

Young Conservation Area

Ten-Year Area Management Plan

FY 2017-2026



Lisa M. Allen
Forestry Division Chief

11-18-16
Date

Young Conservation Area Management Plan Approval Page

PLANNING TEAM

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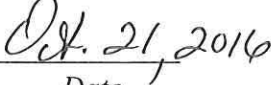
Josh Ward, Private Land Conservationist

ST. LOUIS REGION

RCT Chair



Signature



Date

FORESTRY DIVISION

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Signature



Date

OVERVIEW

- **Official Area Name:** Young Conservation Area, # 8605
- **Year of Initial Acquisition:** 1986
- **Acreage:** 1,145 acres
- **County:** Jefferson
- **Division with Administrative Responsibility:** Forestry
- **Division with Maintenance Responsibility:** Forestry
- **Statements of Primary Purpose:**
 - A. Strategic Direction**

Provide opportunities for diverse public use; manage the natural communities and other habitats for fish, forests, and wildlife; and help to maintain the integrity of the LaBarque Creek Watershed.
 - B. Desired Future Condition**

The desired future condition of Young Conservation Area (CA) is a healthy, diverse, and sustainable mosaic of stream, woodland, and forest communities; and a network of hiking trails that provide outdoor recreational opportunities for the public to enjoy.
 - C. Federal Aid Statement**

This area, or a portion thereof, was acquired with Forest Legacy Program funds to protect important working forest areas.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

A. Priority Areas:

- 1) LaBarque Creek Terrestrial Conservation Opportunity Area
- 2) LaBarque Creek Aquatic Conservation Opportunity Area
- 3) Lower Meramec/Missouri River Priority Forest Landscape,
- 4) LaBarque Creek Fisheries Priority Watershed
- 5) The Nature Conservancy's Meramec River Project
- 6) Big River Fisheries Priority Watershed

B. Natural Areas: None

II. Important Natural Features and Resources

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

B. Caves: None

C. Springs: None

D. Other: The conservation area includes 2.4 miles of stream frontage along LaBarque Creek. This area occurs in the Meramec Highlands Oak Woodland/Forest Rugged Hills Land Type Association. This landtype consists of very rugged hills with narrow ridges, steep slopes, and narrow valleys. Historically, this area was timbered with oak and mixed-hardwood woodland, forest, and scattered glades (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- Two parking lots, one service parking lot
- Concrete bridge over LaBarque Creek
- Taconic Loop Hiking Trail (2.5 miles)
- LaBarque Hills Hiking Trail (3.5 miles)
- Two fishing ponds (2 acres total)

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** Stream Stewardship Trust Funds (Missouri Conservation Heritage Foundation) were used to acquire a portion of this area. There is also a Conservation Restriction Agreement that limits certain types of development on a portion of Young CA.
- B. Federal Interest:** This land must protect a forested landscape in perpetuity. Prohibits conversion of land into non-forest uses; a periodic inspection is required to verify this. Federal funds may also be used in the management of this land. Natural resource agencies may not allow activities or development of 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:** There are two electric transmission easements and two distribution line easements owned by Ameren Missouri. There is an easement owned by the American Telephone and Telegraph Company. An easement is also held by the State of Missouri for Hwy FF.
- 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 Missouri Department of Conservation Resource Policy Manual.
- E. Endangered Species:** None observed.
- F. Boundary Issues:** Establishing accurate and identifiable boundary markers is a priority for this property.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Control infestations of invasive plants on the area (e.g., bush honeysuckle) and prevent future infestations.
- 2) A lack of proper management has resulted in overstocked woodlands (i.e., too many trees per acre); a tree species composition shift to shade-tolerant and fire-intolerant trees (i.e., away from oaks and hickories toward primarily sugar maple); and a major loss of diversity and abundance of ground layer herbaceous vegetation and tree regeneration.
- 3) Maintain healthy, sustainable, and diverse forests and woodlands that are approaching maturity and are mostly even-aged.
- 4) Enhance wildlife habitat by maintaining existing warm-season grass fields and converting fescue, sericea, and woody invasive dominated old fields to native vegetation.

Management Objective 1: Maintain healthy forests and woodlands with management emphasis on wildlife habitat.

Strategy 1: Control invasive plants (predominantly bush honeysuckle, Japanese hop, tree of heaven, and wintercreeper) to avoid significant negative impacts on natural communities. Routinely scout and seek to control invasive plants.

(Forestry)

Strategy 2: Conduct a forest inventory periodically to guide forest management activities. Reduce tree stocking in forests, woodlands, and shortleaf pine plantations to desired stocking levels and to desired tree species mixes, as is appropriate for wildlife habitat improvement. Forestry best management practices will guide all thinning projects (Missouri Department of Conservation, 2014).

(Forestry)

Strategy 3: Utilize management tools such as mechanical thinning of trees and prescribed fire to stimulate herbaceous vegetation in woodlands, to increase oak regeneration in forests and woodlands, and to discourage unwanted vegetation, such as bush honeysuckle. (Forestry)

Strategy 4: Reforest open lands where invasive species invasion requires excessive work to maintain native species such as warm season grasses through a combination of natural tree regeneration and mechanical or hand tree planting. Select tree species that are valuable to wildlife and well-suited to the growing site.

(Forestry)

Management Objective 2: Manage existing open lands and old fields to enhance wildlife habitat.

Strategy 1: Control invasive plants (e.g., autumn olive, fescue, common teasel, exotic thistles, and sericea lespedeza) to avoid negative impacts on natural communities. Routinely look for and seek to control invasive plants. (Forestry)

Strategy 2: Remove and thin undesirable tree species growing in and around open areas. (Forestry)

Strategy 3: Establish warm-season grasses and other native herbaceous vegetation in open areas to provide diverse wildlife habitat. (Forestry)

Strategy 4: Utilize prescribed fire to stimulate herbaceous vegetation in open areas and to discourage undesirable species. (Forestry)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Maintain healthy aquatic ecosystems in the ponds.
- 2) Maintain aquatic biodiversity in area streams.

Management Objective 1: Maintain integrity of the two fishing ponds.

Strategy 1: Improve fish cover with native aquatic vegetation and woody cover, as needed. (Fisheries)

Strategy 2: Maintain dam integrity on the fishing ponds through removal of woody plants and burrowing animals. (Forestry)

Management Objective 2: Conserve LaBarque Creek Watershed's aquatic biodiversity within Young CA streams.

Strategy 1: Implement watershed conservation strategies consistent with the *LaBarque Creek Watershed Conservation Plan* (Meneau, 2009), including maintaining 100-foot wide riparian corridors on all conservation area stream channels, minimizing the number of stream channel crossings, and utilizing appropriate stream crossing best management practices. (Forestry)

Strategy 2: Monitor LaBarque Creek fish community biodiversity through periodic Resource Assessment and Monitoring surveys (every three to five years). (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Young CA offers valuable recreational opportunities such as hiking, hunting, and fishing close to an urban population center.

- 2) The area offers opportunities to build relationships with the public, neighboring landowners, and the Friends of LaBarque Creek watershed group.
- 3) Past and future resource improvement projects offer opportunities for demonstration sites for the public.

Management Objective 1: Provide public hunting, fishing, and wildlife viewing opportunities.

Strategy 1: Conduct management activities that will provide habitats for a diversity of fish and wildlife species. (Forestry, Fisheries)

Strategy 2: Ensure that public hunting opportunities are advertised in the annual hunting regulation booklets. (Forestry, Wildlife)

Strategy 3: Maintain walk-in accesses to area streams and fishing ponds. (Forestry)

Management Objective 2: Facilitate good working relationships with area users and neighboring landowners.

Strategy 1: Work with neighbors and other groups interested in the watershed to occasionally host volunteer projects and demonstrate appropriate habitat management techniques on the area. (Forestry)

Management Objective 3: Maintain demonstration areas for ecological restoration and forest thinning.

Strategy 1: Maintain existing signage at ecological restoration sites and the forest thinning site. (Forestry)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Variety and intensity of public use requires regular area maintenance and management.
- 2) Communicate with easement holders regarding access and maintenance requirements to maintain utility lines.
- 3) Maintain clear and identifiable boundaries and signs.
- 4) Consider for acquisition parcels that border this area and occur within the LaBarque Creek Watershed or that improve access to the area.

Management Objective 1: Maintain parking lots and trails to provide aesthetics, utility, and hiking opportunities for the public.

Strategy 1: Perform routine maintenance on trails. (Forestry)

Strategy 2: Perform routine trash pickup, mowing, sign maintenance, and other maintenance activities. (Forestry)

Strategy 3: Explore opportunities to relocate the north parking lot to a site that is more suitable for additional parking. (Forestry)

Strategy 4: Explore opportunities with partners to develop a LaBarque Creek Trail through areas with multiple ownerships. (Forestry)

Management Objective 2: Ensure requirements of easements are met.

Strategy 1: Regularly communicate with easement holders to know what activities are planned along utility easements and ensure compliance with the easement agreement. (Forestry)

Management Objective 3: Maintain well marked, accurate boundary lines and area signs.

Strategy 1: Paint boundary trees and maintain signs along boundary lines every four years or as needed. (Forestry)

Strategy 2: Continuously maintain area signs. (Forestry)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

| | FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Aquatic Resource Management | | | | | | | | | | |
| <i>Objective 1</i> | | | | | | | | | | |
| Strategy 2 | | X | | | | | X | | | |
| Administrative Considerations | | | | | | | | | | |
| <i>Objective 3</i> | | | | | | | | | | |
| Strategy 1 | | X | | | | X | | | | X |

APPENDICES

Area Background:

The 1,145-acre Young Conservation Area CA is located in north-central Jefferson County, about 5 miles south of Eureka. The original 970-acre tract was acquired in 1986 from the Hilda Young Family with part of the funds donated by Mr. and Mrs. Edward D. Jones, Jr. Additional tracts were added in subsequent years with a 6-acre donation from Richard and Janet Gleb, utilization of Stream Stewardship Trust Funds and a contribution from the U. S. Department of Agriculture Forest Service Forest Legacy Program.

This property helps to maintain and enhance the ecological and recreational values of the LaBarque Creek Watershed (Meneau, 2009), which supports a high quality stream system and diverse plant communities. The watershed lies in northwest Jefferson County and consists of 13 square miles of land with 44 percent being publicly owned and over 86 percent of the area remaining forested. As a result of the low level of development in the watershed and the protection efforts, the creek continues to support a diverse community of 52 fish species (the most diverse community in the St. Louis area).

The area lies in the Ozark border region with soils derived from limestone and dolomite on the upper slopes and St. Peter sandstone in the valleys. As a result, there are a variety of plant communities, including upland dolomite/limestone woodlands and glades, limestone/dolomite and sandstone forests, and bottomland forests along with pine and bottomland tree plantings, warm-season grass plantings and old fields on the lower slopes. The woods are dominated by oak, hickory, maple, and cedar with an understory of flowering dogwood and redbud.

The area is mostly forested and there are several intermittent streams. Over 2 miles of LaBarque Creek and two fishing ponds are present on the area. Currently, there are 6 miles of trails open to hiking through much of the area.

Current Land and Water Types:

| Land/Water Type | Acres | Miles | % of Area |
|-------------------------------|--------------|-------|------------|
| Forest | 520 | | 45 |
| Woodland | 500 | | 44 |
| Open Land | 105 | | 9 |
| Pine Plantation | 16 | | 1 |
| Ponds | 2 | | <1 |
| Other | 2 | | <1 |
| Total | 1,145 | | 100 |
| Tributaries to LaBarque Creek | | 2.95 | |
| LaBarque Creek | | 2.38 | |

Public Input Summary:

The draft Young Conservation Area Management Plan was available for a public comment period May 1–31, 2016. The Missouri Department of Conservation received comments from six respondents (Appendix A). The Young 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.

Department responses to themes and issues identified through the Young Conservation Area public comment period.

Suggests conducting annual prescribed burns to benefit wildlife.

There are several burn plans written for Young Conservation Area. Burns are planned and have been completed in the past for both grass units and woodland restoration areas. The overall burn objective is to restore natural communities (plants and animals) which includes; promoting grass and wildflower growth, removing leaf litter to stimulate growth of desired species, reducing fuel, and setting back undesirable shade tolerant and invasive species. The ability to burn these units is based on Regional burn priorities and appropriate conditions each year.

When forest thinning, suggests thinning the weakest and least desirable trees.

Timber Stand Improvement that has been done at Young and other conservation areas includes removing a percentage of the trees present to restore the woodland community (semi-open canopy) and stimulate the growth of grasses and forbs on the forest floor. Some healthy crop trees are left standing as well as some dead or dying trees, to provide quality habitat for the many species that benefit from these. To reach the desired number of trees?, there are often a variety of tree species and sizes removed in these overstocked woodlands.

Suggests removing undesired woody growth along electric utility easement.

There are several right of way easements on Young Conservation Area that have descriptive easements on how vegetation is to be trimmed and treated. Ameren Missouri is responsible for all treatment and removal within these utility easements.

Suggests connecting Young CA trail system with LaBarque Creek CA trails, partnering with willing landowners or building trail close to road right-of-way.

Missouri Department of Conservation area managers have met with other landowners in the past about partnering to build a trail that connects Young CA and LaBarque Creek CA. The Department is willing to partner in this effort, it takes all willing partners to build and maintain trails on their land and to allow use by the public. This would include support from county

highways, state highway department, and private landowners. This project has not gone any further as all entities have not been in favor.

Suggests expanding trail system on Young CA. Suggests better marking area trails.

At this time there are no plans for adding interior trails to the existing infrastructure at Young Conservation Area. Numerous conservation areas in close proximity to Young provide hiking opportunities, such as the Myron and Sonya Glassberg Family Conservation Area, where a new loop trail opened this past year. The LaBarque Creek Conservation Area nearby also provides opportunities for trail hiking. Trails sign numbers and locations will be reviewed to see what improvements can be made to better mark them for hikers.

Suggests hosting and advertising invasive species removal events for volunteers.

Invasive species events have been held at Young Conservation Area in the past through both the Friends of LaBarque Creek and the Open Space Council. Conservation Department employees have been present at these events to help train willing volunteers and thank them for their service. Individuals and groups can contact the area manager if interested in providing service by becoming a “service volunteer” and filling out a Conservation Service Volunteer Agreement.

Suggests limiting hunters to steel and non-toxic shot.

The Department currently prohibits the use or possession of lead shot on major wetland areas around the state. In addition, federal regulations prohibit the use of lead shot for all waterfowl hunting activities. Further regulations pertaining to the use of non-toxic shot would need to be considered on a statewide basis for all conservation areas.

Suggests adding signs to encourage courtesy and safety among hunters and hikers.

All conservation areas support multi-use and a variety of public users can be seen using our areas on a daily basis. Many hunters have taken mandatory “hunter education” classes prior to buying permits and a hunting license. Area activities are posted on bulletin boards and online in the Conservation Atlas. Outdoor ethical behavior and courtesy for others is difficult to regulate. Visitors can report illegal activities to the Regional Office or by contacting their local conservation agent.

Suggests acquiring additional property to enlarge the area.

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

Appreciates the area.

Thank you for your comments about the area. We hope you continue to enjoy visits to this unique conservation area.

References:

Meneau, K. J. (2009). *LaBarque Creek Watershed conservation plan*. 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.

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, MO: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Topographical Map

Figure 4: Vegetative Cover Map

Figure 5: Easement Map

Additional Appendices:

Appendix A. Young Conservation Area Management Plan Public Comments

Figure 1: Area Map

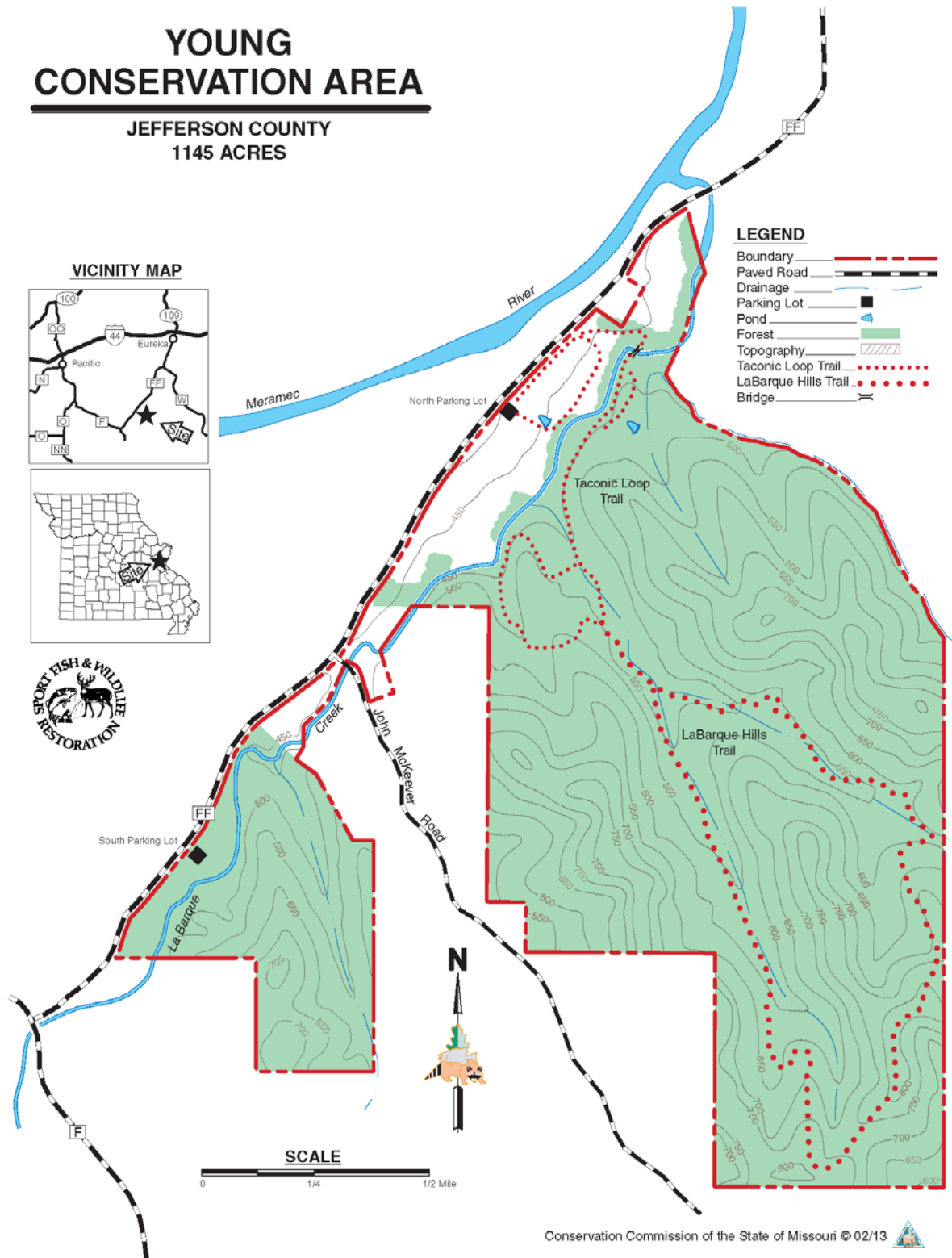
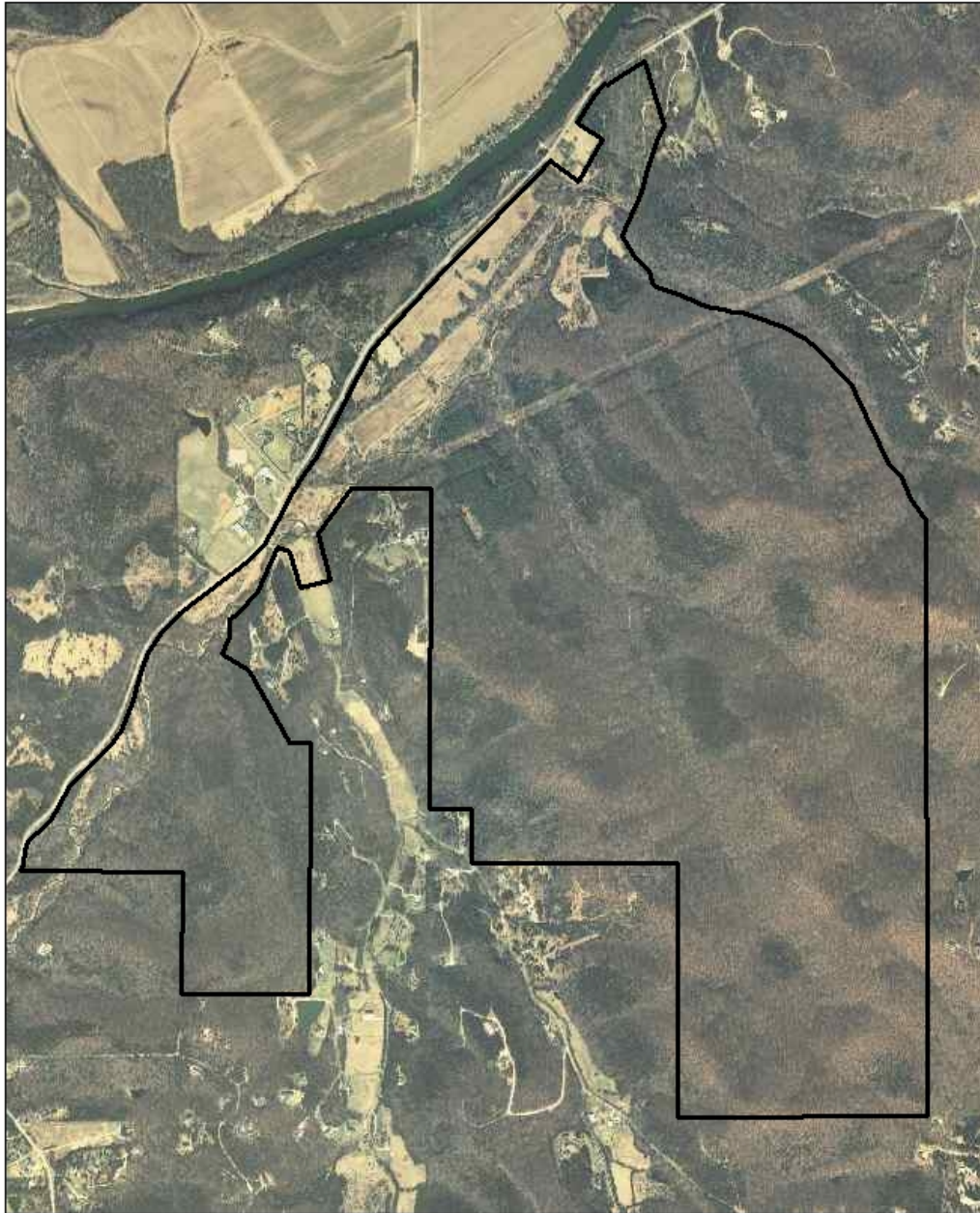



Figure 2: Aerial Map

Young CA Aerial Map



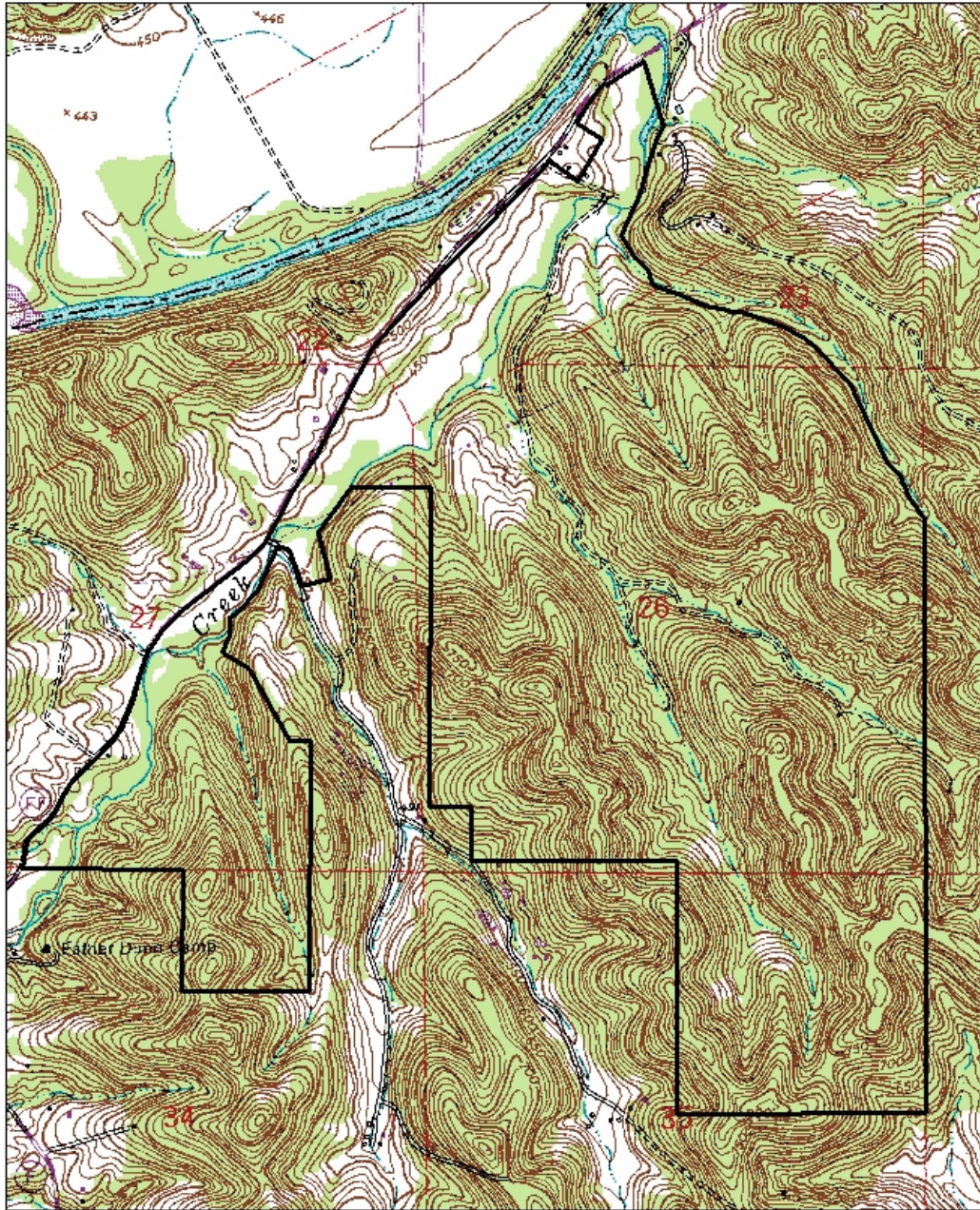
 AreaBoundary

0 0.15 0.3 0.6 0.9 1.2 Miles



Figure 3: Topographical Map

Young CA Topographic Map



□ AreaBoundary

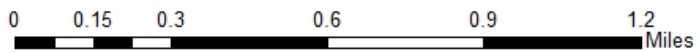
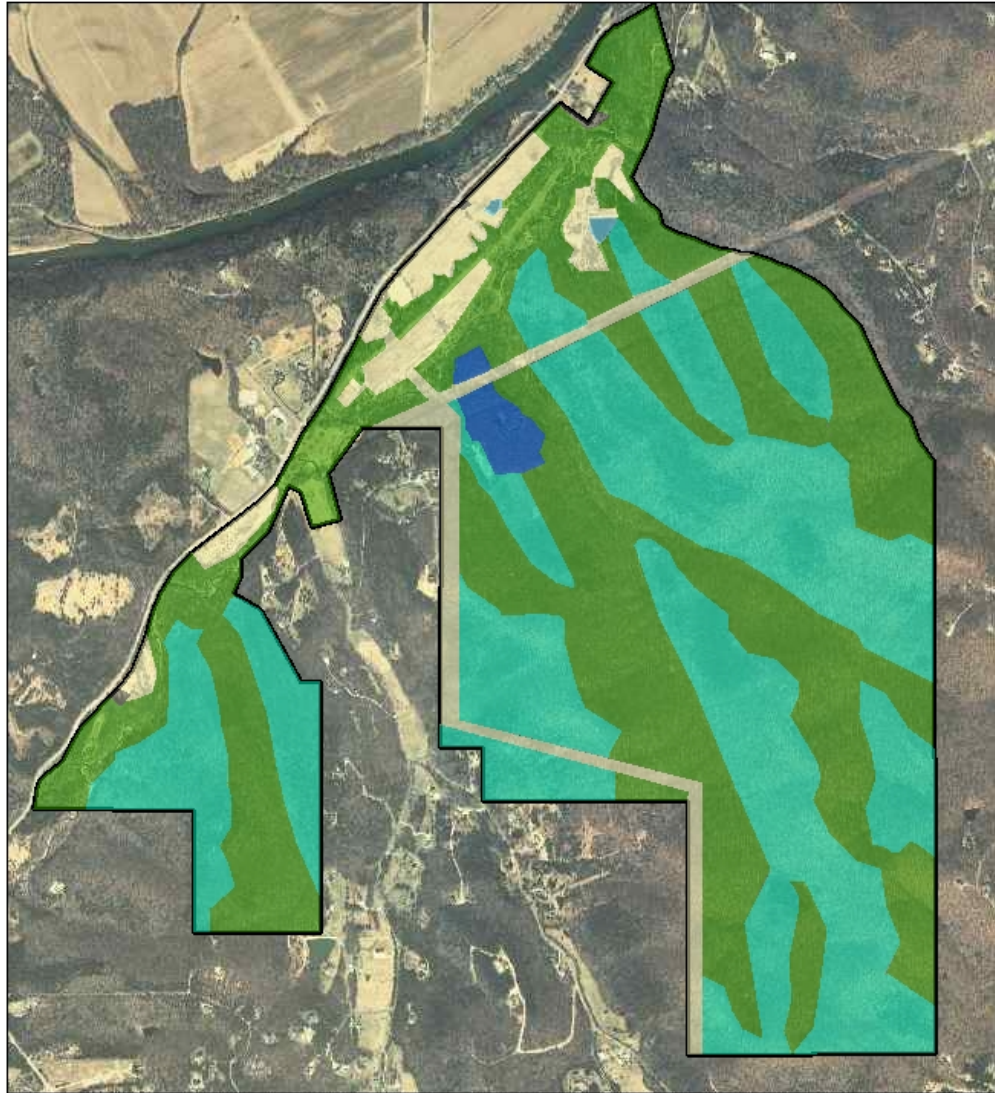


Figure 4: Vegetative Cover Map

Young CA Vegetative Cover Map



Legend Forest AreaBoundary

Open land

Other

Pine plantation

Pond

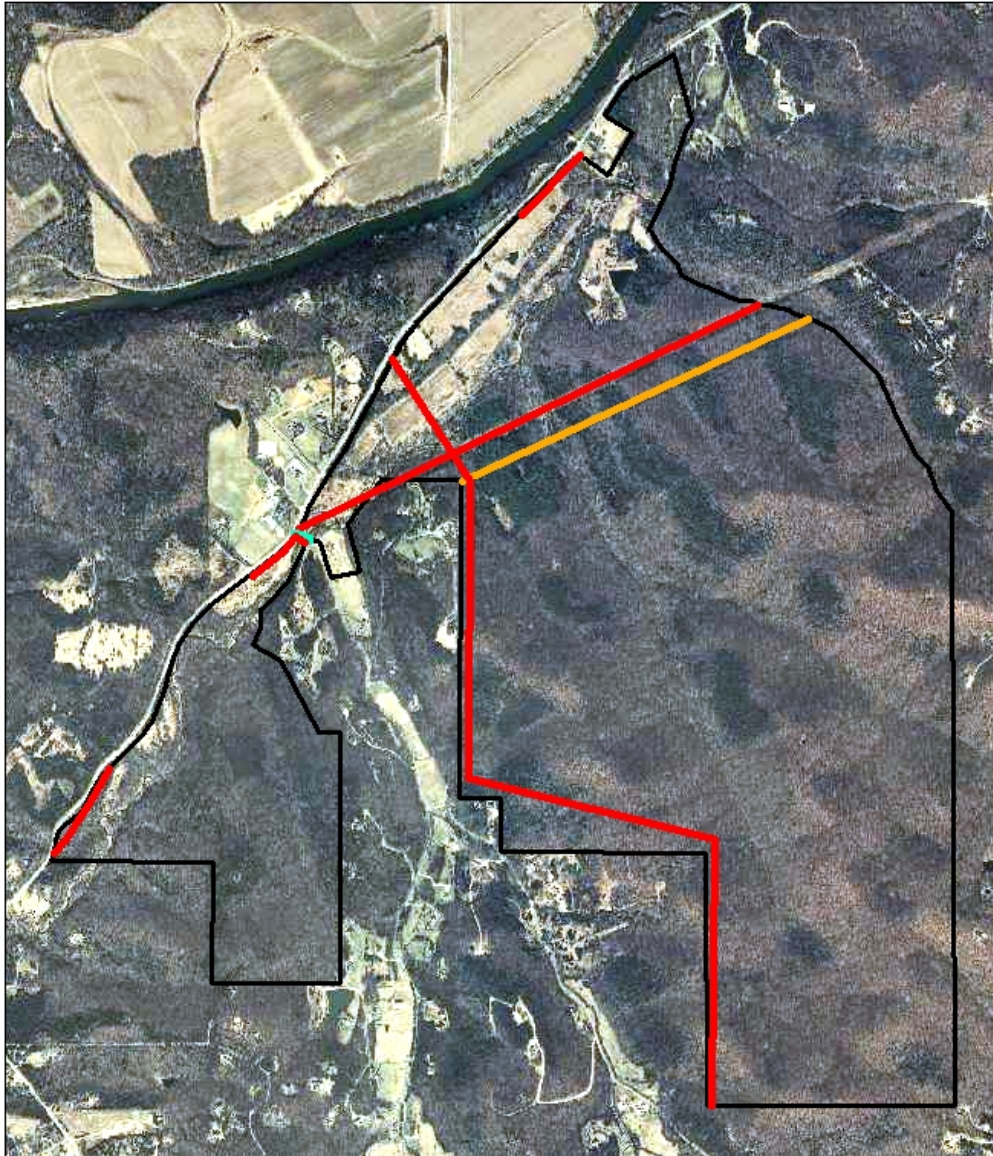
Woodland

0 0.15 0.3 0.6 0.9 1.2 Miles

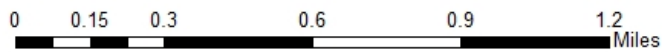


Figure 5: Easement Map

Young CA Easements



| Legend | | Easement | |
|---|--------------|---|-----------|
|  | AreaBoundary |  | Electric |
| | |  | Road |
| | |  | Telephone |



Appendix A. Young Conservation Area Management Plan Public Comments

Received during public comment period (May 1-31, 2016):

With preserving the native warm grasslands (even woodlands for that matter), an annual burn may benefit the area. It could also be beneficial for hunters including dove hunters if burned at a particular time. In order to preserve the watershed and the magnitude of species present in La Barque creek, I think hunters should be limited to steel and non-toxic shot only when hunting with shotguns.

While a 10 year forest management plan looks good, I would hope that MDC has a 100-200 year plan for this area. Most of us will not see significant forests of 200 year age but our descendants will --if you manage appropriately.

When you mention mechanical thinning but do not reference an actual strategy, I would much prefer to see you call out the best practices demonstrated for 60 plus years in Pioneer Forest, managing to improve the forest over time by selecting the weakest and less desirable trees.

The trails on the properties are great. I would urge MDC to work to connect LaBarque Hills with Young CA through a trail along the creek. Many landowners will participate, including The College School (at least the last time it was discussed). I urge MDC to purchase the Washington U property from the university to facilitate that creek corridor trail. (Note I think the trail could be built close to or on the road right of way where private property access if not available.

thanks.

Not specifically addressed in the Management Plan for Young CA is the area of the electric utility easement. This area, specifically that lying just above (northeast) of the Taconic Loop Trail (at about 38.442694, -90.660772) differs markedly from most of the remainder of the Conservation Area and supports numerous species which are rare or absent in other parts of the Conservation Area. Examples are *Astragalus crassicaulus*, *Draba cuneifolia*, *Primula meadia*, *Comandra umbellata*, *Camassia scilloides*, and other species consistent with an upland prairie or glade ecosystem. Unfortunately, it is being heavily overrun by young woody growth which is destroying the unique biodiversity of this segment. Perhaps this should be dealt with specifically, consistent with Section V (Terrestrial Resource Management), Objective 2 (Manage open lands), Strategy 2 (Remove and thin undesirable tree species).

Thanks for the opportunity to comment.

I love Young Conservation Area. As warm weather approaches, I always look forward to revisiting the old field, an idyllic setting of birds and pollinators among blackberry brambles, tall grasses and wildflowers. We also enjoy the frog pond and, of course, beautiful LeBarque Creek.

My only disappointment with Young CA has been inability to locate the Taconic Loop and

LeBarque Hills trails. We have skirted the edge of the forest around the fish pond but somehow have never found the trail entry into the woods. This could be just us, but maybe the trail could be more clearly marked in this area?

Another suggestion might be, and this includes Glassberg and LeBarque CA's, to create and publicize more volunteer invasives removal events. I would like to help if I knew of such events. Could there be MDC email alerts to potential volunteers? If so, please put me on the list

Other than that, all I can say is I love Young CA and am grateful to MDC and all others who have contributed towards land preservation in the LeBarque watershed. Thank you for your ongoing care of Young CA. The management plan looks great.

I would like to see more trails at Young CA. A connecting trail between all the nearby public areas would really be an asset to the LaBarque area.

A LaBarque trail is a great idea. Extending it through different areas would make it even better. If additional properties become available, always buy them to increase the size of the area. Increase signage to let hikers and hunters know to be careful and courteous of each others activities.