**Segment for Week of 27 July 2020 757-550-1854**

This is Steve Rulison bringing you information on shore friendly living, gardening , and our natural world.

This segment is the first in a series of programs about trees. This week I will talk about the benefits that trees bring to the world around us and to us personally. In later segments, we will give you tips on the selection and planting of trees and make some recommendations on trees that are well-suited for the Eastern Shore of Virginia.

For starters, lets learn about how trees are good for the environment. One of the biggest ways that trees impact the environment is through the reduction of air pollution, a serious health threat that causes asthma, respiratory illness, cancer, and other conditions. This is done by “breathing in” harmful gases, through their leaf stomata, which are like little pores in the leaf, and “breathing out” life-giving oxygen. Two medium-sized, healthy trees can supply enough oxygen for a single person for a year, and an acre of forested land supplies four tons of oxygen, enough to meet the annual needs of 18 people.

Through photosynthesis, trees absorb carbon dioxide, then store food as sugars in their roots, trunks, stems and leaves. Although it varies by size and type of tree, on average, a single tree sequesters, or “locks up” about 48 pounds of carbon per year and, according to the US Department of Agriculture, one acre of forest absorbs six tons of carbon.

Trees block the solar radiation that produces heat, helping to reduce the “**heat island effect**.” Trees near buildings can reduce heating and air conditioning demands which, in turn, not only saves money, but reduces emissions associated with power production. A study done in 2017 by NOAA discovered that, on a city’s hot summer day, temperatures were as high as 102o in the areas where there were primarily buildings and concrete surfaces, whereas, in a nearby park with lots of trees, temperatures were much cooler at 85o.

Trees help to slow down storm-water runoff and create a natural filtration system that cleans the water, making it healthier for consumption and the overall environment.

Trees are good for wildlife, supporting it through all stages of a tree’s life. When mature, they are used for food, shelter, and sites for reproduction. Standing dead and dying trees, called “snags,” are just as important; providing birds, small mammals, and other wildlife places for nests, nurseries, storage areas, foraging, roosting, and perching. And finally, decaying logs from dead trees store carbon, fix nitrogen in the soil, retain moisture and nutrients that aid in new plant growth and support wildlife and soil organisms.

Next week we will discuss ways that trees are directly beneficial to humans.

From my perch near the mouth of Occohannock Creek, I recorded virtually no rain last week.

For information on soil testing or answers to other gardening questions, call your local Accomack or Northampton County Extension Office.