

RIP Gully, Gulch, and Ravine Critters
By Dave deCalesta – reprinted from the March 2010 KLA Newsletter

The thin strip of vegetation surrounding bodies of water is called the **riparian zone** (RIP for short). The term comes from the Latin word *ripa* (riverbank). It's a zone of wetted soil characterized by hydrophilic (water-loving) plants and a definitive set of critters that use the vegetation/water combo to meet some or all of their habitat needs. By many definitions, this zone of wetted vegetation and specialized plants extends 100-500 feet from the water's edge. These specialized plants and animals are an important addition to the diversity of species surrounding Keuka Lake. The **horizontal** riparian zone around Keuka Lake is the shoreline, and it has been heavily (and likely irreversibly) impacted by development: residences, docks, marinas, and restaurants—the only intact sections are areas too marshy or steep for construction or are reserved as parks. This article focuses on the **vertical** riparian zone around Keuka Lake—the one comprised of gullies, gulches, and ravines.

Photographs taken in the early 1900's of Keuka Lake show hillsides stripped of trees for vineyards. The thin, dark lines wandering down to the lake's edge from the hilltops are the vertical riparian zones. Many are dark because trees—mostly eastern hemlock—remained as the gullies, gulches and ravines that form the vertical riparian zones were too steep for easy removal of trees, and were too steep for vineyards. Then as now, the vertical riparian zones were shaded by hemlocks, birches, cottonwoods and sycamores that thrive in wetted soils. The understories were and are populated by water-loving shrubs (such as elderberries and witch hobble) and herbaceous plants (such as jewelweed and watercress). These riparian zones provided cool, moist microclimates wherein a distinctive class of specialized wildlife species found all or some of their daily and seasonal habitat needs in spring, summer, and fall. In winter, the sheltering coniferous canopies of hemlocks and white pine cut the wind and moderate the cold, providing warmer microclimates for deer and turkeys. Root systems of trees, shrubs, and herbaceous plants hold bank soil together and prevent silt from washing down the streams and suffocating the eggs of fish and amphibians in streams and along the Keuka Lake shoreline.

Riparian Zone Critters



The Acadian flycatcher nests in hemlock trees above streams



The northern water shrew hunts along streams



The northern two-lined salamander lays eggs in streams

If we don't want the Acadian flycatchers, northern water shrews and two-lined salamanders (and a couple dozen other critters) to depart Keuka Lake's hillsides, we need to preserve the special habitats formed by steep streams overhung with conifers and deciduous trees and shrubs. That means backing off agriculture and development at least 100 feet from the edges of gullies, gulches and ravines in a no-disturb, no devegetate zone. If we don't do that, it will be R.I.P for these unique and potentially-threatened species