

Analysis of Wetland Restoration Done by the National Park Service at Kenilworth Marsh and Roaches Run Waterfowl Sanctuary

Edmonds, Rebecca

Freshwater tidal wetlands process pollutants and stabilize shores from erosion while providing habitat, food, and nesting areas for wildlife. The National Park Service has attempted to restore a number of Potomac watershed wetlands in the Washington, D.C. area. The purpose of this experiment is to analyze the effectiveness of this restoration. Data collected on the species richness and vegetative cover of plants at Dyke Marsh, Kenilworth Aquatic Gardens, and Roaches Run Waterfowl Sanctuary provide insight to long and short-term restoration. Dyke Marsh is an unrestored, natural wetland that has existed for over 200 years, Kenilworth is a wetland that was restored 20 years ago, and Roaches Run is a wetland that was restored 5 years ago and again 6 months ago. Analysis found that Roaches Run had the highest vegetative cover and percentage of native species. Dyke Marsh had the second highest vegetative cover and percentage of native species. These data suggest that short-term restoration done by the National Park Service has been more successful than long-term restoration. The findings of this study conclude that smaller restoration acts over longer periods of time would be a more effective method of restoration.

Awards Won:

