IMPACTS OF JAPANESE KNOTWEED (*POLYGONUM CUSPIDATUM*) ON NATIVE PLANT DIVERSITY IN RIPARIAN COMMUNITIES ALONG THE SUSQUEHANNA RIVER

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Invasive species can alter natural communities and out-compete native plants, reducing densities of natives or replacing them completely. This study sought to quantify the impact of Japanese Knotweed (*Polygonum cuspidatum*) on riparian plant communities along the Susquehanna River in central Pennsylvania.

Two study communities, one relatively intact and one invaded by Japanese knotweed, were surveyed. Both areas were sampled across the herbaceous, understory, and canopy layers. Densities and presence/absence were recorded for 30 x 12m plots within each study area.

Although a small group of native species appear to be tolerant, results indicate that plots in sites invaded by *P. cuspidatum* are significantly less diverse than those in intact plots.

Species recorded within both communities, such as the common blue violet (*Viola cucullata*), smooth Solomon's seal (*Polygonum biflorum*), and green dragon (*Arisaema dracontium*), had significantly reduced densities in the invaded plots compared to the intact plots. Recruitment of native tree seedlings appears to be impaired by incursions of *P. cuspidata* and surveys of mature tree dbh in each site allows us to infer that this has been the case for some time in our study area.