

# The Benefits of a Native Landscape



Native plants and animals sustain the environment on which we ourselves depend. By planting native species in your wetland, you are providing an excellent opportunity for our native birds, insects and other wildlife to thrive in the habitat they need. Seeds from your native species can travel throughout the watershed, promoting a healthier community environment.

Furthermore, native plants are much better adapted to our specific environment — the climate and conditions of this area. Natives are therefore easier to grow and require far less maintenance than their non-native counterparts.

Native plants can provide year-round color and texture in your wetland area or garden. Vibrant flowers in the spring, colorful berries in the summer, deep colors in the fall, and contrasting bark and branch patterns in the winter are just some of the diverse characteristics of the many native plants available.

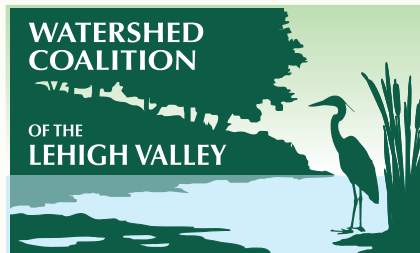
Use the chart of plants inside this brochure as a guide to select species that are ideal for your wetland and native to Pennsylvania. They are beautiful, easy to maintain, and they attract wildlife. Important local resources for native plants are listed on the back of this brochure.



For more information contact:

pennsylvania environmental council

[www.pecpa.org](http://www.pecpa.org)



**Watershed Coalition of the Lehigh Valley**

P.O. Box 3407, Wescosville, PA 18106

[www.watershedcoalitionlv.org](http://www.watershedcoalitionlv.org)

To find your county conservation district:

<http://pacd.org/your-district/find-your-district/>

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MAXFIELD DESIGN

# Caring for your Wetlands



# Wetlands

have been misunderstood for centuries; over a span of 200 years (1780 to 1980), over half a million acres of wetlands in Pennsylvania were filled in as people developed the landscape to suit their needs, unaware of how critical wetlands were to the health of both natural and human ecosystems. Today, wetlands are recognized as valuable habitats and are afforded legal protection, but they are still in danger of nearby land clearing and construction activities. Understanding these ecosystems is important to ensure their protection.

One of the most vital functions of this swampy ecosystem is its ability to remove pollutants from the waterways; by storing water on a temporary basis, pollutants settle out and are absorbed by the vegetation. This keeps drinking water sources safe and allows the fish and other aquatic life to continue thriving in the streams.

Wetlands are also key factors in reducing the frequency and intensity of flooding events. As development increases throughout a watershed, a greater amount of runoff water from impervious surfaces (driveways, parking lots, roofs, and roads) drains into the stream systems at a faster rate. This excess water creates conditions that become hazardous for

those living in the floodplain. Wetlands help to retain a large portion of the runoff (just one acre of wetlands can absorb and hold 1 to 1.5 million gallons of water) and consequently, lessen the destructive forces of flooding.

Wetlands provide habitat to a unique array of wildlife species such as northern dusky salamanders, eastern box turtles, spring peepers, osprey, great blue herons, and red-headed woodpeckers. Wetlands are also full of colorful hydrophilic or “water-loving” plant species such as swamp milkweed, red maple, highbush blueberry, winterberry, cinnamon fern, and red osier dogwood. Overall, wetlands offer incredible scenic beauty, so put on some boots and enjoy them!

*Wetlands are unique habitats characterized by wet soils, hydrophilic (water-loving) vegetation and the presence of standing water.*

## Transform Backyard Wet Spots

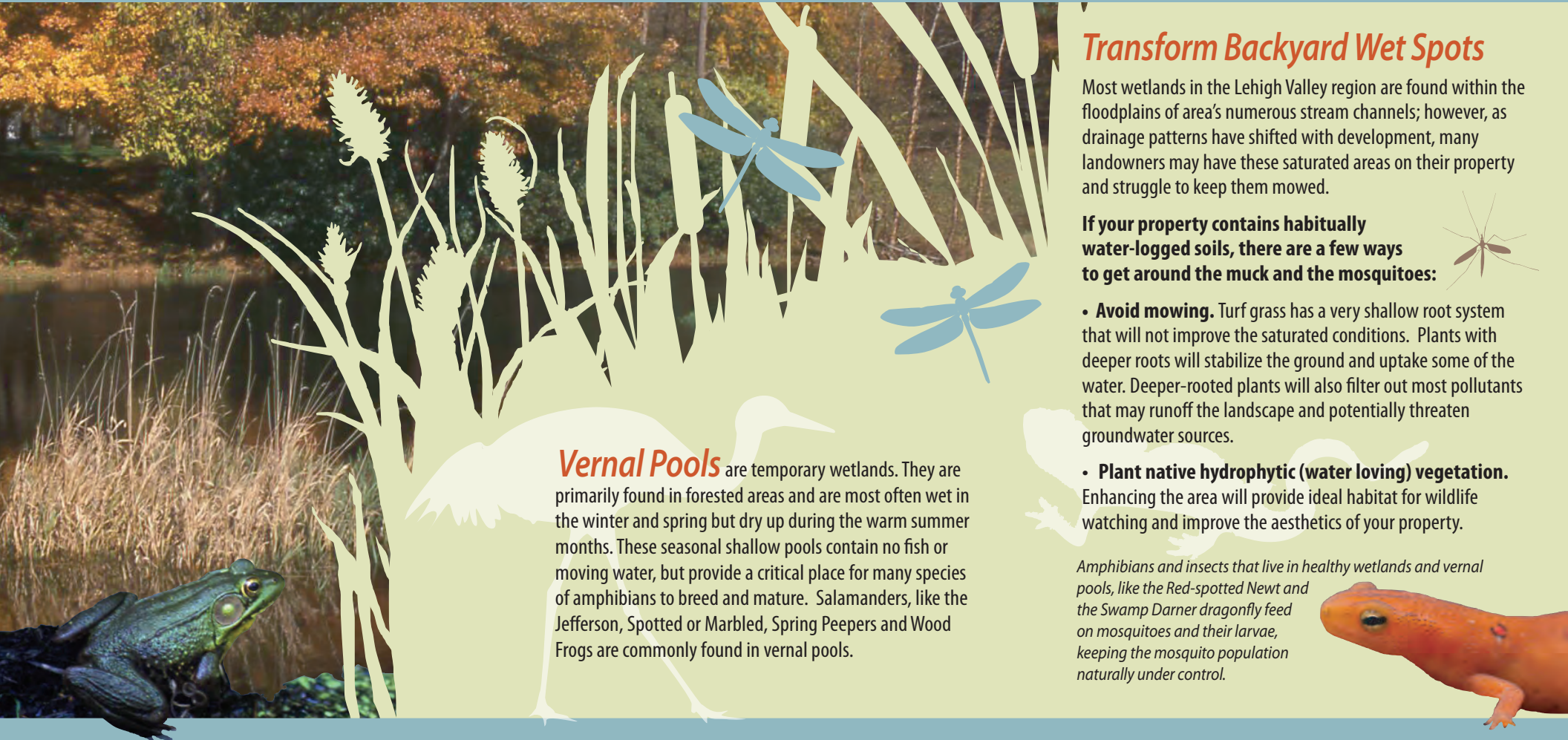
Most wetlands in the Lehigh Valley region are found within the floodplains of area’s numerous stream channels; however, as drainage patterns have shifted with development, many landowners may have these saturated areas on their property and struggle to keep them mowed.

**If your property contains habitually water-logged soils, there are a few ways to get around the muck and the mosquitoes:**

- **Avoid mowing.** Turf grass has a very shallow root system that will not improve the saturated conditions. Plants with deeper roots will stabilize the ground and uptake some of the water. Deeper-rooted plants will also filter out most pollutants that may runoff the landscape and potentially threaten groundwater sources.
- **Plant native hydrophytic (water loving) vegetation.** Enhancing the area will provide ideal habitat for wildlife watching and improve the aesthetics of your property.

*Amphibians and insects that live in healthy wetlands and vernal pools, like the Red-spotted Newt and the Swamp Darner dragonfly feed on mosquitoes and their larvae, keeping the mosquito population naturally under control.*

**Vernal Pools** are temporary wetlands. They are primarily found in forested areas and are most often wet in the winter and spring but dry up during the warm summer months. These seasonal shallow pools contain no fish or moving water, but provide a critical place for many species of amphibians to breed and mature. Salamanders, like the Jefferson, Spotted or Marbled, Spring Peepers and Wood Frogs are commonly found in vernal pools.



## Caring for Wetlands — What to Plant?

The plants below represent just a limited selection of Pennsylvania's native species appropriate for planting throughout the state in wetland and vernal pools. Choose plants adapted for your soil conditions, and your wetland will thrive 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](http://www.dcnr.state.pa.us) or PA Native Plant Society - [www.pawildflower.org](http://www.pawildflower.org)



**Joe-Pye Weed**  
*Eupatorium fistulosum*  
Blooms August to Sept.  
Light shade  
Wet to moist soils  
Attracts beneficial insects  
herbal uses  
Zehr, Jeff



**Redosier Dogwood**  
*Cornus stolonifera*  
Blooms May to July  
Full sun Wet to moist soils  
Very high wildlife value  
Grey and silky dogwood  
shrubs are also good  
choices for wet areas  
Very hardy, white flower  
clusters in spring, fast  
growers, berries for birds,  
and thick vegetation  
[www.co.washburn.wi.us](http://www.co.washburn.wi.us)



**Arrowwood**  
*Viburnum dentatum*  
Blooms May  
Full sun to full shade  
Moist soils  
Dark blue fruits in fall  
High wildlife value  
Loughmiller, Campbell  
and Lynn



**Swamp Milkweed**  
*Asclepias incarnate*  
Blooms June to July  
Light shade  
Wet to moist soils  
Attracts butterflies  
Marcus, Joseph A.



**Grey Dogwood**  
*Cornus racemosa*  
Blooms May to  
July  
Full sun  
Wet to moist soils  
Very high wildlife  
value  
Vick, Albert



**Sedges**  
*Carex stipata*  
(awl sedge) and  
*Carex stricta*  
(tussock sedge)  
Dense ground-  
cover, thrives in  
wet soil  
Wildlife habitat  
and food source  
Lavin, Matt



**Cinnamon Fern**  
*Osumnda cinnamomea*  
Full sun to shade  
Wet to moist soils  
Cinnamon-colored fertile fronds;  
moist acidic soils  
Mohlenbrock, Robert



**Winterberry Holly**  
*Ilex verticillata*  
Blooms late May to June  
Part shade  
Wet to moist soils  
Showy berries in winter  
High wildlife value;  
good colonizing shrubs  
for stream banks.  
Bruso, George



**Nine Bark**  
*Physocarpus opulifolius*  
Blooms May to July  
Full sun to part shade  
Wet to moist soils  
Bloodworth, Stefan



**Highbush Blueberry**  
*Vaccinium corymbosum*  
Blooms late May to June  
Light shade  
Wet to moist soils  
Multi-stemmed  
edible berries; fall color  
High wildlife value  
Bruso, George



**Red Maple**  
*Acer rubrum*  
Blooms late March to  
April  
Full sun to full shade  
Moist soils  
Adapts to a range  
of moisture conditions;  
good fall color  
Wasowski, Sally and Andy



**Pin Oak**  
*Quercus palustris*  
Moderately large tree from 70 to 90 feet  
Dark green to deep scarlet leaves in fall  
High wildlife value  
Mohlenbrock, Robert



**Swamp White Oak**  
*Quercus bicolor*  
Blooms in May  
Light shade  
Wet to moist soils  
Large tree with very high  
wildlife value; good wetland oak  
Mohlenbrock, Robert

## Wetland Threats

Among others, the non-native plants below grow aggressively, dominating and crowding out healthy native wetland plants. Infestations can result in a sharp decline in biological diversity. As native food and cover plant species are completely crowded out, the life cycles of all of its inhabitants, from native plants to insects, birds and animals are threatened.

Effort and vigilance are required to prevent the domination by invasive plants of native vegetation. For more information on controlling invasive species, contact your local County Conservation District listed in the back of this brochure. Extreme caution is necessary for using any herbicides, particularly in sensitive riparian and wetland settings. Check with your local watershed specialist before applying any chemicals.



**Purple Loosestrife**  
*Lythrum salicaria*  
Prolific noxious weed  
Angular stalks, square in  
outline  
Leaves which are  
in pairs that alternate  
at right angle and  
are not serrated  
Up to three million seeds  
from a single plant  
Seeds germinate in moist  
soils after overwintering  
Plant can also re-sprout  
from pieces of root left in  
the soil or water



**Common Reed**  
*Phragmites australis*,  
Tall, tasseled grass  
Crowds out native species  
Exudes a toxic acid from its  
roots that destroys  
neighboring plants



Kortrijk, K.  
(above)  
Riet, L. (left)

Although nature has the ability to tolerate and even compensate for natural disturbances in a wetland ecosystem, there is a limit to the amount of stress it can endure before it collapses.

In addition to the introduction of non-native (exotic) plants, wetlands face major threats from draining, filling, clearing and polluting. The destruction of the vegetation results in loss of critical habitat and destroys the delicate balance of life in the wetland.

In Pennsylvania, wetlands are protected by state regulation. Contact your county conservation district before removing any vegetation or disturbing any soil around or in a wetland.

