Special *Outdoor* Illinois Feature:

What's the Future of Illinois Wildlife?

The Illinois Wildlife Action Plan

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What's the best way to actively manage and protect our shared wildlife resources? A new approach links the assets and resources of diverse partner agencies and organizations into the powerful Illinois Wildlife Action Plan.

Today, we stand at a critical crossroads for all wildlife in Illinois. Man-made changes to our shared landscape, changes that continue to occur, have resulted in a mixed bag of shortcomings and successes for Illinois wildlife and their habitat.

A number of changes have been positive: Bald eagles and river otters, once endangered, are now thriving in Illinois. Meanwhile, the greater prairie-chicken—the signature bird of the tallgrass prairie—barely hangs on in the Prairie State. Although water quality and many fish populations have improved dramatically, a quarter of our freshwater mussels are extinct or extirpated. Game species, such as white-tailed deer, wild turkeys and Canada geese, are doing well, while northern bobwhites are not. Trees now cover twice the Illinois acreage they did a century ago, but we have less than half as much grassland today as in 1950. The Mississippi Flyway and Lake Michigan shoreline continue to bring spectacular concentrations of migratory birds to Illinois. But exotic plants, animals and diseases also continue to arrive—harming native wildlife, degrading natural areas, and complicating conservation efforts. For example, Asian carp now make up about 90 percent of the biomass in some pools of the Illinois River and threaten the Lake Michigan ecosystem.

greater prairie-chicken

The need for action

In 2001, Congress called upon all state wildlife agencies to submit to the U.S. Fish and Wildlife Service by Oct.1, 2005 a strategic assessment and action plan with a focus on wildlife in greatest need of conservation in their state. These plans were a condition for receiving newly available federal funds from the Wildlife Conservation and Restoration Program and the State Wildlife Grants program. Congress identified eight required elements for each state's Wildlife Action Plan:

1. Abundance and distribution of species.
2. Location and conditions of habitats.
3. Species and habitat problems and knowledge gaps.
4. Prioritized actions for conservation.
5. Plan for monitoring species, habitats and adapting to new information.
6. Procedures for reviewing the plan.
7. Coordinated development and implementation among agencies and organizations.
8. Broad public participation.

Actively approaching wildlife conservation

The heart of the Illinois Wildlife Action Plan is action. Prior conservation planning efforts, while well-intended, simply identified various critical conservation needs and pressing challenges—but basically stopped there. For the first time, the Illinois Wildlife Action Plan takes the planning process into an active mode by identifying specific actions required at a statewide level to address those problems and keep wildlife healthy. Because it draws on a wide range of past conservation efforts, along with new information and a broad stakeholder input, the plan also provides a statewide blueprint of how different projects and activities can fit together. Combined with all other state Wildlife Action Plans, the planning process establishes a collective vision for the future of wildlife conservation in America.

Campaigns

Grouped by habitats and issues, these seven interrelated Wildlife Action Plan campaigns outline steps needed to reach goals emphasizing a broad spectrum of natural resource benefits including: clean water, soil conservation, human health and safety, economic diversity and sustainability.

- **Streams**
- **Invasive Species**
- **Land and Water Stewardship**
- **Farmland and Prairie**
- **Forests**
- **Wetlands**
- **Green Cities**

For more about Illinois' Wildlife Action Plan, visit dnr.state.if.us/orc/wildliferesources/thePlan

Creation of this landmark plan involved an amazing diversity of professional talent. For a list of the approximately 150 organizations involved in the development and implementation of the Illinois Wildlife Action Plan, go to: dnr.state.il.us/orc/wildliferesources/thePlan.

Basics of the Illinois plan

- Provides a vision for the future of conservation
- Applies the principles of conservation biology to a coordinated set of real-world actions
- Incorporates a strategy that identifies conservation needs, priorities and solutions based on science
- Is a proactive process
- Identifies 654 species in greatest need of conservation, species whose populations are rare, declining or vulnerable
- Identifies Conservation Opportunity Areas, or local areas of importance for the identified species and communities
- Groups habitats and issues into seven interrelated campaigns

Implementing the plan

The results of Wildlife Action Plans nationwide are already apparent in improved relationships at all levels—across public and private ownerships, across state boundaries and in the growing list of partners and individuals working together for wildlife. To further enable communication among conservation partners, the Illinois Fish and Wildlife Action Team was created in 2005 and is charged with the following objectives:

- Ensure steps described in the plan become actual, on-the-ground results
- Encourage collaboration among key conservation partners
- Guide and shape future priorities for wildlife and habitat conservation through updates to the plan

Early efforts to implement the plan recognized the need to further define Conservation Opportunity Areas. Working with statewide organizations and agencies, local conservation partners and the public, COAs were more precisely defined in order to better focus on-the-ground projects.

The Illinois Wildlife Action Plan has resulted in an additional $19.5 million in federal funding for plan implementation (State Wildlife Grants) since 2001. A list of all SWG-funded projects in Illinois from 2001-2009 is included on the back cover.

For more detailed information about all SWG-funded projects, go to: dnr.state.il.us/ORC/WildlifeResources/theplan/swgGrant/pdfs/swg/Past%20SWG%20projects.html.

Bottom line...

Conserving wildlife makes Illinois a better place for everyone. The Illinois Wildlife Action Plan benefits the health of wildlife and people; enhances our quality of life; fulfills our responsibilities to conserve wildlife and the places they live for our children; and, provides a cost-effective investment by protecting species before they become critically rare, which strengthens our state economy. Important services of the plan include:

- Conservation of wildlife and habitat, thereby protecting clean water and air—making both wildlife and people healthier
- Identification and prevention of problems before they threaten wildlife and affect humans, as wildlife often are early indicators of disease and pollution
- Conservation of wildlife and natural places that bring peace and relaxation to our busy lives, and are important to many of our family traditions
- An outline of actions developed by scientists, sportsmen, conservationists and members of the community working together
- Documentation of the importance of non-consumptive wildlife recreation activities, which are enjoyed by more than 2.6 million Illinoisans, have an annual economic impact of about $1.3 billion and support more than 13,000 jobs
- According to a recent survey, wildlife resources provided 176 million user-days of recreation in Illinois, and five-year trends show increases of about 50 percent

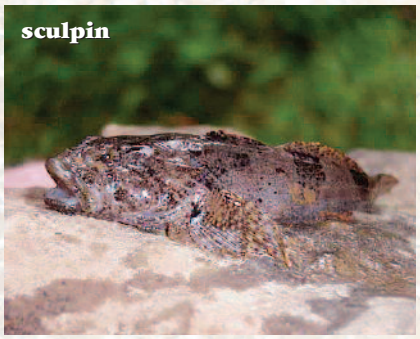
Streams Campaign

Illinois streams have been significantly impacted by conversion of the natural landscape to urban and agricultural land uses. The streams campaign seeks to restore populations of rare aquatic animals by restoring natural ecological processes to Illinois waters.

The **redspotted sunfish** (*Lepomis miniatus*) is a small fish species that few people have seen. Illinois is at the northern limit of this species' distribution. An extensive, statewide survey revealed only two somewhat stable remnant populations left in the state. With State Wildlife Grant program funding, genetic analyses on these fish have determined variability among and within the isolated populations, resulting in the design and implementation of a reintroduction program.

Freshwater mussels are the most endangered group of animals in the Midwest. For more than 20 years, DNR and Illinois EPA have partnered to collect fish, macroinvertebrate, habitat and basic water chemistry information for Illinois streams to assess overall water quality and aquatic life support. In 2009, a grant allowed DNR to add mussel sampling to the basin surveys. Many Illinois streams have never been sampled for mussels, while others, such as the Rock River, were sampled decades ago. In 2009, several rare species, including black sandshell, rock pocketbook and hickorynut, were found in the Rock basin from places not previously known. This mussel project will greatly enhance biologists' ability to effectively protect and restore mussel populations and habitats statewide.

Temperature plays a major role in determining what aquatic organisms live in streams. Although most Illinois waters are warm-water, a recent SWG project identified many cool-water stream reaches. Cool-water streams maintain cool temperatures throughout summer, usually as a result of receiving groundwater through seeps and springs, and have potential to harbor uncommon and unique organisms, such as trout, sculpin and stoneflies. This project provided new information about cool-water stream habitats, thus targeting appropriate protection or restoration efforts that could support cool-water streams species of greatest need for conservation.



Plan Implementation Status:

Stressors:

habitat fragmentation, excessive sediment in channels, changes in water quality and quantity

Partners:

Chicago Wilderness
Eastern Illinois University
Illinois Endangered Species Protection Board
Illinois Environmental Protection Agency
Illinois Natural History Survey
Prairie Rivers
Sierra Club
Smallmouth Bass Alliance
Southern Illinois University
Trout Unlimited
The Nature Conservancy
U.S. Fish and Wildlife Service

Bottom line...

Illinois streams are incredibly diverse and harbor many rare and interesting organisms. Prior to the plan, the status and vulnerability of many aquatic species of greatest need of conservation were not well known. SWG-funded projects have provided status and life history information on many of these species. Additionally, restoration projects are under way to improve the natural function of streams, thereby improving populations of significant aquatic species. Within Conservation Opportunity Areas, future efforts will be directed at connecting floodplains along streams and addressing altered disturbance regimes.

Invasive Species Campaign

Invasive species are a primary threat to wildlife, the integrity of natural communities and the quality of habitats. The invasive species campaign seeks to eradicate, control and prevent the introduction of invasive exotic species.

Action Plan to Eradicate Kudzu from Illinois

A coalition of state and federal agencies is working to prevent the spread of, and eliminate, kudzu in Illinois. Kudzu is a climbing, semi-woody perennial vine that was imported to the U.S. in 1876 as a forage crop and ornamental plant. Potentially growing as much as 1 foot per day during the growing season, kudzu smothers other plants, girdles tree trunks, breaks branches and uprooting trees. DNR serves as the lead agency and since 2001 has had a formal agreement with numerous partner organizations. To date, 183 populations of kudzu in 47 counties, totaling 467 acres, have been identified within the state. Approximately 152 populations, totaling 371 acres or 79 percent of the known kudzu acreage in Illinois, have been treated or eradicated.

Operation Silver Screen

Operation Silver Screen was a complex and highly visible international response, involving more than 450 people from 25 local, state, federal and Canadian entities as well as 22 private contractors, to prevent an invasion of Asian carp into Lake Michigan during maintenance operations of the U.S. Army Corps of Engineers' electrical barrier in the Chicago waterways. Asian carp could severely impact the Great Lakes' sportfishing and recreation industries, which account for an estimated $7 billion dollars annually. This project was a pioneering process as the first international response to an invasive species using the Incident Command System.

Plan Implementation Status:

Stressors:

Invasive species actions are identified in five other campaigns.

Partners:

Chicago Wilderness
Illinois Department of Transportation
Illinois Department of Agriculture
Natural Resource Conservation Service
Northeastern Illinois Forest Preserve Districts
State Universities
The Nature Conservancy
U.S. Army Corps of Engineers
U.S. Coast Guard
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Forest Service

Bottom line...

Invasive species are an enormous problem for wildlife and natural areas. Some exotic invasive species, such as West Nile virus and soybean rust, also are serious threats to human health and the economy. The invasive species campaign prioritizes actions for effective and rapid detection, quarantine, eradication and control of invasive species; identification of key locations for control; and marketing, education, technical assistance, incentives and cost-sharing to prevent and control invasives and restore natural disturbance regimes on private lands.

Land and Water Stewardship Campaign

The vast majority of Illinois is privately owned, and conservation of wildlife and habitat resources is dependent upon the actions of property owners. Publicly owned lands are under increased pressure to ensure long-term habitat and wildlife conservation and a multitude of outdoor recreational opportunities. The Land and Water Stewardship Campaign seeks to improve the stewardship of both public and private lands by promoting goal-oriented management approaches based on the best available science of species and habitats.

Hill Prairie/Bluff Habitat Restoration Project

The Hill Prairie/Bluff Habitat Restoration Project is addressing the urgent needs of a rare and declining natural community, thus protecting a priceless and irreplaceable part of Illinois' natural heritage. Hill prairies are small grasslands located on steep bluffs along major rivers, especially the Mississippi and Illinois rivers or their tributaries. They represent some of the last high-quality remnants of Illinois' prairie habitat and are critical for many rare plant and animal species. Initially, 90 sites on both private and public lands throughout Illinois were identified as potential sites. Management plans were developed for selected sites and include actions such as cutting shrubs and trees, applying herbicides to unwanted plants, and collecting and planting seed. Currently, about 40 sites are actively managed.

Franklin Creek and Nachusa Grasslands Project

Located in Ogle County in northwestern Illinois, Franklin Creek and Nachusa Grassland contain high-quality natural communities and endangered species habitat. Unfortunately, portions of each have been degraded by past land use practices, invasive species encroachment, high levels of deer browsing, or have been converted to agricultural production. DNR and The Nature Conservancy are working to restore, establish and manage prairie, savanna and woodland habitats at these sites. TNC has collected seed from more than 100 species from Nachusa Grasslands to be used for habitat restorations and reconstructions at both sites. Controlled burns and invasive woody and invasive exotic species control have been implemented.

Plan Implementation Status:

Stressors:

rapidly degrading habitats, pollution, inadequate resources

Partners:

Augustana College
CLIFFTOP Alliance
Columbia Quarry
Friends of Salk Lick Point
Great Rivers Land Trust
Illinois Natural History Survey
Peoria Park District
Principia College
Private Landowners
The Nature Conservancy
U.S. Fish and Wildlife Service
Village of Valmeyer

Bottom line...

In many cases, Illinois landowners face economic constraints to maintain or enhance habitats, and limited public lands and waterways place a tremendous demand on public lands for wildlife and habitat conservation and outdoor recreation—demands that sometimes conflict. The extent and quality of habitat resources cannot maintain functional natural systems and viable populations of many species are now rare or declining. Limited resources result in game species populations too low to satisfy harvest demands, and too inaccessible to meet demands for outdoor recreation opportunities.

Farmland and Prairie Campaign

Most of Illinois' tallgrass prairie was converted into productive farmland, and for much of the state's history, grassland and shrubland wildlife thrived in farmland pastures, hay fields and fencerows. With economic incentives and technical assistance for private landowners, the Farmland and Prairie Campaign seeks to expand and improve grassland, shrub and wetland habitats in agricultural landscapes.

Grassland Wildlife Habitat Project in the Grand Prairie Natural Division

Due to inadequate and low-quality habitat, populations of many species of grassland wildlife are well below desired levels, particularly within intensively agricultural

Henslow's sparrow

central Illinois. Thirty-four sites were selected, and ranked, as suitable as large-scale grassland conservation areas based on the likelihood of biological success and feasibility. These sites function as anchoring grassland habitats, and through technical assistance to landowners and farm conservation programs, the quality and quantity of habitat on private lands will increase.

The Bartel Grassland at Prairie Ridge State Natural Area

The 80-acre Bartel Grassland is fast becoming a hot spot for rails. Yellow rails are commonly observed during spring migration and have been the highlight of several birding field trips at this location. Breeding season observations include king rails, and for the first time in 2009, a black rail was observed. The site also is the only Illinois breeding site for the black-necked stilts. A nesting island was constructed on one of the wetlands for this species.

king rail

Plan Implementation Status:

Stressors:

habitat disturbance, over-grazing, fragmentation, soil erosion

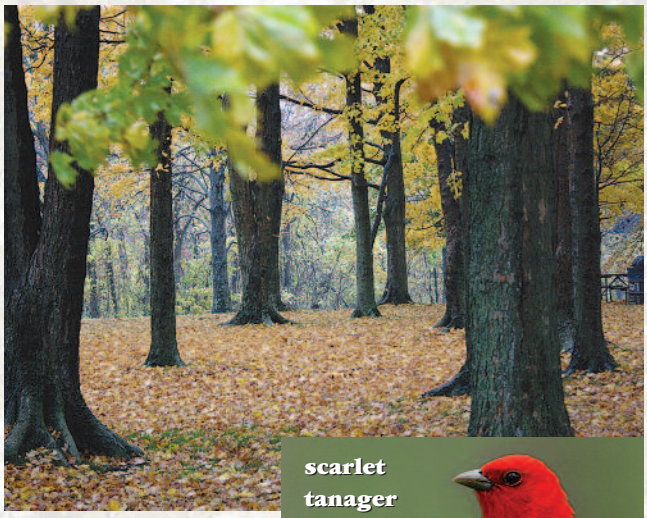
Partners:

Ameren-CIPS
Eastern Illinois University
Farm Service Agency
Illinois Audubon Society
Illinois Central Gulf Railroad
Illinois Endangered Species Protection Board
Illinois Farm Bureau
Illinois Natural History Survey
Illinois Nature Preserves Commission
Natural Resource Conservation Service
Quail Unlimited
The Nature Conservancy
University of Illinois
U.S. Department of Agriculture

Bottom line...

Agriculture is the largest industry in Illinois and dominates the landscape. Most of the lands currently used for crop production in Illinois were tallgrass prairie at the time of European settlement. Of an estimated 21 million acres of prairie, less than 2,600 acres of high-quality remnants remain—a loss of more than 99.99 percent. Wildlife populations once common—northern bobwhite, ring-necked pheasant and eastern cottontail—have declined precipitously.

Forestry Campaign



scarlet tanager

Changes in natural disturbance processes has resulted in a decline in the condition of Illinois forests, affecting the habitat for many terrestrial and aquatic species, and impacting the water quality due to increased erosion.

The **Southeastern Illinois Prescribed Burn Association** was developed in 2006 and is a partnership between landowners, government agencies, conservation groups and other interested individuals and organizations working to expand, through training and the loan of specialized equipment, the use of prescribed burning as a management tool. Expanding the use of prescribed burns in forestry management will greatly improve forest resources, which in turn improves wildlife habitat.

In 2004, a $100,000 SWG grant was awarded to train and equip the **Lake County Fire Equipment and Training Team**. Over a five year period, 120 Lake County structural firefighters were trained and equipped to respond to wildland fires and to implement prescribed fires. The team continues to assist DNR at Illinois Beach, Volo Bog and Chain O'Lakes state parks in implementing prescribed burns.

Plan Implementation Status:

Stressors:

fire suppression, flood regime control, inappropriate harvesting, invasive species, development leading to forest fragmentation

Partners:

Farm Service Agency
Illinois Council on Forestry Development
National Wild Turkey Federation
Natural Resource Conservation Service
Southern Illinois University
USDA Forest Service State & Private Forestry
University of Illinois
U.S. Fish and Wildlife Service

Bottom line...

Illinois forest habitats need to be maintained and enhanced. Reforestation and afforestation efforts must continue. Sustainable forestry practices are necessary to restore and manage open forest habitat, thus providing more and better habitat for most wildlife species in greatest need of conservation and slowing drainage waters from agricultural or developed lands prior to entering streams. The economic benefits of sustainable forestry practices provide incentives for landowners to improve the quality of their forests. Prescribed fire and training for the implementation of this tool needs to be established and encouraged.

Wetlands Campaign

Wetlands function as sponges to reduce floodwaters and pollutants, yet many of Illinois' remaining wetlands are in poor condition, affected by invasive species and diminished water levels.

The state-threatened Illinois chorus frog is found predominantly in a few counties in the central part of Illinois, and sporadically along the Mississippi River from St. Louis to Cairo. Like most frogs, it needs wetlands for reproduction, but what sets this species apart is that the wetlands must occur in loose, sandy soils where the frog can retreat underground during the dry, summer months. Computer modeling the habitat needs of the chorus frog showed Mason County was a prime candidate for conservation efforts.

Illinois chorus frog

Places preferred by this frog tend to be small and often yield poor crops, making it possible to offer producers an incentive to enroll these areas in the Conservation Reserve Program. This win-win strategy has preserved 21 wetlands ringed by sand prairies, totaling approximately 150 acres, and is a start toward achieving a Wildlife Action Plan goal of de-listing the Illinois chorus frog by 2025. Other species benefitting from this effort include the northern bobwhite, grasshopper sparrow and prairie mole cricket, all species in greatest need of conservation.

The Bellrose Site Wetlands Restoration Project

A demonstration area for wildlife conservation practices in Logan County, the Bellrose site contains 400 acres, including the 71-acre Sandra Miller Bellrose Nature Preserve. The nature preserve consists of a tract of timber along Sugar Creek, which has a high diversity of mussels. Other portions of the Bellrose site have been restored to native grassland plantings, and the Henslow sparrow has been documented nesting on this site. Two wooded floodplain wetlands, and another larger wetland, historically had been drained for agricultural production, but through the Conservation Reserve and Enhancement Program a restoration plan was designed to create a 0.2- and a 3-acre wetland.

Plan Implementation Status:

Stressors:

invasive species, manipulated water levels, sedimentation, isolation

Partners:

Ducks Unlimited
Illinois Department of Agriculture
Illinois Farm Bureau
Mason County Soil and Water Conservation District
USDA Farm Service Agency
USDA Natural Resources Conservation Service
U.S. Army Corps of Engineers
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
Wildlife Preservation Fund

Bottom line...

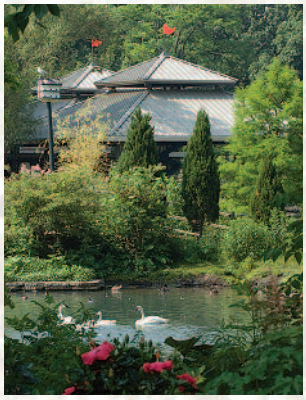
Only a smattering of the state's native wetlands persists—approximately 90 percent of an original 8.2 million acres—and many are poor in condition. Wetlands are critical for many species in greatest need of conservation, and yet are scarce, highly degraded, fragmented, silted and their hydrological conditions have been altered. Invasive plant species, such as reed canary grass, common reed, Eurasian milfoil and purple loosestrife, often dominate disturbed wetlands and exclude native plant species, resulting in a loss of biodiversity. Wetland bird and insect communities are especially sensitive to changes in hydrology, plant species composition and habitat loss.

Green Cities Campaign

Most of the state's residents live in urban areas, making the availability of a Green space near their home all the more important. The Green Cities Campaign emphasizes actions that make our cities and towns more livable through smart growth, protecting open space and providing wildlife recreation opportunities.

Northern Illinois Metro Area

In 2004, members of Chicago Wilderness came together to begin the framework for a Green Infrastructure Vision. That effort identifies 1.8 million acres for prospective protection, restoration and thoughtful land development practices in the Chicago Wilderness region—spanning from southeast Wisconsin, through northeast Illinois into northwest Indiana and southwest Michigan. Many major conservation initiatives in the Chicagoland area are being accomplished by the municipalities, planning entities, museums and zoos, and numerous area conservation groups, many in an alliance called Chicago Wilderness—an alliance of organizations that champion biodiversity and strive to improve the quality of life in urban, suburban and rural areas of Chicago through conservation and stewardship of nature.



Major initiatives in the Chicagoland area under way include watersheds conferences, training for prescription burn crew members, the Leave No Child Inside/Mighty Acorns education initiatives, development of a Climate Action Plan for Nature and creation of a Cooperative Weed Management Area and a Sustainable Watershed Action Team.

Plan Implementation Status:

Stressors:

fragmented habitats, impervious surfaces, pollutants, exotic plants

Partners:

Chicago Metropolitan Agency for Planning
Chicago Wilderness Alliance
Ecosystem Partnerships: American Bottom, Sugar-Pecatonica Rivers, Upper Rock River, Kishwaukee River, Lower Kaskaskia/Silver Creek, Fox River, Upper Des Plaines River, Lake Michigan Watershed and Lower Des Plaines River
Forest Preserves: Lake, Kendall and DuPage counties
Four Rivers Environmental Coalition
Great Lakes Restoration Initiative
Natural Land Institute
Rockford Metropolitan Agency for Planning
The Conservation Foundation
Winnebago County Soil and Water Conservation District

Southwestern Illinois Area

Also working in a large metropolitan area in the southwestern counties of Madison, St. Clair and Monroe is the Southwest Resource Conservation and Development program. Initiated in the 1960s, the RC&D program is charged with empowering local people to improve the quality of life in their area and to utilize the natural resources in a sustainable manner. Many successful projects have been undertaken over the years, such as sustainable development, public outreach, environmental education, watershed planning and a vision for open space and natural areas.

Bottom line...

Since developed lands are the fastest growing type of land cover, integrating habitat into these areas while minimizing nuisance wildlife issues is a formidable challenge. People in developed areas often have less access to natural areas and wildlife habitat. All citizens have a need for ecological education. Understanding and appreciating wildlife, habitat, natural communities, ecological processes and disturbance regimes are important for urban residents to support statewide scientifically-driven conservation priorities.

State Wildlife Grant Accomplishments

Terrestrial Habitat Restoration

Public Lands Habitat Restoration
Lake County Prescribed Fire
SGCN Monitoring and Enhancement
Non-Game Bird Conservation
Important Bird Areas
Critical Habitat for Massasauga Rattlesnakes
Open Grasslands Restoration
Henslow Sparrow Expansion
Private Lands Habitat Restoration in Adams and Brown Counties
Hill Prairie Bluff Restoration
Wapello Reserve Habitat Restoration
Large-scale Grassland Habitat Creation Project
Survey of Size, Distribution and Development of Canebrake Habitat in Southern Illinois
Important Bird Area Conservation in Chicago Wilderness
Sand Community Restoration in Conservation Opportunity Areas—Grand Prairie and Southern Till Plain Wildlife Ventures
Healthy Forests and Woodlands in the Illinois and Kaskaskia River Basins

Aquatic Habitat Restoration

Fish Communities in Coolwater Streams
Aquatic Diversity in Streams
Restoration Mechanisms for Pond-breeding Amphibians
Cache River Restoration Project
Cache River Hydraulic Modeling
Utility of Frog and Toad Call Survey Data from the Cache River Basin
In-stream Restoration to Riparian Wildlife in the Cache River Basin
Project Administration for the Cache River Basin
Benefits of Stream Reconnection to Aquatic Communities in the Cache River Basin
Development of Multi-metric Habitat Index for Streams
Pond Restoration for Listed Species at Allerton State Park
Restoration of Historic Fish Communities in Floodplain Lakes
Raccoon Creek Restoration Project
Kickapoo Creek Restoration Project
Large-scale Restoration of the Pecatonica River

Wetlands Habitat Restoration

Effects of Off-Channel Wetland Restoration
Hennepin Hopper Lakes Wetland Restoration Project
Illinois Chorus Frog and Wetland Mitigation Project
Support for Updating the National Wetlands Inventory

Species Recovery

Potential Habitat for Peregrine Falcon Reintroductions
Recovery Plan for the Common Barn Owl
Recovery of the Blandings Turtle
Strategies for Recovery of Amphibians and Reptiles in Mason and Tazewell Counties
Red-spotted Sunfish Reintroductions to Historic Occurrence Sites
Developing a Propagation Technique for Native Illinois River Mussels

Species Monitoring & Data Management

Management Activity Tracking System
Owned, Managed and Leased Properties
Realty Procedures Manual
Threatened and Endangered Species Data Management
Illinois Mussel Database Development
Quantitative Survey of Land Snails
Priority Conservation Species Monitoring
Status Survey of Harlequin and Eastern Sand Darters
Statewide Survey of Illinois Mussel Populations

Applied Research

Genetic Screening for Red-spotted Sunfish
Genetics of Illinois Red Squirrels
Interrelationships of Grassland Birds and Sand Prairie Insects
Historical Occurrence of Illinois Insect Priority Species
Effects of Habitat Fragmentation on Sensitive Aquatic Species
Effects of Pathogens on Illinois Amphibians

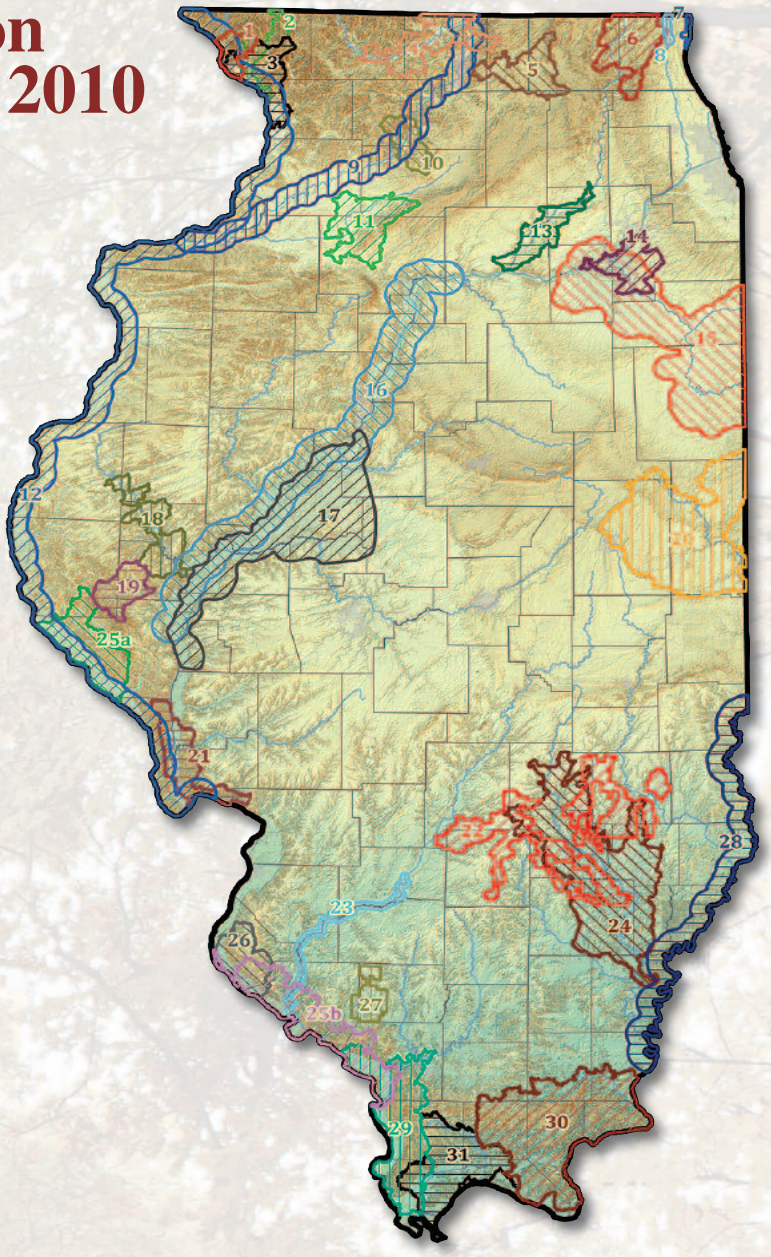
Action Plan Development

Development of Illinois Wildlife Habitat Conservation Plan
Wildlife Conservation Plan
Illinois Conservation Opportunity Areas
Coordination and Planning Support for the Wildlife Action Plan
Update of Illinois Fish Species in Greatest Conservation Need

Land Acquisition

Calumet Open Space Reserve
Shrubland Habitat Acquisition
Acquisition of Addition to Apple River Canyon State Park
Hill Prairie Land Acquisition

Illinois Conservation Opportunity Areas 2010



1. Wisconsin Driftless Forest
2. Apple River
3. Lost Mound
4. Sugar-Pecatonica River
5. Kishwaukee River
6. Lake-McHenry Wetland Complex
7. Illinois Beach—Chiwaukee Prairie
8. Upper Des Plaines River Corridor
9. Rock River
10. Nachusa
11. Green River
12. Upper Mississippi River
13. Lower Fox River
14. Midewin
15. Kankakee Sands
16. Middle Illinois River
17. Mason County Sand Area
18. Lower LaMoine River
19. Siloam Springs
20. Vermilion River
21. Pere Marquette
22. Prairie Ridge Landscape
23. Lower Kaskaskia Bottomlands
24. Middle Little Wabash
25a. Hill Prairie Corridor—Northern Section
25b. Hill Prairie Corridor—Southern Section
26. Sinkhole Plain
27. Pyramid-Arkland Landscape
28. Wabash River
29. LaRue-Pine Hills
30. Eastern Shawnee
31. Cache River-Cypress Creek

All photos taken by Adele Hodde except: Sarah Bales/Illinois Natural History Survey, p. 4 (mussels); Rob Curtis, p. 7 (king rail); David Day/DNR, (sculpin p. 4); Jessica Forrest/DNR, cover (wetland), p. 9 (wetland); Chris Helzer/The Nature Conservancy, p. 6 (prairie); Valerie Keener/DNR, cover (urban); Lincoln Park Zoo p. 10; Joe McFarland/DNR, p. 7 (landscape), p. 8 (landscape); Stan McTaggert, p. 8 (woodland); Mike Mason/DNR, p. 8 (burn); Jody Shimp p. 5 (kudzu); Brian Tang, p. 7 (Henslow's sparrow), p. 8(scarlet tanager); Diane Tecic DNR, cover (bluff), p. 6; Trent Thomas/DNR, p. 4 (sunfish); Mike Redmer/USFWS, p. 9 (chorus frog); DNR staff, cover (stream and grassland), p. 3 (right column).

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