

Examining the Short Term Effects of Restoration Plantings on Emerald Ash Borer Infested Flood Plains

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Emerald Ash Borer (*Agrilus planipennis*) has been identified as present in Ohio since 2003. Since then this small Asian beetle has been devastating to floodplain areas throughout Ohio, killing almost the entire population (99%) of ash trees. In many of these floodplain ecosystems, ash was the dominant species in the canopy. The question now remains as how to best repair these areas. In 2011, restoration plots were planted in Clinton Conservation Area (Clinton, Ohio), Oak Openings Metropark (Toledo, OH) and Sharon Woods Metropark (Columbus, OH), representing a gradient of infestation duration and ash mortality. Three different species were planted randomly throughout the plots, including: pin oak (*Quercus palustris*), American elm (*Ulmus americana*), and sycamore (*Platanus occidentalis*). The American elms used in the study were generated from a cross between two Dutch elm disease-tolerant American elms. Also, different treatments of deer protection and original planting sizes were used to examine potential differences in survival. The goal of this study is to examine techniques for restoration of damaged flood plains.