

Mystic Plains

Conservation Opportunity Area



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Till Plains



Many prairie animals persist in large, wildlife-friendly grasslands.

Chad White, Missouri Department of Conservation

The Mystic Plains Conservation Opportunity Area (COA) is a private land initiative in southeast Sullivan County and southwest Adair County. Identified as a Grasslands Coalition Focus Area in 1998, the Mystic Plains features large grassland expanses.

As recent as the 1940s, the Mystic Plains had one of the largest remaining prairie-chicken populations in the state. By the 1960s, however, prairie-chickens had dramatically declined in most of Missouri. Recent reintroductions of the greater prairie-chicken into grassland landscapes have shown that it can be successful. In 1998, the Mystic Plains Focus Area had more than 40 male prairie-chickens. Sullivan County has one of the highest numbers of acres enrolled in the

Conservation Reserve Program (CRP). Many ranchers remember prairie-chickens and are interested in the recovery of this prairie bird.

Many prairie animals can benefit from wildlife-friendly grasslands, including regal fritillary butterflies, western chorus frogs, northern harriers, upland sandpipers and bobolinks. Over one-third of Missouri was once native tallgrass prairie. Today, less than one percent remains. Landowners can help improve habitat for native prairie animals by replanting disturbed areas with a mixture of native warm-season grasses and wildflowers, modifying hay field management, using prescribed fires to benefit native plants and minimizing use of herbicides, insecticides and pesticides during the prairie-chicken breeding season.

Mystic Plains Conservation Strategies:

- Protect a sizable core area for prairie-chicken management through public ownership or conservation easements.
- Increase plant diversity and structural diversity of grasslands, emphasizing native plants.
- Expand incentive programs for prairie restoration.
- Develop burn assistance teams to assist private landowners.
- Maintain or increase prairie-chicken populations.
- Expand public interest in native grasslands and prairie wildlife.
- Control undesirable woody plants in uplands.
- Restore prairie-chicken nesting cover within two miles of prairie-chicken leks.



Ken McCarty, Missouri Department of Natural Resources

Rattlesnake master flowers among the 200 year-old white oaks on this restored savanna landscape at nearby Chariton River Hills Natural Area in Long Branch State Park. Open woodlands and savannas once occurred along streams in the Mystic Plains COA.

Priority Research and Inventory Needs

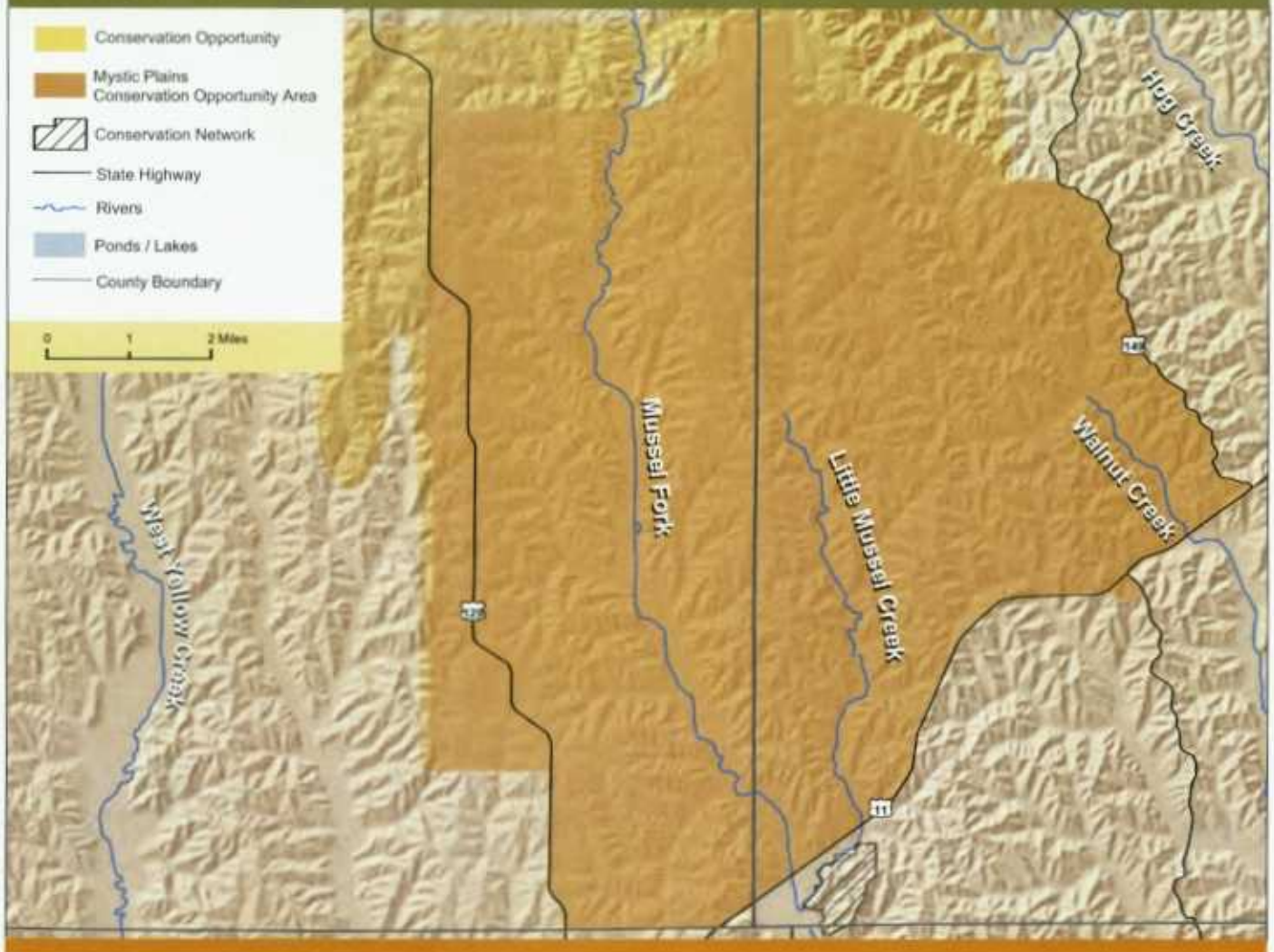
- Inventory native prairie remnants.
- Conduct a grazing trial using patch-burn grazing in cool season pastures.
- Survey landowners to determine interest in managing land for grassland wildlife.
- Determine best methods to promote healthy prairie-chicken habitats.

Conservation Partners

Existing: Missouri Prairie Foundation; National Wild Turkey Federation (NWTF); Farm Service Agency (FSA); Natural Resources Conservation Service (NRCS); Missouri Department of Conservation (MDC)

Potential: Audubon Missouri; Grasslands Coalition; Missouri Conservation Heritage Foundation (MCHF); Truman State University; U.S. Fish and Wildlife Service (USFWS)

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Jim Radtke, Missouri Department of Conservation

Greater prairie-chickens once ranged throughout native prairies in central North America. In Missouri, they historically occupied large grasslands bordered by oak savannas and woodlands. Greater prairie-chickens forage on the ground for leaves, grasses, seeds and insects.

Funding Sources

Existing: MDC Private Lands Cost Share Program; FSA Conservation Reserve Program; NRCS Wildlife Habitat Incentive Program; NRCS Environmental Quality Incentives Program; NWTF Wild Turkey Super Fund

Promising Future Sources: USFWS Partners for Fish and Wildlife; Missouri Bird Conservation Initiative Grants; MDC State Wildlife Grants; MDC Wildlife Diversity Funds; MCHF Stream Stewardship Trust Fund; MCHF Grants

Existing Conservation Network

Private land initiative

Grazing Grasslands



Bison and elk no longer roam freely in Missouri's prairies, but cattle grazing may play a similar role. Landowners can help mimic the effects of bison and elk by rotating cattle to different fields and allowing other grasslands to regrow. Overgrazing prevents the success of many native prairie plants and animals.

Cliff White, Missouri Department of Conservation

Conservation Challenges

Very little natural vegetation remains in the Mystic Plains Conservation Opportunity Area. Most remaining grasslands are exotic, cool-season grasses like fescue and brome. Prescribed burns should be conducted to complement a diversity of native species, reduce exotics and woody invasion and enhance populations of species of conservation

concern. Potential obstacles to conservation success include gaining landowner acceptance, limited funding and staff time, lack of cost-share program continuity, few knowledgeable contractors, difficulty of applying prescribed burns on private lands and the current low priority for savanna management.

To learn more about the Mystic Plains Conservation Opportunity Area, please contact:



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