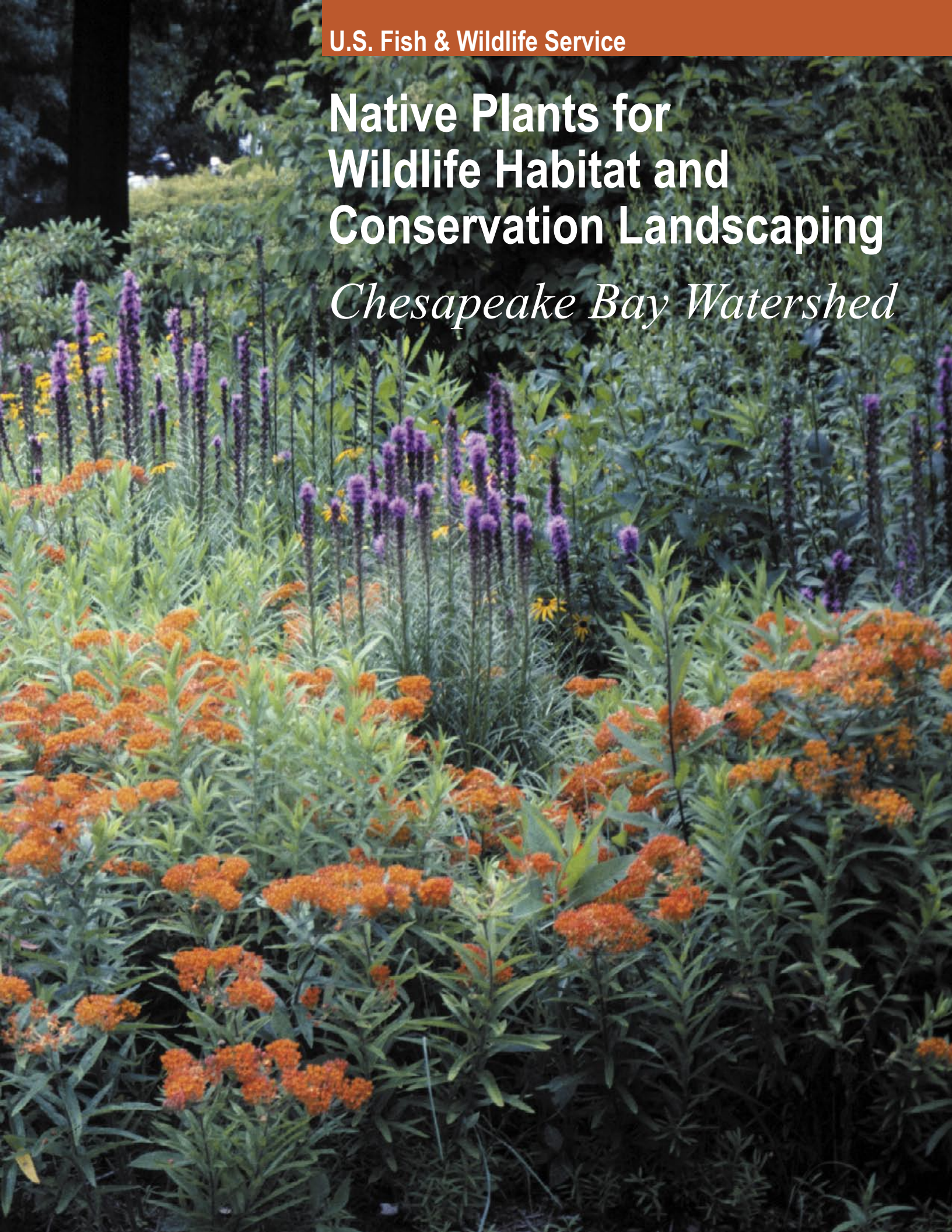


U.S. Fish & Wildlife Service

# Native Plants for Wildlife Habitat and Conservation Landscaping

*Chesapeake Bay Watershed*





## Acknowledgments

Contributors: Printing was made possible through the generous funding from Adkins Arboretum; Baltimore County Department of Environmental Protection and Resource Management; Chesapeake Bay Trust; Irvine Natural Science Center; Maryland Native Plant Society; National Fish and Wildlife Foundation; The Nature Conservancy, Maryland-DC Chapter; U.S. Department of Agriculture, Natural Resource Conservation Service, Cape May Plant Materials Center; and U.S. Fish and Wildlife Service, Chesapeake Bay Field Office.

Reviewers: species included in this guide were reviewed by the following authorities regarding native range, appropriateness for use in individual states, and availability in the nursery trade:

Rodney Bartgis, The Nature Conservancy, West Virginia.  
Ashton Berdine, The Nature Conservancy, West Virginia.  
Chris Firestone, Bureau of Forestry, Pennsylvania Department of Conservation and Natural Resources.  
Chris Frye, State Botanist, Wildlife and Heritage Service, Maryland Department of Natural Resources.  
Mike Hollins, Sylva Native Nursery & Seed Co.  
William A. McAvoy, Delaware Natural Heritage Program, Delaware Department of Natural Resources and Environmental Control.  
Mary Pat Rowan, Landscape Architect, Maryland Native Plant Society.  
Rod Simmons, Maryland Native Plant Society.  
Alison Sterling, Wildlife Resources Section, West Virginia Department of Natural Resources.  
Troy Weldy, Associate Botanist, New York Natural Heritage Program, New York State Department of Environmental Conservation.

Graphic Design and Layout: Laurie Hewitt, U.S. Fish and Wildlife Service, Chesapeake Bay Field Office.

Special thanks to: Volunteer Carole Jelic; Christopher F. Miller, Regional Plant Materials Specialist, Natural Resource Conservation Service; and R. Harrison Weigand, Maryland Department of Natural Resources, Maryland Wildlife and Heritage Division for assistance throughout this project.

Citation: Slattery, Britt E., Kathryn Reshetiloff, and Susan M. Zwicker. 2003. Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed. U.S. Fish & Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. 82 pp.

# Table of Contents

## Introduction

Benefits of Conservation Landscaping .....	3
Why Use Native Plants .....	4
Conservation Landscaping Elements .....	4
How to Choose Plants .....	6
Where to Find Native Plants .....	6

## How To Use This Guide

Plant Names and Types .....	7
Characteristics .....	7
Growth Conditions .....	8
Habitat .....	9
Native To (Where to Use) .....	9
Wildlife Value .....	10
Notes .....	10

## Plant Information Pages

Ferns .....	11
Grasses & Grasslike Plants .....	14
Herbaceous Plants .....	18
Herbaceous Emergents .....	41
Shrubs .....	45
Trees .....	54
Vines .....	64

## Plants with a Purpose

Plants for Coastal Dunes .....	66
Plants for Saltwater or Brackish Water Marshes .....	66
Plants for Freshwater Wetlands and Other Wet Sites .....	67
Plants Appropriate for Bogs or Bog Gardens .....	68
Plants for Dry Meadows .....	68
Plants for Wet Meadows .....	69
Plants for Forest or Woodland Plantings .....	69
Solutions for Slopes .....	71
Evergreens .....	72
Plants to Use as Groundcovers .....	72
Plants for Spring and Fall Color .....	72
Deer Resistant Plants .....	73

<b>Photo Credits</b> .....	74
----------------------------	----

<b>References</b> .....	75
-------------------------	----

<b>Index</b> .....	79
--------------------	----

## To the Reader

The use of native plants in landscaping and of course habitat restoration is certainly not new. In fact, their use has grown exponentially in recent years. Natural resources professionals in turn have been flooded with requests for information on native plants to use in various types of planting projects. Communities, schools, businesses, nonprofit organizations, watershed groups, local governments, state and federal agencies and many others are enhancing and restoring habitat, solving ecological problems, reducing maintenance, or just beautifying surroundings, all using locally native plants. Natural resources professionals, in turn, have been flooded with requests for information on native plants to use in various types of planting projects. There are many excellent resources available on native plants - some more technical than others, some more comprehensive than others. The frustration voiced most frequently by users is the lack of color photographs of the plants. After all, it is the striking visual quality of these plants that is their best "selling point."

This publication includes those pictures as well as user-friendly information on native species appropriate for planting in the Chesapeake Bay watershed and adjacent coastal regions. Although one guide cannot furnish the answers to every question, we have included as much useful information as possible in a limited space. Although the large number of species of plants included here may overwhelm some readers, this guide displays the great diversity of plants available. We hope you will bypass the over-used, non-native and sometimes invasive ornamental plants, and select the equally and often more attractive native plants. Pour through this guide the same way you look through nursery catalogs. Use it to plan and design your next planting, whether it's a small corner of your front yard, a two-acre meadow seeding, or 100 acres of wetland restoration.

# **Native Plants for Wildlife Habitat and Conservation Landscaping:**

## *Chesapeake Bay Watershed*

### **Introduction**

“Conservation landscaping” refers to landscaping with specific goals of reducing pollution and improving the local environment. In the Chesapeake Bay watershed (the land that drains to the Bay and its many tributaries), this style of landscaping is sometimes called “BayScaping,” or beneficial landscaping.

Conservation landscaping provides habitat for local and migratory animals, conserves native plants and improves water quality. Landowners also benefit as this type of landscaping reduces the time and expense of mowing, watering, fertilizing and treating lawn and garden areas, and offers greater visual interest than lawn. Beneficial landscaping can also be used to address areas with problems such as erosion, poor soils, steep slopes, or poor drainage.

One of the simplest ways to begin is by replacing lawn areas with locally native trees, shrubs and perennial plants. The structure, leaves, flowers, seeds, berries and other fruits of these plants provide food and shelter for a variety of birds and other wildlife. The roots of these larger plants are also deeper than that of typical lawn grass, and so they are better at holding soil and capturing rainwater.

### **Benefits of conservation landscaping**

Americans manage approximately more than 30 million acres of lawn. We spend \$750 million per year on grass seed. In managing our yards and gardens, we tend to over-apply products, using 100 million tons of fertilizer and more than 80 million pounds of pesticides annually. The average homeowner spends 40 hours per year behind a power mower, using a quart of gas per hour. Grass clippings consume 25 to 40% of landfill space during a growing season. Per hour of operation, small gas-powered engines used for yard care emit more hydrocarbon than a typical auto (mowers 10 times as much, string trimmers 21 times, blowers 34 times). A yard with 10,000 square feet of turf requires 10,000 gallons of water per summer to stay green; 30% of water consumed on the East Coast goes to watering lawns.

The practices described in this guide reduce the amount of intervention necessary to have attractive and functional landscaping. Conventional lawn and garden care contributes to pollution of our air and water and uses up non-renewable resources such as fuel and water. Many typical landscapes receive high inputs of chemicals, fertilizers, water and time, and require a lot of energy (human as well as gas-powered) to maintain. The effects of lawn and landscaping on the environment can be reduced if properties are properly managed by using organic alternatives applied correctly, decreasing the area requiring gas-powered tools, using native species that can be sustained with little watering and care, and using a different approach to maintenance practices.

With conservation landscaping, there is often less maintenance over the long term, while still presenting a “maintained” appearance. Conservation landscapes, like any new landscape, will require some upkeep, but these alternative measures are usually less costly and less harmful to the environment. New plants need watering and monitoring during the first season until they become established. Disturbed soil is prone to invasion by weeds - requiring manual removal (pulling) instead of chemical application. Over time, desired plants spread to fill gaps and natural cycles help with pest control. Garden maintenance is reduced to only minimal seasonal cleanup and occasional weeding or plant management. The savings realized by using little or no chemicals, and less water and gas, can more than make up for initial costs of installing the landscaping. Redefining landscaping goals overall and gradually shifting to using native species provide even greater rewards in terms of environmental quality, landscape sustainability, improved aesthetics, cost savings, and bringing wildlife to the property.

## Why use native plants?

Native plants naturally occur in the region in which they evolved. While non-native plants might provide some of the above benefits, native plants have many additional advantages. Because native plants are adapted to local soils and climate conditions, they generally require less watering and fertilizing than non-natives. Natives are often more resistant to insects and disease as well, and so are less likely to need pesticides. Wildlife evolved with plants; therefore, they use native plant communities for food, cover and rearing young. Using native plants helps preserve the balance and beauty of natural ecosystems.

This guide provides information about native plants that can be used for landscaping projects as well as large-scale habitat restoration. All of the plants presented are native to the designated areas, however not *all* of the native species for that area have been included. Rather, plants have been included because they have both ornamental and wildlife value, and are generally available for sale. This guide covers the entire Chesapeake Bay watershed, including south central New York; most of Pennsylvania, Maryland and Virginia; the District of Columbia; Delaware, west of Delaware Bay; and the eastern panhandle of West Virginia.

The region's wildlife, plants, habitats and network of streams and rivers leading to the Bay are tremendous resources. As the human population throughout the Chesapeake Bay watershed grows and land-use pressures intensify, it is increasingly important to protect our remaining natural areas and wildlife, and restore and create habitat. By working together, these treasures can be conserved for future generations. Individual projects are great, collective measures are even better, yet every action helps no matter what size.

## Conservation landscaping elements

We can incorporate elements of natural systems into the existing areas where we live, work, learn, shop and play. Landscaping provides valuable opportunities to reduce the effects of the built environment. These areas can be both aesthetically pleasing and functional. Use of native species will make your garden or landscaping more environmentally beneficial. By combining plant selection with some of the other concepts below, you can achieve more environmental benefits.

**Reduce disturbance.** Carefully decide where new development will occur to avoid destruction of existing habitat as much as possible. Take advantage of the site's existing natural features.

**Reduce lawn or high maintenance areas.** Replace turf or ornamental plantings by adding new landscaping beds and/or enlarge existing ones with native plants.

**Think big, but start small.** Draw up a plan for your entire yard but choose one small area for your first effort. Trial and error with the first project will help you learn without being overwhelmed. Phase in the whole project over time.

**Use native plants.** Start by using natives to replace dead or dying non-native plants, or as a substitute for invasive non-natives in existing gardens or landscaping. Plan to use native plants in new landscaping projects.

**Avoid invasive species.** Non-native plants can be invasive. They have few or no naturally occurring measures to control them, such as insects or competitors. Invasive plants can spread rapidly and smother or out-compete native vegetation. Invasive, non-native plants are not effective in providing quality habitat. A copy of the publication "Plant Invaders of Mid Atlantic Natural Areas" can be downloaded from [www.nps.gov/plants/alien/pubs/midatlantic/index.htm](http://www.nps.gov/plants/alien/pubs/midatlantic/index.htm).

**Improve water quality.** Native species planted on slopes, along water bodies and along drainage ditches help prevent erosion and pollution by stabilizing the soil and slowing the flow of rainwater runoff. To collect and filter runoff, depressions can be created and planted with native plants suited to temporary wet conditions. These "rain gardens" will capture water and hold it *temporarily for a*

---

In certain conditions, some native plants can also become aggressive spreaders, though their spread is more limited by natural controls than non-native aggressors. Plants that seed readily (such as black-eyed Susan, *Rudbeckia* species), or that spread by lateral roots (such as mint family plants *Monarda* or *Physostegia* species) should be used sparingly or controlled in gardens. Certain native species that are difficult to control or show up uninvited should not be planted, such as cattail (*Typha* species).

---

*day or two* and remove pollutants washing off of the surrounding land.

**Enhance and create wildlife habitat.** An animal's *habitat* is the area where it finds food, water, shelter, and breeding or nesting space, in a particular arrangement. If we want our gardens to have the greatest ecological value for wildlife, we need to mimic natural plant groupings and incorporate features that provide as many habitat features as possible.

Plants are one of the most important features of an animal's habitat, because they often provide most, or even all of the animal's habitat needs. Animals in turn help plants to reproduce through dispersal of pollen, fruits or seeds. Consequently, plants and animals are interdependent and certain plants and animals are often found together. So, it is important that plants be selected, grouped, and planted in a way that is ecologically appropriate.

Each plant prefers or tolerates a range of soil, sunlight, moisture, temperature and other conditions, as well as a variety of other factors including disturbance by natural events, animals or human activities. Plants sharing similar requirements are likely to be found together in plant *communities* that make up different habitat types - particular groupings of plant communities commonly recognized as wetlands, meadows, forests, etc. Some plants may tolerate a wider range of conditions than others, and therefore can be found at more than one type of site, in association with a different set of plants at each. By matching plants with similar soil, sunlight, moisture and other requirements, and planting them to the existing site conditions, the planted landscapes will do a good job of approximating a natural habitat.

Instead of isolated plantings, such as a tree in the middle of lawn, group trees, shrubs and perennials to create layers of vegetation. A forest has, for example, a *canopy* layer (tallest trees), *understory* layers (various heights of trees and shrubs beneath the canopy) and a ground layer or forest floor. These layers provide the structure and variety needed for shelter, breeding or nesting space for a diversity of wildlife.

To provide food and cover for wildlife year-round, include a variety of plants that produce seeds, nuts, berries or other fruits, or nectar; use evergreens as well as deciduous plants (those that lose their leaves); and allow stems and seedheads of flowers and grasses to remain standing throughout fall and winter.

All animals need water year-round to survive. Even a small dish of water, changed daily to prevent mosquito growth, will provide for some birds and butterflies. Puddles, pools or a small pond can be a home for amphibians and aquatic insects. A larger pond can provide for waterfowl, such as ducks and geese, and wading birds such as herons. Running or circulating water will attract wildlife, stay cleaner and prevent mosquitoes.

Rock walls or piles, stacked wood, or brush piles provide homes for insects, certain birds and small mammals. Fallen logs and leaf litter provide moist places for salamanders, and the many organisms that recycle such organic matter, contributing nutrients to the soil. Standing dead tree trunks benefit cavity-nesting wildlife such as woodpeckers.

**Consider naturalistic planting, or habitat restoration.** It may be feasible to create a more natural landscape instead of a formal one. Naturalistic landscaping uses patterns found in nature, and allows some nature-driven changes to occur. Plants multiply, and succession or gradual replacement of species may take place, with less human intervention. A property located near natural areas, such as forests, wetlands and meadows, is a good candidate for a habitat project. Expand existing forest by planting trees and shrubs along the woods line, using native species that grow in the area, and allow birds and wind to bring the understory plants over time. Wet sites, areas with clay soils, or drainage ditches can be converted to wetlands. An open piece of ground or lawn can be planted as a meadow or grassland. Schools, homes, small businesses, large corporate sites, municipalities, military installations, recreational areas and other public lands can all include habitat plantings.

## How to choose plants

Finding ready information about what plants “go together” for habitat restoration, enhancement, or creation projects is difficult. Often, the professional will examine a nearby natural area and try to mimic the combination of plant species found there. That may not be possible for individuals unfamiliar with natural areas. Fortunately, by following some simple guidelines, you will have garden spaces that grow well on your site and mirror the plant communities found naturally in your area. The plant lists found at the end of this guide will also help give you a start at planting appropriate groupings.

- **Know your site and plant to the existing site conditions.** Check the sun exposure, soil moisture and soil type where you plan to plant, and choose plants that will grow and thrive in those conditions. For a few dollars your state or local cooperative extension office can analyze a small soil sample you send them (for contact information, see your government listings in the phone book). The results will include soil type (sand, clay, loam, etc.), pH and fertility status and recommendations for amending the soil to make it into “average garden soil.” However, by selecting native species that thrive in the *existing* conditions, you won’t need to add soil, fertilizer, lime or compost. There are a wide variety of plants that will thrive in most conditions, even the driest, poorest soil or very wet clay soil. If, however, the soil test shows extreme pH - very acidic (pH of less than 5) or very basic (pH 8 or above), your plant choices will be fairly limited. In that case, you might choose to follow the instructions for making the soil more neutral. If the soil is hard, compacted fill dirt, you might want to improve it by adding organic matter and work the ground so that it can more easily be planted. If you alter the site, then select plants suited to the new conditions.
- **Choose plants native to your region of your state.** Along with planting to the existing site conditions, use locally native plants. Use the map on page 9 to identify which **physio-geographic region** the planting site lies in. If you’re close to a border dividing two regions, you may choose plants from either or both regions.
- **Choose a habitat type.** Try to create or emulate a specific habitat, like woods, wetland or meadow, and choose plants that are appropriate to both your site and the habitat. Look through this guide and mark the plants with growth requirements that match conditions at the planting site. This will help improve the success of your planting, the habitat value, and the ecological functioning of the project. This publication will eventually be made available online, in a format that can be electronically sorted by plant characteristics or growth conditions.

## Where to find native plants

Most nurseries carry some native plants, and some nurseries specialize and carry a greater selection. As the demand for native plants has grown, so has the supply at nurseries. Some plants will be more readily available than others. Here, we’ve focused on species most appropriate for planting and available through the nursery trade. A limited number of species included here are not commonly available but are able to be nursery grown. Take this guide along with you when you visit nurseries and if you need help, ask for nursery staff familiar with native plants. If you see a plant you like, check to see if it’s included in the guide for your state and physiographic region. For those species that are more difficult to find, the hope and intention is that this publication will spark a demand, and hence a greater supply. If you have a favorite plant that you can’t obtain, be sure to ask your local nursery to consider adding it to their stock. A list of some of the many retail and wholesale native plant nurseries in the Chesapeake Bay region is available from the U.S. Fish and Wildlife Service, Chesapeake Bay Field Office at [www.fws.gov/r5cbfo/bayscapes.htm](http://www.fws.gov/r5cbfo/bayscapes.htm).

For the greatest ecological value, select the “true” native species, especially if planting for wildlife benefit. There are cultivated varieties (*cultivars*) available for many native plants. These are named using the scientific name (Latin genus and species, such as *Rudbeckia fulgida*) plus the cultivar name, a third word in single quotation marks (such as *Rudbeckia fulgida* ‘Goldsturm’). These varieties have been grown to provide plants with certain physical characteristics, perhaps a different flower color, different foliage or a compact shape or size. Although these are suitable for gardening use, use true species (not cultivars) if you are planning a habitat project to provide



food for wildlife. These plants are most suited to use by the native wildlife, and will increase your chances of attracting them.

Native plants should never be removed from the wild unless an area is about to be developed. Even then, it is difficult to transplant wild-collected plants and to duplicate their soil and other growth requirements in a home garden. Plants that are grown from seed or cuttings by nurseries have a much greater tolerance for garden conditions. Help to preserve natural areas by purchasing plants that have been grown, not collected.

Ask nurseries about the source of the native species sold. Did they come from seed or cuttings of plants found growing locally, or are they from another region? Ideally, the plants you use should come from stock from the same region, say, within about a 200-mile radius in the same physiographic province (coastal plain, Piedmont, or mountain). Differences exist from region to region even in the same plant species, due to differences in climatic conditions between distant locations. For example, a plant grown in Maine may flower at a different time than the same species grown in Maryland. They may have slight physical differences. These characteristics make a difference in designing gardens and they matter to wildlife seeking food sources. The more consumers ask for locally grown plants or seed, the more likely it is that nurseries will carry local stock.

Once you begin to explore and experiment with native plants, you'll soon discover that many of these plants go beyond just replacing worn out selections in your yard. Native plants will eventually reduce your labor and maintenance costs while inviting wildlife to your yard helping to create your own sense of place.

## How to use this guide

### Plant Names and Types

Plants are organized within each section alphabetically by scientific name. All scientific plant names used are based on names accepted by ITIS, the Integrated Taxonomic Information System. Plants are indexed at the back of the book by scientific as well as frequently used common names. Scientific names are changed periodically as new information is gathered; for those commonly recognized names that changed during development of this guide, the new names are used here, with a cross reference noted in the index. For example: *Aster divaricatus* is now *Eurybia divaricata*, so the plant is listed in the index under both *Aster* and *Eurybia*.

Plants are grouped by botanical categories: Ferns; Grasses & Grasslike Plants (includes grasses and plants with long slender leaves that may appear similar to a grass); Herbaceous Plants (includes flowers and groundcovers); Herbaceous Emergents (plants that grow in moist to wet soils, wetlands or in standing water with roots and part of their stems below water but with most of the plant above the water); Shrubs; Trees; and Vines.

**A note about groundcovers:** English ivy, periwinkle, creeping lily turf and Japanese pachysandra are some commonly used groundcovers, particularly for shade. However, these species are non-natives that are invasive in the landscape, so they should be *avoided*. What native alternatives can be used instead? A groundcover can be any plant that would physically cover or hide the bare ground from view. For the purposes of environmentally beneficial landscaping and habitat enhancement, any plant in the "herbaceous" category would make a good groundcover. For those gardeners and landscapers still seeking a low-growing, creeping, spreading, or clump-forming plant for a groundcover, these plants are marked with a **GC** symbol in the Notes column and a list is included at the end of the guide.

### Characteristics

- **Height and/or Spread** The typical mature height or possible range of heights is given in feet, to the nearest half (0.5) foot. Height may vary depending on conditions (e.g., amount of moisture or sun). For trees and vines, spread is also given in feet. For trees, spread is the measurement of the crown of the plant; for vines, spread is the length a vine will grow along a surface.

- **Flowers: bloom period and flower color** The typical months in which the plant blooms are given. The exact time and duration of bloom may be shifted by days or weeks for different areas and/or depending on seasonal weather conditions and climactic trends. The basic, overall color of the flower is noted. The color of a flower's center or throat may not be included due to limited text space. For simplicity, some shades or tones of colors have been grouped, e.g. lavender, pale purple, bluish purple, even fuchsia may have been listed simply as purple; tan, brown, dark brown are all listed as brown; yellows and pinks may be similarly condensed.
- **Fruit: fruiting period, color and type** This information is provided for plants with more conspicuous fruits or visually interesting seeds. Terms used include: Achene, a dry flat seed such as in clematis; Berry, which includes small single berries such as blueberry, larger berries such as persimmon, aggregates such as blackberry and hips such as a rose hip; Capsule, including various types and sizes of dry fruits with two or more compartments containing seeds, such as iris, sweet pepperbush, hibiscus, or black-eyed Susan; Cone/ cone-like such as pines, hemlock, or alder; fleshy pomes or drupes such as hawthorn, beach plum, paw paw, passion flower, or cherry; Nut/nut-like, as in acorns (oaks) or hickory; Pod, which may include pea-like legumes such as partridge pea or wild senna, *follicles* or other long pod-like *capsules* such as milkweeds, delphinium, or trumpet creeper; and Winged, such as the *samaras* of maples or elm.
- **Fall Color** The color listed indicates the fall color of the leaves, or of the stems for certain plants such as grasses. Some color shades have been grouped by the basic color, as for flower color. Evergreens, species that retain their leaves throughout the winter (in all plant categories), are designated with a ▲ symbol in the Notes column. Evergreens are popular for various landscaping uses and valuable for year-round cover for wildlife.

## Growth Conditions

- **Light** The amount of sunlight a plant requires is defined as: Full Sun ☀, the site is in direct sunlight for at least six hours a day during the growing season; Partial shade ☀, the site receives approximately three to six hours of direct sunlight; and Shade ●, the site receives less than three hours of direct sunlight or filtered light.
- **Moisture** The amount of soil moisture a plant requires is defined as: Dry (D), areas where water does not remain after a rain (areas may be in full sun or in a windy location, on a steep slope, or have sandy soil); Moist (M), areas where the soil is damp, and may be occasionally saturated; and Wet (W), areas where the soil is saturated for much of the growing season, except in droughts. Many of the plants designated for wet areas tolerate specific ranges of water depths (see Flood Depth). Plants with the Dry designation can be considered drought tolerant.
- **Soil pH and Type** Many of the native plants listed will tolerate a range of soil types. Soil types are listed here as Organic (O), containing a high amount of organic material such as decayed leaves and bark; Clay or fine-textured (C) soils with a high clay content and some silt - very fine soil particles; Loamy or medium-textured (L) soils that contain a mix of mostly silt and sand but may contain some clay; and Sandy or coarse-textured (S) soils with larger particles. Soil information has necessarily been simplified for this guide, and lumped into these main categories, which will suffice for the novice. Soils in actuality are often a mixture or gradations of types, categorized by the percentages they contain of clay, silt or sand, for example clay loam (a certain mix of clay and sand); sandy clay; silt loam; or silty clay loam. For best results, select plants suited to existing site conditions rather than amending the soil. However, be aware that plant selection may be limited if your site has very sandy soil, heavy clay, compacted soil, or extreme soil pH (above 8 or below 5.5). In these cases, seek advice from a nurseryman, horticulturist, botanist, Cooperative Extension agent, or other expert.
- **Flood Depth** Some plants tolerate prolonged standing water, and occur in specific water depths or range of depths. In the Herbaceous Emergents section, the depth of water tolerated is indicated (in inches). Other types of wetland plants that can tolerate only intermittent flooding appear in other sections of the guide, and their flood tolerance

information is included in the Notes column. For more complete information on planning and planting wetlands, see the references listed at the end of this guide.

- Salt Tolerance** Some plants that tolerate prolonged standing water can tolerate saltwater or brackish (partly salty) water. For plants in the Herbaceous Emergents section, the salinity range in which each of these plants will grow is given in parts (of salt) per thousand parts (of water) or ppt, from 0 ppt (fresh water) to the maximum salinity tolerated. For plants in other sections of the guide, the maximum salinity is given in the Notes column. Full seawater is approximately 32 ppt. If salinity is not given, then the plant grows in fresh water only or in drier conditions.

**Habitat**

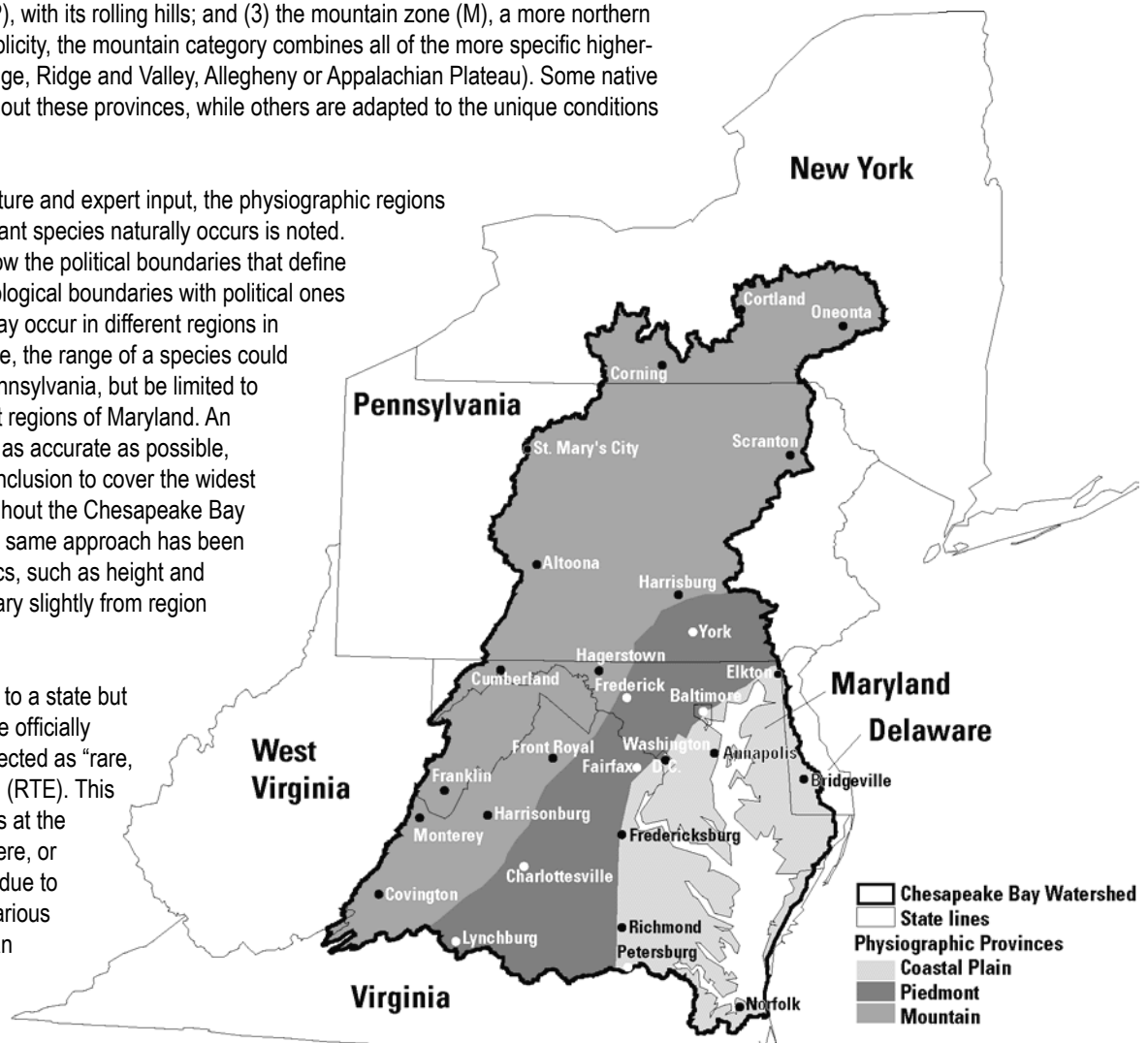
For each plant in this guide, we include a description of habitats in which that plant may be found. Several habitat types may be mentioned as each plant is rarely found in one and only one habitat type. There are dozens of forest types, several types of wetlands including forested wetlands and even wet meadows. The habitats described include those that provide the conditions most preferred by each plant species. To help with planning projects, sample lists of plants to use in certain habitat types, or certain site conditions, are given in the back of this guide. More technically detailed information on plant communities can be found in resources listed in the references section.

**Native To (Where To Use) - States and Physiographic Regions**

From the sandy dunes of the coast to the rocky slopes of the mountains, the rich variety of habitats found throughout the region is strongly linked to its geology, topography and climate. For this guide, the states in the Chesapeake Bay watershed have been divided into three regions or provinces: (1) the coastal plain (C), an area with fairly flat topography and more southern climate; (2) the Piedmont plateau (P), with its rolling hills; and (3) the mountain zone (M), a more northern climate (see map). For simplicity, the mountain category combines all of the more specific higher-altitude provinces (Blue Ridge, Ridge and Valley, Allegheny or Appalachian Plateau). Some native plants are common throughout these provinces, while others are adapted to the unique conditions found only in one or two.

Based on the existing literature and expert input, the physiographic regions and states in which each plant species naturally occurs is noted. However, plants do not follow the political boundaries that define our states, so matching ecological boundaries with political ones is difficult. Certain plants may occur in different regions in different states. For example, the range of a species could extend throughout all of Pennsylvania, but be limited to the mountain and Piedmont regions of Maryland. An effort has been made to be as accurate as possible, while erring on the side of inclusion to cover the widest range of possibilities throughout the Chesapeake Bay watershed as a whole. This same approach has been used for other characteristics, such as height and bloom period, which may vary slightly from region to region.

**Note:** Some species native to a state but not commonly found may be officially designated and legally protected as “rare, threatened, or endangered” (RTE). This may be because the plant is at the edge of its natural range there, or its population has declined due to loss of habitat caused by various natural events and/or human activities in that region. Species that are listed in a state as RTE should



generally not be planted there, because importing species from elsewhere could potentially lead to damaging alteration of the gene pool of the remaining population. This guide lists only those states in which a plant is common and recommended for planting. As a general rule of thumb, if a plant you like is not designated in this guide for your state or your region of the state, we strongly encourage you to forego planting that and select another plant suited to your site.

### Wildlife Value

The notation “high wildlife value” is based mainly on the value of the fruits, seeds and/or nectar used as food for wildlife, and the relative number of species using the plant for food. But remember that animals use leaves, twigs, roots and shoots for food or nesting material, and every plant has value as cover and/or nesting sites. In that respect, although we’ve marked those of higher wildlife (food) value, every plant in this guide has value to wildlife, as well as other environmental values.

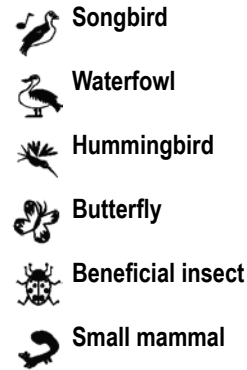
The **types of wildlife** noted here are those desirable species that are likely to use the plants for food, including pollinators which are critical to plant reproduction, for gardens, natural areas and agricultural crops. The information here is fairly general. The songbird icon indicates use of a plant by small usually migratory birds, but may include upland game birds. The waterfowl icon may include shorebirds and wading birds along with ducks and geese. The hummingbird icon has been indicated separately because many people are interested specifically in attracting them. The butterfly icon may refer to the adults or to the larval stage that uses the plant as a host. The beneficial insect icon, besides butterflies, includes ladybugs, bees (essential pollinators) and other insects that serve as a pest control or other desirable role. The small mammal icon is noted for plants used by any of a variety of small animals, such as raccoons, opossums, foxes, etc., depending upon location and surrounding habitat.

**Absent but not forgotten:** Certain wildlife species are not represented, due in part to a lack of available information for every plant related to all types of animals. However, these are all likely to inhabit or occasionally visit a native plant garden or habitat planting, and their importance in the web of life should not be underestimated. Many insects have not been represented here, though they certainly use a wide variety of plants throughout their life cycles and are an integral part of the ecosystems we’re trying to protect, conserve and enhance. Reptiles and amphibians, particularly salamanders, frogs and turtles, inhabit our yards as well as natural areas. They use plants for food and cover, and especially need water sources such as lakes, ponds, streams, puddles or even a small dish of water (aerated or changed daily to prevent mosquito breeding). Bats provide a valuable service as insect pest controllers and pollinators.

### Notes

This catchall includes pertinent information that bears emphasizing or is not reflected in the other categories. It may include additional notes or clarification about the plant’s characteristics, growth, and spread; tips or suggestions on cultivation; cultivars; or general use of the plant.

By providing these characteristics for each plant species we hope to provide you with a variety of choices to meet the conditions of your property as well as your personal preferences. Whether you are replacing a few individual plants, designing a new bed or planning for an entirely new look, this guide can help narrow the choices to plants most likely to thrive in your environment and create the landscape you desire.



---

Providing the basic habitat structures described earlier and planting a diversity of plants (and therefore food sources) will bring a surprising and beneficial array of life to your property.

Characteristics































Conditions

Habitat

Native to

Wildlife

Notes

<p><b>Adiantum pedatum</b></p> <p><i>northern maidenhair fern</i></p>		<p>Height: 1-2'</p> <p>Fruit:</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH: 4.5-6.5</p> <p>Soil type: L S O</p>	<p>moist woods, rocky shaded habitats</p>	<p>Region: M P C</p> <p>States: DC MD NY PA VA WV</p>		<p>grows in clumps; delicate texture; herbal uses</p> <p></p>
<p><b>Asplenium platyneuron</b></p> <p><i>ebony spleenwort</i></p>		<p>Height: 0.5-1.5'</p> <p>Fruit: May-Sep</p>	<p>Light:   </p> <p>Moisture: M</p> <p>Soil pH: 4.5-7</p> <p>Soil type: C L S</p>	<p>banks, open woods and thickets, slopes, rocky ledges, swamps</p>	<p>Region: M P C</p> <p>States: DC MD NY VA WV</p>		<p>easily transplanted; only moderate care needed; evergreen</p> <p></p>
<p><b>Athyrium filix-femina</b></p> <p><i>northern lady fern</i></p>		<p>Height: 1-3'</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>woods, banks, wooded hillsides, sandy bogs</p>	<p>Region: M P C</p> <p>States: DC DE NY WV</p>		<p>varieties occur throughout region; in MD, VA can also use subspecies asplenioides (southern lady fern)</p> <p></p>
<p><b>Botrychium virginianum</b></p> <p><i>rattlesnake fern</i></p>		<p>Height: 1-2'</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH: 5.6-6.9</p> <p>Soil type: L O</p>	<p>rich, woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p></p>
<p><b>Dennstaedtia punctilobula</b></p> <p><i>hay-scented fern</i></p>		<p>Height: 1-3'</p> <p>Fruit: Jul-Oct</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>open woods and fields</p>	<p>Region: M P C</p> <p>States: DC MD NY VA WV</p>		<p>can spread over large areas of open understory or pasture</p> <p></p>
<p><b>Dryopteris carthusiana (D. spinulosa)</b></p> <p><i>toothed or spinulose woodfern</i></p>		<p>Height: 1-2.5'</p> <p>Fruit: Jun-Aug</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 5-6</p> <p>Soil type: L O</p>	<p>low woods, thickets, swamps, rich woods, rocky slopes</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WV</p>		<p>forms colonies; semi-evergreen</p> <p></p>
<p><b>Dryopteris cristata</b></p> <p><i>crested wood or shield fern, narrow swamp fern</i></p>		<p>Height: 1.5-2.5'</p> <p>Fruit: Jun-Sep</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH: 3.5-6.5</p> <p>Soil type: C L</p>	<p>shallow emergent marshes, shrub swamps, wooded swamps, open shrubby wetlands</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>small rosette fronds</p> <p></p>
<p><b>Dryopteris intermedia</b></p> <p><i>evergreen wood-fern</i></p>		<p>Height: 2.5'</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: D M W</p> <p>Soil pH:</p> <p>Soil type: L O</p>	<p>rich, moist to dry woods</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		<p>clump-former; not common on coastal plain; hybridizes with eight species</p> <p></p>



# Ferns

## Characteristics



































## Conditions











## Habitat

## Native to

## Wildlife

## Notes

<p><b>Dryopteris marginalis</b></p> <p><i>marginal or evergreen shield fern, evergreen wood fern</i></p>	 <p>UWI RWF</p>	<p>Height: 1-3'</p> <p>Fruit: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>moist woods, clearings</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>clump-former; attractive; easily transplanted</p> <p> <b>GC</b></p>
<p><b>Onoclea sensibilis</b></p> <p><i>sensitive fern</i></p>	 <p>UWI KJS</p>	<p>Height: 1-3.5'</p> <p>Fruit: Jun-Oct</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>fresh tidal and nontidal marshes, meadows, swamps, woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>spreads in wet areas; fertile fronds dark brown, erect</p> <p><b>GC</b></p>
<p><b>Osmunda cinnamomea</b></p> <p><i>cinnamon fern</i></p>	 <p>RHW, UWI TK</p>	<p>Height: 2-5'</p> <p>Fruit: Apr-May</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH: 4.5-7</p> <p>Soil type: C L</p>	<p>woods, marshes, swamps, bogs, streambanks</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>tolerates drought; fertile fronds reddish brown, woolly</p> <p><b>GC</b></p>
<p><b>Osmunda claytoniana</b></p> <p><i>interrupted fern</i></p>	 <p>UWI EUJ</p>	<p>Height: 1-4'</p> <p>Fruit:</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH: 4-6</p> <p>Soil type: C L</p>	<p>fields, forest and swamp edges</p>	<p>Region: M P</p> <p>States: DC DE MD PA VA WV</p>		<p>grows in clumps</p> <p><b>GC</b></p>
<p><b>Osmunda regalis</b></p> <p><i>royal fern</i></p>	 <p>UWI EUJ</p>	<p>Height: 1.5-6'</p> <p>Fruit: Apr-Jun</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH: 4-6</p> <p>Soil type: C L S</p>	<p>fresh tidal and nontidal marshes and swamps, woods, irregularly, seasonally, or permanently saturated (up to 100% of growing season)</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>tolerates full sun if moist; tolerates drought; tolerates irregular, seasonal or permanent saturation; only tolerates flooding for a few days</p> <p><b>GC</b></p>
<p><b>Polystichum acrostichoides</b></p> <p><i>Christmas fern</i></p>	 <p>USFWS BES</p>	<p>Height: 0.5-2'</p> <p>Fruit: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH: 4.5-7</p> <p>Soil type: L S</p>	<p>woods, thickets, rocky slopes</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>grows in clumps; easily grown in rock gardens and shaded places; impartial to soil type</p> <p> <b>GC</b></p>
<p><b>Pteridium</b></p> <p><i>bracken fern</i></p>	 <p>CM NRCS</p>	<p>Height: 1.5-6'</p> <p>Fruit:</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>dry pine woods, swamps, marshes, fields, waste places</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>forms large colonies; host for several ant types</p> <p><b>GC</b></p>
<p><b>Thelypteris noveboracensis</b></p> <p><i>New York fern</i></p>	 <p>USFWS BES</p>	<p>Height: 1-2.5'</p> <p>Fruit: Jun-Sep</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 4-7</p> <p>Soil type: C L S</p>	<p>forested wetlands, dry to damp woods, thickets</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>tolerates drought; easily transplanted; forms large colonies; spreads easily</p> <p><b>GC</b></p>

	Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Thelypteris palustris</b></p> <p>marsh fern</p>  <p>UWI/RWF</p>	<p>Height: 2-3'</p> <p>Fruit: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>swamps, bogs, fields, thickets, fresh marshes, wooded streambank</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>spreads</p> <p><b>GC</b></p>
<p><b>Woodwardia areolata</b></p> <p>netted chain fern</p>  <p>PLANTS RM/91</p>	<p>Height: 0.5-2'</p> <p>Fruit: Jul-Oct</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>bogs, swamps, woods</p>	<p>Region: P C</p> <p>States: DC DE MD VA</p>		<p>spreads by creeping rhizome</p> <p><b>GC</b></p>
<p><b>Woodwardia virginica</b></p> <p>Virginia chain fern</p>  <p>PLANTS</p>	<p>Height: 3-6'</p> <p>Fruit: Jul-Sep</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>swampy places, woods</p>	<p>Region: P C</p> <p>States: DC DE MD NY VA</p>		<p>spreads by creeping rhizome</p> <p><b>GC</b></p>



Osmunda regalis



Osmunda cinnamomea



Polystichum acrostichoides



New fern fiddleheads emerging.

# Grasses & Grasslike Plants

Characteristics






























Conditions

Habitat

Native to

Wildlife

Notes

<p><b>Agrostis perennans</b></p> <p><i>autumn bentgrass</i></p>	 <p>PLANTS RM95</p>	<p>Height: 1-3'</p> <p>Flowers: Jun-Oct</p>	<p>Light:   </p> <p>Moisture: D M W</p> <p>Soil pH: 5.5-7.5</p> <p>Soil type: C L</p>	<p>dry or moist thickets, open woods</p>	<p>Region: M P C</p> <p>States: DC DE PA VA WV</p>		
<p><b>Ammophila breviligulata</b></p> <p><i>dunegrass, American beachgrass</i></p>	 <p>UWI RRK</p>	<p>Height: 1.5-3.5'</p> <p>Flowers: Jul-Sep</p>	<p>Light: </p> <p>Moisture: D</p> <p>Soil pH: 5.8-7.8</p> <p>Soil type: L S</p>	<p>maritime beaches, dunes, grasslands, shrublands</p>	<p>Region: C</p> <p>States: VA</p>		<p>prefers well-drained, sandy sites; spreads rapidly by rhizomes</p>
<p><b>Andropogon gerardii</b></p> <p><i>big bluestem</i></p>	 <p>RHW</p>	<p>Height: 2-6.5'</p> <p>Flowers: Jun-Sep</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 6-7.5</p> <p>Soil type: C L S</p>	<p>dry or wet open woods, prairies, swales, shores; dry open areas</p>	<p>Region: M P</p> <p>States: DC DE NY PA VA WV</p>		<p>clump forming; attractive, with winter interest</p>
<p><b>Andropogon glomeratus (A. virginicus var. abbreviatus)</b></p> <p><i>bushy bluestem</i></p>	 <p>PLANTS</p>	<p>Height: 1.5-5'</p> <p>Flowers: Aug-Oct, reddish brown</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 5-6.3</p> <p>Soil type: C L S</p>	<p>fresh marshes, coastal areas</p>	<p>Region: M P C</p> <p>States: DC DE VA WV</p>		<p>tolerates drought; grows in tufts; reddish fall color</p>
<p><b>Andropogon virginicus</b></p> <p><i>broomsedge</i></p>	 <p>PLANTS JS</p>	<p>Height: 1-3'</p> <p>Flowers: Aug-Nov, reddish brown</p>	<p>Light: </p> <p>Moisture: D M W</p> <p>Soil pH: 4.9-7</p> <p>Soil type: C L S</p>	<p>wet meadows, transition areas</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>	 	<p>wildlife food and cover; tolerates drought; grows in tufts; reddish-tan fall color</p>
<p><b>Calamagrostis canadensis</b></p> <p><i>bluejoint reedgrass</i></p>	 <p>PLANTS 1995</p>	<p>Height: 1.5-5'</p> <p>Flowers: Jun-Aug</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 4.5-8</p> <p>Soil type: C L</p>	<p>meadows, bogs, thickets</p>	<p>Region: M</p> <p>States: DC DE NY VA WV</p>		
<p><b>Carex crinita var. crinita</b></p> <p><i>long hair sedge</i></p>	 <p>RHW</p>	<p>Height: 1-5'</p> <p>Flowers: Jun-Aug</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 4-7.5</p> <p>Soil type: C L</p>	<p>swales, thickets, low woods</p>	<p>Region: M P C</p> <p>States: DC DE NY VA WV</p>	 	
<p><b>Carex glaucoidea</b></p> <p><i>blue wood sedge</i></p>	 <p>NYNHP, NYNHP</p>	<p>Height: 0.5-2'</p> <p>Flowers: May-Jul, brown to reddish</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>moist to dry woods and fields</p>	<p>Region: P C</p> <p>States: DC DE MD VA</p>		<p>clump-forming; alternative to Liriope</p>



# Grasses & Grasslike Plants

Characteristics





























Conditions

Habitat

Native to

Wildlife

Notes

<p><b>Carex lurida</b></p> <p><i>sallow sedge, lurid sedge</i></p> <p>RHW</p>		<p>Height: 1-3.5'</p> <p>Flowers: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: W</p> <p>Soil pH: 4.9-6.8</p> <p>Soil type: C L S</p>	<p>swales, swamps, woods</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		<p>wetland plant; interesting seeds</p>
<p><b>Carex pensylvanica</b></p> <p><i>Pennsylvania sedge</i></p> <p>CM NRCS</p>		<p>Height: 0.5-1.5'</p> <p>Flowers: Apr-Jul, reddish to white</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>open, dry, sandy or rocky woods, wooded slopes</p>	<p>Region: P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>alternative to lawn; plant densely; fine textured leaves less than 6 inches</p> <p><b>GC</b></p>
<p><b>Carex stricta</b></p> <p><i>tussock sedge</i></p> <p>CM NRCS</p>		<p>Height: 1-3.5'</p> <p>Flowers: May-Aug, reddish to purple brown</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 3.5-7</p> <p>Soil type: C L S</p>	<p>fresh tidal and nontidal marshes, shrub swamps, forested wetlands, swales, fields</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>grows in clumps; partly persists in winter; tolerates flooding to 6 inches</p>
<p><b>Carex vulpinoidea</b></p> <p><i>fox sedge</i></p> <p>UWI RWF</p>		<p>Height: 0.5-3.5'</p> <p>Flowers: Jun-Aug</p>	<p>Light:  </p> <p>Moisture: W</p> <p>Soil pH: 6.8-8.9</p> <p>Soil type: C L</p>	<p>shallow emergent marshes, shrub swamps, floodplain forests, hardwood swamps</p>	<p>Region: M P C</p> <p>States: NY VA WV</p>	 <p>high wildlife value</p>	<p>grows in clumps; tolerates saturation and flooding to 6 inches</p>
<p><b>Chasmanthium latifolium</b></p> <p><i>wild oats, river oats, sea oats, spanglegrass</i></p> <p>USFWS BES</p>		<p>Height: 2-5'</p> <p>Flowers: Jul-Sep, green then tan</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5-7</p> <p>Soil type: C L S</p>	<p>streambanks, alluvial woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		
<p><b>Danthonia spicata</b></p> <p><i>poverty oatgrass, poverty grass</i></p> <p>UWI RWF</p>		<p>Height: 0.5-2'</p> <p>Flowers: May-Jul</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>open woods, pastures, meadows</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		<p><b>GC</b></p>
<p><b>Dichanthelium clandestinum</b></p> <p><i>deer-tongue</i></p> <p>USDA JE</p>		<p>Height: 2-5'</p> <p>Flowers: May-Oct</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 4-7.5</p> <p>Soil type: C L S</p>	<p>moist woods, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		
<p><b>Dichanthelium commutatum</b></p> <p><i>variable panicgrass</i></p> <p>PLANTS 1997</p>		<p>Height: 1-2.5'</p> <p>Flowers: May-Oct</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4-6.5</p> <p>Soil type: L S</p>	<p>rocky or sandy woods</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		

# Grasses & Grasslike Plants

Characteristics




























Conditions

Habitat

Native to

Wildlife

Notes

<p><b>Elymus canadensis</b></p> <p><i>Canada wild rye</i></p> <p>CM NRCS</p>		<p>Height: 2-6.5'</p> <p>Flowers: Jun-Oct</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH: 5-7.9</p> <p>Soil type: C L S</p>	<p>dry, sandy, gravelly, or rocky soil</p>	<p>Region: M P C</p> <p>States: DC MD VA WV</p>		
<p><b>Elymus hystrix (Hystrix patula)</b></p> <p><i>bottlebrush grass</i></p> <p>RHW</p>		<p>Height: 2-4'</p> <p>Flowers: Jun-Aug</p>	<p>Light:   </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>alluvial woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		
<p><b>Elymus riparius</b></p> <p><i>riverbank wild-rye</i></p> <p>UWI EJJ</p>		<p>Height: 0.5-5'</p> <p>Flowers: Jul-Sep</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 4.5-7.2</p> <p>Soil type: C L S O</p>	<p>rich thickets, streambanks, alluvial flats, meadows</p>	<p>Region: P C</p> <p>States: DE PA VA WV</p>		<p>good for streambank conditions</p>
<p><b>Elymus virginicus</b></p> <p><i>Virginia wild rye</i></p> <p>CM NRCS</p>		<p>Height: 1-5.5'</p> <p>Flowers: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5-7</p> <p>Soil type: C L S O</p>	<p>rich thickets, shores, meadows</p>	<p>Region: M P C</p> <p>States: DC DE MD PA VA WV</p>		<p>tolerates a wide range of conditions; forms clumps</p>
<p><b>Festuca rubra</b></p> <p><i>red fescue</i></p> <p>RS MNPS</p>		<p>Height: 0.5-3'</p> <p>Flowers: May-Jul</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 5-8</p> <p>Soil type: C L</p>	<p>dry woods, roadsides, waste areas</p>	<p>Region: M</p> <p>States: DC DE MD VA</p>		<p>can be used as turf grass; grows best in part shade</p> <p><b>GC</b></p>
<p><b>Leersia oryzoides</b></p> <p><i>rice cutgrass</i></p> <p>PLANTS 1995</p>		<p>Height: 5'</p> <p>Flowers: Jun-Oct</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 5.1-8.8</p> <p>Soil type: C L S</p>	<p>fresh tidal and nontidal marshes, meadows, ditches, muddy shores</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		<p>good for sediment stabilization, erosion control; tolerates drought; tolerates flooding to 6 inches</p>
<p><b>Panicum amarum</b></p> <p><i>bitter or coastal panic grass, beachgrass</i></p> <p>CM NRCS</p>		<p>Height: 1-3'</p> <p>Flowers: Aug-Oct</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH: 5-7.5</p> <p>Soil type: L S</p>	<p>sandy coastal shores and dunes</p>	<p>Region: C</p> <p>States: DC DE MD VA</p>		<p>prostrate form, produces little viable seed, use transplants; Panicum amarum var. amarulum (coastal panicgrass), taller form, can be seeded.</p>
<p><b>Panicum virgatum</b></p> <p><i>switchgrass</i></p> <p>USFWS BES</p>		<p>Height: 3-6'</p> <p>Flowers: Jul-Oct</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 4.5-8</p> <p>Soil type: C L S</p>	<p>fresh and brackish tidal and nontidal marshes, wet meadows, open woods, prairies, dunes</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>food for sparrow species; grows in clumps; controls erosion</p>



# Grasses & Grasslike Plants

Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Saccharum giganteum**  
(*Erianthus giganteus*)

*giant plumegrass,*  
*sugar cane*



USDA NRCS

Height: 3.5-10'  
Flowers: Aug-Oct

Light: ☀️ ☀️  
Moisture: M W  
Soil pH: 3.5-7  
Soil type: L S

swamps, low woods,  
swales

Region: P C  
States: DC DE VA

**Schizachyrium scoparium**  
(*Andropogon scoparius*)

*little bluestem*



USFWS BES, USFWS BES

Height: 1.5-4'  
Flowers: Aug-Oct

Light: ☀️  
Moisture: D  
Soil pH:  
Soil type: L S

open woods,  
pinelands, clearings

Region: M P C  
States: DC DE MD NY PA VA WV

tolerates poor soil; clump grass; winter interest and wildlife cover; excellent forage grass

**Sorghastrum nutans**

*Indiangrass*



RHW

Height: 2.5-8'  
Flowers: Aug-Sep

Light: ☀️  
Moisture: D M  
Soil pH: 4.8-8  
Soil type: C L S

dry slopes, prairies,  
borders of woods

Region: M P C  
States: DC DE MD NY PA VA WV

tall clump grass with beautiful seed head; nutritious for livestock

**Tridens flavus**

*redtop, purpletop*



UWU EJU

Height: 2-6.5'  
Flowers: Aug-Oct

Light: ☀️ ☀️  
Moisture: D M  
Soil pH: 4.5-6.5  
Soil type: C L S

dry fields, roadsides,  
openings, forest

Region: M P C  
States: DC DE VA WV

**Tripsacum dactyloides**

*gama grass*



CM NRCS

Height: 6-10'  
Flowers: Jun-Oct

Light: ☀️ ☀️  
Moisture: M W  
Soil pH: 5.7-7.5  
Soil type: C L

swales, fields, forest edges, shores

Region: M P C  
States: DC DE MD VA WV

excellent forage grass; often grows wild near corn fields; can hybridize with corn

See also:

In the *Herbaceous Plants* section:

- Allium cernuum**
- Liatris pilosa v. pilosa** (graminifolia), scariosa, spicata, squarrosa
- Sisyrinchium angustifolium** (graminoides), atlanticum

In the *Herbaceous Emergents* section:

- Distichlis spicata**
- Dulichium arundinaceum**
- Iris prismatica**, versicolor, virginica
- Juncus canadensis**, effusus
- Schoenoplectus pungens v. pungens** (*Scirpus pungens*, americanus), validus (*Scirpus validus*)
- Scirpus atrovirens**, cyperinus
- Sparganium americanum**
- Spartina alterniflora**, cynosuroides, patens, pectinata
- Zizania aquatica**

**Andropogon virginicus** provides a transition between the road and woods.



CM NRCS

**Schizachyrium scoparium** in a garden with *Liatris spicata* and *Asclepias tuberosa*.



USFWS BES



USFWS

Schizachyrium scoparium in fall.



USFWS BES

Characteristic swirls of *Carex stricta*.

# Herbaceous Plants

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Actaea pachypoda

*doll's eyes*

RHW



Height: 1-3'  
Flowers: Apr-Jun, whitish  
Fruit: Jul-Oct, white or red, berry

Light:   
Moisture: M  
Soil pH:  
Soil type: C L S

rich open woods, thickets

Region: C  
States: DE  
NY PA VA  
WV

interesting berries; infrequent in Piedmont and mountain regions

### Agalinis purpurea

*purple false foxglove*

RHW



Height: 1-4'  
Flowers: Jul-Sep, rose-purple, white  
Fruit: capsule

Light:   
Moisture: M W  
Soil pH:  
Soil type: S

moist fields, rocky shores, serpentine barrens

Region: P C  
States: DC DE MD  
NY VA  
WV

### Ageratina altissima var. altissima (Eupatorium rugosum)

*white snakeroot*

UWI KJS, USFWS BES



Height: 1-5'  
Flowers: Jul-Oct, white  
Fruit: capsule

Light:   
Moisture: D M  
Soil pH:  
Soil type: C L S

rich woods, thickets, clearings, meadows

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



tough plant; cultivars available; prefers basic soils

### Allium cernuum

*nodding onion*

RHW



Height: 0.5-2.5'  
Flowers: Jun-Aug, pink, rose, white  
Fruit: capsule

Light:   
Moisture: M  
Soil pH:  
Soil type: L S

ledges, gravels, rocky or wooded slopes

Region: M  
States: DC MD  
VA  
WV



### Anemone canadensis

*round-leaved or Canadian anemone, thimbleweed*

RHW



Height: 0.5-3'  
Flowers: May-Jul, white  
Fruit:

Light:   
Moisture: M  
Soil pH:  
Soil type: C L

damp thickets, meadows, gravelly shores

Region: P  
States: DC  
NY VA

### Anemone virginiana

*thimbleweed, tall anemone*

RHW



Height: 1-2.5'  
Flowers: May-Aug, whitish  
Fruit:

Light:   
Moisture: D M  
Soil pH:  
Soil type: C L S

dry rocky open woods, slopes, thickets

Region: M P  
States: DC DE MD  
NY PA VA  
WV

### Antennaria neglecta

*field pussytoes*

UWI JRS



Height: 0.5-1.5'  
Flowers: Apr-Jul, white  
Fruit:

Light:   
Moisture: D M  
Soil pH: 5.5-7.5  
Soil type: C L

upland meadows, pastures, open woods

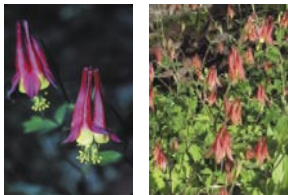
Region: M P  
States: DC DE MD  
NY PA VA  
WV



### Aquilegia canadensis

*eastern or wild columbine*

RHW, USFWS BES



Height: 0.5-3'  
Flowers: Apr-Jul, red-yellow  
Fruit: capsule

Light:   
Moisture: D M  
Soil pH:  
Soil type: L

rich rocky woods, slopes, cliffs, ledges, pastures, roadside banks

























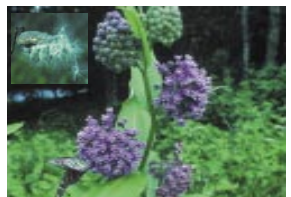



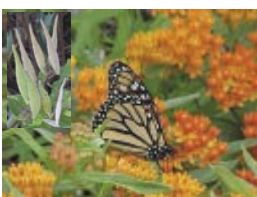




Region: M P C  
States: DC DE MD  
NY PA VA  
WV



commonly cultivated; spreads by seed

GC

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Aralia nudicaulis</b> <i>wild sarsaparilla</i>	 RHW	Height: 0.5-1.5' Flowers: May-Jul, white or green Fruit: May-Jul, purple-black, berry	Light:   Moisture: D M Soil pH: 5-7.2 Soil type: C L S	dry to moist woods	Region: M P C States: DC DE MD NY PA VA WV		aromatic; single-leaved; lacks an above-ground stem; not common in coastal plain
<b>Aralia racemosa</b> <i>spikenard</i>	 RHW, RHW	Height: 1.5-6.5' Flowers: Jun-Aug, greenish-white Fruit: dark purple, berry	Light:   Moisture: M Soil pH: Soil type: C L S	rich woods, thickets, wooded slopes and edges	Region: M P C States: DC DE MD PA VA WV		not common in coastal plain
<b>Arisaema triphyllum</b> <i>Jack-in-the-pulpit</i>	 USFWS BES, RHW	Height: 1-3' Flowers: Mar-Jun, striped, purple or green Fruit: berry	Light:   Moisture: M W Soil pH: 4.8-7 Soil type: L S	woods, bogs swamps	Region: M P C States: DC DE MD NY PA VA WV		red berry clusters appear late summer to fall; unusual flower; spreads rapidly from seed
<b>Aruncus dioicus</b> <i>goat's-beard</i>	 USFWS BES	Height: 3.5-6.5' Flowers: May-Jul, white Fruit: pod	Light:   Moisture: M W Soil pH: Soil type: C L S	wooded roadsides, rich woods, ravines	Region: M States: DC VA WV		
<b>Asarum canadense</b> <i>wild ginger</i>	 USFWS BES	Height: 0.5' Flowers: Apr-May, brownish-purple Fruit: brown, capsule	Light:   Moisture: M Soil pH: Soil type: C L S	rich woods	Region: M P C States: DC DE MD NY PA VA WV		flower inconspicuous; attractive leaves; will spread; semi-evergreen  
<b>Asclepias incarnata</b> <i>swamp milkweed</i>	 USFWS RL	Height: 4-6' Flowers: May-Jun, pink to reddish Fruit: Aug-Nov, pod	Light:   Moisture: M W Soil pH: 5-8 Soil type: C L	fresh tidal and nontidal marshes, meadows, shrub swamps, woods, shores, ditches	Region: M P C States: DC DE MD NY PA VA WV	  	can tolerate drought; interesting seed pod
<b>Asclepias syriaca</b> <i>common milkweed</i>	 RHW, RHW	Height: 3.5-6.5' Flowers: May-Aug, pale purple Fruit: Aug-Nov, pod	Light:  Moisture: D Soil pH: Soil type: L S	thickets, roadsides, fields	Region: M P C States: DC DE MD NY PA VA WV	 	interesting seed pods; fragrant flower
<b>Asclepias tuberosa</b> <i>butterflyweed, butterfly milkweed, butterfly flower</i>	 USFWS RL, USFWS BES	Height: 1-3' Flowers: May-Jul, orange Fruit: Aug-Nov, pod	Light:   Moisture: D M Soil pH: 4.8-6.8 Soil type: L S	dry fields, roadsides, shale barrens	Region: M P C States: DC DE MD NY PA VA WV	 	taproot does not transplant well but seedlings do; attractive seed pod



# Herbaceous Plants

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Baptisia australis

wild blue indigo,  
false blue indigo

USFWS BES, USFWS BES



Height: 3-5'  
Flowers: May-Jun, blue,  
purple  
Fruit:

Light:   
Moisture: D M  
Soil pH:  
Soil type: S

open woods,  
alluvial thickets,  
streambanks,  
floodplains

Region: M P  
States: DC MD  
VA  
WV



tolerates poor soils; flowers  
very showy; shrublike form

### Baptisia tinctoria

yellow wild indigo

RHW



Height: 1-3'  
Flowers: May-Sep,  
yellow  
Fruit:

Light:   
Moisture: D  
Soil pH: 5.8-7  
Soil type: L S

open woods,  
clearings

Region: M P C  
States: DC DE MD  
PA VA  
WV

tolerates poor soils

### Bidens cernua

nodding beggar-  
ticks, nodding bur  
marigold

RHW



Height: 0.5-3'  
Flowers: Aug-Oct, yellow  
Fruit:

Light:   
Moisture: D M  
Soil pH: 5.1-7  
Soil type: C L S

tidal marsh,  
sloughs, springs,  
pools, shore

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



### Boltonia asteroides

star boltonia, white  
doll's daisy

USFWS BES



Height: 0.5-2.5'  
Flowers: Jul-Sep, white  
Fruit:

Light:   
Moisture: D M W  
Soil pH: 5.3-7  
Soil type: L S

gravelly shores,  
sandy thickets

Region: C  
States: DC DE  
VA  
WV

### Caltha palustris

marsh marigold

RHW



Height: 1-2'  
Flowers: Apr-Jun, bright  
yellow  
Fruit:

Light:   
Moisture: W  
Soil pH: 4.9-6.8  
Soil type: C L

forested wetlands,  
shrub swamps,  
streambanks,  
seeps, meadows

Region: M C  
States: DC DE MD  
NY VA  
WV



clump-forming; needs  
some periods of drier  
soil; tolerates flooding to  
6 inches

### Campanulastrum americanum (Campanula americana)

American or tall  
bellflower

RHW



Height: 1.5-6.5'  
Flowers: Jun-Aug, light  
blue  
Fruit: capsule

Light:   
Moisture: M  
Soil pH: 5.5-7.5  
Soil type: C L S

rich moist  
woods, rocky  
wooded slopes,  
streambanks

Region: M P  
States: DC MD  
NY VA  
WV

### Cardamine concatenata (Dentaria laciniata)

toothwort

RHW



Height: 1-1.5'  
Flowers: Apr-Jun, white,  
purplish  
Fruit:

Light:   
Moisture: M  
Soil pH:  
Soil type: L S

rich woods,  
wooded bottoms,  
calcareous rocky  
banks

Region: M P  
States: DC DE MD  
NY VA  
WV

### Caulophyllum thalictroides

blue cohosh

RHW



Height: 1-2.5'  
Flowers: Apr-Jun, green-  
yellow, green-purple  
Fruit: dark blue, berry

Light:   
Moisture: M  
Soil pH: 4.5-7  
Soil type: L

rich woods

Region: M P C  
States: DC DE MD  
NY PA VA  
WV

Characteristics



























Conditions

Habitat

Native to

































Wildlife

Notes

<p><b>Chamaecrista fasciculata</b> (<i>Cassia fasciculata</i>)</p> <p><i>partridge pea,</i> <i>prairie senna</i></p>	 <p>RHW</p>	<p>Height: 0.5-3'</p> <p>Flowers: Jul-Sep, yellow</p> <p>Fruit: pod</p>	<p>Light: </p> <p>Moisture: D</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>upland meadows, fields, streambanks</p>	<p>Region: M P C</p> <p>States: DC DE MD PA VA WV</p>		<p>Pods coil after split open; spreads</p>
<p><b>Chamerion angustifolium</b> spp. <i>angustifolium</i> (<i>Epilobium angustifolium</i>)</p> <p><i>fireweed</i></p>	 <p>RHW, PLANTS CAM</p>	<p>Height: 3-10'</p> <p>Flowers: Jun-Sep, magenta, pink, rarely white</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>recent clearings, burned woodlands, damp ravines, open sandy areas</p>	<p>Region: M</p> <p>States: DC DE MD PA VA WV</p>		
<p><b>Chelone glabra</b></p> <p><i>white turtlehead,</i> <i>turtlehead</i></p>	 <p>RHW</p>	<p>Height: 1.5-6.5'</p> <p>Flowers: Jul-Oct, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>woods, streambanks, swamps, thickets</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>strong grower; herbal uses; host for Baltimore checkerspot butterfly</p>
<p><b>Chimaphila maculata</b></p> <p><i>striped wintergreen,</i> <i>striped prince's pine</i></p>	 <p>RHW</p>	<p>Height: 0.5'</p> <p>Flowers: Jun-Aug, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>acidic woods, frequently under pines</p>	<p>Region: M P C</p> <p>States: DC MD NY PA VA WV</p>		<p>flowers fragrant</p> <p><b>GC</b></p>
<p><b>Chrysogonum virginianum</b></p> <p><i>green-and-gold,</i> <i>golden knees</i></p>	 <p>USFWS BES</p>	<p>Height: 0.5-1'</p> <p>Flowers: Mar-Jun, yellow</p> <p>Fruit:</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>open woods on limestone, rocky open woods</p>	<p>Region: M P C</p> <p>States: DC MD VA WV</p>		<p>will bloom longer if kept moist</p> <p><b>GC</b></p>
<p><b>Chrysopsis mariana</b></p> <p><i>golden aster,</i> <i>Maryland golden aster</i></p>	 <p>RHW</p>	<p>Height: 0.5-2.5'</p> <p>Flowers: Jul-Oct, yellow</p> <p>Fruit:</p>	<p>Light:  </p> <p>Moisture: D</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>woods, openings, roadsides, serpentine barrens</p>	<p>Region: P C</p> <p>States: DC DE MD VA</p>		<p><b>GC</b></p>
<p><b>Cimicifuga racemosa</b></p> <p><i>black snakeroot,</i> <i>black cohosh, fairy candles</i></p>	 <p>RHW</p>	<p>Height: 2.5-8.5'</p> <p>Flowers: Jun-Sep, white</p> <p>Fruit: pod</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>rich woods, wooded slopes, ravines, thickets</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	  	
<p><b>Claytonia virginica</b></p> <p><i>narrowleaf spring beauty, spring beauty</i></p>	 <p>RHW</p>	<p>Height: 0.5-1'</p> <p>Flowers: Mar-May, white with pink</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>rich woods, thickets, clearings</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		



# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Clitoria mariana</b>  <i>Maryland butterfly pea</i>  	RHW	Height: 6'  Flowers: Jun-Sep, pale blue or pinkish  Fruit: pod	Light:   Moisture: D Soil pH: Soil type: S	open areas	Region: M P C  States: DC DE VA  WW		vine-like
<b>Conoclinium coelestinum (Eupatorium coelestinum)</b>  <i>mistflower, wild ageratum</i>  	RHW	Height: 1-3.5'  Flowers: Jul-Oct, blue, violet or purple  Fruit: capsule	Light:   Moisture: D M W Soil pH: Soil type: C L	old fields, meadows; dry sandy woods and clearings, damp thickets, streambanks	Region: C  States: DC DE VA  WW	  	
<b>Coreopsis tripteris</b>  <i>tall coreopsis, tall tickseed</i>  	RHW	Height: 3.5-10'  Flowers: May-Sep, yellow  Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L S	thickets, old fields, forest edges, roadsides	Region: M P C  States: DC VA  WW		flower has anise scent
<b>Coreopsis verticillata</b>  <i>threadleaf coreopsis</i>  	USFWS BES	Height: 0.5-3.5'  Flowers: Jun-Oct, yellow  Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L	dry open woods, clearings, roadsides	Region: P  States: DC MD VA  WW		<b>GC</b>
<b>Delphinium tricornem</b>  <i>dwarf larkspur</i>  	RHW	Height: 0.5-3'  Flowers: Apr-Jun, blue, violet, white, variegated Fruit: pod	Light:   Moisture: M Soil pH: Soil type:	rich woods, calcareous slopes, thickets, river bluffs	Region: M P  States: DC VA  WW		
<b>Desmodium paniculatum</b>  <i>panicked or narrow-leaf tick-trefoil</i>  	RHW	Height: 1-3.5'  Flowers: Jul-Sep, purplish or green  Fruit: pod	Light:   Moisture: D Soil pH: 6-7 Soil type: C L	clearings, edges of moist or dry woods	Region: M P C  States: DC DE MD NY VA  WW	 	not found near coast
<b>Dicentra canadensis</b>  <i>squirrel corn</i>  	RHW	Height: 0.5-1'  Flowers: Apr-May, greenish-white, rose tinge Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: L	rich woods	Region: M P  States: DC MD NY PA VA  WW		flowers hyacinth scented
<b>Dicentra cucullaria</b>  <i>Dutchman's breeches</i>  	RHW	Height: 0.5-1'  Flowers: Apr-Jun, white to cream  Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: L S	rich woods	Region: M P  States: DC DE MD NY PA VA  WW		leaves basal; dormant in summer

Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Dicentra eximia**  
*wild bleeding heart*



RHW

Height: 1.5-2'  
Flowers: Apr-Sep, pink/white  
Fruit: capsule

Light:   
Moisture: D M  
Soil pH:  
Soil type: L

rocky woods and cliffs, rich woods

Region: M P  
States: DC MD  
VA  
WV



sometimes cultivated

**Dodecatheon meadia**

*shooting star*



RHW, RHW

Height: 0.5-2'  
Flowers: Apr-Jun, white with yellow, lilac  
Fruit: capsule

Light:   
Moisture: M  
Soil pH:  
Soil type: L S

open woods, meadows, slopes, prairies

Region: M  
States: DC MD  
VA  
WV

**Doellingeria umbellata**  
var. *umbellata*  
(*Aster umbellatus*)

*flat-top white aster, parasol whitetop*



RHW

Height: 1-7.5'  
Flowers: Aug-Oct, white  
Fruit:

Light:   
Moisture: M W  
Soil pH:  
Soil type: L S

open areas, woods

Region: M P  
States: DC DE MD  
NY PA VA  
WV



**Erigeron pulchellus**

*robin's plantain*



RHW

Height: 0.5-1.5'  
Flowers: Apr-Sep, blue, pink, white  
Fruit: capsule

Light:   
Moisture: D M  
Soil pH:  
Soil type: L S

open woods, meadows, wooded slopes, roadsides

Region: M P C  
States: DC DE MD  
NY PA VA  
WV

GC

**Erythronium americanum**

*trout lily, yellow trout lily, dogtooth violet*



RHW

Height: 0.5-1'  
Flowers: Mar-Jun, yellow  
Fruit: capsule

Light:   
Moisture: M W  
Soil pH:  
Soil type: L S

woods, rich slopes, bottomlands, meadows

Region: M P  
States: DC DE MD  
NY PA VA  
WV

**Eupatorium dubium**

*Joe-Pye weed*



RHW

Height: 2-5'  
Flowers: Jul-Oct, purple, rarely white  
Fruit: capsule

Light:   
Moisture: M W  
Soil pH:  
Soil type: S

swamps, bogs, marshes, swales

Region: M P C  
States: DC DE MD  
VA



**Eupatorium fistulosum**

*Joe-Pye weed, trumpet weed*



RHW

Height: 1.5-10'  
Flowers: Jul-Oct, pink-purple  
Fruit: capsule

Light:   
Moisture: D M W  
Soil pH: 4.5-7  
Soil type: C L

floodplains, meadows, thickets, roadsides

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



herbal uses

**Eupatorium hyssopifolium**

*hyssop-leaved thoroughwort, hyssop-leaved eupatorium*



RHW

Height: 1-4.5'  
Flowers: Jul-Oct, white  
Fruit: capsule



































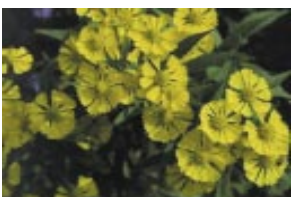




Light:   
Moisture: D M  
Soil pH:  
Soil type: S

dry fields, roadsides, railroad right of ways, woods, fields, salt meadows

Region: C  
States: DC DE MD  
VA



# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Eupatorium maculatum</b></p> <p><i>spotted Joe-Pye weed</i></p> <p>CAB</p> 	<p>Height: 2-6.5'</p> <p>Flowers: Jul-Sep, purple to pale lavender</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH: 5.5-7</p> <p>Soil type: C L</p>	<p>floodplains, swamps, alluvial thickets, grasslands</p>	<p>Region: M P</p> <p>States: DC NY WV</p>	  		
<p><b>Eupatorium perfoliatum</b></p> <p><i>common boneset</i></p> <p>RHW</p> 	<p>Height: 1-5'</p> <p>Flowers: Jul-Oct, white</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>floodplains, swamps, bogs, streambanks, meadows</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	  		
<p><b>Eupatorium purpureum</b></p> <p><i>green-stemmed Joe-Pye weed</i></p> <p>RHW</p> 	<p>Height: 2-6.5'</p> <p>Flowers: Jul-Oct, pink, purple, cream</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>open woods, fields, floodplains</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	  	<p>occurs in drier, shadier habitats than other joe-pye-weeds; injured or dried plant has vanilla scent</p>	
<p><b>Eurybia divaricata (Aster divaricatus)</b></p> <p><i>white wood aster</i></p> <p>RHW, USFWS BES</p> 	<p>Height: 0.5-3'</p> <p>Flowers: Jul-Oct, white</p> <p>Fruit:</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>dry woods, clearings</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WV</p>		<p><b>GC</b></p>	
<p><b>Gentiana clausa</b></p> <p><i>closed gentian, bottle gentian</i></p> <p>USFWS BES</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Aug-Oct, blue</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 5.8-7.2</p> <p>Soil type: L</p>	<p>moist open woods, streambanks, meadows</p>	<p>Region: M P C</p> <p>States: DC MD PA VA WV</p>			
<p><b>Geranium maculatum</b></p> <p><i>wild geranium, wood geranium</i></p> <p>RHW</p> 	<p>Height: 1-2'</p> <p>Flowers: Apr-Jul, lavender or pink</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>woods, roadsides, fields</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	  	<p>adaptable plant; long bloom time; spreader; herbal uses; explosive seed capsule</p> <p><b>GC</b></p>	
<p><b>Goodyera pubescens</b></p> <p><i>downy rattlesnake plantain</i></p> <p>USFWS BES</p> 	<p>Height: 0.5-1.5'</p> <p>Flowers: Jun-Aug, whitish</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>dry to moist woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>very handsome throughout winter</p> 	
<p><b>Helenium autumnale</b></p> <p><i>yellow or common sneezeweed</i></p> <p>USFWS BES</p> 	<p>Height: 1.5-6'</p> <p>Flowers: Jul-Nov, yellow</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: M</p> <p>Soil pH: 4-7.5</p> <p>Soil type: C L S</p>	<p>woods, swamps, riverbanks, alluvial thickets, meadows, marshes, ditches</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>tolerates wet areas; showy flowers; herbal uses</p>	

Characteristics















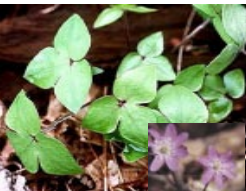











Conditions

Habitat

Native to



























Wildlife

Notes































<p><b>Helianthus angustifolius</b></p> <p><i>swamp sunflower</i></p> <p>RHW</p>		<p>Height: 1.5-5.5'</p> <p>Flowers: Aug-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 4-7</p> <p>Soil type: L S</p>	<p>swamps, moist, sandy areas</p>	<p>Region: C</p> <p>States: DC DE MD VA</p>		
<p><b>Helianthus decapetalus</b></p> <p><i>ten-petaled or thin-leaved sunflower</i></p> <p>BZ</p>		<p>Height: 1.5-5'</p> <p>Flowers: Jul-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>fields, bottomlands, stream banks, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WW</p>		
<p><b>Helianthus divaricatus</b></p> <p><i>woodland sunflower, rough sunflower</i></p> <p>RHW</p>		<p>Height: 1.5-6.5'</p> <p>Flowers: Jul-Sep, yellow</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>dry open woods, wooded slopes, shale barrens, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>		
<p><b>Heliopsis helianthoides</b></p> <p><i>oxeye sunflower, oxeye</i></p> <p>RHW</p>		<p>Height: 1-5'</p> <p>Flowers: Jun-Sep, pale yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5.6-6.8</p> <p>Soil type: L S</p>	<p>fields, open woods, floodplains, thickets, streambanks</p>	<p>Region: P C</p> <p>States: DC DE MD PA VA WW</p>		<p>long bloom time</p>
<p><b>Hepatica nobilis var. acuta (H. acutiloba)</b></p> <p><i>sharp-lobed hepatica</i></p> <p>UWI, KJS, UWI, KJS, UWI, JRS</p>		<p>Height: 0.5-2'</p> <p>Flowers: Mar-Jun, bluish, white, pink</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>rich upland woods, rocky slopes</p>	<p>Region: M</p> <p>States: NY PA VA</p>		<p>may bloom throughout year (rarely)</p> <p><b>GC</b></p>
<p><b>Hepatica nobilis var. obtusa (H. americana)</b></p> <p><i>round-lobed hepatica, liverleaf</i></p> <p>RHW</p>		<p>Height: 0.5-2'</p> <p>Flowers: Mar-Jun, white to lavender</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>dry or rocky woods, dry upland slopes</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>		<p><b>GC</b></p>
<p><b>Heraclium maximum (H. lanatum)</b></p> <p><i>cow parsnip</i></p> <p>RHW</p>		<p>Height: 3.5-10'</p> <p>Flowers: May-Aug, white to pink</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 5.4-7.3</p> <p>Soil type: C L S</p>	<p>rich woods, wooded roadside banks, marshy flats, streambanks, ditches</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>		<p>can cause a dermatitis (skin) reaction</p>
<p><b>Heuchera americana</b></p> <p><i>alumroot</i></p> <p>MOBOT</p>		<p>Height: 1-3.5'</p> <p>Flowers: Apr-Jun, green, white, pink, purple</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>rich woods, rocky slopes, shale cliffs</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WW</p>		<p>long bloom time; many cultivars and hybrids; semi-evergreen</p> <p><b>GC</b></p> 



# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Heuchera villosa</b></p> <p><i>hairy heuchera, hairy alumroot</i></p> <p>PLANTS JSP</p> 	<p>Height: 1-2.5'</p> <p>Flowers: Jun-Oct, white to greenish to pinkish</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>damp rocks, rich wooded slopes</p>	<p>Region: M</p> <p>States: DC MD VA</p>			<p><b>GC</b></p>
<p><b>Houstonia caerulea</b></p> <p><i>bluet, innocence, Quaker-ladies</i></p> <p>RHW</p> 	<p>Height: 0.5-1'</p> <p>Flowers: Apr-Jun, blue, lilac, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>meadows, fields, and thickets, open woods, forest edges</p>	<p>Region: M P C</p> <p>States: DC DE MD VA WW</p>			
<p><b>Hydrophyllum virginianum</b></p> <p><i>Virginia waterleaf</i></p> <p>RHW</p> 	<p>Height: 1-2.5'</p> <p>Flowers: May-Aug, lavender, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>woods, thickets, streambanks</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>			
<p><b>Hylotelephium telephioides (Sedum telephioides)</b></p> <p><i>Allegheny stonecrop</i></p> <p>RHW</p> 	<p>Height: 0.5-1.5'</p> <p>Flowers: Aug-Sep, pale pink</p> <p>Fruit: pod</p>	<p>Light:  </p> <p>Moisture:</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>dry rocky places</p>	<p>Region: M</p> <p>States: DC MD NY VA WW</p>			<p>naturally occurs in bare rock outcrops, but does well in garden; rare in PA, threatened in NY</p> <p><b>GC</b></p>
<p><b>Impatiens capensis (I. biflora)</b></p> <p><i>jewelweed, touch-me-not</i></p> <p>USFWS BES</p> 	<p>Height: 1.5-5'</p> <p>Flowers: May-Oct, orange, yellow, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 5.4-7.4</p> <p>Soil type: C L S</p>	<p>moist meadows, swamps, streambanks, open woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>		<p>ripe seed pod explodes with contact; remedy for poison ivy itching</p>	
<p><b>Ionactis linariifolius (Aster linariifolius)</b></p> <p><i>stiff-leaf aster, flaxleaf whitetop aster</i></p> <p>RHW</p> 	<p>Height: 0.5-2'</p> <p>Flowers: Aug-Oct, blue, yellow eye</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>grasslands, successional shrublands, oak-hickory forest, dry rocky woods and edges</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WW</p>			
<p><b>Jeffersonia diphylla</b></p> <p><i>twinlineaf</i></p> <p>RHW</p> 	<p>Height: 0.5-1'</p> <p>Flowers: Apr-May, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>rich woods</p>	<p>Region: M P</p> <p>States: DC MD VA WW</p>			
<p><b>Lespedeza capitata</b></p> <p><i>round-head bush clover</i></p> <p>UWIKJS</p> 	<p>Height: 2-6'</p> <p>Flowers: Jul-Sep, yellowish white</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: D</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>fields, thin woods</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WW</p>			

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Liatis pilosa</b> var. <i>pilosa</i> (<i>L. graminifolia</i>)</p> <p><i>grass-leaf</i> <i>blazingstar</i></p> <p>RHW</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Aug-Oct, purple</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>open woods, forest edge, salt marsh edges, dune hollows</p>	<p>Region: P C</p> <p>States: DC DE MD VA</p>			
<p><b>Liatis scariosa</b></p> <p><i>eastern or northern</i> <i>blazing star, tall</i> <i>gayfeather</i></p> <p>RHW</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Aug-Sep, lavender to rose- purple</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>dry upland woods</p>	<p>Region: M P C</p> <p>States: DC DE MD VA WV</p>			
<p><b>Liatis spicata</b></p> <p><i>gayfeather,</i> <i>blazingstar, spiked</i> <i>blazing star</i></p> <p>USFWS RL</p> 	<p>Height: 1-6.5'</p> <p>Flowers: Jul-Aug, rose- purple or white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5.6-7.5</p> <p>Soil type: C L S</p>	<p>moist meadows, open areas</p>	<p>Region: P C</p> <p>States: DC DE VA WV</p>	  		
<p><b>Liatis squarrosa</b></p> <p><i>plains blazing star</i></p> <p>RHW</p> 	<p>Height: 0.5-2.5'</p> <p>Flowers: Jul-Sep, rose</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>dry open fields and banks</p>	<p>Region: P C</p> <p>States: DC DE VA</p>			
<p><b>Lilium canadense</b></p> <p><i>Canada lily</i></p> <p>RHW</p> 	<p>Height: 1.5-6.5'</p> <p>Flowers: Jun-Aug, yellow, orange, red</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>fields, thickets, woods</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WV</p>			
<p><b>Lilium philadelphicum</b></p> <p><i>wood lily</i></p> <p>RHW</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Jun-Aug, yellow, red-orange</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>open woods, forest edges, thickets</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>	 		
<p><b>Lilium superbum</b></p> <p><i>Turk's cap lily</i></p> <p>RS MNPS</p> 	<p>Height: 4-8'</p> <p>Flowers: Jul-Aug, yellow- orange, orange-red</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>meadows, streamsides</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>leaves in whorl around stem; takes several years to bloom</p>	
<p><b>Limonium carolinianum</b></p> <p><i>sea lavender</i></p> <p>PLANTS LA</p> 	<p>Height: 0.5-2'</p> <p>Flowers: Jul-Oct, lavender</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 6-8.5</p> <p>Soil type: C L S</p>	<p>irregularly flooded high salt marshes</p>	<p>Region: C</p> <p>States: DE MD NY VA</p>		<p>tolerates salinity to 30 ppt</p>	



# Herbaceous Plants

## Characteristics

## Conditions

## Habitat

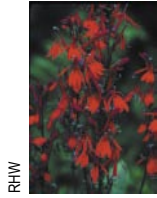
## Native to

## Wildlife

## Notes

### Lobelia cardinalis

cardinal flower



RHW

Height: 2-4'  
Flowers: Jul-Oct, red  
Fruit:

Light:   
Moisture: M W  
Soil pH: 5.8-7.8  
Soil type: C L

fresh tidal and nontidal marshes, wooded swamps, seeps, banks of ponds, rivers, streams

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



long bloom time; biennial, must reseed

### Lobelia siphilitica

great blue lobelia



RHW, USFWS BES

Height: 1-5'  
Flowers: Aug-Oct, blue, violet  
Fruit: capsule

Light:   
Moisture: M W  
Soil pH:  
Soil type: C L S

woodlands, meadows, swamps

Region: M P  
States: DC DE MD  
NY PA VA  
WV



long bloom time; white cultivars available

### Lupinus perennis

lupine, sundial lupine



RHW

Height: 1-2'  
Flowers: Apr-Jul, blue, rarely pink or white  
Fruit: pod

Light:   
Moisture: D M  
Soil pH:  
Soil type: S

open woods, fields, roadsides, streambanks

Region: M P C  
States: DC DE  
NY VA  
WV



prefers acidic soil

### Maianthemum canadense

Canada mayflower



RHW

Height: 0.5'  
Flowers: May-Jul, white  
Fruit: pale red speckled, berry

Light:   
Moisture: M  
Soil pH:  
Soil type: C L S

woods

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



fragrant flowers

GC

### Maianthemum racemosum ssp. racemosum (Smilacina racemosa)

false Solomon's seal



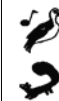
PLANTS JA, PLANTS WSJ

Height: 1-3.5'  
Flowers: May-Jul, white  
Fruit: red, berry

Light:   
Moisture: M  
Soil pH:  
Soil type: C L S

dry to moist woods, clearings, bluffs

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



flowers in plume-like clumps at tip of stem; herbal uses

### Medeola virginiana

Indian cucumber



RHW, RHW

Height: 1-3.5'  
Flowers: May-Jun, yellowish  
Fruit: dark purple or black, berry

Light:   
Moisture: M  
Soil pH:  
Soil type: L S

woods

Region: M P C  
States: DC DE MD  
NY PA VA  
WV

rhizome is edible

### Melanthium virginicum

Virginia bunchflower



RHW

Height: 2.5-6.5'  
Flowers: Jun-Aug, greenish  
Fruit: capsule

Light:   
Moisture: M  
Soil pH:  
Soil type: C L S

woods, seepages, clearings

Region: P C  
States: DC DE MD  
VA  
WV

### Mertensia virginica

Virginia bluebells



RHW

Height: 1-2.5'  
Flowers: Mar-Jun, pink turning blue  
Fruit: Mar-May, nut/nut-like




































Light:   
Moisture: M W  
Soil pH: 4.5-8  
Soil type: C L

rich wooded slopes, floodplains

































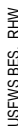









Region: M P C  
States: DC DE MD  
NY PA VA  
WV

dormant in summer; flower color blue, pink, or white according to soil acidity





























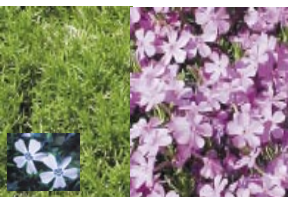













# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Mimulus ringens</b> <i>monkeyflower, Allegheny monkeyflower</i> 	RHW	Height: 1-3' Flowers: Jun-Oct, blue Fruit: capsule	Light:   Moisture: W Soil pH: Soil type: L	open swamps, meadows, shores	Region: M P C States: DC DE NY PA VA WV		interesting flowers
<b>Mitchella repens</b> <i>partridgeberry</i> 	USFWS, RHW	Height: 0.5' Flowers: May-Jul, white Fruit: July-Dec, scarlet, berry	Light:   Moisture: D M Soil pH: Soil type: L S	dry acidic woods	Region: M P C States: DC DE MD NY PA VA WV	 	two flowers form one fruit; berry edible; slow creeper, forms mats under trees  
<b>Mitella diphylla</b> <i>twoleaf miterwort, bishop's cap</i> 	RHW, RHW	Height: 0.5-1.5' Flowers: Apr-Jun, white Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: C L S	rich, woods	Region: M P C States: DC DE MD NY PA VA WV		
<b>Monarda bradburiana (M. fistulosa)</b> <i>wild bergamot, horsemint</i> 	RS MNPS	Height: 1.5-5' Flowers: Jun-Sep, pink to purple Fruit: nut/nut-like	Light:   Moisture: D M Soil pH: 6-8 Soil type: C L	fields, thickets, roadsides, forest edges	Region: M P C States: DC DE MD NY PA VA WV	 	confused with bee-balm ( <i>M. didyma</i> ); aromatic; herbal uses
<b>Monarda didyma</b> <i>bee-balm, Oswego tea</i> 	USFWS BES	Height: 2-5' Flowers: Jul-Sep, red Fruit: nut/nut-like	Light:   Moisture: M W Soil pH: Soil type: L	creek banks, floodplains, woods	Region: M States: DC MD NY PA VA WV	  	showy flowers; aromatic; herbal uses
<b>Monarda punctata</b> <i>horsemint, spotted bee-balm</i> 	RHW	Height: 0.5-3.5' Flowers: Jun-Oct, yellow and purple Fruit: nut/nut-like	Light:  Moisture: D Soil pH: Soil type: L S	open sandy fields	Region: M P C States: DC DE MD NY VA		
<b>Nuttallanthus canadensis (Linaria canadensis)</b> <i>blue, old-field, or Canada toadflax</i> 	PLANTS WSJ	Height: 0.5-2.5' Flowers: Apr-Sep, light blue Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L S	maritime grasslands and shrublands, successional shrubland, woods, fields	Region: M P C States: NY VA WV		delicate flowers; prefers well-drained soil
<b>Oenothera biennis</b> <i>common evening primrose</i> 	RHW	Height: 1.5-6.5' Flowers: Jun-Oct, yellow Fruit: capsule	Light:   Moisture: D Soil pH: 5-7 Soil type: C L S	cultivated fields, waste ground, roadsides	Region: M P C States: DC DE MD NY PA VA WV	 	flowers open in evening; biennial

# Herbaceous Plants
































		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Oenothera fruticosa</b>  <i>narrow-leaved sundrops</i>   	Height: 1-3'  Flowers: May-Sep, yellow  Fruit: capsule	Light:   Moisture: D M Soil pH: 4.5-7 Soil type: C L S	fields, meadows, roadsides	Region: M P C  States: DC DE MD NY PA VA WV	  		
<b>Oenothera perennis</b>  <i>sundrops</i>   	Height: 0.5-3'  Flowers: May-Aug, yellow  Fruit: capsule	Light:  Moisture: D M Soil pH: Soil type: L S	fields, pastures, roadsides, shaly slopes	Region: M P  States: DC DE MD NY PA VA WV	  	similar to evening primrose ( <i>O. biennis</i> ); long bloom time; spreader	
<b>Opuntia humifusa (O. compressa)</b>  <i>eastern prickly-pear cactus</i>   	Height: 0.5-1'  Flowers: Jun-Jul, yellow  Fruit: purplish to deep red, fleshy	Light:  Moisture: D Soil pH: Soil type: L S	sandy coastal dunes, shaly soils	Region: M C  States: DC DE MD VA WV		fruit edible, used for jelly  <b>GC</b>	
<b>Osmorhiza longistylis</b>  <i>sweet cicely, anise root</i>   	Height: 1.5-4'  Flowers: May-Jun, white to green  Fruit:	Light:   Moisture: M Soil pH: Soil type: C L S	rich woods, wooded slopes, thickets	Region: M P C  States: DC DE MD NY VA WV		all plant parts have anise scent	
<b>Oxalis violacea</b>  <i>violet wood sorrel</i>   	Height: 0.5'  Flowers: Apr-Jul, violet  Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L	woods	Region: M P  States: DC DE MD PA WV		<b>GC</b>	
<b>Packera aurea (Senecio aureus)</b>  <i>golden ragwort, golden groundsel</i>   	Height: 0.5-2.5'  Flowers: Apr-Aug, yellow  Fruit: capsule	Light:    Moisture: M W Soil pH: Soil type: L	moist fields, woods, floodplains, roadsides	Region: M P C  States: DC DE MD NY PA VA WV		wetland plant; long bloom time; aggressive spreader	
<b>Penstemon digitalis</b>  <i>beardtongue, tall white or foxglove beardtongue</i>   	Height: 2-5'  Flowers: Jun-Aug, white or faintly purple  Fruit: capsule	Light:   Moisture: D M Soil pH: 5.5-7 Soil type: C L S	open woods, meadows	Region: M P C  States: DC DE MD NY PA VA WV		tolerates poor drainage; variety of cultivars	
<b>Penstemon laevigatus</b>  <i>smooth or eastern beardtongue</i>   	Height: 1-3.5'  Flowers: May-Jul, purplish  Fruit: capsule	Light:    Moisture: M Soil pH: Soil type:	rich woods, fields	Region: M  States: DC MD VA WV			

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Phlox carolina</b> <i>thick-leaved phlox</i>	 PLANTS WSJ	Height: 1-2.5' Flowers: May-Jun, pink to purple, rarely white Fruit: capsule	Light:   Moisture: D M W Soil pH: Soil type: L S	open woods	Region: M States: DC VA		 
<b>Phlox divaricata</b> <i>woodland or wild blue phlox, wild sweet William</i>	 RHW	Height: 1.5' Flowers: Apr-Jun, blue, lavender, white Fruit: capsule	Light:   Moisture: M Soil pH: 5.5-7.2 Soil type: C L S	rich woods	Region: M P States: DC MD NY PA VA WV		aromatic; showy flower; dormant in summer (leaves disappear); frequently cultivated; evergreen 
<b>Phlox maculata</b> <i>phlox, meadow phlox, wild sweet William</i>	 PLANTS WSJ	Height: 1-3' Flowers: May-Sep, rose, pink, purple, rarely white Fruit: capsule	Light:    Moisture: M W Soil pH: 5.9-6.8 Soil type: C L	meadows, streambanks, thickets	Region: M P C States: DE PA VA WV		aromatic; showy flowers; a frequent escapee from cultivation
<b>Phlox paniculata</b> <i>summer phlox, garden phlox</i>	 RHW, USFWS BES	Height: 1.5-6.5' Flowers: Jul-Oct, pink, red-purple, white Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: L	rich, open woods, roadsides, streambanks, thickets	Region: M P C States: DC PA VA WV	 	aromatic; showy flowers frequently escapes from cultivation
<b>Phlox stolonifera</b> <i>creeping phlox</i>	 RHW, USFWS BES	Height: 0.5-1.5' Flowers: Apr-Jun, blue, red-purple, violet Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L S	rich woods	Region: M States: DC MD VA WV	 	 
<b>Phlox subulata</b> <i>moss phlox, moss-pink</i>	 USFWS BES, USFWS BES, RHW	Height: 0.5' Flowers: Apr-Jun, rose, pink, white Fruit: capsule	Light:  Moisture: D Soil pH: 5.7-7.5 Soil type: C L S	rock crevices, ledges	Region: M P States: DC MD NY VA WV		nice rock garden plant  
<b>Physostegia virginiana</b> <i>obedient plant, false dragonhead</i>	 USFWS BES, USFWS BES	Height: 1.5-5' Flowers: Jun-Sep, pink to purple Fruit: nut/nut-like	Light:   Moisture: D M Soil pH: Soil type: C L S	moist open areas, streambanks, shorelines	Region: M P States: DC MD PA VA WV	 	flowers showy; spreads rapidly by underground stems; best in full sun; can escape cultivation
<b>Podophyllum peltatum</b> <i>Mayapple</i>	 RHW	Height: 1-2' Flowers: Apr-May, white Fruit: yellow, berry	Light:   Moisture: M Soil pH: Soil type: L	rich woods, open fields	Region: M P C States: DC DE MD NY PA VA WV		ripe fruit edible; woodland groundcover; mottled foliage 
































# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Polemonium reptans</b>  <i>Jacob's ladder,</i> <i>Greek valerian</i>		Height: 0.5-1.5' Flowers: Apr-Aug, blue Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: L S	rich or rocky woods, wooded floodplains	Region: M P States: DC DE MD PA VA WV		attractive flowers; slow spreader; herbal uses  <b>GC</b>
<b>Polygonatum biflorum</b>  <i>Solomon's seal,</i> <i>dwarf Solomon's seal</i>		Height: 0.5-6.5' Flowers: Apr-Jun, white or green Fruit: blue to black, berry	Light:   Moisture: D M Soil pH: Soil type: L	woods	Region: M P C States: DC DE MD NY PA VA WV		flowers dangle along stalk
<b>Polygonatum pubescens</b>  <i>Solomon's seal,</i> <i>downy Solomon's seal</i>		Height: 1-3.5' Flowers: Apr-Jun, yellowish-green Fruit: blue to black, berry	Light:    Moisture: D M Soil pH: Soil type: C L S	dry to moist woods	Region: M P C States: DE NY PA VA WV		herbal uses; edible
<b>Porteranthus trifoliatus (Gillenia trifoliata)</b>  <i>Bowman's root</i>		Height: 1.5-4' Flowers: May-Jul, white Fruit: pod	Light:    Moisture: M Soil pH: Soil type: C L S	open upland woods, clearings, rocky slopes, roadsides	Region: M P States: DC DE MD PA VA WV		established plants drought tolerant; spreads to form tight clumps; seldom needs dividing; yellow fall color
<b>Pycnanthemum incanum</b>  <i>hoary mountain mint</i>		Height: 3' Flowers: Jul-Sep, white to lavender, purple spots Fruit: nut/nut-like	Light:  Moisture: D Soil pH: Soil type: C L S	upland woods, fields, thickets, barrens	Region: M P C States: DC DE MD NY PA VA WV	  	
<b>Pycnanthemum tenuifolium</b>  <i>narrow-leaved mountain mint</i>		Height: 1.5-2.5' Flowers: Jul-Sep, purple to white Fruit: nut/nut-like	Light:    Moisture: D M Soil pH: Soil type: S	streambanks, floodplains, moist fields	Region: M P C States: DC DE NY PA VA WV		
<b>Rhexia virginica</b>  <i>Virginia meadow-beauty</i>		Height: 1-3.5' Flowers: Jun-Sep, dark pink Fruit: capsule	Light:  Moisture: W Soil pH: Soil type: L	open areas	Region: M P C States: DC DE VA WV		also R. mariana for MD
<b>Rudbeckia fulgida</b>  <i>early, eastern, or orange coneflower</i>		Height: 1.5-3.5' Flowers: Jul-Oct, yellow-orange, black eye Fruit: capsule	Light:    Moisture: D M Soil pH: Soil type: L	moist fields, meadows	Region: P States: DC DE MD VA	  	cultivars have nice foliage



# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Rudbeckia hirta</b> <i>black-eyed Susan</i>		Height: 1-3.5' Flowers: Jun-Oct, yellow, black eye Fruit: capsule	Light:   Moisture: D M Soil pH: 6-7 Soil type: C L	fields, meadows, roadsides	Region: M P C States: DC DE MD NY PA VA WV		
<b>Rudbeckia laciniata</b> <i>tall, green-headed, or cutleaf coneflower</i>		Height: 1.5-10' Flowers: Jul-Sep, yellow Fruit: capsule	Light:   Moisture: M W Soil pH: 4.5-7 Soil type: C L S	floodplains, streambanks, fields	Region: M P C States: DC DE MD NY PA VA WV		herbal uses
<b>Rudbeckia triloba</b> <i>three-lobed coneflower</i>		Height: 1.5-4.5' Flowers: Jun-Oct, yellow or orange Fruit: capsule	Light:   Moisture: D M Soil pH: Soil type: L S	fields, open woods, rocky slopes	Region: M P States: DC MD NY PA VA WV		
<b>Ruellia caroliniensis</b> <i>Carolina wild petunia</i>		Height: 0.5-3' Flowers: May-Aug, lavender-blue Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: C L S	woods, roadsides, thickets, waste places	Region: C States: DC DE MD VA WV		actually in the nightshade family, flower fragile; a highly variable species
<b>Sabatia angularis</b> <i>rose pink, common marsh-pink</i>		Height: 1-3' Flowers: Jul-Oct, pink or white Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: C L S	moist open woods, fields, marshes, meadows; uplands, shores	Region: M P C States: DC DE MD VA WV		
<b>Salvia lyrata</b> <i>lyre-leaf sage</i>		Height: 1-2' Flowers: Apr-Jun, violet Fruit: nut/nut-like	Light:   Moisture: D M Soil pH: Soil type: L S	moist pastures, upland woods, thickets, waste areas	Region: M P C States: DC DE VA WV		
<b>Sanguinaria canadensis</b> <i>bloodroot</i>		Height: 0.5' Flowers: Mar-May, white Fruit: capsule	Light:   Moisture: M Soil pH: Soil type: L	rich woods, open roadsides	Region: M P C States: DC DE MD NY PA VA WV		showy flowers, but blooms fleetingly; herbal uses
<b>Saxifraga pensylvanica</b> <i>eastern swamp saxifrage</i>		Height: 1-3' Flowers: Apr-Jun, white to green Fruit: capsule	Light:   Moisture: W Soil pH: Soil type: C L S	wet woods, bogs, swamps	Region: M P C States: DC DE MD NY PA VA		

# Herbaceous Plants

## Characteristics


































## Conditions

## Habitat






























## Native to

## Wildlife















## Notes

<p><b>Saxifraga virginiana</b></p> <p><i>early saxifrage</i></p>	 <p>RHW</p>	<p>Height: 0.5-1'</p> <p>Flowers: Mar-May, white</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>rock crevices, dry slopes, woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		
<p><b>Scutellaria integrifolia</b></p> <p><i>rough or hyssop skullcap, helmet flower</i></p>	 <p>RHW</p>	<p>Height: 1-2.5'</p> <p>Flowers: May-Jul, blue, pink, white</p> <p>Fruit: blackish, nut/nutlike</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>swamps, bogs, moist woods, fields</p>	<p>Region: M P C</p> <p>States: DC DE MD VA WV</p>		
<p><b>Sedum ternatum</b></p> <p><i>mountain stonecrop, wild stonecrop</i></p>	 <p>RHW</p>	<p>Height: 0.5'</p> <p>Flowers: Apr-Jun, greenish-white</p> <p>Fruit: pod</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>damp rocks, rocky banks, cliffs, woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>creeping stems; used in rock gardens</p> <p> </p>
<p><b>Senna marilandica (Cassia marilandica)</b></p> <p><i>Maryland or southern wild senna</i></p>	  <p>USFWS BES, USFWS BES</p>	<p>Height: 3-6.5'</p> <p>Flowers: Jul-Aug, yellow</p> <p>Fruit: pod</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4-7</p> <p>Soil type: L S</p>	<p>dry roadsides, thickets, open woods</p>	<p>Region: M P C</p> <p>States: DC DE MD VA WV</p>		<p>Pods important food for upland gamebirds</p>
<p><b>Silene caroliniana</b></p> <p><i>wild pink</i></p>	 <p>RHW</p>	<p>Height: 0.5-1'</p> <p>Flowers: Apr-Jun, white to pink</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>dry open woods, rocky slopes, roadside banks, shale barrens</p>	<p>Region: M C</p> <p>States: DC DE MD VA</p>		<p>semi-evergreen; native to limestone areas</p> <p> </p>
<p><b>Silene stellata</b></p> <p><i>starry campion, widow's frill</i></p>	 <p>RHW</p>	<p>Height: 1-3.5'</p> <p>Flowers: Jun-Sep, white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>wooded slopes, roadside banks, barrens</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>drought-tolerant; naturalizes in woods</p>
<p><b>Silene virginica</b></p> <p><i>fire pink</i></p>	 <p>RHW</p>	<p>Height: 1-3'</p> <p>Flowers: Apr-Jul, dark pink to red</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>upland woods, wooded slopes, streambanks, clearings</p>	<p>Region: M P</p> <p>States: DC DE VA WV</p>		
<p><b>Silphium perfoliatum</b></p> <p><i>cup plant</i></p>	 <p>PLANTS DL</p>	<p>Height: 3-8'</p> <p>Flowers: Jul-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>floodplains, fields, moist meadows, woods</p>	<p>Region: M P</p> <p>States: DC VA WV</p>		

# Herbaceous Plants

	Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Sisyrinchium angustifolium</b> (<i>S. graminoides</i>)</p> <p><i>blue-eyed grass</i></p> <p>CM/NRCS</p> 	<p>Height: 0.5-1.5'</p> <p>Flowers: Apr-Jun, blue-violet</p> <p>Fruit: brown, capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5-7</p> <p>Soil type: C L</p>	<p>grassy areas, damp woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>grasslike leaves; also <i>S. montanum</i> in NY</p>
<p><b>Sisyrinchium atlanticum</b></p> <p><i>coastal or eastern blue-eyed grass</i></p> <p>UWI JS</p> 	<p>Height: 0.5-2.5'</p> <p>Flowers: May-Jul, blue-violet</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type:</p>	<p>marshes, meadows, low woods</p>	<p>Region: P C</p> <p>States: DC DE MD VA</p>		<p>leaves grasslike, more slender than <i>S. angustifolium</i></p>
<p><b>Solidago caesia</b></p> <p><i>bluestem goldenrod, wreath goldenrod</i></p> <p>RHW</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Aug-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH: 5.5-7</p> <p>Soil type: C L</p>	<p>rich deciduous woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>stems bluish or purplish</p>
<p><b>Solidago canadensis var. scabra</b> (<i>S. altissima</i>)</p> <p><i>tall or late goldenrod</i></p> <p>UWI, RRK</p> 	<p>Height: 3.5-6.5'</p> <p>Flowers: Jul-Nov, yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L</p>	<p>woods, fields, riverbanks, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		
<p><b>Solidago canadensis</b></p> <p><i>Canada goldenrod</i></p> <p>UWI MRB</p> 	<p>Height: 1-6.5'</p> <p>Flowers: Jul-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4.8-7.5</p> <p>Soil type: C L S</p>	<p>fields, roadsides</p>	<p>Region: M P C</p> <p>States: DE NY VA WV</p>		
<p><b>Solidago flexicaulis</b></p> <p><i>broad leaf or zig zag goldenrod</i></p> <p>RHW</p> 	<p>Height: 1-3.5'</p> <p>Flowers: Jun-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5.3-7</p> <p>Soil type: L</p>	<p>moist woods, rocky wooded slopes</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WV</p>		
<p><b>Solidago juncea</b></p> <p><i>early goldenrod</i></p> <p>RHW</p> 	<p>Height: 1-4'</p> <p>Flowers: Jun-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: S</p>	<p>fields, meadows, rocky slopes, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		
<p><b>Solidago nemoralis</b></p> <p><i>gray, dwarf, old-field, or one-sided goldenrod</i></p> <p>RHW</p> 	<p>Height: 0.5-3'</p> <p>Flowers: Jun-Nov, yellow</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture: D</p> <p>Soil pH: 6.5-7.5</p> <p>Soil type: L S</p>	<p>fields, open woods, roadsides</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>tolerates poor soils</p>

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Solidago odora</b> <i>sweet goldenrod</i>	 RHW	Height: 1.5-5' Flowers: Jul-Oct, yellow Fruit: capsule	Light: ☀️ ☀️ Moisture: D M Soil pH: Soil type: C L S	dry open woods, barrens	Region: M P C States: DC DE NY VA WV		
<b>Solidago rugosa</b> <i>wrinkle-leaf or rough-stemmed goldenrod</i>	 RHW	Height: 1-6.5' Flowers: Aug-Nov, Fruit: capsule	Light: ☀️ ☀️ Moisture: M W Soil pH: 5-7.5 Soil type: L S	fields, woods, floodplains, roadsides, waste places	Region: M P C States: DC DE MD NY PA VA WV		tough plant; aggressive; strongly colonial
<b>Solidago sempervirens</b> <i>seaside goldenrod</i>	 RHW	Height: 1-6.5' Flowers: Jul-Nov, yellow Fruit: capsule	Light: ☀️ ☀️ Moisture: D M Soil pH: 5.5-7.5 Soil type: L S	coastal areas, dunes	Region: C States: DC DE MD VA		coastal plant, may occur where road salts are used
<b>Solidago speciosa</b> <i>showy or slender goldenrod</i>	 PLANTS TGB	Height: 2-6.5' Flowers: Jul-Oct, yellow Fruit: capsule	Light: ☀️ ☀️ Moisture: D M Soil pH: Soil type: L S	dry to moist open woods and fields	Region: M P States: DC MD NY VA		
<b>Spiranthes cernua</b> <i>nodding ladies' tresses</i>	 USFWS BES	Height: 0.5-2' Flowers: Jul-Nov, white Fruit:	Light: ☀️ ☀️ Moisture: M W Soil pH: 4.5-6.5 Soil type: C L S	meadows, open woods, roadsides, bogs	Region: M P C States: DC DE MD NY PA VA WV		orchid flowers; herbal uses
<b>Stachys tenuifolia (S. hispida)</b> <i>hedge nettle</i>	 RHW	Height: 1.5-3.5' Flowers: Jun-Aug, white to pink Fruit: nut/nut-like	Light: ☀️ ☀️ ● Moisture: M W Soil pH: 5.7-7.4 Soil type: C L S	wooded bottomlands, streambanks, meadows, fields	Region: P C States: DC DE MD VA WV		
<b>Stellaria pubera</b> <i>star chickweed, great chickweed</i>	 RHW	Height: 0.5-1.5' Flowers: Mar-Jun, white Fruit: capsule	Light: ● Moisture: M Soil pH: Soil type:	woods, shaded rocky areas	Region: M P ? States: DC MD VA WV		
<b>Symphotrichum cordifolium (Aster cordifolius)</b> <i>heart-leaved aster</i>	 RHW	Height: 1-5' Flowers: Aug-Oct, blue-violet to rose Fruit:	Light: ☀️ ● Moisture: D M Soil pH: Soil type: C L S	upland meadows, woods	Region: M P C States: DC NY PA VA WV		





Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Symphotrichum ericoides var. ericoides (Aster ericoides)**

*heath, white heath, or dense-flowered aster; frostweed*

RHW



Height: 0.5-6.5'  
Flowers: Jul-Nov, white, rarely blue, violet, rose  
Fruit:

Light:   
Moisture: D M  
Soil pH:  
Soil type: L S

dry fields, forest edges, woods, thickets

Region: M P  
States: DC DE MD  
NY  
WV



forms dense mounds

**Symphotrichum laeve var. laeve (Aster laevis)**

*smooth blue aster*

MOBOT



Height: 1-5'  
Flowers: Aug-Oct, pale blue, violet, white  
Fruit:

Light:   
Moisture: D  
Soil pH:  
Soil type: C L S

open areas, forest edges

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



**Symphotrichum novae-angliae (Aster novae-angliae)**

*New England aster*

USFWS



Height: 1-6'  
Flowers: Aug-Oct, violet capsule  
Fruit:

Light:   
Moisture: M  
Soil pH:  
Soil type: L

open woods, seasonal wetlands, shores, meadows

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



showy, frequently cultivated; tolerates drier soils and seasonal flooding

GC

**Symphotrichum novi-belgii var. novi-belgii (Aster novi-belgii)**

*New York aster*

RHW



Height: 1-4.5'  
Flowers: Jul-Oct, blue-violet  
Fruit:

Light:   
Moisture: M W  
Soil pH:  
Soil type: L

thickets, meadows, shores

Region: P C  
States: DC DE MD  
NY VA



**Symplocarpus foetidus**

*skunk cabbage*

RHW, USFWS BES



Height: 1-3'  
Flowers: Feb-May, green to purple-brown  
Fruit:

Light:   
Moisture: W  
Soil pH: 4-7  
Soil type: C L S

fresh tidal and nontidal marshes and shrub swamps, forested wetlands, seeps

Region: M P C  
States: DC DE MD  
NY VA  
WV



flower inconspicuous, emerges before leaves; sap has skunk-like odor

**Thalictrum dioicum**

*early meadow rue*

RHW



Height: 1-2.5'  
Flowers: Apr-May, green to purple  
Fruit: capsule

Light:   
Moisture: M  
Soil pH:  
Soil type: L

rich rocky woods, ravines, alluvial terraces

Region: M P C  
States: DC MD  
NY PA VA  
WV

**Thalictrum pubescens (T. polygamum)**

*tall meadow rue*

RHW



Height: 1.5-9'  
Flowers: Jun-Aug, white  
Fruit:

Light:   
Moisture: M W  
Soil pH:  
Soil type:

rich woods, low thickets, swamps, meadows, streambanks

Region: M P C  
States: DC DE MD  
NY PA VA  
WV

foliage similar to columbines; clump-forming; delicate flowers; species very variable

**Thalictrum thalictroides (Anemone thalictroides)**

*rue anemone, windflower*

RHW



Height: 0.5-1'  
Flowers: Apr-Jun, white  
Fruit:

Light:   
Moisture: D M  
Soil pH:  
Soil type: C L S

wooded banks and thickets

Region: M P C  
States: DC DE MD  
NY PA VA  
WV

foliage similar to columbines

# Herbaceous Plants

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Tiarella cordifolia

foamflower, false miterwort



USFWS/BES

Height: 0.5-1'  
Flowers: Apr-Jul, white  
Fruit: capsule

Light: ☀️ ☀️ 🌑  
Moisture: M  
Soil pH:  
Soil type: L

rich woods, moist rocky wooded slopes

Region: M P C  
States: DC MD  
NY PA VA  
WV

attractive, long-blooming; creeping, clump-forming; many cultivars

**GC**

### Tradescantia virginiana

Virginia spiderwort, widow's tears



RHW

Height: 1-3'  
Flowers: Apr-Jul, deep blue-purple  
Fruit: capsule

Light: ☀️ ☀️ 🌑  
Moisture: M  
Soil pH: 4-8  
Soil type: C L

wooded slopes, shale outcrops, fields, roadsides

Region: M P C  
States: DC DE MD  
VA  
WV

flowers showy

### Trillium erectum

purple or red trillium, wakerobin



RHW

Height: 1-1.5'  
Flowers: Apr-Jun, purple or greenish to white  
Fruit: dark red, berry

Light: 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods

Region: M P  
States: DC MD  
NY PA VA  
WV

flowers ill-scented

### Trillium grandiflorum

white or large-flowered trillium



RHW

Height: 0.5-1.5'  
Flowers: Apr-Jun, white then pink  
Fruit: black, berry

Light: 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods

Region: M P C  
States: DC MD  
NY PA VA  
WV

showy flowers; common, often in large colonies

### Trillium sessile

toadshade



RHW

Height: 0.5-1'  
Flowers: Apr-May, maroon, purple, green  
Fruit: berry

Light: ☀️ 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods, floodplains

Region: M P  
States: DC MD  
VA  
WV

### Trillium undulatum

painted trillium



RHW

Height: 1-1.5'  
Flowers: May-Jun, white with purple  
Fruit: bright red, berry

Light: ☀️ ☀️ 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods

Region: M P  
States: DC MD  
NY PA VA  
WV

### Uvularia grandiflora

large-flowered bellwort



RHW

Height: 2.5'  
Flowers: Apr-Jun, orange-yellow  
Fruit: capsule

Light: 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods

Region: M  
States: DC  
NY VA  
WV

rhizome can be cooked and eaten; young shoots can be substituted for asparagus

### Uvularia perfoliata

perfoliate bellwort, mealy bellwort



RHW

Height: 0.5-2'  
Flowers: Apr-Jul, yellow  
Fruit: capsule




































Light: ☀️ ☀️ 🌑  
Moisture: M  
Soil pH:  
Soil type: L

woods























Region: M P C  
States: DC DE MD  
NY PA VA  
WV

rhizome can be cooked and eaten; young shoots may be substituted for asparagus

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Uvularia sessilifolia</b></p> <p><i>straw lily</i></p> <p>RHW</p>		<p>Height: 0.5-1'</p> <p>Flowers: May-Jun, yellow</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	dry to moist woodlands	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>rhizomes may be cooked and eaten; young shoots may be substituted for asparagus</p> <p><b>GC</b></p>
<p><b>Veratrum viride</b></p> <p><i>green false hellebore, white hellebore</i></p> <p>RHW</p>		<p>Height: 2-5'</p> <p>Flowers: May-Jul, yellow-green</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	swamps, woods	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>leaf edges will brown if soil dries and plant is in windy area; does best in cooler temps; slugs like the foliage</p>
<p><b>Verbena hastata</b></p> <p><i>blue vervain, simpler's joy</i></p> <p>RHW</p>		<p>Height: 1.5-5'</p> <p>Flowers: Jun-Oct, blue to purple</p> <p>Fruit: nut/nut-like</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	meadows, swamps, floodplains, ditches, roadsides	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>bright flowers; herbal uses</p>
<p><b>Verbesina alternifolia</b></p> <p><i>wingstem, yellow ironweed</i></p> <p>RHW</p>		<p>Height: 3.5-8'</p> <p>Flowers: Aug-Oct, yellow</p> <p>Fruit: capsule</p>	<p>Light: </p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type:</p>	wooded slopes, open woodlands, riverbanks, shaded lowlands, roadsides, fields	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>threatened in NY</p>
<p><b>Vernonia noveboracensis</b></p> <p><i>New York ironweed</i></p> <p>RHW</p>		<p>Height: 3.5-8'</p> <p>Flowers: Aug-Oct, purple</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: L</p>	streambanks, fields, freshwater marshes	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>brilliant flowers; tall upright form adds structure to garden; spreads</p>
<p><b>Veronicastrum virginicum (Veronica virginica)</b></p> <p><i>Culver's root</i></p> <p>RHW</p>		<p>Height: 3-6.5'</p> <p>Flowers: Jun-Sep, white, pink</p> <p>Fruit: capsule</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	rich woods, meadows, thickets, swamps	<p>Region: M P</p> <p>States: DC DE MD NY VA WV</p>		
<p><b>Viola conspersa</b></p> <p><i>American dog violet</i></p> <p>UWI RWF</p>		<p>Height: 0.5-1'</p> <p>Flowers: Apr-Jul, pale blue, violet</p> <p>Fruit: green, capsule</p>	<p>Light:   </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type:</p>	woods, fields, swamps	<p>Region: M P C</p> <p>States: NY PA VA WV</p>		<p>delicate plant and flower; edible</p> <p><b>GC</b></p>
<p><b>Viola cucullata</b></p> <p><i>marsh blue violet, blue marsh violet</i></p> <p>RHW</p>		<p>Height: 0-0.5'</p> <p>Flowers: Apr-Jul, pale purple</p> <p>Fruit: green, capsule</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	bogs, meadows, swamps	<p>Region: M P C</p> <p>States: DC DE PA VA WV</p>		<p>stemless; self-sows; can become a nuisance</p> <p><b>GC</b></p>

# Herbaceous Plants

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Viola hastata</b> <i>halberdleaf yellow violet</i>		Height: 0.5-1' Flowers: Apr-May, yellow w/ violet Fruit: green, capsule	Light:  Moisture: D Soil pH: Soil type:	rich deciduous woods	Region: M States: DC MD VA WV		<b>GC</b>
<b>Viola pedata</b> <i>bird's foot violet</i>		Height: 0-0.5' Flowers: Mar-Jun, pale blue or w/ purple-black tips Fruit: green, capsule	Light:  Moisture: D M Soil pH: Soil type: L S	sandy or rocky barrens, dry forested slopes	Region: M P C States: DC DE MD VA WV		stemless <b>GC</b>
<b>Viola pubescens var. pubescens (V. pennsylvanica)</b> <i>yellow violet, downy violet</i>		Height: 0.5-1.5' Flowers: May-Jun, yellow, purple veins Fruit: green, capsule	Light:  Moisture: M Soil pH: 6-7 Soil type: L	moist or dry woods, swamps	Region: M P States: DC DE NY PA VA WV		
<b>Viola sororia (V. papilionacea)</b> <i>common blue violet</i>		Height: 0.5' Flowers: Mar-Jun, dark blue, violet Fruit: green with purple, capsule	Light:  Moisture: M Soil pH: 6-7.8 Soil type: C L	dry to moist woods, swamps, thickets	Region: M P C States: DC DE MD NY PA VA WV		delicate plant and flower; edible; spreader; stemless
<b>Viola striata</b> <i>striped cream violet, striped violet</i>		Height: 0.5-1' Flowers: Apr-Jun, ivory w/ purple Fruit: green, capsule	Light:  Moisture: M W Soil pH: Soil type: L	alluvial woods, swamps, fields	Region: M P C States: DC DE MD NY PA VA WV		
<b>Yucca filamentosa (Y. flaccida)</b> <i>Adam's needle</i>		Height: 2-2.5' Flowers: Jun-Sep, white Fruit:	Light:  Moisture: D Soil pH: 5.5-7.5 Soil type: L S	coastal sand dunes, outcroppings on thin rocky soils	Region: C States: DC DE MD VA		flower stalk can rise 5-15 feet above foliage 
<b>Zizia aurea</b> <i>golden-alexanders</i>		Height: 1-2.5' Flowers: Apr-Jun, yellow Fruit:	Light:  Moisture: D M Soil pH: Soil type: C L S	wooded bottomlands, streambanks, moist meadows, floodplains	Region: M P C States: DC DE NY PA VA WV		






















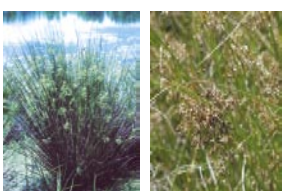


See also:

In the *Vines* section:  
**Smilax herbacea**









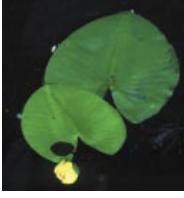



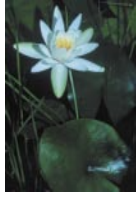












In the *Herbaceous Emergents* section:  
**Iris prismatica, versicolor, virginica**






































# Herbaceous Emergents

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Distichlis spicata</b> <i>saltgrass</i>		Height: 0.5-1.5' Flowers: Aug-Oct Fruit: pod	Light:  Moisture: M W Soil pH: 6.4-10.5 Soil type: C L Flood Depth: Salinity: 0-50 ppt	tidal salt marshes, from Mean High tide above to spring tide level; high salinity; wet depressions	Region: C States: DC DE MD VA		often intermixed with <i>Spartina patens</i> , forms dense mats
<b>Dulichium arundinaceum</b> <i>three-sided sedge</i>		Height: 1-3.5' Flowers: Jul-Oct Fruit: brown, nut/nut-like	Light:  Moisture: W Soil pH: 4.7-7.5 Soil type: C L S Flood Depth: 0-12"	fresh tidal and nontidal marshes, bogs, swamps, pond edges	Region: M P C States: DC DE NY PA VA WV		grows best where water rarely draws down
<b>Hibiscus moscheutos (H. palustris)</b> <i>rose mallow, eastern rosemallow</i>		Height: 3-6' Flowers: Jul-Sep, cream, pink Fruit: Sep-Mar, brown, capsule	Light:  Moisture: M W Soil pH: 4-7.5 Soil type: C L Flood Depth: 0-6" Salinity: 0-15 ppt	fresh to brackish tidal marshes, occasionally nontidal marshes	Region: C States: DC DE MD VA WV		common along coast; persists in winter; split seed capsules; use <i>H. laevis</i> in Piedmont
<b>Iris prismatica</b> <i>slender blueflag</i>		Height: 1-3' Flowers: May-Jun, blue Fruit: green to brown, capsule	Light:  Moisture: M W Soil pH: Soil type: Flood Depth: 0-6" Salinity: 0-0.5 ppt	fresh to moderately brackish tidal marshes, meadows, shores, swamps, forested wetlands	Region: C States: DC DE VA		leaves 1/4-inch wide, narrower than <i>Iris versicolor</i>
<b>Iris versicolor</b> <i>blue flag</i>		Height: 3' Flowers: May-Jun, blue Fruit: green to brown, capsule	Light:  Moisture: M W Soil pH: Soil type: L S Flood Depth: 0-6" Salinity 0-0.5 ppt	fresh to moderately brackish tidal marshes, meadows, shores, swamps, forested wetlands	Region: M P C States: DC DE MD NY PA VA		
<b>Iris virginica</b> <i>Virginia blue flag</i>		Height: 1-2' Flowers: May-Jul, blue Fruit: green to brown, capsule	Light:  Moisture: W Soil pH: 4.8-7.3 Soil type: C L Flood Depth: 0-6" Salinity: 0-0.5 ppt	fresh to moderately brackish tidal marshes, meadows, shores, swamps, forested wetlands	Region: P C States: DC VA WV		
<b>Juncus canadensis</b> <i>Canada rush</i>		Height: 1-4' Flowers: Jul-Oct, greenish brown Fruit: brown, capsule	Light:  Moisture: M W Soil pH: 4.5-5.9 Soil type: C L S Flood Depth: Salinity: 0-0.5 ppt	fresh to slightly brackish tidal and nontidal marshes, swamps, ponds and pond borders, shores, wet meadows, shallow water	Region: P C States: DC DE MD NY PA WV		
<b>Juncus effusus</b> <i>soft rush</i>		Height: 1-4' Flowers: Jun-Sep, greenish brown Fruit: brown, capsule	Light:  Moisture: M W Soil pH: 5.5-7 Soil type: C L S Flood Depth: 0-12"	fresh tidal and nontidal marshes, shrub swamps, meadows, ditches	Region: M P C States: DC DE MD NY PA VA WV		often grows in clumps

# Herbaceous Emergents













		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Juncus roemerianus</b>  <i>black needlerush, needlegrass rush, needlegrass rush</i>	 PLANTS LA	Height: 1-4' Flowers: May-Oct, yellow-green Fruit: July-Nov, brown, capsule	Light:  Moisture: M W Soil pH: 3.5-7 Soil type: C L Flood Depth: Salinity: 0-25 ppt	brackish and salt marshes, above Mean High tide to spring tide level	Region: C States: DE MD VA		some nitrogen fixing value
<b>Justicia americana</b>  <i>American water-willow</i>	 RHW	Height: 1-3' Flowers: Jun-Oct, white with purple Fruit: achene (dry, flat seed)	Light:  Moisture: W Soil pH: 5.4-7.6 Soil type: C L S Flood Depth:	muddy edges of shallow freshwater streams, lakes, ponds; shores	Region: M P States: DC MD PA VA WV		has underground stems and forms colonies
<b>Kosteletzkya virginica</b>  <i>seashore mallow</i>	 RHW	Height: 1.5-4.5' Flowers: Jul-Sep, pink Fruit: brown, capsule	Light:  Moisture: W Soil pH: Soil type: Flood Depth: Salinity: 0-10 ppt	irregularly flooded salt and brackish marshes, above Mean High tide to spring tide level	Region: C States: DC DE MD VA		common near the coast; looks similar to Hibiscus
<b>Nuphar lutea (N. advena)</b>  <i>spatterdock, yellow water lily, cow-lily, American lotus</i>	 RHW	Height: 1-1.5' Flowers: May-Oct, yellow Fruit: green, berry	Light:   Moisture: W Soil pH: Soil type: C L S Flood Depth: 12-36"	fresh tidal and nontidal marshes, swamps, ponds	Region: M P C States: DC DE MD NY VA WV		large leaves floating but rooted; fruit berry-like, many seeded, somewhat flattened, leathery
<b>Nymphaea odorata</b>  <i>fragrant water lily, American water lily, white water lily</i>	 RHW	Height: 1-4' Flowers: Jun-Sep, white Fruit: green, berry	Light:  Moisture: W Soil pH: Soil type: C L S Flood Depth: 12-48"	tidal and nontidal fresh waters, shallow lakes, ponds	Region: P C States: DC DE MD NY VA		large leaves floating but rooted; fruit berry-like, many seeded, somewhat flattened, leathery
<b>Orontium aquaticum</b>  <i>golden club</i>	 RHW	Height: 1.5-2' Flowers: Apr-Jun, yellow Fruit: green, berry	Light:  Moisture: W Soil pH: Soil type: C L S Flood Depth:	edges of regularly flooded tidal fresh marshes, inland shores, pond borders, on mud or in shallow water	Region: C States: DC DE MD VA WV		fruit is a thick fleshy spike covered with small dark green berry-like structures
<b>Peltandra virginica</b>  <i>arrow arum</i>	 RHW, RHW	Height: 2' Flowers: Apr-Jul, green to white Fruit: green or black	Light:   Moisture: W Soil pH: 5.2-9.5 Soil type: C L S Flood Depth: 0-12" Salinity: 0-2 ppt	fresh to moderately brackish tidal and nontidal marshes, swamps, shallow waters of lakes and ponds	Region: C States: DC DE MD NY VA WV		globular head of berries enclosed in green leathery case, curved downward
<b>Pontederia cordata</b>  <i>pickerelweed</i>	 UWI MC	Height: 3.5' Flowers: Jun-Nov, purple Fruit:	Light:   Moisture: W Soil pH: 6-8 Soil type: C L S Flood Depth: 0-18" Salinity: 0-3 ppt	fresh to moderately brackish, tidal and nontidal marshes, shallow water of ponds or lakes	Region: P C States: DC DE MD NY VA		spreads vigorously; a small bladder-like structure crested with toothed ridges holds one seed

# Herbaceous Emergents

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Sagittaria latifolia</b></p> <p><i>duck potato, arrowhead, broadleaf arrowhead</i></p>  <p>RHW</p>	<p>Height: 0.5-4'</p> <p>Flowers: Jul-Sep, white</p> <p>Fruit: green, achene (dry, flat seed)</p>	<p>Light:  </p> <p>Moisture:  W</p> <p>Soil pH: 4.7-8.6</p> <p>Soil type: C L</p> <p>Flood Depth: 0-24"</p> <p>Salinity:</p>	<p>fresh tidal and nontidal marshes, swamps; borders of lakes, streams and ponds</p>	<p>Region: P C</p> <p>States: DC DE MD NY PA VA WV</p>			
<p><b>Saururus cernuus</b></p> <p><i>lizard's tail</i></p>  <p>RHW</p>	<p>Height: 1.5-4.5'</p> <p>Flowers: Jun-Sep, greenish white</p> <p>Fruit: capsule</p>	<p>Light:  </p> <p>Moisture:  W</p> <p>Soil pH:</p> <p>Soil type: C L S</p> <p>Flood Depth: 0-12"</p>	<p>fresh tidal and nontidal marshes, swamps, shallow water</p>	<p>Region: C</p> <p>States: DC DE MD VA WV</p>		<p>fragrant flower; often forms extensive colonies</p>	
<p><b>Schoenoplectus pungens var. pungens (Scirpus pungens, Scirpus americanus)</b></p> <p><i>common three-square</i></p>  <p>CM NRCS</p>	<p>Height: 4'</p> <p>Flowers: Jun-Sep, brown</p> <p>Fruit: Jun-Sep, brown, achene (dry, flat seed)</p>	<p>Light: </p> <p>Moisture:  W</p> <p>Soil pH:</p> <p>Soil type: C L S</p> <p>Flood Depth: 0-6"</p> <p>Salinity: 0-15 ppt</p>	<p>fresh and brackish tidal and nontidal marshes, shores, shallow water</p>	<p>Region: M P C</p> <p>States: DC DE MD VA</p>	 <p>high wildlife value</p>	<p>spike above flower is up to 5 inches tall</p>	
<p><b>Schoenoplectus validus (Scirpus validus)</b></p> <p><i>great bulrush, soft stem bulrush</i></p>  <p>PLANTS 1995</p>	<p>Height: 6-10'</p> <p>Flowers: Jun-Sep, brown</p> <p>Fruit: Jun-Sep, brown, achene (dry, flat seed)</p>	<p>Light: </p> <p>Moisture:  W</p> <p>Soil pH:</p> <p>Soil type: C L S</p> <p>Flood Depth: 0-12"</p> <p>Salinity: 0-5 ppt</p>	<p>fresh to brackish tidal and nontidal marshes, pond edges, quiet waters, emergent marshes</p>	<p>Region: M P C</p> <p>States: NY PA VA MD</p>	 <p>high wildlife value</p>	<p>spreads rapidly</p>	
<p><b>Scirpus atrovirens</b></p> <p><i>black or green bulrush, dark green bulrush</i></p>  <p>PLANTS JA</p>	<p>Height: 3-6'</p> <p>Flowers: Jun-Aug, brown</p> <p>Fruit: Jun-Aug, brown, achene (dry, flat seed)</p>	<p>Light: </p> <p>Moisture:  W</p> <p>Soil pH: 4-8</p> <p>Soil type: C L</p> <p>Flood Depth:</p> <p>Salinity:</p>	<p>shallow emergent marshes, shrub swamps, floodplain forests, wooded swamp, bogs, wet meadows, swales, ditches</p>	<p>Region: M P C</p> <p>States: NY PA VA WV MD</p>	 <p>high wildlife value</p>	<p>grows in clumps or sod-forming</p>	
<p><b>Scirpus cyperinus</b></p> <p><i>woolgrass, woolgrass bulrush</i></p>  <p>USDA JK</p>	<p>Height: 4-5'</p> <p>Flowers: Aug-Sep, brown</p> <p>Fruit: Aug-Sep, brown, achene (dry, flat seed)</p>	<p>Light: </p> <p>Moisture:  M W</p> <p>Soil pH: 4.8-7.2</p> <p>Soil type: C L S</p> <p>Flood Depth:</p> <p>Salinity:</p>	<p>fresh tidal and nontidal marshes, swamps, forested wetlands, meadows, ditches, ponds, bogs</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>grows in large clumps, often extensive colonies</p>	
<p><b>Sparganium americanum</b></p> <p><i>American bur-reed</i></p>  <p>RHW</p>	<p>Height: 5'</p> <p>Flowers: May-Aug, greenish</p> <p>Fruit: green to brown, achene (dry, flat seed)</p>	<p>Light:  </p> <p>Moisture:  W</p> <p>Soil pH: 4.9-7.3</p> <p>Soil type: C L S</p> <p>Flood Depth: 0-6"</p>	<p>fresh nontidal marshes, shallow waters, muddy shores</p>	<p>Region: M P C</p> <p>States: DC DE NY PA VA WV</p>		<p>good for sediment stabilization</p>	
<p><b>Spartina alterniflora</b></p> <p><i>salt marsh or smooth cordgrass</i></p>  <p>USFWS</p>	<p>Height: 2-7'</p> <p>Flowers: Jul-Sep</p> <p>Fruit:</p>	<p>Light: </p> <p>Moisture:  M W</p> <p>Soil pH: 5.4-7</p> <p>Soil type: C L S</p> <p>Flood Depth:</p> <p>Salinity: 0-35 ppt</p>	<p>salt and brackish tidal marshes (mid-tide up to Mean High tide level)</p>	<p>Region: C</p> <p>States: DC DE MD VA</p>		<p>good for shore stabilization; important in seaside habitats; short form (&lt;1.5 ft) found in irregularly flooded high marsh, tall form in regularly flooded low marsh</p>	



# Herbaceous Emergents

	Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Spartina cynosuroides</b>  <i>big cordgrass</i>  PLANTS LA 	Height: 3.5-10' Flowers: Aug-Oct Fruit:	Light:  Moisture: M W Soil pH: 5.8-7.5 Soil type: C L S Flood Depth: Salinity: 0-10 ppt	fresh and brackish tidal marshes, near Mean High tide and above to spring tide level	Region: C States: DC DE MD NY PA VA		soil stabilizer; not drought tolerant
<b>Spartina patens</b>  <i>salt meadow hay</i>  CM NRCS 	Height: 1-3' Flowers: Jul-Sep Fruit: achene (dry, flat seed)	Light:  Moisture: M W Soil pH: 5.3-7.5 Soil type: C L S Flood Depth: Salinity: 0-35 ppt	coastal salt and brackish tidal marshes, near Mean High tide line	Region: C States: DC DE MD VA		forms large mats; good for shore erosion control
<b>Spartina pectinata</b>  <i>freshwater cordgrass, prairie cordgrass</i>  CM NRCS 	Height: 4' Flowers: Jul-Sep Fruit: achene (dry, flat seed)	Light:  Moisture: M W Soil pH: 6-8.5 Soil type: L Flood Depth: 0-6" Salinity: 0-3 ppt	brackish and fresh tidal and nontidal marshes, shores, wet meadows; upper half of intertidal zone and above to spring tide level	Region: M P C States: DC DE MD NY PA VA WV		shore stabilizer; low drought tolerance
<b>Zizania aquatica</b>  <i>wild rice</i>  RHW 	Height: 6-10' Flowers: Jun-Sep Fruit: achene (dry, flat seed)	Light:  Moisture: M W Soil pH: 6.4-7.4 Soil type: C L S Flood Depth: 0-36" Salinity:	fresh tidal and nontidal marshes, streamsides, shallow waters	Region: C States: DC DE MD NY VA		annual; edible

See also:

In the *Ferns* section:

- Dryopteris cristata*
- Onoclea sensibilis*
- Osmunda cinnamomea, regalis*
- Thelypteris palustris*
- Woodwardia areolata, virginica*

In the *Grasses & Grasslike Plants* section:

- Andropogon glomeratus (virginicus var abbreviatus), virginicus*
- Calamagrostis canadensis*
- Carex crinita var. crinita, lurida, stricta, vulpinoidea*
- Elymus virginicus*
- Leersia oryzoides*
- Panicum amarum, virgatum*

In the *Herbaceous Plants* section:

- Asclepias incarnata*
- Bidens cernua*
- Caltha palustris*
- Doellingeria umbellata var. umbellata (Aster umbellatus)*
- Lobelia cardinalis*
- Sabatia angularis*
- Symphotrichum novae-angliae (Aster novae-angliae)*
- Symplocarpus foetidus*
- Verbena hastata*
- Vernonia noveboracensis*

Wetland plants (*Spartina alterniflora*, here) stabilize the shoreline without obstructing the homeowner's view.



USFWS

Wetlands of any size provide valuable habitat for wildlife.



USFWS BES



USFWS BM



Characteristics

Conditions

Habitat

Native to

Wildlife

**Alnus serrulata**

smooth alder, hazel alder



USFWS BES PLANTS WSJ

Height: 12-20'  
Flowers: Mar-Apr, purple  
Fruit: Aug-Feb, brown, cone/cone-like  
Fall color: yellow, red

Light:   
Moisture: M W  
Soil pH: 5.5-7.5  
Soil type: C L

fresh tidal and nontidal marshes, shrub swamps, forested wetlands

Region: M P C  
States: DC DE MD NY PA VA WV



high wildlife value

forms thickets along watercourses; nitrogen fixing; tolerates flooding to 3 inches

**Aralia spinosa**

Devil's walking stick



RHW

Height: 20-30'  
Flowers: Jul-Aug, white  
Fruit: Aug-Sep, black, berry  
Fall color: yellow

Light:   
Moisture: D M  
Soil pH: 5.5-7.1  
Soil type: C L S

moist woods, stream banks, roadsides

Region: M P C  
States: DC DE MD VA WV



high wildlife value

seeds are poisonous if chewed; low maintenance; spreads from new shoots; thorny, clublike stem

**Baccharis halimifolia**

high-tide bush, groundsel tree, sea myrtle



USFWS BES

Height: 6-12'  
Flowers: Aug-Sep, white  
Fruit: Oct-Nov, silvery white, achene  
Fall color: purple

Light:   
Moisture: D M W  
Soil pH: 7-8.5  
Soil type: C L S O

fresh to salt marshes, ditches, shores, dunes

Region: C  
States: DE MD VA



volunteers in disturbed places; shallow, lateral roots; tolerates flooding to 6 inches; tolerates salinity to 15 ppt

**Callicarpa americana**

American beautyberry, French mulberry



USFWS BES

Height: 6'  
Flowers: Jun-Aug, lavender-pink  
Fruit: Sep-Mar, lavender, berry  
Fall color:

Light:   
Moisture: D M  
Soil pH: 4.8-7  
Soil type: C L S

Region: C  
States: DC VA



flowers from new growth; if overgrown prune to 6-18 inches tall; will regain height in one season

**Ceanothus americanus**

New Jersey tea



RHW

Height: 3'  
Flowers: May-Sep, white  
Fruit: Sep-Oct, black  
Fall color: yellow to tan

Light:   
Moisture: D  
Soil pH: 4.3-6.5  
Soil type: C L S

meadows, fields, glades, open woods, borders, rocky areas, openings

Region: M P C  
States: DC DE MD NY PA VA WV



tough; tolerates moist soil if well drained; fixes nitrogen; tolerates dryness

**Cephalanthus occidentalis**

buttonbush



RHW

Height: 6-12'  
Flowers: Jul-Aug, creamy white  
Fruit: Sep-Jan, green to brown  
Fall color: yellow-green

Light:   
Moisture: M W  
Soil pH: 6.1-8.5  
Soil type: C L S O

fresh tidal and nontidal marshes, shrub swamps, forested wetlands; stream, lake and pond edges

Region: M P C  
States: DC DE MD NY PA VA WV



needs sun to flower; flowers fragrant; interesting fruit; tolerates drought; leaves may persist into winter; tolerates flooding to 36 inches

**Clethra alnifolia**

sweet pepperbush, summersweet



USFWS

Height: 6-12'  
Flowers: Jul-Aug, white/pink  
Fruit: Sep-Feb, brown, capsule  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 4.5-6.5  
Soil type: C L S

tidal and nontidal forested wetlands, shrub swamps, bogs, woods, coastal river floodplains, lakeshores

Region: C  
States: DC DE MD NY VA



very fragrant; tolerates some flooding by partly salty water

**Comptonia peregrina**

sweetfern



USFWS BES

Height: 3'  
Flowers: Apr-May, yellow-green  
Fruit: Aug-Oct, green to brown, cone/cone-like  
Fall color: brown

Light:   
Moisture: D  
Soil pH: 4-7  
Soil type: L S O

hillsides, cliffs, woods openings, sand flats and barrens, fields, dunes

Region: M P C  
States: DC DE MD NY PA VA WV



fragrant; fixes nitrogen, leaves may persist into winter

# Shrubs

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Cornus amomum

*silky dogwood, red willow, silky cornel*

RHW



Height: 6-12'  
Flowers: May-Jun, white  
Fruit: Aug, blue, berry  
Fall color: orange, red or purple

Light:   
Moisture: M W  
Soil pH: 6.1-7.5  
Soil type: C L S

forested wetlands, floodplains, shrub wetlands, stream and pond banks, clearings

Region: M P C  
States: DC DE MD NY PA VA WV



### Cornus racemosa

*red-panicked or gray dogwood*

UWI KJS, UWI KJS



Height: 6-12'  
Flowers: May-Jun, white  
Fruit: Aug-Sep, white, red stems, berry  
Fall color: purple

Light:   
Moisture: D M  
Soil pH: 6.1-8.5  
Soil type: C L

open wooded floodplains, forested wetlands, shrub swamps, rocky woods or ledges, fencerows

Region: M P  
States: NY VA WV



tolerates a variety of conditions; berries are food for many songbirds and small mammals

### Corylus americana

*American hazelnut or filbert*

UCONN, UCONN, UCONN



Height: 10-15'  
Flowers: Mar-Apr, brown or red  
Fruit: Aug-Sep, light brown, nut/nut-like  
Fall color: yellow orange

Light:   
Moisture: D M  
Soil pH: 6.1-7.5  
Soil type: C L

dry woodlands, forest edges, hillsides, fence rows, ravines, floodplain woods, brushy pastures

Region: M P  
States: DC DE MD NY PA VA WV



forms large thickets; edible nut; male catkins brown, female red

### Gaultheria procumbens

*wintergreen, checkerberry*

RHW, RHW



Height: 0.5'  
Flowers: May-Aug, white to pink  
Fruit: Jul-Apr, red, berry  
Fall color: evergreen

Light:   
Moisture: D M  
Soil pH: 4-6.5  
Soil type: L S O

clearings, steep rocky open slopes, sandy oak woods, hummocks in bogs

Region: M P C  
States: DC DE MD NY PA VA WV



dense, mat-like form; forms colonies; edible fruits, leaves; wintergreen taste and scent

GC



### Gaylussacia baccata

*black huckleberry*

RHW



Height: 1.5-3'  
Flowers: May-Jun, white to pink  
Fruit: Jul-Sep, black, berry  
Fall color: reddish-purple

Light:   
Moisture: D M W  
Soil pH: 4.5-6.5  
Soil type: C L S

woods, thickets

Region: M P C  
States: DC DE MD NY PA VA WV



very common; fruits edible but many-seeded

### Gaylussacia frondosa

*dangleberry*

CM NRCS



Height: 2-4'  
Flowers: Apr-Jun, greenish to purple  
Fruit: Jul-Oct, blue, berry  
Fall color: reddish-purple

Light:   
Moisture: D M W  
Soil pH: 4.5-6.5  
Soil type: S

woods and thickets

Region: M C  
States: DC DE MD NY VA

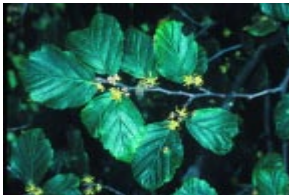


berries borne on long, drooping stems

### Hamamelis virginiana

*witch hazel*

RHW



Height: 15-30'  
Flowers: Sep-Dec, yellow  
Fruit: Oct-Nov, tan brown, capsule  
Fall color: yellow

Light:   
Moisture: D M  
Soil pH: 5.5-6.5  
Soil type: C L S

woods or brushy fields, moist or dry

Region: M P C  
States: DC DE MD NY PA VA WV



noted for fall/winter bloom; medicinal uses, leaves may persist into winter

### Hydrangea arborescens

*wild or smooth hydrangea*

RHW



Height: 3-6'  
Flowers: Jun-Aug, white  
Fruit: Oct-Jan, brown, capsule  
Fall color: yellow

Light:   
Moisture: M  
Soil pH: 6.1-8.5  
Soil type: L S

rich upland or floodplain woods, streambanks

Region: M P  
States: DC MD PA VA WV

leaves poisonous to humans; does best on loamy soils

















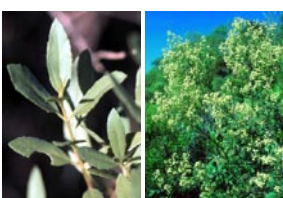










Characteristics

Conditions

Habitat

Native to

Wildlife

<p><b>Hypericum densiflorum</b> <i>dense St. John's wort</i></p>	 <p>RHW</p>	<p>Height: 1.5-6' Flowers: Jul-Sep, yellow Fruit: Oct-Apr, brown, capsule Fall color: yellow green</p>	<p>Light:  Moisture: D M W Soil pH: 5.5-7 Soil type: C L S O</p>	<p>low boggy places, seepage slopes, pond and lake edges, wet meadows, streambanks, ditches, moist pinelands</p>	<p>Region: M P C States: DC DE MD VA</p>		<p>blooms small but form dense flat-topped clusters; can spread aggressively</p>
<p><b>Ilex glabra</b> <i>inkberry</i></p>	 <p>USFWS BES</p>	<p>Height: 6-10' Flowers: May-Jun, greenish white Fruit: Sep-Mar, black, berry Fall color: evergreen</p>	<p>Light:  Moisture: D M Soil pH: 4.5-6 Soil type: C L S O</p>	<p>forested wetlands, shrub swamps, sandy woods</p>	<p>Region: C States: DE NY VA</p>	 high wildlife value	<p>berries persist through winter; male and female flowers on separate plants; tolerates some salt flooding; short cultivars (4-5') available</p> 
<p><b>Ilex laevigata</b> <i>smooth winterberry</i></p>	 <p>RHW RHW</p>	<p>Height: 10-12' Flowers: May-Jul, white to cream Fruit: Sep-Feb, red, scarlet, berry Fall color: yellow</p>	<p>Light:  Moisture: M Soil pH: 4.5-6.5 Soil type: C L S O</p>	<p>wooded swamps</p>	<p>Region: C States: DC DE MD VA</p>	 high wildlife value	<p>berries provide winter bird food; prefers soil with a calcareous layer</p>
<p><b>Ilex verticillata</b> <i>winterberry, winterberry holly, black alder</i></p>	 <p>USFWS BES</p>	<p>Height: 6-12' Flowers: Jun-Jul, greenish white Fruit: Aug-Feb, red Fall color: yellow to brown</p>	<p>Light:  Moisture: M W Soil pH: 4.5-6.5 Soil type: C L S O</p>	<p>fresh tidal swamps, shrub swamps, forested wetlands</p>	<p>Region: M P C States: DC DE MD NY PA VA WV</p>	 high wildlife value	<p>berries provide winter bird food, poisonous to humans; berries on female plants, need male plant to pollinate</p>
<p><b>Itea virginica</b> <i>tassel-white, Virginia sweetspire</i></p>	 <p>USFWS BES</p>	<p>Height: 6-10' Flowers: Jun-Jul, white Fruit: Aug-Mar, brown, capsule Fall color: red to purple</p>	<p>Light:  Moisture: M W Soil pH: 5.1-7.5 Soil type: C L S</p>	<p>forested wetlands, shrub swamps, streambanks, shallow water</p>	<p>Region: C States: DC DE MD VA</p>		<p>fruit capsules on stalk; plant will sucker, form thickets; tolerates flooding to 6 inches</p>
<p><b>Iva frutescens</b> <i>marsh elder, high tide bush</i></p>	 <p>PLANTS LA. RHW</p>	<p>Height: 2-10' Flowers: Aug-Oct, greenish white Fruit: not conspicuous, capsule Fall color:</p>	<p>Light:  Moisture: D M Soil pH: 5-5.7 Soil type: C L S</p>	<p>tidal brackish and salt marshes</p>	<p>Region: C States: DE MD VA</p>		<p>similar to Baccharis halimifolia but with opposite leaves; tolerates salinity to 15 ppt</p>
<p><b>Kalmia angustifolia</b> <i>sheep laurel, lambkill</i></p>	 <p>CM NRCS</p>	<p>Height: 2-3' Flowers: May-Jul, white, pink, purple, red Fruit: Sep-Mar, brown, capsule Fall color: evergreen</p>	<p>Light:  Moisture: M W Soil pH: 4.5-6 Soil type: C L S O</p>	<p>pastures, barrens, slow wooded streams, swamp borders, bogs, thickets</p>	<p>Region: C States: DC DE MD NY PA VA</p>		<p>foliage poisonous to hoofed browsers (not eaten by deer)</p> 
<p><b>Kalmia latifolia</b> <i>mountain laurel</i></p>	 <p>USFWS BES</p>	<p>Height: 12-20' Flowers: May-Jul, white to pink/purple Fruit: May-Jun, brown, capsule Fall color: evergreen</p>	<p>Light:  Moisture: D M W Soil pH: 4.5-6 Soil type: C L S O</p>	<p>woods, ridge tops, fields, swamps, mountain meadows and slopes</p>	<p>Region: M P C States: DC DE MD NY PA VA WV</p>		<p>foliage poisonous to hoofed browsers; PA state flower</p> 



# Shrubs

## Characteristics




















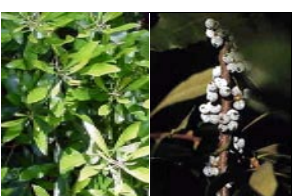




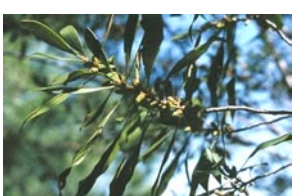







## Conditions

## Habitat

## Native to

## Wildlife

## Notes

<p><b>Leucothoe racemosa</b></p> <p><i>fetterbush, sweetbells</i></p> <p>RHW, PLANTS WSI</p>		<p>Height: 13'</p> <p>Flowers: May-Jun, white, pinkish</p> <p>Fruit: brown, capsule</p> <p>Fall color:</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 4.5-6</p> <p>Soil type: C L</p>	<p>swamps, woods, thickets</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA</p>		<p>zig-zag twigs, reddish or greenish; tends to sucker, forming thickets</p>
<p><b>Lindera benzoin</b></p> <p><i>spicebush</i></p> <p>CM NRCS, RHW, CM NRCS</p>		<p>Height: 6.5-16'</p> <p>Flowers: Mar-May, yellow</p> <p>Fruit: Sep-Oct, scarlet, berry</p> <p>Fall color: yellow</p>	<p>Light:  </p> <p>Moisture: M W</p> <p>Soil pH: 4.5-6.5</p> <p>Soil type: L S</p>	<p>woods, wooded slopes, dunes, floodplain forests</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 high wildlife value	<p>all parts edible and aromatic; herbal uses</p>
<p><b>Lyonia ligustrina</b></p> <p><i>male-berry</i></p> <p>RHW</p>		<p>Height: 6-12'</p> <p>Flowers: May-Jul, white</p> <p>Fruit: Sep-Mar, brown, capsule</p> <p>Fall color: orange to red</p>	<p>Light:  </p> <p>Moisture: M</p> <p>Soil pH: 4-6</p> <p>Soil type: C L S O</p>	<p>open areas, swamps, woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>		<p>berry-like capsules persist through winter</p>
<p><b>Lyonia mariana</b></p> <p><i>stagger-bush</i></p> <p>RHW, CM NRCS</p>		<p>Height: 0.5-6.5'</p> <p>Flowers: May-Jun, white, pale pink</p> <p>Fruit: Sep-Feb, brown, capsule</p> <p>Fall color: red</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4-6</p> <p>Soil type: S</p>	<p>swamps, moist or dry woods</p>	<p>Region: C</p> <p>States: DC DE MD VA</p>		<p>interesting woody capsules persist through winter</p>
<p><b>Morella carolinensis (Myrica heterophylla)</b></p> <p><i>southern or swamp bayberry</i></p> <p>PLANTS</p>		<p>Height: 8-12'</p> <p>Flowers: Apr-Jun, yellowish-green</p> <p>Fruit: Sep-Apr, bluish white, berry</p> <p>Fall color: evergreen</p>	<p>Light:   </p> <p>Moisture: D M W</p> <p>Soil pH: 4.5-7</p> <p>Soil type: C L S</p>	<p>dry or moist thickets, woods, bogs</p>	<p>Region: C</p> <p>States: DE VA</p>		<p>glossy dark green leaves, leaves larger than M. cerifera, plants fuller</p>
<p><b>Morella cerifera (Myrica cerifera)</b></p> <p><i>wax myrtle, southern bayberry</i></p> <p>USFWS BES, PLANTS</p>		<p>Height: 6-15'</p> <p>Flowers: Mar-Jun, yellowish-green</p> <p>Fruit: Sep-Apr, bluish white, berry</p> <p>Fall color: evergreen in southern areas</p>	<p>Light:   </p> <p>Moisture: D M W</p> <p>Soil pH: 5.5-7</p> <p>Soil type: C L S</p>	<p>tidal and nontidal fresh and brackish marshes, swamps, sandy dune swales, upland woods</p>	<p>Region: C</p> <p>States: DE MD VA</p>		<p>fragrant; loses leaves north and west of Ches. Bay, MD north; may reach 30 feet; can be pruned as hedge; nitrogen fixer; tolerates salinity to 10 ppt</p>
<p><b>Morella pensylvanica (Myrica pensylvanica)</b></p> <p><i>northern bayberry, candleberry</i></p> <p>CM NRCS</p>		<p>Height: 5-10'</p> <p>Flowers: Mar-Apr, yellowish-green</p> <p>Fruit: Sep-Apr, bluish white, berry</p> <p>Fall color:</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 5.1-6.5</p> <p>Soil type: C L S</p>	<p>tidal and nontidal fresh and brackish marshes, swamps, sand flats, dunes</p>	<p>Region: C</p> <p>States: DC DE MD NY VA</p>	 high wildlife value	<p>fragrant leaves; tends to sucker and form large colonies; waxy berries persist through winter; tolerates salinity to 20 ppt</p>
<p><b>Photinia melanocarpa (Aronia melanocarpa)</b></p> <p><i>black chokeberry</i></p> <p>USFWS BES</p>		<p>Height: 3-6'</p> <p>Flowers: Apr-May, white or pink-tinged</p> <p>Fruit: Sep-Nov, black, berry</p> <p>Fall color: crimson red</p>	<p>Light:  </p> <p>Moisture: D M W</p> <p>Soil pH: 5.1-6.5</p> <p>Soil type: C L S O</p>	<p>bogs, swamps, springs, dunes, cliffs, fields, clearings, wet or dry thickets, creek banks, bays, rock outcroppings</p>	<p>Region: M P C</p> <p>States: DE MD NY PA VA WV</p>		<p>can be pruned as hedge</p>



Characteristics

Conditions

Habitat

Native to

Wildlife

**Photinia pyrifolia**  
(*Aronia arbutifolia*)

red chokeberry

USFWS BES, VT



Height: 1.5-13'  
Flowers: Mar-May, white, purple-tinged  
Fruit: Sep-Dec, red, berry  
Fall color: orange to red

Light:   
Moisture: D M W  
Soil pH: 5.1-6.5  
Soil type: C L S

forested wetlands, shrub bogs, upland forests, fields, dunes

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



tolerates infrequent flooding by water with some salt; can be pruned as hedge

**Physocarpus opulifolius**

ninebark

USFWS BES



Height: 5-12'  
Flowers: May-Jul, white, pink  
Fruit: Jul-Mar, orange to red, capsule  
Fall color: yellow to purple

Light:   
Moisture: M W  
Soil pH: 6.1-8.5  
Soil type: C L

thickets, along streams in sand or gravel bars, rocky slopes

Region: M P  
States: DC  
NY PA VA  
WV



papery bark continually molts in thin strips; very drought tolerant; adaptable

**Prunus maritima**

beach plum

GM NRCS



Height: 1-8'  
Flowers: Apr-May, white  
Fruit: Aug, blue-purple, fleshy  
Fall color:

Light:   
Moisture: D M  
Soil pH: 5.8-7.7  
Soil type: L S

ocean dunes, roadsides, hedgerows

Region: C  
States: DE MD



edible fruit, prized for jams and jellies; salt tolerant

**Rhododendron atlanticum**

dwarf or coast azalea

GMARS, USFWS BES



Height: 1-2.5'  
Flowers: Apr-May, white, purple-tinged  
Fruit: brown, capsule  
Fall color:

Light:   
Moisture: M  
Soil pH: 4.2-5.7  
Soil type: S

coastal, sandy soils

Region: C  
States: DE MD  
VA



flowers very fragrant; colonial, arising from spreading underground stems;

**Rhododendron calendulaceum**

flame azalea

RHW



Height: 5-9'  
Flowers: May-Jun, yellow, orange, red  
Fruit: Aug-Feb, brown, capsule  
Fall color: yellow green

Light:   
Moisture: D M  
Soil pH: 5.1-6  
Soil type: C L

open oak woods, dry rocky woodlands, damp slopes, mountain streambanks, heath balds

Region: M  
States: VA  
WV



**Rhododendron canescens**

sweet azalea

PLANTS, PLANTS



Height: 3-10'  
Flowers: Apr-May, white or pink  
Fruit: brown, capsule  
Fall color:

Light:   
Moisture: M  
Soil pH: 4.2-5.7  
Soil type: S

woods

Region: C  
States: DC DE MD

**Rhododendron maximum**

great laurel, rosebay rhododendron

RHW, USFWS BES



Height: 15-20'  
Flowers: May-Aug, white, pink  
Fruit: Sep-Nov, tan to red, capsule  
Fall color: evergreen

Light:   
Moisture: M W  
Soil pH: 4.5-6  
Soil type: L

mountain slopes, woods, sheltered coves, ravines, streamsides

Region: M P  
States: DC MD  
NY PA VA  
WV



needs space; may form dense thicket

**Rhododendron periclymenoides**

pinxterbloom, pink azalea, pinxter flower

RHW



Height: 3-10'  
Flowers: Apr-May, pink, purple, white  
Fruit: Aug-Mar, brown, capsule  
Fall color: dull yellow

Light:   
Moisture: D M W  
Soil pH: 4.5-5.5  
Soil type: L

woods, low swampy areas, limestone cliffs

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



will tolerate thin soils over bedrock; open, airy quality; susceptible to disease and insects

# Shrubs

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Rhododendron prinophyllum

rose, roselhell, mountain or early azalea

PLANTS



Height: 2-8'  
Flowers: May-Jun, pink  
Fruit: May-Sep  
Fall color:

Light:   
Moisture: D M  
Soil pH:  
Soil type: O

rocky or rich woods

Region: M  
States: PA VA  
WV

may reach 15 feet tall, but rarely; flowers have clove-like scent

### Rhododendron viscosum

swamp azalea

RHW



Height: 6.5-10'  
Flowers: May-Aug, white, pink  
Fruit: Aug-Mar, brown, capsule  
Fall color: yellow, orange, to purple

Light:   
Moisture: M W  
Soil pH: 4-6  
Soil type: C L S O

wet floodplain woods, streambanks, swamp edges, hillside bogs, ditch banks, clearings

Region: M P C  
States: DC DE MD  
NY VA



attractive spreading, loose-branched habit; demands acid soil; susceptible to disease and insects

### Rhus aromatica

fragrant sumac

RHW, RHW



Height: 6'  
Flowers: Mar-May, greenish yellow  
Fruit: Jul-Mar, dark wine red, berry  
Fall color: red

Light:   
Moisture: D  
Soil pH: 6.1-8.5  
Soil type: L S

limestone cliffs, open upland woods, rocky bluffs, oak barrens, foredunes, barren rock

Region: M P  
States: DC MD  
NY VA  
WV



fuzzy edible berry clusters; aromatic leaves; shorter cultivars available; male and female separate plants

### Rhus copallina

shining, winged, flamel leaf, or dwarf sumac

RHW, CM NRCS



Height: 20-35'  
Flowers: Jul-Sep, greenish yellow  
Fruit: Oct-Nov, red, berry  
Fall color: rich red

Light:   
Moisture: D  
Soil pH: 5.3-7.5  
Soil type: C L S

thickets, fields, open woods, roadsides, fencerows

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



forms large colonies; winter food for wildlife

### Rhus glabra

sweet or smooth sumac

CM NRCS



Height: 2-20'  
Flowers: Jun-Jul, greenish  
Fruit: Aug-Oct, red, berry  
Fall color: red

Light:   
Moisture: D M  
Soil pH: 5.3-7.5  
Soil type: L S

dry or moist open areas, shale barrens, fields, dry open slopes, roadsides, fencerows

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



fuzzy berry clusters; male and female may be on separate plants; extremely drought resistant

### Rhus hirta (R. typhina)

staghorn sumac

RHW



Height: 35-50'  
Flowers: Jun-Jul, yellow-green  
Fruit: Jul-Feb, red, berry  
Fall color: orange-red

Light:   
Moisture: D M  
Soil pH: 4.5-7.2  
Soil type: C L S

fields, roadsides, forest edges

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



spreads by lateral roots to form colonies; female plants produce seed; winter food for wildlife

### Ribes rotundifolium

Appalachian or eastern gooseberry

USFWS BES



Height: 3-6'  
Flowers: May-Jul, greenish purple  
Fruit: Jul-Aug, purple or greenish, berry  
Fall color: red

Light:   
Moisture: D  
Soil pH: 6.1-8.5  
Soil type: C L S

rocky upland woods

Region: M P  
States: DC MD  
NY VA  
WV



do not use near apple orchards; may spread cedar apple rust

### Rosa carolina

pasture rose

RHW, RS MNPS



Height: 0.5-3'  
Flowers: May-Jun, pale pink  
Fruit: Aug-Mar, red, berry  
Fall color: yellowish to orange







































Light:   
Moisture: D M  
Soil pH: 6.1-8.5  
Soil type: C L S

dry fields, open woods; rocky banks, shale barrens

Region: M P C  
States: DC DE MD  
NY VA  
WV



edible fruit is a berry-like hip; thorns

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Rosa palustris</b>  <i>swamp rose</i>		Height: 8' Flowers: Jun-Aug, pink Fruit: Jul-Mar, red, berry Fall color:	Light:    Moisture: M W Soil pH: 4-7 Soil type: C L	fresh tidal and nontidal marshes, forested wetlands, shrub swamps, streambanks	Region: M P C States: DC DE MD NY PA VA WV	  high wildlife value	edible fruit is a berry-like hip; thorns; tolerates flooding to 3 inches
		PLANTS WSJ					
<b>Rubus allegheniensis</b>  <i>Allegheny blackberry</i>		Height: 3-9' Flowers: May-Jun, white Fruit: Jul-Sep, black, berry Fall color: orange, red, to purple	Light:   Moisture: D M Soil pH: 4.5-7.5 Soil type: C L	roadsides, fence rows, fields, thickets, open woods, clearings	Region: M P States: DC DE MD NY PA VA WV	  high wildlife value	prickly; juicy edible fruit used by people and wildlife
		USFWS BES, RHW					
<b>Rubus odoratus</b>  <i>purple flowering raspberry, fragrant thimbleberry</i>		Height: 3-6' Flowers: Jun-Sep, rose purple Fruit: Jul-Sep, dull red, berry Fall color: pale yellow	Light:   Moisture: M Soil pH: 5.1-6 Soil type: C L S	forest edges, rocky ledges, rocky wooded slopes	Region: M P States: DC DE MD NY PA VA WV	  high wildlife value	feels sticky; fruit edible; spreads by suckers
		PLANTS WSJ					
<b>Salix humilis</b>  <i>prairie willow</i>		Height: 6-12' Flowers: Apr-May, greenish yellow Fruit: May-Jun, brown, capsule Fall color: dull yellow	Light:  Moisture: D M W Soil pH: 6.1-7.5 Soil type: C L S O	dry thickets, openings, boggy swales; mountain ridges, barrens, meadows, roadsides	Region: M P C States: DC DE PA VA WV	  high wildlife value	typically spreads up to twice it's height; flowers are catkins
		PLANTS 1997					
<b>Sambucus nigra</b> ssp. <i>canadensis</i> (S. canadensis)  <i>common elderberry, American elder</i>		Height: 6-12' Flowers: Jun-Jul, white Fruit: Aug-Sep, purple to black, berry Fall color: yellow green	Light:    Moisture: D M W Soil pH: 6.1-7.5 Soil type: C L S O	fresh tidal and nontidal marshes, swamps, wet meadows, moist woods, fields	Region: M P C States: DC DE MD NY PA VA WV	  high wildlife value	berries eaten by 48 species of birds
		RS MNPS, USFWS					
<b>Sambucus racemosa</b> var. <i>racemosa</i> (S. pubens)  <i>red elderberry, scarlet elder</i>		Height: 6-12' Flowers: May, white Fruit: Jun-Jul, red, berry Fall color: yellow green	Light:  Moisture: D M Soil pH: 6.1-8.5 Soil type: L	rich woods, dry rocky woods, along creeks, rock crevices, sheltered coves, ravines	Region: M States: PA VA WV	  high wildlife value	important summer wildlife food; one of earliest blooming shrubs; fragrant
		RHW, RHW					
<b>Spiraea alba</b> var. <i>latifolia</i> (Spiraea latifolia)  <i>broad-leaved meadow-sweet</i>		Height: 3-6' Flowers: Jun-Sep, white or pinkish Fruit: Sep-Mar, brown, capsule Fall color: yellow	Light:  Moisture: M Soil pH: Soil type: L S	bogs, woods, barrens, swamps	Region: M States: DC DE MD NY VA WV	  high wildlife value	similar to S. alba but twigs more purplish or red
		RHW					
<b>Spiraea alba</b>  <i>narrow-leaved meadow-sweet</i>		Height: 3-6' Flowers: Jun-Sep, white Fruit: Sep-Mar, brown to red brown, capsule Fall color: yellow	Light:  Moisture: M Soil pH: 6.6-7.5 Soil type: C L S O	bogs, swamps, meadows	Region: M States: DC DE MD NY VA WV	  high wildlife value	bark may be shaggy, orange-brown
		RHW					



# Shrubs

## Characteristics

























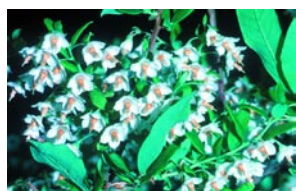








## Conditions

## Habitat

## Native to

## Wildlife

## Notes

<p><b>Spiraea tomentosa</b></p> <p><i>steepleshub, hardback spirea</i></p>  <p>RHW</p>	<p>Height: 3-6'</p> <p>Flowers: Jul-Sep, pink to purple</p> <p>Fruit: Sep-Mar, brown, capsule</p> <p>Fall color: yellow green</p>	<p>Light: </p> <p>Moisture: M W</p> <p>Soil pH: 5.1-6</p> <p>Soil type: C L S O</p>	<p>meadows, fields, bogs, swamps, lake edges, marshes, dunes, swales</p>	<p>Region: M P C</p> <p>States: DC DE MD NY VA WV</p>		<p>cultivars available with white or red flowers</p>
<p><b>Staphylea trifolia</b></p> <p><i>American bladdernut</i></p>  <p>RHW</p>	<p>Height: 3-15'</p> <p>Flowers: May, greenish white</p> <p>Fruit: Aug-Dec, red-brown, capsule</p> <p>Fall color: yellow</p>	<p>Light: </p> <p>Moisture: M</p> <p>Soil pH: 6.1-8</p> <p>Soil type: L</p>	<p>rich woods, floodplain woods, ravines, shores of lakes and ponds, rocky wooded streambanks, shaded dunes</p>	<p>Region: M P</p> <p>States: DC MD PA VA WV</p>		<p>fruit is 3-lobed, papery, balloon-like capsule; branches green-white striped</p>
<p><b>Vaccinium angustifolium</b></p> <p><i>lowbush blueberry</i></p>  <p>BES</p>	<p>Height: 1-2'</p> <p>Flowers: May-Jun, white or pink-tinged</p> <p>Fruit: Jul-Aug, blue to black, berry</p> <p>Fall color: red</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4-6</p> <p>Soil type: C L S</p>	<p>dry woods, barrens, rock outcroppings</p>	<p>Region: M P</p> <p>States: DC MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>edible berries often harvested, makes a nice ground layer</p> <p><b>GC</b></p>
<p><b>Vaccinium corymbosum</b></p> <p><i>highbush blueberry</i></p>  <p>USFWS BES, USFWS BES</p>	<p>Height: 6-12'</p> <p>Flowers: Apr-Jun, white or pink-tinged</p> <p>Fruit: Jul-Aug, blue to black, berry</p> <p>Fall color: yellow to red</p>	<p>Light:   </p> <p>Moisture: D M W</p> <p>Soil pH: 4-6.5</p> <p>Soil type: L S O</p>	<p>forested wetlands, shrub swamps, bogs, dry to wet woods, thickets, streambanks, rock outcroppings</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>edible berries commonly cultivated</p>
<p><b>Vaccinium macrocarpon</b></p> <p><i>cranberry</i></p>  <p>RHW</p>	<p>Height: 0.5-1'</p> <p>Flowers: Jun-Jul, white to pink</p> <p>Fruit: Sep-Nov, red, berry</p> <p>Fall color: dark green to purple to red</p>	<p>Light:  </p> <p>Moisture: W</p> <p>Soil pH: 4-6</p> <p>Soil type: L S O</p>	<p>sphagnum bogs, cool swampy areas</p>	<p>Region: M C</p> <p>States: DC DE MD NY PA WV</p>		<p>low mat form, can spread indefinitely; edible cranberries</p> <p><b>GC</b></p> 
<p><b>Vaccinium pallidum (V. vacillans)</b></p> <p><i>early lowbush blueberry</i></p>  <p>RHW</p>	<p>Height: 1.5-2'</p> <p>Flowers: Apr-May, white, reddish</p> <p>Fruit: Jul-Aug, blue, berry</p> <p>Fall color:</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: L S</p>	<p>dry woods and barrens</p>	<p>Region: M P C</p> <p>States: DC DE MD PA VA WV</p>	 <p>high wildlife value</p>	<p>sweet berries</p> <p><b>GC</b></p>
<p><b>Vaccinium stamineum</b></p> <p><i>deerberry</i></p>  <p>RHW</p>	<p>Height: 6-12'</p> <p>Flowers: Apr-Jun, white or purple</p> <p>Fruit: Sep-Oct, bluish black, berry</p> <p>Fall color: red</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4-6.5</p> <p>Soil type: C L S</p>	<p>dry woods, openings, barrens; uplands, floodplain forests, clearings, thickets, rock outcroppings</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>berries edible but sour</p>
<p><b>Viburnum acerifolium</b></p> <p><i>maple-leaved arrowwood</i></p>  <p>RHW, RHW</p>	<p>Height: 3-6'</p> <p>Flowers: Jun, creamy-white, pink</p> <p>Fruit: Aug-Dec, blue to black, berry</p> <p>Fall color: orange, red, purple</p>	<p>Light:   </p> <p>Moisture: D M</p> <p>Soil pH: 5.1-6</p> <p>Soil type: C L</p>	<p>floodplain forests, dry wooded slopes, woods, rocky slopes, rock outcrops, wooded ravines</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>dry, edible berries</p>



Characteristics

Conditions

Habitat

Native to

Wildlife

**Viburnum dentatum**  
(*V. recognitum*)

southern arrowwood

USFWS BES, RS MNPS



Height: 10-15'  
Flowers: May-Jun, white  
Fruit: Sep-Nov, blue to black, berry  
Fall color: reddish-purple

Light: ☀️ ☀️ 🌑  
Moisture: D M W  
Soil pH: 5.1-6.5  
Soil type: L S O

swamps, wet woods, bogs, floodplain forests, streambanks, low, wet acid-sand habitats

Region: M P C  
States: DC DE MD NY PA VA WV



stems very straight, nice structure in winter

**Viburnum nudum**  
var. *cassinoides*  
(*V. cassinoides*)

witherod

USFWS BES



Height: 6-12'  
Flowers: May-Jun, creamy white  
Fruit: Aug-Sep, pink to blue-black, berry  
Fall color: orange-red to purple

Light: ☀️ ☀️ 🌑  
Moisture: D M W  
Soil pH: 5.1-6.5  
Soil type: L O

swamps, bogs, moist woods, barrens

Region: M P C  
States: MD PA



handsome stature; multiple fruit colors at once

**Viburnum nudum**

naked witherod, possum-haw  
*viburnum*

RHW



Height: 6.5-20'  
Flowers: Jun-Jul, white to cream  
Fruit: Sep-Oct, red to blue, then black, berry  
Fall color: red to purple

Light: ☀️ ☀️ 🌑  
Moisture: M W  
Soil pH: 5.1-6  
Soil type: L S

wet woods, rich upland woods, swamps, margins of vernal ponds, heath bogs

Region: M P C  
States: DC DE MD VA



edible fruit but very acidic; shallow fibrous roots, transplants well

**Viburnum prunifolium**

black haw

RHW



Height: 12-24'  
Flowers: Apr-May, white  
Fruit: Jul-Nov, pink to bluish-black, berry  
Fall color: reddish purple

Light: ☀️ ☀️ 🌑  
Moisture: D M W  
Soil pH: 4.8-7.5  
Soil type: C L

woods, thickets, fields, roadsides

Region: M P C  
States: DC DE MD NY PA VA WV



fruits edible, used for preserves

See also:

In the *Trees* section:

- Castanea pumila
- Cornus alternifolia
- Juniperus virginiana
- Magnolia virginiana
- Malus (Pyrus) coronaria
- Quercus ilicifolia
- Salix sericea

**Rhus copallina**

CM NRCS



**Rosa palustris**

CM NRCS



**Itea virginica**

USFWS BES



**Vaccinium corymbosum** in fall.

USFWS BES



**Kalmia angustifolia**

RHW



































**Kalmia latifolia**

RHW



# Trees

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Acer negundo</b>  <i>box elder, ash leaf maple, Manitoba maple</i>		Height: 30-60' Spread: 30-60' Flowers: Apr-May, yellow-green Fruit: Jul-Sep, tan brown, winged Fall color: yellow, red	Light:   Moisture: M W Soil pH: 5.2-7 Soil type: C L S	along rivers, streams, ponds, and seasonally flooded areas	Region: M P C States: DC DE MD NY PA VA WV		brittle wood; thicket-forming
<b>Acer rubrum</b>  <i>red, scarlet, swamp, or soft maple</i>		Height: 40-100' Spread: 30-75' Flowers: Mar-Apr, (inconspicuous) Fruit: Apr-Jun, red-brown or yellow, winged Fall color: red, orange, yellow	Light:   Moisture: M W Soil pH: 5.4-7.1 Soil type: C L S	swamps, uplands, rocky hillsides, dunes	Region: M P C States: DC DE MD NY PA VA WV		earliest spring bloomer; adaptable
<b>Acer saccharinum</b>  <i>silver, white, river, or soft maple</i>		Height: 50-100' Spread: 75-100' Flowers: Feb-Mar, greenish yellow Fruit: Apr-May, tan brown, winged Fall color: yellow	Light:   Moisture: M W Soil pH: 5.2-7.1 Soil type: C L S	floodplains, streamsides, river bottoms, pond and lake edges	Region: M P States: DC DE MD NY PA VA WV		
<b>Acer saccharum</b>  <i>sugar maple</i>		Height: 60-100' Spread: 50-75' Flowers: Apr-May, yellow-green Fruit: Sep-Oct, green, tan at maturity, winged Fall color: yellow, orange, red	Light:    Moisture: M Soil pH: 4-7.3 Soil type: L S	upland woods, mountain coves and slopes	Region: M P States: DC DE NY PA VA WV	 high wildlife value	fall color; maple syrup; state tree of New York and West Virginia
<b>Acer spicatum</b>  <i>mountain maple</i>		Height: 20-35' Spread: 20-35' Flowers: May-Jun, yellow green Fruit: Jul-Sep, red or yellow, winged Fall color: orange to red	Light:   Moisture: M Soil pH: 5.5-7 Soil type: L	cool rich woods, moist rocky slopes and flats, along small streams	Region: M States: MD NY PA VA WV	 high wildlife value	short-lived, strong acid preference
<b>Amelanchier arborea</b>  <i>downy serviceberry, shadbush</i>		Height: 15-25' Spread: Flowers: Mar-May, white Fruit: red to dark purple, fleshy Fall color: yellow, red	Light:   Moisture: D M Soil pH: 5.5-7.5 Soil type: L S	wooded river banks, swamps, rocky slopes	Region: M States: DC DE MD NY PA VA WV		used by 58 wildlife species; 35 bird species; important early summer food; berries edible to people
<b>Amelanchier canadensis</b>  <i>serviceberry, shadbush, shadblow</i>		Height: 35-50' Spread: 35-50' Flowers: Apr-May, white Fruit: Jun-Jul, red to purple, fleshy Fall color: orange to red	Light:   Moisture: M W Soil pH: 5.6-7.5 Soil type: C L S	swamps, low ground, woods, thickets	Region: M P C States: DC DE MD NY VA		
<b>Asimina triloba</b>  <i>paw-paw</i>		Height: 20-35' Spread: 20-35' Flowers: Apr-Jun, purple Fruit: Aug-Sep, yellow, berry Fall color: yellow/ copper-red	Light:  Moisture: M Soil pH: 5.2-7.2 Soil type: L S	river valleys, bottomlands, understory of woods	Region: C States: DC DE MD PA VA WV		



Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Betula alleghaniensis**

*yellow birch*

PLANTS RM



Height: 60-80'  
Spread: 35-50'  
Flowers: Apr-May, yellow green  
Fruit: Jul-Oct, green to tan, cone/cone-like  
Fall color: golden yellow

Light:   
Moisture: M W  
Soil pH: 4.6-8  
Soil type: L S

rich uplands, low swamps, streamsid es, elevated floodplain terraces and knobs

Region: M  
States: NY PA VA  
WW



fall color; attractive winter texture and color; prefers cool, moist conditions, common on calcareous

**Betula lenta**

*sweet birch, black birch, cherry birch*

USFWS BES, RHW



Height: 50-75'  
Spread: 35-50'  
Flowers: Apr-May, yellow green  
Fruit: Aug-Nov, green to tan, cone/cone-like  
Fall color: golden yellow

Light:   
Moisture: D M  
Soil pH: 4.8-6.8  
Soil type: L S

steep rocky land and lower

Region: M P  
States: NY PA VA  
WW



excellent fall color; prefers moist sites, tolerates dry; colonizes open or disturbed areas

**Betula nigra**

*river birch, red birch, black birch*

USFWS BES, USFWS BES



Height: 50-75'  
Spread: 35-50'  
Flowers: Apr-May, dark brown  
Fruit: Jun-Aug, tan brown, cone/cone-like  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 4-6  
Soil type: C L

along streams, rivers, ponds and swamps

Region: M P C  
States: NY PA VA  
WW



attractive peeling bark;

**Carpinus caroliniana**

*American hornbeam, musclem wood, ironwood*

USFWS BES



Height: 13-40'  
Spread: 35-50'  
Flowers: Apr-May, red or reddish-green  
Fruit: Jun-Oct, nut/nut-like  
Fall color: orange, red

Light:   
Moisture: M  
Soil pH: 4-7.4  
Soil type: L S

river margins, bottomlands, swamps

Region: M P  
States: NY PA VA  
WW



slow growing and short lived

**Carya alba (C. tomentosa)**

*mockernut hickory*

USDA NRCS



Height: 60-100'  
Spread: 35-50'  
Flowers: May-Jun, light green  
Fruit: Sep-Oct, light reddish brown, nut/nut-like  
Fall color: yellow

Light:   
Moisture: D M  
Soil pH: 6.5-7.4  
Soil type: L S

ridges, dry hills, hillsides

Region: M P C  
States: NY PA VA  
WW



good fall color

**Carya cordiformis**

*bitternut or swamp hickory, pignut*

PLANTS



Height: 60-100'  
Spread: 60-100'  
Flowers: Apr-May, yellow-green  
Fruit: Aug-Oct, yellowish green, nut/nut-like  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 6.5-7.4  
Soil type: C L S

rich bottomlands, swamps, frequently flooded areas, dry hillsides

Region: M P C  
States: NY PA VA  
WW



**Carya glabra**

*pignut, sweet pignut, or smooth bark hickory*

CM NRCS



Height: 60-100'  
Spread: 35-50'  
Flowers: Apr-May, yellow-green  
Fruit: Sep-Oct, dark brown, nut/nut-like  
Fall color: yellow

Light:   
Moisture: D M W  
Soil pH: 6.5-7.4  
Soil type: L

dry woods on hillsides and ridges

Region: M P C  
States: NY PA VA  
WW



**Carya ovata**

*shagbark, scalybark, or shellbark hickory*

USDA NRCS



Height: 70-100'  
Spread: 35-50'  
Flowers: May-Jun, yellow-green  
Fruit: Sep-Oct, dark or reddish brown, nut/nut-like  
Fall color: brown

Light:   
Moisture: M  
Soil pH: 4-6.7  
Soil type: L S





































dry upland slopes, lowlands, valleys

Region: M P C  
States: NY PA VA  
WW



attractive peeling bark

# Trees

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Castanea pumila</b> <i>chinquapin, eastern or Allegheny chinkapin</i>		Height: 12-20' Spread: 12-20' Flowers: Jun, pale yellow Fruit: Sep-Oct, dark brown, nut/nut-like Fall color: yellow or purple	Light:   Moisture: D Soil pH: 4.5-7.5 Soil type: L S	rocky slopes, steep rocky land, rocky streambanks, sandy ridges, swamp edges, open woods	Region: M P C States: DC DE MD VA WV		sweet, edible fruit
<b>Celtis occidentalis</b> <i>common hackberry, sugarberry, nettletree</i>		Height: 40-100' Spread: 40-100' Flowers: Apr-May, yellow green, brown tint Fruit: Sep-Dec, purple brown, berry Fall color: yellow	Light:    Moisture: D M W Soil pH: 6-7.8 Soil type: C L S	drainage basins, floodplains, wooded slopes, high rocky limestone bluffs bordering streams, windbreaks	Region: M P C States: DC DE MD NY PA VA WV	 high wildlife value	butterfly larval host; drought tolerant; tolerates occasional flooding; saplings can sprout in deep shade, common on limestone soils
<b>Cercis canadensis</b> <i>eastern redbud</i>	 	Height: 20-35' Spread: 20-35' Flowers: Apr-May, pink to lavender Fruit: Jul-Dec, black, pod Fall color: golden yellow	Light:   Moisture: D M Soil pH: 4.5-7.5 Soil type: L S	river bottoms and streambanks	Region: M P C States: DC DE MD PA VA WV		fixes nitrogen
<b>Chamaecyparis thuyoides</b> <i>Atlantic white cedar</i>	 	Height: 75' Spread: Flowers: Mar-Apr, greenish brown Fruit: bluish, cone/cone-like Fall color: evergreen	Light:   Moisture: M W Soil pH: 4.5-5.5 Soil type: C L S	freshwater swamps, woods	Region: C States: DE MD VA		
<b>Chionanthus virginicus</b> <i>white fringetree</i>	 	Height: 20-35' Spread: 20-35' Flowers: May-Jun, white Fruit: Sep-Oct, bluish black, berry Fall color: yellow	Light:    Moisture: D M Soil pH: 4.5-6.5 Soil type: L S	moist streambanks, ridges, hillsides in sandy to deep-rich soils	Region: M P C States: DC DE MD VA WV		
<b>Cornus alternifolia</b> <i>alternate-leaf or pagoda dogwood</i>		Height: 15-25' Spread: 15-35' Flowers: May-Jun, creamy white Fruit: Jul-Aug, bluish black, berry Fall color: maroon	Light:   Moisture: M Soil pH: 5.8-7.5 Soil type: L	dry woods, forest edges, rocky slopes	Region: M States: DE MD NY PA VA WV	 high wildlife value	used by 64 wildlife species; 43 bird species; keep root zone moist and acidic; tolerates full sun; young stems often purple
<b>Cornus florida</b> <i>flowering dogwood</i>		Height: 20-50' Spread: 20-50' Flowers: Apr-May, white Fruit: Sep-Dec, red to orange, berry Fall color: scarlet red	Light:  Moisture: D M Soil pH: 5-7 Soil type: L	woods, woodland edges and openings, mountain slopes, coves	Region: M P C States: DC DE MD NY PA VA WV	 high wildlife value	fall migrant birds eat berries; tolerates sun, best in moist, well-drained, acidic soil with organic matter, VA state tree
<b>Crataegus crus-galli</b> <i>cockspur hawthorn</i>		Height: 20-35' Spread: 20-35' Flowers: May-Jun, white Fruit: Aug-Jan, dull red or green, fleshy Fall color: orange to red	Light:   Moisture: D M Soil pH: 4.5-7.2 Soil type: C L S	thickets, open areas, especially in dry or rocky places, low rich slopes	Region: M P C States: DC DE MD NY PA VA WV		



Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Crataegus viridis**

southern thorn,  
green hawthorn

PLANTS



Height: 20-35'  
Spread: 35-50'  
Flowers: Apr, white  
Fruit: bright red to orange, fleshy  
Fall color: purple, scarlet

Light:   
Moisture: M W  
Soil pH: 6-7.3  
Soil type: C L

lowlands and valleys

Region: C  
States: DE MD NY VA



**Diospyros virginiana**

common persimmon

PLANTS 1997, PLANTS 1997



Height: 50-75'  
Spread: 35-50'  
Flowers: Jun, greenish yellow to cream  
Fruit: Sep-Nov, orange purple, berry  
Fall color: yellow or purple

Light:   
Moisture: D M  
Soil pH: 5-7  
Soil type: C L

open, disturbed areas, deciduous woods

Region: M P C  
States: DC DE MD PA VA WW



edible fruits

high wildlife value

**Fagus grandifolia**

American beech

CM NRCS, CM NRCS



Height: 50-100'  
Spread: 50-75'  
Flowers: Apr-May, yellow-green  
Fruit: Sep-Nov, orange-green, nut/nut-like  
Fall color: yellow/ tan; retains leaves till spring

Light:   
Moisture: M  
Soil pH: 4.1-6.5  
Soil type: L S

rich uplands and lowlands

Region: M P C  
States: DC DE MD NY PA VA WW



edible nuts; attractive bark; leaves may persist into winter

high wildlife value

**Fraxinus americana**

white ash

UWI KJS



Height: 50-100'  
Spread: 50-75'  
Flowers: Apr-May, deep purple  
Fruit: Aug-Feb, tan brown, winged  
Fall color: yellow, maroon

Light:   
Moisture: M  
Soil pH: 5-7.5  
Soil type: C L S

upland slopes, valleys, coves, bottomlands

Region: M P C  
States: DC DE MD NY PA VA WW



fast growth; fall color

**Fraxinus pennsylvanica**

green ash, red ash, swamp ash

UWI RK



Height: 50-75'  
Spread: 35-50'  
Flowers: Apr-May, purple  
Fruit: Aug-Dec, tan brown, winged  
Fall color: yellow to orange

Light:   
Moisture: D M W  
Soil pH: 5-8  
Soil type: C L S

tidal and nontidal freshwater forested wetlands; seasonally to regularly flooded or saturated

Region: M P C  
States: DC DE MD NY PA VA WW



tolerates drought; tolerates infrequent flooding and some salt; male and female flowers on separate plants

**Ilex opaca**

American holly

USFWS BES



Height: 15-50'  
Spread: 18-40'  
Flowers: May-Jun, white or cream  
Fruit: red, fleshy  
Fall color: evergreen

Light:   
Moisture: M  
Soil pH: 4-7.5  
Soil type: C L

sandy woods

Region: M P C  
States: DC DE MD VA



birds eat berries; state tree of Delaware



**Juglans nigra**

black walnut, American walnut

PLANTS DEH



Height: 70-90'  
Spread: 75-100'  
Flowers: May-Jun, yellow-green  
Fruit: Aug-Sep, yellow-green, nut/nut-like  
Fall color: yellow

Light:   
Moisture: M  
Soil pH: 5.5-8  
Soil type: L

woods, slopes, streamsidess

Region: M P C  
States: DC DE MD NY PA VA WW



may stunt growth of nearby plant

**Juniperus virginiana**

eastern red cedar

RHW, CM NRCS



Height: 50-75'  
Spread: 35-50'  
Flowers: Mar-Apr, red purple  
Fruit: Jul-Mar, pale green to dark blue, cone/cone-like  
Fall color: evergreen

Light:   
Moisture: D M  
Soil pH: 5-8  
Soil type: C L S

broad range of habitats









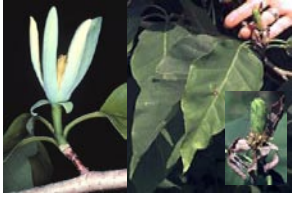


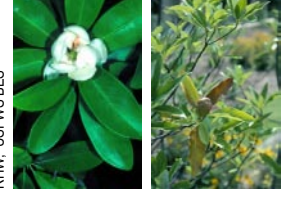











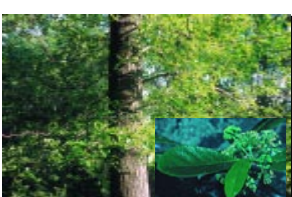







Region: M P C  
States: DC DE MD NY PA VA WW



berries consumed by over 50 species of birds; berries have culinary use



# Trees

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Liquidambar styraciflua</b>  <i>sweet gum, red gum, sap gum</i>		Height: 60-100' Spread: 50-75' Flowers: Apr-May, yellow-green Fruit: Jul-Jan, brown, capsule Fall color: yellow, red	Light:   Moisture: M W Soil pH: 4.5-7 Soil type: C L S	upland woods, slopes, ravines, floodplains, streambanks	Region: M P C States: DC DE MD NY VA		
<b>Liriodendron tulipifera</b>  <i>tulip tree, tulip poplar, yellow poplar</i>		Height: 70-100' Spread: 35-50' Flowers: Jun, greenish yellow Fruit: Aug-Nov, brown, winged Fall color: yellow	Light:   Moisture: M Soil pH: 4.5-6.5 Soil type: L S	bottomland woods, mountain coves, lower slopes	Region: M P C States: DC DE MD NY PA VA WV		fast growth
<b>Magnolia acuminata</b>  <i>cucumber magnolia</i>		Height: 70-100' Spread: 35-50' Flowers: May-Jun, greenish-yellow Fruit: Sep-Nov, brown cone w/ scarlet seed, pod Fall color: ashy brown	Light:  Moisture: M Soil pH: 5.2-7 Soil type: C L S	slopes, ravines, valleys, streamsides	Region: M States: NY VA WV MD		
<b>Magnolia virginiana</b>  <i>sweetbay magnolia</i>		Height: 12-30' Spread: 12-30' Flowers: May-Jul, white to cream Fruit: Sep-Oct, red, berry Fall color: semi-evergreen	Light:    Moisture: M W Soil pH: 5-6.5 Soil type: C L S	forested wetlands, seeps, stream and pond edges, sandy woods	Region: P C States: DC DE MD VA		semi-evergreen; fragrant flowers; tolerates occasional flooding, some salt
<b>Malus coronaria (Pyrus coronaria)</b>  <i>sweet crabapple, American crabapple</i>		Height: 10-30' Spread: 20-30' Flowers: Apr-May, pink to white Fruit: Sep-Oct, greenish, fleshy Fall color:	Light:  Moisture: M Soil pH: Soil type: C L S	forest edges, rocky streams, fields	Region: M P C States: DC DE MD PA VA WV		flowers fragrant; susceptible to insects and diseases; plant at least 500 feet from cedars; attracts bees and wasps; fruit sour; high wildlife value
<b>Morus rubra</b>  <i>red mulberry, moral</i>		Height: 35-60' Spread: 35-60' Flowers: May-Jun, greenish Fruit: Jun-Jul, red, berry Fall color: yellow	Light:   Moisture: M Soil pH: 5-7 Soil type: C L S	floodplains, river valleys, hillsides	Region: M P C States: DC DE MD PA VA WV		fruit sweet
<b>Nyssa sylvatica</b>  <i>black gum, sourgum, black or swamp tupelo</i>		Height: 30-75' Spread: 20-50' Flowers: Apr-Jun, greenish white Fruit: Sep-Oct, blue-black, fleshy Fall color: red	Light:   Moisture: D M W Soil pH: 4.5-6 Soil type: L S	forested seasonal wetlands, swamp borders, upland woods, dry slopes; seasonally flooded or saturated	Region: M P C States: DC DE MD NY PA VA WV		outstanding fall color  high wildlife value
<b>Ostrya virginiana</b>  <i>eastern hop-hornbeam, ironwood</i>		Height: 25-50' Spread: 20-35' Flowers: May, red-brown Fruit: Jun-Oct, green turning brown, nut/nut-like Fall color: yellow	Light:   Moisture: M Soil pH: 4.2-7.6 Soil type: C L S	slopes and ridges	Region: M P C States: DC DE MD NY PA VA WV		leaves may persist into winter

Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Pinus echinata**

*shortleaf pine, shortstraw pine, southern yellow pine*

BUG RFW



Height: 100'  
Spread:  
Flowers:  
  
Fruit: reddish brown, cone/cone-like  
Fall color: evergreen

Light:   
Moisture: D M  
Soil pH: 4.6-6  
Soil type: C L S

dry mountain ridges, fields, floodplains

Region: M P C  
States: DC DE MD VA  
WW

best used for naturalizing



**Pinus rigida**

*pitch pine*

CM NRCS



Height: 50-75'  
Spread: 50-75'  
Flowers: May, red- purple  
  
Fruit: light brown, cone/ cone-like  
Fall color: evergreen

Light:   
Moisture: D  
Soil pH: 3.5-5.1  
Soil type: L S

slopes and ridges of mountains, river valleys, and swamps

Region: M P C  
States: DC DE MD NY PA VA  
WW



many birds feed on the seeds; provides winter cover; old trees are fire resistant due to thick bark



**Pinus serotina**

*pond pine, marsh pine, pocosin pine*

VT



Height: 50-60'  
Spread:  
Flowers:  
  
Fruit: yellowish brown, cone/cone-like  
Fall color: evergreen

Light:   
Moisture: M W  
Soil pH: 4.8-6.8  
Soil type: L S

swamps, pocosins, bays, pond margins, flatwoods

Region: C  
States: DE PA VA



many birds feed on the seeds; provides winter cover



**Pinus strobus**

*white pine, Eastern white pine*

USDA NRCS



Height: 75-100'  
Spread: 50-75'  
Flowers: May-Jul, red to purplish  
Fruit: Aug-Oct, green to light brown, cone/cone-like  
Fall color: evergreen

Light:   
Moisture: D M  
Soil pH: 4-6.5  
Soil type: L

variety of habitats; does best on moist, well drained, sandy loam soils of ridges

Region: M P  
States: DC MD NY PA VA  
WW



many birds feed on the seeds; provides winter cover



**Pinus taeda**

*loblolly, old field, or North Carolina pine*

USFWS BES



Height: 70-90'  
Spread:  
Flowers:  
  
Fruit: yellowish, cone/ cone-like  
Fall color: evergreen

Light:   
Moisture: D M W  
Soil pH: 4.5-7  
Soil type: C L S

floodplains fields, slopes

Region: C  
States: DE MD VA



many birds feed on the seeds; provides winter cover



**Pinus virginiana**

*Virginia pine, scrub pine, Jersey pine*

USDA NRCS



Height: 50-80'  
Spread:  
Flowers:  
  
Fruit: reddish brown, cone/cone-like  
Fall color: evergreen

Light:   
Moisture: D M  
Soil pH: 4.5-7.5  
Soil type: C L S

well drained sites; often a pioneer species

Region: M P C  
States: DC DE MD PA VA  
WW



many birds feed on the seeds; provides winter cover



**Platanus occidentalis**

*American sycamore, American planetree*

PLANTS LA, USDA NRCS



Height: 75-100'  
Spread: 75-100'  
Flowers: Apr-Jun, yellow-green  
Fruit: Aug-Dec, brown, achene (dry, flat seed)  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 4.9-6.5  
Soil type: L S

river bottoms, lake shores

Region: M P C  
States: DC DE MD NY PA VA  
WW



leaves out late spring; showy bark; leaves may persist into winter

**Populus deltoides**

*eastern or southern cottonwood, Carolina poplar*

UWI JK



Height: 75-100'  
Spread: 50-100'  
Flowers: Mar-Apr, red  
  
Fruit: May-Jul, yellow-green, capsule  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 5.2-7.3  
Soil type: C L S

along waterways

Region: P  
States: DC DE MD NY VA  
WW



best used for naturalizing; grows fast but short lived



# Trees

## Characteristics

























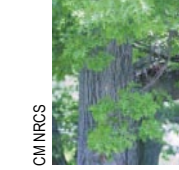


## Conditions

## Habitat

## Native to

## Wildlife

## Notes

<p><b>Populus heterophylla</b></p> <p><i>swamp cottonwood, swamp poplar, black cottonwood, downy poplar</i></p>	 <p>VT, PLANTS 1997</p>	<p>Height: 80' Spread: Flowers: Mar</p> <p>Fruit: Apr-May, capsule</p> <p>Fall color: yellow</p>	<p>Light: </p> <p>Moisture: W</p> <p>Soil pH: 4.6-5.9</p> <p>Soil type: C L</p>	<p>swamps and bottomlands</p>	<p>Region: P</p> <p>States: DE MD VA</p>		
<p><b>Prunus americana</b></p> <p><i>American wild plum</i></p>	 <p>RHW</p>	<p>Height: 20-35' Spread: 20-35' Flowers: Apr-May, white</p> <p>Fruit: Aug-Sep, orange to red, fleshy</p> <p>Fall color: pale yellow</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 5-7</p> <p>Soil type: L S</p>	<p>woods, pastures, fencerows, streamsides</p>	<p>Region: M P</p> <p>States: DC DE MD NY PA VA WV</p>	<p>high wildlife value</p>	<p>edible fruit, used for making pies and jellies</p>
<p><b>Prunus pensylvanica</b></p> <p><i>pin cherry, fire cherry</i></p>	 <p>RHW</p>	<p>Height: 20-35' Spread: 20-35' Flowers: May, white</p> <p>Fruit: Jul-Sep, bright red, fleshy</p> <p>Fall color: yellow</p>	<p>Light:  </p> <p>Moisture: D</p> <p>Soil pH: 4.3-6.6</p> <p>Soil type: C L S</p>	<p>woods</p>	<p>Region: M</p> <p>States: NY PA VA WV MD</p>	 <p>high wildlife value</p>	
<p><b>Prunus serotina</b></p> <p><i>black or wild cherry, black chokecherry</i></p>	 <p>CM NRCS, RHW</p>	<p>Height: 40-75' Spread: 20-35' Flowers: May-Jun, white</p> <p>Fruit: Aug-Sep, black, fleshy</p> <p>Fall color: yellow/ red</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH: 5-7.5</p> <p>Soil type: L</p>	<p>forests, fence rows, fields, forest edges</p>	<p>Region: M P C</p> <p>States: DC DE NY VA WV</p>	 <p>high wildlife value</p>	<p>birds eat fruit</p>
<p><b>Prunus virginiana</b></p> <p><i>choke cherry</i></p>	 <p>RHW</p>	<p>Height: 25-50' Spread: 20-35' Flowers: May-Jun, white</p> <p>Fruit: Aug-Sep, red, black, or yellow, fleshy</p> <p>Fall color: dark red-purple</p>	<p>Light: </p> <p>Moisture: M</p> <p>Soil pH: 5.2-8.4</p> <p>Soil type: C L S</p>	<p>open moist sites; pioneer species after fires</p>	<p>Region: M</p> <p>States: DC DE MD NY PA VA WV</p>		<p>fast growing, short lived; fruit sometimes used for making jelly</p>
<p><b>Quercus alba</b></p> <p><i>white oak, stave oak</i></p>	 <p>CM NRCS</p>	<p>Height: 75-100' Spread: 75-100' Flowers: Mar-May, yellow-green</p> <p>Fruit: Sep-Oct, brown, nut/nut-like</p> <p>Fall color: red</p>	<p>Light:  </p> <p>Moisture: D M</p> <p>Soil pH: 4.5-6.8</p> <p>Soil type: L S</p>	<p>dry to moist woods</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>acorns food for wildlife; majestic; MD state tree; leaves may persist into winter</p>
<p><b>Quercus bicolor</b></p> <p><i>swamp white oak, swamp oak</i></p>	 <p>PLANTS RM89, OSU</p>	<p>Height: 60-100' Spread: 50-75' Flowers: May, yellow-green</p> <p>Fruit: Sep-Oct, tan brown, nut/nut-like</p> <p>Fall color: red/brown</p>	<p>Light:  </p> <p>Moisture: W</p> <p>Soil pH: 4.3-6.5</p> <p>Soil type: C L S</p>	<p>bottomlands, swamp and stream edges</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>acorns food for wildlife</p>
<p><b>Quercus coccinea</b></p> <p><i>scarlet oak, red oak, black oak</i></p>	 <p>CM NRCS</p>	<p>Height: 40-75' Spread: 50-75' Flowers: May-Jun, yellow-green</p> <p>Fruit: Sep-Oct, reddish brown, nut/nut-like</p> <p>Fall color: scarlet</p>	<p>Light: </p> <p>Moisture: D M</p> <p>Soil pH: 4.5-6.9</p> <p>Soil type: L S</p>	<p>dry uplands and slopes</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 <p>high wildlife value</p>	<p>acorns food for wildlife</p>

Characteristics

Conditions

Habitat

Native to

Wildlife

Notes

**Quercus falcata**

southern or swamp red oak, Spanish oak

DFT HW



Height: 70-80'  
Spread:  
Flowers: Apr-May  
  
Fruit: Oct, orange brown, nut/nut-like  
Fall color: brown

Light:   
Moisture: D M  
Soil pH: 4.8-7  
Soil type: C L S

uplands

Region: C  
States: DC DE MD VA



acorns food for wildlife

**Quercus ilicifolia**

bear oak, scrub oak

CM NRCS



Height: 12-20'  
Spread: 12-20'  
Flowers: May-Jun, yellow-green or reddish  
Fruit: Sep-Jan, light brown, nut/nut-like  
Fall color: yellow, scarlet red to purplish

Light:   
Moisture: D  
Soil pH: 4-7.5  
Soil type: C L S

barrens, balds, woods, dunes, fields

Region: M P  
States: PA VA WV



high wildlife value

leaves may persist into winter

**Quercus marilandica**

blackjack oak, Jack oak

CM NRCS



Height: 35-50'  
Spread: 35-50'  
Flowers: Apr-Jun, yellow-green  
Fruit: Sep-Oct, tan brown, nut/nut-like  
Fall color: yellow/brown

Light:   
Moisture: D  
Soil pH: 4.6-5.6  
Soil type: L S

woods, ridges, slopes, sandy flatwoods

Region: P C  
States: DC DE MD VA WV



high wildlife value

acorns food for wildlife, leaves may persist into winter

**Quercus michauxii (Q. montana)**

swamp chestnut oak, basket oak, cow oak

PLANTS 1995



Height: 50-80'  
Spread: 75-100'  
Flowers: May, yellow-green  
Fruit: Sep-Oct, tan brown, nut/nut-like  
Fall color: red/ brown

Light:   
Moisture: M W  
Soil pH: 4.5-6.5  
Soil type: L

bottomlands, ravine slopes, flatwoods over limestone

Region: M P C  
States: DE MD NY VA WV



high wildlife value

acorns food for wildlife

**Quercus muehlenbergii**

Chinquapin or chinkapin oak, yellow oak, chestnut oak

UWI KJS



Height: 35-50'  
Spread: 35-50'  
Flowers: May-Jun, yellow-green  
Fruit: Sep-Oct, light brown, nut/nut-like  
Fall color: yellow-brown

Light:   
Moisture: D M  
Soil pH: 6.5-8  
Soil type: L

rich, woods, uplands, outcrops, dry bluffs, slopes

Region: M P C  
States: DC MD NY VA WV



high wildlife value

**Quercus nigra**

water oak

PLANTS LA



Height: 50-80'  
Spread:  
Flowers: Apr-May  
  
Fruit: Oct, black, nut/nut-like  
Fall color: green persists late

Light:   
Moisture: M W  
Soil pH: 4.8-5.8  
Soil type: C L

upland woods, bottomlands, hammocks, fields

Region: C  
States: DC DE MD VA



acorns food for wildlife

**Quercus palustris**

pin oak, swamp oak, Spanish oak

PLANTS RM91



Height: 50-80'  
Spread: 50-75'  
Flowers: Apr-May, yellow-green  
Fruit: Sep-Oct, light brown, nut/nut-like  
Fall color: red

Light:   
Moisture: M W  
Soil pH: 4.5-6.5  
Soil type: C L

bottomlands or upland flats

Region: M P C  
States: DC DE MD NY PA VA WV



high wildlife value

popular shade tree; fall color; acorns food for wildlife; leaves may persist into winter

**Quercus phellos**

willow oak, pin oak, peach oak

USFWS BES



Height: 80-100'  
Spread:  
Flowers: Feb-May  
  
Fruit: light yellow or greenish brown, nut/nut-like  
Fall color: red

Light:   
Moisture: M W  
Soil pH: 4.5-5.5  
Soil type: C L

bottomlands, low flatwoods, upland fields

Region: P C  
States: DC DE MD VA WV



acorns food for wildlife

# Trees

## Characteristics

## Conditions

## Habitat

## Native to

## Wildlife

## Notes

### Quercus prinus (Q. montana)

chestnut oak, rock oak

PLANTS 1997



Height: 40-80'  
Spread:  
Flowers: May-Jun, yellowish  
Fruit: Sep-Oct, brown, nut/nut-like  
Fall color: yellow/orange

Light:   
Moisture: D  
Soil pH: 4.5-7  
Soil type: L S

rocky ridges and slopes

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



acorns food for wildlife; fall color

### Quercus rubra

northern red oak

UWI KJIS



Height: 90'  
Spread:  
Flowers: Apr-May  
Fruit: scales reddish-brown, nut/nut-like  
Fall color: red or yellow

Light:   
Moisture: D M  
Soil pH: 4.3-6.5  
Soil type: C L

slopes, coves, and drier ridges

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



acorns food for wildlife; hardy and long-lived; fall color

### Quercus stellata

post oak, iron oak

CM NRCS



Height: 35-50'  
Spread: 35-50'  
Flowers: Apr-Jun, yellow-green  
Fruit: Sep-Oct, light brown to almost black, nut/nut-like  
Fall color: brown

Light:   
Moisture: D M  
Soil pH: 4.8-7  
Soil type: C L S

upland dry ridges to moist flatwoods

Region: M P C  
States: DC DE MD  
VA  
WV



acorns food

### Quercus velutina

black oak, yellow bark oak, quercitron oak

BUG D.JM



Height: 75-100'  
Spread: 75-100'  
Flowers: Apr-May, yellow-green  
Fruit: Sep-Oct, light red-brown, nut/nut-like  
Fall color: red/brown

Light:   
Moisture: D M  
Soil pH: 4.5-6  
Soil type: C L S

dry upland ridges and slopes, flatwoods

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



acorns food for wildlife; leaves may persist into winter

### Salix nigra

black willow, swamp willow

CM NRCS



Height: 35-50'  
Spread: 20-35'  
Flowers: Mar-Apr, yellow green  
Fruit: Apr-May, green yellow, cone/cone-like  
Fall color: yellow green

Light:   
Moisture: M W  
Soil pH: 6-8  
Soil type: C L S

fresh tidal marshes and swamps, forested wetlands, floodplains, wet meadows; seasonally to regularly flooded or saturated

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



streambank stabilizer; spreads by suckers; preferred food of ruffed grouse and pine grosbeak; tolerates flooding; tolerates salinity to 0.5 ppt

### Salix sericea

silky willow

CM NRCS



Height: 12'  
Spread:  
Flowers: Jun-Jul  
Fruit:  
Fall color: yellow

Light:   
Moisture: M W  
Soil pH: 5.2-7  
Soil type: C L S

marshes, ditches, low woods

Region: M P  
States: DC DE MD  
NY PA VA  
WV



### Sassafras albidum

sassafras

USFWS EES, RHW



Height: 35-50'  
Spread: 35-50'  
Flowers: Apr, yellow-green  
Fruit: Sep-Oct, dark blue, fleshy  
Fall color: yellow, orange, purple

Light:   
Moisture: D M  
Soil pH: 4.5-7.2  
Soil type: L S

moist, open woods

Region: M P C  
States: DC DE MD  
NY PA VA  
WV



edible and medicinal uses; provides spring and fall color

### Sorbus americana (Pyrus americana)

American mountain ash

RHW, RHW



Height: 30-40'  
Spread:  
Flowers: May-Jul, white  
Fruit: Aug-Dec, orange, fleshy  
Fall color: orange, purple

Light:   
Moisture: M  
Soil pH: 5.3-6.8  
Soil type: C L S

areas from borders of swamps to rocky hillsides; openings, uplands along forest edges, roadsides

Region: M  
States: MD  
VA  
WV



slow-growing, short-lived; not drought or heat tolerant; plant at least 500 feet from cedars



Characteristics

























Conditions

Habitat

Native to

Wildlife

Notes

<p><b>Taxodium distichum</b></p> <p><i>bald cypress, cypress, swamp cypress</i></p> <p>USFWS BES</p>		<p>Height: 50-100' Spread: 20-35' Flowers: Mar-Apr, deep purple Fruit: Oct-Dec, brown, cone/cone-like Fall color: purple to brown</p>	<p>Light: </p> <p>Moisture:  W</p> <p>Soil pH: 4.5-6</p> <p>Soil type: C L S</p>	<p>rivers, lake and pond margins, swamps, coastal marshes, pocosins, river bottoms</p>	<p>Region: C</p> <p>States: DE MD VA</p>		<p>deciduous conifer</p>
<p><b>Thuja occidentalis</b></p> <p><i>arborvitae, northern white cedar</i></p> <p>USFWS BES</p>		<p>Height: 50-75' Spread: 35-50' Flowers: May, red brown Fruit: Aug-Dec, reddish-brown, cone/cone-like Fall color: evergreen</p>	<p>Light: </p> <p>Moisture:  M W</p> <p>Soil pH: 5.2-7</p> <p>Soil type: C L S</p>	<p>calcareous areas</p>	<p>Region: M</p> <p>States: NY VA</p>		<p>prefers wet calcareous areas</p>
<p><b>Tilia americana</b></p> <p><i>American basswood, linden</i></p> <p>PLANTS DEH, PLANTS DEH</p>		<p>Height: 70-100' Spread: 50-75' Flowers: Jun-Jul, yellow Fruit: Sep-Oct, tan brown, winged Fall color: yellow or brown</p>	<p>Light: </p> <p>Moisture:  M</p> <p>Soil pH: 4.5-7.5</p> <p>Soil type: L S</p>	<p>woods, slopes</p>	<p>Region: M</p> <p>States: DC DE MD NY PA VA WW</p>		<p>fragrant flowers; important pollen source for honey</p>
<p><b>Tsuga canadensis</b></p> <p><i>eastern hemlock</i></p> <p>USDA NRCS</p>		<p>Height: 75-100' Spread: 35-50' Flowers: May-Jun, tan brown Fruit: Sep-Jan, light brown, cone/cone-like Fall color: evergreen</p>	<p>Light: </p> <p>Moisture:  M</p> <p>Soil pH: 4.2-5.7</p> <p>Soil type: L S</p>	<p>cool valleys</p>	<p>Region: M P</p> <p>States: DE MD NY PA VA WW</p>	 <p>high wildlife value</p>	<p>susceptible to woolly adelgid and red spider mite; also T. caroliniana for VA</p>
<p><b>Ulmus americana</b></p> <p><i>American elm, white elm, soft elm</i></p> <p>USDA NRCS</p>		<p>Height: 75-100' Spread: 75-100' Flowers: Mar-Apr, red brown Fruit: May, tan brown, winged Fall color: bright yellow</p>	<p>Light: </p> <p>Moisture:  M W</p> <p>Soil pH: 5.5-8</p> <p>Soil type: C L S</p>	<p>river bottoms, swamps, disturbed fields, road sides, cutover forests</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WW</p>	 <p>high wildlife value</p>	<p>Dutch elm disease caused decline; distinctive vase shape; favorite nesting site of Baltimore oriole</p>
<p><b>Ulmus rubra</b></p> <p><i>slippery elm, red elm, soft elm</i></p> <p>UWI DMW</p>		<p>Height: 70' Spread: Flowers: Mar-May Fruit: winged Fall color: yellow</p>	<p>Light: </p> <p>Moisture:  D M</p> <p>Soil pH: 5.5-7</p> <p>Soil type: C L S</p>	<p>moist slopes and bottomlands, drier sites on calcareous soils</p>	<p>Region: P</p> <p>States: DC DE MD NY PA VA WW</p>	 <p>high wildlife value</p>	

See also:

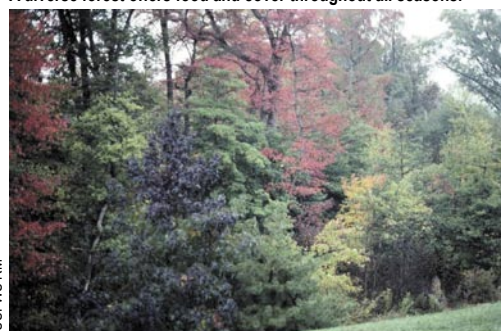
In the *Shrubs* section:

- Hamamelis virginiana
- Morella (Myrica) cerifera
- Rhododendron maximum
- Rhus copallina, hirta (typhina)
- Viburnum prunifolium

Cornus florida












































A diverse forest offers food and cover throughout all seasons.










Ilex opaca



# Vines

		Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<b>Aristolochia macrophylla</b> ( <i>A. durior</i> )  <i>pipevine,</i> <i>Dutchman's pipe</i>		Spread:  Flowers: May-Jun, yellowish to purplish  Fruit: green to brown, pod  Fall color: yellow green	Light:   Moisture: M Soil pH: 6.1-8.5 Soil type: L O	rich woods, streambanks	Region: M  States: VA  WV		occasionally escapes from cultivation; host for pipevine swallowtail butterfly
<b>Bignonia capreolata</b>  <i>crossvine</i>		Spread: 20-35'  Flowers: May-Jun, orange with red  Fruit: Aug-Oct, brown, pod  Fall color: semi-evergreen; reddish-purple	Light:   Moisture: D M W Soil pH: 6.1-8.5 Soil type: C L S	swampy forests, calcareous river banks, cliffs, dry open woods, bogs, fence rows, rock outcrops	Region: C  States: MD  VA	  	spreads across ground and climbs any structure it meets (control by cutting); semi-evergreen  
<b>Campsis radicans</b>  <i>trumpet vine,</i> <i>trumpet creeper</i>		Spread: 20-35'  Flowers: Jul-Sep, orange  Fruit: Aug-Mar, brown, pod  Fall color: yellow green	Light:   Moisture: D M Soil pH: 6.1-7.5 Soil type: C L S	moist woods, fence rows, roadside thickets, floodplain forests, rocky hillsides, open woods, streambanks, fields	Region: M P C  States: DC DE MD  PA VA		thick, twisted, aged woody vines; leaves/flowers may cause dermatitis (skin irritation)  
<b>Celastrus scandens</b>  <i>American bittersweet</i>		Spread: 6-20'  Flowers: May-Jun, greenish  Fruit: Sep-Dec, orange and red, capsule Fall color: yellow	Light:    Moisture: D M Soil pH: 6.1-7.5 Soil type: C L S	roadsides, forest edges, fence rows, pastures, hedges, bluffs, rocky slopes, dunes, sandy oak woods	Region: M P C  States: DC DE MD  NY PA VA  WV	  	distinguished from nonnative invasive Oriental bittersweet by flowers/fruits in clusters at ends of twigs  
<b>Clematis viorna</b>  <i>leather flower,</i> <i>vasevine</i>		Spread:  Flowers: May-Aug, purple  Fruit: Aug-Nov, dark brown, achene (dry, flat seed) Fall color:	Light:    Moisture: D M Soil pH: Soil type:	rich wooded banks, thickets	Region: P  States: DC DE MD  VA  WV		feathery seeds
<b>Clematis virginiana</b>  <i>virgin's bower</i>		Spread: 6-12'  Flowers: Jul-Sep, white  Fruit: Aug-Nov, brown, achene (dry, flat seed) Fall color: yellow, green or purplish	Light:    Moisture: D M Soil pH: 6.1-8.5 Soil type: C L S O	fencerows, riverbanks, thickets, woods edge, roadside swales, swamps, overhanging cliffs	Region: M P C  States: DC DE MD  NY PA VA  WV		fragrant flowers; feathery seeds; young plants can be transplanted; yellow, green or purplish fall color
<b>Lonicera sempervirens</b>  <i>trumpet or coral honeysuckle</i>		Spread: 6-12'  Flowers: Apr-Oct, coral to red with yellow  Fruit: Aug-Mar, red, berry  Fall color: semi-evergreen	Light:   Moisture: D M Soil pH: 6.1-7.5 Soil type: C L S	thickets, fence rows, open woods, dry stony woods, forest edges, cliffs	Region: M P C  States: DC DE MD  NY VA	   	flowers intermittently until frost; flowers/fruits present together; transplants well; may have aphids - hose off, snip new growth and damaged buds; semi-evergreen  
<b>Mikania scandens</b>  <i>climbing hempvine</i>		Spread:  Flowers: Jun-Oct, pink or whitish  Fruit: blue  Fall color:	Light:  Moisture: M W Soil pH: 5.7-7.5 Soil type: C L	swamps, thickets	Region: M P C  States: DC DE MD  NY VA		vines herbaceous, not woody



	Characteristics	Conditions	Habitat	Native to	Wildlife	Notes
<p><b>Parthenocissus quinquefolia</b></p> <p><i>Virginia creeper</i></p> <p>RHW, USFWS BES</p> 	<p>Spread: 25-35'</p> <p>Flowers: Jun-Aug, greenish white</p> <p>Fruit: Sep-Feb, bluish black, berry</p> <p>Fall color: purple to crimson</p>	<p>Light: ☀️ ☁️ 🌑</p> <p>Moisture: D M W</p> <p>Soil pH: 5.1-7.5</p> <p>Soil type: C L S</p>	<p>fence rows, forest edges, open woods, ravines, bluffs, cliffs</p>	<p>Region: M P C</p> <p>States: DC DE MD NY PA VA WV</p>	 high wildlife value	<p>bank stabilizer; control by trimming; fruits eaten by variety of wildlife; purple to crimson fall color</p> <p><b>GC</b></p>
<p><b>Passiflora incarnata</b></p> <p><i>passionflower, Maypops</i></p> <p>RHW</p> 	<p>Spread:</p> <p>Flowers: Jun-Sep, purple and white</p> <p>Fruit: Sep-Oct, yellow, fleshy</p> <p>Fall color:</p>	<p>Light: ☀️</p> <p>Moisture: D M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>fields, rocky slopes, thin woods, roadsides, fencerows, thickets</p>	<p>Region: C</p> <p>States: MD VA</p>		<p>herbaceous vine; large fleshy berry edible; fragrant</p>
<p><b>Smilax herbacea</b></p> <p><i>smooth carrion flower</i></p> <p>RHW, RHW</p> 	<p>Spread:</p> <p>Flowers: Apr-Jun, greenish-yellow</p> <p>Fruit: Jul-Nov, blue-black, berry</p> <p>Fall color:</p>	<p>Light: ☀️</p> <p>Moisture: M</p> <p>Soil pH:</p> <p>Soil type: C L S</p>	<p>thickets, woods, floodplains</p>	<p>Region: M P C</p> <p>States: DC DE MD NY WV</p>		<p>herbaceous, climbing vine, not prickly; flower malodorous; male and female plants separate</p>
<p><b>Wisteria frutescens</b></p> <p><i>Atlantic wisteria, American wisteria</i></p> <p>SMSU, SMSU</p> 	<p>Spread:</p> <p>Flowers: Apr-Aug, lilac</p> <p>Fruit: brown, pod</p> <p>Fall color:</p>	<p>Light: ☀️ ☁️</p> <p>Moisture: M W</p> <p>Soil pH: 4-7</p> <p>Soil type: C L S</p>	<p>forest and forested swamp edges, streambanks, thickets</p>	<p>Region: C</p> <p>States: DE VA</p>		

See also:

In the *Herbaceous Plants* section:  
**Clitoria mariana**

Characteristic pipe-shaped flower of **Aristolochia macrophylla**.



**Lonicera sempervirens** may bloom year-round.



**Bignonia capreolata** in bloom adorns a porch.



**Parthenocissus quinquefolia** used as a groundcover.





# Plants With a Purpose

This section includes lists of plant combinations that can be used to mimic the natural communities of plants found in wetlands, meadows, forests, etc. They can be used to create, restore or enhance existing habitat for wildlife. Also included are plants that can be used in solving problems such as stabilizing soils, or for specific landscaping uses. No matter what the purpose, it is imperative that species are chosen to suit planting site conditions and the physiographic location of the site. None of these lists are complete – there are additional suitable plants in this guide (and even more native species not included in this publication) that would suit these purposes. This document is intended to give project planners guidance in choosing appropriate plants for various projects, and additional learning is encouraged. For the most ecologically “correct” habitat restoration projects, consultation with professionals is recommended, as there are other factors to consider that are not addressed here.

## Plants For Coastal Dunes

---

Note: the shrubs and trees listed would occur on the inner or secondary dunes and/or on interdunal swales.

### Grasses and Grasslike Plants

*Ammophila breviligulata*  
*Panicum amarum* (and var. *amarulum*)  
*Spartina patens*  
*Panicum virgatum*

### Herbaceous Plants

*Baptisia tinctoria*  
*Liatris pilosa* v. *pilosa* (*graminifolia*)  
*Nuttallanthus canadensis* (*Linaria canadensis*)  
*Opuntia humifusa* (*compressa*)  
*Oenothera biennis*  
*Solidago sempervirens*  
*Yucca filamentosa* (*flaccida*)

### Shrubs

*Baccharis halimifolia*  
*Morella* (*Myrica*) *cerifera*, *pensylvanica*  
*Prunus maritima*  
*Rhus copallina*  
*Rosa carolina*

### Trees

*Acer rubrum*  
*Amelanchier arborea*  
*Diospyros virginiana*  
*Juniperus virginiana*  
*Pinus rigida*  
*Prunus pensylvanica*, *serotina*

### Vines

*Celastrus scandens*  
*Parthenocissus quinquefolia*

## Plants For Saltwater or Brackish Water Marshes

---

Plants in this list can be used for marsh plantings or to stabilize tidal fresh, brackish or saltwater shorelines based on salinity and wetness tolerances. Check the salinity and moisture requirements given in this publication for each plant, so they will be planted in the appropriate conditions. Those species for use in salinity greater than 15 ppt are marked (\*).

### Grasses and Grasslike Plants

*Ammophila breviligulata* \*  
*Distichlis spicata* \*  
*Juncus canadensis*  
*Juncus roemerianus* \*  
*Panicum amarum* (and var. *amarulum*) \*  
*Panicum virgatum*  
*Schoenoplectus pungens* v. *pungens* (*Scirpus pungens*, *americanus*)  
*Schoenoplectus* (*Scirpus*) *validus*  
*Spartina alterniflora* \*  
*Spartina cynosuroides*  
*Spartina patens* \*  
*Spartina pectinata*

Note: Although grasslike, *Distichlis*, *Juncus*, *Schoenoplectus*, and *Spartina* species information can be found in the Herbaceous Emergents section of the guide.

### Herbaceous Plants

*Agalinus purpurea*  
*Limonium carolinianum*  
*Solidago sempervirens* \*

### Herbaceous Emergents

*Hibiscus moscheutos* (*palustris*)  
*Iris prismatica*, *versicolor*, *virginica*  
*Kosteletzkya virginica*  
*Peltandra virginica*  
*Pontederia cordata*

### Shrubs

*Baccharis halimifolia* \*  
*Iva frutescens* \*  
*Morella* (*Myrica*) *cerifera* \*, *pensylvanica* \*

## Plants for Freshwater Wetlands and Other Wet Sites

---

The following plants may be used to create or enhance freshwater marshes or swamps or to stabilize and enhance streambanks, riverbanks or pond edges.

Remember to match the plants' growth requirements with the site conditions. Wetness tolerated by these plants is provided in this guide in terms of frequency and duration of soil saturation or inundation (flooding), and depth of standing water.

### Ferns

*Athyrium filix-femina*  
*Dryopteris carthusiana* (*spinulosa*), *cristata*, *intermedia*  
*Onoclea sensibilis*  
*Osmunda cinnamomea*, *regalis*  
*Pteridium aquilinum*  
*Thelypteris noveboracensis*, *palustris*  
*Woodwardia areolata*, *virginica*

### Grasses and Grasslike Plants

*Agrostis perennans*  
*Andropogon gerardii*, *glomeratus*, *virginicus*  
*Calamagrostis canadensis*  
*Carex crinita* var. *crinita*, *lurida*, *stricta*, *vulpinoidea*  
*Dichanthelium clandestinum*  
*Elymus riparius*  
*Festuca rubra*  
*Leersia oryzoides*  
*Panicum virgatum*  
*Saccharum giganteum* (*Erianthus giganteus*)  
*Tripsacum dactyloides*

### Herbaceous Plants

*Arisaema triphyllum*  
*Asclepias incarnata*  
*Caltha palustris*  
*Chelone glabra*  
*Conoclinium* (*Eupatorium*) *coelestinum*  
*Doellingeria umbellata* var. *umbellata* (*Aster umbellatus*)  
*Eupatorium dubium*, *perfoliatum*  
*Gentiana clausa*  
*Helianthus angustifolius*  
*Heracleum maximum* (*lanatum*)  
*Impatiens capensis* (*biflora*)  
*Lobelia cardinalis*, *siphilitica*  
*Mertensia virginica*  
*Mimulus ringens*  
*Monarda didyma*  
*Packera aurea* (*Senecio aureus*)  
*Phlox maculata*  
*Rudbeckia laciniata*

*Saxifraga pensylvanica*  
*Scutellaria integrifolia*  
*Sisyrinchium atlanticum*  
*Spiranthes cernua*  
*Stachys tenuifolia* (*hispida*)  
*Symphotrichum* (*Aster*) *novae-angliae*, *novi-belgii*  
*Symplocarpus foetidus*  
*Thalictrum pubescens* (*polygamum*)  
*Veratrum viride*  
*Verbena hastata*  
*Vernonia noveboracensis*  
*Veronicastrum virginicum* (*Veronica virginica*)  
*Viola conspersa*, *cucullata*, *striata*

### Herbaceous Emergents

*Dulichium arundinaceum*  
*Hibiscus moscheutos* (*palustris*)  
*Iris prismatica*, *versicolor*, *virginica*  
*Juncus effusus*  
*Justicia americana*  
*Nuphar lutea* (*advena*)  
*Nymphaea odorata*  
*Orontium aquaticum*  
*Peltandra virginica*  
*Pontederia cordata*  
*Sagittaria latifolia*  
*Saururus cernuus*  
*Schoenoplectus* (*Scirpus*) *validus*  
*Scirpus atrovirens*, *cyperinus*  
*Sparganium americanum*  
*Spartina pectinata*  
*Zizania aquatica*

### Shrubs

*Alnus serrulata*  
*Cephalanthus occidentalis*  
*Clethra alnifolia*  
*Cornus amomum*  
*Gaylussacia baccata*, *frondosa*  
*Hypericum densiflorum*  
*Ilex verticillata*  
*Itea virginica*  
*Kalmia angustifolia*, *latifolia*  
*Leucothoe racemosa*  
*Lindera benzoin*  
*Lyonia ligustrina*  
*Morella* (*Myrica*) *caroliniensis* (*heterophylla*), *cerifera*, *pensylvanica*  
*Photinia* (*Aronia*) *melanocarpa*, *pyrifolia* (*arbutifolia*)  
*Physocarpus opulifolius*  
*Rhododendron maximum*, *periclymenoides*, *viscosum*  
*Rosa palustris*  
*Rubus allegheniensis*

*Salix humilis*  
*Sambucus nigra* ssp. *canadensis* (*S. canadensis*)  
*Spiraea alba* v. *latifolia* (*latifolia*), *tomentosa*  
*Vaccinium corymbosum*, *macrocarpon*  
*Viburnum dentatum* (*recognitum*), *nudum*, *nudum* v. *cassinoides* (*cassinoides*), *prunifolium*

### Trees

*Acer negundo*, *rubrum*, *saccharinum*  
*Amelanchier canadensis*  
*Betula alleghaniensis*, *nigra*  
*Carpinus caroliniana*  
*Carya cordiformis*, *glabra*  
*Celtis occidentalis*  
*Chamaecyparis thyoides*  
*Crataegus viridis*  
*Fraxinus pennsylvanica*  
*Liquidambar styraciflua*  
*Magnolia virginiana*  
*Nyssa sylvatica*  
*Pinus serotina*, *strobus*, *taeda*  
*Platanus occidentalis*  
*Populus deltoides*, *heterophylla*  
*Quercus bicolor*, *michauxii* (*montana*), *nigra*, *palustris*, *phellos*  
*Salix nigra*, *sericea*  
*Taxodium distichum*  
*Thuja occidentalis*  
*Tsuga canadensis*  
*Ulmus americana*

### Vines

*Bignonia capreolata*  
*Mikania scandens*  
*Parthenocissus quinquefolia*  
*Wisteria frutescens*

## Plants Appropriate for Bogs or Bog Gardens

---

### Ferns

*Athyrium filix-femina*  
*Onoclea sensibilis*  
*Osmunda cinnamomea*  
*Thelypteris noveboracensis*, *palustris*  
*Woodwardia areolata*

### Grasses and Grasslike Plants

*Calamagrostis canadensis*  
*Carex stricta*  
*Leersia oryzoides*

### Herbaceous Plants

*Arisaema triphyllum*  
*Caltha palustris*  
*Chelone glabra*  
*Doellingeria umbellata* var. *umbellata* (*Aster umbellatus*)  
*Eupatorium dubium*, *perfoliatum*  
*Gentiana clausa*  
*Saxifraga pensylvanica*  
*Scutellaria integrifolia*  
*Spiranthes cernua*  
*Symplocarpus foetidus*  
*Veratrum viride*  
*Viola cucullata*

### Herbaceous Emergents

*Dulichium arundinaceum*  
*Juncus effusus*  
*Orontium aquaticum*  
*Sagittaria latifolia*  
*Scirpus atrovirens*, *cyperinus*  
*Sparganium americanum*

### Shrubs

*Clethra alnifolia*  
*Gaultheria procumbens*  
*Hypericum densiflorum*  
*Kalmia angustifolia*  
*Morella caroliniensis* (*Myrica heterophylla*)  
*Photinia* (*Aronia*) *melanocarpa*, *pyrifolia* (*arbutifolia*)  
*Rhododendron viscosum*  
*Salix humilis*  
*Spiraea alba*, *alba* v. *latifolia* (*latifolia*)  
*Spiraea tomentosa*  
*Vaccinium corymbosum*, *macrocarpon*  
*Viburnum dentatum* (*recognitum*), *nudum*, *nudum* v. *cassinoides* (*cassinoides*)

### Trees

*Acer rubrum*  
*Chamaecyparis thyoides*  
*Nyssa sylvatica*

### Vines

*Bignonia capreolata*

## Plants for Dry Meadows

---

### Grasses and Grasslike Plants

*Andropogon gerardii*  
*Danthonia spicata*  
*Elymus canadensis*, *riparius*, *virginicus*  
*Schizachyrium scoparium* (*Andropogon scoparius*)  
*Sorghastrum nutans*  
*Tridens flavus*

### Herbaceous Plants

*Ageratina altissima* v. *altissima* (*Eupatorium rugosum*)  
*Antennaria neglecta*  
*Asclepias syriaca*, *tuberosa*  
*Chamaecrista* (*Cassia*) *fasciculata*  
*Conoclinium* (*Eupatorium*) *coelestinum*  
*Coreopsis tripteris*, *verticillata*  
*Desmodium paniculatum*  
*Dodecatheon meadia*  
*Erigeron pulchellus*  
*Eupatorium hyssopifolium*, *purpureum*  
*Heliopsis helianthoides*  
*Ionactis* (*Aster*) *linariifolius*

*Lespedeza capitata*  
*Liatris spicata*, *squarrosa*  
*Lupinus perennis*  
*Monarda bradburiana* (*fistulosa*), *punctata*  
*Nuttallanthus* (*Linaria*) *canadensis*  
*Oenothera biennis*, *fruticosa*, *perennis*  
*Penstemon digitalis*  
*Pycnanthemum incanum*  
*Rudbeckia fulgida*, *hirta*, *triloba*  
*Solidago canadensis*, *canadensis* v. *scabra* (*altissima*), *juncea*, *nemoralis*, *speciosa*  
*Symphotrichum* (*Aster*) *cordifolius*, *ericoides* var. *ericoides*, *laeve* var. *laeve* (*laevis*), *novae-angliae*

### Shrubs

Note: Listed are a few of the shorter shrubs that may appear in or at the edges of meadows. Using shrubs in a planting that is to remain as a meadow is not recommended, as they provide perching spots for birds, whose droppings will seed in unwanted plants, including trees. If the meadow is to be allowed to succeed eventually to forest, then adding shrubs is one prescribed method.

*Ceanothus americanus*  
*Comptonia peregrina*  
*Rhus glabra*  
*Rosa carolina*  
*Rubus allegheniensis*



## Plants for Wet Meadows

---

### Ferns

*Oncoclea sensibilis*  
*Osmunda cinnamomea*  
*Thelypteris palustris*

### Grasses and Grasslike Plants

*Andropogon gerardii, virginicus*  
*Calamagrostis canadensis*  
*Carex glaucoidea, stricta*  
*Elymus riparius*  
*Leersia oryzoides*  
*Panicum virgatum*  
*Tripsacum dactyloides*

### Herbaceous Plants

*Agalinis purpurea*  
*Asclepias incarnata*  
*Caltha palustris*  
*Doellingeria umbellata* var. *umbellata* (*Aster umbellatus*)  
*Gentiana clausa*

*Eupatorium fistulosum, maculatum, perfoliatum*  
*Helenium autumnale*  
*Impatiens capensis* (*I. biflora*)  
*Lilium canadense, superbum*  
*Lobelia cardinalis, siphilitica*  
*Mimulus ringens*  
*Packera aurea* (*Senecio aureus*)  
*Phlox maculata*  
*Rudbeckia laciniata*  
*Sabatia angularis*  
*Scutellaria integrifolia*  
*Silphium perfoliatum*  
*Sisyrinchium atlanticum*  
*Solidago rugosa*  
*Spiranthes cernua*  
*Stachys tenuifolia* (*hispida*)  
*Symphotrichum* (*Aster*) *novi-belgii*  
*Thalictrum pubescens* (*polygamum*)  
*Verbena hastata*  
*Viola conspersa*  
*Viola striata*

### Herbaceous Emergents

*Iris prismatica, versicolor, virginica*  
*Juncus effusus*  
*Scirpus atrovirens, cyperinus*  
*Spartina pectinata*

### Shrubs

Note: Listed are a few of the shorter shrubs that may appear in or at the edges of meadows. Using shrubs in a planting that is to remain as a meadow is not recommended, as they provide perching spots for birds, whose droppings will seed in unwanted plants, including trees. If the meadow is to be allowed to succeed eventually to forest, then adding shrubs is one prescribed method.

*Cephalanthus occidentalis*  
*Ilex verticillata*  
*Rhododendron viscosum*  
*Rosa palustris*  
*Spiraea tomentosa*

## Plants for Forest or Woodland Plantings

---

Forests contain a diversity of plant types arranged in vertical layers, from the tallest (canopy or overstory) trees, through the understory of shorter trees and shrubs, to the forest floor or ground layer of low shrubs and herbaceous plants. Forest types are classified by the dominant trees present (e.g., oak-hickory-pine forest). Plant species occurring together in these different forest types are a function of the climate, altitude, geology and physiographic location, soil type, moisture, sunlight, and other conditions. So many combinations of plants occur in these different forests that space limitations prevent listing them all. Instead, the following represent plants found in a few of the more common forest types in the Chesapeake Bay watershed. These lists provide the basis for a viable forest or woodland project. Common ferns, grasses and herbaceous plants for the ground layer are listed separately, as they may occur in many of the forest types in various combinations. Remember to match the plants' growth requirements with the site conditions.

For new projects at open sites, it may take years for young trees to provide adequate shade. Consult other restoration resources and/or professionals for alternative methods

of developing the ground layer, and for more comprehensive forest community information.

### Forest Types, Basic Structure

#### Oak-Mixed Forest (Coastal Plain)

##### Canopy trees for well-drained sites

*Carya cordiformis, tomentosa*  
*Quercus alba, falcata, marilandica, phellos,*  
*pinus, stellata, velutina*  
*Pinus* species, occasional intermixed with the above

##### Canopy trees for moist sites

*Acer rubrum*  
*Fagus grandifolia*  
*Quercus bicolor, michauxii, nigra, palustris,*  
*phellos*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Nyssa sylvatica*

##### Understory trees

*Asimina triloba*  
*Cercis canadensis*  
*Cornus florida*  
*Ilex opaca*  
*Magnolia virginiana*

#### Understory shrubs

*Comptonia peregrina*  
*Gaylussacia frondosa*  
*Ilex glabra*  
*Kalmia angustifolia, latifolia*  
*Morella* (*Myrica*) *cerifera, pensylvanica*  
*Vaccinium pallidum* (*vacillans*), *stamineum*  
*Viburnum dentatum* (*recognitum*), *prunifolium*

#### Pine Forest (Coastal Plain)

##### Overstory trees

*Pinus taeda, virginiana, rigida* (occasional)

##### Understory trees

*Ilex opaca*  
*Sassafras albidum*

##### Understory shrubs

*Clethra alnifolia*  
*Morella* (*Myrica*) *cerifera, pensylvanica*  
*Rhus copallina*

**Oak-Hickory Forest** (Piedmont and Mountain, occasional on Coastal Plain)

**Dominant overstory trees**

*Carya cordiformis, ovata*  
*Quercus alba, prinus, rubra, velutina*

**Other trees**

*Amelanchier arborea, canadensis*  
*Carya alba, glabra, tomentosa*  
*Celtis occidentalis*  
*Cercis canadensis*  
*Cornus florida*  
*Crataegus viridis*  
*Fraxinus Americana*  
*Juglans nigra*  
*Prunus serotina*  
*Quercus coccinea, falcata, lyrata, marilandica, muhlenbergii, stellata*  
*Sassafras albidum*  
*Tilia americana*  
*Ulmus Americana*

**Additional trees for more moist sites**

*Acer rubrum*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Ulmus americana*

**Shrubs**

*Kalmia latifolia*  
*Vaccinium angustifolium, corymbosum, pallidum (vacillans), stamineum*  
*Viburnum acerifolium*

**Red Oak - Mixed Hardwood Forest** (Piedmont)

**Dominant overstory trees**

*Acer rubrum*  
*Carya ovata, tomentosa*  
*Betula alleghaniensis (lutea), lenta*  
*Fraxinus americana*  
*Fagus grandifolia*  
*Liriodendron tulipifera*  
*Quercus alba, rubra, velutina*  
*Pinus strobus\**  
*Tsuga canadensis\**

\* These would be in the Hemlock-White Pine-Red Oak-Mixed Hardwood Forest (Piedmont and Mountain regions).

**Understory trees and shrubs**

*Amelanchier species*  
*Carpinus caroliniana*  
*Hamamelis virginiana*  
*Lindera benzoin*  
*Viburnum acerifolium, dentatum (recognitum)*

**Hemlock-White Pine Forest** (Mountain)

**Dominant overstory trees**

*Acer saccharum*  
*Betula alleghaniensis (lutea)*  
*Fagus grandifolia*  
*Pinus strobus*  
*Tilia americana*  
*Tsuga canadensis*  
also *Picea rubens* (red spruce, not included in this guide, but native in the Bay watershed in mountain region)

**Other trees**

*Acer rubrum*  
*Betula lenta*  
*Liriodendron tulipifera*  
*Quercus rubra, velutina*

**Shrubs**

*Hamamelis virginiana*  
*Rhododendron maximum*  
*Viburnum acerifolium*

**Mixed Mesophytic Forest** (Mountain)

These forests are relicts of ancient mesic (moist) broadleaf deciduous forests. They can be very diverse.

**Dominant overstory trees**

*Acer saccharum*  
*Betula lenta*  
*Carya ovata*  
*Carpinus caroliniana*  
*Fagus grandifolia*  
*Fraxinus americana*  
*Juglans nigra*  
*Liriodendron tulipifera*  
*Magnolia acuminata*  
*Prunus serotina*  
*Quercus rubra*  
*Tilia americana*

**Understory trees and shrubs**

*Cercis canadensis*  
*Hamamelis virginiana*  
*Hydrangea arborescens*  
*Lindera benzoin*  
*Rhododendron maximum*  
*Staphylea trifolia*

**Woodland Floor or Ground Layer Plants**

These plants can also be used for gardens in or adjacent to wooded areas. Refer to specific habitat and growing conditions to match plants in appropriate groupings.

**Ferns**

All species included in this guide occur in woodlands.

**Grasses and Grasslike Plants**

*Agrostis perennans*  
*Andropogon gerardii*  
*Carex crinita var. crinita, glaucodea, lurida, pensylvanica, vulpinoidea*  
*Chasmanthium latifolium*  
*Danthonia spicata*  
*Dichanthelium clandestinum, commutatum*  
*Elymus hystrix (Hystrix patula)*  
*Festuca rubra*  
*Panicum virgatum*  
*Saccharum giganteum (Erianthus giganteus)*  
*Schizachyrium scoparium (Andropogon scoparius)*  
*Sorghastrum nutans*  
*Tridens flavus*  
*Tripsacum dactyloides*

**Herbaceous Plants**

*Actaea pachypoda*  
*Ageratina altissima v. altissima (Eupatorium rugosum)*  
*Aquilegia canadensis*  
*Aralia nudicaulis, racemosa*  
*Arisaema triphyllum*  
*Aruncus dioicus*  
*Asarum canadense*  
*Campanulastrum americanum (Campanula americana)*  
*Cardamine concatenata (Dentaria laciniata)*  
*Caulophyllum thalictroides*  
*Chelone glabra*  
*Chimaphila maculata*  
*Chrysogonum virginianum*  
*Cimicifuga racemosa*  
*Claytonia virginica*  
*Delphinium tricorne*  
*Dicentra canadensis, cucullaria, eximia*  
*Erythronium americanum*  
*Eurybia divaricata (Aster divaricatus)*  
*Geranium maculatum*  
*Helenium autumnale*  
*Helianthus divaricatus*  
*Heliopsis helianthoides*  
*Hepatica nobilis var. acuta (acutiloba), var. obtusa (americana)*  
*Heracleum maximum (lanatum)*  
*Heuchera americana, villosa*

(continued)

*Hydrophyllum virginianum*  
*Impatiens capensis* (biflora)  
*Ionactis* (*Aster*) *linariifolius*  
*Jeffersonia diphylla*  
*Liatris scariosa*  
*Lilium canadense*, *philadelphicum*  
*Maianthemum canadense*, *racemosum*  
 (*Smilacina racemosa*)  
*Medeola virginiana*  
*Melanthium virginicum*  
*Mertensia virginica*  
*Mitchella repens*  
*Mitella diphylla*  
*Monarda didyma*  
*Osmorhiza longistylis*  
*Oxalis violacea*  
*Packera aurea* (*Senecio aureus*)

*Penstemon laevigatus*  
*Phlox carolina*, *divaricata*, *stolonifera*  
*Podophyllum peltatum*  
*Polemonium reptans*  
*Polygonatum biflorum*, *pubescens*  
*Sanguinaria canadensis*  
*Saxifraga pensylvanica*, *virginiensis*  
*Scutellaria integrifolia*  
*Sedum ternatum*  
*Silene caroliniana*, *stellata*, *virginica*  
*Solidago caesia*, *flexicaulis*, *rugosa*  
*Stachys tenuifolia* (*hispidula*)  
*Stellaria pubera*  
*Thalictrum dioicum*, *pubescens* (*polygamum*),  
*thalictroides* (*Anemonella t.*)  
*Tiarella cordifolia*

*Tradescantia virginiana*  
*Trillium erectum*, *grandiflorum*, *sessile*,  
*undulatum*  
*Uvularia grandiflora*, *perfoliata*, *sessilifolia*  
*Veratrum viride*  
*Viola conspersa*, *hastata*, *pubescens*  
 (*pennsylvanica*), *sororia* (*papilionacea*), *striata*  
*Zizia aurea*

### Vines

Any of the vines included in this guide may be found in woodlands, occupying various vegetative layers, from the ground up.

## Solutions for Slopes

Slopes of any kind are prone to erosion from rain, runoff; wave action, stream or river currents, and foot or lawnmower traffic. Plants with deep, spreading root systems help prevent erosion by holding soil in place. Some plants that are particularly well suited to and recommended for holding or stabilizing soils on a dry upland slope or hillsides such as a sloping yard or road embankment are listed below.

However, any plant suited to the site's sun, soil, and moisture conditions that could be planted on a flat surface could be planted on a slope, as long as the slope is accessible. Plants that naturally occur on slopes or hillsides can be found by searching the "habitat" notes provided with each plant in this guide.

For plants to use on a tidal shoreline, see the list of saltmarsh or freshwater marsh plants. For plants to use on a stream, pond or riverbank, see the list of freshwater marsh plants.

## Plants That Provide Stabilization on Dry, Sunny Slopes or Hillsides

### Grasses & Grasslike Plants

*Ammophila breviligulata*  
*Andropogon gerardii*  
*Dichanthelium clandestinum*  
*Elymus canadensis*  
*Panicum virgatum*  
*Panicum amarum*  
*Schizachyrium scoparium*

### Herbaceous Plants

Any of the herbaceous plants that thrive in a sunny, dry site tend to be deep-rooted and would provide good slope stabilization. See the dry meadow plants list on for additional choices.

*Baptisia tinctoria*  
*Lespedeza capitata*  
*Chamaecrista* (*Cassia*) *fasciculata*

### Shrubs

*Comptonia peregrina*  
*Ceanothus americanus*  
*Clethra alnifolia*  
*Cornus racemosa*  
*Gaylussacia baccata*, *frondosa*

*Hypericum densiflorum*  
*Kalmia latifolia*  
*Morella pensylvanica*  
*Physocarpus opulifolius*  
*Rhus aromatica*  
*Rhus copallina*  
*Rhus glabra*  
*Rosa carolina*  
*Rubus allegheniensis*  
*Vaccinium angustifolium*  
*Viburnum acerifolium*

### Trees

The following are some of the tree species that may occur on slopes. However, for stabilization purposes, practitioners recommend planting herbaceous plants and shrubs, as trees will appear in time through succession.

*Acer rubrum*, *saccharum*, *spicatum*  
*Amelanchier arborea*  
*Betula lenta*  
*Carya alba* (*tomentosa*), *cordiformis*, *glabra*,  
*ovata*

*Castanea pumila*  
*Celtis occidentalis*  
*Chionanthus virginicus*  
*Cornus alternifolia*, *florida*  
*Crataegus crus-galli*  
*Fraxinus americana*  
*Juglans nigra*  
*Liquidambar styraciflua*  
*Liriodendron tulipifera*  
*Magnolia acuminata*  
*Morus rubra*  
*Nyssa sylvatica*  
*Ostrya virginiana*  
*Pinus rigida*, *taeda*  
*Quercus coccinea*  
*Quercus marilandica*, *michauxii*, *muehlenbergii*,  
*prinus*, *rubra*, *velutina*  
*Sorbus* (*Pyrus*) *americana*  
*Ulmus rubra*

### Vines

*Campsis radicans*  
*Celastrus scandens*  
*Passiflora incarnata*  
*Parthenocissus quinquefolia*



## Evergreens

---

### Ferns

*Asplenium platyneuron*  
*Dryopteris carthusiana* (*spinulosa*), *crinata*,  
*intermedia*, *marginalis*  
*Polystichum acrostichoides*

### Herbaceous Plants

*Asarum canadense*  
*Goodyera pubescens*  
*Heuchera americana*  
*Mitchella repens*  
*Phlox carolina*, *stolonifera*, *subulata*  
*Sedum ternatum*

*Silene caroliniana*  
*Solidago sempervirens*  
*Yucca filamentosa* (*flaccida*)

### Shrubs

*Gaultheria procumbens*  
*Ilex glabra*  
*Kalmia angustifolia*, *latifolia*  
*Morella* (*Myrica*) *caroliniensis* (*heterophylla*),  
*cerifera*  
*Rhododendron maximum*  
*Vaccinium macrocarpon*

### Trees

*Chamaecyparis thyoides*  
*Ilex opaca*  
*Juniperus virginiana*  
*Magnolia virginiana*  
*Pinus any species in this guide*  
*Thuja occidentalis*  
*Tsuga canadensis*

### Vines

*Bignonia capreolata*  
*Lonicera sempervirens*

## Plants to use as Groundcovers

---

### Ferns

Any species in this guide

### Grasses and Grasslike Plants

*Carex glaucoidea*, *pensylvanica*  
*Danthonia spicata*  
*Festuca rubra*

### Herbaceous Plants

*Aquilegia canadensis*  
*Asarum canadense*  
*Chimaphila maculata*  
*Chrysogonum virginianum*  
*Chrysopsis mariana*  
*Coreopsis verticillata*

*Erigeron pulchellus*  
*Eurybia divaricata* (*Aster divaricatus*)  
*Geranium maculatum*  
*Hepatica nobilis* var. *acuta* (*acutiloba*), *nobilis*  
var. *obtusa* (*americana*)  
*Heuchera americana*, *villosa*  
*Hylotelephium* (*Sedum*) *telephioides*  
*Maianthemum canadense*  
*Mitchella repens*  
*Opuntia humifusa* (*compressa*)  
*Oxalis violacea*  
*Phlox carolina*, *stolonifera*, *subulata*  
*Podophyllum peltatum*  
*Polemonium reptans*  
*Sedum ternatum*

*Silene caroliniana*  
*Tiarella cordifolia*  
*Uvularia sessilifolia*  
*Viola conspersa*, *cucullata*, *hastata*, *pedata*

### Shrubs

*Gaultheria procumbens*  
*Vaccinium angustifolium*, *macrocarpon*  
*Vaccinium pallidum* (*vacillans*)

### Vines

*Bignonia capreolata*  
*Campsis radicans*  
*Celastrus scandens*  
*Parthenocissus quinquefolia*

## Plants for Spring and Fall Color

---

A search through this guide will reveal literally hundreds of plants of all types that will flower or fruit in spring or fall, providing a wide variety of choices to color a native landscaping project and to offer a diversity of food for wildlife. Remember to consider trees, shrubs and vines when choosing plants for their flower color; and to include fruit color in the palette. The fall color of many plants, particularly grasses, trees, shrubs and vines adds interest to the landscape. A landscape planned for seasonal color, throughout *all* seasons of the year, can also provide year-round food, cover and nesting structure for wildlife.

## Deer Resistant Plants

---

Gardeners challenged by browsing deer often look for a definitive list of plants that deer will leave alone. Unfortunately, deer are not quite that predictable. In areas where high populations of deer have over-browsed the woodland understory, they are likely to eat any plant they can find to survive. Gardeners and habitat restorationists are strongly encouraged to use other appropriate barriers to exclude deer, in consultation with a local wildlife agency. Plants marked with an asterisk (\*) may be browsed occasionally.

The list below was compiled from Bowman's Hill Wildflower Preserve and Deer Proofing Your Yard (Hart), see references.

### Grasses and Grasslike Plants

*Andropogon gerardii*  
*Panicum virgatum*

### Herbaceous Plants

*Actaea pachypoda*  
*Allium cernuum*  
*Aquilegia canadensis*  
*Arisaema triphyllum*  
*Aruncus dioicus*  
*Asarum canadense* \*  
*Asclepias tuberosa*  
*Baptisia australis*  
*Campanulastrum americanum* (*Campanula americana*)  
*Coreopsis tripteris*  
*Dicentra eximia*  
*Geranium maculatum*  
*Helenium autumnale*  
*Hibiscus moscheutos* (*H. palustris*)  
*Jeffersonia diphylla*  
*Lobelia cardinalis* \*, *siphilitica* \*  
*Lupinus perennis*  
*Monarda didyma*  
*Phlox divaricata, stolonifera*  
*Podophyllum peltatum* \*  
*Polemonium reptans*  
*Rudbeckia fulgida, hirta*  
*Solidago species*  
*Symphotrichum* (*Aster novae-angliae*)  
*Veronicastrum virginicum* (*Veronica virginica*)

### Herbaceous Emergents

*Iris prismatica, versicolor, virginica*

### Shrubs

*Aralia spinosa*  
*Clethra alnifolia*  
*Cornus amomum*  
*Hamamelis virginiana*  
*Hypericum densiflorum*  
*Ilex glabra, laevigata, verticillata*  
*Kalmia latifolia*  
*Leucothoe racemosa*  
*Lindera benzoin*  
*Morella* (*Myrica*) *cerifera, pensylvanica*  
*Ribes rotundifolium*  
*Spiraea alba, alba v. latifolia* (*latifolia*), *tomentosa*  
*Viburnum acerifolium, dentatum* (*recognitum*), *prunifolium*

### Trees

*Acer negundo, rubrum*  
*Amelanchier canadensis*  
*Betula nigra*  
*Carpinus caroliniana*  
*Cercis canadensis*  
*Cornus alternifolia*  
*Cornus florida* \*  
*Diospyros virginiana*  
*Fagus grandifolia*  
*Fraxinus americana, pennsylvanica*  
*Ilex opaca*  
*Juniperus virginiana*  
*Magnolia acuminata, virginiana*  
*Nyssa sylvatica*  
*Pinus* — any species in this guide  
*Quercus* — any species in this guide  
*Sambucus racemosa v. racemosa* (*S. pubens*)

### Vines

*Celastrus scandens*  
*Clematis virginiana* \*  
*Lonicera sempervirens*  
*Wisteria frutescens* \*

## Photographic Credits

All photographs in this publication were used with permission of the photographers. Most images are copyrighted by the photographers and/or the sources listed below, and may not be used for commercial purposes without prior written permission of the copyright holders. The U.S. Fish and Wildlife Service is grateful for the generosity and cooperation of these photographers.

Each photograph is marked with an abbreviated form for the corresponding photographer, due to space limitations. Those abbreviations are listed here in alphabetical order, followed by the full credit information.

**The Bugwood Network and Forestry Images** Image Archive and Database Systems, The University of Georgia-Warnell School of Forest Resources and College of Agricultural and Environmental Sciences-Department of Entomology. [www.bugwood.org](http://www.bugwood.org)  
BUG DJM David J. Moorhead  
BUG RFW Robert F. Wittwer

BZ Bob Zuberbuhler, [www.westernpawildflowers.com](http://www.westernpawildflowers.com)

CAB Carole Ann Barth, Heal Earth Gardens, Silver Spring, Maryland.

CM NRCS Christopher F. Miller, Regional Plant Materials Specialist, U.S. Department of Agriculture, Natural Resources Conservation Service, Somerset, New Jersey.

### Digital Flora of Texas Vascular Plant Image Library.

[www.csd.tamu.edu/FLORA/galfolks.htm](http://www.csd.tamu.edu/FLORA/galfolks.htm), or  
[www.texasflora.org](http://www.texasflora.org)

DFT DL David Lemke, The State University-San Marcos, Department of Biology Herbarium.

DFT HW Hugh Wilson, TAMU Herbarium, Texas A&M University.

GM ARS George McLellan, Species Study Group of the Middle Atlantic Chapter, American Rhododendron Society. [tjhsst.edu/~dhyatt/azaleas/atlantikum.html](http://tjhsst.edu/~dhyatt/azaleas/atlantikum.html)

MOBOT Missouri Botanical Garden. [www.mobot.org/gardeninghelp/planfinder/service.shtml](http://www.mobot.org/gardeninghelp/planfinder/service.shtml). Digital images in this database were contributed by Martha Hill, Glenn Kopp and Alan Stentz.

MP Dan Tanaglia, MissouriPlants. [www.missouriplants.com](http://www.missouriplants.com)

NYNHP Stephen M. Young, New York Natural Heritage Program. [www.dec.state.ny.us/website/dfwmr/heritage](http://www.dec.state.ny.us/website/dfwmr/heritage)

OSU Scott Biggs, Ohio State University. <http://PlantFacts.osu.edu>

PLANTS **USDA-NRCS. 2003. The PLANTS Database.** [plants.usda.gov/plants](http://plants.usda.gov/plants). National Plant Data Center. Baton Rouge, LA 70874-4490 USA. PLANTS Database images that were used in this guide were contributed by the following:

PLANTS 1995 U.S. Department of Agriculture Natural Resources Conservation Service. 1995 Midwestern Wetlands Flora.

PLANTS 1997 U.S. Department of Agriculture Natural Resources Conservation Service. 1997 Northeastern Wetlands Flora.

PLANTS DEH Herman, D.E. et al. 1996 North Dakota Tree Handbook. USDA NRCS. ND State Soil Conservation Committee. NDSU Extension and Western Area Power Administration. Bismark, ND.

PLANTS DL Douglas Ladd. U.S. Department of Agriculture Soil Conservation Service. 1989 Midwest Wetland Flora: Field Office Illustrated Guide to Plant Species. Midwest National Technical Center, Lincoln, NE.

PLANTS GAM Gary A. Monroe

PLANTS GFR George F. Russell

PLANTS JA Jennifer Anderson

PLANTS JS Jim Stasz

PLANTS JSP J.S. Peterson

PLANTS LA Larry Allain

PLANTS RM89 Robert H. Mohlenbrock. U.S. Department of Agriculture, Soil Conservation Service. 1989 Midwest Wetland Flora: Field Office Illustrated Guide to Plant Species. Midwest National Technical Center, Lincoln, NE.

PLANTS RM91 Robert H. Mohlenbrock. U.S. Department of Agriculture, Soil Conservation Service. 1991 Southern Wetland Flora: Field Office Guide to Plant Species. South National Technical Center, Fort Worth, TX.

PLANTS RM95 Robert H. Mohlenbrock. U.S. Department of Agriculture, Natural Resources Conservation Service. 1995 Northeast Wetland Flora: Field Guide to Plant Species. Northeast Technical Center, Chester, PA.

PLANTS TGB Thomas G. Barnes

PLANTS WSJ William S. Justice

RHW R. Harrison Wiegand, Maryland Department of Natural Resources, Wildlife and Heritage Service. [www.dnr.state.md.us](http://www.dnr.state.md.us)

RS MNPS Rod Simmons, Maryland Native Plant Society. [www.mdflora.org](http://www.mdflora.org)

SMSU Paul Redfean, Ozarks Regional Herbarium, Southwest Missouri State University. [biology.smsu.edu/Herbarium](http://biology.smsu.edu/Herbarium)

UCONN Mark Brand, UConn Plant Database, University of Connecticut. [www.hort.uconn.edu/plants/about.html](http://www.hort.uconn.edu/plants/about.html)

USDA NRCS **U.S. Department of Agriculture, Natural Resources Conservation Service**, National Plant Materials Center, Beltsville, MD. [www.plantmaterials.nrcs.usda.gov/mdpmc](http://www.plantmaterials.nrcs.usda.gov/mdpmc)

USDA JE John Englert

USDA JK Jennifer Kujawski

USDA MG Martin van der Grinten

USFWS **U.S. Fish and Wildlife Service Chesapeake Bay Field Office**, Annapolis, MD 21401. [www.fws.gov/r5cbfo](http://www.fws.gov/r5cbfo)

USFWS BES Britt Slattery

USFWS RL Randy Loftus

USFWS RM Rich Mason

USFWS RS Rich Starr

**University of Wisconsin, Wisconsin State Herbarium**, Madison, WI 53706-1381. [www.botany.wisc.edu/herbarium](http://www.botany.wisc.edu/herbarium)

UWI AH Andrew Hipp, University of Wisconsin-Madison.

UWI DK Darrin Kimbler, University of Wisconsin-Madison.

UWI DWW Dennis W. Woodland, Andrews University.

UWI EJJ Emmet J. Judziewicz University of Wisconsin-Stevens Point and Madison.

UWI JK John Kohout, donated to Wisconsin Department of Natural Resources.

UWI JRS James R. Sime, Middleton, Wisconsin.

UWI JS Janice Stiefel, Bailey's Harbor, Wisconsin.

UWI KJS Kenneth J. Sytsma, University of Wisconsin-Madison.

UWI KK Kitty Kohout, donated to Wisconsin Department of Natural Resources.

UWI MC Michael Clayton, University of Wisconsin-Madison.

UWI MRB Merel R. Black, University of Wisconsin-Madison.

UWI RRK Robert R. Kowal, University of Wisconsin-Madison.

UWI RWF Robert W. Freckmann, University of Wisconsin-Stevens Point.

UWI TK Tim Kessenich, Wisconsin Department of Natural Resources.

VT Virginia Tech (Virginia Polytechnic Institute and State University), College of Natural Resources, Forest Biology and Dendrology Educational Sites. [www.cnr.vt.edu/dendro/wwwmain.html](http://www.cnr.vt.edu/dendro/wwwmain.html)



## References

---

- Bowman's Hill Wildflower Preserve. *Deer Tolerant/Resistant Native Plants* (information sheet). New Hope, PA. 2002.
- Brown, Russel G. and Melvin L. Brown. *Herbaceous Plants of Maryland*. Port City Press, Baltimore, MD. 1984.
- Brown, Russel G. and Melvin L. Brown. *Woody Plants of Maryland*. Port City Press, Baltimore, MD. 1972.
- Burrell, C. Colston. *A Gardener's Encyclopedia of Wildflowers: An Organic Guide to Choosing and Growing over 150 Beautiful Wildflowers*. Rodale Press, Inc., Emmaus, PA. 1997.
- Dirr, Michael A. *Manual of Woody Landscape Plants*. Fifth Edition. Stipes Publishing LLC, Champaign, IL. 1998.
- Elias, Thomas S. *The Complete Trees of North America*. Gramercy Publishing Company, New York, NY. 1987.
- Flora of North America Editorial Committee. *Flora of North America North of Mexico. Volume 2: Pteridophytes and Gymnosperms*. Oxford University Press, New York, NY. 1993.
- Fernald, Merritt L. *Gray's Manual of Botany*. Eighth Edition. D. Van Nostrand Company, New York, NY. 1970.
- Fike, Jean. *Terrestrial and Palustrine Plant Communities of Pennsylvania*. Pennsylvania Bureau of Forestry, Harrisburg, PA, The Nature Conservancy, Middletown, PA and Western Pennsylvania Conservancy, Pittsburgh, PA. 1999.
- Gleason, Henry A. and Arthur Cronquist. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. Willard Grant Press, Boston, MA 1963.
- Harlow, William M., Ellwood S. Harrar, James W. Hardin, and Fred M. White. *Textbook of Dendrology* Eighth Edition. McGraw-Hill, Inc., New York, NY. 1996.
- Hart, Rhonda Massingham. *Deer-Proofing Your Yard & Garden*. Storey Books, Pownal, VT. 1997.
- Hightshoe, Gary L. *Native Trees, Shrubs, and Vines for Urban and Rural America*. Van Nostrand Reinhold, New York, NY. 1988.
- Johnson, Lorraine. *100 Easy-To-Grow Native Plants For American Gardens in Temperate Zones*. Firefly Books Ltd., Buffalo, NY. 1999.
- Jones, Samuel B. Jr. and Arlen E. Luchsinger. *Plant Systematics*. Second Edition. McGraw-Hill Book Company, New York, NY. 1986.
- Kricher, John C. *The Peterson Field Guide Series. A Field Guide to Eastern Forests: North America*. Houghton Mifflin Company, Boston, MA. 1988.
- Little, Elbert L. *The Audubon Society Field Guide to North American Trees: Eastern Region*. Alfred A. Knopf, Inc., New York, NY. 1980.
- Luttenberg, Danielle, Deborah Lev and Michael Feller. *Native Species Planting Guide for New York City and Vicinity*. City of New York Parks and Recreation, New York, NY. 1993.
- Magee, Dennis W. *Freshwater Wetlands: A Guide to Common Indicator Plants of the Northeast*. University of Massachusetts Press, Amherst, MA. 1981.

- Martin, Alexander C. and A. L. Nelson. *American Wildlife and Plants: A Guide to Wildlife Food*. Dover Publications, Minneola, NY. 1985.
- Newcomb, Lawrence. *Newcomb's Wildflower Guide*. Little, Brown and Company, Boston, MA. 1977.
- Niering, William A. *The Audubon Society Nature Guides: Wetlands*. Alfred A. Knopf, Inc., New York, NY. 1985.
- Phillips, Ellen and C. Colston Burrell. *Rodale's Illustrated Encyclopedia of Perennials*. Rodale Press, Inc., Emmaus, PA. 1993.
- Redington, Charles B., Ph.D. *Plants in Wetlands*. Kendall/Hunt Publishing Company, Dubuque, IA. 1994.
- Reed, Clyde F. *The Ferns and Fern Allies of Maryland and Delaware including District of Columbia*. The Science Press, Lancaster, PA. 1953.
- Rhoads, Ann F. and Timothy A. Block. *The Plants of Pennsylvania: An Illustrated Manual*. University of Pennsylvania Press, Philadelphia, PA. 2000.
- Still, Steven M. *Manual of Herbaceous Ornamental Plants*. Fourth Edition. Stipes Publishing Company, Champaign, IL. 1994.
- Swearingen, J., K. Reshetiloff, B. Slattery, and S. Zwicker. 2002. *Plant Invaders of Mid-Atlantic Natural Areas*. National Park Service and U.S. Fish & Wildlife Service, 82 pp.
- Thurnhorst, Gwendolyn A. *Wetland Planting Guide for the Northeastern United States*. Environmental Concern, Inc., St. Michaels, MD. 1993.
- Tiner, Ralph W. *A Field Guide to Coastal Wetland Plants of the Northeastern United States*. University of Massachusetts Press, Amherst, MA. 1987.
- Tiner, Ralph W. *Field Guide to Nontidal Wetland Identification*. Maryland Department of Natural Resources, Annapolis, MD and U.S. Fish and Wildlife Service, Newton Corner, MA. 1988.
- Tyning, Thomas F. *A Guide to Amphibians and Reptiles*. Stokes Nature Guides. Little, Brown and Company, Boston, MA. 1990.
- Water and Ecosystems Team. *Roadside Use of Native Plants*. Federal Highway Administration. Washington D.C. 1999.

## Internet References

---

- American Forests ([www.americanforest.org/resources/bigtrees/register.php](http://www.americanforest.org/resources/bigtrees/register.php)).
- Bowman's Hill Wildflower Preserve ([www.bhwp.org](http://www.bhwp.org)).
- Brooklyn Botanic Garden ([www.bbg.org](http://www.bbg.org)).
- Connecticut Botanical Society ([www.ct-botanical-society.org](http://www.ct-botanical-society.org)).
- Harvard University Herbaria ([www.huh.harvard.edu](http://www.huh.harvard.edu)).
- Hortiscopia ([www.hortiscopia.com](http://www.hortiscopia.com)).
- Hortiscopia Plant Information ([www.hortpix.com](http://www.hortpix.com)).
- Kentucky Native Plant Society ([www.knps.org](http://www.knps.org)).
- Missouri Botanical Garden ([www.mobot.org](http://www.mobot.org)).
- NatureServe ([www.natureserve.org](http://www.natureserve.org)).
- Nearctica ([www.nearctica.com/nathist/nathist.htm](http://www.nearctica.com/nathist/nathist.htm)).
- Ohio State University ([ohioline.osu.edu](http://ohioline.osu.edu)).
- Plant America ([www.plantamerica.com](http://www.plantamerica.com)).
- Plant File ([www.plantfile.com](http://www.plantfile.com)).
- Plants For a Future ([www.pfaf.org](http://www.pfaf.org)).
- Saw Mill River Audubon, Pruyn Sanctuary Butterfly and Hummingbird Garden 2001 Plant List ([www.sawmillriveraudubon.org/downloads/GardenList.doc](http://www.sawmillriveraudubon.org/downloads/GardenList.doc)).
- South Carolina Forestry Commission ([www.state.sc.us/forest/tidtsim.htm](http://www.state.sc.us/forest/tidtsim.htm)).
- Sustainable Urban Landscape Information Series ([www.sustland.umn.edu](http://www.sustland.umn.edu)).
- Toadshade ([www.toadshade.com](http://www.toadshade.com)).
- USDA Silvics of North America ([www.na.fs.fed.us/spfo/pubs/silvics\\_manual/table\\_of\\_contents.htm](http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm)) Burns, Russell M., and Barbara H. Honkala, tech. coords. Silvics of North America: 1. Conifers; 2. Hardwoods. Agriculture Handbook 654. U.S. Department of Agriculture, Forest Service, Washington, DC. 1990.
- USDA, NRCS. 2001 The PLANTS Database, version 3.1 ([plants.usda.gov/plants](http://plants.usda.gov/plants)). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- University of Minnesota, Sustainable Urban Landscape Information Series ([www.sustland.umn.edu](http://www.sustland.umn.edu)).
- University of Wisconsin Botanical Garden ([www.botany.wisc.edu/Garden](http://www.botany.wisc.edu/Garden)).
- Washington State Department of Ecology ([www.ecy.wa.gov/programs/wq/plants/native/brasenia.html](http://www.ecy.wa.gov/programs/wq/plants/native/brasenia.html)).
- The Xerces Society ([www.xerces.org](http://www.xerces.org)).



## Catalogs

---

Adkins Arboretum. Fall 2001 Native Plant Sale: Plant Sale List. Ridgely, MD  
([www.adkinsarboretum.org](http://www.adkinsarboretum.org)).

Bluemount Nurseries, Inc. Catalog 2001. Monkton, MD ([www.bluemount.com](http://www.bluemount.com)).

Carroll Gardens. America's Selection of Rare and Unusual Plants 1997. Westminster, MD  
([www.carrollgardens.com](http://www.carrollgardens.com)).

Environmental Concern. 2001 Nursery Catalog. St. Michaels, MD ([www.wetland.org](http://www.wetland.org)).

Environmental Concern, Inc. 1996 Nursey Catalog. St. Michaels, MD. 1996 ([www.wetland.org](http://www.wetland.org)).

Ernst Conservation Seeds. Wholesale Price List – Spring/Summer 2003. Meadville, PA  
([www.ersntseed.com](http://www.ersntseed.com)).

Ernst Conservation Seeds. Wholesale 2002 Catalog and Information Guide. Meadville, PA  
([www.ersntseed.com](http://www.ersntseed.com)).

Ernst Conservation Seeds. 1999 Information Guide. Meadville, PA ([www.ersntseed.com](http://www.ersntseed.com)).

Lower Marlboro Nursery. Spring 1999. Dunkirk, MD ([www.lowermarlboronursery.com](http://www.lowermarlboronursery.com)).

Maryland Natives Nursery, Inc. 2002 Catalog. Baltimore, MD  
([www.marylandnativesnursery.com](http://www.marylandnativesnursery.com)).

North Creek Nurseries, Inc. 2001 Wholesale Catalog. Landenberg, PA  
([www.northcreeknurseries.com](http://www.northcreeknurseries.com)).

North Creek Nurseries, Inc. 1999 Wholesale Starters. Landenberg, PA  
([www.northcreeknurseries.com](http://www.northcreeknurseries.com)).

Octoraro Native Plant Nursery. 2002 Wholesale Nursery Catalog. Kirkwood, PA  
([www.octoraro.com](http://www.octoraro.com)).

Talmage Farm. Native Plants Naturally 2000 Wholesale Catalog. Riverhead, NY  
([www.talmagefarm.com](http://www.talmagefarm.com)).

Virginia Natives. 2001 Catalog. Hume, VA. ([www.vnps.org](http://www.vnps.org)).

Wild Earth Native Plant Nursery. 1999 Catalog. Freehold, NJ.

# Index

## Latin name

<i>Acer negundo</i> .....	54	<i>Celastrus scandens</i> .....	64	<i>Geranium maculatum</i> .....	24	<i>Mitella diphylla</i> .....	29
<i>Acer rubrum</i> .....	54	<i>Celtis occidentalis</i> .....	56	<i>Gillenia trifoliata</i> (see <i>Porteranthus trifoliatus</i> )		<i>Monarda bradburiana</i> .....	29
<i>Acer saccharinum</i> .....	54	<i>Cephalanthus occidentalis</i> .....	45	<i>Goodyera pubescens</i> .....	24	<i>Monarda didyma</i> .....	29
<i>Acer saccharum</i> .....	54	<i>Cercis canadensis</i> .....	56	<i>Hamamelis virginiana</i> .....	46	<i>Monarda fistulosa</i> (see <i>M. bradburiana</i> )	
<i>Acer spicatum</i> .....	54	<i>Chamaecrista fasciculata</i> .....	21	<i>Helenium autumnale</i> .....	24	<i>Monarda punctata</i> .....	29
<i>Actaea pachypoda</i> .....	18	<i>Chamaecyparis thyoides</i> .....	56	<i>Helianthus angustifolius</i> .....	25	<i>Morella carolinensis</i> .....	48
<i>Adiantum pedatum</i> .....	11	<i>Chamerion angustifolium</i> .....		<i>Helianthus decapetalus</i> .....	25	<i>Morella cerifera</i> .....	48
<i>Agalinis purpurea</i> .....	18	<i>spp angustifolium</i> .....	21	<i>Helianthus divaricatus</i> .....	25	<i>Morella pensylvanica</i> .....	48
<i>Ageratina altissima v. altissima</i> .....	18	<i>Chasmanthium latifolium</i> .....	15	<i>Heliopsis helianthoides</i> .....	25	<i>Morus rubra</i> .....	58
<i>Agrostis perennans</i> .....	14	<i>Chelone glabra</i> .....	21	<i>Hepatica acutiloba</i> .....		<i>Myrica</i> (see <i>Morella</i> )	
<i>Allium cernuum</i> .....	18	<i>Chimaphila maculata</i> .....	21	(see <i>H. nobilis</i> var. <i>acuta</i> )		<i>Nuphar lutea</i> .....	42
<i>Alnus serrulata</i> .....	45	<i>Chionanthus virginicus</i> .....	56	<i>Hepatica americana</i> .....		<i>Nuttallanthus canadensis</i> .....	29
<i>Amelanchier arborea</i> .....	54	<i>Chrysogonum virginianum</i> .....	21	(see <i>H. nobilis</i> var. <i>obtusa</i> )		<i>Nymphaea odorata</i> .....	42
<i>Amelanchier canadensis</i> .....	54	<i>Chrysopsis mariana</i> .....	21	<i>Hepatica nobilis</i> var. <i>acuta</i> .....	25	<i>Nyssa sylvatica</i> .....	58
<i>Ammophila breviligulata</i> .....	14	<i>Cimicifuga racemosa</i> .....	21	<i>Hepatica nobilis</i> var. <i>obtusa</i> .....	25	<i>Oenothera biennis</i> .....	29
<i>Andropogon gerardii</i> .....	14	<i>Claytonia virginica</i> .....	21	<i>Heracleum maximum</i> .....	25	<i>Oenothera fruticosa</i> .....	30
<i>Andropogon glomeratus</i> .....	14	<i>Clematis viorna</i> .....	64	<i>Heuchera americana</i> .....	25	<i>Oenothera perennis</i> .....	30
<i>Andropogon scoparius</i> (see <i>Schizachyrium</i> )		<i>Clematis virginiana</i> .....	64	<i>Heuchera villosa</i> .....	26	<i>Onoclea sensibilis</i> .....	12
<i>Andropogon virginicus</i> .....	14	<i>Clethra alnifolia</i> .....	45	<i>Hibiscus moscheutos</i> .....	41	<i>Opuntia humifusa</i> .....	30
<i>Anemone canadensis</i> .....	18	<i>Clitoria mariana</i> .....	22	<i>Houstonia caerulea</i> .....	26	<i>Orontium aquaticum</i> .....	42
<i>Anemone virginiana</i> .....	18	<i>Comptonia peregrina</i> .....	45	<i>Hydrangea arborescens</i> .....	46	<i>Osmorhiza longistylis</i> .....	30
<i>Anemonella thalictroides</i> (see <i>Thalictrum thalictroides</i> )		<i>Conoclinium coelestinum</i> .....	22	<i>Hydrophyllum virginianum</i> .....	26	<i>Osmunda cinnamomea</i> .....	12
<i>Antennaria neglecta</i> .....	18	<i>Coreopsis tripteris</i> .....	22	<i>Hylotelephium telephoides</i> .....	26	<i>Osmunda claytoniana</i> .....	12
<i>Aquilegia canadensis</i> .....	18	<i>Coreopsis verticillata</i> .....	22	<i>Hypericum densiflorum</i> .....	47	<i>Osmunda regalis</i> .....	12
<i>Aralia nudicaulis</i> .....	19	<i>Cornus alternifolia</i> .....	56	<i>Hystrix patula</i> (see <i>Elymus hystrix</i> )		<i>Ostrya virginiana</i> .....	58
<i>Aralia racemosa</i> .....	19	<i>Cornus amomum</i> .....	56	<i>Ilex glabra</i> .....	47	<i>Oxalis violacea</i> .....	30
<i>Aralia spinosa</i> .....	45	<i>Cornus florida</i> .....	56	<i>Ilex laevigata</i> .....	47	<i>Packeria aurea</i> .....	30
<i>Arisaema triphyllum</i> .....	19	<i>Cornus racemosa</i> .....	46	<i>Ilex opaca</i> .....	57	<i>Panicum amarum</i> .....	16
<i>Aristolochia durior</i> (see <i>A. macrophylla</i> )		<i>Corylus americana</i> .....	46	<i>Ilex verticillata</i> .....	47	<i>Panicum virgatum</i> .....	16
<i>Aristolochia macrophylla</i> .....	64	<i>Crataegus crus-galli</i> .....	56	<i>Impatiens capensis</i> .....	26	<i>Parthenocissus quinquefolia</i> .....	65
<i>Aronia</i> (see <i>Photinia</i> )		<i>Crataegus viridis</i> .....	57	<i>Ionactis linariifolius</i> .....	26	<i>Passiflora incarnata</i> .....	65
<i>Aruncus dioicus</i> .....	19	<i>Danthonia spicata</i> .....	15	<i>Iris prismatica</i> .....	41	<i>Peltandra virginica</i> .....	42
<i>Asarum canadense</i> .....	19	<i>Delphinium tricornu</i> .....	22	<i>Iris versicolor</i> .....	41	<i>Penstemon digitalis</i> .....	30
<i>Asclepias incarnata</i> .....	19	<i>Dennstaedtia punctilobula</i> .....	11	<i>Iris virginica</i> .....	41	<i>Penstemon laevigatus</i> .....	30
<i>Asclepias syriaca</i> .....	19	<i>Dentaria laciniata</i> (see <i>Cardamine concatenata</i> )		<i>Itea virginica</i> .....	47	<i>Phlox carolina</i> .....	31
<i>Asclepias tuberosa</i> .....	19	<i>Desmodium paniculatum</i> .....	22	<i>Iva frutescens</i> .....	47	<i>Phlox divaricata</i> .....	31
<i>Asimina triloba</i> .....	54	<i>Dicentra canadensis</i> .....	22	<i>Jeffersonia diphylla</i> .....	26	<i>Phlox maculate</i> .....	31
<i>Asplenium platyneuron</i> .....	11	<i>Dicentra cucullaria</i> .....	22	<i>Juglans nigra</i> .....	57	<i>Phlox paniculata</i> .....	31
<i>Aster</i> (see <i>Doellingeria</i> , <i>Eurybia</i> , <i>Ionactis</i> , <i>Symphotrichum</i> )		<i>Dicentra eximia</i> .....	23	<i>Juncus canadensis</i> .....	41	<i>Phlox stolonifera</i> .....	31
<i>Athyrium filix-femina</i> .....	11	<i>Dichantheium clandestinum</i> .....	15	<i>Juncus effuses</i> .....	41	<i>Phlox subulata</i> .....	31
<i>Baccharis halimifolia</i> .....	45	<i>Dichantheium commutatum</i> .....	15	<i>Juncus roemerianus</i> .....	42	<i>Photinia melanocarpa</i> .....	48
<i>Baptisia australis</i> .....	20	<i>Diospyros virginiana</i> .....	57	<i>Juniperus virginiana</i> .....	57	<i>Photinia pyrifolia</i> .....	49
<i>Baptisia tinctoria</i> .....	20	<i>Distichlis spicata</i> .....	41	<i>Justicia americana</i> .....	42	<i>Physocarpus opulifolius</i> .....	49
<i>Betula alleghaniensis</i> .....	55	<i>Dodecatheon meadia</i> .....	23	<i>Kalmia angustifolia</i> .....	47	<i>Physostegia virginiana</i> .....	31
<i>Betula lenta</i> .....	55	<i>Doellingeria umbellata</i> var. <i>umbellata</i> .....	23	<i>Kalmia latifolia</i> .....	47	<i>Pinus echinata</i> .....	59
<i>Betula nigra</i> .....	55	<i>Dryopteris carthusiana</i> .....	11	<i>Kosteletzkya virginica</i> .....	42	<i>Pinus rigida</i> .....	59
<i>Bidens cernua</i> .....	20	<i>Dryopteris cristata</i> .....	11	<i>Leersia oryzoides</i> .....	16	<i>Pinus serotina</i> .....	59
<i>Bignonia capreolata</i> .....	64	<i>Dryopteris intermedia</i> .....	11	<i>Lespedeza capitata</i> .....	26	<i>Pinus strobes</i> .....	59
<i>Boltonia asteroides</i> .....	20	<i>Dryopteris marginalis</i> .....	12	<i>Leucothoe racemosa</i> .....	48	<i>Pinus taeda</i> .....	59
<i>Botrychium virginianum</i> .....	11	<i>Dulichium arundinaceum</i> .....	41	<i>Liatris pilosa v. pilosa</i> .....	27	<i>Pinus virginiana</i> .....	59
<i>Calamagrostis canadensis</i> .....	14	<i>Elymus canadensis</i> .....	16	<i>Liatris scariosa</i> .....	27	<i>Platanus occidentalis</i> .....	59
<i>Calliandra americana</i> .....	45	<i>Elymus hystrix</i> .....	16	<i>Liatris spicata</i> .....	27	<i>Podophyllum peltatum</i> .....	31
<i>Caltha palustris</i> .....	20	<i>Elymus riparius</i> .....	16	<i>Liatris squarrosa</i> .....	27	<i>Polemonium reptans</i> .....	32
<i>Campanula americana</i> (see <i>Campanulastrum americanum</i> )		<i>Elymus virginicus</i> .....	16	<i>Lilium canadense</i> .....	27	<i>Polygonatum biflorum</i> .....	32
<i>Campanulastrum americanum</i> .....	20	<i>Epilobium angustifolium</i> .....		<i>Lilium philadelphicum</i> .....	27	<i>Polygonatum pubescens</i> .....	32
<i>Campsis radicans</i> .....	64	(see <i>Chamerion</i> )		<i>Lilium superbium</i> .....	27	<i>Polystichum acrostichoides</i> .....	12
<i>Cardamine concatenata</i> .....	20	<i>Erianthus giganteus</i> (see <i>Saccharum giganteum</i> )		<i>Limonium carolinianum</i> .....	27	<i>Pontederia cordata</i> .....	42
<i>Carex crinita</i> var. <i>crinita</i> .....	14	<i>Erigeron pulchellus</i> .....	23	<i>Linaria canadensis</i> (see <i>Nuttallanthus canadensis</i> )		<i>Populus deltoides</i> .....	59
<i>Carex glaucoidea</i> .....	14	<i>Erythronium americanum</i> .....	23	<i>Lindera benzoin</i> .....	48	<i>Populus heterophylla</i> .....	60
<i>Carex lurida</i> .....	15	<i>Eupatorium coelestinum</i> .....		<i>Liquidambar styraciflua</i> .....	58	<i>Porteranthus trifoliatus</i> .....	32
<i>Carex pensylvanica</i> .....	15	(see <i>Conoclinium coelestinum</i> )		<i>Liriodendron tulipifera</i> .....	58	<i>Prunus americana</i> .....	60
<i>Carex stricta</i> .....	15	<i>Eupatorium dubium</i> .....	23	<i>Lobelia cardinalis</i> .....	28	<i>Prunus maritima</i> .....	49
<i>Carex vulpinoidea</i> .....	15	<i>Eupatorium fistulosum</i> .....	23	<i>Lobelia siphilitica</i> .....	28	<i>Prunus pensylvanica</i> .....	60
<i>Carpinus caroliniana</i> .....	55	<i>Eupatorium hyssopifolium</i> .....	23	<i>Lonicera sempervirens</i> .....	64	<i>Prunus serotina</i> .....	60
<i>Carya alba</i> .....	55	<i>Eupatorium maculatum</i> .....	24	<i>Lupinus perennis</i> .....	28	<i>Prunus virginiana</i> .....	60
<i>Carya cordiformis</i> .....	55	<i>Eupatorium perfoliatum</i> .....	24	<i>Lyonia ligustrina</i> .....	48	<i>Pteridium aquilinum</i> .....	12
<i>Carya glabra</i> .....	55	<i>Eupatorium purpureum</i> .....	24	<i>Lyonia mariana</i> .....	48	<i>Pycnanthemum incanum</i> .....	32
<i>Carya ovata</i> .....	55	<i>Eupatorium purpureum</i> .....	24	<i>Magnolia acuminata</i> .....	58	<i>Pycnanthemum tenuifolium</i> .....	32
<i>Cassia fasciculata</i> (see <i>Chamaecrista fasciculata</i> )		<i>Eupatorium rugosum</i> .....		<i>Magnolia virginiana</i> .....	58	<i>Pyrus americana</i> (see <i>Sorbus americana</i> )	
<i>Cassia marilandica</i> (see <i>Senna</i> )		(see <i>Ageratina altissima v. altissima</i> )		<i>Maianthemum canadense</i> .....	28	<i>Pyrus coronaria</i> (see <i>Malus coronaria</i> )	
<i>Castanea pumila</i> .....	56	<i>Eurybia divaricata</i> .....	24	<i>Maianthemum racemosum</i> .....		<i>Quercus alba</i> .....	60
<i>Caulophyllum thalictroides</i> .....	20	<i>Fagus grandifolia</i> .....	57	<i>ssp. racemosum</i> .....	28	<i>Quercus bicolor</i> .....	60
<i>Ceanothus americanus</i> .....	45	<i>Festuca rubra</i> .....	16	<i>Malus coronaria</i> .....	28	<i>Quercus coccinea</i> .....	60
		<i>Fraxinus americana</i> .....	57	<i>Medeola virginiana</i> .....	58	<i>Quercus falcata</i> .....	61
		<i>Fraxinus pennsylvanica</i> .....	57	<i>Melanthium virginicum</i> .....	28	<i>Quercus ilicifolia</i> .....	61
		<i>Gaultheria procumbens</i> .....	46	<i>Mertensia virginica</i> .....	28	<i>Quercus marilandica</i> .....	61
		<i>Gaylussacia baccata</i> .....	46	<i>Mikania scandens</i> .....	64	<i>Quercus michauxii</i> .....	61
		<i>Gaylussacia frondosa</i> .....	46	<i>Mimulus ringens</i> .....	29	<i>Quercus montana</i> (see <i>Quercus michauxii</i> and <i>pinus</i> )	
		<i>Gentiana clausa</i> .....	24	<i>Mitchella repens</i> .....	29	<i>Quercus muehlenbergii</i> .....	61

<i>Quercus nigra</i> .....	61	<i>Solidago nemoralis</i> .....	35	<i>Viola striata</i> .....	40	blueberry,	
<i>Quercus palustris</i> .....	61	<i>Solidago odora</i> .....	36	<i>Wisteria frutescens</i> .....	65	early lowbush.....	52
<i>Quercus phellos</i> .....	61	<i>Solidago rugosa</i> .....	36	<i>Woodwardia areolata</i> .....	13	highbush.....	52
<i>Quercus prinus</i> .....	62	<i>Solidago sempervirens</i> .....	36	<i>Woodwardia virginica</i> .....	13	lowbush.....	52
<i>Quercus rubra</i> .....	62	<i>Solidago speciosa</i> .....	36	<i>Yucca filamentosa (flaccida)</i> .....	40	bluestem,	
<i>Quercus stellata</i> .....	62	<i>Sorbus americana</i> .....	62	<i>Zizania aquatica</i> .....	44	big.....	14
<i>Quercus velutina</i> .....	62	<i>Sorghastrum nutans</i> .....	17	<i>Zizia aurea</i> .....	40	bushy.....	14
<i>Rhexia virginica</i> .....	32	<i>Sparganium americanum</i> .....	43			little.....	17
<i>Rhododendron atlanticum</i> .....	49	<i>Spartina alterniflora</i> .....	43	<b>Common Name</b>		bluet.....	26
<i>Rhododendron calendulaceum</i> .....	49	<i>Spartina cynosuroides</i> .....	44	Adam's needle.....	40	boltonia, star.....	20
<i>Rhododendron canescens</i> .....	49	<i>Spartina patens</i> .....	44	alder, smooth.....	45	boneset, common.....	24
<i>Rhododendron maximum</i> .....	49	<i>Spartina pectinata</i> .....	44	alumroot.....	25	Bowman's root.....	32
<i>Rhododendron periclymenoides</i> .....	49	<i>Spiraea alba</i> .....	51	anemone,		bulrush,	
<i>Rhododendron prinophyllum</i> .....	50	<i>Spiraea alba v. latifolia</i> .....	51	round-leaved.....	18	black.....	43
<i>Rhododendron viscosum</i> .....	50	<i>Spiraea latifolia</i>		rue.....	37	great.....	43
<i>Rhus aromatica</i> .....	50	(see <i>Spiraea alba v. latifolia</i> )		arrow arum.....	42	woolgrass.....	43
<i>Rhus copallina</i> .....	50	<i>Spiraea tomentosa</i> .....	52	arrowwood,		bunchflower, Virginia.....	28
<i>Rhus glabra</i> .....	50	<i>Spiranthes cernua</i> .....	36	maple-leaved.....	52	bur-reed, American.....	43
<i>Rhus allegheniensis</i> .....	50	<i>Stachys tenuifolia (hispida)</i> .....	36	southern.....	53	butterfly pea, Maryland.....	22
<i>Ribes rotundifolium</i> .....	50	<i>Staphylea trifolia</i> .....	52	ash,		butterflyweed.....	19
<i>Rosa carolina</i> .....	50	<i>Stellaria pubera</i> .....	36	American mountain.....	62	buttonbush.....	45
<i>Rosa palustris</i> .....	51	<i>Symphyotrichum cordifolium</i> .....	36	green.....	57	cactus, prickly-pear, eastern.....	30
<i>Rubus allegheniensis</i> .....	51	<i>Symphyotrichum ericoides var. ericoides</i> .....	37	white.....	57	Canada mayflower.....	28
<i>Rubus odoratus</i> .....	51	<i>Symphyotrichum laeve var. laeve</i> .....	37	aster,		cardinal flower.....	28
<i>Rudbeckia fulgida</i> .....	32	<i>Symphyotrichum novae-angliae</i> .....	37	flat-top white.....	23	cedar,	
<i>Rudbeckia hirta</i> .....	32	<i>Symphyotrichum novae-belgii</i>		golden.....	21	Atlantic white.....	56
<i>Rudbeckia laciniata</i> .....	33	var. <i>novi-belgii</i> .....	37	heart-leaved.....	36	eastern red.....	57
<i>Rudbeckia triloba</i> .....	33	<i>Symplocarpus foetidus</i> .....	37	heath.....	37	northern white.....	63
<i>Ruellia carolinensis</i> .....	33	<i>Taxodium distichum</i> .....	63	New England.....	37	cherry,	
<i>Sabatia angularis</i> .....	33	<i>Thalictrum dioicum</i> .....	39	New York.....	37	black.....	60
<i>Saccharum giganteum</i> .....	17	<i>Thalictrum pubescens</i> .....	37	smooth blue.....	37	choke.....	60
<i>Sagittaria latifolia</i> .....	43	<i>Thalictrum thalictroides</i> .....	37	stiff-leaf.....	26	pin.....	60
<i>Salix humilis</i> .....	51	<i>Thelypteris noveboracensis</i> .....	12	white wood.....	24	chickweed, star.....	36
<i>Salix nigra</i> .....	62	<i>Thelypteris palustris</i> .....	13	autumn bentgrass.....	14	chinquapin.....	56
<i>Salix sericea</i> .....	62	<i>Thuja occidentalis</i> .....	63	azalea,		chokeberry,	
<i>Salvia lyrata</i> .....	33	<i>Tiarella cordifolia</i> .....	38	dwarf.....	49	black.....	48
<i>Sambucus canadensis</i> (see <i>Sambucus nigra</i>		<i>Tilia americana</i> .....	63	flame.....	49	red.....	49
ssp. <i>canadensis</i> )		<i>Tradescantia virginiana</i> .....	38	pinxterbloom.....	49	climbing hempvine.....	64
<i>Sambucus nigra</i> ssp. <i>canadensis</i> .....	51	<i>Tridens flavus</i> .....	17	rose.....	50	clover, round-head bush.....	26
<i>Sambucus pubens</i> (see <i>Sambucus racemosa</i>		<i>Trillium erectum</i> .....	38	swamp.....	50	columbine, eastern.....	18
v. <i>racemosa</i> )		<i>Trillium grandiflorum</i> .....	38	sweet.....	49	coneflower,	
<i>Sambucus racemosa</i> v. <i>racemosa</i> .....	51	<i>Trillium sessile</i> .....	38	basswood, American.....	63	early.....	32
<i>Sanguinaria canadensis</i> .....	33	<i>Trillium undulatum</i> .....	38	bayberry,		tall.....	33
<i>Sassafras albidum</i> .....	62	<i>Tripsacum dactyloides</i> .....	17	northern.....	48	three-lobed.....	33
<i>Saururus cernuus</i> .....	43	<i>Tsuga canadensis</i> .....	63	southern.....	48	cordgrass,	
<i>Saxifraga pensylvanica</i> .....	33	<i>Ulmus americana</i> .....	63	beardtongue.....	30	big.....	44
<i>Saxifraga virginensis</i> .....	34	<i>Ulmus rubra</i> .....	63	smooth.....	30	freshwater.....	44
<i>Schizachyrium scoparium</i> .....	17	<i>Uvularia grandiflora</i> .....	38	beautyberry, American.....	45	salt marsh.....	43
<i>Schoenoplectus pungens</i> v. <i>pungens</i> .....	43	<i>Uvularia perfoliata</i> .....	38	beebalm.....	29	coreopsis,	
<i>Schoenoplectus validus</i> .....	43	<i>Uvularia sessilifolia</i> .....	39	spotted.....	29	tall.....	22
<i>Scirpus atrovirens</i> .....	43	<i>Vaccinium angustifolium</i> .....	52	beggar-ticks, nodding.....	20	threadleaf.....	22
<i>Scirpus cyperinus</i> .....	43	<i>Vaccinium corymbosum</i> .....	52	bellflower, American.....	20	cottonwood,	
<i>Scirpus pungens</i> (see <i>Schoenoplectus</i>		<i>Vaccinium macrocarpon</i> .....	52	bellwort,		beech, American.....	59
<i>pungens</i> v. <i>pungens</i> )		<i>Vaccinium pallidum (vacillans)</i> .....	52	large-flowered.....	38	eastern.....	60
<i>Scirpus validus</i>		<i>Vaccinium stamineum</i> .....	52	perfoliate.....	38	swamp.....	60
(see <i>Schoenoplectus validus</i> )		<i>Veratrum viride</i> .....	39	bergamot, wild.....	29	cow parsnip.....	25
<i>Scutellaria integrifolia</i> .....	34	<i>Verbena hastata</i> .....	39	birch,		crabapple, sweet.....	58
<i>Sedum telephoides</i> (see <i>Hylotelephium</i>		<i>Verbesina alternifolia</i> .....	39	river.....	55	cranberry.....	52
<i>telephoides</i> )		<i>Vernonia noveboracensis</i> .....	39	sweet.....	55	creeper, Virginia.....	65
<i>Sedum tematum</i> .....	34	<i>Vernonia virginicum</i>		yellow.....	55	crossvine.....	64
<i>Senecio aureus</i> (see <i>Packera aurea</i> )		(see <i>Veronicastrum</i> )		bittersweet, American.....	64	Culver's root.....	39
<i>Senna marilandica</i> .....	34	<i>Veronicastrum virginicum</i> .....	39	blackberry, Allegheny.....	51	cup plant.....	34
<i>Silene caroliniana</i> .....	34	<i>Viburnum acerifolium</i> .....	52	black-eyed Susan.....	33	cutgrass, rice.....	16
<i>Silene stellata</i> .....	34	<i>Viburnum cassinoides</i> (See <i>Viburnum nudum</i> v.		bladderhut, American.....	52	cypress, bald.....	63
<i>Silene virginica</i> .....	34	<i>cassinoides</i> )		blazing star.....	27	dangleberry.....	46
<i>Silphium perfoliatum</i> .....	34	<i>Viburnum dentatum</i> .....	53	eastern.....	27	deerberry.....	52
<i>Sisyrinchium angustifolium</i> .....	34	<i>Viburnum nudum</i> .....	53	grass-leaf.....	27	deer-tongue.....	15
<i>Sisyrinchium atlanticum</i> .....	34	<i>Viburnum nudum</i> v. <i>cassinoides</i> .....	53	plains.....	27	Devil's walking stick.....	45
<i>Sisyrinchium atlanticum</i> .....	34	<i>Viburnum nudum</i> v. <i>cassinoides</i> .....	53	bleeding heart, wild.....	23	dogwood,	
<i>Sisyrinchium graminoides</i> (see <i>Sisyrinchium</i>		<i>Viburnum prunifolium</i> .....	53	bloodroot.....	33	alternate-leaf.....	56
<i>angustifolium</i> )		<i>Viburnum recognitum</i>		bluebells, Virginia.....	28	flowering.....	56
<i>Smilacina racemosa</i> (see <i>Maianthemum</i>		(see <i>Viburnum dentatum</i> )		blue cohosh.....	20	red-panicked.....	46
<i>racemosum</i> ssp. <i>racemosum</i> )		<i>Viola conspersa</i> .....	39	blue flag.....	41	silky.....	46
<i>Smilax herbacea</i> .....	65	<i>Viola cucullata</i> .....	39	slender.....	41	doll's eyes.....	18
<i>Solidago altissima</i> (see <i>S. canadensis</i> v.		<i>Viola hastata</i> .....	40	Virginia.....	41	duck potato.....	43
<i>scabra</i> )		<i>Viola papilionacea</i> (see <i>Viola sororia</i> )		blue vervain.....	39	dunegrass.....	14
<i>Solidago caesia</i> .....	35	<i>Viola pedata</i> .....	40			Dutchman's breeches.....	22
<i>Solidago canadensis</i> .....	35	<i>Viola pennsylvanica</i>				dwarf larkspur.....	22
<i>Solidago canadensis</i> v. <i>scabra</i> .....	35	(see <i>Viola pubescens</i> var. <i>pubescens</i> )				elder,	
<i>Solidago flexicaulis</i> .....	35	<i>Viola pubescens</i> var. <i>pubescens</i> .....	40			box.....	54
<i>Solidago juncea</i> .....	35	<i>Viola sororia</i> .....	40			marsh.....	47

elderberry,		hickory,		needlerush, black	42	sedge,	
common	51	bitternut	55	New Jersey tea	45	blue wood	14
red	51	mockernut	55	ninebark	49	broom	14
elm,		pignut	55	oak,		fox	15
American	63	shagbark	55	bear	61	long hair	14
slippery	63	high-tide bush	45	black	62	Pennsylvania	15
false foxglove, purple	18	holly,		blackjack	61	sallow	15
fern,		American	57	chestnut	62	three-sided	41
bracken	12	inkberry	47	Chinquapin	61	tussock	15
Christmas	12	winterberry	47	northern red	62	senna, Maryland wild	34
cinnamon	12	winterberry, smooth	47	pin	61	serviceberry,	
crested wood	11	honeysuckle, trumpet	64	post	62	downy	54
evergreen wood	11	hornbeam,		scarlet	60	shooting star	23
hay-scented	11	American	55	southern red	61	skullcap, rough	34
interrupted	12	eastern hop	58	swamp chestnut	61	skunk cabbage	37
marginal shield	12	huckleberry, black	46	swamp white	60	smooth carrion flower	65
marsh	13	hydrangea, wild	46	water	61	snakeroot,	
netted chain	13	hyssop-leaved thoroughwort	23	white	60	black	21
New York	12	Indian cucumber	28	willow	61	white	18
northern lady	11	Indiangrass	17	oats, wild	15	sneezeweed, yellow	24
northern maidenhair	11	indigo,		obedient plant	31	Solomon's seal,	
rattlesnake	11	wild blue	20	onion, nodding	18	dwarf	32
royal	12	wild yellow	20	panicgrass, variable	15	false	28
sensitive	12	iris (see blue flag)		partridge pea	21	spatterdock	42
sweet	45	ironweed, New York	39	partridgeberry	29	spicebush	48
toothed	11	Jack-in-the-pulpit	19	passionflower	65	spiderwort, Virginia	38
Virginia chain	13	Jacob's ladder	32	paw-paw	54	spikenard	19
fescue, red	16	jewelweed	26	persimmon, common	57	spleenwort, ebony	11
fetterbush	48	Joe-Pye weed,		petunia, Carolina wild	33	spring beauty	21
field pussytoes	18	green-stemmed	24	phlox,		squirrel corn	22
fire pink	34	spotted	24	creeping	31	St. John's wort, dense	47
fireweed	21	trumpet weed	23	meadow	31	stagger-bush	48
foamflower	38	ladies' tresses, nodding	36	moss	31	starry campion	34
fringetree, white	56	laurel,		summer	31	steeplesh	52
gentian, closed	24	great	49	thick-leaved	31	stonecrop,	
geranium, wild	24	mountain	47	woodland	31	Allegheny	26
ginger, wild	19	sheep	47	pickerelweed	42	mountain	34
goat's-beard	19	leather flower	64	pine,		sumac,	
golden club	42	lily,		loblolly	59	fragrant	50
golden ragwort	30	Canada	27	pitch	59	shining	50
golden-alexanders	40	fragrant water	42	pond	59	staghorn	33
goldenrod,		straw	39	shortleaf	59	sweet	50
bluestem	35	trout	23	Virginia	59	sundrops,	
broad leaf	35	Turk's cap	27	white	59	narrow-leaved	30
Canada	35	wood	27	pipevine	64	sunflower,	
early	35	lizard's tail	43	plantain,		oxeye	25
gray	35	lobelia, great blue	28	downy rattlesnake	24	swamp	25
seaside	36	lupine	28	robin's	23	ten-petaled	25
showy	36	lyre-leaf sage	33	plum,		woodland	25
sweet	36	magnolia,		American wild	60	sweet cicely	30
tall	35	cucumber	58	beach	49	sweet pepperbush	45
wrinkle-leaf	36	sweetbay	58	plumegrass, giant	17	switchgrass	16
gooseberry, Appalachian	50	male-berry	48	poplar, tulip	58	sycamore, American	59
grass,		mallow,		primrose, common evening	29	tassel-white	47
bitter or coastal panic	16	rose	41	raspberry, purple flowering	51	thimbleweed	18
blue-eyed	34	seashore	42	redbud, eastern	56	three-square, common	43
bottlebrush	16	maple,		redtop	17	tick-trefoil, panicked	22
coastal blue-eyed	34	mountain	54	reedgrass, bluejoint	14	toadflax, blue	29
gama	17	red	54	rice, wild	44	toadshade	38
poverty	15	silver	54	rose,		toothwort	20
salt	41	sugar	54	pasture	50	trillium,	
green-and-gold	21	marigold, marsh	20	swamp	51	painted	38
gum,		Mayapple	31	rose pink	33	purple	38
black	58	meadow-beauty, Virginia	32	rush,		white	38
sweet	58	meadow rue,		Canada	41	trumpet vine	64
hackberry, common	56	early	37	soft	41	turtlehead, white	21
haw, black	53	tall	37	rye,		twinleaf	26
hawthorn,		meadow-sweet,		Canada wild	16	violet,	
cockspur	56	broad-leaved	51	riverbank wild	16	American dog	39
green	57	narrow-leaved	51	Virginia wild	16	bird's foot	40
hazelnut, American	46	milkweed,		salt meadow hay	44	common blue	40
hedge nettle	36	common	19	sarsaparilla, wild	19	halberdleaf yellow	40
hellebore, green false	39	swamp	19	sassafras	62	marsh blue	39
hemlock, eastern	63	mint,		saxifrage,		striped cream	40
hepatica,		hoary mountain	32	early	34	yellow	40
round-lobed	25	narrow-leaved mountain	32	eastern swamp	33	virgin's bower	64
sharp-lobed	25	mistflower	22	sea lavender	27	walnut, black	57
heuchera, hairy	26	miterwort, twoleaf	29			waterleaf, Virginia	26
		monkeyflower	29			wax myrtle	48
		mulberry, red	58			wild pink	34



willow,	
American water .....	42
black .....	62
prairie .....	51
silky .....	62
wingstem, yellow ironweed .....	39
wintergreen, .....	46
striped .....	21
wisteria, Atlantic .....	65
witch hazel .....	46
witherod, .....	53
naked .....	53
wood sorrel, violet .....	30



**U.S. Fish & Wildlife Service**  
**Chesapeake Bay Field Office**  
177 Admiral Cochrane Dr.  
Annapolis, MD 21401  
410/573 4500  
[www.fws.gov/r5cbfo](http://www.fws.gov/r5cbfo)



**Adkins Arboretum**  
P.O. Box 100  
Ridgely, MD 21660  
410/634 2847  
[www.adkinsarboretum.org](http://www.adkinsarboretum.org)



**Baltimore County Department of**  
**Environmental Protection and**  
**Resource Management**  
401 Bosley Ave., Ste. 416  
Towson, MD 21204  
410/887 4488  
[www.baltimorecountyonline.info](http://www.baltimorecountyonline.info)



**Chesapeake Bay Trust**  
60 West Street, Ste. 200-A  
Annapolis, MD 21401  
410/974 2941  
[www.chesapeakebaytrust.org](http://www.chesapeakebaytrust.org)



**Irvine Nature Center**  
8400 Greenspring Avenue  
Stevenson, MD 21153  
410/484 2413  
[www.explorenature.org](http://www.explorenature.org)



**Maryland Native Plant Society**  
P.O. Box 4877  
Silver Spring, MD 20914  
301/809 0139  
[www.mdflora.org](http://www.mdflora.org)  
[mnps@toad.net](mailto:mnps@toad.net)



**National Fish and Wildlife**  
**Foudation**  
1120 Connecticut Ave. NW, Ste. 900  
Washington, DC 20036  
202/857 0166  
[www.nfwf.org](http://www.nfwf.org)



**The Nature Conservancy**  
Maryland/DC Chapter  
5410 Grosvenor Ln., Ste. 100  
Bethesda, MD 20814  
301/897 8570  
[www.nature.org](http://www.nature.org)



**USDA NRCS**  
**Cape May Plant Materials Center**  
1536 Rt. 9 North  
Cape May Court House, NJ 08210  
609/465 5901  
[plant-materials.nrcs.usda.gov](http://plant-materials.nrcs.usda.gov)