

**CELEBRATING  
50 YEARS OF  
EARTH DAY  
1970-2020**



LANCASTER COUNTY  
CONSERVATION DISTRICT

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



Earth Day celebrates people who make a difference in the world of *conservation*.

*Conservation means the wise use of our natural resources.*

This viburnum is a shrub that offers food and cover to wildlife and even pollinators. Native to Pennsylvania, wildlife identify it as part of their food chain. The roots stabilize and hold soil in place.





Adding a bluebird box on the edge of an open field, pasture, or meadow provides shelter for a beneficial bird in your neighborhood. Bluebirds are insect eaters and need an open space to look for food.

Bluebird *populations* dropped when pesticide use 50 years ago interfered with their food chain. Today they are on the come back thanks to students and adults who have built hundreds of habitat boxes. Boxes should be checked and cleaned after the nesting season.

*Population is the number of a certain species found in an area.*

PA Bluebird Society:

<http://www.thebsp.org/>





In the last 50 years we've learned that invasive species whether plants like this garlic mustard, trees like the ailanthus, or insects like the spotted lanternfly can change *Biodiversity* of an ecosystem.

*Biodiversity is the appreciation of the differences and connections in all living things.*

Managing invasive species is tricky. Introduced to a new space some times by accident other times on purpose, their native predators remain in their original area. Without a predator to control its population, this garlic mustard spreads new seeds that grow hundreds of new plants and crowd out native trees and plants. Native wildlife lose variety of food in their habitat.

PA Invasive Species:

[http://www.landscape.org/pennsylvania/Threats%20and%20Issues/pa\\_invasives/](http://www.landscape.org/pennsylvania/Threats%20and%20Issues/pa_invasives/)





The dish in this picture is filled with egg shells, orange peels, coffee grinds, chopped up leaves, and corn cobs. Does it look like dirt to you?

The worms and bugs that live in this *compost* pile created the soil after eating vegetable, fruits, and other organic matter. Composting has become popular since the first Earth Day. When you compost you put less waste in the trash can while getting a product to grow flowers or vegetables in your garden.

*Compost is decayed organic matter that can be used as plant/grass fertilizer.*

Even in a city setting a kitchen compost bin can feed worms and provide enough soil for potted plants on a patio or balcony.

Compost: <https://aggie-horticulture.tamu.edu/kindergarden/kidscompost/CompostingForKids.pdf>





A stream that's surrounded by trees and plants is sometimes hard to see and that's a good thing. Over 200 years ago, most of Penn's Woods was forested. The tree roots and canopy protected the streams while the leaves that dropped from trees fed the tiny macroinvertebrates that were a food source for fish.

This changed when settlers cleared land, soon streams were negatively effected by bare streambanks. Today, the benefit of trees replanted along a stream have reinvigorated ecosystems. These plantings create a *Riparian Buffer*.

*Riparian buffer is a vegetated or forested area near a stream that protects the stream from land use close by.*





Riparian buffers act a bit like a hallway or corridor for wildlife. Trees along the stream can give cover to animals as they walk, fly, or swim from place to place. Sometimes you'll even find a sign of animals in the buffer like these walnuts eaten by squirrels.

A healthy buffer in Pennsylvania might give food or cover to white tailed deer, kingfishers, wood ducks, carpenter bees, mink, skunks, or great blue herons. Buffers can be filled with biodiversity.

Riparian buffers can be planted next to any stream in a town, by farm fields, railroad lines, roadways, or even in your backyard. Each one helps improve the quality of water in a *watershed*. We all live a watershed.

*A watershed is an area of land where rain drains over the land to a central waterway.*





The log deflector in the top of this photo is over 10 years old. It's still doing its job. The V shaped placement of the logs against the streambank deflects the pressure of the water off the streambank and pushes the water into the center of the stream. There are logs stacked together above and below the water. The logs in the water will last the longest and provide shelter for fish and even crayfish.

To place a log deflector a permit is needed to protect the stream while the work in placing the log deflector is completed.

Pages 1-16:

[https://www.fishandboat.com/Resource/Documents/habitat\\_improve\\_t\\_rout.pdf](https://www.fishandboat.com/Resource/Documents/habitat_improve_t_rout.pdf)





This redbud tree will be blooming soon after Earth Day. Planted near a stream, it will shade and cool the water throughout the summer. Later in the fall, its heart shaped leaves will drop into the water and pack together with other leaves sheltering macroinvertebrates which are aquatic bugs.. Throughout the winter the packed leaves will provide food for the aquatic bugs.

With any luck a wild brook trout will feed on the aquatic bugs in the new year.

That's something to celebrate. Happy Earth Day everyone!