Hart Creek Conservation Area

Fifteen-Year Area Management Plan FY 2018-2032



Lisa D. Allen

Forestry Division Chief

3-28-18

Date

Hart Creek Conservation Area Management Plan Approval Page

HOH	4 18	TR	TYPA	TAT	LH cH.	A	IN AT
PLA	M	41.	TH F	U		A	ΠVI

A.J. Campbell, Resource Forester

Tim James, Wildlife Management Biologist

Craig Gemming, Fisheries Regional Supervisor

Ann Koenig, Community Forester

Chris Newbold, Natural History Biologist

Adam Doerhoff, Conservation Agent

Sean Earnst, Conservation Agent

Brian Flowers, Outdoor Skills Specialist

Ryan Luekenhoff, Private Land Conservationist

CENTRAL REGION

RCT Chair

Showwood State I

Date

FORESTRY DIVISION

Forest Management Chief

Signatura

Date

Signature

OVERVIEW

• Official Area Name: Hart Creek Conservation Area, #9732

• Year of Initial Acquisition: 1997

Acreage: 657 acresCounty: BooneRegion: Central

• **Division with Administrative Responsibility:** Forestry

• **Division with Maintenance Responsibility:** Forestry

• Statements of Purpose:

A. Strategic Direction

Manage the area for wildlife, forest, and woodland resources; and provide compatible recreational opportunities with access to the adjacent Katy Trail.

B. Desired Future Condition

The desired future condition of Hart Creek Conservation Area (CA) is a healthy forest/woodland complex with trail access, hunting, and nature viewing opportunities.

C. Federal Aid Statement:

NA

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- **A. Priority Areas:** Mid-Missouri Riverlands Forest and Woodland Conservation Opportunity Area, Mid-Missouri Riverlands Wetland Conservation Opportunity Area, Priority Forest Landscape
- 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: NoneC. Springs: None
- **D.** Other: The area includes four natural community types: mesic loess/glacial till forest, dry-mesic loess/glacial till forest, dry limestone/dolomite cliff, and dry limestone/dolomite woodland.

III. Existing Infrastructure

• One parking lot

- Multi-use hike/bike trail, 2.2 miles
- Katy Trail Camping Area, accessible by the Katy Trail
- One footbridge across Hart Creek at parking lot
- One wooden overlook
- One low-water crossing
- Hart Creek Lake, 2-acre fishing lake

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations: 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:** Permission to cross the Katy Trail for maintenance on southwest side.
- **D.** Cultural Resources Findings: Yes, records kept with Missouri Department of Conservation (Department) environmental compliance specialist. Managers should follow best management practices for cultural resources found in the Department Resource Policy Manual.
- **E. Endangered Species:** Endangered species are found in the area surrounding Hart Creek CA and may be present on the conservation area. Area managers should consult annually with the natural history biologist.
- F. Boundary Issues: None

MANAGEMENT CONSIDERATIONS

V. <u>Terrestrial Resource Management Considerations</u>

Hart Creek CA contains four different forest types:

- 1) Steep, dry, west-facing dolomite slopes on the western boundary of the property. These slopes contain cedar, blue ash, and chinquapin oak.
- 2) Productive east- and north-facing slopes (Missouri River Hills) that contain, sugar maple, northern red oak, basswood, and white oak.
- 3) Early successional stands that were once cleared and have grown back to cedar, elm, various oaks, and other pioneer species located along the bottom and lower slopes.
- 4) Bottomland stands along Jemerson Creek and Hart Creek. These stands are primarily cottonwood, silver maple, and box elder.

Challenges and Opportunities:

- 1) Manage forest, glade, and woodland natural communities.
- 2) Control invasive species.
- 3) Maintain open field in the bottoms.

Management Objective 1: Enhance, restore, and protect forest, glade, and woodland natural communities.

Strategy 1: Manage the forest and woodland natural communities to ensure their health by using a variety of tools, including, but not limited to, pre-commercial thinning, chemical treatments, and prescribed fire. Access is limiting for commercial management in this planning period. An area inventory was conducted in FY17. (Forestry)

Strategy 2: Create and retain standing dead, loose-bark trees for bat habitat, as described in the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014). (Forestry)

Strategy 3: Implement best management practices to prevent soil erosion when conducting forest management. Follow recommendations per the *Missouri Watershed Protection Practice Recommended Practices for Missouri Forests:* 2014 Management Guidelines for Maintaining Forested Watersheds to Protect Streams (Missouri Department of Conservation, 2014) and the *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* (Missouri Department of Conservation, 2014). (Forestry)

Strategy 4: Reduce erosion throughout the area by establishing and/or maintaining area fields in native cover year-round. (Forestry)

Management Objective 2: Control invasive species, diseases, and insect infestations.

Strategy 1: Periodically monitor the area for invasive vegetation, diseases, and insects. (Forestry)

Strategy 2: Use appropriate strategies to suppress any infestations that may develop, including, but not limited to, mechanical and pesticide treatments. (Forestry)

Management Objective 3: Maintain open bottomland fields on southeast side of the area to provide habitat for game species.

Strategy 1: Control and setback woody succession using appropriate methods. (Forestry)

Strategy 2: Monitor the area for invasive species. Suppress any infestations that may develop using appropriate methods. (Forestry)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Maintain a high-quality sport fishery.
- 2) Maintain amphibian and reptile habitat.
- 3) Protect and maintain the area's riparian corridors, instream areas, and watershed.
- 4) Provide quality habitat to support a diversity of aquatic species.

Management Objective 1: Maintain a high-quality sport fishery in Hart Creek Lake.

Strategy 1: Monitor Hart Creek Lake to determine the fishery's current status, potential, and/or management needs. Conduct electrofishing sampling every three years, or as needed. (Fisheries)

Management Objective 2: Provide suitable pond habitat for amphibians and reptiles.

Strategy 1: Chemically renovate ponds with unbalanced or undesirable fish communities by FY20. Ponds will be maintained as fishless to promote amphibian, reptile, and/or other wildlife management. (Fisheries)

Management Objective 3: Ensure that the Hart Creek CA demonstrates best management practices in the riparian corridor, watershed, and stream management.

Strategy 1: Maintain at least a 200-foot wooded corridor (100 feet on each side of stream) on all area streams. Follow *Missouri Forest Management Guidelines: Voluntary Recommendations for Well-Managed Forests* concerning riparian corridor management (Missouri Department of Conservation, 2014). (Forestry, Fisheries)

Strategy 2: Enhance watershed and improve in-stream habitat according to the Watershed and Stream Management Guidelines for Lands and Waters Managed by Missouri Department of Conservation (Missouri Department of Conservation, 2009). (Fisheries)

Strategy 3: Inspect all streambank stabilization practices annually until woody vegetation is well established after completion and undertake appropriate corrective and maintenance activities, if deemed necessary. (Fisheries) Strategy 4: Periodically monitor area terrestrial and aquatic habitat conditions to ensure that best management practices are used to limit erosion and sediment input into streams. (Fisheries)

Management Objective 4: Maintain and improve water quality and critical stream habitat areas for fish and other aquatic species to support diverse aquatic biota.

Strategy 1: Develop and implement management recommendations, as needed, to improve instream water quality, habitat, or fish/macro-invertebrate communities. (Fisheries)

Strategy 2: Inventory area stream fish communities by electrofishing and seining to determine species composition and status by FY21. (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide quality wildlife hunting opportunities.
- 2) Maintain the area in a desirable condition.
- 3) The Hart Creek CA creeks flood during large rain events sending water into the parking lot and up into the edges of the fields. The flooding also silts in the low-water crossing making it impassable.
- 4) Maintain a usable trail connection from Hart Creek Road to the Katy Trial.

Management Objective 1: Manage for turkey, deer, rabbit, and squirrel habitat to provide quality hunting opportunities.

Strategy 1: Continue to manage for natural communities using management techniques, such as prescribed fire, mechanical and chemical methods, and forest thinning. (Forestry)

Strategy 2: Continue to search for and treat invasive species throughout the area. (Forestry)

Management Objective 2: Maintain area infrastructure at current levels.

Strategy 1: Continue to mow the trail. (Forestry)

Strategy 2: Continue to mow and keep the camping spots near the Katy Trail open and useable. (Forestry)

Strategy 3: Continue to maintain the parking lot. (Design and Development)

Strategy 4: Remove silt and debris from the low-water crossing after flood events. (Design and Development)

Management Objective 3: Maintain the connection to the Katy Trail.

Strategy 1: Mow the trail from the parking lot to the camping spot next to the Katy Trail several times a summer. (Forestry)

Strategy 2: Remove downed trees or hazard trees from the trail, as needed. (Forestry)

Management Objective 4: Continue to provide public education concerning Hart Creek CA aquatic resources.

Strategy 1: Develop and maintain signs and displays, as needed, that explain area regulations and management efforts. (Forestry)

Strategy 2: Disseminate information on Hart Creek CA's aquatic resources using Department publications, local newspapers, and the Department's public website, as appropriate. (Fisheries)

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Terrestrial Resource Management															
Objective 1															
Strategy 1		X	X												
Strategy 2		X	X												
Strategy 3		X	X												
Aquatic Resource Management															
Objective 1															
Strategy 1	X			X			X			X			X		
Objective 2															
Strategy 1	X	X	X												
Objective 4															
Strategy 2			X	X											

APPENDICES

Area Background:

The 657-acre Hart Creek Conservation Area is about 1 mile north of Hartsburg, near the Missouri River. It was acquired through two purchases. In 1997 the Missouri Department of Conservation purchased the initial 574-acre tract from Vernon and Alta Fay Renner. The other adjoining 83 acres was obtained from John W. Shettlesworth in 2000. Because this area borders the Missouri River floodplain, it has typical "River Hills" habitat that consists of mostly densely wooded steep terrain. The Katy Trail serves as the area's southwest boundary (Figure 1).

The area is open to the public from 4 a.m. to 10 p.m. daily. Special facilities include a parking lot and a foot and bike trail through the area connecting the parking lot to the Katy Trail. There is an overlook on the top of the main ridge overlooking the Hartsburg Bottoms and the Missouri River.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Forest and Woodland	624		95
Old Field	25		4
Savanna	5		1
Lakes	2		<1
Glade	1		<1
Total	657		100
Streams – Hart Creek		1.0	
Streams – Jemerson Creek		1.0	

Public Input Summary:

The draft Hart Creek Conservation Area Management Plan was available for a public comment period May 1 through August 31, 2017. The Missouri Department of Conservation received 57 comments from 55 respondents (Appendix A). The Hart Creek Conservation Area 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.

<u>Department responses to themes and issues identified through the Hart Creek Conservation Area</u> Management Plan public comment period.

Terrestrial Resource Considerations

Forest/Woodland/Glade Management

Opposes clear cutting/even-aged management.

Even-aged management is an appropriate method for ensuring continued abundance of oak trees when shade tolerant species, such as sugar maple, compete for growing space. As access is not feasible currently for a commercial harvest, management of this planning cycle will focus on improving tree health and diversity while addressing invasive species.

Suggests managing Hart Creek CA as an urban forest or "wild area."

Hart Creek is managed for many uses, including recreation. Without active care, "wild areas" will become overrun with invasive plants like bush honeysuckle. Hart Creek CA will be managed to ensure a healthy and diverse forest and plant community while providing opportunities for hiking, camping, fishing, and hunting.

Opposes maple removal.

A mixed oak/hickory forest cannot maintain itself long-term when sugar maple is abundant; although sugar maple will likely become dominant in some stands, we will prescribe management to promote oak and hickory species reproduction and recruitment. In addition, oak and hickory mast is an important food for many wildlife species.

Suggest including more details about the forest management on the area.

The area plan is a strategic-level document that informs the overall management of the area. We seek public input during the development of this document. Implementation plans are more detailed and deal with operational level activities.

Opposes commercial logging on the area.

Commercial harvesting is a tool that can be used to implement management prescriptions as needed. Other tools or management actions, such as non-commercial tree cutting, can also provide benefits as well. Access for commercial harvest is not feasible at this time; therefore, a timber sale is not being recommended in this planning cycle.

Supports selective harvest of trees.

Selective harvest is a method that can be used to harvest timber. All methods will be considered based on the management objective.

Supports removal of maples on the area to promote growth of hardwood species.

Thinning practices that reduce the density of wooded stands and reduce the abundance of maple are planned for this area.

Supports using controlled burns on the area.

Prescribed burns have been conducted on the area in the past, and we will continue to use prescribed fire as a management tool to aid in the management and restoration of natural communities.

Appreciates that the Department follows the best management practices for forest management and watershed protection.

Thank you for taking the time to understand our management approach and guidelines. For more information on the Missouri Forest Management Guidelines, please visit https://mdc.mo.gov/trees-plants/forest-care/missouri-forest-management-guidelines.

Would like to be able to harvest sugar maple timber for personal use.

Access for harvest is limited at this time; therefore, permitting the harvest of wood for personal use will be limited in this planning cycle.

Field Management

Wonders purpose of open fields. Could these be managed as savanna, glade, or tall-grass prairie to provide more wildlife habitat?

The open fields are currently habitat for a variety of wildlife species. Management of these fields is a lower priority than the management of the forests and woodlands that dominate the area.

Suggests managing for quail.

Quail are a desirable species for many reasons, but the area lacks the level of open habitat needed to suit them.

Wonders if there are plans to manage for ruffed grouse on this area.

There are currently no plans to create the type of early successional forests on the area that ruffed grouse need. Most ruffed grouse specific management in Missouri takes place in southern Montgomery and Warren counties.

Invasive Species Management

Supports the control of invasive species.

Invasive species control is important to the Department and efforts are made to contain them.

Is concerned that invasive honeysuckle (from adjacent properties) will spread if areas are clear cut.

Bush honeysuckle is already spreading throughout Boone and surrounding counties. Forest management actions or inaction will likely do little to influence the spread. Routine invasive species control is planned for this area.

Endangered Species

Would like to know what species of conservation concern are on or near the area. Wonders how the Department plans to manage for these species.

Records for species of conservation concern are kept in the Department's Heritage Database. Area managers consult the database annually to ensure that management actions will not interfere with species recovery efforts.

Concerned that logging could harm endangered bats.

Best management practices for all management actions are approved within the context of safe dates for Indiana, long-eared, and grey bats.

Aquatic Resource Considerations

Would like to know more details about the chemical renovation of area ponds.

The small ponds on Hart Creek CA were once farm ponds created as livestock watering holes. These ponds are too small or too shallow to support healthy game fish populations, but would be great amphibian habitat. Amphibians lay their eggs in water. The eggs and larvae of some species of amphibians only survive in bodies of water that do not contain fish, otherwise they would be eaten as prey. Therefore, in order to convert these ponds to amphibian ponds, fish species need to be removed. This is most effectively done by applying a chemical, called Rotenone, which is safe when applied properly. This chemical degrades very quickly in the environment and is only toxic to gilled species in the body of water where it is applied.

Wonders what fish species are being managed for in Hart Creek Lake.

Currently Hart Creek Lake contains largemouth bass, bluegill, crappie, green sunfish, and some bullhead catfish. The species in the lake are sampled every three to four years and are managed through fishing regulations.

Wonders if water quality is monitored.

Water quality is not monitored on a regular basis at Hart Creek Lake or Hart Creek, unless managers notice there is a problem (e.g., a fish kill).

Public Use Considerations

Hunting

Would like to be able to look-up online if the area is closed for other uses during hunting seasons.

The area does not currently close to other uses during any hunting seasons. Information about areas regulations can be found on-line at https://nature.mdc.mo.gov/discover-nature/places.

Trails

Suggests moving lower section of trail.

Routine maintenance on the area includes mowing the lower portion of the trail.

Suggests adding a pathway around the pond to provide easier access to fishing and frog gigging opportunities.

The Hart Creek Lake dam is mowed regularly as part of routine area maintenance and provides partial access to the lake. Trail expansion is not currently under consideration on this area due to infrastructure maintenance limitations.

Suggests adding trail mileage to the area brochure.

We will consider adding it to the next version of the brochure.

Suggest adding a trail loop to be able to see more of the area.

Trail expansion is not currently under consideration on this area due to infrastructure maintenance limitations.

Suggest adding equestrian trails to connect the Katy Trail with Hart Creek CA.

Trail expansion is not currently under consideration on this area due to infrastructure maintenance limitations.

Administrative Considerations

Suggests better maintenance of boundary lines.

Boundary lines are maintained on a five-year schedule. They were last maintained during the winter of 2016/2017. Please contact the area manager if there is specific concern on a boundary and it will be addressed.

The plan should indicate whether more land will be acquired to expand the conservation area.

The Department does buy land from willing sellers, and offered land that adjoins an existing conservation area is generally considered a higher priority by the Realty Committee and the Conservation Commission.

Suggests expanding the conservation area since the urban areas surrounding it are continually expanding.

The Department does buy land from willing sellers, and offered land that adjoins an existing conservation area is generally considered a higher priority by the Realty Committee and the Conservation Commission.

General Comments

Would like the Department to provide a public meeting/hearing or walking tour regarding the Hart Creek Conservation Area plan.

A public meeting was held at the 80th Anniversary Open House event in August 2017. A follow-up meeting was held November 1, 2017.

Concerned management plan is too general.

The area plan is a strategic level document that informs the overall management of the area. We seek public input during the development of these documents. Implementation plans are more detailed and deal with operational level activities.

Would like the comment period for this plan to be extended to a 90-day comment period.

The comment period for this plan was extended to a total length of 120 days.

Wonders if there are Indian burial mounds on the area.

Cultural resources are present on Hart Creek CA, and policies exist for protecting these resources during management activities.

Appreciates the Department acquiring and maintaining Hart Creek CA for the public.

Thank you for participating in the area planning process.

Suggests making personal comment with neighboring landowners when inquiring about crossing their property for a timber harvest.

Personal contact via phone was the method most recently utilized to contact neighbors in regard to specific requests or communications. Additionally, a general mailing was sent to neighbors to inform them of the area plan public comment period.

Enjoyed viewing the solar eclipse at Hart Creek CA.

We had concerns that our small parking lot would limit viewing opportunities on this highlighted area, but it all worked out well and we are glad that folks enjoyed the area for this spectacular event.

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 Department of Conservation. (2014). *Missouri forest management guidelines:*Voluntary recommendations for well-managed forests. Jefferson City, MO: Conservation Commission of the State of Missouri.
- Missouri Department of Conservation. (2014). Missouri watershed protection practice recommended practices for Missouri forests: 2014 management guidelines for maintaining forested watersheds to protect streams. Jefferson City, MO: Conservation Commission of the State of Missouri.
- Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

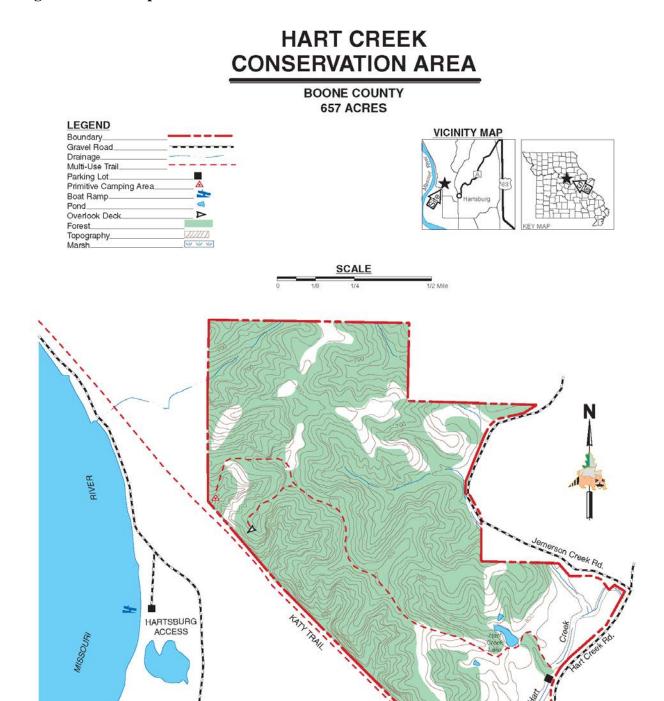
Figure 3: Topographic Map

Figure 4: Current Vegetation Map

Additional Appendices:

Appendix A: Hart Creek Conservation Area Management Plan Public Comments

Figure 1: Area Map



Conservation Commission of the State of Missouri © 09/15 🧥

Figure 2: Aerial Map



Figure 3: Topographic Map

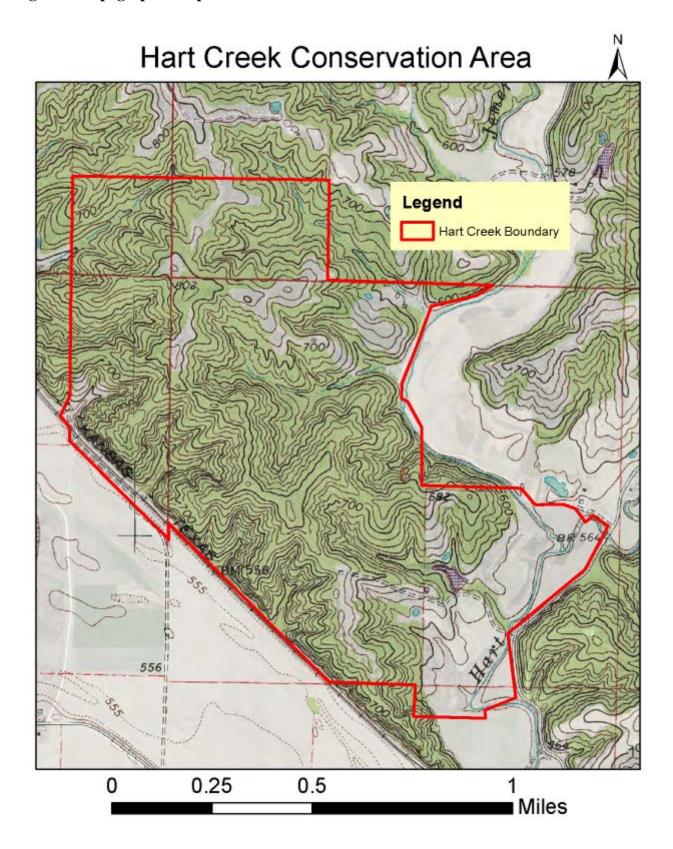
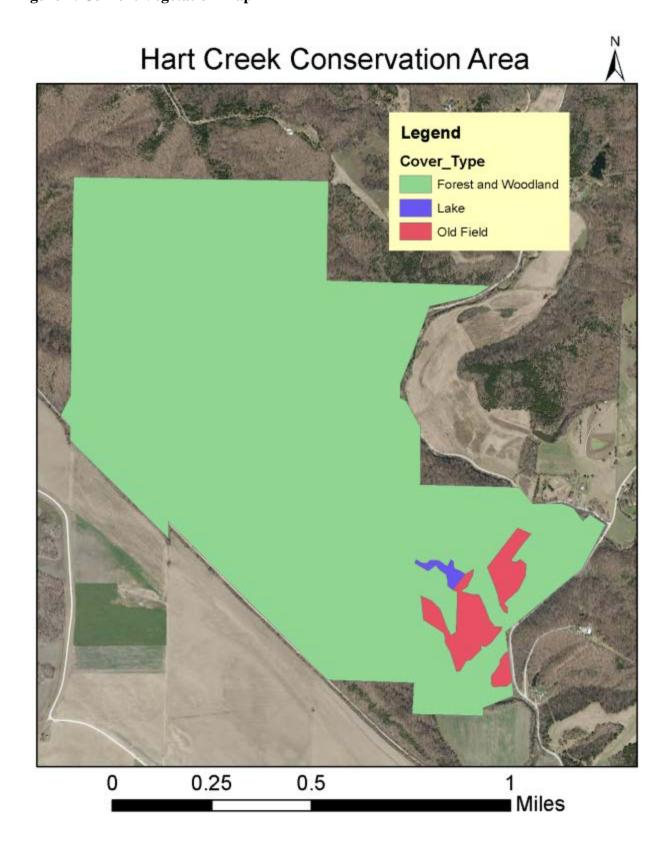


Figure 4: Current Vegetation Map



Appendix A: Hart Creek Conservation Area Management Plan Public Comments

Received during public comment period (May 1 through August 31, 2017):

Please no clear cutting. Thank you.

Several times we have visited this area only to find it closed due to hunting which is fine. It is remote, and it sure would be nice if notifications of closure would go up online and save a trip there for hiking when it and for that matter others are closed for hunting seasons.

I just discovered this comment period for the Hart Creek area. As a two-decade citizen of Columbia, one of my favorite aspects is the proximity of *quality* wildlife-areas for hiking, bird-watching, wildlife viewing, etc. I take my two boys out regularly, and their independent school has an Outdoor Day every Friday for this same purpose.

As a Missouri citizen, I greatly value our Department of Conservation, and their recommendations for land management. I do hope that their plans may be free from political influence from JC, and the attached plans of exploitation from big companies who seek to plunder the Commons. Conservation areas Do Not Exist for one company to come clear-cut at the expense of all the life and joy of everything and everyone else. If logging is to be done, it MUST be done in a manner that does not use the heavy machinery that rips apart the entire ecosystem. Missouri has MULTIPLE parties of foresters who use mules for the work, and their impact is beautifully minimal, with best management practices upheld, instead of ignored.

It is my most sincere hope that any management plan will be extremely clear and accessible to the public--neighboring land owners and all who have a stake in Conservation Department Lands have the right to know how that land shall be managed. Please include a public hearing on the plan and/or a walking tour of the Hart Creek area with an MDC forester—setting a new democratic precedent for explaining plans in this public area.

Thank you for your efforts.

- 1. A more detailed plan to comment on. This plan is a too, broad of list and could be very detrimental to the natural area and the general public' interest.
- 2. Area should be left alone to nature, or managed very lightly with thinning and fire to release oak forests on the drier slopes. Maple woods on north and east slopes should be left alone.
- 3. Slopes are steep and vulnerable to erosion. Clear cuts, logging roads, skidders etc should not be used.
- 4. Hart Creek should be managed as an urban forest. It's near Ashland and between Jefferson City and the rapidly increasing population of Columbia and is accessible from the Katy Trail. It needs to be managed for both non-hunting recreation as well as hunting, but in separate areas & not for timber logging.
- 5. Support control of invasives like honeysuckle though more details about herbicides and methods to be used are needed.

Please extend the comment period for this area for 90- days in order to have more time to review.

I have been familiar with this area since it was first presented to MDC as a potential acquisition. Given its location along the Katy in a portion of that trail that lacks primitive camping opportunities, and its river hills woodland values, I find the stated plan to be appropriate, with 2 reserved comments.

The use of the term "even aged" management of the timber inevitably brings to mind clear cuts. Since that seems incompatible with much of the rest of the stated management practices standards recited, that term seems inappropriate, or at least would benefit greatly from some explanation of the limits and purposes of any even aged management.

And I have been contacted by neighbors who reported receiving their notice letters that included a request to utilize their private drives, through the properties where they reside, for purposes related to timber harvest. As far as I have been able to determine, there has been no advance personal contact or explanation of MDC intentions by staff. Their reaction has predictably been one of alarm and negative responses. While I recognize that staff does not luxuriate in free time, if such access is indeed a serious interest, it would have served far better to have made personal contact before the property owners received such a request by mail. That was a method designed to fail.

As always the efforts at ecologically balanced BMPs are very much appreciated. The reference to controlled burning is a welcome advance in management, and the pervasive issue of Maple Encroachment in particular would be far less troublesome if periodic litter burns were still occurring as they certainly did in the forest's natural state. Now there is a matter for neighbors' need for explanations. I wish you well.

These comments are submitted on behalf of the Sierra Club, Missouri Chapter which has 9000 members in the state.

Thank you for the opportunity to comment on Hart Creek Conservation Area management plan.

On page two the draft mentions that species of conservation concern are known from the area. On page three the draft states no endangered species are known in the area but are found in surrounding areas. Then on page 4 there is reference to the need to maintain loose bark trees for bat habitat. It would be helpful to know what species of concern are involved and what endangered species are nearby. We assume that MDC would try to create more habitat for those species in hopes of supporting existing species of concern and recruiting endangered species from surrounding areas if those populations could grow. Whatever additional information MDC can provide would relay to the public the agency's commitment to quality wildlife habitat for species in need.

Page four, strategy six refers to reducing erosion and maintaining area fields in native cover. More information on the role of these fields would be helpful. What species depend on them? Also could these fields be restored to more natural open habitat which would also provide wildlife benefits? Savannas, glades, tall grass prairie areas, meadows etc. could be considered. If MDC feels these areas need to be kept in the less natural "field" environment what is the reasoning and what is missing?

Page 4, Management Objective 1 includes Strategy 1, which refers to controlling sugar maples to create more natural forest communities based on 2017 inventory. It would be helpful to know more about that inventory and if MDC sees any role for maples in the forest community. The draft does not describe the extent to which maple component will be reduced.

The MDC website current online information for Hart Creek Conservation area mentions the importance of colorful fall foliage as a benefit for hikers, bikers etc. The website states: " Spectacular Fall foliage display along the trail."

Is the maple component part of that fall foliage and if so will the planned management activities reduce this attractive feature of the area? We encourage MDC to leave a maple component.

We strongly support efforts to remove invasive species such as Autumn Olive and honevsuckle.

The draft mentions forest and woodland management involving timber stand improvement, salvage cutting, timber harvesting, planting, prescribed burning etc. Since this draft covers years 2018 through 2032 it could provide some perspective on the amount of timber harvesting expected over time. We recommend that MDC seek to apply only uneven-aged management. The concerns raised could be met through group selection and individual tree selection.

Hart Creek area is close to two significant urban areas and is popular with many of their residents. It would be helpful to know what MDC thinks the current recreational use is and is expected to be in the next 2 decades. What balance is there between consumptive and nonconsumptive uses in the area?

Also Strategy 1 as part of Management Objective 1 is mentioned on page 4 but is not included in the chart on page 8. The headline subscript on page 8 is a bit confusing "strategies are considered ongoing unless listed in the following table". So we assume the strategy of limiting sugar maples is ongoing. But some other key strategies seem then oddly limited in the chart on page 8.

On page 8, Objective one, only strategy one is projected beyond 2020. Why is this? Strategies three and four are important for wildlife and non-timber dominated communities. These too should be priorities in the future, why are these strategies not ongoing?

A similar imbalance for Aquatic resources is found on page 8. There only objective one regarding sport fisheries is projected in the future. Objectives 2 and 3 about pond and stream habitats should also be an ongoing priority beyond 2021.

Page 5 mentions maintaining a high quality sport fishery. We assume "quality" includes only native fishes and other aquatic denizens. If so, that should be mentioned.

Management Objective 2, Strategy 1 in Aquatic Resources includes "chemical" renovation of ponds to remove or reduce fish populations. More information would be helpful. What type of chemicals and how was the need for this type of treatment determined? What are the risks? How many ponds are there? What size? What is the amphibian/reptile population health in the area and how will this pond treatment improve those populations? Also is there any opportunity for wetland or marsh creation in connection to these ponds?

What is known about water quality in the area? Strategy 4 references monitoring of habitat in regard to erosion control. Is there any planned water quality monitoring beyond sediment issues? We did not note water quality monitoring in Objective 4 either.

On page 6 under Public Use Management Considerations Objective one lists several game species. Is MDC also planning to manage the area for Ruff Grouse?

Also the current MDC website suggests the area is good for birdwatching and says: "Good for forest interior and spring migrants. Designated an Important Bird Area by Audubon Missouri..." The draft plan should include attention to this feature of the area and a

commitment to maintaining good habitat for interior and spring migrants. Thank you for consideration of our comments.

It would be helpful, to know of other mis-management of areas by MDC if they do indeed exist. Missouri and MDC has had a world-renown reputation for rehabilitating over-grazed, mis-managed areas in Missouri over the past 90 or so years. Hart Creek is really two sections separated by a deep ravine. The land owners on the north/east have almost exclusive access to the north section. We toured both the north/east corner and the much larger south/west area. I understand that the logging and agriculture from decades ago has now resulted in loss of what would be the natural ecology of the area with sugar maples being a prime culprit - running rampant and crowding out the other young hardwoods in certain areas - we find it difficult to understand the long term results of human interference in natural ecology. So we are left with a dilemma - try to replicate and help the natural process with our imperfect tools or allow our foibles to continue unchecked and hope the earth can fix things. I tend to trust woods-people and people who devote their lives to conservation of the land. I have not personally encountered bad practices by the MDC so I tend to trust their plans. This does not mean that people should not ask questions!

Please understand, we are all a little skittish due to the relatively recent cutting of the massive and healthy old oaks in Stephens Park and Lion/Stephens parks and essentially clear cutting at the old 63 bike trail entrance in Columbia - both very questionable practices by "authorities". Indeed, I think this is a GREAT LEARNING OPPORTUNITY for both the concerned citizenry and MDC. We could learn what "clear-cutting" or "logging" really menses pertaining to MDC lands, and when, where, and if it could be a good thing or if it is even applicable to Hart Creek (what with the precipitately steep grades). We could learn about healthy versus unhealthy forests, we could gain a better perspective on the long term affects of our actions when we use and take from the land. I think the Hart Creek area could be an invaluable outdoor classroom for students from the surrounding communities with signs identifying and explaining the areas could be posted along the trail. Shoot in just a few hours I learned so much about our forests and I found three edible mushrooms, several non edibles, pawpaw patches, many native trees with edible nuts and fruit (not in season), I heard several bird species, saw amphibians and a wealth of other scenes - if nothing else I have discovered a new favorite place to hike.

On our first 'tour' we entered the north section from the land owner's road. (They really don'l want MDC to use their road!) They showed us a small section of the woods up to a point where there was a deer stand. Now either the deer stand was illegal or we were only on small N.E. corner area of the actual area managed by MDC. From what I saw, the hill side we walked along was truly in need of sugar maple removal - as it was explained to me by our forestry prof. along on the trip; I began to see what at first looked like a beautifully forested hillside was really at risk of becoming a sugar maple grove instead of a native Missouri forest of oaks and other nut and fruit bearing trees. The smaller sugar maples are blocking the sun, you notice no baby or juvenile hard-woods anywhere on the slope because they can't get any needed sunlight. When the larger trees reach the end of the lifespan there will be no juveniles to take their place - only sugar maples.

On our second tour via the public access on the south we toured the larger south/west section and I noted (to my untrained eyes) what appeared to be well managed by MDC with the activities as outlined in the plan. We found areas where the smaller and invasive sugar maples had been removed by cutting (and I suspect chemical treatment and fire) allowing the ground

under the large hardwood trees (multiple species of oaks, hickories, ash, hackberry, bass to name some) to receive the sunlight needed to encourage and nurture the babies of these hard woods not to mention numerous species of smaller plants and brush all necessary to a healthy ecosystem. Now these smaller sugar maples trunks are only 2-5 inches in diameter; I see no reason why they couldn't be hauled out on 4 wheelers. I don't see the need to build massive logging roads of which the 5 land owners are fearful. Judging by the south and western areas, the path the MDC used was just a small 4 wheeler path.

I think MDC may need to be clearer in general especially when people feel they need to know more and reassure the 5 land owners that their road won't be destroyed. And I suspect that the land owners may need to look at the bigger picture and allow the MDC to use their nice road to accomplish management of the area which these landowners have almost exclusive access to due to the deep ravine that isolates the north areas from the rest of the Hart Creek area to the S.W. Come on, can't we all just be friends? I know that were it my land, I'd be a little possessive, but after a little education, I would certainly allow access for the better good! I am certainly not one to refrain from a good fight, however, in these difficult times when we must all work hard to ensure the survival of this beautiful earth, and with reduction in funding, we must all button our shirts a little tighter, stiffen our jaws, educate ourselves a little more, work together and take care that our personal battles don't cut into the pockets of the GOOD institutions when those funds would be better spent on better battles.

Finally, (on a personal environmentalist's note), I sure hope the glyphosphate is painted on with a brush immediately following cutting as opposed to spraying. And I sure wish we could hire a lot of workers to remove these small sugar maples by hand as opposed to using big machinery. Hey, don't we need jobs!

Thanks MDC, keep up the GOOD work!

Please manage the area to increase quail numbers.

I am writing in relation to the management plans for the Hart Creek Conservation Area.

I would like to state my opposition to using any form of clearcutting as a management practice. I didn't even think this was done much these days anymore. I would also be opposed to any kind of logging that would involve making roads or other large equipment access as I would much prefer the area to remain wild and undeveloped. In this day and age, there are precious few areas that are undisturbed. Surely there are animal species that can find and benefit from an undisturbed landscape. Any kind of road or large equipment access would lead to more people and disturbance of this area. I would wonder if logging sales could be high enough to justify that level of disturbance?

As this land is mostly narrow ridgetops and significantly steep slopes, I would worry that any mechanized logging or road building would cause significant erosion, something to be avoided. I much prefer timber stand improvement, and other manual management methods, such as fire as opposed to mechanical logging.

I am not opposed to hunting, but if part of this management orientation is to promote hunting species (deer and turkey), then my sense is that their levels are not needed to be increased as they seem plentiful to me as an occasional hunter.

Also, as an adjacent landowner, I would like to point out that the boundary on the north side of

the area is only sporadically marked, with many previous signs (End of Public Use) that have fallen down or disappeared, and I would certainly be concerned that all management activity be contained to MDC land, and that any large-scale access would also detract from the privacy so far enjoyed here.

Lastly, I would like in the future for this whole process to be more accessible, as in a possible public meeting for presentation to the public, instead of the current "comment only" set up, especially in so far as the management plan is so unspecific, and general as it is currently presented.

Thank you for allowing me to present my thoughts

The MO Department of Conservation should be putting its' resources into conserving and promoting our natural areas for recreation, exploration, and for making our state a destination for tourists. These undertakings will bring, over the long run, more dollars into our economy than the sale of our lands for commercial use. Our region with its' diverse flora and fauna will take decades to recover from the devastating effects of logging. The encroachment of nearby residential and commercial development needs planning for the future. The lack of management can be seen by the rampant and destructive advancement by profit-oriented operations. The function of the MDC should be to protect our invaluable natural environment, the loss of which cannot easily be retrieved.

Would look to see the trail moved more on the lower section. It is a beautiful area. Also would be helpful if the brochure for the area had mileage on it. Would look future plan to have a loop trail to see more of the area. Thanks for all mdc does!

To whom it may concern:

Please know that we strongly discourage and stand against any clearcutting in the Hart Creek area. I hope you will reconsider your plan and focus instead on selective cutting to improve the forest while also harvesting lumber if/as needed.

For logging, it's very important that you avoid building new roads as well as damaging the land by using heavy machinery. Given that this land is within close proximity to Columbia and Jefferson City, a focus and consideration on available fishing, hiking, biking and the like seems every bit as important as logging for the profit of a few entrepreneurs.

The public deserves more opportunity for review of the plan proposed, to make informed decisions and take action as appropriate. There should be an open process with significant public input.

Thank you for your consideration of our concerns.

Thank you for:

- 1. Acquiring the Hart Creek area for the public and working to keep it a well-maintained and inviting area.
- 2. Adopting BMP's in the 2014 MDC Missouri forest management guidelines and the 2014 Missouri watershed protection recommended practices for Missouri forests.

3. Requesting comments on this broad proposal, extending the comment period, and being available for discussion at the Jefferson City open house.

However, I have the following concerns about the proposed management plan:

- 1. The public should be able to comment on a more detailed plan. What foresty activities are planned in which stands? How many acres would be affected?, What herbicides would be used, where, how and why? What were the results and conclusions of the 2017 area inventory? Indian mounds in area? Protected?
- 2. Since this area is between two cities, it should be managed as an urban wild area similar to Three Creeks and with a similar process for public input. Tourism over Timber is appropriate for this area.
- 3. Control of invasives is also more important than timber. How would that be done? How would you ensure that invasives were not introduced by management activities?
- 4. Managing for acorns for game species like deer and turkey needs to be balanced with other increasing kinds of recreationalo use – hiking, birding, photography etc. For example, many people enjoy the color of the maples during the Hartsburg Pumpkin Fest. And the area is visible and accessible from the Katy Trail.
- 5. The plan should acknowledge the historical range of maples on the river hills as documented in 19th century surveys and in Clair Kucera's study of a similar area upstream. Maples are a natural component of these forests. I can agree that some thinning and burning on west and south slopes to release the oaks and herbaceous understory could be good management if done with a light hand. Large maples and associated species on more moist and shady east and north slopes should be left undisturbed.
- 6. Any tree removal should avoid clear cuts, road building or expansion, degrading trails, disturbing steep slopes, using skidders or other heavy machinery. Consider horses or mules instead to take out fallen logs; minimize and repair damage to any area where logging occurs and to any access routes created. Any "even age" management (clearcuts), if done at all, should be non-commercial, small in area and not on slopes.
- 7. What chemical treatment would be used to kill fish to allow amphibians and reptiles to reproduce? With more information, this could be something I would support.

Thank you for considering these comments.

I think it would be beneficial to the users of this CA to have a pathway around the pond for better fishing & frog gigging opportunities. Currently you can only fish from the dam side of the pond because the other sides of the pond are overgrown. Also I've heard there are Indian burial mounds on this property is that true? If so it would be nice to include this piece of history in the area brochure. Thanks.

I object to closing the comment period on May 31st. I have questions that aren't answered in the Draft Area Management Plan.I request a 90 day extension of the comment period. I believe a public meeting explaining the plan is clearly needed. You want to log a "conservation" area and poison fish in a lake! Is that the best use of taxpayer money for "conservation?" It seems rather odd and antithetical to your agency's purpose. There needs to be a public meeting on this ill-advised project.

Please consider adding equestrian trails. Thank you. Being so close to the Katy Trail, equestrians would probably ride off down the Katy if they had a place to park trailers.

The generic nature of the plan and lack of specificity raises many questions. For example, it is not clear if commercial logging will be allowed. This vagueness necessitates a public meeting. at a minimum, and a revision to clarify the plan's intent. Preserving the natural environment and providing for recreational activities should outweigh any commercial benefits.

The plan seems to allow for clear-cutting. Such practice has been proven to be very harmful to the environment. Loss of habitat and severe erosion are only two examples of its damaging effects. Please state clearly that clear-cutting will not be allowed.

Please preserve

I am concerned that the vague plan may include clear cutting in the area and building logging roads. To preserve the area for hiking, please avoid building logging roads and clear cutting the tress in the area. If tress need to be harvested, it should be done in ways that limit the impact to wildlife and recreational use.

(In a call to the Department): A citizen said he appreciates the good work of the Department, and has had a chance to walk around Hart Creek and thinks it's a lovely place. He thinks the 15-year management plan is vague and hopes the next plan is much more detailed. he wants to see old-growth forest and no clear cutting.

31 Aug. 2017

Sara Parker Pauley, Director Missouri Department of Conservation

Dear Director Pauley,

To begin, my apologies for losing track of when MDC's open house was—I had hoped to have made it. Sadly, it coincidentally turned out to be the day a dozen of us gathered for the first of two walk about the Hart Creek Conservation Area. Dang it

For the last eight years I have had the good fortune of living in rural southern Boone County and have spent much time enjoying, especially the lovely public wooded lands maintained in this part of the state by our Missouri Department of Conservation. I generally thank you and your colleagues for your vital stewardship of these lands.

My appreciation was clouded with alarm, however, as I learned in early May about a draft plan for the Hart Creek Conservation Area. The on-line description of what MDOC plans to do is rather vague but it seems that a significant portion of the area could be clear cut. I've spoken with some friends who own land adjacent to the MDOC land; they were asked for permission to build a road through their property into the area, apparently to facilitate the transportation of

logging trucks and equipment. The prospect of cutting clear all the mature trees greatly offends me.

Please include a public hearing and/or a walking tour of the Hart Creek area with an MDC forestor—setting a new democratic precedent for explaining plans in this public area where an MDOC forester could explain what precisely is being planned/considered for the area and why-- in terms of conserving/preserving the woodlands for their long-term viability. Without such a process, we the public, are left to fill the void with conjecture

The current draft plan presents a very wide range of possible actions with little specific detail about different portions of the 600-acre plus public land;

Please refrain from any mass clear-cutting of the woodlands. The draft plan notes the use of "even-aged" (euphemistic for clear-cutting) management practices. Again, the very general plan, lacking in specifics about particular parcels is problematic;

Consider the land an urban forest, with its proximity to Columbia and Jefferson City (like the Three Creeks MDC area)-- giving greater weight/value to tourism (hiking, fishing, biking, etc.) over cash logging;

Please be judicious in any selective cutting, supporting the growth of a diversity of trees and other native flora. If doing logging, avoid building roads, using skidders or other heavy machinery. Consider horses or mules to instead take out fallen logs; minimize and repair damage to any area where logging occurs and to any access routes created;

We are thankful for the many areas that the MDC workers labor for the public interests of all Missourians and for future generations. We want to see best management practices employed, working toward creating with Hart Creek, what hopefully one day, many decades from now can be seen as featuring vibrant old-growth forests.

Sincerely,

The main omission in the plan is it does not address whether or not expansion is a goal. Several small out-parcels of adjacent land (most notably the land between Jemerson Creek Road and the Conservation Area) seem to make sense to acquire from a management standpoint. From a negotiation with potential donors or sellers standpoint not including this in the public plan is understandable but the lack of transparency could also be criticized in the future if not disclosed here.

I have property just 5 miles north and we have tons of invasive honeysuckle on my property, and around the area that we have had trouble getting rid of over the past several years. The Hart Creek Property doesn't seem to have much, if any, invasive honeysuckle yet, but the birds fly from my property over to the Hart Creek area. We are worried that the clearcutting and other disturbance to the land will result in a lot of invasive honeysuckle. Please include control for invasives, particularly the invasive honeysuckle as part of the plan if you move forward with disturbing the area. Thank you!

Please do not allow clear cutting of this area.

Please, no clear cutting in the Hart Creek Area! This area has great value as an urban forest, being so close to Jefferson City and Columbia.

Renewal of Request for Extension and Comments on Proposed Management Plan for Hart Creek CA.

By this comment, I renew my request for a 90-day extension for submission of comments.

In the unlikely event, that my request and that of many others for an extension will be denied, please consider the following as hasty comments based on an rather abrupt timeline for submission:

Specific Comments:

- 1. Terrestrial Management Objective 1, Strategy #3 (p.4): "Even-aged" management is a dog whistle term for "clear cutting". Even aged should never be permitted on MDC lands. It is merely a way for the timber industry to maximize profits, and harms diversity.
- 2. While maple trees may be of little value in promoting deer and turkey (the species that MDC garners much largess by issuing hunting license and fees and from federal P-R monies), MDC data shows that the number of hunters is diminishing dramatically, and that "no impact, low impact" sports (such as hiking and birdwatching) are increasing at about the same rate that hunting is decreasing.. Promoting deer and turkey at the expense of other mammals, reptiles, and amphibians reduces diversity. For aesthetic reasons, maple trees should be spared.
- 3. The statement is made that there are no endangered species in this area, yet there are a number of shagbark hickories that are utilized by the Indiana Bat. This assertion is, at best, questionable and, at worst, a prevarication. Strategy #3 includes this statement: "...while maintaining loose bark trees for bat habitat". Is MDC protecting existing bat habitat or promoting future? Whatever, there is little doubt that this is habitat for an endangered species, and one which will go elsewhere if timber management is engaged.
- 4. Terrestrial Management Objective 1, Strategies #1 and 2 (p.4) allows just about everything. Chemicals (what type?), fire, timber harvest (always a loss leader), TSI (this presumably involves whacking down maples) firewood cutting (how will this be supervised?), salvage cutting (what is being salvaged? Dead and downed trees provide much in the way of habitat), tree planting (what is being planted? Russian Olive?) seeding (presumably the "even-aged" management areas) and mechanical tools (chainsaws, it is assumed).
- 5. Terrestrial Management Objective 2, Strategy 2 (p. 4) is so broad as to be meaningless.
- "...appropriate strategies" can be almost anything. This needs to be much more specific.
- 6. Terrestrial Management Objective 3, Strategy (p. 4). Same comments as #5 above. Overbroad, needs much more specificity.
- 7. Aquatic Resource Management, Management Objective 2, Strategy 1 (p.5. "Chemically renovate" means poisoning all existing life using Rotenone or something similar. While this kills all diversity, I must commend MDC personnel for using such an imaginative term for "killing everything". The objective is so that the ponds will be fishless, thereby promoting frogs, reptiles and/or other wildlife management. This is being done, apparently, so that coyotes that come for a drink won't be snapped up by an alligator gar.
- 8. The section entitled "Public Use Management Considerations" contains Management Objective 1, which pretty much repeats the overly broad and offensive language in the sections

pertaining to Terrestrial and Aquatic resources. Particularly objectionable are the methods to be used in managing for the species listed. While some things (fire, mechanical and chemical methods, and thinning) are among things that may be used, nothing is excluded. While it is unlikely that such things as napalm or defoliants (Agent Orange) would be used, this does not rule out such measures.

Overall comment:

Hart Creek CA is near to two metropolitan areas and a small town (Ashland) that has become a "bedroom community" for both Columbia and Jefferson City. As such, the Hart Creek CA should be managed as an "urban area wild area", similar to Burr Oak Woods near Kansas City. MDC has provisions in its rules for designation of a "Wild Area" as promoted by the ex-Conservation Commissioner (and now-deceased) John Powell.

To promote terrestrial and aquatic diversity and to provide a place that city dwellers can go to find peace and quiet among wild things, to enjoy unmanipulated nature away from noisy management techniques, and to find refuge in an increasingly hectic world, it is highly recommended that MDC adopt a "hands off" policy and designate this as a Wild Area, where the processes of nature prevail.

Once again, I wish to apologize for the hasty nature of these comments, but the deadline of May 31 left little time for proper consideration.

Please extend the comment period for 90 days. I have just now downloaded the management plan and became aware only because of neighboring persons' (to the Hart Creek CA) Concerns.

I am writing to encourage the Missouri Department of Conservation to maintain the Hart Creek Conservation Area as a public use area for hiking and nature enjoyment and to preserve its natural beauty. Several years ago, my in-laws were visiting Columbia, and we took a drive toward the river, enjoying the backroads and small towns we passed through. We stumbled upon the Hart Creek Conservation Area, and decided to check it out, since this was one conservation area we surprisingly had not heard of. We spent several hours hiking through the forest and enjoying the natural world around us. My husband, two daughters, in-laws and I all had a great afternoon at this jewel of a place.

Please do not clear cut this important forested space that is a valuable natural area, being close to both Columbia and Jefferson City. A new plan could include promoting this conservation area as a place to take in some of Missouri's natural beauty, as my family has done. If cutting must be done, it should be selective and with as minimal impact as possible. Hauling in equipment and cutting in a new road would be damaging to the environment and mar the beauty of this place. I encourage the Department to change its plan to preserve the Hart Creek Conservation Area, rather than destroy a significant portion of it. Thank you for considering my comments.

I think it would be a shame to deface the Hart Creek Conservation area by clear cutting and openingit

up to economic development. It should be preserved as a beautiful and scant area of urban woodland.

Hart Creek should be managed as an urban forest. Honeysuckle and other invasive plants should be controlled.

Otherwise, please leave the area alone, especially the maple woods on north and east slopes. Please don't allow clear cutting or logging roads, as these would cause erosion. This is a beautiful area, so please protect it.

Please do not clear-cut this conservation area! If timber must be harvested, please do it selectively to preserve the forest, using old-fashioned, ecologically-responsible methods.

It is heartbreaking to think that the Department of Conservation would even consider clearcutting. Please reread your mission and vision statement.

I would like to strongly encourage keeping the Hart Creek Conservation Area in a wild/natural state. This will not only provide excellent recreational opportunities for the public, but it will ensure suitable habitat for countless animal and plant species. This includes migratory birds that rely upon the Missouri River corridor for their migration routes. I have enjoyed this conservation area in the past, in particular the forested areas, and strongly encourage this area be maintained as a wilderness area. Thank you.

I flew out to visit friends from Kansas City and find somewhere to watch the eclipse. A family member suggested from Columbia suggested Hartsburg bottoms, and we stumbled upon the Hart Creek Conservation Area. What a great find!! We enjoyed the area prepared for eclipse watching; it was a beautiful site, and just what we were looking for!

A.J. Campbell from your department was there and gave us a lot of helpful information about the conservation area, general area, and local hikes. We enjoyed the hike out to the overlook, and the link to the Katy trail, and to town.

Thank you for a great venue to enjoy one of nature's most amazing spectacles, and thanks to Mr. Campbell for his helpful info and knowledge of the local area!

Sincerely,	
Greetings:	
My name is and I am co-owner of 41 acres of land contiguous to the Hart Creek Conservation Area. I was recently made aware of plans that have been drafted which include logging in that area.	
I have read through what's been posted on-line, but find the description vague and, to be honest, I am unsure as to what would actually be done to the forested land or to the lake in this	is

I would respectfully request both a 90-day extension of the public comment period to give those of us who have an interest in this matter time to learn more and make comments, and also request a public hearing at which members of the public could both ask questions and make our concerns known.

area.

I have spoken with several neighbors and my sense is that the concerns I'm expressing here are widely held among those who own property adjacent to or in close proximity to the Hart Creek CA.

I sincerely hope that the concerns of neighbors will be considered in making decisions as to what to do in this area. And I hope that sufficient time will be provided to allow us to understand what's proposed and what the implications of implementing this proposal would

I thank you for considering my concerns.

Sincerely,

- P.S. I have refrained from making actual comments on the proposal at this time, as I have not had sufficient time to fully understand the draft area plan or its full implications. I reserve the right to make additional comments in the future and sincerely hope that the Department will allow additional time to allow informed comments. Thank you!
- --Refrain from clear-cutting the woodlands. The draft plan notes the use of "even-aged" (euphemistic for clear-cutting) management practices. Again, the very general plan, lacking in specifics about particular parcels is problematic;
- --More detail is needed so that the public has clear knowledge of the management activities that will take place. Several of us who participate in two hikes of the area earlier this month would request that the next version of the plan—with much greater detail—will be available to the interested public and neighboring landowners. The current draft plan presents a very wide range of possible actions with little specific detail about different portions of the 600-acre plus public land;
- --Spare the forests, recognizing trees are among the very best climate-change controllers on the planet!;
- --Please include a public hearing on the plan and/or a walking tour of the Hart Creek area with an MDC forester—setting a new democratic precedent for explaining plans in this public area;
- --Consider the land an urban forest, with its proximity to Columbia and Jefferson City (like the Three Creeks MDC area)-- giving greater weight/value to tourism (hiking, fishing, biking, etc.) over cash logging;
- --Be judicious in any selective cutting, supporting the growth of a diversity of trees and other native flora, helping to develop what hopefully many decades from now, could become an oldgrowth forest;
- --If doing logging, avoid building roads, using skidders or other heavy machinery. Consider horses or mules to instead take out fallen logs; minimize and repair damage to any area where logging occurs and to any access routes created;

--We are thankful for the many areas that the MDC workers oversee and want to see best management practices employed.

Hey thanks for all you do at MDC! We love our/your amazing #1 Conservation Dept. in the country.

I am writing to ask that you PLEASE extend the comment period for the Hart Creek plan for another 90 days!

We just heard about this a few weeks ago and you know how the month of May is! It's always crazy even without graduations, school, & other seasonal activities. We know of people who want to comment on this but have been very busy, and traveling, etc. & did not have time to write in this short comment period.

Hart Creek is a favorite area of many who come from surrounding areas and out of town visitors. Since it is a conservation and recreation area and being located by the Katy Trail it provides an ample actives for a diverse group of people. The Biodiversity is so rich including the loess soil and the large sugar maples, which in fact brings a lot of people there for the glorious autumn glow when the trees are changing. This is an annual tradition for some & the main time many of them go to Hart Creek. Hikes at Hart Creek and the sugar maples have provided unique and special memories for kids I know & has been the key connector for them learning about MDC, their home state, biodiversity, the history of the area, a sense of community, a sense of belonging, their heritage, all of which were lacking before. As you may know, a sense of belonging can make a profound impact on a child's, and adult's life. There is research showing the benefits of being outdoors and feeling of connectivity.

When your plan mentions maintaining the native habitat & old growth, preserving the sugar maples would be part of that. If you want to enhance the area, how about capitalizing on the beauty and assets of the sugar maple as Vermont and other northeastern states and embrace this recreation and touri\$m opportunity? This is one of the main assets of the area from many peoples perspective. If you have to cut, why not clear around the maples and really let them grow and glow in the autumn?

Knowing that MDC has a million acres which is one thing I love about Missouri, can't you cut somewhere else? There is so much forested land south of here where they need to generate income.

If you have to cut there please don't go clearcutting up to landowners properties.

Thanks YOU so much for all you do for MDC and Missouri. I brag about our MDC all the time.

There should be NO clear cutting! If the forest can be improved, let's remove a few trees by use of horse or mule instead of damaging machinery. This area is great for biking, camping, hiking and would be much better served as such.

The management plan should provide more detail to encourage best practices for minimizing ecosystem disruption and conservation priorities. This is close to urban areas and vauable for habitat, beauty and recreation.

Please, no clear cutting. Save the conservation area for animals and plants.

During the 1980's, I lived on and was a co-owner of an 80 acre portion of what is now Hart Creek Conservation Area. MKT trains still ran slowly through the property. It was a very special place to live and we shared it with wildlife. I remember seeing nesting bald eagles, hawks, owls, geese and turkeys; the forest was full of songbirds. There were fox, badgers, mink, deer, coyotes, bats, woodchucks, raccoons, possums, rabbits, skunks, squirrels - and most enchanting of all - flying squirrels. There were reptiles, moths, butterflies, mushrooms, large trees and wildflowers in abundance. There were Native American mounds, stone arrowheads and tools, bluffs, caves, hollows, springs, streams, meadows and forests.

I am a now a 33 year resident of the Santa Fe, New Mexico area. I am surrounded by millions of acres of public land which are appreciated by everyone from locals to international visitors. I have visited Hart Creek in recent years and, again, enjoyed it's peace, tranquility and expansive Missouri River views. This small Southern Boone County treasure is fragile and needs your continued protection. Please do everything you can to protect it's flora, fauna and land from exploitation so that current and future generations can experience and enjoy it's wildness. Respectfully submitted,

I along with some others object to closing the comment period on May 31, 2017. I would also request a 90-day extension to the comment period. Some of that plans that I have been hearing about sound a little bit on the draconian side. A public meeting would be beneficial for the local citizenry in the Hart Creek Conservation area.

I wish you people would talk to each other in the different divisions. I read in the Mo. Conservationist quite some time ago that sugar maple was becoming a problem for forest management. I went to the forestry

group on Discovery Parkway several times and let them know I had a use for the maple in truck load lots.

Was initially led to believe that I would be allowed to remove some from Hart Creek CA. Then after much

delay, was told it would have to go out on bids. Which of course to my knowledge it never did. Is maple a

problem as stated or isn't it? I would still be interested in working with you about the maple. Thanks

for all you do, it is much appreciated.

I have concern about this plan because MDC needs to preserve this urban forest so close to Columbia and Jeff City for present and future generations to enjoy, rather than use for economic gain by clear-cutting the trees, an important source of carbon absorption which aids our struggle to control climate change. MDC should have a public hearing nearby to get citizen input and prior to that, it should inform the details of the proposed plan so citizens can peruse it. Please allow some of our state lands to become old-growth forests.

Comments on the Heart Creek Conservation Area

Forest description: This forest area is not typical of north Missouri forests. It is maple-oak forest in the loess hills near the Missouri river. Maples have been here before humans and do not fit the forest description of Nigh and Pallardy. Sugar maple are found '(Styrmark) in both hydroseres and xeroseres in this public land. Although Heart Creek for area is complex, much of it is old pre European uncut natural forest. I suggest a 90 day extension on this project to better assess the potential silvicultural treatments.

Silvicultural descriptions for cutting in Heart Creek

- 1. Species (not large Acer saccharum)
- 2. No maples over 10 inches dbh)
- 3. No maples over >100 years)
- 4. Quercus spp. of merchantable size are allowed
- 5. No even age cutting or forest management
- 6. The value of recreation along the Katy Trail in a highly populated country is worth

considerably more than timber resources.

Citations

Steyermark, J. A. 1940. Studies of the vegetation of Missouri-1, Field Museum of Natural History. Chicago.

Nigh, T. A and Schroeder, W.A. 2002. Atlas of Missouri Ecoregions. Missouri Department of Conservation.

My name is ***** and I am commenting on the Department of Conservation management plan for the Hart Creek Conservation Area. My family and I have lived on an adjacent 100 acres to the conservation area for over 40 years, and have a special knowledge and interest in the area. We want the best-possible future for this small part of Southern Boone County Missouri.

My main concern is in mentioning of "even aged" in the management strategy. In my observation of the Hart Creek Conservation Area I haven't seen the economics of a timber logging operation to be worthwhile. Most of the hillsides are very steep. Foresters I know say that very few large trees should be cut on slopes over 25% grade. They also say that small circular clear-cut areas of 200ft could be used in this conservation area.

In my opinion, this particular conservation area has touristic value in its woodland features for hiking, bird watching, tourism, and camping. Logging threatens these qualities. In my experience as rural homebuilder and in living in Boone County for 45 years, I've seen a lot of logging. The evidence of logging lasts for years. With the acceptation of "leave no trace" techniques (no bulldozers or logging trucks) and small circular clearings (200ft wide), logging these steep slopes should be totally taken out of this plan. I am asking for no 3rd party logging contracts, and no new logging roads to be built.

Before moving forward with "Strategy 3" I would urge you to make an inventory of location, species, size and grade of trees tagged for logging. That would be in the State's best interest. Also, a comprehensive plan showing where access and logging roads would be, and how the damage would be fixed. This area, being so close to 2 major cities, should be a shining example of what an urban forest can be.

Awaiting your response.

Sincerely,

It is not clear why this management plan includes reducing/eliminating sugar maple? Sugar maple and basswood among other mesic specie are the major components of the late successional forest of the thick loess covered River Hills. Research from Kucera from the 1950's revealed that sugar maple was a dominant overstory species in this area. Why eliminate these? On the contrary this forest type is becoming increasing rare and should be protected.

Leave our trees.

To whom it may concern,

I am a long term resident of south Boone County and own land adjoining the Hart Creek Conservation area. I am writing to express my opposition to any large scale logging as proposed for this area.

In addition to destroying the wild and scenic natural beauty and habitat of this land, a large

logging operation would necessitate the building of logging roads. The building and use of such roads would further degrade the natural beauty of this area and would lead to erosion and noise issues.

Clear cutting would not be desirable from an ecological perspective. And it would not be very profitable from a financial perspective.

I believe that selective cutting/thinning would be the best forest management technique to preserve the beauty and integrity of these woods.

Thank you for considering my comments,

Hartsburg, Missorui

This land needs to be preserved. No cutting.

My comment regard the Hart Creek Management Plan. I regularly find myself in or near this area, either by hiking or bicycle. The are contains an overlook with spectacular scenery and a number of large trees along a trail that overlooks the bluff. The other item that is notable about the area is the obvious presence of Indian Mounds that also line the ridgetops.

I absolutely agree that management of invasive species, particularly in the areas along east side of the area is greatly needed. Particularly autumn olive and honeysuckle. I do not agree that the elimination of Maple Trees that have been there for a hundred years needs to be managed. Although not originally part of the makeup of the forest cover over a hundred years ago; digging up these trees could easily lead to rapid erosion of the soil damage to cultural resources; and would also make the forested area unsightly to the general public for a long period of time. In my opinion, the statute of limitations is up along the Missouri River corridor for Maple trees; lets focus on the real invasive species only.

Comment 1) Management Objective 1, Strategies 2 and 3, leave the option open for a number of forest harvesting techniques. There is a lot of mature forest in this conservation area; I would like to see the mature forest remain unharvested. Strategy 3 leaves the option open for even aged management. Not only is clearcutting distasteful, but I'm concerned that creating openings would exacerbate the spread of bush honeysuckle.

Comment 2) Management Strategy 2 discusses control of invasive species. I have personally noticed that bush honeysuckle has moved into the woods near the lake; this outbreak needs to be taken care of, in my opinion.

Thanks for considering my comments.

Can you tell us the extent of the logging plan? Is it just the sugar maple that you plan to log? A neighbor who lives adjacent to the land is also concerned and has suggested a short public meeting to describe what the plan is. Our concern also is major logging in that area. Thank you for your consideration.

Hart Creek Plan sounds great. Why don't we ever see plans concerning the Columbia Bottoms Conservation area? I would like to know if all of the damage from the 2017 flood has been repaired? I would like to know if Columbia Bottoms is protected (or lets say Mo. citizens property) is protected for the Spring and the floods that may come? I would also like to know

how much of our money has been spent at Columbia Bottoms with the 2013, 2015, and 2017 flood? Please post and email your response. Don't worry I will not hold my breath.

I read the article in the Columbia Tribune. There are several issues that concern me, but the most concerning to me is the destruction of the sugar maple trees. When driving around the state I wonder how many people gaze upon the bluffs in the fall to see the changing yellow/brown color of the "native" "non-invasive" oak trees. How conservative is the conservation department being by destroying what has survived naturally? Who gets to decide what stays and what goes? When making all these plans, I hope the department keeps in mind, the rights of others only go as far as my rights begin.

This area is beautiful as it is and should be left without logging, and most certainly not for clear cutting. The Management Plan should clearly state that the area should not be available for forest clear cutting.

Because of the population now near this area, and the population sure to be there in the future, please enhance this area and enlarge it greatly if possible.