

The Many Benefits of Trees

by Krista Scheirer, Conservation Coordinator at the Perkiomen Watershed Conservancy

Trees are an important part of a landscape, and they do many beneficial and necessary things for us and our waterways. Often, however, homeowners along a stream remove trees and mow their lawns up to the stream's edge, not knowing they are impacting wildlife, reducing water quality, and changing the very composition of the stream. Over time, these residents notice their properties eroding and their streams lacking "the fish they once had." If people understand the many benefits trees provide, they can make more informed decisions about how to care for the trees on their properties.

Many people receive drinking water from the streams in our watershed, so it is important to keep them as clean as possible. Trees help us to do that. The rain water that runs off our roads and properties picks up a lot of pollutants (litter, chemicals, nutrients and sediment) on its way to a stream. A forested area next to a stream, called a 'riparian buffer,' slows down that polluted stormwater. This does three things to improve water quality: it allows time for some of that water to infiltrate into the soil, recharging wells and springs; it allows the plants to use up some of the water, naturally filtering out pollutants; and it minimizes the stream bank erosion that occurs when high volumes of water rush into our waterways during a storm. This erosion drags soil into the water, making streams look like chocolate milk after it rains (yuck!), and it is responsible for the exaggerated sloping of streamside properties without trees. For these reasons, trees along a stream should not be removed, and the area next to a stream should not be mowed within 50 feet of the stream's edge.



A forested area buffering the Perkiomen Creek in Central Perkiomen Park.

When stream banks erode, it affects the plants and animals that live in the stream. The cloudy water prevents sunlight from reaching aquatic plants, preventing growth. The soil particles eventually settle on the bottom of the creek, and fish cannot find a clean place to lay their eggs. Trees on the very edge of a stream help to hold the banks in place with their roots, and they provide shade that lowers the temperature of the water, creating better habitat for fish and other aquatic species. These are a few of the reasons why homeowners who remove their streamside trees notice less fish near their properties.

Because of the major changes humans have wrought on the landscape, we need to do our best to protect the mature trees we have and to plant as many native trees as possible. Native trees are those species that evolved in this area of the United States, and they attract other native species that evolved to use those trees as food or shelter- everything from mammals to birds to insects to fungi. We enjoy the many benefits of wildlife, including recreational opportunities, and studies have shown that spending time in natural areas improves mood and has certain health benefits.



Trees along streams are crucial to protecting water quality and preventing erosion of adjacent properties.

In residential communities, shade is a major benefit of trees, and strategically placed trees can significantly reduce energy use for air conditioning.

Having healthy trees can also increase your property value. Perhaps the most important benefit of trees, however, is they provide the oxygen we breathe! As an added bonus, trees can even help clean the atmosphere by absorbing air pollutants, which worsen asthma.

If you want to improve air, habitat and water quality, you can help plant native trees and shrubs this fall with the Perkiomen Watershed Conservancy. You might even get an idea of how to improve your property with native trees. For more details, and to sign up as a volunteer, please visit PerkiomenWatershed.org.

Native Tree Plantings with Perkiomen Watershed Conservancy

Briarwyck Park in Lower Salford Township

Wednesday, September 11

Saturday, September 14

Mayfield Estates Community in Perkiomen Township

Saturday, October 5

Gabriel's Field in Lower Providence Township

Friday, October 11

Saturday, October 12

For more info on the benefits of trees:

<http://www.ncsu.edu/project/treesofstrength/treefact.htm>

<http://www.americanforests.org/why-it-matters/why-it-matters-clean-air-and-water/>

http://usatoday30.usatoday.com/news/health/2009-10-15-nature-anxiety-exercise_N.htm