Hite Prairie Conservation Area Plan

Fifteen-Year Area Management Plan
FY 2017-2031

Forestry Division Chief

10-31-16
Date
PLANNING TEAM

Chris Newbold, Natural History Biologist
Paul Johnson, Resource Forester
Adam Jones, Wildlife Management Biologist
Greg Stoner, Fisheries Management Biologist
Jodi Moulder, Private Land Conservationist
Kurt Heisler, Conservation Agent
Matt Smith, Conservation Agent

CENTRAL REGION

RCT Chair

FORESTRY DIVISION

Forest Management Chief
OVERVIEW

- **Official Area Name:** Hite Prairie Conservation Area, #7922
- **Year of Initial Acquisition:** 1979
- **Acreage:** 103 acres
- **County:** Morgan
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statement of Purpose:**
  A. **Strategic Direction**
     Manage for a diverse suite of native prairie plants and animals using a variety of grassland management tools.
  B. **Desired Future Condition**
     The desired future condition is a functioning native prairie community that meets the resource needs of a variety of grassland plant and animal species.
  C. **Federal Aid Statement**
     N/A

GENERAL INFORMATION AND CONDITIONS

I. **Special Considerations**
   A. **Priority Areas:** None
   B. **Natural Areas:** None

II. **Important Natural Features and Resources**
   A. **Species of Conservation Concern:** Species 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.
   B. **Caves:** None
   C. **Springs:** None
   D. **Other:** A portion of Hite Prairie Conservation Area (CA) contains remnant dry-mesic chert prairie, a natural community that is ranked as vulnerable in Missouri. Dry-mesic chert prairies are comprised of dense stands of grasses and forbs. Soils are usually well-drained, acidic, and with areas of exposed bedrock. Prairies were historically maintained with periodic grazing and burning disturbances.

III. **Existing Infrastructure**
   - One parking lot
IV. **Area Restrictions or Limitations**
   A. **Deed Restrictions:** None
   B. **Federal Interest:** Federal 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.
   C. **Easements:** None
   D. **Cultural Resources:** No known cultural resources.
   E. **Endangered Species:** None observed
   F. **Boundary Issues:** None

**MANAGEMENT CONSIDERATIONS**

V. **Terrestrial Resource Management Considerations**

**Challenges and Opportunities:**
1) Tall grass prairie communities are one of the most imperiled habitats in Missouri, and many of the species that utilize this habitat are declining.
2) Control invasive species.
3) Maintain or increase the diversity of vegetation to provide quality wildlife habitat.

**Management Objective 1:** Reduce/eliminate invasive plant species on the prairie.
   **Strategy 1:** Monitor for the occurrence and spread of invasive species. (Forestry)
   **Strategy 2:** Use management techniques including but not limited to prescribed burning, targeted herbicide applications, and timed mowing/haying to control the spread of invasive plants. (Forestry)

**Management Objective 2:** Maintain or increase plant diversity and structure of the prairie to provide habitat for grassland wildlife.
   **Strategy 1:** Utilize prescribed fire, mowing, herbicide application, and haying or other management tools, at appropriate seasons and frequencies to create varied successional stages of habitat, stimulate forbs, and increase plant diversity. (Forestry)
   **Strategy 2:** Explore overseeding strategies to diversify plant communities in non-remnant portions of the prairie. (Forestry)
VI. **Aquatic Resource Management Considerations**

**Challenges and Opportunities:**

1) Aquatic features at Hite Prairie CA consist of a small headwater stream that bisects the area. Headwater streams can be impacted by off-property activities like stream channelization and removal of riparian vegetation. Such activities can lead to stream channel instability and head-cutting.

2) Ensure terrestrial management practices are compatible with aquatic resource management.

**Management Objective 1:** Maintain the functionality and quality of the headwater stream on Hite Prairie CA.

- **Strategy 1:** Continue to implement stream Best Management Practices as outlined in the Department’s *Watershed and Stream Management Guidelines for Lands and Waters Managed by the Missouri Department of Conservation* (Missouri Department of Conservation, 2009). (Forestry)
- **Strategy 2:** Address channel instability and any head-cutting, as needed. (Forestry, Fisheries)

VII. **Public Use Management Considerations**

**Challenges and Opportunities:**

1) Increase public awareness and use of the area.

2) Provide accurate area regulation information.

**Management Objective 1:** Maintain suitable public access.

- **Strategy 1:** Maintain parking area and signage that is aesthetically pleasing and inviting to area users. (Forestry)

**Management Objective 2:** Continue to inform the public of activities and recreational opportunities on the area.

- **Strategy 1:** Maintain regulation signage at accesses in accordance with Missouri Department of Conservation (Department) policy. (Forestry)
- **Strategy 2:** Ensure that information regarding the area is accurate, consistent and available to the public through the Missouri Conservation Atlas database, posted signs, and area brochures. (Forestry)
- **Strategy 3:** When appropriate, place signage explaining current or upcoming management activities. (Forestry, Wildlife)
VIII. **Administrative Considerations**

**Challenges and Opportunities:**

1) Foster cooperation and good relations with neighboring landowners.
2) Enforce area and statewide regulations to ensure area user and resource protection.

**Management Objective 1:** Maintain area boundaries to reduce conflict or confusion about area boundaries.

  **Strategy 1:** Monitor area boundaries on an annual basis to ensure proper signage is in place. (Forestry)

**Management Objective 2:** Monitor and administer area and statewide regulations to ensure public safety and satisfaction.

  **Strategy 1:** Ensure all special use permit users follow standards set within their permits. Confront any violations in a punctual manner. (Forestry, Wildlife)
  **Strategy 2:** Work in cooperation with conservation agents and other law enforcement to enforce and investigate wildlife code and area regulation violations. (Forestry, Wildlife)

**Lands Proposed for Acquisition:**

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural features 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

Area Background:
The Department purchased the Hite Prairie Conservation Area from the Hite family in 1979. The Hite family managed about 80 of 103 acres as a hay pasture. As with the majority of the prairies purchased in the 1960s – 1990s, the dedication of those acres to continual hay production was effective in preserving them. Prairies can be hayed annually and largely maintain their diverse suite of plants and animals.

Hite Prairie CA is one of the easternmost fragments of the formerly vast Osage Plains prairies that covered the majority of the landscape to the west. The prairie is managed primarily with prescribed fires and some additional efforts to control woody growth and exotic species. Although greater prairie chickens have been extirpated from the site since the mid-1990s, the area still supports over 150 native plant species and prairie animals.

Driving Directions: From Versailles (Highway 5/52 junction), take Highway 52 west 0.25 miles, Take Fairgrounds Road south 0.5 miles.

Current Land and Water Types:

<table>
<thead>
<tr>
<th>Land/Water Type</th>
<th>Acres</th>
<th>% of Area</th>
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<tbody>
<tr>
<td>Native Prairie</td>
<td>103</td>
<td>100</td>
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Public Input Summary:
The draft Hite Prairie Conservation Area Management Plan was available for public comment July 1-31, 2016. The Missouri Department of Conservation received no comments during this time period.

References:

Maps:
Figure 1: Area Map
Figure 2: Aerial Map
Figure 3: Hite Prairie Conservation Area Prairie Units
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