U.S. Fish & Wildlife Service





Patoka River

National Wildlife Refuge and Management Area

Summary Comprehensive Conservation Plan

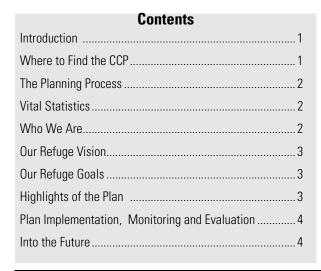
 $September\ 2008$

Comprehensive Conservation Plan Approved!

A planning effort that involved neighbors, nongovernment organizations, local officials and interested citizens has concluded with the completion of a comprehensive conservation plan (CCP) for Patoka River National Wildlife Refuge and Management Area in southern Indiana.

The comprehensive conservation plan lays out management goals for the next 15 years and specifies the objectives and strategies needed to accomplish these goals.

The CCP is a guide for future management, not a promise. Much of what the CCP describes depends on either nature or funding, and both are hard to predict. The CCP describes how the U.S. Fish & Wildlife Service (Service) would like to manage Patoka River NWR, but it does not constitute a commitment for staffing increases or operational and maintenance increases that may be detailed in the plan.





Bottomland hardwood forest at Patoka River NWR and Management Area. U.S. Fish & Wildlife Service photo.

Where to Find the CCP

The CCP is available in a variety of formats through a variety of sources.

If you have access to a computer, you can see the plan in portable document format (pdf) at the Refuge's planning website:

http://www.fws.gov/midwest/planning/PatokaRiver

Paper copies and an electronic version of the plan are available at libraries throughout the area, including:

- Oakland City Public Library
- Pike County Public Library
- Princeton Public Library
- Huntingburg Public Library
- Fort Branch Public Library
- Willard Library
- Jasper Public Library
- Winslow Branch Library

Paper copies are available in limited numbers for individuals who want one. The CCP is also available as a pdf document on compact disk. To request either a paper copy or a compact disk, please call the Refuge at 812/749-3199.

The Planning Process

Work on the comprehensive conservation plan began with a public scoping meeting held on October 14, 2004, at the Indiana Department of Natural Resources' Sugar Ridge Fish and Wildlife Area Office, south of Winslow, Indiana. More than 30 people attended the meeting to offer their ideas for the Refuge's management.

The Draft CCP/EA was released for public review and comment on October 17, 2007. A Draft CCP/EA or a summary of the document was sent to more than 416 individuals, organizations, and local, state, and federal agencies and elected officials. An open house event was held on November 7, 2007, at the Sugar Ridge Fish and Wildlife Area headquarters following release of the draft document. We received a total of 18 comment letters and e-mails during the 45-day review period. Appendix K of the CCP summarizes these comments and our responses. Several of the comments resulted in changes in the CCP.

Vital Statistics

Patoka River NWR & MA is a work in progress. Established in 1994, approximately one-fourth of the total area approved for acquisition is presently part of the Refuge. Acquiring additional lands within the approved boundary is an ongoing effort. The Refuge is the 502nd refuge within the National Wildlife Refuge System and the second refuge established in the State of Indiana.

The Patoka River had long been recognized for its wetland and wildlife values on a local, statewide and regional basis. In the late 1980s and early 1990s, the Service proposed establishing a national wildlife refuge/wildlife management area along the Patoka River in Pike and Gibson Counties of southwestern Indiana. The portion of the river included in the proposal contains one of the few remaining expanses of bottomland hardwood forest wetlands in Indiana and the midwestern United States.

The area provides some of the most significant remnant bottomland hardwood wetlands in all of Indiana. In all there are more than 380 species of wildlife on the Refuge, including the federally-listed endangered Indiana bat, and more than 50 species listed as conservation priorities in the Indiana Comprehensive Wildlife Strategy.

The area's natural resources face considerable challenges. Along the Patoka River, ditching, diking and channelization dating back to the early 1900s contributed to wetland losses. Water quality in the Patoka River drainage has been diminished by acid mine drainage runoff from abandoned derelict mine areas in the upper watershed, oil well development activities, intensive agricultural operations, and community effluent.

Who We Are

The Refuge is administered by the U.S. Fish and Wildlife Service, the primary federal agency responsible for conserving, protecting, and enhancing the nation's fish and wildlife populations and their habitats. The Service oversees the enforcement of federal wildlife laws, management and protection of migratory bird populations, restoration of nationally significant fisheries, administration of the Endangered Species Act, and the restoration of wildlife habitat such as wetlands. The Service also manages the National Wildlife Refuge System, which was founded in 1903 when President Theodore Roosevelt designated Pelican Island in Florida as a sanctuary for Brown Pelicans.

Today, the Refuge System is a network of over 545 refuges and 7,000 waterfowl production areas covering more than 95 million acres of public lands and waters. Most of these lands (82 percent) are in Alaska, with approximately 16 million acres located in the lower 48 states and several island territories. When it is compatible with wildlife and habitat conservation, refuges are places where people can enjoy wildlife-dependent recreation such as hunting, fishing, wildlife observation, photography, environmental education, and environmental interpretation.



 $Coots\ at\ Patoka\ River\ NWR.\ U.S.\ Fish\ \&\ Wildlife\ Service\ photo.$

Our Vision for the Refuge

The Patoka River National Wildlife Refuge and Management Area restores, protects and manages a diverse bottomland hardwood forest ecosystem and associated habitats for migratory birds, threatened and endangered species, and indigenous fish and wildlife, while striving to develop citizen understanding and support for the protection of natural resources by providing wildlife-related education and recreation opportunities.

Our Refuge Goals

Goal 1: Habitat

Manage a diversity of habitats to benefit threatened and endangered species, waterfowl, other migratory birds, and indigenous species in the Patoka River and associated watersheds.

Goal 2: Wildlife

Perpetuate listed species, waterfowl, other migratory birds, and native fish and wildlife, within the Patoka River and associated watersheds while restoring and preserving the biological integrity, diversity, and environmental health of the Refuge.

Goal 3: People

Visitors, nearby residents and other stakeholders have the opportunity to enjoy wildlife-dependent recreation, understand and appreciate the natural resources, ecological processes and cultural resources of the Refuge, thereby supporting the Service's mission.

Highlights From the Plan

In a nutshell, the Refuge intends to expand bottomland hardwood forest, improve water quality for the Patoka River and its tributaries, expand the fish population, and make the Refuge easier for visitors to navigate and understand over the next 15 years. Specific objectives include the following:

Habitat

■ Refuge staff will maintain existing bottomland forest, of which 3,056 acres are presently acquired, over the next 15 years. As land with suitable soils is acquired, and if it is outside of areas managed as non-forested habitat, it will be reforested to bottomland hardwoods. In the long-term (100-200 years), the Refuge will increase the habitat complexity of bottomland



 $Patoka\ River\ NWR\ restoration.\ U.S.\ Fish\ \&\ Wildlife\ Service\ photo.$

hardwood forests on between 12,000 to 13,000 acres.

- Emergent wetlands at Snakey Point and Buck's Marsh will be maintained over the next 15 years as a mixture of vegetation that includes cattail, bulrush, sedges, spatterdock, water lily and smartweeds.
- The number of lakes and ponds on the Refuge will be maintained at or above the number present in 2006, and we will work to increase the aquatic diversity of these waters.
- A meandering Patoka River is part of the vision for the Refuge, but it is one that will require additional study. Within 5 years of plan approval, staff will pursue studies to collect information necessary to evaluate stream channel restoration options for the Patoka River and its tributaries. This could include restoring sections of channelized stream to meandering stream.
- Over the life of the plan, the Refuge will work with partners to improve water quality within the Patoka River and its tributaries and move toward compliance with Indiana Department of Environmental Management standards. The long-term goal is to see the streams removed from the list of impaired waters.
- Depending on future acquisition, up to 1,000 acres of bottomland farmland will be maintained over the life of the CCP as stopover habitat for migratory waterbirds. Within 15 years of plan approval, the existing 265 acres of moist soil units will be maintained and up to another 700 acres of bottomland farmland will be converted to moist soil management.



Recreation on Patoka River. U.S. Fish & Wildlife Service photo.

- Reclaimed minelands will be maintained as grasslands and some upland openings will be converted to upland forest.
- Refuge staff will develop measurable annual targets to help eradicate or slow the spread of invasive plant species.

Wildlife

- Wise management depends on learning more about Refuge wildlife. Within 5 years of plan approval, staff will implement programs to monitor listed species, selected migratory and resident bird species, and selected native resident wildlife species.
- Refuge staff will also focus on creating or maintaining diverse, self-sustaining fisheries in Refuge lakes, ponds, and streams, primarily through water quality improvements in the watershed.

People

- The Refuge will install new directional signing as well as placing new entrance signs and kiosks at existing boat ramps, Snakey Point, and along Highway 57.
- The Refuge will remain open for fishing in accordance with State seasons and regulations, and the Refuge Hunting and Fishing Plan. Within 5 years of plan approval the Refuge will enhance access by adding docks and ramps at various locations dependent on land acquisition.
- Opportunities for wildlife observation and photography at Cane Ridge and Snakey Point will be enhanced as opportunities occur.
- Guided tours and programs will be provided on request as staffing permits. Within 5 years of plan approval, interpretation elements will be added and the number of interpretive trails, walks and programs will be increased.

- Environmental education will be maintained at its current level of fewer than five group visits per year, however within 3 years of plan approval the Refuge will develop the capacity to provide environmental education materials and programs to teachers and other upon request.
- Friends groups are a tremendous help at national wildlife refuges across the nation, and Refuge staff will support efforts to establish a formal Friends group within 5 years of plan approval.

Plan Implementation, Monitoring and Evaluation

The CCP outlines an ambitious but achievable course of action for the future management of Patoka River NWR and Management Area. Pursuing and ultimately achieving goals set out in the CCP will require considerable staff and partnership commitment. Throughout the life of the CCP we will monitor our progress in achieving the goals, objectives and strategies. On a periodic basis, the Service will evaluate Refuge activities in light of the CCP. Additional "step-down" management plans will also be necessary to provide more details on Refuge programs such as visitor services, hunting, habitat management, water management and law enforcement.

Into the Future

Throughout the comprehensive conservation planning process, many people have contributed time and ideas to make the CCP for the Patoka River NWR and Management Area a better document. We are grateful to everyone who cared enough about the Refuge and its future to participate in this planning effort. We will continue to welcome your thoughts on Refuge management.

To succeed, a refuge management plan has to adapt to nature's ever changing conditions. Although the plan is complete, we expect to review it and, if needed, update it every 5 to 10 years in response to conditions that could not be anticipated in planning.

Patoka River NWR and Management Area is a place for both wildlife and people to use and enjoy, now and in the future. We hope that you will continue to care about and participate in conserving the Refuge's wildlife and habitat.