INTEGRATED VEGETATION MANAGEMENT RECOMMENDATIONS FOR GEORGE WASHINGTON CARVER NATIONAL MONUMENT

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ABSTRACT

George Washington Carver National Monument (GWCA) is a 97 ha historic site in southwest Missouri. Park managers are responsible for management of more than 90 ha of grassland and woodland. There have been several efforts to develop a long-term monitoring program to support cultural and historical interpretation programs at GWCA. My study is a cooperative project to develop Integrated Vegetation Management Recommendations (IVMR) for GWCA that includes input from multiple agencies and stakeholders. Park staff will use three alternatives as a guide for monitoring and management. A key aspect of the plan is the use of Habitat Suitability Index (HSI) models and presence/absence surveys for four prairie indicator species (Henslow's sparrow, ornate box turtle, northern bobwhite quail, and prairie vole) to evaluate 53 314-m^2 circular plots for existing prairie structure. In 2009 and 2010 I found there were areas of mixed quality across the prairie units, and management recommendations were provided to GWCA to address limiting habitat characteristics (scores <0.50) from HSI data. In addition to the IVMR, two additional products were provided for GWCA. I compiled and evaluated prairie management practices since 1981 in the *George Washington Carver National Monument Prairie Restoration Management Review*. I also created a guidebook for using HSI models at GWCA, allowing park staff to prescribe applicable management techniques based on ranges of HSI scores. GWCA staff will be trained to implement an adaptive approach to management based on this project's habitat evaluation procedures.