

GREAT RIVER NATIONAL WILDLIFE REFUGE FOX ISLAND DIVISION

Bottomland Hardwood Reforestation, Wetland Enhancement, and Grassland Restoration

Rock Island Corps of Engineers District, Missouri
Mississippi River Pool 20

Location

The Fox Island Division of Great River National Wildlife Refuge is located along the right descending bank of the Mississippi River between river miles 358.5 and 353.6, one mile below the town of Alexandria in Clark County, Missouri. Prior to completion of the Comprehensive Conservation Plan in 2001, this refuge unit was known as the Gregory Landing Division. The Fox River bisects a portion of the refuge and creates much of the western boundary of the Division. The Great River National Wildlife Refuge is part of the Mark Twain National Wildlife Refuge Complex of the U.S. Fish and Wildlife Service. Fox Island Division lands are owned in fee title by the U.S. Fish and Wildlife Service.

Existing Resources

The Division is comprised of 2100 acres of land and water within the Mississippi River floodplain. Currently, about 1200 acres are floodplain forest dominated by silver maple and cottonwood. Higher elevations include a strong pin oak component. Wetlands, backwaters, and sloughs comprise about 300 acres. The remaining 600 acres are currently being farmed to hold them in an open condition until reforestation plans can be implemented. A portion of the division boundary joins the 620-acre Rose Pond Conservation Area of restored grassland and wetland managed by the Missouri Department of Conservation (MDOC).

Problem Identification

The wetlands, forests and grasslands along the Mississippi River provide habitat for over 230 species of birds along one of the most important migration corridors in North America. The Upper Mississippi River floodplain also contains hundreds of species of fish, reptiles, amphibians, and mammals. Along much of the river these habitats have been severely reduced or degraded due to the impacts of man. This is particularly true for Pool 20 which contains among the lowest proportion and total acreage of publicly protected and managed habitats along the Upper Mississippi River.

Fox Island is primarily former agricultural land that was purchased following the '93 flood to increase river connectivity and wildlife habitat in the floodplain. Hundreds of acres of higher elevation former cropland are suitable for planting to hard mast trees and native grassland species. Lack of ability to control water levels limits the quality of wetland wildlife habitat on the Division.

Project Goals and Objectives

This project would allow full development and management potential of the Fox Island Division. The mosaic of a large tract of bottomland forest, enhanced wetlands and restored grasslands would provide significant habitat benefits to a wide variety of important wildlife species. About 95% of the Division is un-leveed and

open to river flood pulses. The project will not increase flood frequency, height, or duration on the Mississippi River.

1) Bottomland hardwood reforestation would reduce forest fragmentation by creating a large contiguous tract located along a reach of the river currently deficient in managed and protected forests. Planting of hardwood species would significantly add to the wildlife value of this forest habitat. Numerous neotropical bird species that rely on the river corridor for nesting habitat as well as migration habitat would directly benefit.

2) Wetland enhancement would benefit fall migrating waterfowl and other wetland species. Managed and protected wetlands that provide waterfowl sanctuary are in very short supply along this reach of the river.

3) Restored grasslands would adjoin existing grasslands on the Rose Pond Conservation Area, managed by MDOC. Native grasslands, although historically prevalent in the river bottoms, are today in critically short supply. The combined 300 - 400 acre block would be large enough to provide benefits for nesting and migrating neotropical bird species that are dependent on grassland habitat.

Proposed Project

The proposed project features include bottomland hardwood reforestation, wetland enhancement, and grassland restoration:

1) Approximately 340 acres of existing cropland will be reforested using a variety of hard mast species. Planting sites are located on the higher elevations of the fields to reduce flooding frequency and improve survivability. RPM or similar type trees are recommended since their additional height and fast growth will provide additional protection from flood damage compared to bare root seedlings. Another 250 acres of lower elevation ground will be allowed to regenerate naturally to bottomland forest. These sites will be dominated primarily by species such as silver maple and cottonwood. The entire forest complex of existing, planted, and naturally regenerated sites will create a contiguous bottomland forest block of approximately 1800 acres.

2) Wetland enhancement will be accomplished by the installation of two wells and one water control structure. These features will provide improved and reliable fall wetland conditions on Logsden Slough, Coin Pond, and Slim Slough (approximately 90 acres total). The potential value of these enhanced wetlands is significantly increased due to the fact that managed and protected wetlands are in very limited abundance along the Pool 20 reach of the river. Construction of ½ to 1 mile of gravel road may be needed to provide access to the well sites for operation and maintenance.

3) About 90 acres of native grassland will be restored on the Logsden Tract by seeding abandoned cropland that lies inside the Fox River Drainage District levee. This restoration is adjacent to existing grasslands on the Rose Pond Conservation Area.

Financial Data

Status of Project

Point of Contact

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Great River NWR Fox Island Division

Proposed HREP Project

