



Riparian Buffers

River conservation groups like CU Maurice River focus their efforts on greenways along with general environmental awareness. A greenway is a strip of undeveloped land near urban areas, which can provide both recreation and crucial habitat for plants and animals. Because of our mission, CU is largely interested in riparian buffers. These are the natural vegetated barriers or interfaces along a stream bank. In the tidal areas in our

watershed we have wetland buffers and then wooded buffers that we seek to maintain. Along non-tidal rivers and streams there are often hardwood swamps or higher banks that lead directly to upland woods.

In either case the buffers perform extremely important functions. Structurally, roots hold soil in banks, minimizing erosion. This is critical to water quality. And water is critical to all life. Soils become suspended solids in water (think Yoohoo). Fish and other living creatures do not thrive in a murky mess; for us it would be like being in a dust storm or a smoky room.

From a land-use perspective people are erosion-adverse. Watching one's land disappear into a neighboring stream is upsetting. Often people build expensive barriers to prevent erosion, but these barriers are normally wildlife-adverse, preventing important movements from one ecotone or habitat type to another. The proper name for this habitat is riparian, one of fifteen terrestrial biomes on the planet. Vegetation is the most ecofriendly approach to protecting these edges, but when I say "vegetation" I don't mean lawn. In fact that would be totally counterproductive,

since commonly we use all manner of deleterious products on lawns that don't belong in streams.

The most desirable cover along waterways in our region would be native trees and shrubs. Native plants support native animals; exotics do not. (We'll save that for a future article). The wider the greenway the more natural purposes it can serve. CU has advocated for and helped achieve the preservation of thousands of acres along our streams. But there are still stretches along our local rivers where grass or agricultural crops abut the water's edge.

Why is wider better? Animals rely on water and we rely on clean water. The buffers actually decontaminate the water, trapping nutrients and even removing harmful pollutants like fertilizers and chemicals. Conversely vegetation and vegetative matter provide the kind of nutrient input that the stream needs: leaf matter, stumps for fish habitat, invertebrates that sustain all matter of life, shaded areas, and so forth. Many animals use bank vegetation for development. For instance dragonflies need the structure of stems and grasses for part of their

life cycle. In turn when they hatch they feed on mosquitos in the stream.

Forests clean our air. And today a great deal of emphasis is placed on undeveloped corridors for animals to move along. This supports migration, stages in life history, and interchange between populations for a more diverse gene pool. In other words a species can find a mate from a different group by moving safely within a larger buffer. One of my favorite cartoon strips is "Calvin and Hobbes", Hobbes being a tiger who belongs to a boy named Calvin. The storyline one week was the difficulty Hobbes was having finding dates. Upon finally learning that he was endangered, Hobbes declared, "No wonder I can't get any dames!" Buffers are about preventing isolation!

Forested buffers also allow for safer movement and fewer paved lanes through a territory. The perils of road crossing are affecting entire populations of creatures, especially reptiles and amphibians.

Now that you've learned about the importance of vegetated buffers, you might like to help make a difference! In March, CU Maurice River will be

teaming up with The American Littoral Society to plant trees at Giampietro Park in Vineland. The aim is to reforest three acres of land and you can be part of this project. On Wednesday, March 20th at 9:00 a.m. we will assist Emma Melvin of ALS as well as local school groups. We would love to have you join us in rebuffering the water's edge.

If you are interested in participating, please send an email our program Manager, Karla Rossini (karla.rossini@cumauriceriver.org), or call 856-300-5331, letting her know of your availability. In that email, also indicate whether you would prefer to work with students or focus on planting trees. We will bring some shovels and other tools, but we won't have enough on hand for everyone, so if you can, please bring a shovel with you. Also, we recommend having a pair of waterproof boots in case the ground is soggy!