Southeast Regional Office & Cape Girardeau Conservation Nature Center

Ten-Year Area Management Plan

FY 2017-2026

Joanie Stu
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8/4/16
Date

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8/23/16
Date

Southeast Regional Office & Cape Girardeau Conservation Nature Center Area Management Plan Approval Page

PLANNING TEAM

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SOUTHEAST REGION

RCT Chair _____ *Signature* 7-25-16 *Date*

OUTREACH & EDUCATION DIVISION

Outreach and Education Unit Chief _____ *Signature* 8-4-16 *Date*

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Private Land Services Unit Chief _____ *Signature* 8/24/16 *Date*

OVERVIEW

- **Official Area Name:** Southeast Regional Office, #9021; Cape Girardeau Conservation Nature Center, #3603
- **Year of Initial Lease:** 1990
- **Acreage:** 78.7 acres owned by Capre Giardeau County Commission and leased to the Missouri Department of Conservation
- **County:** Cape Girardeau
- **Division with Administrative Responsibility:** Private Land Services; Outreach and Education
- **Division with Maintenance Responsibility:** Design and Development
- **Statements of Purpose:**
  - **A. Strategic Direction**
    Manage for healthy forests, woodlands, wetlands, swamp and pond communities; maintain a quality fishery; provide outdoor educational opportunities; demonstrate native plant and natural community management; and provide public recreational opportunities.
  - **B. Desired Future Condition**
    The desired future condition is an area containing demonstration wetlands, ponds, forested natural communities, grassland habitats, native plant gardens, and aquatic communities; inviting interpretive trails; and instructive outdoor spaces. Provide area visitors with welcoming facilities and quality public service.
  - **C. Federal Aid Statement**
    N/A

GENERAL INFORMATION AND CONDITIONS

I. <u>Special Considerations</u>

- **A. Priority Areas:** None
- **B. Natural Areas:** None

II. <u>Important Natural Features and Resources</u>

- **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:** Yes, records kept with Department natural history biologist.

III. <u>Existing Infrastructure</u>

- Two staffed offices (Americans with Disabilities Act (ADA) accessible)
- Four parking lots (ADA accessible)

- Visitor Center (ADA accessible)
- Ridgetop Trail (ADA accessible, 0.3 miles)
- Three miles of hiking trails
- Kids fishing pond (1.0 acres) and ADA-accessible fishing dock
- Wood Duck Swamp wetland (1.0 acres) and boardwalk
- Two fishless ponds (0.1 acres)
- Demonstration rain garden
- Demonstration sand prairie
- Native plant gardens
- Storage bays and pods

IV. Area Restrictions or Limitations

A. **Deed Restrictions or Ownership Considerations:** These areas are owned by the Cape Giraedeau County Commission and leased to the Departmetn under a 99 year lease agreement. (1989 Regional Office and 2002 Nature Center)

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 land. Other uses may be acceptable and must be assessed in each specific situation.

C. **Easements:** City of Cape Girardeau has easement for sewer lift station.

D. **Cultural Resources Findings:** No known cultural resources.

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

F. **Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

The Southeast Regional Office and Cape Girardeau Conservation Nature Center contain examples of diverse habitat types that are unique to southeast Missouri. The region is noted for cypress-tupelo swamps and lowland wetlands that were once prevalent in the bootheel region – representations of those wetlands can be located at Wood Duck Swamp and in the select wetland developments on the area. The White Oak Trace trail system winds through an area of highly-dissected River Hills forest, a representation of the Ozark oak-hickory forests and the mesophytic river cove forests adjoining the Mississippi River. The forest features oak, hickory, maple, and elm on upland slopes and paw-paw, sassafras, tulip poplar, and sycamore in lowland areas.

Challenges and Opportunities:

1) Manage forest and woodland communities.
2) Control invasive species.
3) Manage rain garden.

Management Objective 1: Maintain healthy forests, woodlands, and landscaped vegetation to support wildlife habitat and visitor use.

Strategy 1: Monitor forest, woodlands, landscaped trees and green space plantings for invasive vegetation, diseases and insect pest species. Suppress any infestations that may develop and conduct regular interdivisional maintenance treatments to maintain low levels on non-native plant populations. (Outreach and Education)

Strategy 2: Conduct prescribed burns to maintain green space plantings, restore natural communities (e.g., sand prairie garden, Farkleberry Knob "hill prairie" and open woodland), reduce leaf litter, promote ground flora and suppress non-native vegetation. (Outreach and Education)

Strategy 3: Annually remove potential hazard trees. (Design and Development)

Strategy 4: Manage oak-hickory forest by controlling competing vegetation. (Outreach and Education)

Strategy 5: Manage landscaped trees with proper arboriculture, e.g., pruning, planting, insect and disease control and watering. (Outreach and Education)

Management Objective 2: Manage rain garden.

Strategy 1: Renovate and manage the rain garden to promote growth of aesthetically pleasing native vegetation and provide a sink for runoff during heavy rains. (Design and Development)

VI. <u>Aquatic Resource Management Considerations</u>

A kids fishing pond is located on the area and contains several species of emergent, floating-leaf and moist soil plants. An ADA-compliant fishing dock provides users with access to the kids fishing pond and serves as a staging area for fishing programs. An amphibian pond near the building is managed as a fishless pond and supports a variety of aquatic life. Wood Duck Swamp is a healthy living swamp ecosystem. It includes a boardwalk to aid visitor access. The swamp contains a variety of rare swamp endemic fish species for educational purposes.

Challenges and Opportunities:

1) Grow and maintain a healthy and sustainable fishery in kids fishing pond and Wood Duck Swamp.

2) Maintain an aesthetically pleasing aquatic vegetation and marsh area in kids fishing pond and Wood Duck Swamp.

Management Objective 1: Provide quality fish populations at the kids fishing pond and at Wood Duck Swamp; provide diverse angling opportunities at the fishing pond.

Strategy 1: Conduct spring electrofishing surveys to assess largemouth bass and sunfish communities. (Fisheries)
Strategy 2: Conduct standardized hoop netting surveys every three years to evaluate the channel catfish community. (Fisheries)
Strategy 3: Continue stocking 12-inch or larger channel catfish on a regular basis to ensure youth angling success. (Fisheries)
Strategy 4: Continue to monitor swamp endemic fish species survival and growth in Wood Duck Swamp. (Fisheries)

Management Objective 2: Maintain beneficial aquatic vegetation at a level not to exceed 20 percent of coverage to allow for angler accessibility during the growing months.

Strategy 1: Use herbicides to control invasive aquatic vegetation. (Fisheries)
Strategy 2: Annually maintain beneficial aquatic vegetation in the upper end of the kids fishing pond. (Fisheries)

Management Objective 3: Provide littoral and deep-water woody cover to diversify fish habitat and improve angler success.

Strategy 1: Periodically add hardy structure into the ponds. Frequently evergreen trees will be used as woody cover due to their availability. (Fisheries)

Management Objective 4: Maintain healthy aquatic habitats on the area.

Strategy 1: Manage the kids fishing pond for educational and recreational use. (Fisheries)
Strategy 2: Monitor and suppress invasive and exotic species. (Fisheries)

VII. <u>Public Use Management Considerations</u>

The regional office and nature center feature demonstration habitats to aid visitors in developing similar habitats on their own property. The sites are also used by interpretive staff to teach the importance of each habitat to school and youth groups. Currently, there is a butterfly garden, rain garden, sand prairie, shade garden, wetland garden, Wood Duck Swamp, ephemeral wetlands, kids fishing pond and green space plantings (including native grasses and forbs) to aid in interpretive education.

Challenges and Opportunities:

1) Improve educational, interpretive and outdoor skills programming.
2) Provide hiking, fishing and wildlife viewing opportunities.
3) Serve as a model for growing and maintaining native plants and preserving natural communities.
4) Reduce effects of urban and suburban development.
5) Promote the use of the kids fishing pond.

Management Objective 1: Improve educational, interpretive and outdoor skills programming.

Strategy 1: Design and construct an Outdoor Skills Pavilion for archery, orienteering and other outdoor skills instruction. (Design and Development)

Strategy 2: Communicate the uniqueness of the area to teachers, students, scout groups and youth groups. Promote the area as a possible destination for environmental education classes, school programs and workshops. (Outreach and Education)

Strategy 3: Consider creating and constructing a nature classroom near the future Outdoor Skills Pavilion to increase opportunities for programming and public use. (Outreach and Education)

Strategy 4: Continue to utilize telemetry equipment to monitor alligator gar in Wood Duck Swamp for aquatic education purposes. (Fisheries)

Management Objective 2: Provide hiking, fishing and wildlife viewing opportunities.

Strategy 1: Maintain existing trails and provide interpretational and directional signage to improve trail-use experience. (Design and Development)

Strategy 2: Revise current White Oak Trace trail map to include Wood Duck Swamp and Maple Hollow Trail. (Outreach and Education)

Strategy 3: Redesign steps and trail surfaces to promote safety and area user comfort. (Design and Development)

Strategy 4: Maintain safety and cleanliness of fishing dock and boardwalks to enhance the use of the kids fishing pond, amphibian pool and Wood Duck Swamp. (Design and Development)

Strategy 5: Communicate recreational opportunities to the public. (Outreach and Education)

Strategy 6: Conduct annual management activities that will provide habitat for a diversity of species. (Outreach and Education)

Management Objective 3: Provide a model for growing and maintaining native plants and preserving natural communities.

Strategy 1: Replace cultivars and exotic species with native species, wherever possible. (Outreach and Education)

Strategy 2: Promote and manage native plant gardens to the public using minimal staff time for weeding and maintenance. (Outreach and Education)

Strategy 3: Maintain demonstration sand prairie to provide educational opportunities. (Outreach and Education)

Management Objective 4: Manage effects of nearby urban development to provide an enjoyable visitor experience.

Strategy 1: Reduce noise from Highway 61. Plant a sound barrier of Eastern red cedar to minimize noise on the trail and at the future outdoor skills pavilion. (Outreach and Education)

Strategy 2: Create a forested buffer area between the Sinkhole Bottom portion of the trail system and Walden Park subdivision to improve the trail use experience by providing a visual barrier. (Outreach and Education)

Strategy 3: Reduce storage of excess materials near Highway 61 and minimize public view to enhance area aesthetics, e.g., install fencing or storage addition at the future outdoor skills pavilion. (Design and Development)

Management Objective 5: Increase public awareness of the kids fishing pond and angling opportunities to maintain or improve public use and satisfaction.

Strategy 1: Offer basic angling programs semi- or bi-annually. (Outreach and Education)

Strategy 2: Design and install an interpretive sign to inform the public of appropriate bait and tackle. (Design and Development)

VIII. <u>Administrative Considerations</u>

Challenges and Opportunities:

1) Maintain area infrastructure at current levels.
2) Coordinate with Cape Girardeau County Park and the City of Cape Girardeau to minimize user conflicts and promote the use of the area's amenities.

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines. (Design and Development)

Management Objective 2: Coordinate with Cape Girardeau County Park and the City of Cape Girardeau to minimize user conflicts and promote the use of the area's amenities.

Strategy 1: Design and create a trail bypass from Cape LaCroix Recreation Trail to Cape County Park North to minimize trail user conflicts among hikers, school groups, bikers, joggers and dog walkers. (Outreach and Education)

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY17	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**	**FY24**	**FY25**	**FY26**
Terrestrial Resources Management										
Objective 2										
Strategy 1	X			X			X			X
Aquatic Resources Management										
Objective 4										
Strategy 2	X									
Objective 4										
Strategy 3	X									
Public Use Management										
Objective 1										
Strategy 3	X									
Objective 2										
Strategy 2	X									
Objective 4										
Strategy 1	X									

APPENDICES

Area Background:
In 1850, Benjamin Miller received a land patent from the United States General Land Office for 360 acres in Cape Girardeau County (Section 22, Township 31, Range 13). In 1874, the farm, located midway between the cities of Cape Girardeau and Jackson, was ordered by the court to be sold and it was purchased by the county at a price of $6500 (approximately $18 per acre). This land, mostly covered with timber, was set aside by the county to establish a county farm. However, this did not happen, and for more than 80 years, the farm operated as the Cape Girardeau County Home for the Friendless that provided housing for the old and mentally ill who had no one to care for them. After the home was closed in 1956, the land became a county park. In 1990, the Southeast Regional Office of the Missouri Department of Conservation relocated within a portion of the park. The office building underwent a renovation in 2002, the same year a lease agreement was made with Cape Girardeau County for the ground on which to construct the Cape Girardeau Conservation Nature Center. Construction began in 2003 and the nature center opened in May of 2005.

The Cape Girardeau Conservation Nature Center is open to the public Tuesday through Saturday, 8 a.m. to 5 p.m. The facility is closed on Sundays, Mondays, and all state holidays. The facility and programming are free of charge; paid for through the 1/8% "Design for Conservation" sales tax.

The nature center includes a multipurpose classroom, laboratory classroom, 160-seat auditorium, working laboratory in the exhibit gallery, educator resource area, nature shop and 8,000 square foot exhibit gallery.

The Southeast Regional Office is open to the public Monday-Friday, 8 a.m. to 5 p.m., except for state holidays. The SERO includes regional field offices, a small conference room, large conference room, mechanic's shop and storage bays.

The grounds and surrounding County Park are open every day from dawn to 10 p.m. The entrance to the County Park is not gated.

Current Land and Water Types:

Land/Water Type	Acres	% of Area
Forest and Woodland	56.8	72
Yard	10.9	14
Facilities and Parking	8.73	11
Ponds and Aquatic Areas	2.27	3
Total	**78.7**	**100**

Public Input Summary:
The draft Southeast Regional Office and Cape Girardeau Conservation Nature Center Management Plan was available for a public comment period April 1–30, 2016. The Missouri Department of Conservation received comments from two respondents (Appendix A). The Southeast Regional Office and Cape Girardeau Conservation Nature Center 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 Southeast Regional Office and Cape Girardeau Conservation Nature Center Conservation Area public comment period

Wonders how to combat invasive Asian ladybug beetles.
We recommend you visit the University of Missouri Extension webpage to learn more about how to combat Asian ladybug beetles (http://extension.missouri.edu/p/G7369).

Encourages partnerships with hunting organizations like Quality Deer Management Association, National Wild Turkey Federation, Rocky Mountain Elk Foundation, and Ducks Unlimited.
The Cape Girardeau Conservation Nature Center has partnered with various hunting organizations in the region. Delta Waterfowl and National Wild Turkey Federation have assisted with "Hunting Camp." Quality Deer Management Association has met at the nature center on multiple occasions. Ducks Unlimited has been an active partner in our annual "Day on the River" event. We extend the invitation to these groups to participate with our programs and events whenever possible.

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

Maps:
Figure 1: Area Map
Figure 2: Aerial photograph with topographic lines
Figure 3: Current Vegetation Map
Figure 4: Topographic Map

Additional Appendices:

Appendix A: Southeast Regional Office and Cape Girardeau Conservation Nature Center Management Plan Public Comments

Figure 1: Area Map

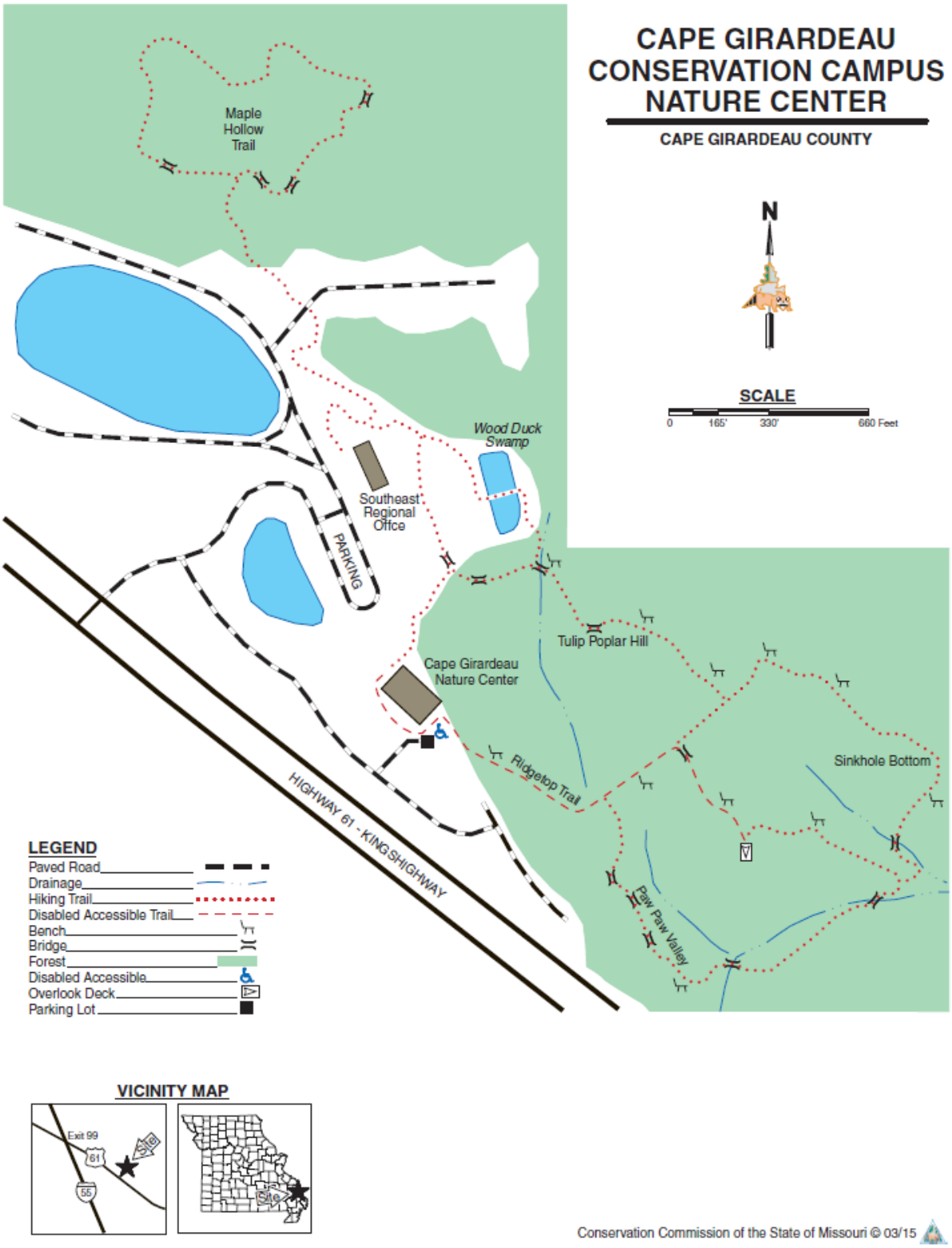


Figure 2: Aerial Photograph with Topographic Lines

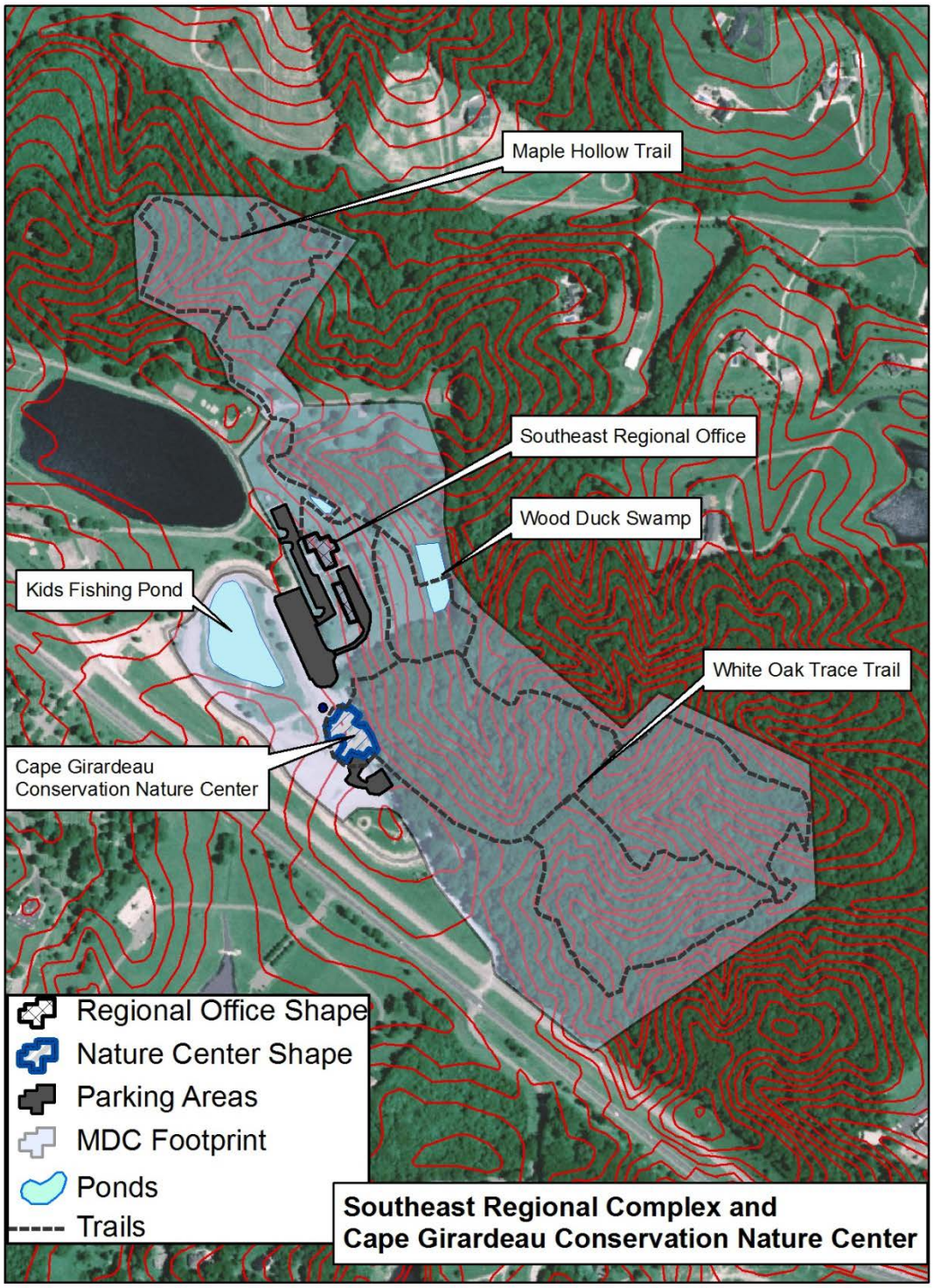


Figure 3: Current Vegetation Map

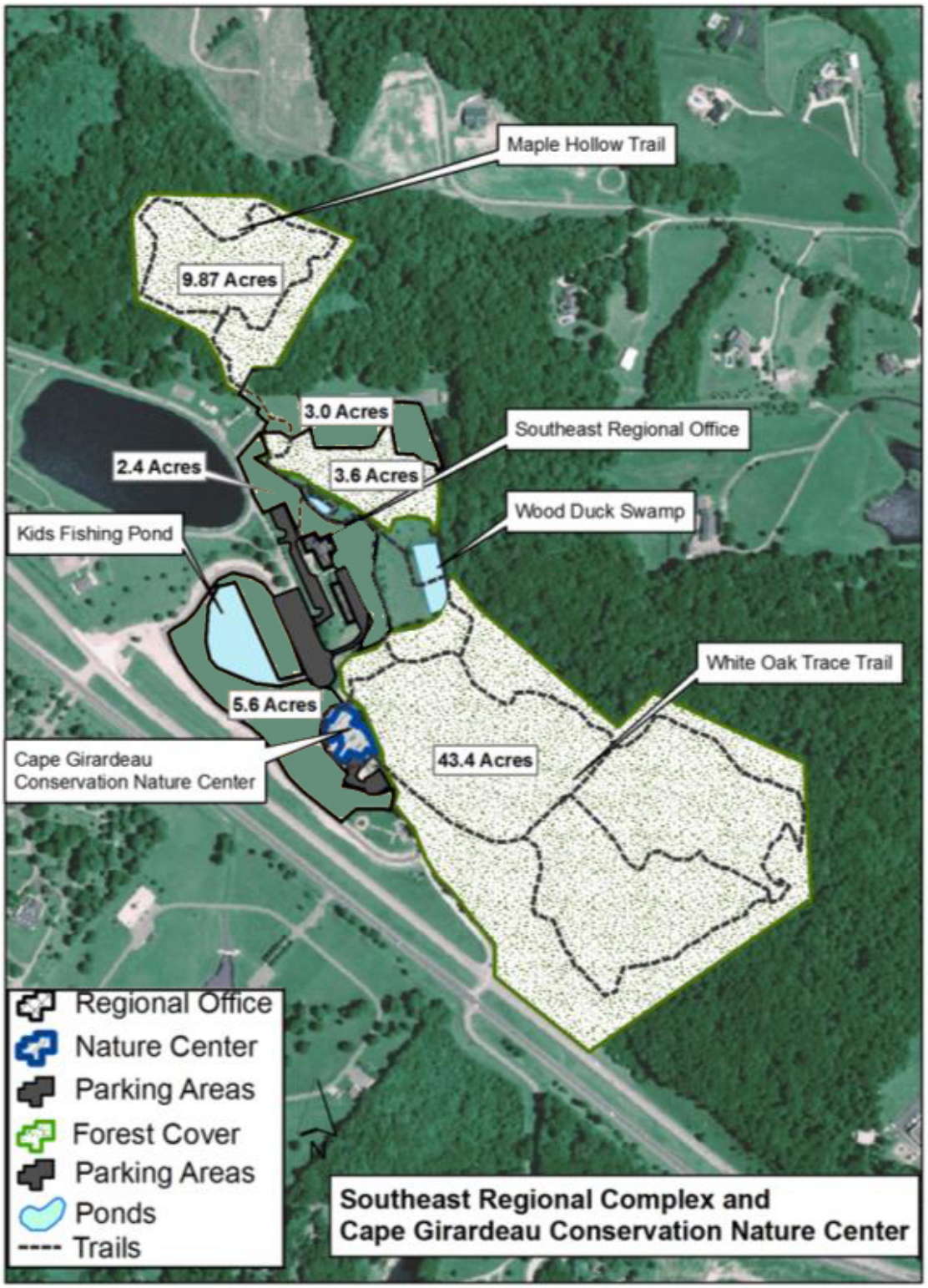
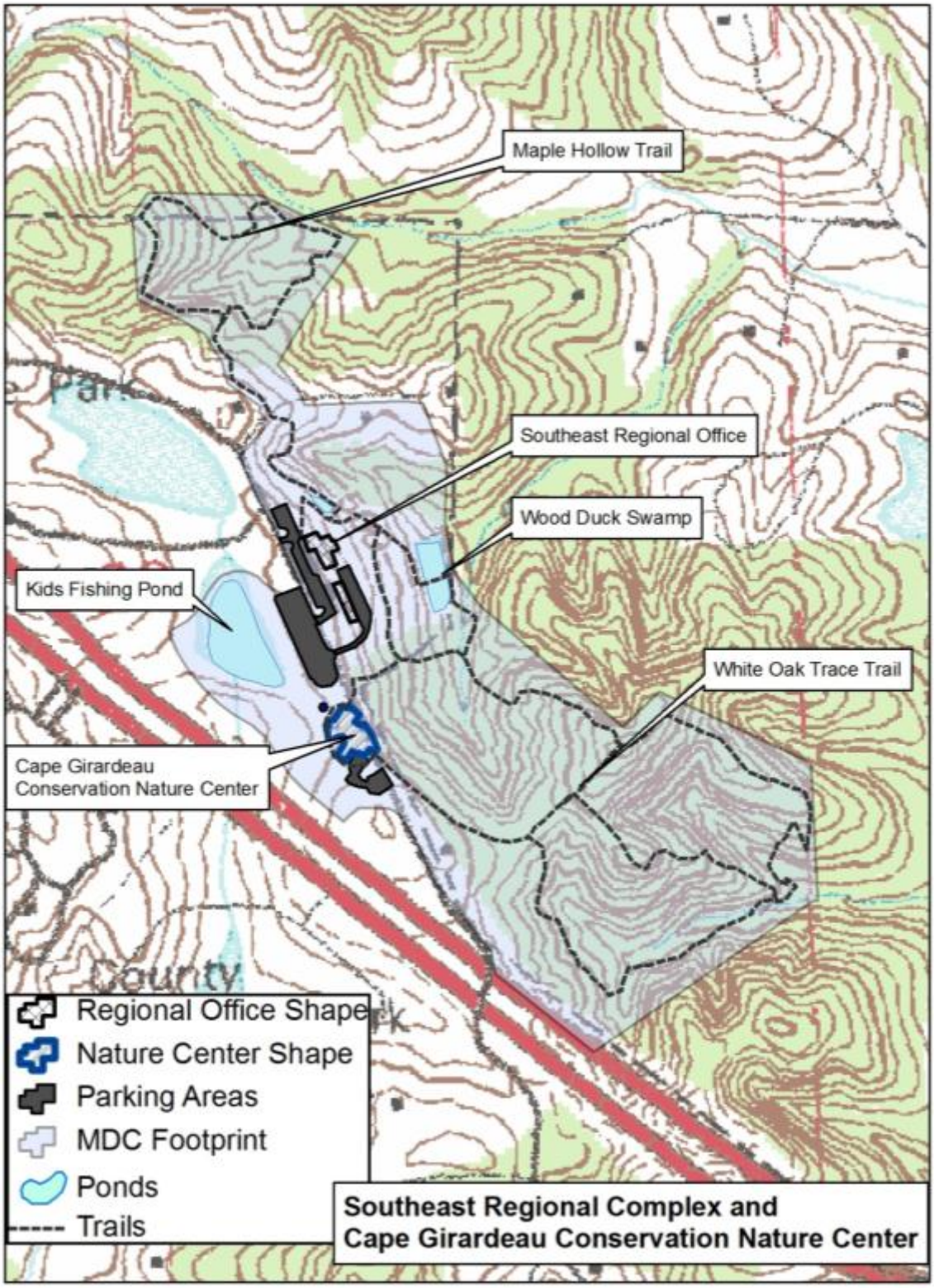


Figure 4: Topographic Map



Appendix A: Southeast Regional Office and Cape Girardeau Conservation Nature Center Management Plan Public Comments

Received during public comment period (April 1-30, 2016):

Need more PRO HUNTING / PRO PARTNERSHIPS WITH hunting groups like the QDMA, NWTF, RMEF and DU. Groups and members gave money to nature center to occur and little to no support is given back to groups.
What are you doing about the Asian lady bug beetles?