EASTERN TALLGRASS PRAIRIE LANDSCAPE CONSERVATION COOPERATIVE

PROGRESS REPORT 2017





Agroecology

Gulf Hypoxia

Monarch Butterfly Conservation







River Restoration

Urban Conservation

FOCUS

he Eastern Tallgrass Prairie Landscape Conservation L Cooperative is dedicated to addressing the conservation challenges of a largely privately owned and agricultural landscape that stretches across the nation's heartland through cornfields, grazing lands, small towns and large cities from southwest Ohio westward across to parts of eastern Kansas, Oklahoma and Nebraska and northward into segments of Iowa, South Dakota and Minnesota.

VISION

Prairie Restoration

Functional tallgrass prairie and big river natural communities embedded in a healthy and productive agricultural and urban landscape—ecologically connected lands and waters, managed cooperatively for current and future generations.

MISSION

Restore and connect wildlife with people on the rich soils of a functional working landscape.



Kelley Myers, Coordinator, Eastern Tallgrass Prairie LCC

Healthy fish and wildlife resources are essential to all of us. The collaborative nature of our landscape conservation cooperative effort is integral to their success. I'm very proud of the work of the Eastern Tallgrass Prairie LCC to deliver sound fish and wildlife management support in concert with the working lands of our region. And you should be, too. Collaborative conservation could not happen without your dedication and passion. Let us continue to work togetherand find even more partners—to conserve the fish, wildlife and habitats we all love.



PROJECT HIGHLIGHTS



MULTI-LCC GULF HYPOXIA INITIATIVE -PRECISION CONSERVATION BLUEPRINT **UPGRADES TO VERSION 1.5**

To date, eleven diverse agencies and organizations have used the multi-LCC Gulf Hypoxia Initiative - Precision Conservation Blueprint to inform conservation investments for their programs. For example, Decatur County (IN) revised its County Comprehensive Plan utilizing the data layers to show how protection of locally important habitats can contribute to larger Gulf hypoxia goals. The Upper Mississippi River & Great Lakes Region Joint Venture utilized the Blueprint to target waterfowl habitat conservation

MULTIPLYING THE IMPACT OF STATE WILDLIFE ACTION PLANS

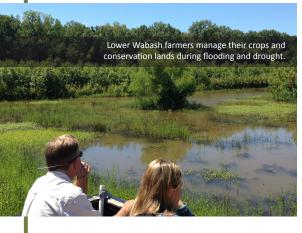
SWAP Coordinators from Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin are working across state boundaries to conserve mussels, pollinators, and large grassland complexes and their associated species of greatest conservation need. The Tallgrass Prairie LCC and Upper Midwest and Great Lakes LCC are helping to facilitate this conversation and enhance coordination through an Indiana University graduate student intern, Lauren Salvato, who will work on this effort until she graduates in May 2018. Contact: Lauren Salvato, Indiana University, lauren salvato@fws.gov



Tell us how you are using the Blueprint in your conservation planning processes



investments based on biological and social parameters. Future applications could connect coverage of planning tools from the western CHAT and southeast SECAS across the Mississippi Basin. Over this past year, The Conservation Fund updated the online Blueprint with more than 75 new data layers. If you use the Blueprint for prioritizing and aligning conservation actions, please let us know so we can add to the growing list of case studies. Contact: Gwen White, gwen white@fws.gov



INDIANA UNIVERSITY MAKES A \$55 MILLION INVESTMENT FOR RESILIENT ECOSYSTEMS AND LIVABLE COMMUNITIES

A team of Indiana University faculty recently announced a \$55 million award to expand research to prepare Hoosiers for environmental change. Prompted by a policy directing National Wildlife Refuges to plan within a stakeholder-driven context, representatives of 19 organizations and agencies convened over 18 months to use the multi-LCC Gulf Hypoxia Initiative - Precision Conservation Blueprint to fit local conditions and objectives in southern Indiana and Illinois. The Lower Wabash River basin was selected as one of three community "living laboratories" to test policies and tools that promote conservation while reducing agricultural risk. Human dimensions, hydrology and wildlife migration will be among the topics studied to improve our understanding of

barriers to community preparedness and adaptation as a model for agroecology in floodplains and associated uplands across the Midwest. Contact: Gwen White, gwen_white@fws.gov

ILLINOIS AGRICULTURE PRODUCERS AND GULF HYPOXIA

An LCC-supported survey of Illinois agriculture producers in 2015 shows strong positive awareness of and attitudes toward conservation—both locally as well as 1,000 miles downriver in the Gulf of Mexico. The



survey investigated management practices, conservation program enrollment, and landscape values. Practices with high potential benefits for wildlife, water quality, energy and ecosystem services are common on Illinois lands, with 84% of farmers using conservation tillage and 74% having grassed waterways. Most Illinois farmers (92%) acknowledge their responsibility to protect

AREAS OF FOCUS THIS YEAR

- GIVE STATE FISH AND WILDLIFE AGENCY DIRECTORS UPDATES OF ONGOING AND PLANNED LANDSCAPE CONSERVATION PROJECTS THROUGH AFWA.
- MORE CLEARLY DEFINE OUR METHODS AND STANDARD OPERATING PROCEDURES FOR COMMUNICATION.
- EXPAND TO EVEN MORE PARTICIPANTS. SUMMARY COMMENTS FROM TALLGRASS PRAIRIE LCC STEERING COMMITTEE

water quality locally and 71% were concerned about impacts on the Gulf of Mexico. Nearly all respondents (97%) felt that conserving land for future generations is important and 91% expressed an emotional bond with the land. The report provides a basis for communication regarding landscape conservation opportunities and outcomes. Contact: Craig A. Miller, University of Illinois, craigm@illinois.edu



PIGS, PRAIRIE & POWER – MULTIFUNCTIONAL WILDLIFE HABITAT

Smithfield Foods and Roeslein Alternative Energy have successfully installed modular bioenergy refineries in northwest Missouri with the intent of combining diverse prairie plantings and hog waste from covered lagoons to produce clean renewable natural gas through anaerobic digestion processes - improving air and water quality, while significantly reducing soil erosion, and producing wildlife habitat, food, energy and local economic growth. As an extension of the Prairie STRIPs project, researchers from Iowa State University are quantifying wildlife benefits in the first phase of this \$120 million bioenergy project. The next phase will expand to 20,000 acres of prairie around 88 hog manure lagoons, located on nine finishing farms. The addition of native prairie grasses and forbs as an additional feedstock will help stabilize the gas production while augmenting the current production from hog manure and ultimately producing pipeline-quality natural gas with the energy equivalent of 17 million gallons of diesel fuel each year. Demand for grass feedstock

around livestock facilities could result in as much as 30 million acres of prairie across the mid-continent. Contact: Lisa Schulte Moore, Iowa State University, <u>lschulte@iastate.edu</u>

ST. LOUIS LEADS THE PACK IN URBAN MONARCH CONSERVATION

In July 2015, the LCC supported the urban education and outreach efforts of *Milkweeds for Monarchs: The St. Louis Butterfly Project* and advanced the understanding of urban monarch habitat. The program created 50 new urban school monarch gardens, facilitated a successful educator-neighborhood specialist workshop, created a Monarch Gardens for Schools educator guide, developed protocols and conducted research on pollinator, vegetation and social impact at 30 monarch gardens and 7 urban prairie patches, and installed highly visible exhibits at two popular conservation institutions. Lessons learned from this project have been shared with other cities looking to replicate monarch conservation efforts in their towns, and the project has strengthened the conservation ethic in the City of St. Louis. **Contacts: Kristin Shaw, kristin shaw@fws.gov; Catherine Werner, City of St. Louis, wernerc@stlouis-mo.gov**



The City of St Louis celebrated its 250th anniversary by planting hundreds of backyard monarch and pollinator gardens.

OPPORTUNITIES TO BE SEIZED

Photo by USFWS

- COMPLETE THE GULF HYPOXIA INITIATIVE PRECISION CONSERVATION BLUEPRINT AND GET IT INTO THE HANDS OF USERS.
- REDUCE DUPLICATION OF EFFORT BY GETTING MORE GROUPS TO WORK TOGETHER.
- ENCOURAGE MORE INVOLVEMENT FROM STATE FISH AND WILDLIFE AGENCIES AND AGRICULTURAL PRODUCER ORGANIZATIONS.

SUMMARY COMMENTS FROM TALLGRASS PRAIRIE LCC STEERING COMMITTEE



A MONARCH'S VIEW OF A CITY – GUIDEBOOK AND TOOLS FOR URBAN PLANNERS

The LCC, in partnership with the Keller Science Action Center at the Field Museum in Chicago and the U.S. Fish and Wildlife Service, have developed a set of tools to inform the creation of pollinator habitat in the places we live, work, and play. The tools were developed in four pilot cities – Austin, Chicago, Kansas City, and Minneapolis-St. Paul – and they can be modified to expand to more cities. The LCC is currently working with partners to share these tools and inform monarch conservation delivery in cities and towns across the monarch butterfly's migration corridor. This initiative shows that cities do matter for monarch conservation, and can be places where both people and pollinators can thrive. **Contacts: Kelley Myers, kelley_myers@fws.gov; Abigail Derby Lewis, The Field Museum, aderby@fieldmuseum.org**

PRAIRIE RECONSTRUCTION DATABASE – TRACKING AND DETERMINING SUCCESS

Conservationists in the agricultural Midwest invest countless hours and considerable money reassembling pieces of the imperiled prairie ecosystem. All too often the results are disappointing, despite our years of experience. How can we do better? Imagine if we had records of all the species planted, their establishment, the methods used, and the management actions taken before and after reconstruction for the thousands of acres of restoration attempts to date. With support from the LCC, the Prairie Reconstruction Initiative (PRI) is collaborating with the Chicago Botanic Garden to crowdsource reconstruction data to systematically determine what works, what doesn't, and why. The database can serve as a centralized location for data storage and retrieval and will be the foundation for future analyses to inform the creation of robust, diverse prairies across the Midwest. **Contact: Diane Larson, U.S. Geological Survey, dlarson@usgs.gov**



GREATEST LCC ADVANCEMENTS TO DATE

- GETTING SUCH A GOOD VARIETY OF GROUPS INTO ONE ROOM AND BEGINNING TO PUT CONSERVATION ON THE GROUND ON IMPORTANT ISSUES LIKE GULF HYPOXIA (AND PROVIDING NECESSARY TOOLS).
- CREATING THE VENUE FOR EXCHANGE OF INFORMATION, IDENTIFICATION OF OTHER POINTS OF LINKAGE, AND NETWORKING.
- INCREASED COORDINATION AND COMMUNICATION ACROSS AGENCIES AT LANDSCAPE SCALE.

SUMMARY COMMENTS FROM TALLGRASS PRAIRIE LCC STEERING COMMITTEE



Express your opinion in Summer Online Dialogues based on the Spring Webinar series

Where should landscape conservation lead over the next few years? Join the upcoming summer webinars to listen to your colleagues and express your opinion about the future of large-scale multi-sector collaboration. Through the spring, the LCC hosted a webinar series to update partners on research and practitioner groups from around the Midwest. Visit the Resources page on our website to watch recorded webinars from our spring series that took place February 15 - April 12, 2017. Over the summer months, join us in a short series of community dialogues on how we as a community can continue developing:

- resources and capacity for the Gulf Hypoxia and Urban Monarch Initiatives;
- multi-sector explorations in Renewable Energy and Green Infrastructure;
- emerging practitioner networks of the Prairie Reconstruction Initiative (PRI), Floodplain Science Network (FpSN), Agroecology Technical Advisory Group (Ag TAG), and Ecological Places in Cities (EPiC); and
- other topics that advance landscape conservation.





Charlie Wooley, Co-Chair, Eastern Tallgrass Prairie LCC

Through the efforts of the Eastern Tallgrass Prairie Landscape Conservation Cooperative, we have demonstrated the tremendous amount of work that gets done when we pool our unique strengths for the collective good. Together we are working with our state partners and the American public to balance conservation with commerce.





For more on the Eastern Tallgrass Prairie LCC, including the latest news, upcoming events, project information, and resources visit <u>www.TallgrassPrairieLCC.org</u>.