

Wurst, S. and R.B. Atkinson. 2011. A characterization of soils in created wetlands in Loudoun County, Virginia. MARCUS

Soil compaction and low nutrient availability have hindered efforts to create functioning wetlands. The purpose of this study is to characterize soils at three created wetlands to determine the effect of soil variables on growth. Species including *Betula nigra*, *Liquidambar styraciflua*, *Platanus occidentalis*, *Quercus bicolor*, *Q. palustris*, *Q. phellos*, and *Salix nigra* were planted as bare roots, potted (3.8-L) pots, or tubelings at sites in Northern Virginia. Planting occurred on March 9-10, 2009 and growth (canopy width, stem diameter at base, and height) of individual trees was monitored immediately after planting and each subsequent August. Averages for bulk density (1.04 ± 0.14), Nitrate/Nitrite (3.6 ± 3.7) and Potassium (66.1 ± 64.3) suggest that each may influence observed growth trends among tree species.