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Section 1 — Grounds

Paradise Falls started out in 1922 with ground that was mainly old farmland. In the last 90-odd years, trees have grown, and the forest has returned in most places. Some trees are reaching maturity, but a lot of the forest is “young,” and no old growth is left. The grounds consist of many different micro-climate areas, including the lake with wetlands and stream delta, floodplain areas, bedrock creek bed, ephemeral streams and swamps and mixed dry forest. The committee is responsible for keeping an eye on the health of all these areas. Hiking the grounds on a regular basis is one of the best ways to accomplish this. The paths and trails connect most of the areas on the grounds, some are accessible with a small 4WD vehicle (quad/4 wheeler). Things to check for on the grounds are trash, evidence of fires, spent ammunition shells (evidence of poaching), downed posted signs, weird smells (bad septic systems, etc.), and downed trees.

Early spring (spring thaw) — It’s good to check the grounds for proper drainage/erosion. Check the Gypsy Moth report from the state and other sources. Start checking the lake for goose evidence. Coordinate with the Property Committee/Garden Club about spring planting.

Late spring — coordinate with the Property Committee about Clean-up Day, Garlic Mustard/Plant Pull, etc.

Opening — start collecting lake water reports (weekly), monitor the lake level, check trees for caterpillar damage, check Woolly Adelgid infestation levels.

Summer — continue monitoring, remind people of fire risks

Fall — coordinate fall plantings, fall fire risk

Winter — check for fallen trees

Section 2 — Trees

We have about 400 acres of property and almost all of it is wooded consisting of young forest (scrub forest) with many different types of trees. Like trees all over the state, we have problems. Gypsy Moths attack the broadleaf trees (mainly the oaks) in a 5-to-7 year cycle. In the past 30 years, we have had some large-scale infestations that have killed off a lot of the oak population. In the past few cycles, we have done aero spraying, and that seems to have broken the moth cycle to a manageable level. Woolly Adelgids are a concern for our hemlocks. Some members get their trees treated, and we treat the trees around the falls. It's an ongoing problem, and the committee should be seeking out new ways to combat the adelgids. Emerald Ash Borers are claiming our ash trees, and most of the ashes are dead or dying. Unfortunately, most of the ash trees are too far gone to save, so cutting the trees and replanting other species is a priority. Spotted Lantern Flies are here. There are many ideas on combatting these highly invasive bugs, but most are not proven. Traps look promising, a flyswatter or a good stomp with a foot is the most effective right now.

A forestry report was conducted in 2019, which found that our woods are mainly healthy, but there are not enough mature trees to make logging feasible. This is nice for the forest, but we must be aware of overgrowth and forest fire risks. Our deer population is high, and this poses a risk to the future of the forest as the deer are eating saplings and understory plants faster than they can grow. Working on a deer management plan would be a good future project.

In the early spring (spring thaw), check the Gypsy Moth report from the state and other sources. Coordinate with the Property Committee/ Garden Club about spring planting.

Late spring — tree planting

Opening — check trees for caterpillar damage, check Woolly Adelgid infestation levels

Summer — continue monitoring, remind people of fire risks

Fall — coordinate fall plantings, fall fire risk

Winter — check for fallen trees

Section 3 — Lake

Lake Crawford is a manmade lake, completed in the 1930s by damming the Paradise Creek at a natural floodplain. Paradise Creek (west end) and Hatchery Run (north end) feed into the lake. There are also springs under the lake that feed in a small amount of water. The lake is rich in wildlife, including trout, bass, sunfish, bluegills, suckers, catfish and eels. Lots of aquatic insects are present along with crayfish and freshwater sponges. Ducks, mergansers, cormorants, hawks, eagles, turkey vultures and many other types of birds also live at or visit the lake. There are aquatic plants and plenty of fish habitat.

During the season, water tests are taken by Prosser Labs weekly at three locations (Paradise Creek at the shale pit access road, Hatchery Run at Bob Bell's house and at the long dock at the beach), and the data is returned to us in 48 hours. We try to get the testing day on a Monday so that if the lake fails for E. Coli bacteria, there is time to retest it before the next weekend. The lake can fail for a few different reasons with a few scenarios.

1. When the lake gets warm after extended daytime temps in the high 80's low 90's, the bacteria grow easily. Bacteria come from the trout hatchery and from defective septic systems.
2. When there is a dry weather event, nothing is washed out of the forest in the watershed above the lake. When the dry event is broken by rains, excess material is washed out of the forest (and sometimes septic systems) and the bacteria has an excess of nutrients and grows exponentially.
3. There are geese on the lake (non-migratory Canadian geese) and the goose droppings are a great food for both bacteria and algae. Beavers contribute heavily to the fecal count of the lake water if present. With these scenarios, there is one outcome. Within 24 hours, the lake water cycles out and the bacteria level goes back down (except for the geese or beavers and that's an ongoing issue). The problem lies in the laboratory incubation time. When a test sample is taken from contaminated water, it takes 48 hours to grow the bacteria and identify them in the lab. By the time we get the results, the contaminated water has already flowed out of the lake. Once the lake has been identified as contaminated, it is closed, and they test again. Another 48 hours etc. The lake rarely fails twice in a row unless there are adverse weather conditions. The system is flawed, by the time we know the lake water is at a high bacteria level, the lake has already flushed out, and the bacteria has gone down to an acceptable level.

Our other nemesis at the lake is filamentous algae, which follows a similar route to the bacteria. As the lake warms, the algae grows on the bottom. When it matures it floats to the surface to spread elsewhere. We get large mats of decomposing algae floating on the surface of the

lake, which raises the temperature of the lake and promotes more algae and bacteria growth. When the algae starts to bloom we can get the lake treated with copper sulfate. This kills the algae on the surface and the lake bottom. The algae is pretty much gone in about 48 hours. The lake is closed for 24 hours during treatment. Concerns have been raised about using copper sulfate, but most of the concerns stem from over usage (treating once a week for an entire season, etc.) The PA Dept. of Health and the boating and fishing commission list copper sulfate as an accepted treatment for algae.

The Broadhead Watershed Association also monitors Paradise Stream and our lake. Currently (2021) PF members trained by BWA take the samples and submit the results on a regular basis. Every few years, BWA does a more intense testing procedure and sends a team out to conduct the tests.

Spring — check lake level periodically, check for beaver damage on trees around lake, check erosion levels in upper creek to the lake inlets, check for Canadian goose activity.

Summer — check water testing results, monitor weather and lake level. Look for algae blooms.

Fall — help oversee dredging activities, look for beaver damage.

Section 4 — Stream

Paradise Stream runs on PF property from the Northwestern edge of the property adjacent to the trout hatchery to the south edge of the property, 250 yards downstream of the falls. The upper section above the lake is a meandering cobble bed stream. After the lake it is a bedrock carving stream all the way to the end of the property. It's classed as exceptional quality and is monitored by the Broadhead Watershed Association. It contains stocked and wild trout and other aquatic life.

Just below the field there is an area that is sometimes orange. This is iron oxide, it was tested in 2017 over concern that it might have been "yellow boy" (mine water escapement). It may be that there is a bed frame or other large piece of ferrous metal embedded in the bank from the flood of 1955 that washed away the Girls Camp that was in the field.

One concern of the committee is the stream banks, both for erosion and for shade. Both can be remedied with tree plantings of native species. Erosion of the stream banks above the lake is of major concern as this affects how much silt settles in the lake (and causes a need for dredging).

The upper stream above the lake is a wandering stream; the channel changes from year to year depending on flood events. The stream is currently cutting the south bank away, bringing cobble further into the lake.

The upper stream is also where we are starting to have a problem with Japanese Knot weed. Plant sections break off upstream and wash down. They then root in the rich silt and cobbles. Spraying cannot be done as most plants are in or on the creek bed. Covering and “cooking” the plants with plastic has mixed results. Digging up the plants works well but is labor intensive.

Spring — look at erosion damage from winter/spring storms/snowmelt. Check for knotweed shoots. Check for beaver damage

Summer — continue removing knotweed. Monitor stream level.

Section 5 — Private Lots

Members’ private lots are Paradise Falls property, but improvements are allowed. It’s highly recommended that they keep healthy trees and that all plantings are native, non-invasive species. But it’s only a recommendation. Many lots have old plantings from previous members, and they have invasive plants. Educating people about invasive plants is an ongoing project.

Trees on private lots can be cut by their owners, but trees on common grounds/PF property cannot be cut without Property Committee approval. (firewood, blocking views, “it’s scary” etc.)

If trees are to be removed, it is up to the member to check their lot lines. Lot markers can still be found, although most are buried.

Members are encouraged to keep their lots clean of leaf litter and combustibles, i.e. leaves, branches, downed trees, etc. to reduce the chances of forest fires. Brush piles are a great habitat for small animals but keeping them away from structures and having a hose or water source that can reach them is important.

Heating oil and propane tanks should be checked on a regular basis for leaks. Cesspools, septic tanks and sand (turkey) mounds should be checked for seeps and leaks, as 70% of PF acreage drains into Paradise Creek and the lake. This seepage can and does contaminate the lake and causes the lake to be closed due to high bacteria counts.

Spring — coordinate with Property Committee for spring grounds cleanup, coordinate invasive plant pull, coordinate spring plantings

Summer — check on gardens, look for invasive plants

Fall — PF email blast about leaf fires/forest fire danger

Winter — continue checking for unauthorized tree cutting

Section 6 — Contacts

Aerial Spraying: Bruce's Flying Service, 5561 GA Highway 216, Arlington, GA 39813 (229) 725-3273

Broadhead Watershed Association: (570) 839-1120

Forestry Report/Gypsy Moth forecast: Garrett Beers / Service Forester PA Department of Conservation and Natural Resources Delaware Forest District 2174A Rt. 611, Swiftwater, PA 18370 Phone: (570) 895-4039 / Fax: (570)895-4041 E-mail: garbeers@pa.gov

Prosser Laboratories water testing: (570) 629-2981

Monroe County Conservation District (570) 629-3060

Tree treating:

Section 7 — Outline of Responsibilities (from PF Bylaws)

ENVIRONMENTAL COMMITTEE

The responsibilities of the Environmental Committee include but are not limited to the following:

1. Assuring the continued quality and recreational use of Lake Crawford and Paradise Stream by conducting periodic testing of the lake and stream waters and monitoring upstream uses/development/discharges. (Sec 3 Lake)

The Environmental Committee [EC] shall work with the Property Committee to contract and monitor scheduled dredging of the lake as approved by the Association to improve the water quality and continued recreational use of Lake Crawford.

The Environmental Committee shall also work with the Community Relations Committee in monitoring upstream development, community wastewater treatment plants and other potential impacts on the quality of Lake Crawford and Paradise Stream.

The Environmental Committee shall support/organize local committees, groups, letter-writing campaigns, political action to minimize/control impacts to the quality of the lake and stream. (Working with Broadhead Watershed Association)

2. Working with the Property Committee to provide needed information and support for the PFLA recycling program and other programs to properly manage the Association's solid waste.

3. Providing information to the Board of Directors and the Association on local environmental issues, committees and concerns that affect the environmental quality of the Association and surrounding community.
4. Support local environmental committees and groups that help to provide a greater political voice on important environmental issues affecting PFLA. Such organizations include the Brodhead Watershed Association.
5. Working with the Long-Range Planning Committee in developing a land use plan for the Association that considers protecting the environmental resources of PFLA and potential future uses and needs of the Association.
6. Maintaining and promoting the Association’s trail system, including developing new trails and modifying existing ones as needed. The above responsibilities are provided as guidance for the Environmental Committee and should be periodically updated/expanded with input from other committees, the Board of Directors and members of PFLA.

Section 8 — Subcommittees

The Hiking/Trail subcommittee is focused on trail building and maintenance and encouraging use of the trails at PF. Volunteers are asked to help with trail maintenance or to lead hikes. People can “adopt a trail” to work on or they can hike and maintain. They work with the Environmental and Property committees.

The Gardening Club subcommittee is focused on gardening in PF, of vegetables and non-edible plants. They also oversee planting in the various PF community gardens and volunteer time to weed and care for those gardens.

Appendix I: Invasive Plant List

Not limited to, but including:

Commonly Sold Invasive Plants and Some Native Plant Alternatives

| Invasive Plant | | | Native Plant Alternatives | | | | |
|-----------------|-------------|--------------------|------------------------------|-------------|--------------------|----------------|------------|
| Scientific Name | Common Name | Desirable Trait(s) | Scientific Name Requirements | Common Name | Desirable Trait(s) | Wildlife Value | Sun & Soil |
| GRASSES | | | | | | | |

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|----------------------------|---------------------|-------------------|------------------------------|----------------|---|-------|---|
| <i>Arundo donax</i> | giant reed | tall, bamboo-like | <i>Andropogon gerardii</i> | big bluestem | tall, colorful, clump-forming | birds | full to part sun; clay loamy to sandy and dry to wet soils; pH 6-7 |
| | | | <i>Sorghastrum nutans</i> | Indiangrass | tall, colorful, clump-forming, nutritious for livestock | birds | full sun; clay, loam sandy and dry to moist soils; pH 4.8 to 8 |
| <i>Miscanthus sinensis</i> | Chinese silvergrass | ornamental | <i>Andropogon glomeratus</i> | bushy bluestem | fluffy seed heads; moist soil | birds | full to part sun; clay loamy and sandy a moist to wet soils; 5-6.3 |
| | | | <i>Panicum virgatum</i> | switchgrass | colorful foliage, upright habit, seed heads | birds | full to part sun; clay loamy and sandy a dry to wet soils; pH 4.5-8 |

HERBACEOUS

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|------------------------------|--------------------|------------------------------------|---|----------------------------------|--|---|---|
| <i>Lythrum salicaria</i> | purple loosestrife | Showy flowers, wet soil, longbloom | <i>Eupatorium purpureum, E. maculatum, & E. fistulosum</i> <i>Liatris spicata, & L. scariosa</i> | Joe-pye-weed blazing star | purple flowers, wet soils showy purple flowers, long bloom time | birds, bees, butterflies bees, butterflies | full to partial sun, moist to wet soils, clay to loamy soils full to partial sun, loamy to sandy soil dry to moist soils |
| | | | <i>Asclepias incarnata</i> | swamp milkweed | showy pink flowers, wet soils | | full to partial sun, clay to loamy, moist to wet soils |
| <i>Aegopodium podagraria</i> | goutweed | groundcover, variegated foliage in | <i>Senecio aureus</i> | golden ragwort | early yellow flowers, groundcover, | bees, butterflies | full sun to shade; loamy and moist to wet soil soils (will grow in c |

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|--|----------------|----------------------|----------------------------|--------------------|---------------------------------|-------------------|---|
| <i>Muscari botryoides, M. neglectum, & M. atlanticum</i> | grape hyacinth | certain varieties | <i>Eurybia divaricata</i> | white wood aster | evergreen | | soils) |
| | | purple flowers, bulb | <i>Mertensia virginica</i> | Virginia bluebells | white flowers, fast spreading | bees, butterflies | partial sun to shade dry to moist soil |
| | | | <i>Claytonia virginica</i> | spring beauty | showy blue early spring flowers | bees | partial sun to shade; organic, clay to loamy and moist to wet soil pH 4.5-8 |
| | | | | | white spring flowers, bulb | bees | shade; organic to loamy and moist soil |

| Invasive Plant | | | Native Plant Alternatives | | | | |
|------------------------------------|-----------------------|---|------------------------------------|------------------|---|---------------------------------|---|
| Scientific Name | Common Name | Desirable Trait(s) | Scientific Name Requirements | Common Name | Desirable Trait(s) | Wildlife Value | Sun & Soil |
| HERBACEOUS Cont. | | | | | | | |
| <i>Hemerocallis fulva</i> | orange daylily | flowers, tolerates most soils and drought | <i>Lilium canadense</i> | Canada lily | colorful flowers | bees | full to part sun; loamy and moist to wet soils |
| | | | <i>Lilium philadelphicum</i> | wood lily | colorful flowers | bees, butterflies, birds | full to part sun; loamy, sandy and dry soils |
| | | | <i>Heliopsis helianthoides</i> | oxeye sunflower | yellow flowers, long bloom time | bees, butterflies, hummingbirds | full to part sun; loamy, sandy, and dry to moist soils; pH 5.6-6.8 |
| VINES | | | | | | | |
| <i>Ampelopsis brevipedunculata</i> | Porcelainberry | pink to blue fruit | <i>Parthenocissus quinquefolia</i> | Virginia creeper | black-blue fruit, fall color | birds, mammals | full sun to shade; clay, loamy, sandy and dry to wet soils |
| | | | <i>Vitis</i> species | grape | edible fruit, fragrant flowers | birds, mammals | full to part sun; well-drained soils |
| <i>Clematis terniflora</i> | sweet autumn clematis | showy flowers, fragrant | <i>Clematis virginiana</i> | Virgin's bower | showy flowers, fragrant | bees | full sun to shade; most soil textures, dry to moist soils; pH 6.1-8.5 |
| <i>Euonymus fortunei</i> | wintercreeper | evergreen, groundcover | <i>Polystichum acrostichoides</i> | Christmas fern | evergreen, dry soil, shade | | part sun to shade; loamy, sandy and moist soils; pH 4.5-7 |
| | | | <i>Chrysogonum virginianum</i> | green-and-gold | evergreen, groundcover, yellow flowers | butterflies | full sun to part shade; loamy and dry to moist soils |
| <i>Hedera helix</i> | English ivy | evergreen, shade, groundcover | <i>Asarum canadense</i> | wild ginger | herb groundcover, shade, semi-evergreen | insects | part sun to shade; clay, loamy, sandy and moist soils |

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|--------------------------|----------------------|--|--|----------------------------|--------------------------------------|-----------------------------------|--|
| <i>Lonicera japonica</i> | Japanese honeysuckle | white fragrant flowers, twining, black fruit | <i>Lonicera sempervirens</i> | trumpet honeysuckle | red flowers, twining, red fruit | hummingbird S, birds, butterflies | full to partial sun; to sandy and dry to moist soils; pH 6.1 - 7.5 |
| <i>Vinca minor</i> | common periwinkle | blue flowers, groundcover, shade | <i>Phlox stolonifera</i> & <i>P. divariacata</i> | creeping & wild blue phlox | semi-evergreen, flowers, groundcover | butterflies, insects | part sun to shade; organic, loamy to sandy and dry to moist soils |

| Invasive Plant | | | Native Plant Alternatives | | | | |
|----------------------------|-------------------|---------------------------------------|----------------------------------|--------------------|---|-----------------------------------|---|
| Scientific Name | Common Name | Desirable Trait(s) | Scientific Name Requirements | Common Name | Desirable Trait(s) | Wildlife Value | Sun & Soil |
| SHRUBS | | | | | | | |
| <i>Berberis thunbergii</i> | Japanese barberry | fall color, winter fruit, dense habit | <i>Morella pensylvanica</i> | bayberry | fruit, fragrant leaves | birds | full sun to partial shade, poor soils, drought tolerant |
| | | | <i>Ilex verticillata</i> | winterberry | fruit, minimal yellow fall color | birds, bees, mammals | full sun to partial shade, moist soil textures, wet tolerant, need male and female |
| | | | <i>Photinia pyrifolia</i> | red chokeberry | fruit, fall color | birds, bees, mammals | full sun to partial shade, adapts to various soil conditions |
| <i>Buddleja davidii</i> | butterfly bush | flower spikes, attracts butterflies | <i>Cephalanthus occidentalis</i> | buttonbush | summer flower clusters | bees, butterflies | full sun to shade; most soil textures and wet, moist to flooded soils; pH 6.1 to 8.5 |
| | | | <i>Ceanothus americanus</i> | New Jersey tea | late spring flower clusters, seed pods | bees, butterflies, birds, mammals | full to part sun; clay, loamy or sandy and dry soils; pH 4.3-6.5; tolerates most soil types if well-drained |
| <i>Euonymus alatus</i> | burningbush | fall color | <i>Cornus sericea</i> | red-osier dogwood | fruits, fall color | birds, bees, mammals | full sun to shade; moist, well-drained soil, but adaptable |
| | | | <i>Photinia melanocarpa</i> | black chokeberry | fruits, fall color | birds, bees, mammals | full to part sun; most soil types, dry to wet soils; pH 5.1-6.5 |
| | | | <i>Vaccinium corymbosum</i> | highbush blueberry | showy flowers, edible fruit, fall color | birds, bees, butterflies, mammals | full sun, partial sun, shade, dry to wet, organic to sandy |
| <i>Forsythia</i> species | forsythia | yellow | <i>Lindera benzoin</i> | spicebush | All parts | butterflies, | part sun to shade; |

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| | | flowers, spreading | | | edible, aromatic when crushed, fall color, fruit | birds, mammals | loamy, sandy and moist to wet soils; pH 4.5-6.5 |
| <i>Spiraea japonica</i> | Japanese spiraea | showy flowers, mounded form | <i>Spiraea tomentosa</i> | steeplebush | showy pink flowers | butterflies | full sun; organic, clay, loamy, sandy and moist to wet soils |
| | | | <i>Physocarpus opulifolius</i> | ninebark | showy flowers, exfoliating bark | bees, birds, butterflies mammals | full to part sun; clay, loamy and moist to wet soils; pH 6.1-8.5 |

| Invasive Plant | | | Native Plant Alternatives | | | | |
|----------------------------|------------------|---|---|-----------------------|--|------------------------------------|--|
| Scientific Name | Common Name | Desirable Trait(s) | Scientific Name Requirements | Common Name | Desirable Trait(s) | Wildlife Value | Sun & Soil |
| TREES | | | | | | | |
| <i>Acer palmatum</i> | Japanese maple | foliage color and texture | <i>Chionanthus virginicus</i> | white fringetree | yellow fall color, showy, fragrant flowers, fruit (female) | birds | full sun to shade, loamy, sandy and dry to moist soils, pH 4.4-6.5 |
| | | | <i>Cercis canadensis</i> | eastern redbud | early purple flowers, fast growth, umbrella shape | bees, butterflies, birds, mammals | part sun to shade, loamy, sandy and dry to moist soils, pH 4.5-7.5 |
| <i>Acer platanoides</i> | Norway maple | yellow fall color, shade tolerant, tolerates poor soils | <i>Acer rubrum</i> | red maple | red fall color | mammals | full sun to partial shade; moist soils, but can tolerate wet soils; lower pH (more acidic soils) |
| | | | <i>Acer saccharum</i> | sugar maple | yellow to orange fall color | mammals | full sun or shade, moist, fertile soil; tolerant of higher pH soils (more basic) |
| <i>Paulownia tomentosa</i> | princess tree | showy flowers, fast growth | <i>Magnolia virginiana</i> (southeastern part of PA only) | sweetbay magnolia | showy fragrant flowers, fast growth, semi-evergreen | bees, insects, birds, mammals | full sun to shade; organic, clay, loamy and sandy and moist to wet soils; pH 5-6.5 |
| | | | <i>Liriodendron tulipifera</i> | tulip poplar | fast growth, fall color | bees, birds, hummingbirds, mammals | full to part sun; loamy to sandy and moist soils; pH 4.5-6.5 |
| <i>Pyrus calleryana</i> | Bradford/callery | white flowers, | <i>Amelanchier arborea/A.</i> | serviceberry/shadbush | white flowers, | bees, birds, | part sun to shade; |

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|------|-----------------------------|-----------------------------|-------------------|--|-----------------------------|---|
| pear | fall color, upright form | <i>laevis/A. canadensis</i> | | edible fruit, fall color | butterflies, mammals | soil type and moisture vary depending on species; ~pH 5.5-7.5 |
| | | <i>Crataegus crus galli</i> | cockspur hawthorn | white flowers, fruit | bees, birds, butterflies | full to part sun; clay, loamy or sandy soils and dry to moist soils; pH 4.5-7.2 |
| | | <i>Cornus florida</i> | flowering dogwood | white flowers, red fruit, fall color | bees, birds, mammals | Partial sun; loamy and dry to moist soils; pH 5-7 |

Helpful Resources

iConserve Pennsylvania

<http://www.iconservepa.org>

Native plant nurseries in Pennsylvania and provides a tool to help you determine what plants are right for the conditions on your property.

Native Plant Center: Chesapeake Region

<http://www.nativeplantcenter.net>

Ernst Conservation Seeds

<http://www.ernstseed.com/>

Native seed mixes available for different habitats.

Plant Native

<http://www.plantnative.org>

Native plant nurseries in Pennsylvania.

Pennsylvania Native Plant Society

<http://www.panativeplantsociety.org/index.html>

Plant nurseries in Pennsylvania and useful native plant information and other resources.

Plant Invaders of Mid-Atlantic Natural Areas (pdf of publication)

<http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

Mistaken Identity? Invasive Plants and their Native Look-Alikes (pdf of publication)

Mid-Atlantic Invasive Plant Council (MAIPC) Invasive Plant List

<http://www.invasive.org/maweeds.cfm>

Appendix II: Recommended trees and plants

| Sunny Moist Sites | | | | | |
|-------------------|---------------------------------|--|--------------------------|---|---|
| Trees | Red maple | <i>Acer rubrum</i> | Mar-Apr / red | 40-100' | very adaptable to light and moisture conditions |
| | Serviceberries | <i>Amelanchier</i> species | Mar-May / white | 20-30' | good fall color and edible berries |
| | Tuliptree | <i>Liriodendron tulipifera</i> | May-Jun / green & orange | 75-100' | fast growing, nectar source, tulip-shaped flowers |
| | Eastern white pine | <i>Pinus strobus</i> | May / cones 5" | > 100' | graceful shape with very high wildlife value |
| | White oak | <i>Quercus alba</i> | Mar-May / inconspicuous | 60-80' | acorns feed a variety of wildlife, slow-growing |
| | Eastern hemlock | <i>Tsuga canadensis</i> | Apr-May / cones ¾" | 60-80' | evergreen, tolerates shade, PA's state tree symbol |
| Shrubs | Summersweet | <i>Clethra alnifolia</i> | Jul-Aug / white or pink | 6-12' | very fragrant, tolerates shade, supports pollinators |
| | Red-osier dogwood | <i>Cornus sericea</i> | May / white | 6-12' | showy red stems, spreads to form colonies |
| | Winterberry | <i>Ilex verticillata</i> | May-Jun / red berries | 6-10' | male and female plants needed for fruit production |
| | Red chokeberry | <i>Photinia pyrifolia</i> | Mar-May / white | 5-10' | red fruits & tall color, can be pruned as a hedge |
| | Ninebark | <i>Physocarpus opulifolius</i> | May-Jul / pinkish white | 5-10' | coppery fall color, papery peeling bark |
| Perennials | Swamp milkweed | <i>Asclepias incarnata</i> | Jul-Aug / rose | 2-6' | lovely flowers, food for monarch butterfly caterpillars |
| | Joe-pye-weed | <i>Eutrochium fistulosum</i> (<i>Eupatorium</i> f.) | Aug-Sep / purple | 3-10' | nectar source draws many pollinators |
| | Gaura | <i>Gaura biennis</i> | Jul-Sep / pink or white | 1-6' | long-blooming, very attractive flowers |
| | Oxeye sunflower | <i>Heliopsis helianthoides</i> | Jul-Sep / yellow | 1-5' | nectar for butterflies & bees, seeds for goldfinches |
| | Great blue lobelia | <i>Lobelia siphilitica</i> | Jul-Oct / blue | 1-4' | long blooming, nectar for hummingbirds & butterflies |
| | Bee-balm | <i>Monarda didyma</i> | Jul-Aug / red | 2-5' | nectar for hummingbirds & butterflies, aromatic |
| | Wild blue phlox | <i>Phlox divaricata</i> | May-Jun / lilac | 1-2' | aromatic showy, nectar source, dormant in summer |
| | Mountain mints | <i>Pycnanthemum</i> species | Jul-Aug / white | 15-36" | aromatic, support butterflies, bees and other species |
| | New England aster | <i>Symphotrichum novae-angliae</i> | Aug-Oct / purple | 2-6' | tolerates drier soil |
| | New York ironweed | <i>Vernonia noveboracensis</i> | Jul-Sep / purple | 3-6' | tall, attractive nectar source for wet sites |
| Culver's-root | <i>Veronicastrum virginicum</i> | Jun-Sep / white or pink | to 6' | elegant spires of flowers support butterflies | |
| Sunny Dry Sites | | | | | |

| | | | | | |
|--------------------------|---------------------------|------------------------------------|------------------------------|-------------------------------------|---|
| Trees | Red bud | <i>Cercis canadensis</i> | Apr-May / pink | 20-35' | fixes nitrogen, 20-year average lifespan |
| | Eastern red-cedar | <i>Juniperus virginiana</i> | Apr-May / inconspicuous | 30-45' | evergreen, sky blue fleshy berry-like cones |
| | Blackgum | <i>Nyssa sylvatica</i> | Apr-May / inconspicuous | 30-75' | dark blue fruits, scarlet early fall color |
| | Red oak | <i>Quercus rubra</i> | Apr-May / inconspicuous | 60-80' | acorns feed wildlife |
| | Sassafras | <i>Sassafras albidum</i> | Apr-May / yellow | 30-50' | dark blue fruits feed songbirds |
| Shrubs | Black chokeberry | <i>Photinia melanocarpa</i> | Apr-May / white | 3-6' | black fruits feed songbirds, red fall color |
| | New Jersey tea | <i>Ceanothus americanus</i> | May-Sep / creamy white | < 3' | drought tolerant |
| | Blueberries | <i>Vaccinium species</i> | May-Jun / white-pink | 2-12' | Highbush & lowbush need acidic soils, edible fruit |
| | Blackhaw | <i>Viburnum prunifolium</i> | Apr-May / white | 8-15' | blue-black fruits feed songbird and people |
| Perennials & Grasses | Big bluestem grass | <i>Andropogon gerardii</i> | Jun-Sep / inconspicuous | 3-5' | clump-forming, bronze fall & winter color |
| | Butterfly-weed | <i>Asclepias tuberosa</i> | May-Sep / orange | 1-3' | food for monarch caterpillars, deep-rooted |
| | Blazing-star | <i>Liatris spicata</i> | Jul-Sep / purple | 2-6' | showy flower spikes |
| | Wild bergamot | <i>Monarda fistulosa</i> | Jul-Aug / pink-violet | 2-5' | nectar for hummingbirds & butterflies, aromatic |
| | Sundrops | <i>Oenothera perennis</i> | Jun-Aug / yellow | 1-2' | long-blooming perennial, drought tolerant |
| | Switchgrass | <i>Panicum virgatum</i> | Jul-Sep / pink-red | 3-6' | golden yellow-burgundy fall color, winter cover |
| | Virginia creeper vine | <i>Parthenocissus quinquefolia</i> | Jul-Aug / inconspicuous | 25-35' | bluish-black berries with high wildlife value, fall color |
| | Beard-tongue | <i>Penstemon digitalis</i> | May-Jul / white | 2-5' | meadow & border plant, long-blooming |
| | Black-eyed Susan | <i>Rudbeckia hirta</i> | Jul-Sep / yellow | 2-3' | long-blooming, readily available |
| | Little bluestem grass | <i>Schizachyrium scoparium</i> | Aug-Oct / inconspicuous | 2-4' | blue-green in spring, coppery autumn color |
| | Goldenrods | <i>Solidago species</i> | Sep-Oct / yellow | 1-4' | drought tolerant once established, many pollinators |
| Indian-grass | <i>Sorghastrum nutans</i> | Aug-Sep / yellow anthers | 3-8' | beautiful seed heads feed songbirds | |
| Shady Moist Sites | | | | | |
| Trees | Sugar maple | <i>Acer saccharum</i> | Apr-May / yellow | 60-75' | adaptable to dry sites, outstanding fall color |
| | River birch | <i>Betula nigra</i> | Apr-May / brown catkins | 60-80' | attractive peeling bark |
| | Flowering dogwood | <i>Cornus florida</i> | Apr-Jun / white or pink | 10-30' | prefers acidic soils, red berries |
| | Pin oak | <i>Quercus palustris</i> | Apr-May / tan catkins | 60-70' | red fall color, acorns feed wildlife |
| Shrubs | Smooth alder | <i>Alnus serrulata</i> | Mar-Apr / yellow catkins | 6-10' | high wildlife value |
| | Pagoda dogwood | <i>Cornus alternifolia</i> | May-Jun / white | 15-25' | very high wildlife value, purple-red fall color |
| | Wild hydrangea | <i>Hydrangea arborescens</i> | Jun-Aug / white | 3-6' | leaves poisonous |
| | Spicebush | <i>Lindera benzoin</i> | Mar-May / yellow | 6-12' | aromatic, red fruits |
| | Rosebay | <i>Rhododendron maximum</i> | Jun-Jul / rose pink | 10-30' | evergreen wildlife cover |
| Perennials | Jack-in-the-pulpit | <i>Arisaema triphyllum</i> | Apr-Jun / green-purple | 1-3' | bright red berries in an unusual flower shape |
| | Wild ginger | <i>Asarum canadense</i> | Apr-May / maroon | < 1' | semi-evergreen groundcover |
| | Dutchman's breeches | <i>Dicentra cucullaria</i> | Apr-May / white to cream | < 1' | early nectar for bumblebees, dormant in summer |
| | Cardinal-flower | <i>Lobelia cardinalis</i> | Jul-Sep / scarlet | 2-5' | nectar for hummingbirds & butterflies, usually biennial |
| | Golden ragwort | <i>Packera aurea</i> | Apr-Jul / yellow | 1-2' | long-blooming, tolerates wet areas |
| | Jacob's ladder | <i>Polemonium reptans</i> | Apr-Jun / blue | 1-2' | clumping ladder-like foliage, self-seeds |
| | Foamflower | <i>Tiarella cordifolia</i> | Apr-Jul / white | 4-14" | groundcover for deciduous woods, long-blooming |
| Ferns | Maidenhair fern | <i>Adiantum pedatum</i> | distinctive delicate texture | 1-2' | great for woodland or rock gardens |
| | Wood ferns | <i>Dryopteris species</i> | lacy clump of fronds | 1-3' | evergreen, some adaptable to drier sites |

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|------------------------|---------------------|---|----------------------------|--------|---|
| | Cinnamon fern | <i>Osmunda cinnamomea</i> | fertile fronds in Apr-May | 1-2' | fertile fronds cinnamon brown, prefers acidic soils |
| | Interrupted fern | <i>Osmunda claytoniana</i> | distinctive fronds | 2-4' | prefers acidic soils |
| | Christmas fern | <i>Polystichum achrostichoides</i> | evergreen, short rhizomes | 1-2' | adaptable to drier sites |
| Shady Dry Sites | | | | | |
| Trees | Shagbark hickory | <i>Carya ovata</i> | May / green catkins | 60-80' | golden yellow to orange fall color, sweet nuts |
| | Chestnut oak | <i>Quercus montana</i> | May-Jun / catkins | 50-75' | acorns feed wildlife |
| | Hop-hornbeam | <i>Ostrya virginiana</i> | April / catkins | 35-50' | nutlets in a loose papery cone resembling hops |
| | Witch-hazel | <i>Hamamelis virginiana</i> | Sep-Nov / golden yellow | 8-20' | fragrant, often multi-stemmed |
| Shrubs | Pinxter-flower | <i>Rhododendron periclymenoides</i> | Apr-May / pink to white | 6-12' | prefers acidic soils |
| | American hazelnut | <i>Corylus americana</i> | Mar-Apr / catkins | 10-15' | nuts ripen in Aug-Sep. |
| | Arrow-wood viburnum | <i>Viburnum dentatum</i> | May-Jun / white | 3-15' | a very variable and adaptable species |
| Perennials | Black cohosh | <i>Actea racemosa</i> | Jun-Sep / white | 3-8' | tapering spikes of flowers & interesting seed heads |
| | White snakeroot | <i>Ageratina altissima (Eupatorium rugosum)</i> | Jul-Oct / white | 2-3' | nectar for butterflies & bees, hardy, spreading habit |
| | Wild columbine | <i>Aquilegia canadensis</i> | Apr-Jun / red & yellow | 1-3' | supports hummingbirds, adaptable to sun and soil |
| | White wood aster | <i>Eurybia divaricata</i> | Jul-Oct / white | 1-3' | showy fall flowers, thrives throughout PA |
| | Bigleaf aster | <i>Eurybia macrophylla</i> | Aug-Sep / pale blue-violet | 1-2' | groundcover, larval food for pearl crescent butterfly |
| | Wood geranium | <i>Geranium maculatum</i> | Apr-Jul / lavender-pink | 1-2' | adaptable to full sun, spreads slowly |
| | Alumroot | <i>Heuchera americana</i> | May-Aug / greenish | 1-2' | long-blooming, many cultivars |
| | Virginia bluebells | <i>Mertensia virginica</i> | Mar-Jun / blue | 1-2.5' | early, long-blooming, supports early pollinators |
| | Partridge-berry | <i>Mitchella repens</i> | May-Jul / white | <1' | groundcover, acid soils, trailing stems, red fruits |
| | Mayapple | <i>Podophyllum peltatum</i> | May / white | 1-2' | prefers acid soils, rhizomes spread slowly |
| | Stonecrop | <i>Sedum ternatum</i> | Apr-Jun / greenish-white | <1' | groundcover, adaptable to sun |
| | Solomon's plume | <i>Smilacina racemosa</i> | May-Jul / white | 1-2' | starry flowers, red berries, rhizomes spread |

Appendix III: Pennsylvania Native Plants for the Perennial Garden

| Botanical Name | Common Name | Height | Color | Bloom time | Comments |
|-----------------------------|-------------|--------|--------------|-------------|--|
| <i>Aquilegia canadensis</i> | Columbine | 1-2' | Red & yellow | April- June | Moist to dry. Partial shade to sun. Self Seeds |
| <i>Asarum canadense</i> | Wild ginger | 4-8" | Maroon | April-May | Moist shade. Ground cover. Inconspicuous flowers |

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|--------------------------------|-----------------------|----------|------------------|-------------------|--|
| <i>Asclepias tuberosa</i> | Butterfly weed | 1-2' | Orange | June-July | Dry. Sun. Attracts butterflies. |
| <i>Aster divaricatus</i> | White wood aster | 2' | White | August-October | Moist to dry. Shadeto partial shade. |
| <i>Aster novae-angliae</i> | New England aster | Up to 6' | Lavender-pink | August to frost | Wet to dry. Sun to partial sun. |
| <i>Aster oblongifolius</i> | Aromatic aster | 12-20" | Pink-lavender | September-October | Dry. Sun. Attracts butterflies. |
| <i>Baptisia australis</i> | Blue wild indigo | 2-4' | Blue/purple | April -June | Moist to dry. Sun. Shrubby. |
| <i>Chelone glabra</i> | Turtlehead | 1-4' | White | July-August | Moist to wet. Partial shade. |
| <i>Chrysogonum virginianum</i> | Green-and-gold | 6-12" | Yellow | April-October | Moist to dry. Sun to partial shade. Ground cover |
| <i>Cimicifuga racemosa</i> | Bugbane, Black cohosh | 3-8' | White | July-August | Moist to dry. Partial sun |
| <i>Coreopsis tripteris</i> | Tall coreopsis | 3-9' | Yellow | July-Sept. | Moist to dry. Sun to partial sun. Use for back of the border |
| <i>Dicentra eximia</i> | Wild bleeding heart | 1-2' | Pink | April-September | Moist to dry. Partial shade |
| <i>Eupatorium fistulosum</i> | Joe-pye weed | 2-7' | Pinkish-lavender | July-Sept. | Wet to moist. Sun to partial shade. Attracts butterflies |
| <i>Geranium maculatum</i> | Wild geranium, | 1-3' | Pink | April to July | Moist to dry. Shadeto partial |

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|-------------------------|--|--------|---------------|------------------|---|
| m | Cranesbill | | | | shade. |
| Helenium autumnale | Common sneezeweed | 2-5' | Yellow | August-September | Wet to moist. Sun. to partial sun |
| Helianthus simulans | Narrow-leaved sunflower, Swamp sunflower | 3-8' | Yellow | August-September | Wet to moist. Sun to partial shade |
| Heliopsis helianthoides | Ox-eye sunflower, False sunflower | 3-4' | Yellow | June-August | Wet to dry. Sun |
| Heuchera americana | Alumroot | 1.5-3' | Cream | May-June | Moist to dry. Shade to sun. Ground cover |
| Iris cristata | Dwarf crested iris | 4-12" | Blue/violet | April-May | Moist to dry. Partial shade to part sun. Ground cover |
| Liatris spicata | Marsh blazing star, Gayfeather | 3-4' | Purple | July-September | Moist to wet. Sun. Attracts Gayfeather butterflies. |
| Lilium michiganense | Turk's cap lily, Michigan lily | 2-5' | Orange | July-August | Wet to moist. Sun to shade |
| Lobelia siphilitica | Great blue lobelia | 2-3' | Blue/lavender | July-October | Wet to moist. Partial sun |
| Mertensia virginica | Virginia bluebells | 1-2' | Blue | April-June | Wet to moist. Shade to partial sun |
| Monarda didyma | Beebalm, Oswegotea | 2-3' | Red | July-August | Wet to moist. Sun to partial |

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|----------------------------|------------------------------------|--------|------------------|------------------|--|
| | | | | | shade. |
| Monarda fistulosa | Wild bergamot, Horsemint, Beebalm | 2-5' | Lavender | July-August | Moist to dry. Sun to partial shade |
| Penstemon digitalis | Beardtongue | 2-5' | White | June-July | Moist to dry. Sun to partial sun |
| Phlox paniculata | Summer phlox, Perennial phlox | 3-4' | Pink to lavender | June-August | Moist, Sun to partial sun. |
| Polemonium reptans | Jacob's ladder, Greek valerian | 10-15" | Pink | April-May | Moist. Shade |
| Polygonatum biflorum | Solomon's seal | 1-5' | White | May-June | Moist to dry. Shade |
| Pycnanthemum tenuifolium | Slender mountainmint | 2-3' | White | August-September | Moist to dry. Sun to partial sun. Attracts beneficials |
| Rudbeckia fulgida | Black-eye Susan, Orange coneflower | 1-3' | Yellow | July-October | Moist to dry. Sun |
| Senecio aureus | Golden ragwort | 1' | Yellow | June-August | Wet to moist. Sun to partial shade. Ground cover |
| Sisyrinchium angustifolium | Narrow-leaved blue-eyed grass | 1-1.5' | Blue | May-July | Wet to moist. Sun to partial sun. Ground cover |

| Smilacina racemosa | False solomon's seal, False spikenard | 1-3' | White | May | Moist to dry. Shadeto sun |
|--------------------------|---------------------------------------|--------|--|------------------|---------------------------------|
| Solidago speciosa | Showy goldenrod | 1-5' | Yellow | August-September | Moist to dry. Sun topartial sun |
| Tiarella cordifolia | Foam flower | 8-12" | White | April-July | Moist. Shade |
| Vernonia noveboracensis | New York ironweed | 5-8' | Reddish purple | August-September | Wet to moist. Sun |
| Veronicastrum virginicum | Culver's root | 2-6' | White | July-September | Moist. Sun topartial shade |
| Botanical Name | Common Name | Height | Comments | | |
| Panicum virgatum | Switchgrass | 3-6' | Wet to dry. Sun | | |
| Schizachyrium scoparium | Little Bluestem | 3-6' | Moist to dry. Sun. Good fallcolor | | |
| Sorghastrum nutans | Indiangrass | 3-8' | Wet to dry. Sun. Good fallcolor | | |
| Sporobolus heterolepis | Prairie Dropseed | 1-2' | "Weeping" form Moist to dry.Sun. Attractive form year round. | | |

Appendix IV: DCNR Invasive watch list

DCNR defines invasive plants as those species that are not native to the state, grow aggressively, and spread and displace native vegetation. Invasive plants are generally undesirable because they are difficult and costly to control and can dominate whole habitats, making them environmentally destructive in certain situations. Not all non-native plants become invasive. In fact, very few actually do. The plants listed here have been determined by DCNR to be invasive on State Forest and State Park lands and may act aggressively in other parts of Pennsylvania. Some of the species listed below are only invasive in certain environmental conditions and there may be cases where they may be used with little environmental risk. This list was compiled through coordinated efforts between ecologists in Pennsylvania and other natural resource partners. New species cross state borders and some plants that have been here for decades may suddenly become invasive due to changing land uses, changes in weather or climate, or genetic reasons, so this list may change over time and will be updated periodically. **This list is not regulatory.** It is used to guide the management efforts of DCNR lands because of knowledge that these species can become invasive under the right environmental conditions. To learn more about invasive plants in Pennsylvania and how they can be controlled, visit www.dcnr.state.pa.us/forestry/plants/invasiveplants/index.htm.

Invasive plant species have been ranked in terms of the threat they pose to native plant communities. Each rank is defined below:

Rank 1- Severe Threat. Exotic plant species that possess characteristics of invasive species and spread easily into native plant communities and displace native vegetation. Includes species that are or could become widespread in Pennsylvania.

Rank 2- Significant Threat. Exotic plant species that possess characteristics of invasive species but are not presently considered to spread as easily and aggressively into native plant communities as those species listed as Rank 1.

Rank 3- Lesser Threat. Exotic plant species that spread in or near disturbed areas, and are not presently considered a major threat to undisturbed native plant communities.

Watch List- Exotic plant species that are severe problems in surrounding states but have not been widely reported in Pennsylvania, OR may naturalize and become a problem in the future and require more monitoring.

Vines

| Scientific Name | Common Name | Rank |
|-------------------------------------|----------------------|------|
| <i>Ampelopsis glandulosa</i> | Porcelain Berry | 1 |
| <i>Celastrus orbiculatus</i> | Oriental Bittersweet | 1 |
| <i>Humulus japonicus</i> | Japanese Hops | 1 |
| <i>Lonicera japonica</i> | Japanese Honeysuckle | 1 |
| <i>Persicaria perfoliata</i> | Mile-a-Minute | 1 |
| <i>Pueraria montana var. lobata</i> | Kudzu | 1 |
| <i>Vincetoxicum nigrum</i> | Black Swallow-Wort | 1 |
| <i>Vincetoxicum rossicum</i> | Pale Swallow-Wort | 1 |
| <i>Euonymus fortunei</i> | Wintercreeper | 2 |
| <i>Wisteria floribunda</i> | Japanese Wisteria | 2 |

| | | |
|-----------------------------|--------------------|-------|
| <i>Wisteria sinensis</i> | Chinese Wisteria | 2 |
| <i>Hedera helix</i> | English Ivy | 3 |
| <i>Vinca major</i> | Bigleaf Periwinkle | 3 |
| <i>Vinca minor</i> | Common Periwinkle | 3 |
| <i>Akebia quinata</i> | Chocolate Vine | Watch |
| <i>Clematis terniflora</i> | Japanese Clematis | Watch |
| <i>Dioscorea polystacha</i> | Chinese Yam | Watch |

Herbs and Forbs

| Scientific Name | Common Name | Rank |
|---------------------------------|-------------------------|------|
| <i>Alliaria petiolata</i> | Garlic Mustard | 1 |
| <i>Conium maculatum</i> | Poison Hemlock | 1 |
| <i>Fallopia japonica</i> | Japanese Knotweed | 1 |
| <i>Fallopia sachalinensis</i> | Giant Knotweed | 1 |
| <i>Fallopia X bohemica</i> | Hybrid Knotweed | 1 |
| <i>Ficaria verna</i> | Lesser Celandine | 1 |
| <i>Galega officinalis</i> | Goatsrue | 1 |
| <i>Heracleum mantegazzianum</i> | Giant Hogweed | 1 |
| <i>Lythrum salicaria</i> | Purple Loosestrife | 1 |
| <i>Centaurea jacea</i> | Brown Knapweed | 2 |
| <i>Centaurea nigra</i> | Black Knapweed | 2 |
| <i>Centaurea stoebe</i> | Spotted Knapweed | 2 |
| <i>Chelidonium majus</i> | Greater Celandine | 2 |
| <i>Cirsium arvense</i> | Canada Thistle | 2 |
| <i>Cirsium vulgare</i> | Bull Thistle | 2 |
| <i>Hesperis matronalis</i> | Dames Rocket | 2 |
| <i>Iris pseudacorus</i> | Yellow Flag Iris | 2 |
| <i>Lespedeza bicolor</i> | Shrubby Bushclover | 2 |
| <i>Lespedeza cuneata</i> | Chinese Bushclover | 2 |
| <i>Pastinaca sativa</i> | Wild Parsnip | 2 |
| <i>Perilla frutescens</i> | Beefsteak Plant | 2 |
| <i>Rubus phoenicolasius</i> | Wineberry | 2 |
| <i>Securigera varia</i> | Crown-vetch | 2 |
| <i>Aegopodium podagraria</i> | Goutweed | 3 |
| <i>Anthriscus sylvestris</i> | Wild Chervil | 3 |
| <i>Artemisia vulgaris</i> | Mugwort | 3 |
| <i>Butomus umbellatus</i> | Flowering Rush | 3 |
| <i>Cardamine impatiens</i> | Narrowleaf Bittercress | 3 |
| <i>Carduus acanthoides</i> | Spiny Plumeless Thistle | 3 |

| | | |
|-------------------------------|-------------------------------|-------|
| <i>Carduus nutans</i> | Musk Thistle | 3 |
| <i>Datura stramonium</i> | Jimsonweed | 3 |
| <i>Epilobium hirsutum</i> | Hairy Willow Herb | 3 |
| <i>Epilobium parviflorum</i> | Smallflower Hairy Willow-Herb | 3 |
| <i>Hemerocallis fulva</i> | Orange Day-Lily | 3 |
| <i>Lysimachia nummularia</i> | Moneywort | 3 |
| <i>Pachysandra terminalis</i> | Japanese Pachysandra | 3 |
| <i>Persicaria longiseta</i> | Bristled Knotweed | 3 |
| <i>Stellaria media</i> | Common Chickweed | 3 |
| <i>Amaranthus palmeri</i> | Palmer Amaranth | Watch |

Trees

Common Name

Scientific Name

Rank

| | | |
|--------------------------------|------------------------|-------|
| <i>Ailanthus altissima</i> | Tree-of-Heaven | 1 |
| <i>Aralia elata</i> | Japanese Angelica Tree | 1 |
| <i>Acer platanoides</i> | Norway Maple | 2 |
| <i>Albizia julibrissin</i> | Mimosa | 2 |
| <i>Alnus glutinosa</i> | European Black Alder | 2 |
| <i>Paulownia tomentosa</i> | Empress Tree | 2 |
| <i>Phellodendron amurense</i> | Amur Corktree | 2 |
| <i>Phellodendron japonicum</i> | Japanese Corktree | 2 |
| <i>Phellodendron lavallei</i> | Lavella Corktree | 2 |
| <i>Pyrus calleryana</i> | Callery Pear | 2 |
| <i>Tetradium daniellii</i> | Bee-Bee Tree | 2 |
| <i>Broussonetia papyrifera</i> | Paper Mulberry | 3 |
| <i>Morus alba</i> | White Mulberry | 3 |
| <i>Acer ginnala</i> | Amur Maple | Watch |
| <i>Acer palmatum</i> | Japanese Maple | Watch |
| <i>Koelreuteria paniculata</i> | Golden Rain-Tree | Watch |
| <i>Quercus acutissima</i> | Sawtooth Oak | Watch |
| <i>Ulmus pumila</i> | Siberian Elm | Watch |

Grasses

Scientific Name

Common Name

Rank

| | | |
|---|----------------------|---|
| <i>Microstegium vimineum</i> | Japanese Stiltgrass | 1 |
| <i>Oplismenus hirtellus</i> | Wavyleaf Basketgrass | 1 |
| <i>Phragmites australis ssp australis</i> | Common Reed | 1 |
| <i>Arthraxon hispidus</i> | Small carpetgrass | 2 |
| <i>Phalaris arundinacea</i> | Reed Canary Grass | 2 |
| <i>Phyllostachys aurea</i> | Golden Bamboo | 2 |
| <i>Phyllostachys aureosulcata</i> | Yellow Groove Bamboo | 2 |
| <i>Phyllostachys bambusoides</i> | Giant Timber Bamboo | 2 |

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|---|---------------------|-------|
| <i>Poa trivialis</i> | Rough Bluegrass | 2 |
| <i>Bromus japonicus</i> | Japanese brome | 3 |
| <i>Bromus sterilis</i> | Poverty Brome | 3 |
| <i>Bromus tectorum</i> | Cheatgrass | 3 |
| <i>Holcus lanatus</i> | Velvetgrass | 3 |
| <i>Miscanthus sinensis</i> | Chinese Silvergrass | 3 |
| <i>Schedonorus arundinaceus</i> | Tall Fescue | 3 |
| <i>Sorghum bicolor ssp. x. drummondii</i> | Shattercane | 3 |
| <i>Sorghum halepense</i> | Johnson Grass | Watch |
| <i>Arundo donax</i> | Giant Reed | Watch |
| <i>Imperata cylindrica</i> | Cogon Grass | Watch |
| <i>Tripidium ravennae</i> | Ravenna Grass | Watch |

| Shrubs | | |
|----------------------------------|--------------------------|------|
| Scientific Name | Common Name | Rank |
| <i>Berberis thunbergii</i> | Japanese Barberry | 1 |
| <i>Berberis vulgaris</i> | European Barberry | 1 |
| <i>Frangula alnus</i> | Glossy Buckthorn | 1 |
| <i>Lonicera fragrantissima</i> | Sweet Breath Honeysuckle | 1 |
| <i>Lonicera maackii</i> | Amur Honeysuckle | 1 |
| <i>Lonicera morrowii</i> | Morrow's Honeysuckle | 1 |
| <i>Lonicera morrowii x bella</i> | Beautiful Honeysuckle | 1 |
| <i>Lonicera standishii</i> | Standish Honeysuckle | 1 |
| <i>Lonicera tatarica</i> | Tartarian Honeysuckle | 1 |
| <i>Rhamnus cathartica</i> | Common Buckthorn | 1 |
| <i>Rhodotypos scandens</i> | Jetbead | 1 |
| <i>Rosa multiflora</i> | Multiflora Rose | 1 |
| <i>Spiraea japonica</i> | Japanese Spiraea | 1 |
| <i>Buddleja davidii</i> | Butterfly Bush | 2 |
| <i>Elaeagnus angustifolia</i> | Russian Olive | 2 |
| <i>Elaeagnus umbellata</i> | Autumn Olive | 2 |
| <i>Euonymus alatus</i> | Winged Euonymus | 2 |
| <i>Ligustrum japonicum</i> | Japanese Privet | 2 |
| <i>Ligustrum obtusifolium</i> | Border Privet | 2 |
| <i>Ligustrum sinense</i> | Chinese Privet | 2 |
| <i>Ligustrum vulgare</i> | Common Privet | 2 |
| <i>Viburnum dilatatum</i> | Linden Viburnum | 2 |
| <i>Viburnum plicatum</i> | Doublefile Viburnum | 2 |
| <i>Viburnum sieboldii</i> | Siebold Viburnum | 2 |
| <i>Viburnum opulus</i> | Guelder Rose | 3 |

Aquatic

| Scientific Name | Common Name | Rank |
|---|-----------------------------------|-------|
| <i>Hydrilla verticillata</i> | Hydrilla | 1 |
| <i>Myriophyllum aquaticum</i> | Parrot feather watermilfoil | 1 |
| <i>Myriophyllum spicatum</i> | Eurasian Watermilfoil | 1 |
| <i>Potamogeton crispus</i> | Curly Pondweed | 1 |
| <i>Trapa natans</i> | European Water Chestnut | 1 |
| <i>Typha angustifolia</i> | Narrow-Leaved Cattail | 1 |
| <i>Typha x glauca</i> | Hybrid Cattail | 1 |
| <i>Cabomba caroliniana</i> | Carolina Fanwort | 3 |
| <i>Egeria densa</i> | Brazilian Water-Weed | 3 |
| <i>Najas minor</i> | Brittle Waternymph | 3 |
| <i>Nitellopsis obtusa</i> | Starry Stonewort | 3 |
| <i>Hydrocharis morsus-ranae</i> | Common Frogbit | Watch |
| <i>Ludwigia grandiflora ssp. Hexapetala</i> | Large Flower Primrose Willow High | Watch |
| <i>Nymphoides peltata</i> | Yellow Floatingheart | Watch |