

Northwest Region Upland Prairies

Foxglove Conservation Area
Little Tarkio Prairie
Tarkio Prairie Conservation Area

Ten-Year Area Management Plan FY 2019-2028





Wildlife Division Chief



Date

OVERVIEW

Area Name	Area Number	Year Acquired	Acreage	County	Administrative Responsibility	Maintenance Responsibility
Foxglove Conservation Area (CA)	9012	1990	54	Ray	Wildlife	Wildlife
Little Tarkio Prairie	9912	1999	129	Holt	Wildlife	Wildlife
Tarkio Prairie CA	8603	1986	640	Atchison	Wildlife	Wildlife

Statements of Purpose:

A. Strategic Direction

The primary purpose of these areas is to protect and restore fish, forest, and wildlife habitats representative of the Central Dissected Till Plains Ecological Section.

Management emphasis is placed on maintaining, protecting, and restoring habitat conditions that support species that depend upon prairies and adjacent forest/woodland communities.

B. Desired Future Condition

The desired future condition is to provide an example of high quality prairie and associated forest/woodland plants and animals located in the Central Dissected Till Plains of northwest Missouri that provides important ecosystem functions while also providing recreational opportunities for area users.

C. Federal Aid Statement

N/A

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

Area Name	Priority Areas	Natural Areas
Foxglove CA	Crooked River Fisheries Priority Watershed	None
Little Tarkio Prairie	Loess Hills Prairie Complex – Grassland Prairie Savanna Conservation Opportunity Area	Little Tarkio Prairie Natural Area (15 acres) ¹
Tarkio Prairie CA	Tarkio Prairie – Grassland and Prairie Savanna Conservation Opportunity Area	Tarkio Prairie Natural Area (54 acres) ¹

¹These are some of the few remaining deep soil dry-mesic prairies left in northwest Missouri. Despite their small sizes these prairies support over 100 native plant species each, including plant and animal species of conservation concern that depend on remnant prairies.

II. Important Natural Features and Resources

Area Name	Species of Conservation Concern	Caves	Springs
Foxglove CA	Yes ¹	None	None
Little Tarkio Prairie	Yes ¹	None	None
Tarkio Prairie CA	Yes ¹	None	None

¹Species of conservation concern are known from this area. Area managers should consult the Natural Heritage Database annually and review all management activities with the natural history biologist.

III. Existing Infrastructure

Area Name	Camping Areas	Parking Area #	Fishing Lake or Pond
Foxglove CA	None	1	None
Little Tarkio Prairie	None	1	None
Tarkio Prairie CA	2	2	5 ponds (2 acres total) ¹

¹Ponds 2, 3, and 5 are fishing ponds. Ponds 1 and 4 are fishless.

IV. Area Restrictions or Limitations

Area Name	Deed Restrictions	Federal Interest	Ease-ments	Cultural Resources	Endangered Species	Boundary Issues
Foxglove CA	None	Yes ¹	None	None known	None observed	None
Little Tarkio Prairie	None	Yes ¹	None	None known	Yes ²	None
Tarkio Prairie CA	None	Yes ¹	None	None known	Yes ²	None

¹Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.

²Endangered species are known from this area. Area managers should consult the Natural Heritage Database annually and review all management activities with the natural history biologist.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Manage species of conservation concern.
- 2) Manage natural areas.
- 3) Control invasive species.

- 4) Restore prairie areas.
- 5) Manage early successional and old fields.

Management Objective 1: Maintain and enhance populations of species of conservation concern.

Strategy 1: Consult with natural history biologist prior to any new soil disturbance or vegetation management practices near the site of the species or communities of conservation concern. (Wildlife)

Strategy 2: Coordinate with the natural history biologist on the development of an annual plan for habitat restoration efforts, cropping-food plots, tree removal activities, burning, construction, and/or maintenance projects in the vicinity of the species or community of conservation concern. (Wildlife)

Management Objective 2: Manage natural areas as the best examples of representative communities.

Strategy 1: Natural areas on Tarkio Prairie CA and Little Tarkio Prairie are managed to maintain and enhance biological diversity and ecological integrity, using mechanical, cultural (prescribed fire), and chemical methods. Management will conform to the *Missouri Natural Areas Procedures Manual* (Missouri Natural Areas Committee, 2010). (Wildlife)

Strategy 2: Coordinate with natural history biologist to develop an annual work plan for habitat restoration and maintenance within natural areas on Tarkio Prairie CA and Little Tarkio Prairie. (Wildlife)

Management Objective 3: Detect and control invasive species.

Strategy 1: Annually treat sericea lespedeza, Johnson grass, tree-of-heaven, amur honeysuckle, and any other invasive species. (Wildlife)

Management Objective 4: Restore native prairie to enhance existing biological communities.

Strategy 1: On potential prairie restoration areas, use a combination of prescribed burning, mechanical, and chemical treatment of woody vegetation, mowing, and seeding of local ecotype noxious weed-free seed to provide conditions necessary to restore native prairie vegetation. (Wildlife)

Management Objective 5: Manage early successional and old field habitat as preparation for restoration.

Strategy 1: Maintain old field habitats using a combination of prescribed burning, mechanical and chemical treatment of woody vegetation, disking, mowing, and

seeding to provide nesting and brood rearing habitat such as bare ground, annual forbs, warm- and cool-season grasses, and shrubs. (Wildlife)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Provide quality sport fish populations on area fisheries
- 2) Manage for native aquatic vegetation on area fisheries and prevent the infestation and spread of nuisance aquatic species
- 3) Maintain riparian corridor management.

Management Objective 1: Manage for quality angling opportunities on Tarkio Prairie CA ponds.

Strategy 1: Conduct fish surveys as needed to monitor for quality (largemouth bass proportional stock density (12) values of 40-70, and bluegill proportional stock density (6) values of 20-40) sport fish populations. (Fisheries)

Strategy 2: Conduct supplemental stocking of fish (channel catfish, hybrid bluegill), when needed to maintain quality angling opportunities or for kids fishing clinics. (Fisheries)

Management Objective 2: Manage for native aquatic vegetation at Tarkio Prairie CA.

Strategy 1: Plant native vegetation (water willow, water lily, pickerel weed), as needed. (Fisheries)

Strategy 2: Treat aquatic nuisance species with herbicide, as needed. (Fisheries)

Management Objective 3: Maintain vegetated riparian buffer along intermittent streams.

Strategy 1: Ensure vegetation is maintained in riparian buffers according to the Department's *Watershed and Stream Management Guidelines for Lands and Waters Managed by the Missouri Department of Conservation* (2009). (Wildlife)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide quality fishing opportunities at Tarkio Prairie CA.
- 2) Provide quality hunting opportunities at Tarkio Prairie CA and Little Tarkio Prairies.
- 3) Provide primitive camping opportunities at Tarkio Prairie CA.

Management Objective 1: Provide access to quality fishing opportunities at Tarkio Prairie CA.

Strategy 1: Maintain public access to area ponds by maintaining area field roads according to Department standards. (Wildlife, Fisheries)

Management Objective 2: Provide quality hunting opportunities at Tarkio Prairie CA and Little Tarkio Prairie.

Strategy 1: Maintain the current Ag Crop Program to provide quality high energy food sources for deer and turkey management until open areas can be restored with seed from the native prairie portion of the area on Tarkio Prairie CA. (Wildlife)

Strategy 2: Provide food and cover plots to provide quality habitat for small game. (Wildlife)

Strategy 3: Participate in annual reviews of game populations and regulations that provide for a quality hunting experience. (Wildlife)

Management Objective 3: Provide primitive camping opportunities in appropriate areas at Tarkio Prairie CA.

Strategy 1: Mow/maintain grass around parking lots designated for primitive camping on Tarkio Prairie CA. (Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain existing infrastructure.
- 2) Consider land acquisition, when available.

Management Objective 1: Maintain infrastructure, regulations, and Missouri Atlas database to provide access and reflect resource and recreational opportunities.

Strategy 1: Maintain area facilities according to the current Area and Facility Maintenance Policy located in the Department's Resource Policy Manual. (Wildlife)

Lands Proposed for Acquisition:

Pursue the highest priority lands for acquisition as they become available. When available, three-sided inholdings and any adjacent (or nearby) lands may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

All strategies for this management plan are considered ongoing.

APPENDICES

Public Input Summary:

The draft Northwest Region Upland Prairies Management Plan was available for a public comment period March 1–31, 2017. The Missouri Department of Conservation received comments from two respondents (Appendix A). The Northwest Region Upland Prairies Planning Team carefully reviewed and considered these ideas as they finalized this document. A brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

Department responses to themes and issues identified through the Northwest Region Upland Prairies Management Plan public comment period.

Appreciates the Department’s efforts to protect prairies.

Thank you. Prairies are an important part of Missouri’s natural resources.

Suggests changing wording in the plan from “control” to “eradicate” invasive species.

Eradicate is a great goal. Control is more feasible and a more practical way to describe our efforts.

Appreciates prescribed burning on Foxglove Conservation Area. Encourages continuing to mow and spray for thistles.

Thank you for your appreciation of our management efforts.

Suggests requesting better county road maintenance.

Ray County is responsible for county road maintenance at Fox Glove CA. Requests for better road maintenance should be made directly to the county by area users.

References:

Missouri Department of Conservation. (2009). *Watershed and stream management guidelines for lands and waters managed by Missouri Department of Conservation*. Jefferson City, MO: Missouri Department of Conservation.

Missouri Natural Areas Committee. (2010). *Missouri natural areas procedures manual version 1.0, November 10, 2010*. Jefferson City, MO: Missouri Natural Areas Committee.

Appendices:

Appendix 1. Foxglove Conservation Area Background

Appendix 2. Map of Foxglove Conservation Area

Appendix 3. Foxglove Conservation Area Land Cover Map

Appendix 4. Little Tarkio Prairie Area Background

Appendix 5. Map of Little Tarkio Prairie

Appendix 6. Little Tarkio Prairie Land Cover Map

Appendix 7. Tarkio Prairie Conservation Area Background

Appendix 8. Map of Tarkio Prairie Conservation Area

Appendix 9. Tarkio Prairie Conservation Area Land Cover Map

Additional Appendices:

Appendix A. Northwest Region Upland Prairies Management Plan Public Comments

Appendix 1. Foxglove Conservation Area Background

Foxglove Conservation Area is in Ray County, 1 mile east of Vibbard and 0.5 miles north on the gravel road. The Missouri Department of Conservation (Department) purchased the area from Claude H. and Marian E. Fine in 1990.

This 54-acre area is one of the few high quality native prairies remaining in the western section of the glaciated plains. The area supports the second largest population of articulate false foxglove in the state.

Management of the area consists of mowing and prescribed burning to promote native prairie plants and wildlife.

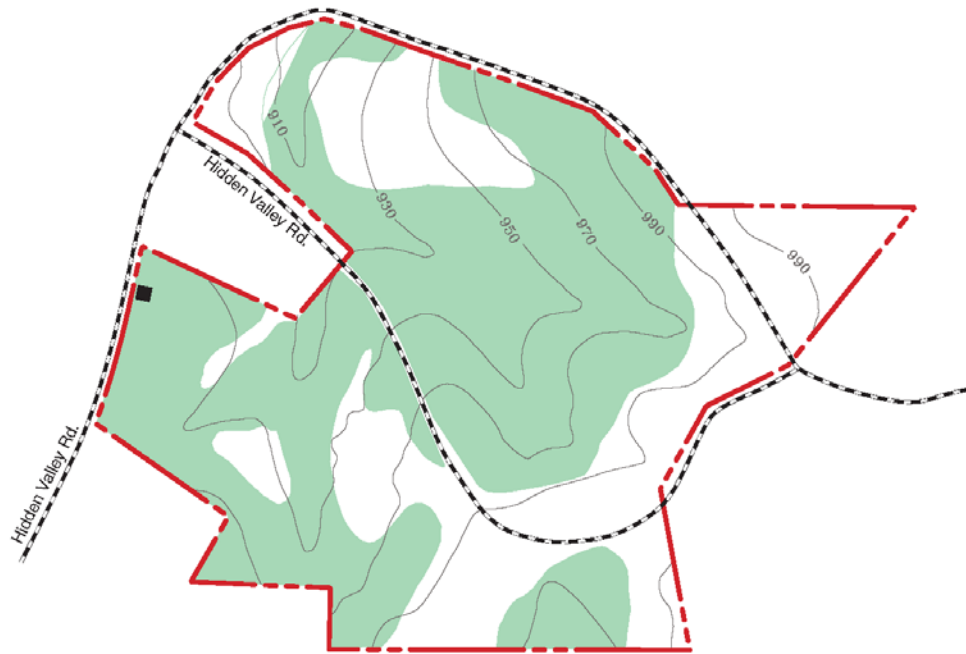
Legal Description: Township 53N, Range 29W, Section 23.

Area Location: This area is located 1.5 miles northeast of Vibbard, Missouri.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Native prairie	21		40
Woodland	21		40
Old Field	11		19
Infrastructure	1		1
Total	54		100
Stream frontage		0	

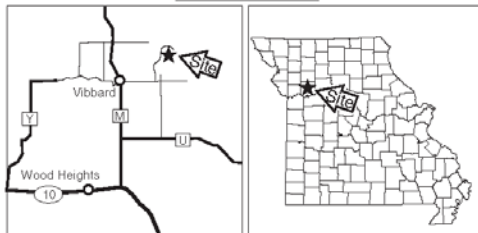
Appendix 2. Map of Foxglove Conservation Area



LEGEND

- Boundary ————
- Gravel Road - - - - -
- Parking Lot ■
- Forest ■
- Topography ▨

VICINITY MAP

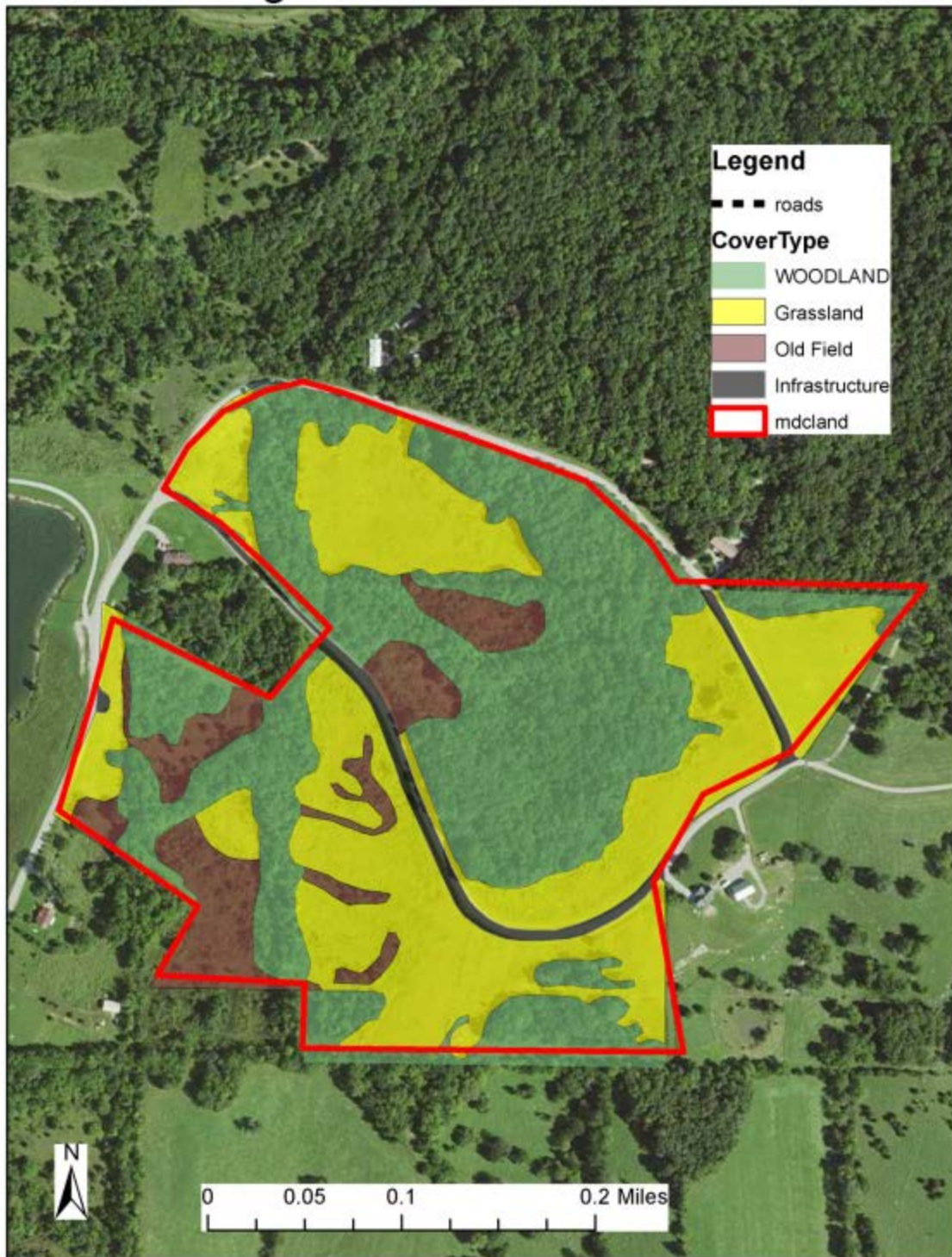


FOXGLOVE CONSERVATION AREA

RAY COUNTY
54 ACRES

Appendix 3. Foxglove Conservation Area Land Cover Map

Foxglove Conservation Area



Appendix 4. Little Tarkio Prairie Area Background

The Department purchased this area in 1999 to protect its remaining prairie habitat. The area contains 15 acres of high quality prairie, one of the last remnants of this type of habitat in the glaciated plains of northwest Missouri.

The prairie, located in the southeastern corner of the conservation area, features a diverse prairie flora on loess soils. These soils were deposited here by wind during an arid period following the retreat of the glaciers.

Extensive prairies once stretched over one-third of Missouri and dominated the northwestern part of the state. Holt County was originally 60 percent prairie. The first visitors to these extensive grasslands were French explorers. They named the prairies the French word for meadow.

Little Tarkio Prairie Area lies at the headwaters of Little Tarkio Creek. Tarkio is the Native American word for walnut.

Little Tarkio Prairie Natural Area is a 15-acre unplowed prairie immediately southwest of the parking lot. Very few unplowed prairies exist in northern Missouri. Wildflower displays are especially notable from mid-May to late June.

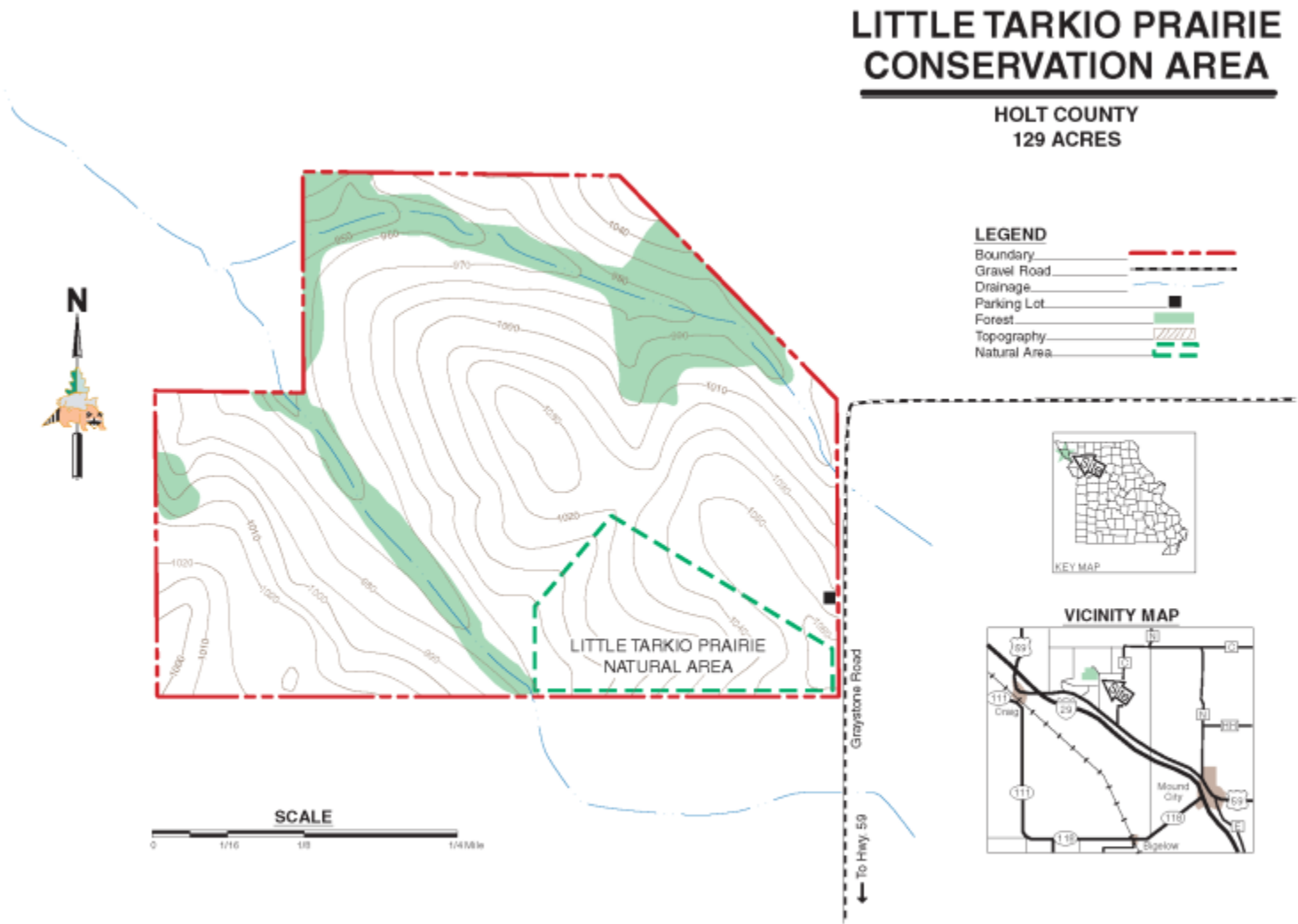
Legal Description: Township 62N, Range 39W, Section 8.

Area Location: This area is located approximately 3 miles east of Craig, Missouri.

Current Land and Water Types:

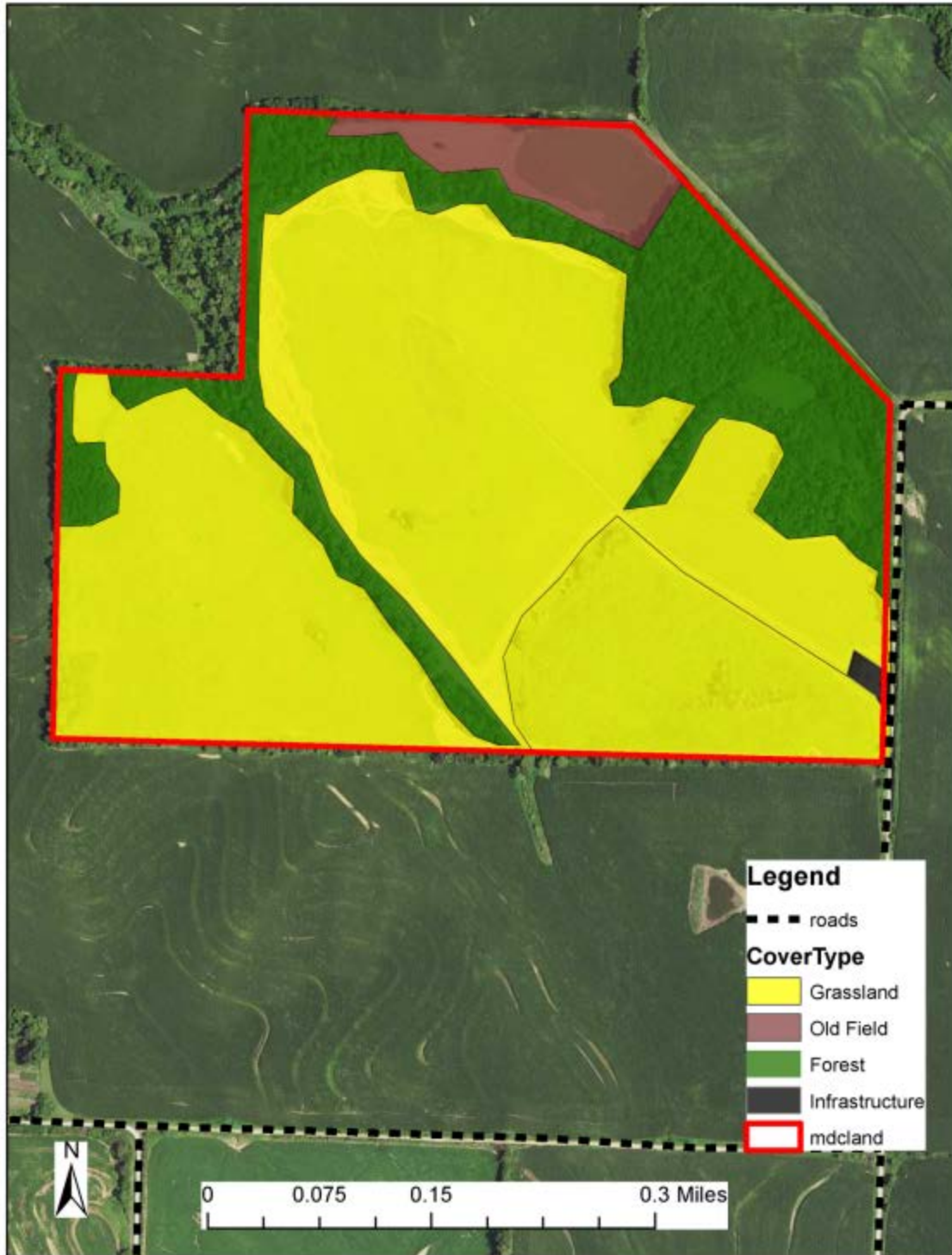
Land/Water Type	Acres	Miles	% of Area
Grassland	102		79
Forest	14		11
Old Field	13		10
Total	129		100
Stream frontage		0	

Appendix 5. Map of Little Tarkio Prairie



Appendix 6: Little Tarkio Prairie Land Cover Map

Little Tarkio Prairie Conservation Area



Appendix 7. Tarkio Prairie Conservation Area Background

Tarkio Prairie Conservation Area contains one of the few known high quality prairies remaining in the glaciated plains of northern Missouri. It features very diverse prairie plants on loess and glacial till soils.

Vast prairies once stretched across Missouri, dominating the landscapes of the five northwestern counties in the state. Atchison County was 83 percent prairie. The French were the first to visit these extensive grasslands and call them prairies, their word for European meadow.

The Department, which is committed to protecting the State's remaining prairie heritage, purchased a 160-acre tract in 1985, added 400 acres to the area in 1995, and added another 80 acres to the area in 2003.

The area is available to the public for a variety of outdoor activities compatible with resource management. A portion of the area is a Missouri natural area.

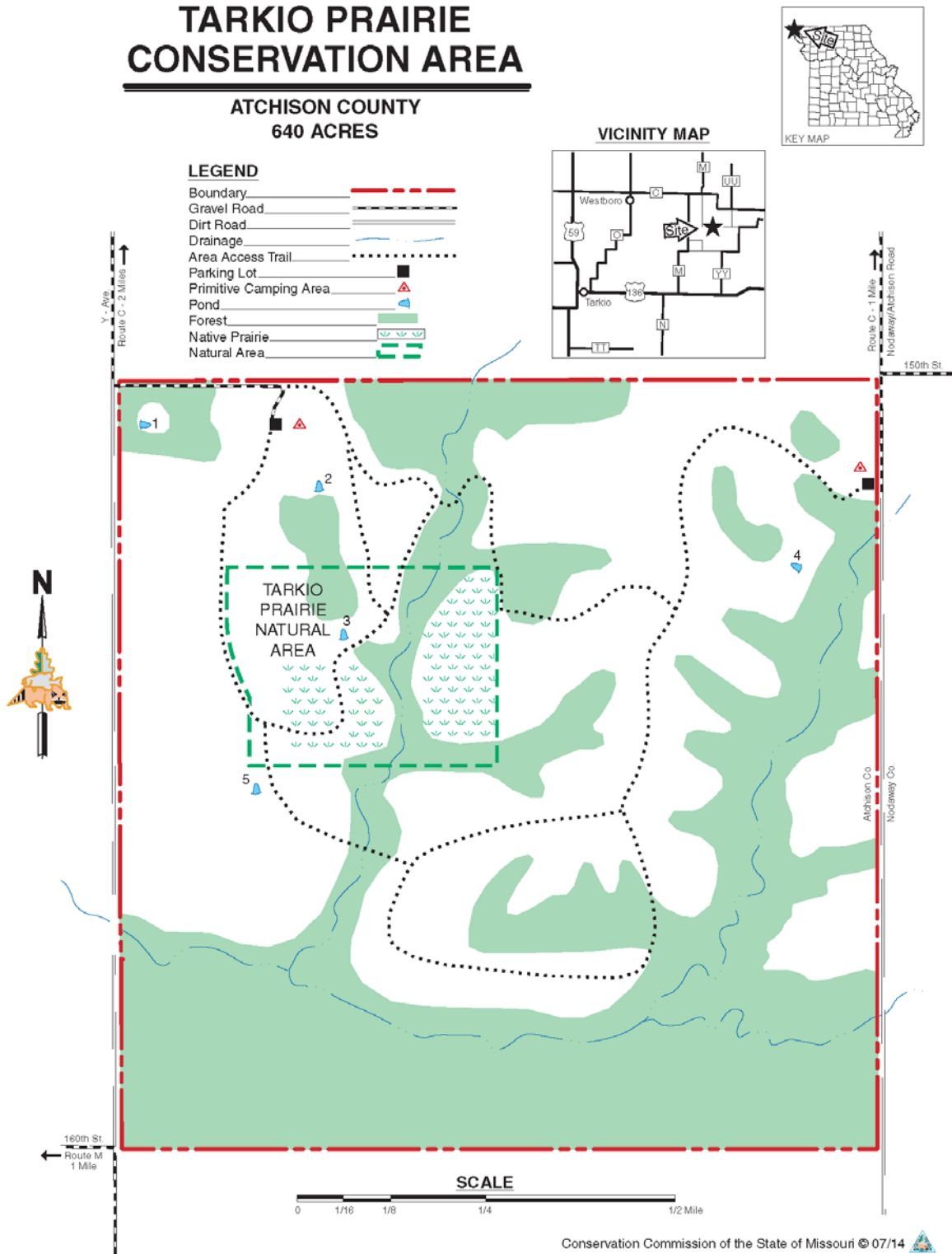
Legal Description: Township 66N, Range 38W, Section 28.

Area Location: This area is located approximately 7 miles southeast Westboro, Missouri.

Current Land and Water Types:

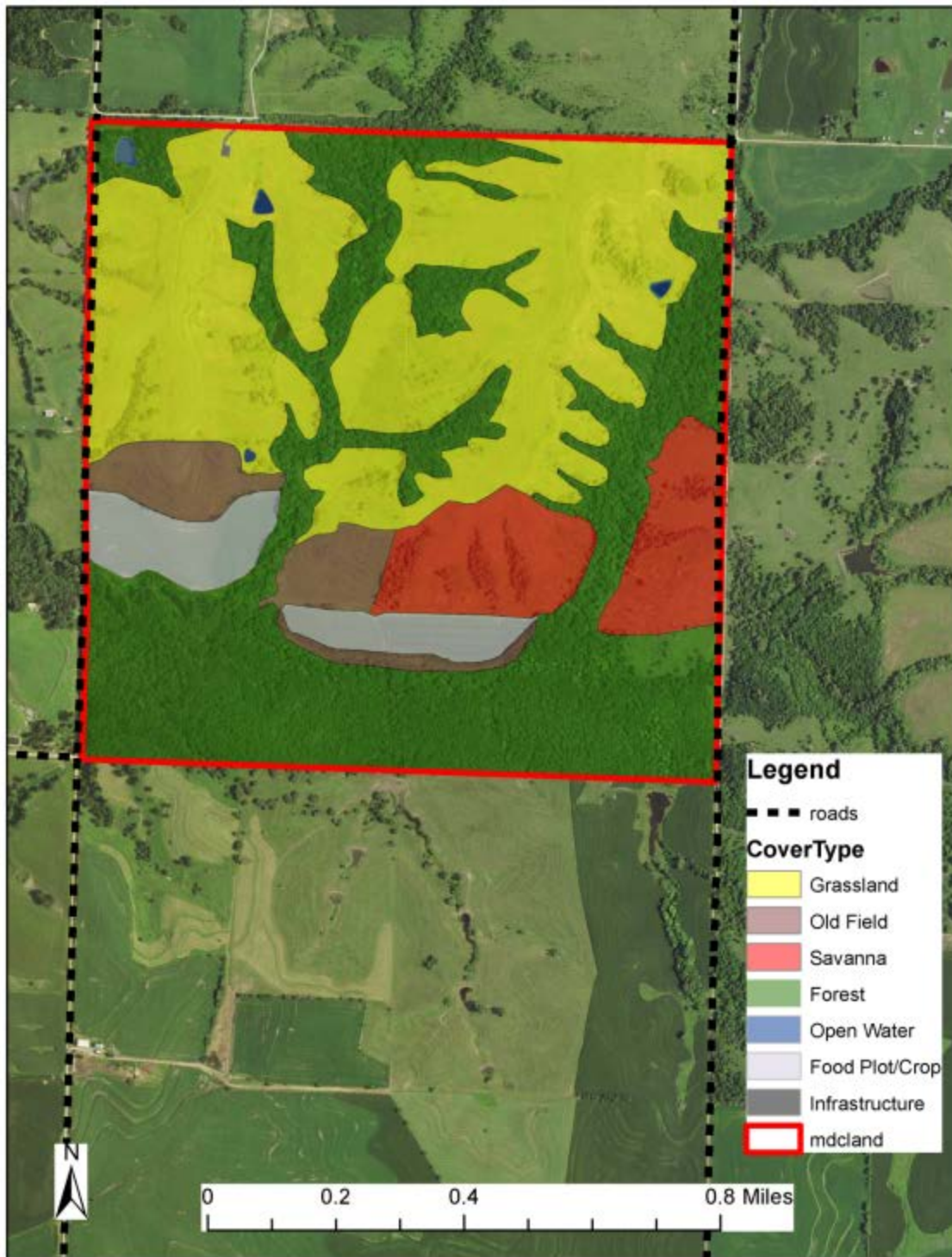
Land/Water Type	Acres	Miles	% of Area
Grassland	245		38
Forest	212		33
Savanna	116		18
Old field	40		6
Food Plot/ Crop	25		4
Lakes/ponds	2		1
Total	640		100
Stream Frontage		0	

Appendix 8. Map of Tarkio Prairie Conservation Area



Appendix 9. Tarkio Prairie Conservation Area Land Cover Map

Tarkio Prairie Conservation Area



Appendix A. Northwest Region Upland Prairies Management Plan Public Comments

Received during public comment period (March 1–31, 2017):

I'm happy to see MDC protecting some of the disappearing prairie. That's awesome. Thank you so much. I would like to see "control invasives" changed to "eradicate invasives" and instead of "treatment" I suggest "removal and treatment". It takes teamwork, time, and hard work, but it can be done. For example, Honeysuckle Sweep Week and regular volunteers are making a noticeable and sizable dent in the presence of invasive bush honeysuckle in some parks in the St. Louis area. Compared to what they were, prairies are almost gone. It's important to protect, preserve, and restore our natural heritage as much as we can.

I am an adjacent property owner to Fox Glove since before the Dept. purchased it from C. Fine. I appreciate it being burnt off this spring, it has been a long time. The prairie has mostly been taken over by brush. Please continue to mow and spray for thistles on the property and if possible a request for better county road maintenance would be most beneficial for the overall appearance. It constantly needs more road rock.

On the topic of Public Use, with the regulations in affect for the property, very little usage is allowed or done by the public. Except for an occasional mushroom hunter I never see anyone on the property. I don't mind the stiff restrictions. I'm just letting the Dept .know I see the area is being used.

Thank you for your time and please have the area mowed regularly.