

Habitat Use and Niche Partitioning Study of *Nerodia sipedon* and *Regina septemvittata* in a Small Appalachian Stream in West Virginia

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The common water snake, *Nerodia sipedon*, and the queen snake, *Regina septemvittata* are two species of stream-dwelling water snakes in the Family Natricidae native to the northern panhandle of West Virginia. *Nerodia sipedon* is a large-bodied generalist, ranging up to 140 cm in length and 400 g in mass, which feeds on many fish and amphibian species. *Regina septemvittata* is a smaller specialist, reaching only 92 cm in length and 100 g in mass, which primarily consumes freshly molted crayfish. In an ongoing study conducted by students at West Virginia University, I studied the habitat preferences of both of these species in the North fork of Short Creek as there has been little research done on habitat preferences in small streams. Morphological, environmental, and behavioral data on each snake that was captured. Qualitative habitat evaluation indexes (QHEI) were also collected to assess stream health in conjunction with presence and abundance of both species. No significant differences were found in the presence or abundance as it relates to QHEI, but trends show higher rates of presence and abundance in sites with lower QHEI scores. These results suggest that there is minimal interspecific competition of habitat present between *N. sipedon* and *R. septemvittata*, as well as support the hypothesis that both species thrive in more disturbed habitats.