



USDA-CSREES 2006 National Water Quality Conference

Wetland Restoration in Marginal Agricultural Fields/Innovative Wetland Restoration Techniques and Tax Ditch Best Management Practices

Delaware has developed a variety of innovative wetland restoration and construction techniques. Significant resources have been dedicated toward the development of these techniques, all of which aid in jumpstarting restoration projects. Employing construction techniques which replicate natural wetland systems has resulted in the establishment of many demonstration/education sites in excess of 200 acres. These wetland projects have been constructed with minimal engineering and in many cases have utilized “in the field engineering” practices. Emphasis has been placed on irregularly-shaped perimeters with micro and macro topography. Trees ranging in diameter from one to six inches have been relocated into wetlands with a backhoe or hydraulic excavator. Coarse woody debris has been added to provide habitat structure, long-term carbon source, and basking/loafing areas for reptiles and waterfowl. Straw and horse manure have been added to provide organic matter as a substrate for macro invertebrates. The surrounding upland buffers have been seeded with warm season grasses for filter strips and to provide additional wildlife habitat. Routinely, deserving/special projects are planted with nursery stock to further promote diversity. This special care provides opportunities for student groups to participate in planting events which allow them to reinforce and apply their classroom lessons in the field. Highlighted will be examples of construction techniques used to jump start wetland restoration projects to promote diversity in plant and animal communities. This presentation will also focus on the most frequently utilized Best Management Practices in Delaware’s Water Management projects. Listeners will be treated to a presentation comprised of approximately 100 photos with only a few of them having text. The listeners should leave with a vivid image of Delaware’s wetland restoration initiative and tax ditch BMPs.

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