

For more information

Places and organizations in Pennsylvania

Audubon Society of Western Pennsylvania, 614 Dorseyville Road, Pittsburgh, PA 15238-1618, Tel (412) 963-6100, Fax (412) 963-6761, www.enviroweb.org/orgs/aswp

Bowman's Hill Wildflower Preserve, Washington Crossing Historic Park, PO Box 685, New Hope, PA 18938-0685, Tel (215) 862-2924, Fax (215) 862-1846, Native plant preserve, plant sales, native seed, educational programs, www.bhwp.org

Brandywine Conservancy, Brandywine River Museum, PO Box 141, Chadds Ford, PA 19317, Tel (610) 388-2700, Fax (610) 388-3814, Native seeds, plants, garden, and bookstore; Environmental Management Center offers planning and conservation services, www.brandywinemuseum.org

Department of Conservation and Natural Resources; Bureau of Forestry; PO Box 8552, Harrisburg, PA 17105-8552, Tel (717) 787-3444, Fax (717) 783-5109, , Invasive plant brochure; list of native plant & seed suppliers in PA; list of rare, endangered, threatened species, www.dcnr.state.pa.us/forestry

Morris Arboretum of the University of Pennsylvania, 9414 Meadowbrook Avenue, Philadelphia, PA 19118, Tel (215) 247-5777, www.upenn.edu/morris, PA Flora Project Website: Arboretum and gardens (some natives), educational programs, PA Flora Project, www.upenn.edu/paflora

"Native Plants in the Landscape" Conference (each June at Millersville, Lancaster County, PA); Millersville University Dept. of Continuing Education, Tel (717) 872-3030, Fax (717) 871-2022

Pennsylvania Landscape & Nursery Association, 1707 S. Cameron Street, Harrisburg, PA, 17104, Tel (717) 238-1673, Fax (717) 238-1675, www.plna.com

Pennsylvania Native Plants Society, 1001 East College Avenue, State College, PA 16801

Penn State Cooperative Extension, Department of Horticulture, 102 Tyson Building, University Park, PA, 16802, Tel (814) 865-2571, Fax (814) 863- 6139 For local information, contact the extension office in your county listed in the blue section of your phone book or by locating their office on the Web at www.extension.psu.edu

Pittsburgh Garden Center Place; 1059 Shady Ave., Pittsburgh, PA 15232, Tel (412) 441-4442, Fax (412) 665-2368, Green Line (412) 665-2364, Education programs, trfn.clpgh.org/garden

Rodale Institute, 611 Siegfriedale Road, Kutztown, PA 19530, Tel (610) 683-1400, Fax (610) 683-8548, Gardens, landscaping brochures, organic gardening and farming events and products, www.rodaleinstitute.org

Western Pennsylvania Conservancy, 209 Fourth Avenue, Pittsburgh, PA 15222, Tel (412) 288-2777, Fax (412) 281-1792, www.paconserve.org

Other Internet Sites

Look for many other listings under "native plants" on the Internet.

Plant Conservation Alliance, www.nps/plants/alien

Lady Bird Johnson Wildflower Center, www.wildflower.org

Center for Plant Conservation, Missouri Botanical Garden, www.mobot.org/cpc

The Nature Conservancy, www.tnc.org

The New England Wildflower Society, www.newfs.org/index.html

U.S. Environmental Protection Agency, Green Landscaping with Native Plants, www.epa.gov/greenacres/

Books

Bir, Richard. *Growing and Propagating Showy, Native Woody Plants*. University of North Carolina Press. ISBN# 0-8078-4366-0

Dirr, M.A. 1990. *Manual of Woody Landscape Plants*. 4 ed. Stipes Publishing Co; 10-12 Chester St; Champaign, IL 61820. ISBN# 0-87563-347-1

Ferreneia, Viki. 1993. *Wildflowers in Your Garden*. New York: Regina Ryan, Random House. ISBN# 0-679-41453-3

Hightshoe, G.L. 1988. *Native Trees, Shrubs, and Vines for Urban and Rural America*. New York: Van Nostrand Reinhold. ISBN# 0-442-23274-8

Mickel, John. 1994. *Ferns for American Gardens*. New York: Macmillan. ISBN# 0-02-584491-1

Newcomb, Lawrence. 1977. *Newcomb's Wildflower Guide*. Boston: Little, Brown, & Co. ISBN# 0-316-60441-0

Ottesen, Carole. 1995. *The Native Plant Primer*. New York: Harmony Books. ISBN# 0-517-59215-0

Petrides, G.A. 1972. *A Field Guide to Trees and Shrubs*. Boston: Houghton Mifflin. Peterson Field Guide Series. ISBN# 0-395-17579-8

Phillips, H.R. 1985. *Growing and Propagating Wild Flowers*. Chapel Hill: University of North Carolina Press. ISBN# 0-8078-4131-5

Rhoads, A.F. and Klein, W.M. 1993. *The Vascular Flora of Pennsylvania, Annotated Checklist and Atlas*. American Philosophical Soc.; 104 S. Fifth St.; Philadelphia, PA 19106. ISBN#0-87169-207-4

Rhoads, A.F. and Block, T.A. 2000. *The Plants of Pennsylvania, An Illustrated Manual*. Philadelphia: University of Pennsylvania. ISBN# 0-8122-3535-5

Roberts, E.A. and Rehmann, Elsa. 1996. *American Plants for American Gardens*. Athens: University of Georgia Press. ISBN# 0-8203-1851-5

Stein, Sara. 1993. *Noah's Garden, Restoring the Ecology of Our Own Back Yards*. Houghton Mifflin. ISBN# 0-395-65373-8

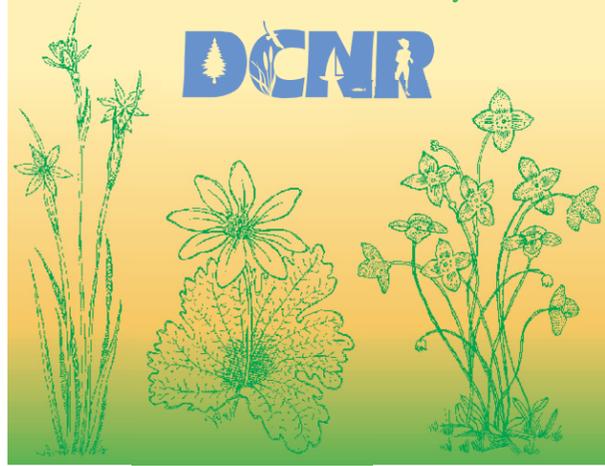
Strasbaugh, P.D. and Core, E.L. *Flora of West Virginia*. Grantsville, WV: Seneca Books, INC. ISBN# 0-89092-010-9

Landscaping with Native Plants



in Pennsylvania

Commonwealth of Pennsylvania
Edward G. Rendell, Governor
Department of Conservation & Natural Resources
Michael DiBerardinis, Secretary



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Revised from original text by:
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Summary

The first rule of responsible landscaping is to plant the right plants in the right environment: never introduce invasive plants into your landscape that will aggressively spread off your property and invade native plant communities. They can drastically alter ecosystems and give you and your neighbors maintenance headaches for years to come. Ask the DCNR-BOF for the brochure "Invasive Plants in Pennsylvania."

When landscaping with native plants, it is important to choose plants that will grow well at the site: wet or dry, shade or sun, acid or neutral soil. A good trick is to notice which native plants are thriving nearby, and to use those clues to guide plant selection. This brochure lists some information, but more is available from plant nurseries, catalogs, books, or the Internet.

For soil fertility, compost and mulch of leaves or grass clippings provide slow release nutrients. Chemical fertilizers often provide too many nutrients too quickly for native plants, and this flush of nutrients gives weeds a competitive edge. Proper site preparation begins with a soil test before applying fertilizer.

Try organic pest control. Keep the soil covered to prevent weeds. Remove invasive plants nearby. Take out severely diseased plants, or ones with insect infestations. Many native plants attract beneficial insects which help control pests, so try creating habitat for "good bugs."

Native plants help create beautiful landscapes that provide wildlife habitat and reduce maintenance costs. Their greatest benefit, though, may be the increased awareness about which plants are native and which are not, and the protection of remaining native plant communities. Children and adults can have a high-quality educational experience right in their own backyard, park, school, or workplace. Loss of native plant communities is not just in the tropical rainforest!

6. Practice responsible landscaping techniques

1. Landscaping with native plants

Native plant communities have been destroyed in many areas and therefore landscaping is required: parks, yards, streets, and campuses, for example. Well-chosen native plants perform well in these landscapes. The Department of Conservation and Natural Resources (DCNR)-Bureau of Forestry (BOF) recommends avoiding rare, endangered, and threatened plants and instead choosing native plant species which grow commonly throughout the state.

These hardy and adaptable plants do well in a wide variety of conditions and have a much better chance of success in gardens. For a list of recommended native plants easily purchased, see the inside of this brochure. If you do not want all natives, plant adapted introduced plants suited for the site, colorful annuals, or flowering plants that will not escape and become environmental weeds.

Learn what plants are native in your area. This brochure lists just a few of the resources for this region, but there are many more. Many field guides can get you started.

4. Buy nursery-propagated native plants

Most retail nurseries and mail-order catalogs now offer native plants. The more consumers request native plants, the more this supply will grow. If you want guaranteed ornamental characteristics, cultivars (named varieties) are available in some cases; for instance, New England Aster has a cultivar named 'Purple Dome,' which was selected for shorter height and showier flowers. Cultivars should be predictable in attributes like height, color, blooming period, or absence of seed pods/thorns—qualities many gardeners want. If your goal is genetic diversity, however, ask for straight species, not cultivars, grown from local seed sources. Plants grown from seed have much more variety than cloned cultivars.

5. Do not remove native plants from the wild

Taking native plants from the wild depletes native populations. Also, many wild-collected plants do not survive transplanting. Prevent wild-collecting of plants by making sure that plants you buy are propagated at a nursery, or by starting plants yourself from a local seed supply (Collect seed only with the property owner's permission). Ask the DCNR-BOF for a list of native plant and seed sources in Pennsylvania.

Go Native with these 6 basics:

1. Protect native plant communities and minimize habitat destruction

Learn more about native plants

Landscaping with native plants

Buy nursery-propagated native plants

Do not remove native plants from the wild

Practice responsible landscaping techniques

So what exactly is a Native Plant?

A native plant is one which occurred within the state before settlement by Europeans. Native plants include ferns and clubmosses; grasses, sedges, rushes, and their kin; flowering perennials; annuals which only live one year; biennials, which have a two year life cycle; and, of course, the woody trees, shrubs, and vines which covered "Penn's Woods" when the first settlers arrived. There are over 2,100 native plant species known in Pennsylvania.

An introduced or non-native plant is one that has been brought into the state and become established. At the turn of the 21st century, about 1,300 species of non-native plants existed in Pennsylvania. That is 37 percent of Pennsylvania's total plant flora (which is about 3,400 species), and more introduced plants are identified every year.

An invasive plant is a species that has become a weed pest. One that grows aggressively, spreads, and displaces other plants. Although some native plants are aggressive on disturbed areas, most invasive plants are introduced from other continents, leaving behind pests, predators, and other natural controls.

While new plants are coming into Pennsylvania, native plants are being lost to habitat destruction, invasive plants, and introduced pests and diseases. By 2000, 5 percent of Pennsylvania native plant species had been eliminated and another 25 percent were in danger of becoming so. The good news is that action can be taken to protect and enhance the remaining diversity of beautiful and often useful plant species which grace our Commonwealth.

Protect native plant communities and minimize habitat destruction

Learn more about native plants

Landscaping with native plants

Buy nursery-propagated native plants

Do not remove native plants from the wild

Practice responsible landscaping techniques

Recommended Native Plants for Landscaping in Pennsylvania

The species on this list are native plants suggested for landscaping in Pennsylvania. They have been selected because they tend to grow widely throughout the state; they are common and will likely do well if matched to their preferred growing conditions. By definition, none of these plants are rare, endangered, threatened, or extinct in the state. These plants are also commonly cultivated and used in horticulture; they should be available for purchase and should perform well in garden conditions;

Common Name: since there often are many common names for the same plant, these species are arranged alphabetically by scientific name.

Scientific Name: Scientific name from Rhoads and Klein, 1993, *The Vascular Flora of Pennsylvania* (see resource list).

Zone Preference: Pennsylvania is generally divided into two horticultural zones: **USDA zone 5** in the northern half of the state and higher elevations where the average minimum temperature may reach -10 to -20F. **USDA Zone 6** is in the southern half of the state and lower elevations where the average coldest temperature is 0 to -10F. An X in the zone 6 column means that a plant grows fairly widely through that zone where minimums are 0 to -10F; if there is an X in both Zone columns, it means that the plant grows throughout the whole state in both temperature zones. If there is a dash (-), the plant grows partially in that zone, but not throughout the area.

Caution: Edible and herbal uses should be carefully researched as these notes are not an endorsement or recommendation.

Herbaceous Perennials

	Common Name	Scientific Name	Zone Preference		Bloom Period	Bloom Color	Light Preference			Moisture Preference			Height in Feet	Notes
			5	6			Sun	Med	Shade	Wet	Moist	Dry		
Showy Flowers	Doll's eyes	<i>Actaea pachypoda</i>	X	--	Apr-Jun	white			☀			💧	1 - 3	Interesting berries
	Wild columbine	<i>Aquilegia canadensis</i>	X	X	Apr-Jun	red and yellow			☀			💧	1 - 3	Commonly cultivated; spreads by seed; hummingbirds
	Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	X	X	Apr-Jun	green-purple			☀		💧		1 - 3	Unusual flower; bright red berries
	Wild ginger	<i>Asarum canadense</i>	X	X	Apr-May	maroon			☀				< 1	Edible and herbal uses
	Swamp milkweed	<i>Asclepias incarnata</i>	--	X	Jul-Aug	rose	☀	☀			💧		2 - 4	Butterfly plant; needs wet-moist soil
	Common milkweed	<i>Asclepias syriaca</i>	X	X	Jun-Aug	pink	☀	☀				💧	2 - 6	Butterfly plant; interesting seed pods
	Butterfly-weed	<i>Asclepias tuberosa</i>	--	X	May-Sep	orange	☀	☀	☀			💧	1 - 3	Butterfly plant; tolerates dry conditions; taproot
	New England aster	<i>Aster novae-angliae</i>	--	X	Aug-Oct	purple	☀	☀					2 - 6	Showy and frequently cultivated
	Turtlehead	<i>Chelone glabra</i>	X	X	Jul-Sep	whitish	☀	☀	☀				1 - 3	Tolerates wet; strong grower; herbal uses; hummingbirds
	Joe-Pye weed	<i>Eupatorium fistulosum</i>	--	X	Aug-Sep	purple	☀	☀					3 - 6	Good for insects in the garden; herbal uses
	White snakeroot	<i>Eupatorium rugosum</i>	--	X	Jul-Oct	white	☀	☀	☀			💧	2 - 3	Tough plant; can grow in dry shade; cultivars available
	Gaura	<i>Gaura biennis</i>	--	X	Jul-Sep	white	☀	☀					1 - 6	Attractive flowers
	Wood geranium	<i>Geranium maculatum</i>	X	X	Apr-Jul	rose	☀	☀	☀				1 - 2	Adaptable plant; long bloom time; spreader; herbal uses
	Common sneezeweed	<i>Helenium autumnale</i>	--	X	Aug-Oct	yellow	☀	☀	☀				2 - 6	Tolerates wet areas; showy flowers; herbal uses
	Sunflowers	<i>Helianthus sp.</i>	--	X	Jul-Sep	yellow	☀	☀	☀			💧	4 - 6	Perennials; often aggressive; showy flowers; good for birds
	Oxeye sunflower	<i>Heliopsis helianthoides</i>	--	X	Jul-Sep	yellow	☀	☀	☀				1 - 5	Long bloom time; butterfly plant
	Alum-root	<i>Heuchera americana</i>	--	X	May-Aug	greenish	☀	☀	☀				1 - 2	Long bloom time; many cultivars and hybrids
	Cardinal flower	<i>Lobelia cardinalis</i>	--	X	Jul-Sep	scarlet	☀	☀	☀				2 - 5	Long bloom time; butterfly and hummingbird plant
	Great blue lobelia	<i>Lobelia siphilitica</i>	--	X	Jul-Oct	blue	☀	☀	☀				1 - 3	Long bloom time; white cultivars; hummingbirds
	Monkey-flower	<i>Mimulus ringens</i>	X	X	Jul-Sep	violet	☀	☀					2 - 3	Grows in moist places; interesting flowers
	Partridge-berry	<i>Mitchella repens</i>	X	X	Jun-Jul	white	☀	☀	☀			💧	< 1	Evergreen; ground cover; berry edible and showy
	Bee-balm	<i>Monarda didyma</i>	X	--	Jul-Aug	red	☀	☀	☀				2 - 5	Showy flowers; aromatic; butterfly plant; herbal uses
	Bee-balm	<i>Monarda fistulosa</i>	--	--	Jul-Aug	violet	☀	☀	☀			💧	2 - 5	Aromatic; tolerates dry soils; herbal uses
	Sundrops	<i>Oenothera fruticosa</i>	--	X	Jun-Sep	yellow	☀	☀					1 - 3	Bright flowers; long bloom time
	Sundrops	<i>Oenothera perennis</i>	X	X	Jun-Aug	yellow	☀	☀				💧	1 - 2	Bright flowers; long bloom time
	Beard-tongue	<i>Penstemon digitalis</i>	--	X	May-Jul	white	☀	☀				💧	2 - 5	Colored cultivars; hummingbirds
	Phlox	<i>Phlox divaricata</i>	--	--	May-Jun	lilac	☀	☀	☀				1 - 2	Aromatic; butterflies
	Phlox	<i>Phlox maculata</i>	--	X	Jun-Sep	purple	☀	☀	☀				1 - 3	Aromatic; showy flowers; butterflies
	Phlox	<i>Phlox paniculata</i>	--	X	Jul-Oct	pink	☀	☀	☀				2 - 5	Aromatic; showy flowers; butterflies
	May-apple	<i>Podophyllum peltatum</i>	--	X	May	white	☀	☀	☀				1 - 2	Ground cover; edible fruit; mottled foliage
	Spreading Jacob's ladder	<i>Polemonium reptans</i>	--	--	Apr-Jun	blue	☀	☀	☀				1 - 2	Attractive flowers; slow spreader; herbal uses
	Solomon's seal	<i>Polygonatum pubescens</i>	--	X	Apr-Jun	yellow	☀	☀	☀				1 - 3	Not fussy; blue berries; herbal and edible uses
	Black-eyed Susan	<i>Rudbeckia hirta</i>	X	X	May-Sep	orange	☀	☀	☀			💧	2 - 3	Bright daisy-like flowers; long bloom time; many cultivars
	Cutleaf coneflower	<i>Rudbeckia laciniata</i>	X	X	Jul-Sep	yellow	☀	☀	☀				2 - 6	Tall daisy; tolerates wet soil; herbal
	Bloodroot	<i>Sanguinaria canadensis</i>	--	X	Mar-May	white	☀	☀	☀				< 1	Red juice; herbal uses
	Golden ragwort	<i>Senecio aureus</i>	--	X	May-Jul	yellow	☀	☀	☀				1 - 2	Wetland plant; long bloom time; early daisy-like flowers
	False Solomon's seal	<i>Smilacina racemosa</i>	X	X	May-Jul	white	☀	☀	☀			💧	1 - 2	Plume like flower; red berries; herbal uses
	Wrinkle-leaf goldenrod	<i>Solidago rugosa</i>	X	X	Jul-Nov	yellow	☀	☀	☀				2 - 6	Aggressive; tough plant; butterflies
	Nodding ladies-tresses	<i>Spiranthes cernua</i>	--	--	Aug-Oct	white	☀	☀	☀				1 - 2	Likes moist, acid soil; orchid flowers; herbal uses
	Tall meadow-rue	<i>Thalictrum pubescens</i>	X	X	May-Jun	white	☀	☀	☀				2 - 8	Wet to moist soil; tall plant; delicate flowers
	Foamflower	<i>Tiarella cordifolia</i>	X	--	Apr-Jul	white	☀	☀	☀				< 1	Attractive, long-blooming flower; many cultivars
	Trillium	<i>Trillium grandiflorum</i>	--	--	Apr-Jun	white	☀	☀	☀				1 - 2	Showy flowers; common in western PA
	Blue vervain	<i>Verbena hastata</i>	X	X	Jun-Sep	blue	☀	☀	☀				2 - 5	Wet-moist soils; bright flowers; herbal uses
	New York ironweed	<i>Vernonia noveboracensis</i>	--	X	Jul-Sep	purple	☀	☀	☀				3 - 6	Tall plant of wet-moist soils; brilliant flowers
	American dog violet	<i>Viola conspersa</i>	--	X	Apr-May	violet	☀	☀	☀				< 1	Delicate plant and flower; edible
	Common blue violet	<i>Viola sororia</i>	--	X	Apr-May	violet	☀	☀	☀				< 1	Delicate plant and flower; edible
	Golden-Alexanders	<i>Zizia aurea</i>	--	--	Apr-Jun	gold	☀	☀	☀				1 - 2	Not fussy; attracts good insects
	Grasses	Big bluestem	<i>Andropogon gerardii</i>	--	--	Jun-Sep		☀	☀			💧	3 - 5	Clump forming; attractive, with winter interest
Lurid sedge		<i>Carex lurida</i>	X	X	Jun-Oct		☀	☀	☀			1 - 2	Wetland plant; interesting seeds	
Bottlebrush grass		<i>Elymus hystrix</i>	--	X	Jun-Aug		☀	☀	☀			2 - 4	Grass which grows in shade	
Riverbank wild-rye		<i>Elymus riparius</i>	X	X	Jul-Sep		☀	☀	☀		💧	3 - 5	Good for streambank conditions	
Virginia wild-rye		<i>Elymus virginicus</i>	X	X	Jul-Sep		☀	☀	☀			2 - 4	Grass which tolerates a wide range of conditions	
Switch grass		<i>Panicum virgatum</i>	--	--	Aug-Sep		☀	☀	☀				3 - 6	Clump grass; can help control erosion
Ferns	Little bluestem	<i>Schizachyrium scoparium</i>	--	X	Jul-Sep		☀	☀	☀		💧	2 - 4	Clump grass; tolerates poor soil; winter interest	
	Indian grass	<i>Sorghastrum nutans</i>	--	--	Aug-Sep		☀	☀	☀			3 - 6	Clump grass; tall with beautiful flowers	
	Maidenhair fern	<i>Adiantum pedatum</i>	X	X								1 - 2	Grows in clumps; delicate texture; herbal uses	
Evergreen shield fern	<i>Dryopteris marginalis</i>	X	X							💧	1 - 3	Evergreen; clump-former; attractive		
Interrupted fern	<i>Osmunda claytoniana</i>	X	X								2 - 4	Grows in clumps; distinctive fronds		
Christmas fern	<i>Polystichum achrostichoides</i>	X	X								1 - 2	Evergreen; grows in clumps		

Woody Plants

	Common Name	Scientific Name	Zone Preference		Bloom Period	Wildlife Value	Light Preference			Moisture Preference			Height in Feet	Notes
			5	6			Sun	Med	Shade	Wet	Moist	Dry		
Medium to Large Trees	Red maple	<i>Acer rubrum</i>	X	X	Mar-Apr	very high	☀	☀	☀		💧	💧	40 - 60	Red flowers; adaptable; fall color
	Sugar maple	<i>Acer saccharum</i>	X	X	Apr-May	very high		☀	☀				60 - 75	Yellow flowers in spring; fall color; maple syrup
	Yellow birch	<i>Betula alleghaniensis</i>	X		Apr-May	very high		☀	☀				60 - 80	Catkins in winter
	Black birch	<i>Betula lenta</i>	--	--	Apr-May	very high		☀	☀			💧	45 - 55	Catkins in winter
	River birch	<i>Betula nigra</i>	--	--	Apr-May	very high	☀	☀	☀		💧		60 - 80	Catkins; striking bark; grows in eastern & central PA
	American beech	<i>Fagus grandifolia</i>	X	X	Apr-May	high	☀	☀	☀				50 - 70	Beautiful tree; edible nuts; attractive bark
	White ash	<i>Fraxinus americana</i>	--	X	Apr-May	intermediate	☀	☀	☀			💧	50 - 80	Fast growth; fall color
	Green ash	<i>Fraxinus pennsylvanica</i>	--	--	Apr-May	intermediate	☀	☀	☀				30 - 50	Fast growth; fall color
	Tulip poplar	<i>Liriodendron tulipifera</i>	--	X	May-Jun	intermediate	☀	☀	☀			💧	75 - 100	Green flowers in early summer; fast growth
	Black-gum	<i>Nyssa sylvatica</i>	--	X	Apr-May	high	☀	☀	☀		💧		30 - 60	Outstanding fall color
	Eastern white pine	<i>Pinus strobus</i>	X	X		very high	☀	☀	☀			💧	50 - 80	Evergreen conifer
	Sycamore	<i>Platanus occidentalis</i>	--	--	Apr-May	low	☀	☀	☀				75 - 100	Showy bark; drops fruits
	White oak	<i>Quercus alba</i>	--	X	Mar-May	very high	☀	☀	☀			💧	50 - 100	Edible nuts; majestic
	Chestnut Oak	<i>Quercus montana</i>	--	X	May-Jun	very high	☀	☀	☀			💧	40 - 75	Fall color; nuts attractive to wildlife
	Pin Oak	<i>Quercus palustris</i>	--	X	Apr-May	very high	☀	☀	☀				60 - 70	Common ornamental street trees; fall color
	Red Oak	<i>Quercus rubra</i>	X	X	Apr-May	very high	☀	☀	☀			💧	60 - 80	Hardy and long-lived tree; fall color
	Sassafras	<i>Sassafras albidum</i>	--	X	April	high	☀	☀	☀				30 - 50	Edible and medicinal uses; fall color
Basswood	<i>Tilia americana</i>	X	X	May-Jun	very low	☀	☀	☀				60 - 80	Flowers aromatic, with herbal uses; multiple trunks	
Canada hemlock	<i>Tsuga canadensis</i>	X	X		high	☀	☀	☀				40 - 70	Evergreen conifer; PA state tree	
Small Trees and Shrubs	Smooth alder	<i>Alnus serrulata</i>	--	X	Mar-Apr	high	☀	☀	☀		💧	💧	6 - 10	Yellow catkins; multi-stemmed; needs wet soil
	Serviceberry	<i>Amelanchier arborea</i>	--	X	Mar-May	high	☀	☀	☀			💧	15 - 25	White flowers in spring; edible berries; fall color
	Black chokeberry	<i>Aronia melanocarpa</i>	--	--	Mar-Jul	intermediate	☀	☀	☀				3 - 6	White flowers; multi-stemmed; berries; fall color
	New Jersey tea	<i>Ceanothus americanus</i>	--	X	May-Sep	intermediate	☀	☀	☀				< 3	White flowers; multi-stemmed; tough; fixes nitrogen
	Buttonbush	<i>Cephalanthus occidentalis</i>	--	X	Jun-Sep	intermediate	☀	☀	☀				6 - 15	White flowers; multi-stemmed; interesting fruit
	Redbud	<i>Cercis canadensis</i>	--	--	April	very low		☀	☀			💧	20 - 35	Purple flowers in spring; fixes nitrogen
	Alternate-leaved dogwood	<i>Cornus alternifolia</i>	X	X	May-Jun	very high		☀	☀				15 - 25	White flowers in early summer; blue berries
	Silky dogwood	<i>Cornus amomum</i>	--	X	May-Jul	very high	☀	☀	☀				6 - 12	White flowers in summer; blue berries; multi-stemmed
	Flowering dogwood	<i>Cornus florida</i>	--	X	Apr-Jun	very high		☀	☀				10 - 30	White bracts in spring; red berries; diseases
	Witch-hazel	<i>Hamamelis virginiana</i>	X	X	Sep-Nov	low		☀	☀				20 - 30	Yellow flowers; multi-stemmed; fragrant; medicinal
	Wild hydrangea	<i>Hydrangea arborescens</i>	--	X	Jun-Jul	low		☀	☀				3 - 5	White blooms in mid-summer; multi-stemmed
	Winterberry	<i>Ilex verticillata</i>	--	X	May-Jun	high	☀	☀	☀				6 - 10	Showy berries in winter; multi-stemmed
	Mountain laurel	<i>Kalmia latifolia</i>	--	X	May-Jul	very low	☀	☀	☀			💧	7 - 15	White fl.; evergreen; multi-stemmed; Pa state flower
	Spicebush	<i>Lindera benzoin</i>	--	X	Mar-May	high		☀	☀				6 - 12	Berries and foliage in fall; multi-stemmed; herbal uses</