

## **I INTRODUCTION:**

In 2001, the U.S. Congress authorized the Wildlife Conservation and Restoration Program and the State Wildlife Grant Program. These programs' purposes are threefold: improve wildlife and habitat stewardship and management in hope of reducing the number of species requiring listing as threatened or endangered; lower overall wildlife recovery costs; and, address shortages in funding wildlife programs.

The U.S. Fish and Wildlife Service (USFWS) is designated the lead agency to manage the overall effort. The USFWS mandated that the governing focus be species in greatest need of conservation, and that all states develop 10-year increment plans for wildlife management, with initial plans due in 2005.

In 2005, Illinois completed its initial wildlife action plan (IWAP), after an integrated effort on the part of numerous state, federal and non-governmental organizations (NGO). The USFWS subsequently approved the IWAP.

The IWAP identifies 31 Conservation Opportunity Areas (COAs) within Illinois, areas with special importance for conserving species in the greatest need and for preserving special natural communities.

Two of the identified COAs, the Hill Prairie Corridor and the Karst Sinkhole Plain, are located in Southwestern Illinois. Both COAs are within or near the Ozark Natural Division (Northern Section), a 40 mile long, 2-6 mile wide corridor, containing approximately 45,000 acres, in a small area of St. Clair County, all of Monroe County, and western Randolph County.

In December 2007, various stakeholders met to begin to formulate IWAP implementation guidelines for the two COAs. Representatives attended from the Illinois Department of Natural Resources (IDNR), the Illinois Nature Preserves Commission (INPC), the National Wild Turkey Federation (NWTf), USDA's Natural Resources Conservation Service (NRCS), The Land Conservancy (TLC), Quail Unlimited (QU), the Southwestern Illinois Rural Conservation and Development, Inc. (SWIRC&D), Monroe and Randolph Counties' Soil and Water Conservation Districts (SWCD), the Illinois Native Plant Society (INPS), the Kaskaskia Valley Audubon Society (KVAS), the Illinois Speleological Survey (ISS), and the Monroe County Farm Bureau.

IWAP specifically recommends that local, landowner-based protection groups emerge to help implement IWAP recommendations for the COAs. Three such groups have been organized: the Salt Lick Point Land and Water Reserve Stewardship Committee, the Friends of Stemler Preserves, and Clifftop (Conserving Lands in Farm, Forest, Talus or Prairie). All three NGOs attended the meeting. Clifftop organized and facilitated the meeting. Clifftop compiled, collated and coordinated this plan.

## **II Proceedings**

1. It was agreed, because of geographic contiguity and overlap, and similarity of overall IWAP guidelines and recommended solutions, that both the Hill Prairie Corridor COA and Karst Sink Hole Plain COA be addressed in one Southwestern Illinois Wildlife Action Plan (SWIWAP, the Bluff Lands Conservation Corridor) for implementation.

2. Diane Tecic, IDNR's Region 4 Natural Heritage Administrator, is the overall leader of

the SWIWAP implementation planning process.

3. IWAP's 12 major guidelines for the two COAs were distilled to seven SWIWAP goals:

Goal 1: Protect, manage and preserve existing wooded habitat and increase wooded areas by 3500 acres. Wooded lands are defined as forested acreage, open woods, and talus slope.

Goal 2: Protect, manage and preserve hill prairies and glades and increase hill prairie and glade acreage to approximate their historical boundaries.

Goal 3: Restore and maintain wetland areas, with emphasis on their significance as breeding areas for species in greatest need of conservation, to include herpetofauna and avifauna.

Goal 4: Increase karst area protection; the unique nature of karst geology and its high biotic value, despite low species diversity, requires special protection against groundwater pollution.

Goal 5: Encourage landholders and policy makers to adopt sound land and wildlife management practices.

Goal 6: Improve and expand science-based evaluation, monitoring and research in the COAs.

Goal 7: Seek resources and funding to implement these goals.

### **III Challenges, Strategies and Actions**

#### **1. Goal 1: Protect, manage and preserve existing wooded habitat and increase wooded areas by 3500 acres.**

a. **Challenges**: The majority of acreage in the COAs is held in private ownership. Landholders are often unaware of the health of their lands and the requirements for a sustainable ecosystem. An array of Federal and State conservation programs, many with cost-sharing incentives, is available to private landholders, but the programs sometimes are under marketed, often under resourced, and frequently misunderstood.

b. **Strategies**: Improving private landholder stewardship requires three components: education on best practices and programs, providing technical assistance to develop a management plan, and providing financial assistance to help cost share implementation of the practices. The optimal long-term strategy to protect and preserve COA lands is conservation easements.

c. **Actions:**

(1) Clifftop will work with the Monroe and Randolph County NRCS and SWCD to expand public information and outreach on promoting USDA conservation programs and tailoring program applicability.

(2) Clifftop will work with the IDNR Region 4 biologists and staff to expand public information outreach on promoting Illinois conservation programs and tailoring program applicability.

(3) Clifftop and TLC will continue to work with local landholders on promoting the merits of donated conservation easements.

(4) INPC will continue to work with local landholders on promoting the merits of enrolling in INPC programs.

(5) IDNR, INPC and Clifftop will redouble efforts to purchase land, purchase or establish conservation easements, or offer landowner assistance, where large forested tracts or forest gaps, given to reforestation, are available.

(6) SWI RC & D, working with Clifftop, IDNR and INPC, will develop a GIS tool to identify large forested tracts and forest gaps.

(7) IDNR will work to encourage the inclusion of mature forested lands as eligible for participation in the Illinois Conservation and Climate Initiative (ICCI), a carbon sequestration program.

(8) IDNR and INPC will continue to actively steward state-owned and INPC-registered forested land. Clifftop, Salt Lick Point Stewardship Committee, and Friends of Stemler Preserves volunteers will assist with invasive controls and prescribed burns.

(9) Clifftop will continue to assist local landholders with stewardship practices. The Salt Lick Point Stewardship Committee and the Friends of Stemler Preserves will continue to actively manage their holdings.

(10) NWTF and QU biologists, USDA NRCS & SWCDs, and IDNR / INPC will actively promote landholder participation in State and Federal conservation programs, assist in the development of conservation management plans, and continue to educate landholders on best stewardship practices.

**2. Goal 2: Protect, manage and preserve hill prairies and glades and increase hill prairie and glade acreage to approximate their historical boundaries.**

a. The challenges and strategies detailed in Goal 1 also apply to this goal.

b. **Actions:**

(1), (2), (3), (4), (5), (9), and (10) of Goal 1 also apply to hill prairies and glades. Secondly, the SWI RC & D developed GIS tool needs to have the capability to delineate the historical extent of hill prairies and glades.

**3. Goal 3: Restore and maintain wetland areas, with emphasis on their significance as breeding areas for species in greatest need of conservation, to include herpetofauna and avifauna.**

a. **Situation:** Wetlands in the bluff corridor and the two COAs are comprised of thousands of sink hole ponds associated with karst. Numerous man-made lakes and ponds also contribute aquatic habitat. Nine lotic, spring-fed creek systems (Palmer, Carr, Long Slash, Fountain, Bond, Duck Hollow, Monroe City, Maeystown, and Fults) have headwaters in the bluffs and flow to the bottoms. Three seasonal watercourses (Trout, Morrison and Maple Hollows) also make up the watershed. On the American Bottoms, eight ancient marsh-lake systems (Moredock, Wallace, Raynor, Maeystown, Strasser, Kidd, Grand Coulee, and Conner), all near the bluff line, once provided nearly 9000 acres of wetland habitat in pre-European settlement times. Today, the American Bottoms has been reengineered into a vast drainage system to facilitate agricultural production and most wetlands have been eliminated. However, Kidd Lake Marsh State Natural Area and a half dozen private waterfowl clubs at Lakes Kidd and Conner are providing over 3000 acres of wetland habitat by pumping groundwater. And, Moredock Lake, an oxbow of the Mississippi River, remains a viable wetland habitat.

Current wetland restorations are important herpetological and bird breeding areas. Many herp species breed in the wetlands and migrate to the bluffs to their winter hibernacula.

b. **Challenges:** Excepting Kidd Lake Marsh Natural Area and a few small, scattered sink hole ponds, wetlands in the bluffs and bottoms are held in private ownership.

c. **Strategies:** Educate wetland owners on best management practices and programs; provide technical assistance to develop management plans; and, provide cost-sharing financial assistance to help implement best practices.

d. **Actions:**

(1) Clifftop will encourage wetland owners on the American Bottoms to enroll in USDA's Wetland Reserve Program or INPC's Land and Water Reserve Program.

(2) IDNR will insure resources are available to maintain Kidd Lake Marsh Natural Area wetlands.

(3) Clifftop and INPC will research and develop options to protect herps on

their twice-yearly migration across the bluff / marsh ecotones, now bisected by Bluff Road.

(4) Actions (1)-(4), (8) and (10) to Goal 1 also apply to this Goal to promote habitat improvement and protection of sink hole ponds and creek habitats in the bluff lands.

**4. Goal 4: Increase karst area protection; the unique nature of karst geology and its high biotic value, despite low species diversity, requires special protection against groundwater pollution.**

a. **Challenges**: The large geographic recharge areas of the sinkhole plain involves overlapping political, jurisdictional and regulatory boundaries. The Illinois Department of Public Health oversees residential well construction and onsite sewage systems. The Illinois Environmental Protection Agency oversees Class III groundwater, landfills, and sewage transfer stations. The Monroe, St. Clair and Randolph County governments and various municipal authorities legislate karst protective ordinances, but conform to no set of standards in issuing variances.

b. **Strategies**: Educate landowners, the public, and county and municipal officials about karst, the reduction of groundwater pollution, and potential liability resulting from the issuance of variances.

c. **Actions**:

(1) SWI RC & D, with Clifftop and ISS assistance, will, using grant funding, work to establish a “karst outreach-educator” position to spearhead improved karst management with landholders and policy makers.

(2) Clifftop and ISS will explore, initially with Monroe County officials, the feasibility of establishing a Southwestern Illinois Governmental Compact for Karst Protection.

**5. Goal 5: Encourage landholders and policy makers to adopt sound land and wildlife management practices.**

a. **Strategy**: Monroe County’s Comprehensive Plan specifically recommends the preservation of the “conservation corridor” (the Hill Prairie and Sink Hole Plain COAs), to protect continuous forest habitat and environmentally sensitive lands. Monroe County government has already endorsed a goal; we must work to ensure that officials stay the course for conservation and uphold the development limits outlined within the County’s plan. In a parallel initiative, Monroe County NRCS’s / SWCD’s “Locally Led Conservation” program has established conservation goals complementary to those of IWAP / SWIWAP and the Monroe County Comprehensive Plan. Strategies in Goal 1 for landholders apply here as well.

b. **Actions:**

(1) Clifftop, in coordination with the Monroe County NRCS & SWCD, will work to establish a Bluff Lands Conservation Corridor Cooperative, which will serve to enlarge venues, standardize and integrate information, synergize and leverage programs, and expand information outreach operations for educating landholders and policy makers on best management practices. The new Bluff Lands Conservation Corridor Cooperative also will:

(a) develop recommendations for curtailing illegal, off-road, all-terrain-vehicle abuse.

(b) integrate improved identification and control of invasive species education into their efforts.

(c) develop recommendations for removing trash from sink holes and for encouraging landholders to cease using these areas as trash dumps.

(2) Clifftop will continue to sponsor workshops, practicums, field trips, news releases, and special events aimed at landholder and public education throughout the corridor.

(3) The Salt Lick Point Stewardship Committee and the Friends of Stemler Preserves will continue to work at improving best management practices for their constituent areas.

(4) Local IDNR staff will work to develop a plan to monitor and control deer herds, as needed, in the corridor in coordination with larger statewide efforts as directed in IWAP.

(5) All SWIWAP partners will work to control invasive species that threaten blufflands resources in concert with the overall statewide IWAP Invasive Species Campaign.

**6. Goal 6: Improve and expand science-based evaluation, monitoring, and research within the COAs.**

a. **Challenges:** Science-based analysis and surveys in the COAs are random, aperiodic, disjointed, and not widely shared. Landholders and management planners lack science-based tools and information on which to base best practices decisions. The Illinois Natural History Survey, IDNR and INPC lack the resources for concerted and integrated science-based evaluation and monitoring.

b. **Strategies:** Fuse and compile studies; enlarge citizen science involvement; promote research; develop evaluatory tools; and, increase public awareness of extant and ongoing research.

c. **Actions:**

(1) SWI RC & D, working with Clifftop, INPC and IDNR, will develop a GIS tool, the Bluff<sup>base</sup> (Basic Analytical Survey Evaluation), to aid in science-based evaluations. Geo-spatial layering data will depict:

- (a) Parcel boundaries
- (b) Current ortho-digital aerial photography
- (c) Digitized 1938-1940 aerial photography
- (d) GLO-Public Land Survey analyses
- (e) Illinois Natural Area Inventory Sites
- (f) ISS cave, spring and recharge area mapping
- (g) Large forested blocks ( 500 acres) and forest gaps
- (h) Extant parcels under the stewardship of management plans

Access-protected safeguards will be established to delimit availability of sensitive data.

(2) IDNR will pursue and promote additional research, through various funding sources, and through partnerships with the Illinois Natural History Survey and Illinois universities, with particular emphasis on cave fauna, a number of which are highly endemic.

(3) Clifftop will continue to compile and maintain on their web site ([www.clifftopalliance.org](http://www.clifftopalliance.org)) a biodiversity data base of the SWIWAP COAs.

(4) IDNR, INPC, and ISS will identify to Clifftop their specific monitoring requirements. Clifftop will solicit and help train volunteer citizen-scientists to help carry out monitoring requirements.

(5) KVAS, INPS, St. Louis Herpetological Society, North American Butterfly Association, other volunteers, as well as IDNR and INPC, will continue to conduct biodiversity surveys and forward their results to Clifftop for compilation.

(6) INPC and IDNR, with Clifftop assistance, will promote research opportunities for Illinois and Missouri universities.

**7. Goal 7: Seek resources and funding to implement these goals.**

a. **Challenges:** Budgetary shortfalls in Illinois government may preclude resourcing most SWIWAP goals with state revenues.

b. **Strategies:** Grant moneys must be solicited from a wide range of sources.

c. **Actions:**

(1) IDNR will solicit State Wildlife Grant and other funds, where practicable.

(2) SWI RC & D will solicit grant funding to establish a karst outreach educator.

(3) SWI RC & D will solicit grant funding to develop Bluff**base**.

(4) Clifftop will continue to solicit grant and donational funding to carry out information outreach and land protection operations.

#### **IV FOLLOW-UP:**

Clifftop will organize a meeting of all stakeholders no later than December 2008 to review the status of actions, establish timelines, and refine goals as necessary.