

Management of Forested Wetland Ecosystems in the Central Hardwood Region

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Forested wetland ecosystems currently comprise a relatively small, important and overlooked portion of the landscapes of the Central Hardwood Region. Prior to European settlement, several million acres of forested wetlands existed. This has been reduced to a fraction of the original area as much of the land has been converted to urban, agricultural, or other industrial uses.

Forested wetlands have many functions and can potentially provide many as well as economic benefits. Wetlands regulate water flows, thus helping to reduce peaks and troughs in channel flow. They protect stream and river banks from erosion and improve water quality by filtering sediments and pollutants before they reach floodplains. Wetlands also provide habitat for a wide range of plants and animals, including a number of threatened, endangered, and sensitive species. In addition to their ecological functions, forested wetlands often have the potential to be extremely productive sources of timber and other forest products.

Forested wetlands are currently receiving considerable attention from scientists and the media. Most of the research has been centered in the Southeast and Midwest. Comparatively little research has been performed in the forested wetlands of the central midwest states; thus, natural resource professionals in the region are making management decisions from a limited knowledge base. Because of ecological and legal constraints, practitioners and landowners avoid management of forested wetland sites. There is a demonstrated need for more basic knowledge on forested wetland ecosystems in the Central Hardwood Region.

These proceedings contain papers delivered at a workshop on "Managing Forested Wetland Ecosystems in the Central Hardwood Region" held in Evansville, Indiana, in October 1994. The original purpose of the workshop was to pull together information on the ecology and management of forested wetlands in the Central Hardwood Region. It soon became apparent, however, that there was a paucity of information on these ecosystems within the region. We found ourselves, therefore, going

for speakers, particularly to the Southern and Southeastern Regions which of research on, and management of, bottomland forests. Hopefully, by borrowing experience of other regions, we can begin to enhance our knowledge and understanding of forested wetlands within the Central Hardwood Region.

We structured the workshop to move from the more basic information on forested wetland ecosystems function to the more applied aspects of management. The workshop opened with an overview of the topic, starting with a national perspective then focusing in on the forested wetland resource in the Central Hardwood Region. We looked at the unique legal and social aspects of forested wetlands.

We then moved on to the functioning of forested wetlands. We heard about hydrological characteristics at the local scale, followed by how these systems function at watershed or landscape scale. Day one concluded with a series of papers on the fauna of forested wetlands, and some of the functions they serve in these systems.

Much of day two of the workshop concentrated on aspects of managing forested wetlands. We heard about some of the silvicultural challenges and special considerations that managers must be aware of. Research challenges and current knowledge of management of these systems we've discussed. We concluded with a paper on the restoration of degraded forested wetlands, a subject that deserved additional attention in the Central Hardwood Region.

The workshop concluded with a field tour of forested wetlands. At the Fish and Wildlife Area in northwestern Kentucky, we observed the management of a tree reservoir system, and discussed design principles of both green tree and soil management units. We had a demonstration of tree planting and direct regeneration in forested wetlands. The field tour ended with an in-the-field discussion of the management of bottomland hardwood forests. The tour provided excellent opportunities for some of the speakers to expand upon the information given in their presentations. We allowed workshop participants to interact with the speakers in an informal setting.

In general, participants felt that the workshop was a success. We hope the information presented at the workshop, and captured in these proceedings, will help to improve the understanding and management of forested wetland ecosystems in the Central Hardwood Region.

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