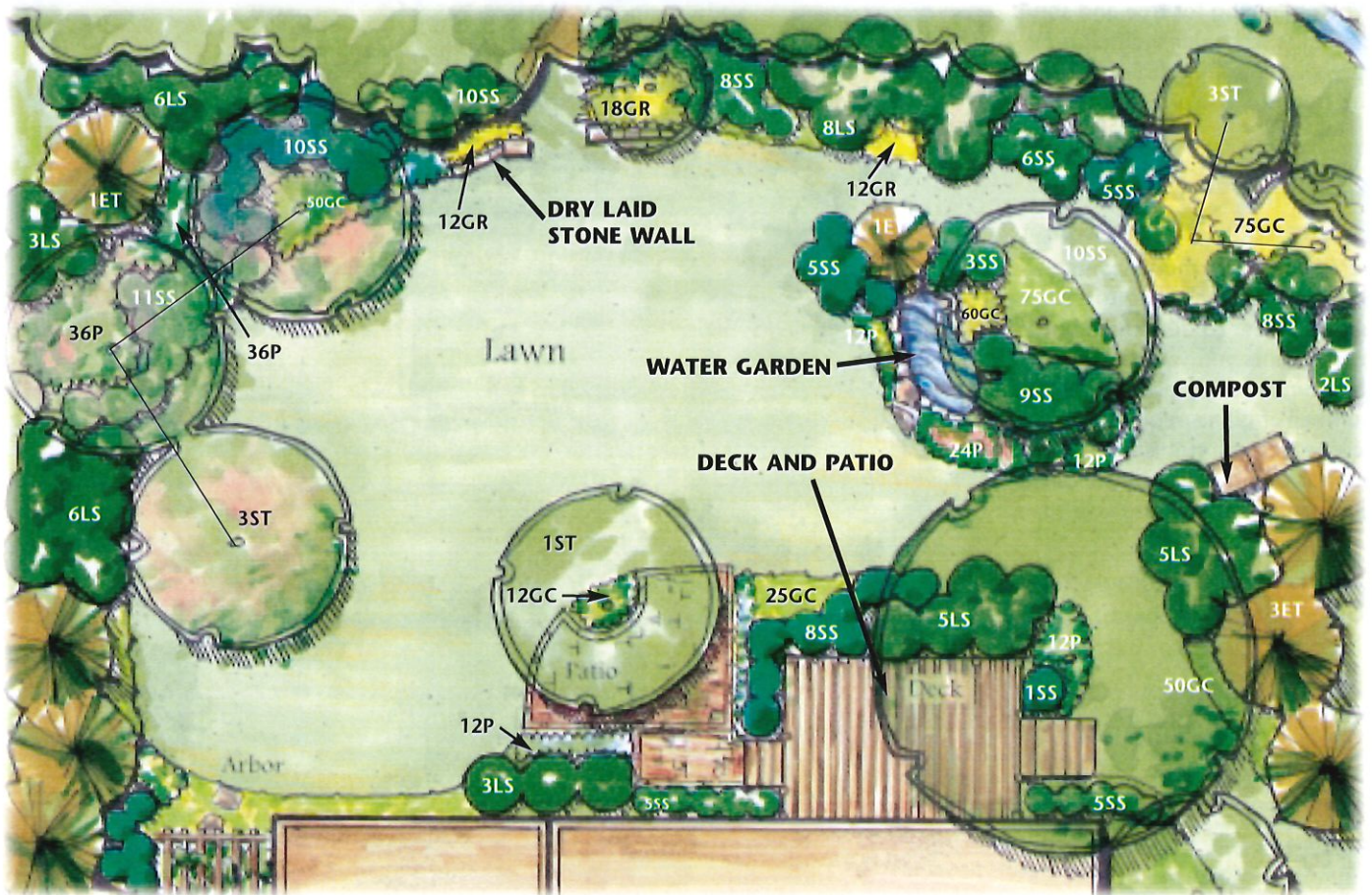
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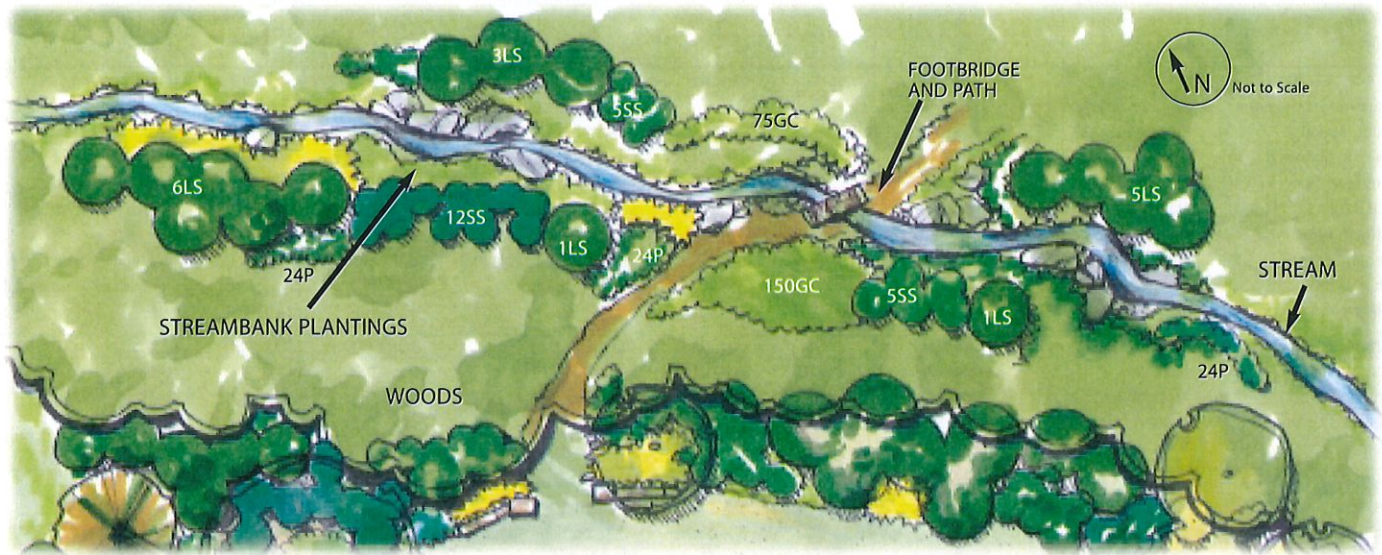
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Stream Buffer Planting

Planting native trees, shrubs and perennials next to streams protects the water from soil erosion and nutrient runoff. Stream buffers protect water quality by absorbing and filtering runoff from lawns and open spaces before it reaches the water. Streambank or "riparian" plantings also create aquatic habitat for bugs and fish by providing shade and places to hide.



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For more information such as additional Homeowners' Guides, native plant lists, and/or more BayScapes information, visit our website at:

www.allianceforthebay.org



BayScaping benefits people and wildlife.

Beneficial Plants for BayScaping in the Chesapeake Bay Region

This plant list is a guide to help you install your landscape plan. There are many more native plants that are suitable for BayScaping. Be careful to avoid invasive plants. Consult native plant lists for your region or your local nursery or agricultural extension agent for additional plants which may fit into your landscape.

| LARGE TREE | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
|---------------------------|---|-----------------------|------------|------------------------------|-----------|---------|------------------------------|
| Red maple | <i>Acer rubrum</i> | all | 75' – 100' | red bloom | sun – ps | w – d | very high wildlife, buffer |
| River birch | <i>Betula nigra</i> | piedmont & coastal | 50' – 75' | catkin flower | ps – fs | w – m | wildlife, buffer, ornamental |
| Red or green ash | <i>Fraxinus pennsylvanica</i> | piedmont & coastal | 50' – 75' | | sun | m | buffer |
| Sweet gum | <i>Liquidambar styraciflua</i> | piedmont & coastal | 50' – 75' | ornamental capsule | sun | m – w | wildlife, ornamental |
| Tuliptree | <i>Liriodendron tulipifera</i> | all | 75' – 100' | yellow-green bloom | sun | d – m | buffer, ornamental |
| Black gum | <i>Nyssa sylvatica</i> | all | 50' – 75' | | sun – ps | d | ornamental, high wildlife |
| White oak | <i>Quercus alba</i> | all | 75' – 100' | acorn fruit | sun | d – m | very high wildlife |
| SM. TREE/LG. SHRUB | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| Shadblow serviceberry | <i>Amelanchier canadensis</i> | all | 20' – 30' | deep black, edible fruit | sun – ps | d – m | very high wildlife, buffer |
| Eastern redbud | <i>Cercis canadensis</i> | mountains & piedmont | 20' – 30' | pinkish bloom | sun – fs | d – m | ornamental |
| Flowering dogwood | <i>Cornus florida</i> | all | 10' – 30' | white bloom/scarlet berries | sun – ps | d – m | wildlife, ornamental |
| Winterberry holly | <i>Ilex verticillata</i> | all | 6' – 12' | red-berried fruit | ps | m – w | wildlife, ornamental |
| Witch hazel | <i>Hamamelis virginiana</i> | all | 20' – 35' | yellow bloom-in fall | sun – ps | d | ornamental, borders |
| Northern bayberry | <i>Myrica pensylvanica</i> | piedmont & coastal | 6' – 12' | waxy gray fruit | ps | d – w | high wildlife |
| Common elderberry | <i>Sambucus canadensis</i> | all | 6' – 12' | white bloom/purple fruit | sun – fs | d – w | very high wildlife |
| Highbush blueberry | <i>Vaccinium corymbosum</i> | all - acid soil | 3' – 10' | dark blue fruit | sun – fs | d – m | high wildlife, ornamental |
| Southern arrowwood | <i>Viburnum dentatum</i> | piedmont & coastal | 6' – 12' | bluish-black fruit | sun – fs | m – w | wildlife, buffer, ornamental |
| EVERGREEN TREE/SHRUB | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| American holly | <i>Ilex opaca</i> | coastal | 30' – 50' | red berry | sun – ps | m | cover, high wildlife, orn. |
| Common juniper | <i>Juniperus communis</i> | all | 2' – 30' | blue-black berry | sun | d | cover, high wildlife, |
| Eastern red cedar | <i>Juniperus virginiana</i> | piedmont & coastal | 50' – 75' | blue-green berry | sun | d | very high wildlife |
| Eastern white pine | <i>Pinus strobus</i> | mountains & piedmont | 75' – 100' | five-needled bundle | sun | d | high wildlife, buffer |
| SMALL SHRUBS | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| Bearberry | <i>Arctostaphylos urva-ursi</i> | mountains & piedmont | 1' | red berries | ps | d | ornamental |
| Fothergilla | <i>Fothergilla gardenii</i> | all | 3' – 5' | white bottlebrush flowers | sun – fs | m – w | ornamental |
| Inkberry holly | <i>Ilex glabra</i> "Shamrock" | all | 4' – 6' | black berry | ps | d – w | evergreen, cover |
| Compact Oregon grapeholly | <i>Mahonia aquifolium</i> "Compacta" | all | 2' – 3' | yellow flower, blue berries | ps – fs | m – w | evergreen, ornamental |
| Pinxterbloom azalea | <i>Rhododendron periclymenoides</i> | mountains - acid soil | 6' | pink bloom | ps | m – w | ornamental |
| PERENNIAL | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| Wild columbine | <i>Aquilegia canadensis</i> | all | 8" – 24" | red & yellow flowers | sun – fs | d – m | wildlife, ornamental |
| Swamp milkweed | <i>Asclepias incarnata</i> | all | 2' – 5' | pink-red flowers | sun – fs | m – w | wildlife, buffer |
| Butterfly weed | <i>Asclepias tuberosa</i> | all | 1' – 3' | yellow to red flowers | sun | d | wildlife, ornamental |
| New England aster | <i>Aster novae-angliae</i> | all | 3' – 4' | pink to violet flowers | sun | m | wildlife, ornamental |
| Tickseed | <i>Coreopsis verticillata</i> | all | 1' | yellow flowers | fs | d – m | long flowering ornamental |
| Wild bleeding heart | <i>Dicentra eximia</i> | mountains & piedmont | 8' – 12' | pink flowers | ps – fs | m | ornamental |
| Purple coneflower | <i>Echinacea purpurea</i> | all | 2' – 3' | pink flower/seed heads | sun | d | wildlife, ornamental |
| Mistflower | <i>Eupatorium colestinum</i> | all | 3' – 4' | violet-blue flowers | fs | m – w | wildlife, buffer, ornamental |
| Joe-pye-weed | <i>Eupatorium fistulosum</i> | all | 5' – 10' | pink-purple flowers | sun | m – w | wildlife, buffer, ornamental |
| Wild geranium | <i>Geranium maculatum</i> | mountains & piedmont | 1' – 2' | rose-purple flowers | sun | m | ornamental |
| Gayfeather | <i>Liatris spicata</i> | all | 2' | purple flower spikes | sun | d | ornamental, wildlife |
| Black-eyed susan | <i>Rudbeckia fulgida</i> | all | 2' – 3' | yellow flowers | sun | d | wildlife, buffer, ornamental |
| Goldenrod | <i>Solidago rugosa</i> | all | 2' – 7' | yellow flowers | sun – ps | d – m | wildlife, buffer |
| New York ironweed | <i>Vernonia noveboracensis</i> | all | Up to 7' | deep purple flowers | sun | m – w | wildlife, buffer, ornamental |
| GROUNDCOVER | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| Green and gold | <i>Chrysogonum virginianum</i> | all | 4" – 12" | yellow-green flowers | ps – fs | m | ornamental |
| Woodland phlox | <i>Phlox divaricata</i> | mountains & piedmont | 6" – 18" | blue flowers, semi-evergreen | ps | m | wildlife, ornamental |
| Creeping phlox | <i>Phlox stolonifera</i> | all | 3" – 4" | semi-evergreen | sun – ps | m | ornamental |
| Sensitive fern | <i>Onoclea sensibilis</i> | all | 18" – 24" | dried brown spore-stalks | ps – fs | m – w | ornamental |
| Foamflower | <i>Tiarella cordifolia</i> | mountains & piedmont | 6" | white flower | ps | m – w | ornamental |
| GRASS | BOTANICAL NAME | REGION | HEIGHT | BLOOM/FRUIT | SUN/SHADE | DRY/WET | VALUE |
| Switchgrass | <i>Panicum virgatum</i> | all | 3' – 5' | seeds | sun | d | wildlife, ornamental |
| Little bluestem | <i>Schizachyrium scoparium</i> | all | up to 3' | seeds | sun | d | wildlife, ornamental |
| Indian grass | <i>Sorghastrum nutans</i> | all | 5' – 6' | seeds | sun | d – m | wildlife, ornamental |

LEGEND

VALUE: Wildlife = provides food and/or shelter
 Buffers = for streamside or riparian areas
 Ornamental = attractive, decorative plant

SUN/SHADE: sun = sun
 ps = partial shade
 fs = full shade

DRY/WET: w = moisture
 m = moderate
 d = drought tolerant