

EXCLUDING INVASIVE PLANTS WITH RIPARIAN CORRIDORS

Jessica Morgan¹, Gavin Ferris¹, Chris Williams¹, and Vincent D'Amico²

¹University of Delaware, Department of Entomology and Wildlife Ecology,
Newark, DE 19717

²U.S. Forest Service, Northern Research Station, University of Delaware,
Department of Entomology and Wildlife Ecology, Newark, DE 19716

ABSTRACT

Riparian corridors are strips of forest between a stream and human-impacted land. This area is thought to provide protection for the stream against the harmful effects of surrounding human activities. This buffering effect may include the exclusion of invasive plants, considered a threat to native biodiversity, from the streambank. By sampling multiple riparian corridors of varied widths and

surveying the progression of invasive plant density into the corridor, as well as the basal area and the canopy density, we were able to determine the relationship between the width of a buffer and its ability to exclude invasive plants. Our results suggest that invasive plants at the streambank are greatly reduced by a 50-m buffer and are sufficiently excluded by a 100-m buffer.