

Benton County Forestry Areas

Edmonson Access
Brickley Hollow Conservation Area
Mount Hulda Towersite
Granny's Acres Conservation Area

Ten-Year Area Management Plan FY 2016-2025



Lisa B. Allen
Forestry Division Chief

11-5-15
Date

Benton County Forestry Areas Management Plan Approval Page

PLANNING TEAM

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KANSAS CITY REGION

RCT Chair


Signature

10-23-2015
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FORESTRY DIVISION

Forest Management Chief


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11/15
Date

OVERVIEW

Area Name	Area Number	Year Acquired	Acreage	County	Administrative Responsibility	Maintenance Responsibility
Edmonson Access	8840	1988	110	Benton	Forestry	Forestry
Brickley Hollow Conservation Area (CA)	9237	1992	186	Benton	Forestry	Forestry
Mount Hulda Towersite	4705	1947	37.75	Benton	Forestry	Forestry
Granny's Acres CA	6520	1965	351	Benton	Forestry	Forestry

Statements of Purpose:

A. Strategic Direction

The primary management emphasis of these areas is to protect and enhance the existing natural communities while providing public recreation and educational use that is compatible with those resources.

B. Desired Future Condition

The future desired condition of these areas is high-quality forest and woodland communities with interspersed native warm-season grasses/forb communities, old fields, and glades.

C. Federal Aid Statement

Edmonson Access, Brickley Hollow CA, and Mount Hulda Towersite: N/A

Granny's Acres CA: This area, or a portion thereof, was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve and restore suitable wildlife habitat, and provide public access for hunting or other wildlife-oriented recreation.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

Area Name	Priority Area	Natural Areas
Edmonson Access	Cole Camp Creek Priority Watershed	None
Brickley Hollow CA	Cole Camp Creek Priority Watershed	None
Mount Hulda Towersite	Lake of the Ozarks Priority Forest Landscape/Big Buffalo Creek Priority Geography/Cole Camp Creek Priority Watershed	None
Granny's Acres CA	None	None

II. Important Natural Features and Resources

Area Name	Species of Conservation Concern	Caves	Springs
Edmonson Access	None	None	None
Brickley Hollow CA	None	None	None
Mount Hulda Towersite	None	None	None
Granny's Acres 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	Trails (miles)	Radio Tower	Parking Lots
Edmonson Access	None	None	1
Brickley Hollow CA	1.4	None	1
Mount Hulda Towersite	None	1	1
Granny's Acres CA	3.7	None	1

IV. Area Restrictions or Limitations

Area Name	Deed Restrictions	Federal Interest	Easements	Cultural Resources	Hazards	Endangered Species	Boundary Issues
Edmonson Access	None	Yes ¹	None	None	None	None	None
Brickley Hollow CA	None	Yes ¹	None	Yes ³	None	None	None
Mount Hulda Towersite	None	Yes ¹	None	None	None	None	None
Granny's Acres CA	None	Yes ²	None	None	None	None	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.

²Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. Federal funds may also 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.

³Records kept with the Missouri Department of Conservation (the Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Management of these areas centers on enhancement and management of natural communities and on maintaining and enhancing forest health and wildlife habitat. Area maintenance is provided by staff within the Forestry Division.

Challenges and Opportunities:

- 1) Much of the management work on these areas is focused on the restoration of natural communities. Restoration work can be a highly labor intensive and lengthy process, depending on the level of degradation. In most cases, the woodland stands are overstocked due to fire exclusion and lack of management. Closed canopy stands resulted in a low diversity of understory plants. Prior to the start of restoration work, the glades on both Granny's Acres CA and Brickley Hollow CA had grown up in eastern red cedar and other woody plants. Removal of the cedars is labor intensive and impacts the ability to perform the necessary prescribed burning operations.
- 2) The majority of the grassland habitat on the areas was formerly pastureland dominated by non-native tall fescue. Removal of the fescue and conversion to native grasses and forbs requires repeated treatment and ongoing maintenance.
- 3) Invasive species are an issue on all of the areas. Efforts to control them are ongoing and will need to be continued to ensure that populations do not increase or spread.

Management Objective 1: Actively manage areas to serve as role models for best management practices that will enhance natural communities and benefit a diversity of wildlife species associated with grasslands, old fields, glades, woodland, and forest habitats.

Strategy 1: Conduct a forest inventory to determine management needs.
(Forestry)

Strategy 2: Implement appropriate woodland and forest management activities, as identified in the inventory. Management work may include, but is not limited to, mechanical thinning, herbicide application, commercial timber harvest, and prescribed burning. The goal of any management practice will be the enhancement of the resources. (Forestry)

Strategy 3: Manage existing woodlands to maintain woody canopy (at <80%) and to increase herbaceous growth. (Forestry)

Strategy 4: Emphasize early successional species, such as bobwhite quail, when conducting grassland management. Rotating management activities should ensure adequate acres for brood rearing and nesting cover. (Forestry)

Strategy 5: Retain and protect adequate numbers of den trees within the woodland and forest habitats. (Forestry)

Strategy 6: Manage existing old field habitat to control woody encroachment and to promote a greater diversity of native grasses and forbs. (Forestry)

Strategy 7: Restore and maintain glades through appropriate management activities. (Forestry)

Management Objective 2: Eradicate and/or control the spread of invasive and undesirable plant species, to the extent that funding and manpower allow.

Strategy 1: Monitor for invasive plants and control or eradicate as situation allows. This includes annual treatment of Johnson grass, tall fescue, sericea lespedeza, and Autumn olive. (Forestry)

VI. Aquatic Resource Management Considerations

These four areas lie within three watersheds: Big Buffalo Creek, Cole Camp Creek, and Whig Creek. All have several streams up to fifth order running through them.

Brickley Hollow CA is located along the Cole Camp Creek Arm of the Lake of the Ozarks. However, there are no boat ramps on the area. Boat access was previously determined to be unsuitable because of the lake's shallowness at this location.

There are no ponds at any of the areas.

Challenges and Opportunities:

- 1) All four of these areas are small in size. This poses a challenge when the desired practice is to manage landscapes on a watershed basis. Due to the fact that land management within a watershed affects conditions locally and downstream of the site, the quality of the aquatic resources on these areas may be impacted by land management practices upstream.
- 2) Aquatic invasive species, including zebra mussels and bighead carp, have been found in the Lake of the Ozarks. Brickley Hollow CA is located on the Lake of the Ozarks. Edmonson Access is approximately 4.3 miles upstream from where Cole Camp Creek empties into the lake. These areas would serve as good locations to post information about the negative impacts of these aquatic invasive species.

Management Objective 1: Maintain and protect healthy watersheds by implementing best management practices.

Strategy 1: Ensure that all management activities adhere to the *Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation (Missouri Department of Conservation, 2009)*. (Forestry)

Strategy 2: Maintain adequate stream corridors on area streams in order to maintain or improve water quality. (Forestry)

Management Objective 2: Inform users of the negative impacts of aquatic invasive species.

Strategy 1: Inform area users through signage about the hazards and prevention of spreading aquatic invasive species, in particular, zebra mussels and Asian carp (i.e., at Edmonson Access and Brickley Hollow CA). (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) These areas provide the public with excellent hunting, fishing, hiking, and wildlife viewing opportunities.
- 2) These areas, especially Edmonson Access, could be utilized for increased educational and interpretive opportunities.
- 3) Brickley Hollow CA and Granny's Acres CA have designated no shooting zones due to proximity of adjacent homes.

Management Objective 1: Provide the public with hunting and viewing opportunities.

Strategy 1: Maintain parking lots and trails through the areas. (Forestry)

Strategy 2: Ensure areas are mowed and litter is removed according to Department maintenance standards. (Forestry)

Management Objective 2: Inform public about area regulations.

Strategy 1: Maintain signs according to Department policy. (Forestry)

Strategy 2: Conduct routine patrols to maintain acceptable area use. (Protection)

Strategy 3: Maintain accurate and timely information on the Department's Atlas Database. Review information annually. (Forestry)

Strategy 4: Ensure that "No Shooting Zones" are clearly identified at Brickley Hollow CA and Granny's Acres CA to minimize conflicts with adjacent neighbors.

APPENDICES

Public Input Summary:

The draft Benton County Forestry Areas Management Plan was available for a public comment period July 1–31, 2015. The Missouri Department of Conservation received comments from three respondents (Appendix A). The Benton County Forestry Areas 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 Benton Country Forestry Areas public comment period

Neighboring landowner requests notification of management changes (burning, excavating, construction).

We strive to notify neighboring landowners of any operation on the conservation areas that may have potential impacts to our neighbors, especially when we conduct a prescribed burn. All prescribed burning is done under specific conditions outlined in an approved burn plan.

Wonders if there are future plans for a boat ramp, campgrounds, and fencing at Brickley Hollow CA.

Brickley Hollow Conservation Area was initially purchased with the intent of installing a boat launch. After further investigation, it was found that the lake is too shallow along the property line for this to be practical.

There are no plans at this time for a campground. The area is relatively small in size and is best suited as a day-use area.

Fencing on the area has been deemed unnecessary. No livestock are present on the area or on neighboring property. Boundary lines are marked to notify users when entering and leaving the area.

Suggests allowing archery hunting in “no shooting” zones.

No shooting zones are designated on portions of the areas that are in close proximity to neighboring homes. The no shooting zone at Brickley Hollow is 27 acres, leaving 159 acres open for hunting. At Granny’s Acres, the no shooting zone is 7 acres, leaving 344 acres open for hunting.

Concern about predators affecting quail populations. Suggests predator control.

The predator/prey relationship is complex. As an example, if mammalian predator control is implemented in a certain locale, that action may lessen the pressure on other predators (mice, rats, voles, and snakes) that also predate ground nesting birds such as quail. The best solution is to improve habitat (and to accomplish that on a large enough scale) so that predation is minimized. Depending on the area, the Area Manager has the option to issue Special Use Permits to allow the public to legally harvest mammalian predators.

Suggests allowing horseback riding.

Horseback riding is generally reserved for larger areas with extensive multi-use trails that are regularly maintained. Because these areas are relatively small in size and do not have adequate trail systems or adequate parking for large trailers, horseback riding is not allowed. Big Buffalo Creek Conservation Area is in close proximity to these areas and has 6 miles of trails available for horseback riding.

Suggests allowing electric off-road golf carts to haul deer stands and retrieve game.

Electric off-road golf carts may be used on the areas with a Special Use Permit only if the user has a mobility disability. Users can apply for a Special Use Permit at the Sedalia MDC office, 2000 S. Limit, Sedalia, MO 65301.

References:

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

Missouri Department of Conservation. (2013). Resource policy manual. Missouri Department of Conservation intranet.

Missouri Department of Conservation. (2014). *Missouri watershed protection practice recommended practices for Missouri: 2014 management guidelines for maintaining forested watersheds to protect streams*. Jefferson City, Missouri: The Conservation Commission of the State of Missouri.

Missouri Department of Conservation. (n.d.). Missouri atlas database. Missouri Department of Conservation intranet.

Missouri Department of Conservation. (n.d.). Historic area files, Sedalia Office.

Missouri Department of Conservation. (n.d.). MDC online: Missouri Natural Heritage database records. <http://mdc.mo.gov/your-property/greener-communities/missouri-natural-heritageprogram>

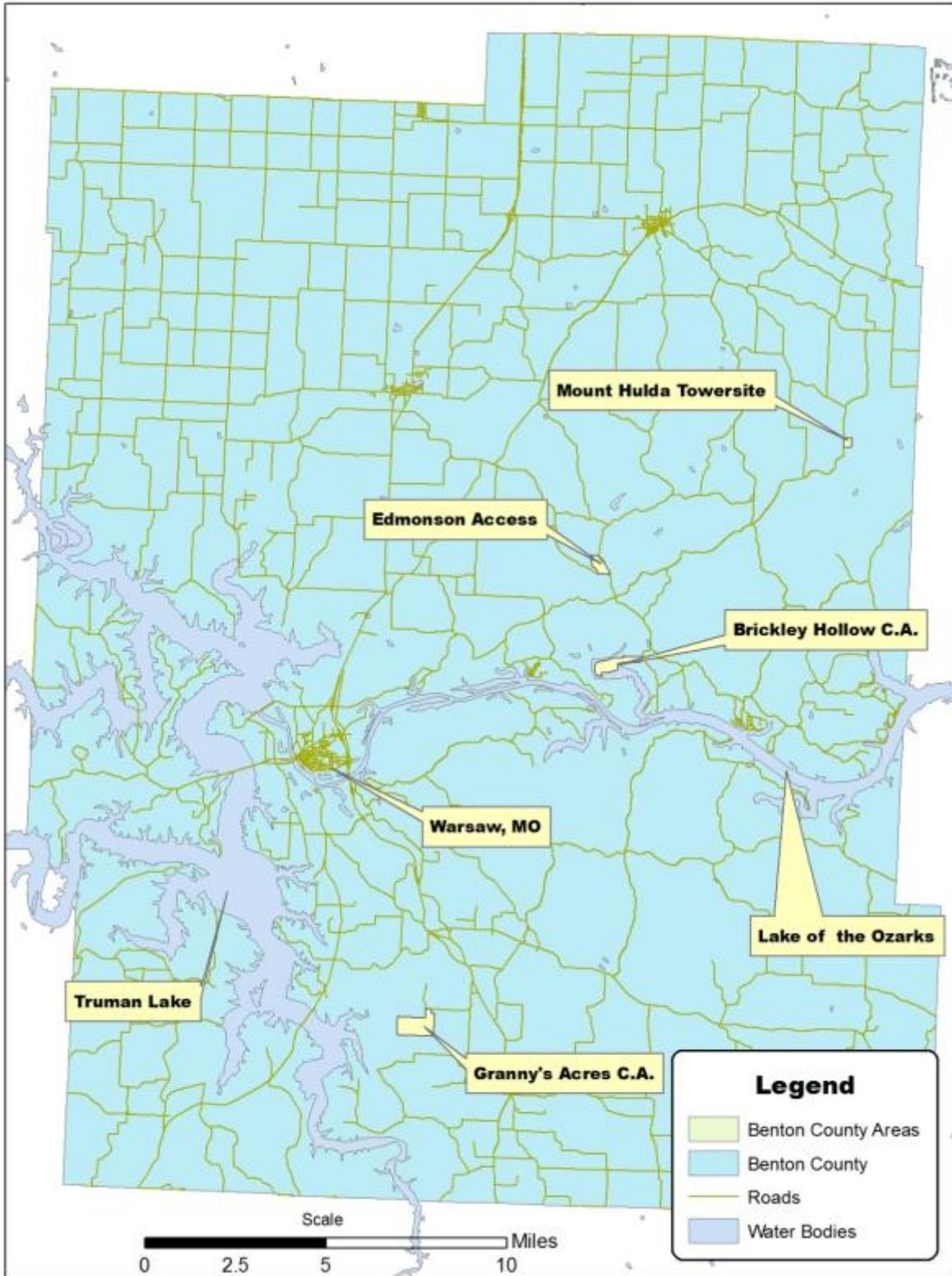
Appendices:

- Appendix 1. Benton County Forestry Areas
- Appendix 2. Edmonson Access Area Background
- Appendix 3. Area Map of Edmonson Access
- Appendix 4. Aerial Map of Cover Types at Edmonson Access
- Appendix 5. Brickley Hollow CA Background
- Appendix 6. Area Map of Brickley Hollow CA
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- Appendix 11. Granny's Acres CA Background
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Additional Appendices:

- Appendix A. Benton County Forestry Areas Management Plan Public Comments

Appendix 1. Benton County Forestry Areas



Appendix 2. Edmonson Access Area Background

Edmonson Access is located immediately north of Highway H, approximately 8.5 miles southeast of Lincoln; at Township 41 North, Range 21 West, Sections 15 and 22.

The access is located on Cole Camp Creek which flows into the Lake of the Ozarks and provides public fishing access to Cole Camp Creek. Anglers have access to approximately 0.4 miles of stream bank along Cole Camp Creek, and approximately 0.31 miles along Rose Creek, a tributary of Cole Camp Creek.

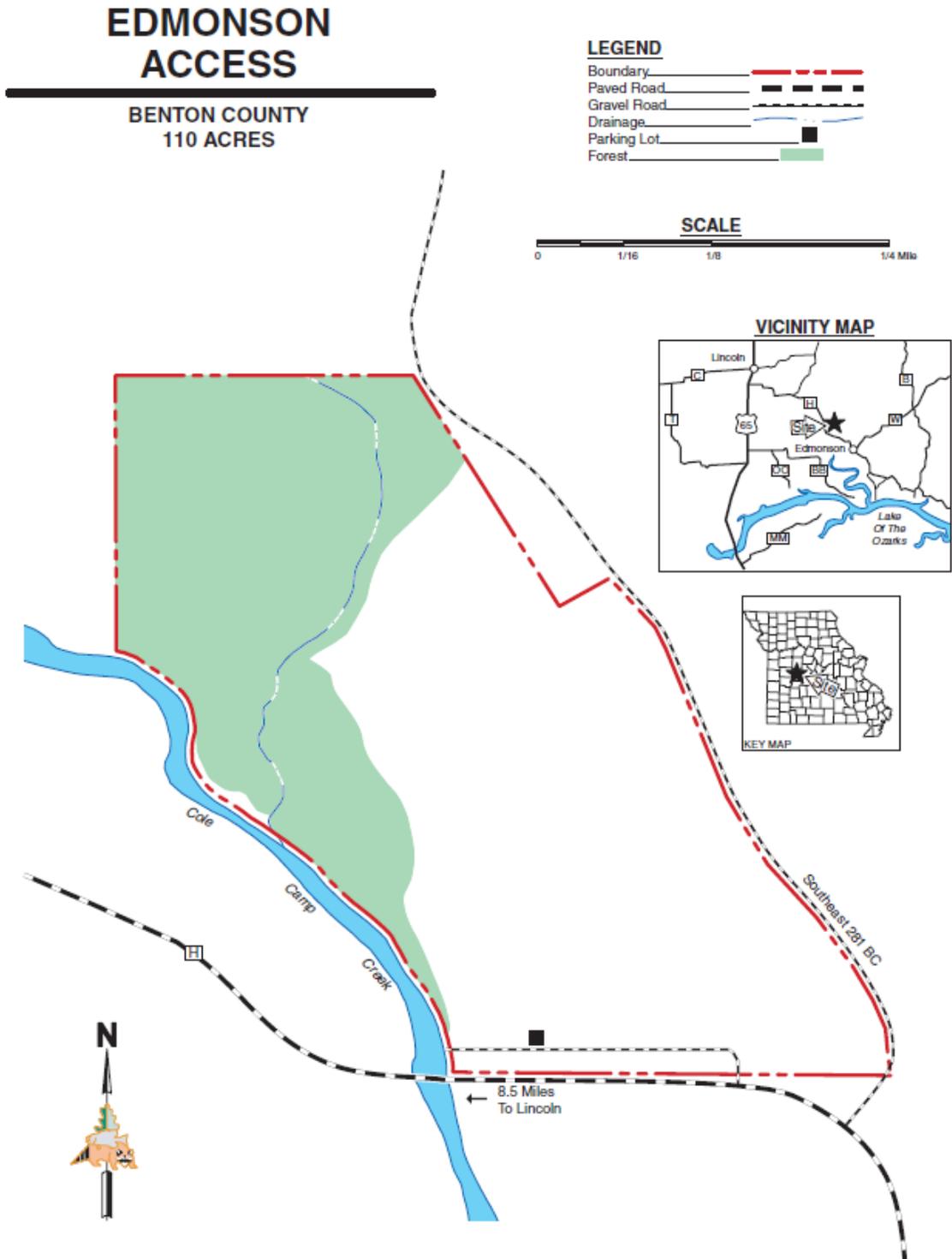
Edmonson Access was purchased in 1988 and receives moderate public use. The area includes a small amount of mature bottomland timber. Much of the remaining area, which was primarily old field when the property was purchased, has been planted to bottomland hardwoods or has naturally regenerated.

The area supports good populations of deer and turkey. Deer hunting is allowed by archery methods only.

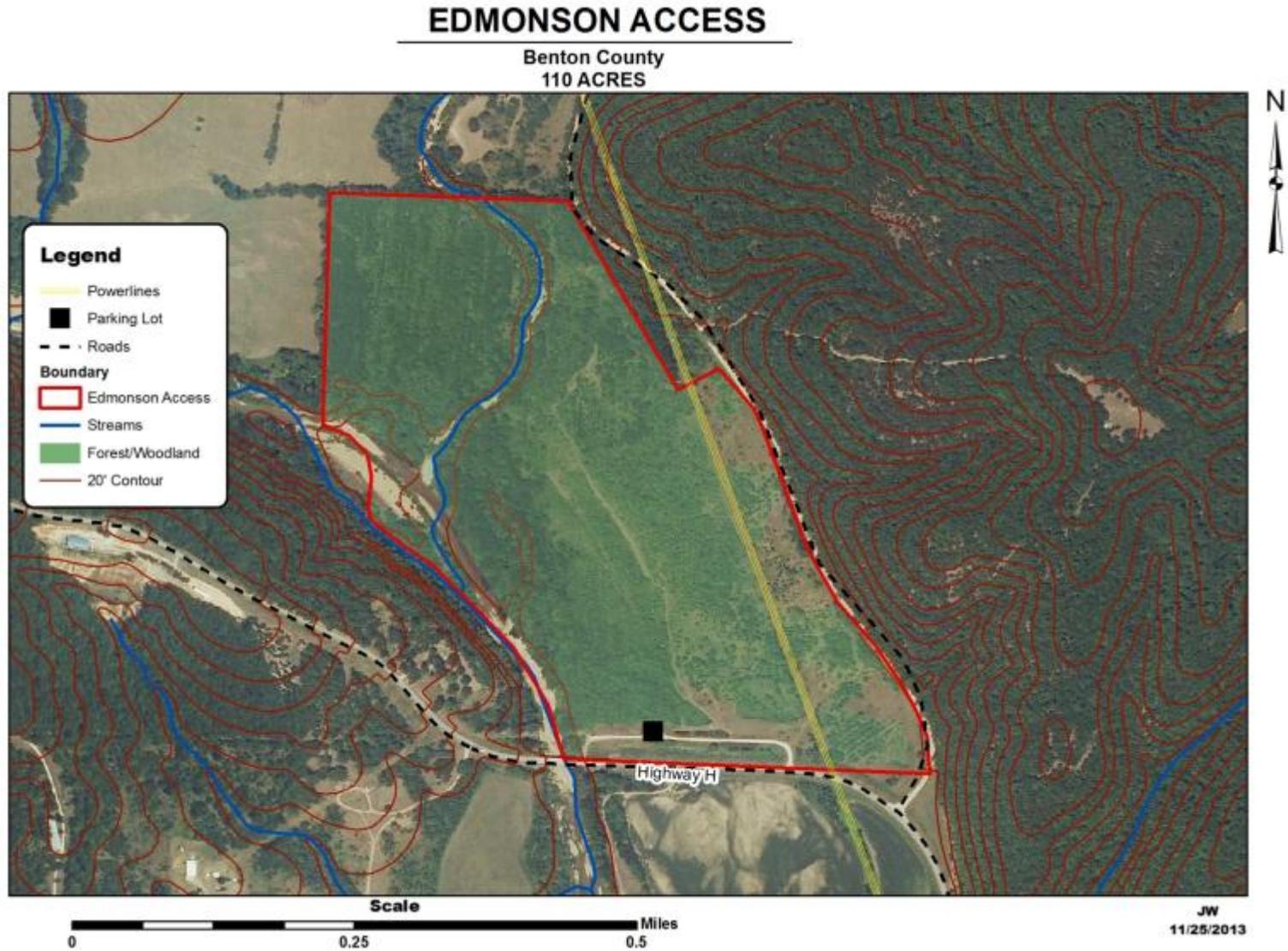
Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest/Woodland	83		75
Open Land	27		25
Total	110		100
Stream Frontage		0.71	

Appendix 3. Area Map of Edmonson Access



Appendix 4. Aerial Map of Cover Types at Edmonson Access



Appendix 5. Brickley Hollow CA Background

Brickley Hollow CA is located approximately 11.5 miles southeast of Lincoln. Its access is off Heits Point Avenue. It is in Township 41 North, Range 21 West, Sections 34 and 35; Township 40 North, Range 21 West, Section 3.

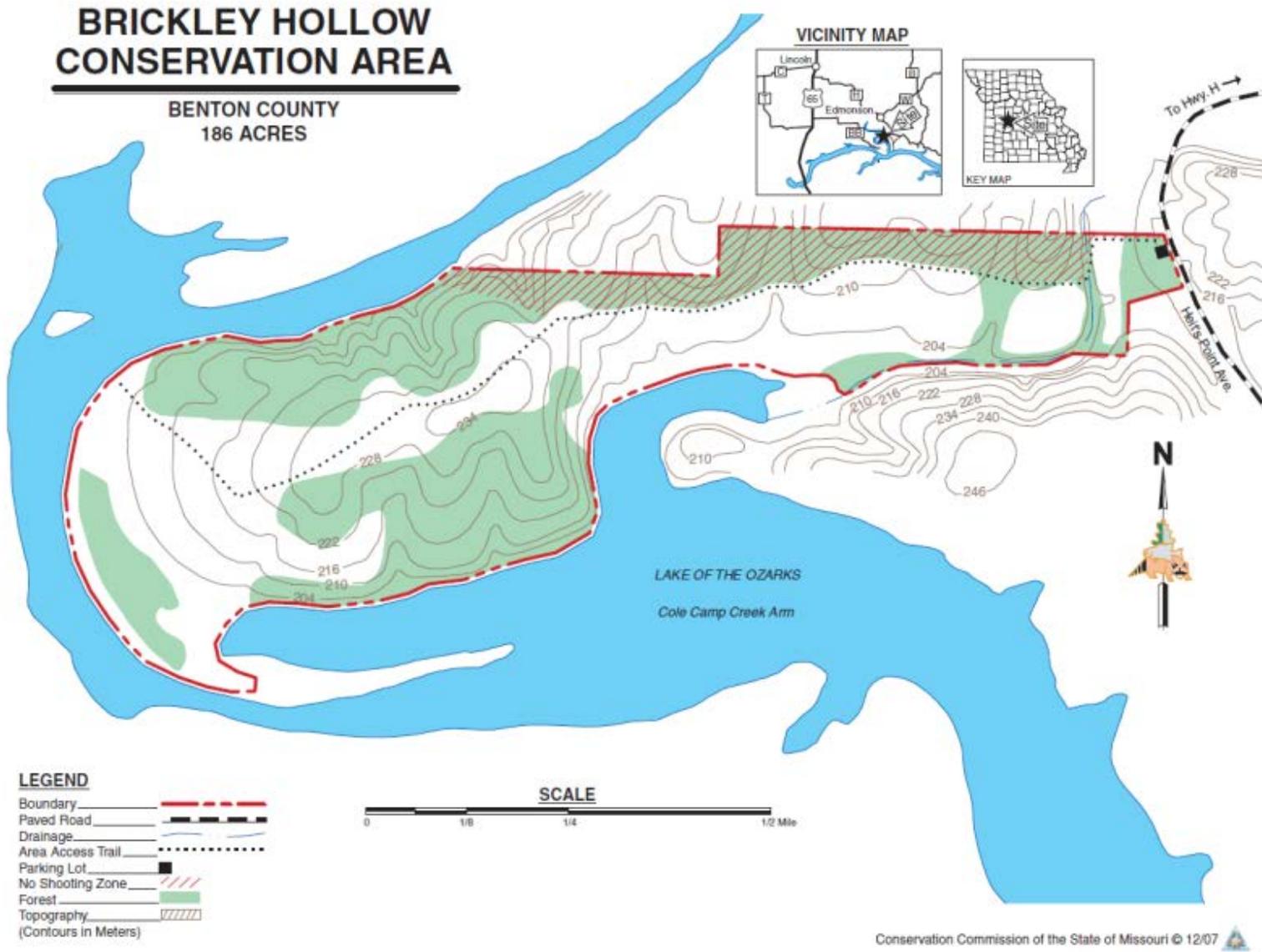
Brickley Hollow CA was purchased in 1992. The area is located on the Cole Camp arm of the Lake of the Ozarks. The majority of the area is oak/hickory woodlands. Management of the woodlands has focused on thinning and prescribed burning. The majority of the open land is old fields, which have been converted to warm-season grasses. There is also one 2-acre glade where restoration has been implemented.

The area has approximately 1.6 miles of lake frontage, which provides limited bank fishing opportunities for visitors willing to hike into the area. The area also supports good populations of deer and turkey. Deer hunting is allowed by archery methods only.

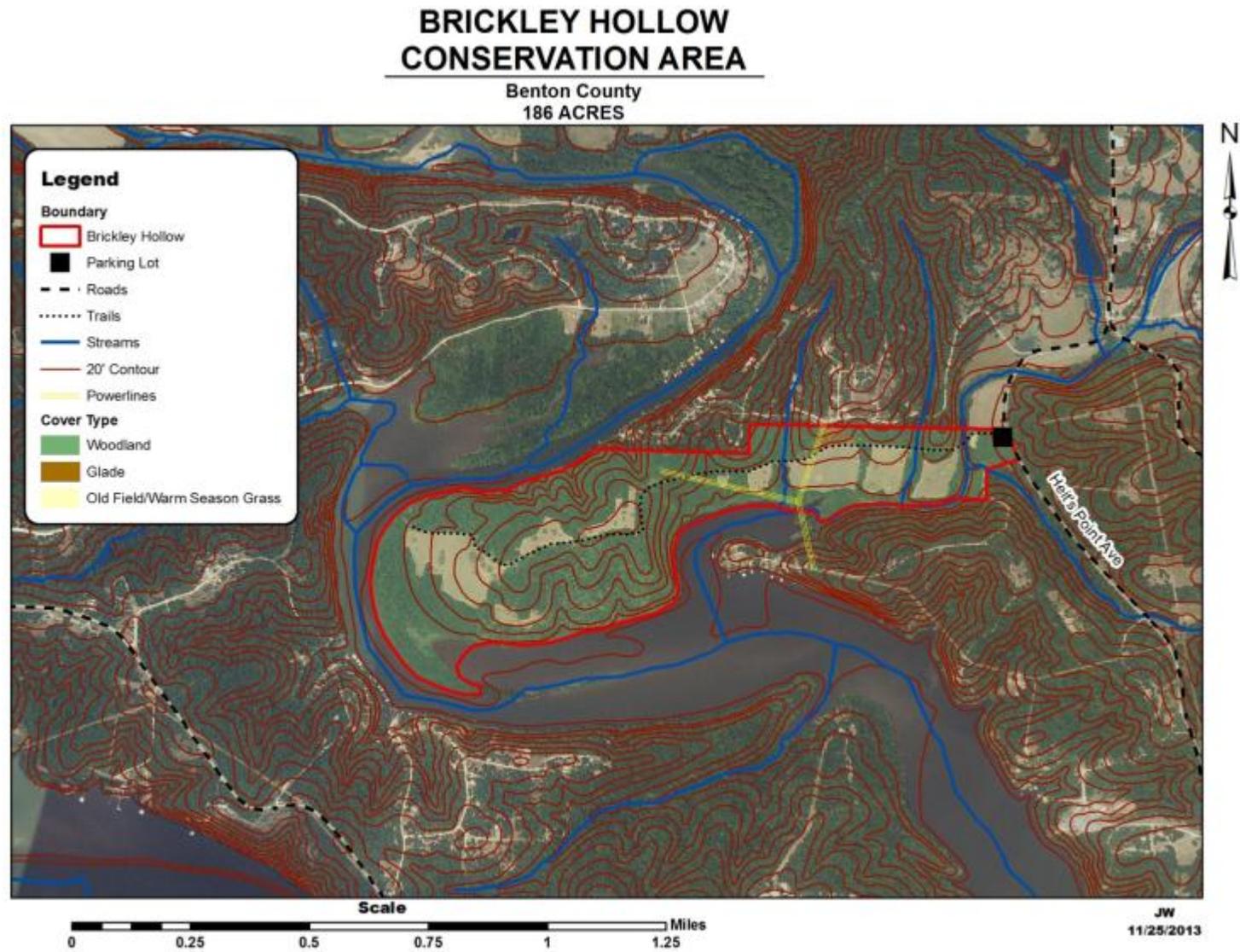
Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest/Woodland	152		82
Old Field/Warm-Season Grasses	32		17
Glade	2		1
Total	186		100
Stream Frontage		1.36	
Lake Frontage		1.61	

Appendix 6. Area Map of Brickley Hollow CA



Appendix 7. Aerial Map of Cover Types at Brickley Hollow CA



Appendix 8. Mount Hulda Tower Site Background

Mount Hulda Towersite is located adjacent to Highway W, approximately 12.8 miles southeast of Cole Camp. It is in Township 42 North, Range 20 West, Section 35.

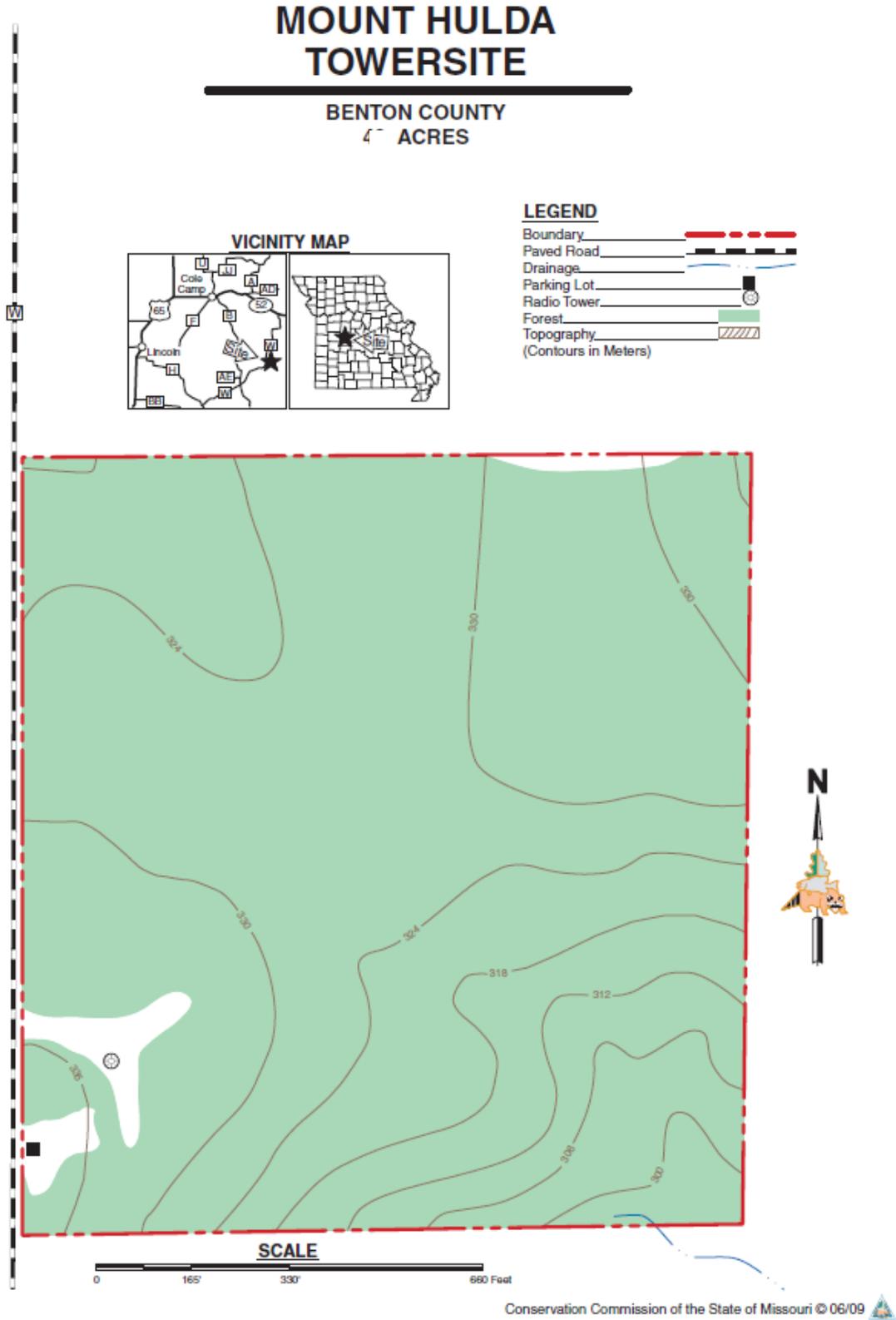
This 37.75-acre forested area was originally purchased in 1947. Originally 40 acres, a 2.25-acre tract across Highway W was sold in 2013 to an adjoining landowner. For approximately 40 years, a fire tower, used to detect wildfires, was maintained at the site. In 2008, the tower was dismantled and donated to the Cimarron National Grasslands in western Kansas. The area is now the site of a Department radio communication tower.

The area supports good populations of deer and turkey. Deer hunting is allowed by archery and muzzle loader methods only.

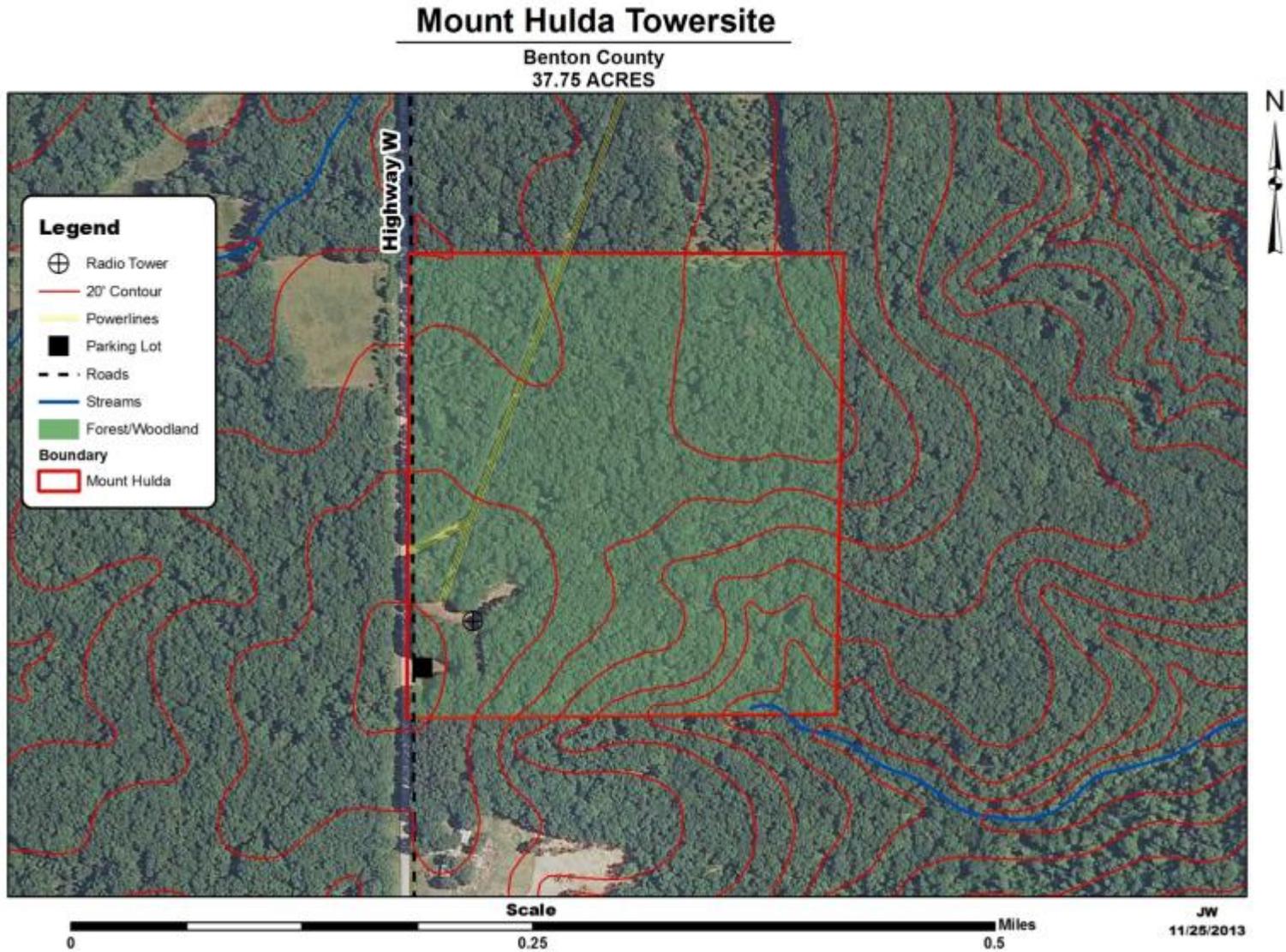
Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest/Woodland	37.75		100
Stream Frontage		0.02	

Appendix 9. Area Map of Mount Hulda Towersite



Appendix 10. Aerial Map of Cover Types at Mount Hulda Towersite



Appendix 11. Granny’s Acres CA Background

Granny’s Acres CA is located approximately 9 miles south of Warsaw on Day Road. It is at Township 39 North, Range 22 West, Sections 10 and 15.

Originally a 320-acre parcel, Granny’s Acres CA was acquired in 1965 from the University of Missouri. The land was purchased with federal Wildlife Restoration funds. Until 2008, the parcel was landlocked and the Department had no access. In 2008, the Department acquired an additional 31-acre tract, and a three-car parking lot was constructed for area visitors in 2009. Thanks to these improvements, visitors can now park at the area and hike in for hunting and nature viewing.

Managers use prescribed fire and other techniques to restore the area's dolomite glades, maintain the limestone oak/hickory woodland plant community, and restore the riparian forest along Whig Creek. These management practices maintain the area's diverse wildlife habitat. The area supports good populations of turkey, deer and squirrel.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest/Woodland	318		91
Glade	19		5
Warm-Season Grass Field	14		4
Total	351		100
Stream Frontage		1.33	

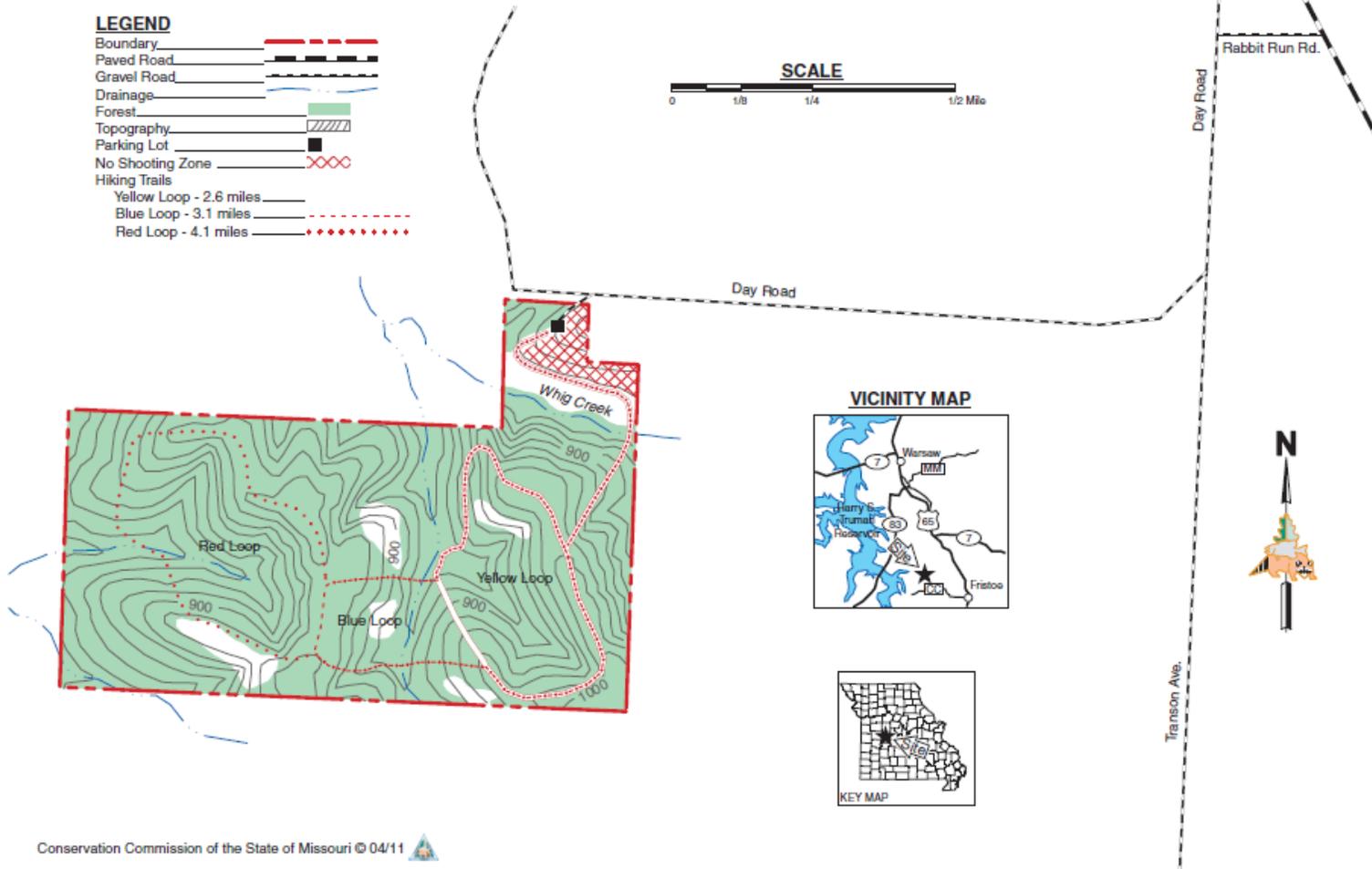
Appendix 12. Area Map of Granny's Acres CA

GRANNY'S ACRES CONSERVATION AREA

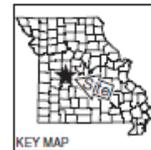
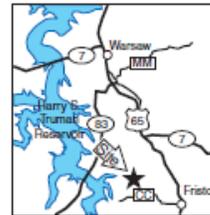
BENTON COUNTY
351 ACRES

LEGEND

- Boundary
- Paved Road
- Gravel Road
- Drainage
- Forest
- Topography
- Parking Lot
- No Shooting Zone
- Hiking Trails
 - Yellow Loop - 2.6 miles
 - Blue Loop - 3.1 miles
 - Red Loop - 4.1 miles



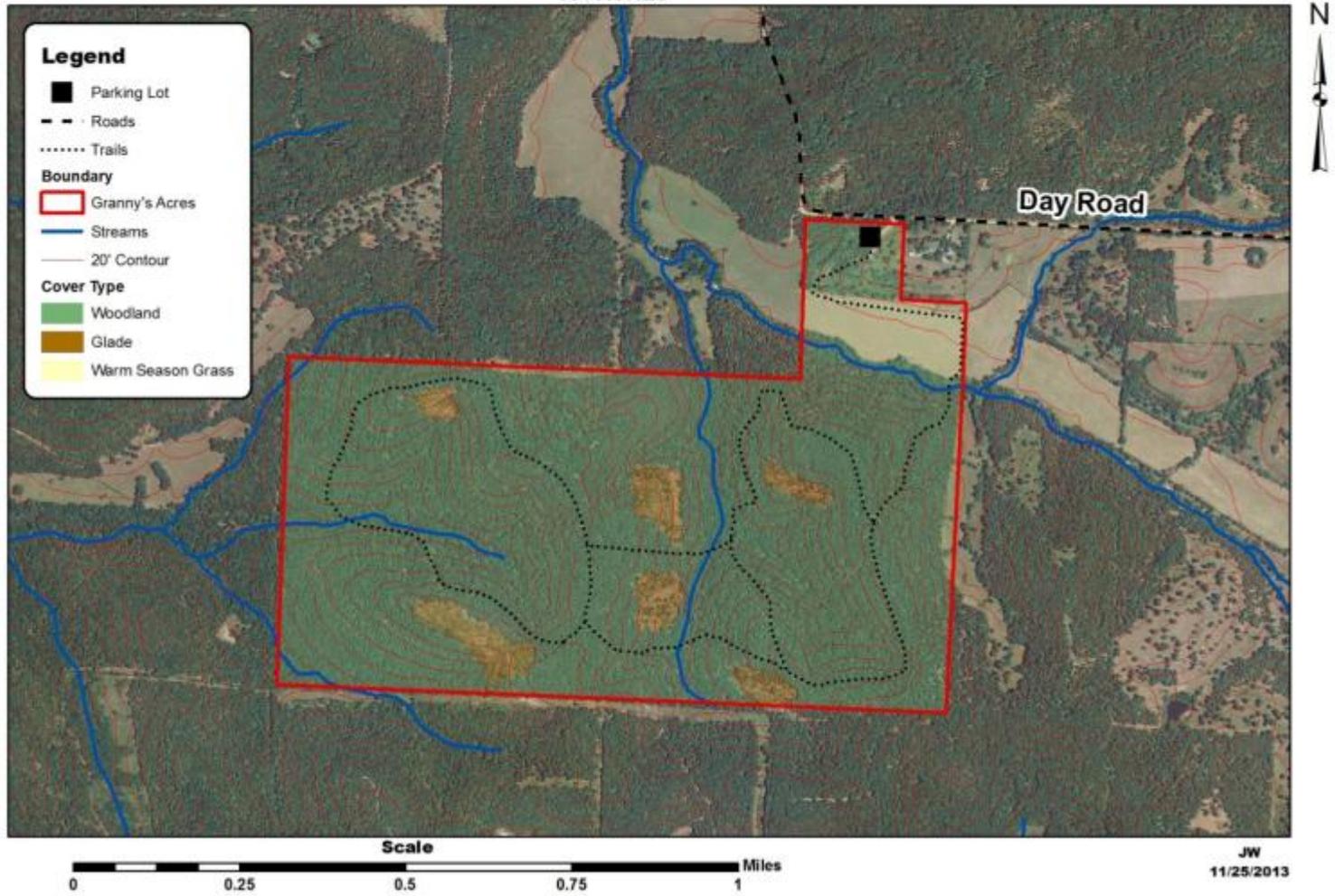
VICINITY MAP



Appendix 13. Aerial Map of Cover Types at Granny's Acres CA

**GRANNY'S ACRES
CONSERVATION AREA**

Benton County
351 ACRES



Appendix A. Benton County Forestry Areas Management Plan Public Comments

Received during public comment period (July 1-31, 2015):

We are your neighbor to the north property line of Brickley Hollow CA and are reviewing the 10 year management plan recently published for this area. Would you please email if there are any upcoming changes to the environment (i.e. Burning, Excavating or Construction) in the near future. We would really appreciate it! Thank you

I own property against Henry's Acres and the conservation area Brickley Hollow. I was told previously that these areas would be separated by a fence and I am wondering if that is now part of the plan. What are the future plans about camp grounds, boat ramp, etc.?

I have some general comments: Note my stomping grounds are In and around Benton County. First, I would like "no shooting zones" to be evaluated to allow bow hunting. It can be administered much like the urban hunting zones; e.g. Swope Park in Kansas City, MO. Two, I am very excited to see an emphasis on quail! However I don't see anything about predator control in your plans. I have a whole lot of coyotes, which is reducing my small critter population. Lastly, ATV's and mountain bikes get a lot of press for use of our protected areas. Which I really don't approve of their use... However Horse trails are neglected or restricted. I think they benefit areas by blending in to the wildlife. Additionally, these Only Electric off-road golf cart vehicles are a possible for use. If they do not tear up the trails -- I would suggest limiting the amount of horsepower which could be used. The idea is to transport not race; e.g. hauling deer stands, and harvested animals out. You are doing a great job. I wish I could join the team.