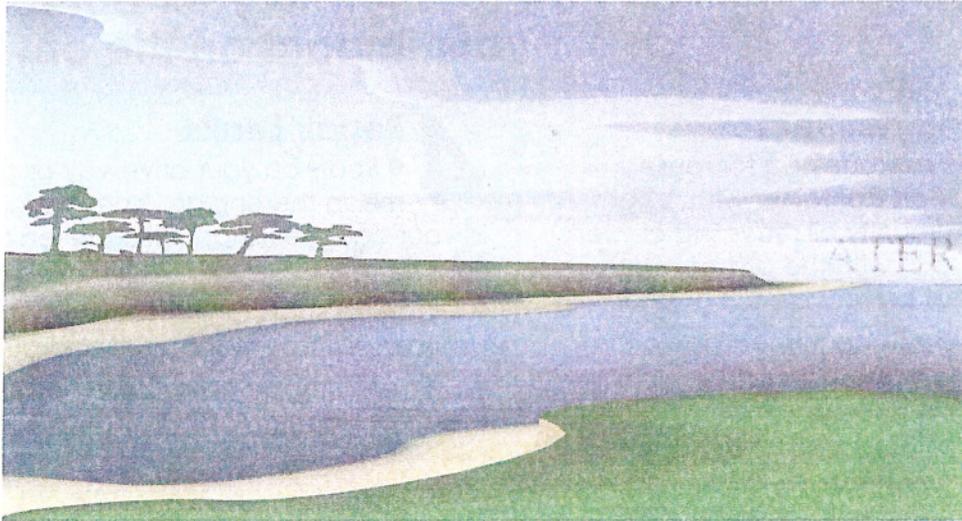


SUMMER TIPS FOR OUR
ENVIRONMENT AND STORMWATER
MANAGEMENT



Thank you for protecting our environment. We are all stewards of the land and need to work together to keep our streams clean and healthy. Even a small act, will help to protect our streams and “Mother Earth”!

Thank you, Upland Borough Council

Edward M. Mitchell, President
Georgianna Hicks, Council Member
Dennis Walls, Council Member
Maira Crawford, Council Member

Christine Peterson, Vice President
Leland Hunter, Council Member
Sandra Miazza, Council Member
Michael J. Ciach, Mayor

Shirley Purcival, Borough Manager

John Easton, Police Chief

Cars for Cleaner Creeks

tips for stormwater management on your property



DID YOU KNOW:

Cars contribute to pollution of our streams. Even small amounts of used oil or leaking fluids are easily washed by stormwater into stormdrains where they pollute our streams.

Here are some tips on how to operate your car to minimize your impact on the environment.

1 Recycle Oil and Antifreeze

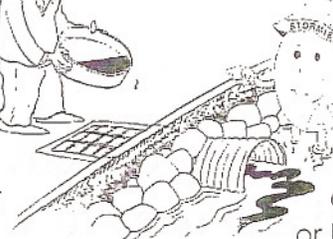
- Motor oil can be reprocessed for reuse. Put used oil in a clean container with a tight lid, and take it to a community oil recycling center. Do not put anything else in with the oil because contaminated oil cannot be recycled.
- Used antifreeze should not be flushed down the drain or put in the trash because it contains toxins that may cause problems for wastewater treatment plants or leach from landfills.

For a list of sites that recycle automotive wastes, see links listed below.*



2 Use Commercial Car Washes

- Take your car to a commercial car wash or spray booth where dirty water is typically filtered for reuse, and ultimately is treated at a wastewater treatment plant.
- Conduct fundraisers in partnership with local car wash operators.



3 Keep Your Car Serviced

A well-tuned car saves you money by using 20% less gasoline. Regular tune-ups reduce the amount of hydrocarbons, nitrous oxides, and other pollutants which pollute our water as well as our air.

4 Repair Leaks

- Spots on your driveway or garage floor mean the engine, transmission, or radiator in your car is leaking. Have the leak repaired right away.
- Clean up spots and spills with cat litter or another absorbent material and put in the trash.
- Do not dump or hose these pollutants into streets or stormdrains.

5 Return Used Batteries

- Return your used car or truck battery to the place where you bought it.
- Do not throw old batteries in the trash or bury them—you'll be breaking the law. Old batteries contain hazardous chemicals that can leach through the soil and pollute our groundwater.

6 Check Tire Pressure

- One of the simplest and cheapest ways to prevent pollution is to keep your tires properly inflated. For every pound that your tires are underinflated, your car loses 1% in gas mileage.
- Underinflated tires also wear out sooner.

*For a list of certified Automotive Drop-Off Centers, see www.chestercountyswa.org/pdf/auto.pdf or www.co.delaware.pa.us/recycle/pdf/motoroil.pdf.

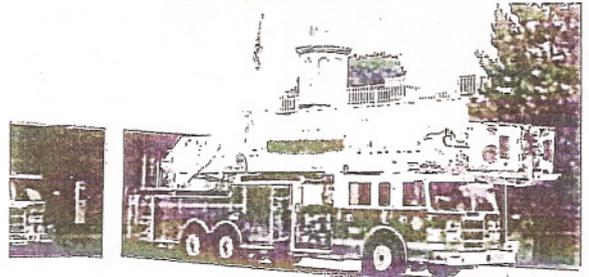
This message is brought to you by your municipality and Chester-Ridley-Crum Watersheds Association, www.crcwatersheds.org with credit to the University of Wisconsin-Extension.

Keep Vehicle Washing from Harming Our Streams

Pollution Prevention for Firehouses

DID YOU KNOW:

- Soapy runoff from vehicle washing entering storm drains flows untreated into our streams.
- Detergent levels as low as 0.1 ppm can harm wildlife and negatively impact drinking water supplies.
- Detergents are a source of excessive nutrients which also degrade streams.



1 Detergents contain surfactants harmful to wildlife and the water supply.



3 Stormwater outfalls conduct this polluted water from storm drains untreated into our streams. (Crum Creek outfall, 1/17/09).



2 Runoff from vehicle washing can enter streams via storm drains in parking lots or streets. Many floor drains also connect to storm drains.

4 The detergent levels in this stream measured 0.15 mg/L downstream from the outfall. (Crum Creek outfall, 1/17/09).



5 Detergent also contributes to excessive loadings of nitrogen and phosphorus to our streams (Crum Creek outfall, 1/17/09).



TO PREVENT POLLUTING OUR STREAMS:

- Do not allow soapy water to run down the street into storm drains.
- Determine whether your floor drains connect to sanitary sewers or storm sewers.
- Switch to plain water only for vehicle washing.
- Use dry cleanup methods, such as sweeping and absorbents, to clean floors and spills.

THANK YOU FOR HELPING TO PROTECT CLEAN WATER!

This message is brought to you by your municipality and Chester-Ridley-Crum Watersheds Association, www.crcwatersheds.org.

Hold the Stormwater, Please!

tips for stormwater management on your property



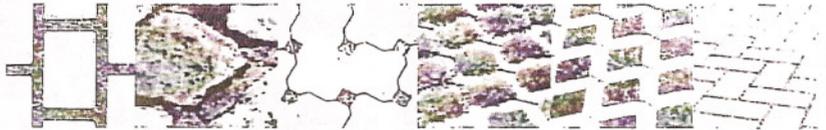
DID YOU KNOW:

- We depend on rainfall soaking into the ground to recharge our groundwater levels.
- Increased number of impervious (non-porous) surfaces, such as asphalt and rooftops, result in fewer opportunities for rainfall to soak into the ground causing flooding and increased pollution of our streams.
- Low groundwater levels result in critically low or even dry creek beds and diminished drinking water supply during periods of reduced rainfall.

Here are some ways you can help in your own backyard:

1 Substitute porous surfaces for impervious ones.

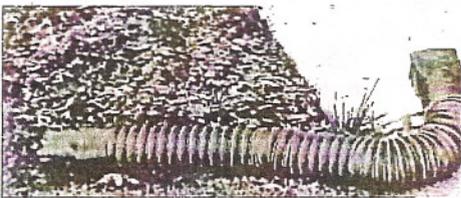
Patios, walkways, driveways, and parking areas can be constructed with porous materials that reduce stormwater runoff. One option is special blocks or pavers with voids that can be filled with gravel or planted with grass that allow stormwater to soak into the soil.



gravel or planted with grass that allow stormwater

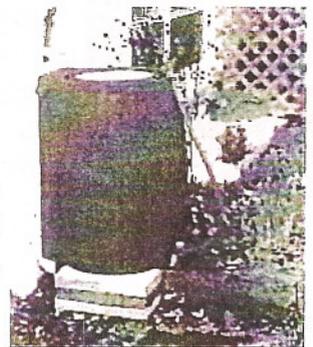
2 Direct stormwater to areas where it can seep into the ground.

Do any of your downspouts direct rooftop runoff down the driveway into the street or directly into a stream? Redirect those downspouts away from the foundation of your home to a grassy area, seepage pit, mulched bed, or rain garden. Use a PVC extension or pipe.



3 Hold stormwater for use or release later.

Use a rain barrel to retain stormwater coming off rooftops for reuse in gardens or to release at a later time. For best results, direct overflow from your rain barrel to a more porous area such as a mulched bed or a rain garden.



4 Plant more trees, shrubs, and mulched beds.

Trees, shrubs, and mulched beds with flowers will intercept and infiltrate rainwater better than mowed lawns. Consider planting one or more large canopy trees, such as maples and oaks. Each large tree will intercept over 1,000 gallons of rainwater each year.

For Cleaner Creeks, Save Fertilizer for the Fall.

tips for stormwater management on your property

DID YOU KNOW:

- Fertilizers contain nitrogen and phosphorus which wash or leach into our streams and ponds.
- Even small levels of these nutrients can overload ponds or streams, and result in undesirable weed and algae growth. Algae depletes oxygen, killing fish and limiting the diversity of what lives in our streams.

To minimize the impact of lawn fertilization on our streams:

1 Fertilize in the fall.

Pennsylvania Department of Environmental Protection discourages spring application of fertilizer because it creates excessive top growth of grass. DEP recommends instead that homeowners **fertilize lawns around Labor Day** and use a second application in late October if needed. Fall fertilization promotes vigorous root growth and prevents fertilizer from leaching into streams and ponds in the spring.

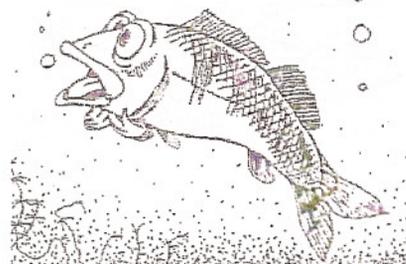


2 Do a soil test and consider phosphorus-free fertilizers.

Phosphorus is typically the limiting nutrient in algae growth. If your phosphorus levels are already adequate, select a phosphorus-free fertilizer. If your property drains to a stream, pond, or reservoir, do not use phosphate fertilizers. Mail-in soil test kits are available from your County Extension Service.

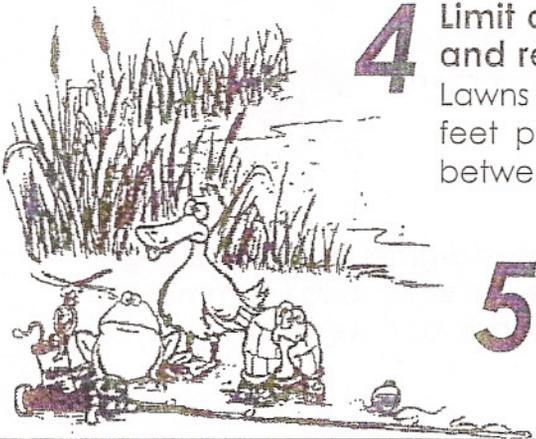
3 Use slow-release and organic alternatives.

Select fertilizers with "slow-release" forms of nitrogen which release more slowly into the soil and are less likely to leach. Choose organic rather than chemical-based fertilizers.



4 Limit application amounts to designated levels, and recycle grass clippings.

Lawns typically require 2.5 - 3 pounds of nitrogen per 1,000 square feet per year. Recycling grass clippings on your lawn can meet between 25% and 50% of nitrogen needs.



5 Avoid stream edges and stormwater conveyances.

Do not fertilize stormwater basins, or drainage swales leading to basins, or within 25 feet of stormwater basins or streams.

Stormwater Pollution and Yard Waste

tips for stormwater management on your property

DID YOU KNOW:

- Yard debris, including leaves and other organic plant material like shrubbery trimmings and grass clippings, are a significant source of stormwater pollution. This debris can clog culverts, storm drains, and pipes, causing flooding.
- Debris can carry fertilizers and pesticides from your yard and deposit them in streams and ponds.
- Piles of leaves and grass clippings will overload a stream's ability to process leaf litter, causing nutrient pollution and oxygen depletion.

It is easy to do your part to protect our streams and the drainage systems leading to our waterways:



- 1** Do not pile leaves or other yard waste near streams or drainage channels where they can blow or wash into creeks. Use designated leaf collection bags for curbside leaf recycling.

- 2** Do not blow leaves or grass clippings off your property into streets, streams, ponds, or drainage swales.



- 3** Recycle grass clippings and their nutrients on your lawn. Use a mulching lawnmower to recycle remaining leaves into your lawn in the fall!



- 4** Compost leaves and grass clippings along with yard waste. Select a location removed from streams, ponds, and wetlands.

This message is brought to you by your municipality and Chester-Ridley-Crum Watersheds Association, www.crcwatersheds.org.

Illustration credit to the University of Wisconsin-Extension.

HOW TO CARE FOR YOUR STREAM

DO... plant trees and shrubs along your stream.

WHY: The roots of woody plants stabilize the banks and reduce erosion. Trees and shrubs also shade and cool the stream, which is better for fish.

DO... maintain or create buffer zones (the wider the better) along streams and wetlands.

WHY: Buffer zones absorb water and filter out lawn chemicals, fertilizers and sediment.

DON'T... remove native vegetation from stream banks.

WHY: Leaf litter from native plants is part of the aquatic food chain.

DON'T... mow your lawn right up to the stream.

WHY: Turf does not make a good buffer. It sheds water, especially on slopes, and its shallow roots do not hold the soil as well as native grasses, trees, or shrubs.

DON'T... throw grass clippings or yard waste into your stream—compost them.

WHY: Grass clippings and debris reduce oxygen in the stream, killing fish and other aquatic life.

DO... leave naturally occurring debris, such as fallen logs, leaves and rocks in place in your stream.

WHY: In-stream debris provides shelter and food for aquatic life.

DO... limit your use of yard fertilizers and chemicals. Maintain septic tanks in good condition.

WHY: Lawn chemicals and septic tank pollutants easily find their way into streams, and can kill insects, fish, frogs, birds, and plants.

DON'T... dump swimming pool water or soapy water directly into streams or storm sewers.

WHY: Storm sewers run directly into streams, where chlorine and detergents harm fish and plants.

NEVER DUMP OIL, ANTIFREEZE OR TOXIC CHEMICALS. DISPOSE OF THESE AT APPROVED DISPOSAL CENTERS.



www.crcwatersheds.org

EVERY LITTLE STREAM COUNTS. . .

The stream on your property may be a spring-fed rivulet, or a real creek. All are part of a single system, feeding into the Delaware River. Even the smallest stream supports aquatic plant and animal life, and is an important part of the water cycle.

Every stream deserves to be cared for, and kept free of pollutants, to keep the whole system healthy.

SOME HELPFUL DEFINITIONS:

A Stream Buffer or Riparian Buffer is a strip of land along a stream where trees, shrubs, and small plants are encouraged to grow. Recently scientists have learned the importance of buffers in keeping streams healthy.

The U.S. Forest Service now recommends a 50 foot buffer, free of all development, on each bank of a stream. Buffers of 300 feet or more are often used to protect the natural character of streams.

On smaller properties, aim for a minimum of 10 feet between your lawn and the stream bank. Even a single row of trees or bushes will help protect your stream.

Native Vegetation refers to plants that have always grown in this area. The animals in our streams use specific tree leaves for food and building material and thrive best when those species are present. Non-native plants can contribute to a buffer zone by reducing erosion, but they may be invasive, and are less well-suited to the existing food chain.

BEAUTIFUL AND HEALTHY:

Some streamside homeowners maintain their properties by mowing their lawn up to the stream edge. This practice facilitates stream bank erosion and allows runoff to enter streams unchecked and unfiltered by native vegetation, and offers little in the form of streamside habitat for birds, pollinators, fish and other wildlife.

A buffer zone of trees, shrubs and warm and cool season native grasses and perennials will add interest to your landscape and protect your stream.

Here are some of the native species you might try:

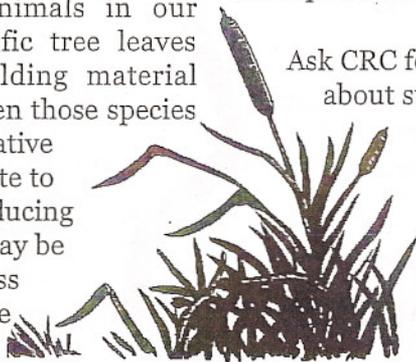
Flowers: *New England aster; blue vervain; cardinal flower; pink turtlehead; swamp milkweed; New York ironweed; Joe-pye weed; swamp sunflower.*

Grasses & Sedges: *Virginia wild rye; soft rush; switch grass 'Heavy Metal'; broom sedge; little blue stem; lurid sedge.*

Woody Plants: *Buttonbush; redtwig or silky dogwood; spicebush; Virginia sweetspire; shadbush; red or black chokeberry; sweet pepperbush; inkberry and winterberry holly; common alder.*

Trees: *River birch; red maple; silver maple; ironwood; black gum; swamp white oak; silky willow.*

Ask CRC for more information about streamside plantings.



WHO IS RESPONSIBLE FOR OUR STREAMS?

We all are! Most of us live upstream from someone else, and what we do affects others' water as well as our own. We need to work together to keep our streams clean and healthy. We are all stewards of the land.

Your township or borough is responsible for making regulations to protect the streams that run through it in compliance with state and federal regulations. These may cover development on steep slopes or flood plains, storm water management, sewers and septic tank regulations.

Most streams run through more than one jurisdiction, and protection strategies require multi-municipal cooperation. Encourage local officials in towns along your stream to cooperate to protect it.

Chester-Ridley-Crum Watersheds Association (CRC) is your local nonprofit watershed group working to monitor, clean-up and protect your local streams. CRC works in partnership with multiple municipalities to implement laws and policies and projects to protect your local water and environmental resources. CRC is member-supported and volunteer-based. For more information, visit www.crcwatersheds.org or contact us:

CRC Watersheds Association
Ridley Creek State Park
1023 Sycamore Mills Road
Media, PA 19063

Phone: 610-892-8731
email: info@crcwatersheds.org

This pamphlet was developed by CRC Watersheds Association, in partnership with the Media League of Women Voters and Darby Creek Valley Association.



Streamside Buffers

Taking good care of a stream involves taking care of the land around it. A streamside buffer (or riparian buffer) is a planted area along the edge of the stream.

A well-planted streamside buffer:

- absorbs nutrients and pollutants
- stabilizes the bank and prevent erosion
- reduces floodwater damage
- filters out sediment
- helps control the temperature of the stream

Creating a Streamside Buffer

Begin with a "no mow" or "no graze zone" along your stream banks. A buffer of any width is more beneficial than grass. Make yours as wide as possible.

Plant trees and shrubs in your buffer area. They provide many long-lasting benefits and can be quite inexpensive to establish and maintain.

Using shrubs will give your buffer a quick start; many reach full size in just a few years.

Where you do have lawn, set your mower blades at least three inches high. Taller grass slows runoff, resists drought and needs less fertilizer.

Stabilizing Your Streambank

It is best to work with professionals when looking for the causes of and solutions to erosion problems. Where buffers alone aren't enough, there are many new and innovative techniques to help solve the problem. Contact your regional office of the Pennsylvania Department of Environmental Protection (DEP) before making plans to alter a streambank. Permits are likely to be required.



Top Reasons Not to Mow

Promotes bank stability —

Deep rooted native plants hold soil in place and keep banks stable. Turf grass has roots only an inch or two deep - not very effective at preventing erosion!

Flood flow reduction —

Fully grown vegetation slows the velocity of overland flows by providing enough resistance to allow some of the water to infiltrate the soil. This helps to recharge groundwater and reduces flood damage downstream.

Water quality —

Natural vegetation removes pollutants and fine sediment from the waterway, leaving water cleaner and clearer.

Reduction of mosquito habitat —

Turf grass does not absorb water as well as full-height vegetation; consequently, ponding occurs which makes ideal habitat for mosquito breeding. Higher vegetation may absorb more water and decrease the opportunity for mosquitos to breed.

Wildlife habitat —

Stream banks in a natural state provide habitat for a diversity of reptiles, amphibians, birds, and small mammals. Fish and aquatic insects are also protected by the purifying function of a buffer.

Reduce Pollution

Most stream pollution comes from manure, fertilizers, road salts, oil and other chemicals. Called *non-point source pollution*, these come from the entire watershed rather than from any one point. Together, these pollutants add up in the streams and become a big problem. Other accumulated pollution includes trash and yard debris that washes into the streams.

To protect a stream from pollution:

- don't overuse fertilizers - more is not better - and don't use fertilizer near streams.
- limit your overall use of pesticides and herbicides, and use extreme caution when using them near streams.
- compost, don't bag, yard waste. Leave lawn trimmings in place for effective recycling of nutrients.
- don't burn refuse near streambanks.
- don't store or dump manure, garden waste, or grass clippings near streams.
- store firewood, trash, or other materials away from streams.
- never dump trash or chemicals into streams, storm drains or sewers.
- keep farm animals out of and away from the stream. Contact the county conservation office to find out about farm fencing programs.

Prevent Excess Sediment

Every stream carries with it, fine particles of soil. But too much soil can clog the streambed, covering rocks and gravel where fish lay their eggs. Excess sediment can choke out the life of a stream. A major source of silt and sediment is construction or any project that disturbs the soil. Farming activities can also cause soil runoff.

To protect the stream from silt:

- use hay bales or a special silt fence to prevent soil from washing off a work site.
- never store loose piles of soil near a stream
- cover piles of soil with tarps to protect them from rain
- use good farm practices like no-till cropping and planting winter cover crops to conserve soil.
- contact your local county conservation office if you see soil run-off from a construction site.

Ticks are an unpleasant and potentially dangerous reality in this area of Pennsylvania. Deer ticks can carry Lyme disease and are often found in areas of high grass and shrubs. Fear of ticks, however, should not be a reason to mow your streambank to the edge. Some basic precautions will minimize this danger:

- consider mowing a path through the buffer to access the stream without having to walk through high grass.
- learn to recognize deer ticks and check yourself and your pet thoroughly if you have been walking through the woods or fields.

Caring for Streamside Buffers — What to Plant?

Often, when left to grow up on its own, a streamside buffer will contain mostly weeds and other undesirable plants. One way to make sure this doesn't happen is to plant native plants. The plants below represent just a limited selection of Pennsylvania's native species appropriate for planting throughout the state along streams and in adjacent floodplains and wetlands. Choose plants adapted for your soil conditions, and your garden will thrive with less watering and without the need for chemical fertilizers or pesticides. There are many resources to help homeowners with native plantings. For some help, contact one of the organizations on the back of this brochure, or visit one of the following websites: PA Department of Conservation and Natural Resources - www.dcnr.state.pa.us or PA Native Plant Society - www.pawildflower.org

Illustrations by Erin Fendrick, Lehigh County Conservation District



Cinnamon Fern
Osmunda cinnamomea
Full sun to shade
Wet to moist soils
Cinnamon-colored fertile fronds; moist acidic soils
Photo: Robert Mahlenbrock, USDA



Royal Fern
Osmunda regalis
Part shade
Consistently wet or saturated soils
Unique form and texture
Photo: Robert Mahlenbrock, USDA



Sensitive Fern
Osmoclea sensibilis
Full sun to shade
Wet to moist soils
Sunny or shaded swamps, marshes, moist meadows
Forms colonizing masses



Wild Bergamot
Monarda fistulosa
Blooms May to September
Full sun to light shade
Moist to dry soils
Dry open woods, wet meadows, ditches, edge of woods and marshes



Black-eyed Susan
Rudbeckia hirta
Blooms May to June
Moist to dry soils
Full sun to light shade
Attracts birds and butterflies



Blue Lobelia
Lobelia siphilitica
Blooms from July to October
Light shade
Wet to moist soils
Attracts hummingbirds



Blue Vervain
Verbena hastata
Blooms June to September
Full sun to light shade
Dry soils
Bright flowers; herbal uses; streambanks and moist meadows



Boneset
Eupatorium perfoliatum
Blooms July to August
Light shade to full shade
Wet to moist soils
Wet meadow species



Plains Coreopsis
Coreopsis tinctoria
Blooms April to June
Full sun to light shade
Moist to dry soils



Purple Coneflower
Echinacea purpurea
Blooms April to September
Full sun to light shade
Moist soils
Herbal uses



Ironweed
Vernonia noveboracensis
Blooms August to September
Full sun
Wet to moist soils
Tall plant with brilliant late summer flowers



Joe-Pye Weed
Eupatorium fistulosum
Blooms August to September
Light shade
Wet to moist soils
Attracts beneficial insects; herbal uses



Blue Mist Flower
Conoclinium coelestinum
Blooms July to November
Full sun to light shade
Moist soils
Good border plant or colonizing ground cover; attracts butterflies



New England Aster
Aster novae-angliae
Blooms August to October
Full sun to light shade
Wet to moist soils
Showy and frequently cultivated; dry to moist meadows



Common Sneezeweed
Helenium autumnale
Blooms July to September
Full sun
Consistently wet to moist soils
Moist open areas along streams & ponds; wet meadows



Sedge
Carex vulpinoidea
Blooms Summer
Full sun
Consistently wet or saturated soils
Swampy areas



Switch Grass
Panicum virgatum
Blooms August to September
Moist soils
Clump grass; can help to control erosion
Sandy and river soils
Photo: Robert Mahlenbrock, USDA
Photo: William Center



Virginia Wild Rye
Elymus virginicus
Blooms June to September
Full sun to light shade
Wet to moist soils
Moist woods, meadows, stream banks
Photo: EPA



Arrowwood
Viburnum dentatum
Blooms May
Full sun to full shade
Moist soils
Dark blue fruits in fall; high wildlife value; streambanks, pastures
Photo: Campbell and Lynn Campbell, Lady Bird Johnson Wildflower Center



Buttonbush
Cephalanthus occidentalis
Blooms June to September
Full sun
Consistently wet or saturated soils
Multi-stemmed; tolerates inundation
Photo: Norman Flagg, Lady Bird Johnson Wildflower Center



Highbush Blueberry
Vaccinium corymbosum
Blooms May to June
Light shade
Wet to moist soils
Multi-stemmed; edible berries; fall color; very high wildlife value



Nine Bark
Physocarpus opulifolius
Blooms May to July
Full sun to part shade
Wet to moist soils
Wet woods, sandy or rocky stream banks
Photo: Stefan Blumhardt, Lady Bird Johnson Wildflower Center



Red Chokeberry
Aronia arbutifolia
Blooms May
Part shade
Wet to moist soil
Red berries; high value for wildlife
Photo: Robert Mahlenbrock, USDA



Serviceberry
Amelanchier arborea
Blooms March to April
Part shade
Moist soil
Small tree with early spring flowers; delicious edible berries in summer
Photo: Stefan Blumhardt, Lady Bird Johnson Wildflower Center



Silky Dogwood
Cornus amomum
Blooms May to July
Full sun
Wet to moist soils
Flowers in summer; blue berries; multi-stemmed; very high wildlife value
Photo: Sally & Andy Wasowski, Lady Bird Johnson Wildflower Center



Spice Bush
Lindera benzoin
Blooms March to May
Light shade to shade
Wet to moist soils
Bright red berries in fall; herbal uses; wildlife value



Winterberry Holly
Ilex verticillata
Blooms May to June
Part shade
Wet to moist soils
Showy berries in winter; high wildlife value; good colonizing shrubs for stream banks
Photo: George Bruns, Lady Bird Johnson Wildflower Center



American Beech
Fagus grandifolia
Blooms April to May
Full sun to full shade
Moist, but well-drained soils
Large tree with handsome gray bark; high wildlife value
Photo: Bill Cook, Michigan State University



American Sycamore
Platanus occidentalis
Blooms April
Full sun
Wet to moist soils
Large tree with showy mottled bark; riverbanks, floodplains and alluvial soils



Black Gum
Nyssa sylvatica
Blooms April to May
Full sun to part shade
Moist soils
Tall tree with outstanding fall color; high wildlife value
Photo: Keith Kanata, Maine Forest Service



Green Ash
Fraxinus pennsylvanica
Blooms April to May
Part shade
Wet to moist soils
Fast growth; good fall color.
Photo: Robert Mahlenbrock, USDA



Pagoda Dogwood
Cornus alternifolia
Blooms May to June
Part shade
Moist soils
Small tree for moist woods and shaded ravines; dark blue fruit



Red Maple
Acer rubrum
Blooms March to April
Full sun to full shade
Moist soils
Adapts to a range of moisture conditions; good fall color
Photo: Bill Cook, Michigan State University



River Birch
Betula nigra
Blooms May
Full sun to part shade
Wet to moist soils
Notable for its peeling bark; floodplains, streambanks, wet woods, swamps
Photo: Stefan Blumhardt, USDA Forest Service



Shagbark Hickory
Carya ovata
Blooms in May
Full sun to part shade
Moist soils
Shaggy gray exfoliating bark; very high wildlife value
Photo: Keith Kanata, Maine Forest Service



Swamp White Oak
Quercus bicolor
Blooms in May
Part shade
Wet to moist soils
Large tree with very high wildlife value; good wetland oak
Photo: Mark Brand, Univ of CT

Trees