

## Native Plant Information

There are other species native to Pennsylvania that are not included in this brochure. The plants listed in the brochure were selected because they were available from nurseries in spring 2003. Some are harder to find than others, but the following websites can assist you in finding local sources of native plants.

Pennsylvania Native Plant Society  
[www.pawildflower.org](http://www.pawildflower.org)

Native Plant Society of New Jersey  
[www.npsnj.org](http://www.npsnj.org)

Delaware Native Plant Society  
[www.delawarenativeplants.org](http://www.delawarenativeplants.org)

Maryland Native Plant Society  
[www.mdflora.org](http://www.mdflora.org)

Bowman's Hill Wildflower Preserve  
[www.bhwp.org](http://www.bhwp.org)

Also, visit the Natural Resource Conservation Service's (NRCS) PLANTS Database. This website provides information, including plant characteristics and general distribution, on many of the species listed in this brochure. It is also useful to check the federal and state status of a plant (invasive, threatened, endangered, rare). The address is: [plants.usda.gov/index.html](http://plants.usda.gov/index.html)

## Credits and Partners

The Fairmount Park thanks those who took time to edit and add information to this brochure.

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Fairmount  
Park

PHILADELPHIA'S  
PARK SYSTEM

Trees

Shrubs

woody  
plants

selected

Native Plants  
of Philadelphia



The Junior League of Philadelphia, Inc.

Native plants are part of our natural heritage. William Penn described the forests of Philadelphia as “the natural produce of the country.” Native trees, shrubs, wildflowers, grasses, sedges, rushes and ferns should be planted and protected. You can help preserve Pennsylvania’s ecosystems by using native plants in gardens, property enhancement and restoration projects.

To assist you, Fairmount Park is pleased to offer this descriptive brochure of selected plants native to Philadelphia County, PA. Information in the brochure will enable you to select appropriate plants for your landscaping and restoration projects. All species on this list are commercially available and many species are also available as seed. We hope you find this list useful when choosing plants.

Fairmount Park  
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[www.fairmountpark.org](http://www.fairmountpark.org)

*The mission of Fairmount Park is to preserve, protect and maintain the open space, street trees, natural and cultural resources of Philadelphia's parks for the recreation and enjoyment of residents and visitors; educate the public on the environment, history and use of the Fairmount Park system, and to promote, celebrate and enhance the uniqueness and value of the Fairmount Park system and its economic impact to the City, region and state.*

## The Value of Native Plants

The native plant species listed in this brochure are adapted to the environmental conditions (e.g., climate, soils) that have existed historically in Philadelphia County. The primary benefit of native plants is that they provide food, shelter, breeding and nesting sites for animals that have used the natural areas of Philadelphia for millennia. All levels of animals, from insects to mammals, are adapted to a suite of native plants. Installing native plants is a practice that can be used on all sites and will help insure ecological integrity. Natives also provide diversity and beauty in any landscape.

## Issues with Non-Native Plants

Non-native plants don't provide the same quality of ecologic function as natives. They do not sustain insect populations in the same way as natives, resulting in less food for birds and other animals. The fat content of fruits of non-native shrubs is much lower than some of the native shrubs and trees, resulting in lower food value for migrating birds. Some non-natives are reservoirs for tree diseases or produce chemicals harmful to native insects. Non-natives compete with natives for light, water and nutrients. Some non-native species are invasive, aggressively displacing native plant populations.

## Pennsylvania Natural Diversity Inventory (PNDI)

Some plant species on the list are preceded by a bullet (●). This indicates that the plant is currently listed on the PA Department of Conservation and Natural Resources (DCNR) Pennsylvania Natural Diversity Inventory (PNDI). The Pennsylvania Natural Heritage Program (PNHP) conducts inventories and collects data to identify and describe Pennsylvania’s rarest and most significant ecological features, including plant and animal species of special concern, rare and exemplary natural communities and outstanding geologic features. Species tracked in the PNDI system are those classified as Endangered, Threatened or Rare. The PNHP website shows the current status of all PNDI species. The address is: [www.naturalheritage.state.pa.us/plantspage.aspx](http://www.naturalheritage.state.pa.us/plantspage.aspx)

## Native Plants for Landscaping, Restoration and Conservation

When using native plants in a landscaped or natural area, it is important to install the plants in locations that meet their soil and light requirements. This brochure serves as a guide to help you determine which plants are most appropriate for your situation. When you are ready to purchase plants, be sure to buy from a reputable source that propagates its plants, preferably from *local seed sources* (seed that was first collected from naturally-occurring plant populations in your area) rather than one that collects plants from the wild. Plants propagated from a local source will help to preserve the local gene pool and will be well suited for planting sites in the same region. PNDI-listed species should not be planted unless the plants can be documented to be from a local source. When using native plants for restoration and conservation, species should be documented as native to a county, not a state. Native plant species have known historic ranges and habitats. To find out if a plant is native to your Pennsylvania county, refer to *The Vascular Flora of Pennsylvania Annotated Checklist and Atlas* (see "Resources").

## Points to Remember

NEVER collect plants from the wild, or purchase plants from a nursery that collects wild specimens.

ALWAYS buy nursery propagated plants.

ONLY plant PNDI-listed species that have been propagated from a documented local seed source.

ALWAYS ask for a plant by the scientific name (e.g., *Acer saccharum*). Scientific names are unique and represent only one species; whereas common names vary widely and can represent two or more species. For example, Burning bush can refer to the exotic *Euonymus alatus* or the native *Euonymus atropurpureus*.

ALWAYS encourage the use of native plants to help reduce the establishment of non-native vegetation.

AVOID as much as possible the use of cultivars (e.g., *Phlox paniculata* ‘David’) or hybrids (e.g., *Heuchera* x ‘Plum Pudding’) as they may negatively affect native plant populations.



urban tolerance

habitat

indicator

height & rate

common name

species

genus



genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Acer</i>	<i>negundo</i>	<b>Box elder</b>	30-50' fast	<b>FAC+</b>	floodplains or low moist areas along stream banks; full sun	drought/heat tolerant, tolerant of poor soils
<i>Acer</i>	<i>rubrum</i>	<b>Red maple</b>	40-60' med-fast	<b>FACW</b>	wooded slopes, swamps, bogs, moist areas; sun to shade	tolerant of many soils, flood tolerant
<i>Acer</i>	<i>saccharinum</i>	<b>Silver maple</b>	50-70' fast	<b>FACW</b>	floodplains and moist woods, stream banks and alluvial soils; full sun to part shade	drought/heat tolerant, very tolerant of poor soils
<i>Acer</i>	<i>saccharum</i>	<b>Sugar maple</b>	60-75' slow	<b>FACU</b>	moist woods, wooded slopes, ravines, and alluvial soils; sun to shade	intolerant of crowding, pollution and drought
<i>Amelanchier</i>	<i>arborea</i>	<b>Shadbush</b>	15-25' medium	<b>FAC-</b>	upland woods and rocky bluffs; full sun to part shade	intolerant of pollution
<i>Amelanchier</i>	<i>laevis</i>	<b>Smooth serviceberry</b>	25' medium		rocky woods, thickets and roadside banks; sun to shade	drought/heat and soil compaction sensitive
<i>Asimina</i>	<i>triloba</i>	<b>Pawpaw</b>	15-20' medium	<b>FACU+</b>	moist rich woods, mesic slopes, stream borders; full sun to shade	drought/heat and soil compaction sensitive
<i>Betula</i>	<i>lenta</i>	<b>Sweet birch</b>	40-55' medium	<b>FACU</b>	woods and stream banks; full sun to part shade	drought tolerance o.k., sensitive to soil compaction
<i>Betula</i>	<i>nigra</i>	<b>River birch</b>	40-70' medium	<b>FACW</b>	floodplains, riverbanks, wet woods and swamps, acidic soils; full sun	drought/heat and compaction resistant

# trees

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Betula</i>	<i>populifolia</i>	<b>Gray birch</b>	20-40' med-fast	<b>FAC</b>	old fields, open woods, poor soils-wet to dry; full sun	flood tolerant, drought/heat and compaction resistant, serious insect problems
<i>Carpinus</i>	<i>caroliniana</i>	<b>Hornbeam</b>	20-30' slow	<b>FAC</b>	moist woods and stream banks, understory; heavy shade	flood intolerant, drought/heat and compaction sensitive
<i>Carya</i>	<i>cordiformis</i>	<b>Bitternut hickory</b>	50-75' slow-med	<b>FACU+</b>	moist woods and stream banks; full sun to part shade, fastest growing of the hickories	flood, drought/heat and compaction tolerance o.k.
<i>Carya</i>	<i>glabra</i>	<b>Pignut hickory</b>	50-60' slow	<b>FACU-</b>	hillsides and ridges in dry, rich soils, warm south facing slopes; full sun to part shade	very flood intolerant, drought/heat resistant, compaction sensitive
<i>Carya</i>	<i>ovata</i>	<b>Shagbark hickory</b>	75-100'	<b>FACU</b>	moist woods, upland mesic to dry; full sun to part shade	flood intolerant, drought/heat resistant, compaction tolerance o.k.
<i>Carya</i>	<i>tomentosa</i>	<b>Mockernut hickory</b>	50-80' slow		ridges, dry hills and slopes, moist well-drained soil; full sun	very flood intolerant, drought/heat resistant, compaction sensitive
<i>Castanea</i>	<i>pumila</i>	<b>Chinquapin</b>	6-15'		dry woods; full sun to part shade	drought/heat resistant, flood and compaction intolerant
<i>Celtis</i>	<i>occidentalis</i>	<b>Hackberry</b>	40-60' med-fast	<b>FACU</b>	dry to moist woods, rocky slopes, rich banks; full sun to part shade	flood tolerance o.k., drought/heat resistant
<i>Cercis</i>	<i>canadensis</i>	<b>Redbud</b>	20-30' medium		dry to moist rich woods, adaptable; full sun to light shade, not good in acidic soils	drought/heat resistant
<i>Cornus</i>	<i>florida</i>	<b>Flowering dogwood</b>	35-50' slow-med	<b>FACU-</b>	mesic woods, edges, old fields; sun to shade	flood intolerant, disease susceptible
<i>Crataegus</i>	<i>crus-galli</i>	<b>Cockspur hawthorn</b>	20-30'	<b>FACU</b>	woods, meadows, roadsides, thickets, tolerant of many soils; full sun	flood and compaction tolerance o.k., drought/heat resistant
<i>Diospyrus</i>	<i>virginiana</i>	<b>Persimmon</b>	35-60' slow-med	<b>FAC-</b>	open woods, floodplains and old fields; full sun	flood and compaction tolerance o.k., drought/heat resistant
<i>Fagus</i>	<i>grandifolia</i>	<b>American beech</b>	50-70' slow	<b>FACU</b>	moist well-drained woods; sun to shade	flood and compaction intolerant, drought/heat sensitive
<i>Fraxinus</i>	<i>americana</i>	<b>White ash</b>	50-80' medium	<b>FACU</b>	woods, moist well-drained soils, old fields; full sun to part shade	flood, drought/heat and compaction tolerance o.k.
<i>Fraxinus</i>	<i>pennsylvanica</i>	<b>Green ash</b>	50-60' fast	<b>FACW</b>	alluvial woods; stream banks and moist fields; full sun	flood tolerance o.k., drought/heat and compaction resistant
<i>Gleditsia</i>	<i>triacanthos</i>	<b>Honeylocust</b>	50-75' fast		stream banks and floodplains, wood edges; very adaptable; full sun	flood tolerance o.k., drought/heat and compaction resistant
<i>Ilex</i>	<i>opaca</i>	<b>American holly</b>	40-50' slow		alluvial woods and wooded slopes, acidic well-drained soils; full sun to part shade	intolerant of wind and flooding
<i>Juglans</i>	<i>cinerea</i>	<b>Butternut</b>	40-60'	<b>FACU+</b>	rich woods on limestone soils, low (usually alluvial) woods; full sun	drought/heat, compaction and flood tolerance o.k., severe disease problems

# trees

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Juglans</i>	<i>nigra</i>	<b>Black walnut</b>	50-75'	<b>FACU</b>	open woods, floodplains, meadows, alluvial soils; full sun	drought resistant, flood and compaction tolerance o.k.
<i>Juniperus</i>	<i>virginiana</i>	<b>Eastern red cedar</b>	50-75' medium	<b>FACU</b>	moist to dry open sites that are sunny and airy, old fields, successional woods; full sun	flood and shade intolerant, drought/heat tolerance o.k.
<i>Liquidambar</i>	<i>styraciflua</i>	<b>Sweetgum</b>	60-75' med-fast	<b>FAC</b>	wet coastal plain woods; full sun	flood tolerant, drought/heat tolerance o.k.
<i>Liriodendron</i>	<i>tulipifera</i>	<b>Tulip tree</b>	70-150' fast	<b>FACU</b>	mesic forests; full sun to part shade	drought/heat and compaction sensitive, flood intolerant
<i>Magnolia</i>	<i>virginiana</i>	<b>Sweetbay magnolia</b>	10-20' med-fast	<b>FACW+</b>	moist woods and swamps, sandy-peaty acidic soil; sun to shade	flood tolerant, drought/heat sensitive
<i>Malus</i>	<i>coronaria</i>	<b>Sweet crabapple</b>	20-30'		woods, old fields and thickets, moist acidic soils; full sun	plant at least 500' away from species in the Juniper family to reduce susceptibility of cedar apple rust
<i>Morus</i>	<i>rubra</i>	<b>Red mulberry</b>	40-70'	<b>FACU</b>	rich, moist, alluvial soils, shade	compaction and flood tolerance o.k., drought/heat resistant
<i>Nyssa</i>	<i>sylvatica</i>	<b>Sourgum</b>	30-50' slow-med	<b>FAC</b>	dry to moist woods, rocky slopes and ridge-tops; full sun	drought/heat resistant, flood and compaction tolerance o.k.
<i>Ostrya</i>	<i>virginiana</i>	<b>Hop-hornbeam</b>	25-40' slow	<b>FACU-</b>	dry, wooded slopes, gravelly or rocky soils; full sun to part shade	drought/heat tolerance o.k., flood and compaction intolerant
<i>Pinus</i>	<i>rigida</i>	<b>Pitch pine</b>	40-60' medium	<b>FACU</b>	moist to dry sterile acidic soil; full sun	drought/heat resistant, shade and flood intolerant, sensitive to compaction
<i>Pinus</i>	<i>strobus</i>	<b>White pine</b>	50-100' fast	<b>FACU</b>	upland mesic, steep rocky land; full sun to part shade	drought/heat sensitive, flood and compaction sensitive
<i>Pinus</i>	<i>virginiana</i>	<b>Scrub pine</b>	15-40' slow		barrens, slopes and ridgetops, dry sandy or shaley soils; open sunny exposure	drought/heat tolerant, tolerant of poor sterile soils
<i>Platanus</i>	<i>occidentalis</i>	<b>Sycamore</b>	75-100' med-fast	<b>FACW-</b>	riverbanks, low woods, floodplains, alluvial soils; full sun to part shade	flood tolerance o.k., drought/heat and compaction resistant; susceptible to sycamore anthracnose
<i>Populus</i>	<i>deltoides</i>	<b>Cottonwood</b>	75-100' fast	<b>FACU-</b>	floodplains and swamps, alluvial soils, pioneer species; full sun	flood tolerant, drought/heat and compaction resistant
<i>Populus</i>	<i>grandidentata</i>	<b>Large-toothed aspen</b>	50-70' fast	<b>FACU-</b>	moist fertile soils to dry sandy or gravelly soils, pioneer species; full sun	flood intolerant, drought/heat tolerance o.k., compaction sensitive
<i>Populus</i>	<i>tremuloides</i>	<b>Quaking aspen</b>	35-50'		dry to wet open woods, pioneer species; full sun	flood intolerant, compaction sensitive, drought/heat tolerance o.k.
<i>Prunus</i>	<i>serotina</i>	<b>Black cherry</b>	50-60'	<b>FACU</b>	moist to dry forests, pioneer species; full sun	flood and compaction intolerant, drought/heat resistant
<i>Prunus</i>	<i>virginiana</i>	<b>Chokecherry</b>	20-30'	<b>FACU</b>	rocky woods, edges and open fields, roadside banks, borders swamps; full sun to light shade	drought/heat resistant, flood and compaction intolerant

urban tolerance

tree

habitat

indicator

height & rate

common name

species

genus

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Quercus</i>	<i>alba</i>	<b>White oak</b>	50-80' slow-med	<b>FACU</b>	dry to moist acidic woods; full sun to part shade	drought/heat tolerance o.k., flood intolerant, compaction very sensitive
<i>Quercus</i>	<i>bicolor</i>	<b>Swamp white oak</b>	50-60'	<b>FACW+</b>	swamps and low woods; full sun to part shade	flood tolerant, drought/heat and compaction resistant
<i>Quercus</i>	<i>coccinea</i>	<b>Scarlet oak</b>	50-75'		dry woods, sandy soil, steep rocky land; full sun	flood and compaction intolerant, drought/heat resistant
<i>Quercus</i>	<i>falcata</i>	<b>Spanish oak</b>	70-80'	<b>FACU-</b>	dry to moist woods, poorer soils of the Piedmont; full sun to part shade	drought tolerant
<i>Quercus</i>	<i>marilandica</i>	<b>Blackjack oak</b>	30-40' slow		dry wooded slopes and serpentine barrens; full sun	very flood intolerant, drought/heat resistant, compaction sensitive
<i>Quercus</i>	<i>montana</i>	<b>Chestnut oak</b>	60-70' medium	<b>UPL</b>	dry woods and rocky slopes; full sun to part shade	flood and compaction intolerant, drought/heat resistant
<i>Quercus</i>	<i>palustris</i>	<b>Pin oak</b>	60-70'	<b>FACW</b>	swamps, low woods, moist acidic well drained soils; full sun	flood tolerance o.k., drought/heat and compaction resistant
<i>Quercus</i>	<i>phellos</i>	<b>Willow oak</b>	40-60' medium	<b>FACU-</b>	moist to wet woods, acidic soils, tolerates poor drainage; full sun to light shade	drought/heat, compaction, salt and flood tolerant
<i>Quercus</i>	<i>rubra</i>	<b>Red oak</b>	60-75'	<b>FACU-</b>	dry to moist acidic woods; full sun	drought/heat tolerance o.k., compaction and pollution tolerant
<i>Quercus</i>	<i>stellata</i>	<b>Post oak</b>	40-50' slow	<b>UPL</b>	dry woods, rocky slopes and serpentine barrens; full sun	very flood intolerant, drought/heat resistant, compaction sensitive
<i>Quercus</i>	<i>velutina</i>	<b>Black oak</b>	50-60'		dry well drained acidic woods; full sun to light shade	flood and compaction intolerant, drought/heat resistant
<i>Robinia</i>	<i>pseudacacia</i>	<b>Black locust</b>	30-50' fast	<b>FACU-</b>	open woods, floodplains, thickets, pioneer species, very adaptable; full sun	flood intolerant, drought/heat resistant, compaction sensitive
<i>Salix</i>	<i>nigra</i>	<b>Black willow</b>	35-50' fast	<b>FACW+</b>	swamps, wet meadows and alluvial soils; full sun	flood tolerant, drought/heat and compaction resistant
<i>Sassafras</i>	<i>albidum</i>	<b>Sassafras</b>	30-60' med-fast	<b>FACU</b>	old fields and woods edges, pioneer species; full sun to part shade	flood and compaction intolerant, drought/heat resistant
<i>Tilia</i>	<i>americana</i>	<b>Basswood</b>	60-80' medium	<b>FACU</b>	upland mesic, slopes and rocky places; full sun to part shade	flood intolerant, drought/heat and compaction sensitive
<i>Tsuga</i>	<i>canadensis</i>	<b>Hemlock</b>	to 100' medium	<b>FAGU</b>	cool moist acidic woods, shaded north facing slopes, rocky bluffs; shade	flood, compaction and drought/heat sensitive, severe insect problems
<i>Ulmus</i>	<i>americana</i>	<b>American elm</b>	60-80' med-fast	<b>FACW-</b>	stream banks and floodplains; full sun to light shade	flood and compaction tolerance o.k., drought/heat resistant, disease problems

urban tolerance

# shrubs

habitat

indicator

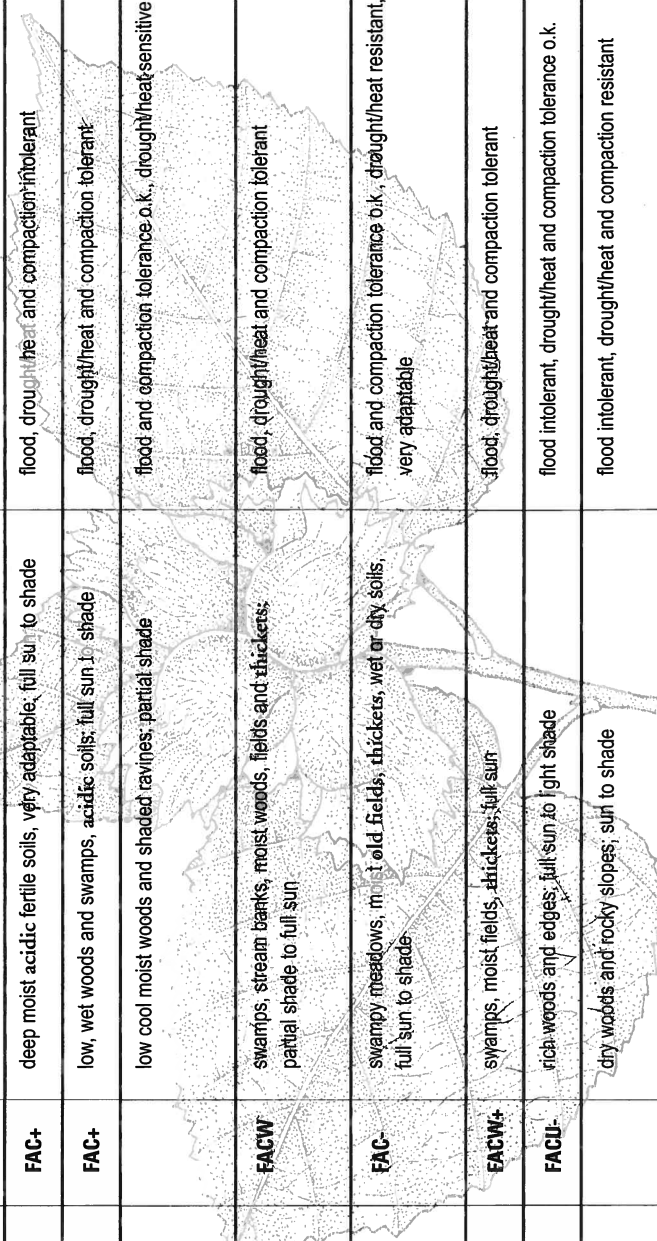
height & rate

common name

species

genus

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Alnus</i>	<i>serrulata</i>	<b>Smooth alder</b>	6-10' fast	<b>OBL</b>	low wet woods and swamps; full sun	very flood tolerant, drought/heat and compaction resistant
<i>Amelanchier</i>	<i>canadensis</i>	<b>Serviceberry</b>	6-20'	<b>FAC</b>	moist woods and swamps; full sun to part shade	drought/heat, flood and compaction sensitive; susceptible to deer browse
<i>Aronia</i>	<i>arbutifolia</i>	<b>Red chokeberry</b>	6-10' slow	<b>FACW</b>	swamps, bogs and moist woods; full sun to part shade	very flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Aronia</i>	<i>melanocarpa</i>	<b>Black chokeberry</b>	5-10'	<b>FAC</b>	swamps, bogs, wet or dry woods; full sun to part shade	flood, drought/heat and compaction tolerant
<i>Aronia</i>	<i>prunifolia</i>	<b>Purple chokeberry</b>	12'	<b>FACW</b>	bogs, swamps, wet woods; full sun to part shade; may be a hybrid between <i>A. melanocarpa</i> and <i>A. arbutifolia</i>	flood tolerant and drought/heat tolerance o.k., compaction resistant
<i>Baccharis</i>	<i>halimifolia</i>	<b>Groundsel-tree</b>	6-12' fast	<b>FACW</b>	tidal marshes, banks of marshes, shores and swales; full sun	drought/heat resistant, compaction resistant, salt resistant
<i>Campsis</i>	<i>radicans</i>	<b>Trumpet creeper</b>	vine fast	<b>FAC</b>	woods, stream banks, thickets, fencerows; full sun to light shade	flood tolerance o.k., drought/heat and compaction resistant; can be very aggressive
<i>Ceanothus</i>	<i>americanus</i>	<b>New Jersey tea</b>	3-4' slow-med		wooded bluffs, roadside banks, shaley slopes; full sun to shade	flood and drought/heat tolerant, compaction sensitive
<i>Cephalanthus</i>	<i>occidentalis</i>	<b>Buttonbush</b>	3-6'	<b>OBL</b>	swamps, bogs, lake margins and wet low ground; full sun	flood and compaction tolerant, drought/heat sensitive
<i>Chionanthus</i>	<i>virginicus</i>	<b>Fringe-tree</b>	12-25' slow	<b>FAC+</b>	deep moist acidic fertile soils, very adaptable; full sun to shade	flood, drought/heat and compaction intolerant
<i>Clethra</i>	<i>alnifolia</i>	<b>Sweet pepperbush</b>	3-8' slow-med	<b>FAC+</b>	low, wet woods and swamps, acidic soils; full sun to shade	flood, drought/heat and compaction tolerant
<i>Cornus</i>	<i>alternifolia</i>	<b>Alternate-leaved dogwood</b>	15-25'		low cool moist woods and shaded ravines; partial shade	flood and compaction tolerance o.k., drought/heat sensitive
<i>Cornus</i>	<i>amomum</i>	<b>Silky dogwood</b>	6-10' medium	<b>FACW</b>	swamps, stream banks, moist woods, fields and thickets; partial shade to full sun	flood, drought/heat and compaction tolerant
<i>Cornus</i>	<i>racemosa</i>	<b>Gray dogwood</b>	10-15' slow	<b>FAC</b>	swampy meadows, moist old fields, thickets, wet or dry soils, full sun to shade	flood and compaction tolerance o.k., drought/heat resistant, very adaptable
<i>Cornus</i>	<i>sericea</i>	<b>Red-osier dogwood</b>	7-9' fast	<b>FACW+</b>	swamps, moist fields, thickets; full sun	flood, drought/heat and compaction tolerant
<i>Corylus</i>	<i>americana</i>	<b>Hazelnut</b>	8-10' med-fast	<b>FACU-</b>	rich woods and edges; full sun to light shade	flood intolerant, drought/heat and compaction tolerance o.k.
<i>Diervilla</i>	<i>lonicera</i>	<b>Bush-honeysuckle</b>	3' fast		dry woods and rocky slopes; sun to shade	flood intolerant, drought/heat and compaction resistant



# shrubs

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Euonymus</i>	<i>americanus</i>	<b>Strawberry bush</b>	4-6'	<b>FAC</b>	moist woods, floodplains and wet thickets; full sun to light shade	flood tolerance o.k., very susceptible to deer browse
<i>Euonymus</i>	<i>atropurpureus</i>	<b>Burning-bush</b>	12-25'	<b>FACU</b>	moist woods and floodplain thickets on limestone or diabase; full sun to part shade	flood, compaction, drought/heat tolerance o.k.
<i>Gaultheria</i>	<i>procumbens</i>	<b>Wintergreen</b>	6"	<b>FACU</b>	low evergreen shrub; dry to wet woods and barrens; full sun to part shade	very shade and flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Hamamelis</i>	<i>virginiana</i>	<b>Witch-hazel</b>	20-30' medium	<b>FAC-</b>	moist, rocky woods; full sun to shade	flood, drought/heat and compaction intolerant
<i>Hydrangea</i>	<i>arborescens</i>	<b>Wild hydrangea</b>	3-5' fast	<b>FACU</b>	rich woods, slopes, stream banks; partial shade to full shade	flood drought/heat intolerant, compaction tolerance o.k.
<i>Ilex</i>	<i>verticillata</i>	<b>Winterberry</b>	6-12' slow	<b>FACW+</b>	swamps, bogs, wet woods, moist shores, acidic soils; full sun to part shade	very flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Juniperus</i>	<i>communis</i>	<b>Common juniper</b>	5-10' slow		dry open woods and slopes; full sun	flood intolerant
<i>Kalmia</i>	<i>latifolia</i>	<b>Mountain laurel</b>	7-15' slow	<b>FACU</b>	dry woods and rocky slopes, acidic, cool moist well drained soil; full sun to part shade	flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Leucothoe</i>	<i>racemosa</i>	<b>Swamp sweetbells</b>	4-6'	<b>FACW</b>	wet woods and thickets; part shade	flood and compaction tolerance o.k., drought/heat sensitive
<i>Lindera</i>	<i>benzoin</i>	<b>Spicebush</b>	6-12' slow-med	<b>FACW-</b>	moist woods; full sun to shade	drought/heat resistant, compaction tolerance o.k., flood intolerant
<i>Lonicera</i>	<i>sempervirens</i>	<b>Trumpet honeysuckle</b>	vine medium	<b>FACU</b>	fencerows, thickets and roadsides; full sun to part shade	very flood tolerant, drought/heat and compaction resistant
<i>Lyonia</i>	<i>ligustrina</i>	<b>Maleberry</b>	6-12'	<b>FACW</b>	dry to wet woods and thickets, low alluvial forests, wet meadows; full sun	flood very tolerant, drought/heat and compaction resistant, salt tolerant
<i>Myrica</i>	<i>pensylvanica</i>	<b>Bayberry</b>	9' medium	<b>FAC</b>	old fields, open woods with dry sterile-sandy soils; full sun	flood tolerance o.k., drought/heat and compaction resistant
<i>Parthenocissus</i>	<i>quinquefolia</i>	<b>Virginia creeper</b>	vine fast	<b>FACU</b>	woods, fields and edges, adaptable; full sun to light shade	very flood tolerant, drought/heat and compaction resistant
<i>Physocarpus</i>	<i>opulifolius</i>	<b>Ninebark</b>	5-10' fast	<b>FACW</b>	moist cliffs; wet woods, sandy or rocky stream banks; full sun	flood and compaction intolerant, drought/heat resistant
<i>Prunus</i>	<i>americana</i>	<b>American plum</b>	15-30'	<b>FACU-</b>	wooded slopes, hedgerows and roadside thickets, steep rocky hillsides; drought conditions; full sun	flood and compaction intolerant, drought/heat resistant



urban tolerance

shrubs

habitat

indicator

height & rate

common name

species

genus

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Prelea</i>	<i>trifoliata</i>	<b>Wafer ash</b>	15-20'	<b>FAC</b>	stream banks and roadside thickets; full sun to part shade	very flood tolerant, drought/heat resistant, compaction sensitive
<i>Rhododendron</i>	<i>maximum</i>	<b>Rosebay</b>	4-25' slow-med	<b>FAC</b>	stream banks, cool slopes and swamps, moist, acidic soil; full sun to part shade	flood tolerant, drought/heat and compaction sensitive
<i>Rhododendron</i>	<i>periclymenoides</i>	<b>Pinxter flower</b>	4-6'	<b>FAC</b>	dry sandy rocky woods, acidic soils only, thickets and stream banks; full sun to part shade	flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Rhododendron</i>	<i>viscosum</i>	<b>Swamp azalea</b>	5-8'	<b>FACW+</b>	wet woods and swamps; full sun-part shade	flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Rhus</i>	<i>copallina</i>	<b>Winged sumac</b>	20-30'		dry rocky open woods, thickets and old fields; full sun	flood intolerant, drought/heat resistant, compaction sensitive
<i>Rhus</i>	<i>glabra</i>	<b>Smooth sumac</b>	9-15'		old fields, dry open slopes, poor soils; full sun	flood and compaction intolerant, drought/heat resistant
<i>Rhus</i>	<i>typhina</i>	<b>Staghorn sumac</b>	15-25' fast		dry sterile open soils, old fields, woods edges; full sun	flood intolerant, drought/heat resistant, compaction sensitive
<i>Ribes</i>	<i>americanum</i>	<b>American black currant</b>	3-6'	<b>FACW</b>	moist woods, marshes, thickets; full sun to light shade	drought/heat tolerance o.k., very flood tolerant, compaction resistant
<i>Rosa</i>	<i>carolina</i>	<b>Pasture rose</b>	4-6' fast	<b>UPL</b>	rocky banks and other dry open ground; full sun	flood intolerant, drought/heat resistant, compaction tolerance o.k.
<i>Rosa</i>	<i>palustris</i>	<b>Swamp rose</b>	6'	<b>OBL</b>	swamps and marshes; full sun	
<i>Rosa</i>	<i>virginiana</i>	<b>Wild rose</b>	4-6'	<b>FAC</b>	pastures, fields, open woods, thickets and roadsides, moist soils; full sun	tolerant of poor soils
<i>Rubus</i>	<i>allegheniensis</i>	<b>Common blackberry</b>	3-6' fast	<b>FACU-</b>	old fields, open woods, and disturbed woods; full sun to part shade	flood and compaction tolerance o.k., drought/heat resistant
<i>Salix</i>	<i>discolor</i>	<b>Pussy-willow</b>	10-15'	<b>FACW</b>	swamps and moist wet woods, low lying areas; full sun	very flood tolerant, drought/heat and compaction resistant
<i>Salix</i>	<i>eriocephala</i>	<b>Heart-leaved willow</b>	15-20'	<b>FACW</b>	shores and bottomlands; full sun	
<i>Salix</i>	<i>exigua</i>	<b>Sandbar willow</b>	10' fast	<b>OBL</b>	sandy, gravelly bars or shores; full sun	
<i>Salix</i>	<i>sericea</i>	<b>Silky willow</b>	10' fast	<b>OBL</b>	swamps, bogs, stream banks and low woods; full sun to light shade	
<i>Sambucus</i>	<i>canadensis</i>	<b>American elder</b>	5-12' fast	<b>FACW</b>	woods, fields, stream banks, moist fields, swamps; sun to shade	very flood tolerant, drought/heat, compaction resistant
<i>Spiraea</i>	<i>latifolia</i>	<b>Meadowsweet</b>	3-6' fast	<b>FAC+</b>	bogs, moist woods, swamps; full sun to light shade	
<i>Spiraea</i>	<i>tomentosa</i>	<b>Steeplebush</b>	3-6'	<b>FACW-</b>	wet meadows, moist old fields, bogs and swamps; full sun	flood tolerant, drought/heat and compaction resistant
<i>Staphylea</i>	<i>trifolia</i>	<b>Bladdernut</b>	10-15' med-fast	<b>FAC</b>	moist rocky woods and stream banks; sun to shade	flood and compaction tolerance o.k., drought/heat sensitive

# shrubs

genus	species	common name	height & rate	indicator	habitat	urban tolerance
<i>Symphoricarpos</i>	<i>orbiculatus</i>	<b>Coralberry</b>	2-5' fast	UPL	wet woods, thickets and old fields, disturbed floodplain forests and woods edges; full sun to light shade	flood and compaction tolerance o.k., drought/heat sensitive
<i>Vaccinium</i>	<i>angustifolium</i>	<b>Low-bush blueberry</b>	1-3'	FACU-	dry woods, old fields, open rocky or sandy ground; sun to shade	very flood tolerant, drought/heat resistant, compaction sensitive
<i>Vaccinium</i>	<i>corymbosum</i>	<b>High-bush blueberry</b>	6-12' slow	FACW-	dry to wet woods, thickets and stream banks, acidic soils, moist, organic well drained soil; full sun to part shade	flood tolerant, drought/heat tolerance o.k., compaction resistant
<i>Vaccinium</i>	<i>pallidum</i>	<b>Southern low blueberry</b>	1-3'	FACU-	dry woods, old fields, open rocky or sandy ground; sun to shade	very flood tolerant, drought/heat resistant, compaction sensitive
<i>Viburnum</i>	<i>acerifolium</i>	<b>Maple-leaved viburnum</b>	4-6'	URL	woods, dry soils, rock outcrops, wooded ravines; sun to shade	flood intolerant, drought/heat and compaction tolerance o.k.
<i>Viburnum</i>	<i>dentatum</i>	<b>Southern arrow-wood</b>	6-12'	FAC	swamps and wet woods; sun to part shade	flood tolerant, drought/heat resistant, compaction tolerance o.k.
<i>Viburnum</i>	<i>lentago</i>	<b>Nannyberry</b>	15-18' medium	FAC	moist woods, swamps, roadside edges; adaptable; sun to shade	shade tolerance o.k., flood intolerant; drought/heat resistant, compaction sensitive
<i>Viburnum</i>	<i>nudum</i>	<b>Possom-haw</b>	12-20'	OBL	wet woods, swamps, vernal pool edges; full sun to light shade	flood tolerant, drought/heat and compaction resistant
<i>Viburnum</i>	<i>prunifolium</i>	<b>Black-haw</b>	15-20' slow-med	FACU	successional woods, thickets, old fields and roadsides; adaptable; sun to shade	flood and shade intolerant, drought/heat resistant and compaction sensitive
<i>Viburnum</i>	<i>trilobum</i>	<b>Cranberry viburnum</b>	8-12' med-fast	FACW	swamps, fens and wet woods; sun to part shade; very similar to <i>Viburnum opulus</i> , a European native	flood tolerant, drought/heat and compaction resistant
<i>Zanthoxylum</i>	<i>americanum</i>	<b>Toothache tree</b>	15-25' fast	FACU	streambanks, river bluffs, wet woods, open areas; full sun	flood tolerance o.k., drought/heat resistant, compaction sensitive

## resources

1. *Manual of Woody Landscape Plants*, Michael Dirr, 1990
2. *Native Trees, Shrubs, and Vines for Urban and Rural America*, Gary L. Highshoe, 1988
3. *The Plants of Pennsylvania*, Ann Fowler Rhoads & Timothy A. Block, 2000
4. *The Vascular Flora of PA Annotated Checklist and Atlas*, Ann Fowler Rhoads & William McKinley Klein, Jr., 1993

# glossary

## wetland indicator

probability of occurring in a wetland

<b>OBL</b>	Obligate wetland species	99%
<b>FACW</b>	Facultative wetland species	67-99%
<b>FAC</b>	Facultative species	34-66%
<b>FACU</b>	Facultative upland species	1-33%
<b>UPL</b>	Upland species	1%

(+) indicates that the species occurs in the higher portion of the range

(-) indicates that the species occurs in the lower portion of the range

Those species with no wetland indicator are virtually intolerant of flooding or prolonged soil saturation during the growing season.

<b>acidic soil</b>	pH less than 6.0	mesic	a habitat with moderate soil water content and is well drained; moist
<b>alkaline soil</b>	pH higher than 6.0	old field	an abandoned agricultural field, usually in the early stages of succession
<b>alluvial</b>	soils deposited by running water along streams and rivers		
<b>barren</b>	plant communities where tree establishment or growth is suppressed by environmental conditions or disturbance	Piedmont	refers to a region between the coastal plain and Appalachian Mountains (south from New York City to Montgomery, Alabama) which is underlain by a bed of crystalline rocks
<b>bog</b>	low nutrient (usually acidic) peatland, dominated by Ericaceous shrubs, sedges and mosses	pioneer species	an early colonizer of a newly available site
<b>fencerow</b>	the uncultivated land on either side of a fence	serpentine barrens	barrens associated with serpentine, a mineral toxic to plants
<b>fen</b>	high nutrient peatland dominated by sedges	succession(al)	the process of vegetation change that culminates in a climax community
<b>floodplain</b>	the area of lowland along a water course that is subject to periodic flooding and sediment deposition	thicket	a dense colony of one species, usually spreading by underground roots
		understory	tree crown greater than 20 feet but less than 50 feet in height at maturity
		vernal pools	pools formed in the wet season of spring that dry out in summer