

# Outdoor Recreation, Conservation and Open Spaces Comprehensive Planning

**FY22 - FY32** 

July 1, 2021 - June 30, 2031





Louisa County Conservation Board Members FY22
Elizabeth Kling, Josh Hardin, Chris Ball, Roxy Yakle & Sam Willson



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# The Conservation Board's Mission

**The Louisa County Conservation Board's Mission** is to "provide an appreciation of Louisa County's natural resources through environmental education and recreation; and to manage our parks and natural areas for present and future generations."

#### It is our vision to:

- Provide areas and facilities for conservation, recreation, and environmental education.
- Maintain, rehabilitate, and renovate facilities and equipment to ensure safety for all users.
- Maintain and expand environmental education programming efforts.
- Encourage the use of conservation board facilities, programs, and equipment.
- Promote and provide quality native habitat for a diversity of wildlife.
- Encourage good stewardship for local citizens.

#### Acknowledgements

#### **Louisa County Board of Supervisors**

Chris Ball Randy Griffin Brad Quigley

#### **Louisa County Conservation Board Members**

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Approved on Thursday, September 2, 2021, at a regular meeting of the Louisa County Conservation

Board held at Langwood Education Center.

Prepared by: Katie Hammond, LCC Director

## Overview

The Conservation, Recreation and Open Spaces Plan is designed to be a fluid and working document. It is expected that the Louisa County Conservation staff and board will be well acquainted with the document and use it to set policy and make decisions into the future.

Planning is an essential part of every organization. It is important that every member understands the mission statement and that day-to-day decisions are based on the overall mission and vision that we have all agreed upon. Setting both short-term goals and long-term objectives provides specific initiatives and projects that are obtainable. Some of these tasks will be quite easy to accomplish with staff and resources we currently have available, while others will require additional resources, personnel and grants or fundraising to complete. Keeping our goals and objectives in mind, certain strategies will provide us with the methods needed to reach our vision.

The planning process has been essential to help us determine: Where we are now? Where are we going? How do we get there? An online survey, similar to the one completed in 2014 was available on the LouisaCountyConservation.org website, with advertisements on various Facebook pages and in the local papers. In addition, Staff and Board held meetings to discuss areas and ideas.

Staff evaluated each area using a S.W.O.T. analysis. The "S" stands for strengths. What are we good at? Where do we excel and what puts us ahead of our competition? The "W" stands for weaknesses. Where are some areas we are lacking? What can we do to improve habitat, education, and the services we provide? The "O" stands for opportunities. Are there opportunities out there that we haven't taken advantage of? Dream big — what could/can we do to make Louisa County Conservation even better? The "T" stands for threats. What do we need to watch out for that could make reaching our goals difficult? If we have an understanding of possible or existing threats, then we can formulate a strategy to counteract or avoid allowing them to affect our outcomes.

Conservation Board members worked through each area discussing ideas for improvements to each area and setting priorities for accomplishing the goals and objectives set for each area.

To be sure that we are staying focused, we have developed key performance indicators and a sort of scorecard that will allow us to track our progress through the years. It is expected that this document will be updated yearly to stay current with opportunities and current needs. This will allow us to target specific projects or goals that we want to accomplish and ensure we are still working toward our mission.

## History of the Louisa County Conservation Board

#### **Purpose of the Conservation Board**

The establishment of County Conservation Boards, in the state of Iowa, is possible because of the County Conservation Law passed by the Iowa State Legislature in 1955. The Iowa General Assembly believed that providing areas for recreation and education at the local level would be beneficial to safeguard against environmental destruction. That legislation allowed each county the ability to create a county conservation board, determined by the will of the voters. All 99 counties eventually approved creating a Conservation Board. That law, Chapter 350 (formerly Chapter 111A) of the Code of Iowa gave counties the ability to:

"... create a county conservation board and to authorize counties to acquire, develop, maintain, and make available to the inhabitants of the county, public museums, parks, preserves, parkways, playgrounds, recreational centers, county forests, wildlife and other conservation areas, and to promote and preserve the health and general welfare of the people, to encourage the orderly development and conservation of natural resources, and to cultivate good citizenship by providing adequate programs of public recreation."

It's powers and duties are summarized below from the Iowa Code 350.4:

- 1. To study and ascertain the county's parks and related facilities.
- 2. To acquire, for and by the county, real estate for such facilities.
- 3. To plan and administer the county's features and facilities.
- 4. To accept, for the county, all gifts bequeathed for conservation purposes.
- 5. To employ an executive officer who will administer the organization and carry out its policies.
- 6. To charge and collect reasonable fees for such facilities under its jurisdiction.
- 7. To offer concessions, let out and rent its facilities.
- 8. To participate with other organizations for the benefit of Louisa County and the Conservation Board including projects that enhance soil and water quality, drainage districts and recreation.
- 9. To furnish suitable uniforms for employees on official duty.

#### Establishment of the LCCB

Under the jurisdiction of the Iowa Code 350, the Louisa County Conservation Board was established by popular vote in 1967. The charter board members were appointed in 1968. The board consists of five volunteers who are appointed by the Louisa County Board of Supervisors and empowered with the duties of setting policy, approving budget, and hiring an executive director. Financial support from the Board of Supervisors began in 1975, the year the first Executive Director was hired. The director implements policies, hires staff, and fulfills other duties.

The Louisa County Conservation Board acquired its first two areas, Cappy Russell Access, and River Forks Access, on August 1, 1973. On that date, the Conservation Board had 11 acres and no employees. The first Director was not hired until 1975.

#### **History of LCCB Staffing**

- 1975 Executive Director hired
- 1977 Park Ranger hired
- 1983 Part-time Conservation Technician hired
- 1985 Part-time Program Coordinator Hired
- 1989 Part-time Assistant Naturalist, Office manager and Toolesboro Museum Interpreters hired
- 1999 4 permanent full time, 3 permanent part time, 11 seasonal (Summer Rec, youth workforce)
- 2000 Langwood Program Director hired
- 2001 AmeriCorps employees 2.25 FTE
- 2014 LCC maintained 6 permanent staff: 5 seasonal and 2 on-call staff (ropes & Toolesboro)
- 2021 LCC maintained 6 permanent staff: 5 seasonal and 3 Toolesboro part-time staff

#### Other Historic Dates of Interest

- 2002: Electronic distribution of newsletter began
- 2003: Strategic plan completed and presented to the public
- 2004: Extreme Makeover; Langwood Edition
- 2006: Extreme Makeover; Chinkapin Bluffs Edition
- FY 07: Interpretive Center Master Plan created
- FY08: Odessa Water Trail launched
- FY 09: First AmeriCorps NCCC crew
- FY 10: Extreme Makeover; Flaming Prairie & natural playground built
- FY 12: New LCCB Logo adopted
- FY20: Wetland Interpretive Trail was constructed at the (future) Louisa Interpretive Center & the Hoover Nature Trail at Chinkapin Bluffs was resurfaced.

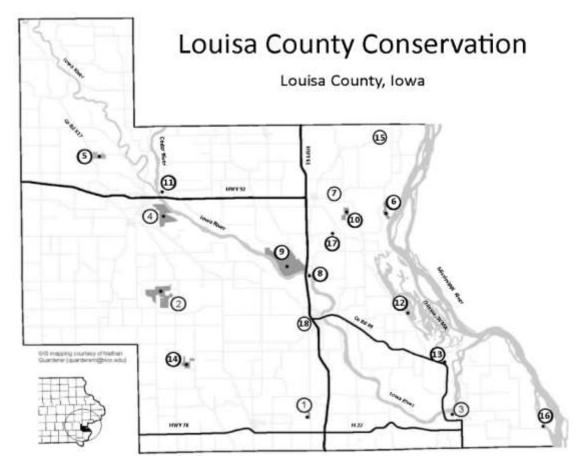
#### **History of Land Acquisition and Management Agreements**

- 1973 Cappy Russell Access 5 acres acquired
- 1973 River Forks Access 5 acres acquired
- 1975 Virginia Grove Recreation Area main tract 106 acres acquired
- 1977 Maintenance Shop 1 acre acquired
- 1978 Flaming Prairie Park 25-year lease was signed with the US Army Corps of Engineers (updated in 2005 for another 25 years)
- 1983 Baird Timber 18 acres acquired

1985	Snively Access - 25-year lease signed with the State of Iowa for management - 6 acres (lease renewed in June 2007 for another 25 years)
1987	Cairo Woods Wildlife Area (between 1985-1987) - 525 acres acquired
1988	Indian Slough Wildlife Area (between 1985-1988) - 1,049 acres acquired
1989	Highway 61 Access - 1 acre acquired
1990	Toolesboro Indian Mounds and Museum – 5 acres; annual management agreements began with the State Historical Society of Iowa
1992	Chinkapin Bluffs Recreation Area - 262 acres acquired
2000	Langwood 4-H Reserve acquired and renamed Langwood Education Center - 92 acres
2000	Langwood High Ropes Challenge Course built
2002	Wykerts Landing - less than 1 acre - ten-year management lease signed with the US Army Corps of Engineers (another 10-year lease renewed in 2012)
2002	Chinkapin Bluffs wetland addition - 136 acres
2005	Hoover Nature Trail at Chinkapin Bluffs - 2.01 miles and Morning Sun - 2.6 miles acquired
2006	Louisa County Conservation offices moved to the Louisa County Complex
2007	Odessa River Water Trail established - 14 miles of trail including one loop on the Mississippi River from Port Louisa to Toolesboro
2008	Replaced boat ramp at River Forks (due to major flooding in 2008)
2008	Iowa River Water Trail established - 72 miles from Sturgis Ferry to the Mississippi River
2010	(Future) Louisa Interpretive Center site acquired - 45 acres adjacent to Langwood
2012	Eden Park - 146 acres acquired
2014	Hickory Hollow Wildlife Area - 34 acres acquired – Indiana Bat 404 Restrictions
2019	Wilson Prairie acquired – 37 acres of native, virgin prairie
Histor	y of LCCB Environmental Education (EE) Programming
1979	First offering of Hunter Safety class – this was the first EE effort
1985	County-wide Environmental Education program initiated
1986	Conducted 19 programs with total attendance of 886
FY 90:	Conducted 96 programs with total attendance of 3,613
FY 95:	Conducted 163 programs with total attendance of 5,761
FY 00:	Conducted 206 programs with total attendance of 7,046
FY 05:	Conducted 218 programs with total attendance of 7,375
FY 10:	Conducted 416 programs with total attendance of 8,845
FY15:	Conducted 296 programs with total attendance of 10,759
EV20.	Conducted 321 programs with total attendance of 7 139 (COVID)

## **Current Area Inventory**

Louisa County Conservation currently owns and/or manages 18 areas comprising a total of 2,589 acres for conservation, recreation, open spaces and wildlife benefit.



- 1. Baird Timber
- 2. Cairo Woods Wildlife Area
- 3. Cappy Russell Access
- 4. Chinkapin Bluffs Recreation Area
- 5. Eden Park
- 6. Flaming Prairie Park
- 7. Hickory Hollow Wildlife Area
- 8. Highway 61 Access
- 9. Indian Slough Wildlife Area
- 10. Langwood Education Center
- 11. River Forks Access
- 12. Snively Access
- 13. Toolesboro Mounds and Museum/Littleton Brothers Memorial
- 14. Virginia Grove Recreation Area & Baird Grove Unit
- 15. Wilson Prairie
- 16. Wykert's Landing
- 17. Louisa County Complex (Conservation Office)
- 18. LCC Maintenance Shop



Map number	Area 911 Address Baird Timber	Acreage	# Camping sites	Electricity	Water	Toilets	Picnicking	Hiking Trails	Equestrian Trails	Fishing, R-River L=lake or pond	Boating - motor	Boating - electric or no motor	Boat Ramp	Hunting - Forest	Hunting - Upland	Hunting - Wetland
1	2851 "K" Ave, Wapello	18												•		
2	Cairo Woods Wildlife Area 9032 "S"Ave, Columbus Jct.	525						•	*	P		•		•	•	
3	Cappy Russell Access 6444 West Cty Rd X-71, Oakville	5					•			R	•	•	•	No	Hunt	ing
4	Chinkapin Bluffs Recreation Area 14198 "R"Ave, Columbus Jct.	400			•	•	•	•		R				•	•	•
5	Eden Park 17426 Co. Rd. X17, Columbus Jct.	146					•	•						No	Hunt	ing
6	Flaming Prairie Park 14624 Cty Rd X-61, Muscatine, IA	71	20	•	•	•	•			R	•	•	•	No	Hunt	ing
7	<b>Hickory Hollow</b> 12786 148th Street, Wapello	34						•						•		
8	<b>Highway 61 Access</b> 10726 Highway 61, Wapello	1								R	•			No	Hunt	ing
9	Indian Slough Wildlife Area 1225 "L" Avenue, Wapello	1100						•	*	R, P		•		•	•	•
10	<b>Langwood Education Center</b> 14019 "H" Ave, Wapello	130		F	or g	roup	use	e by	rese	ervatio	n or	ıly - N	o H	unti	ng	
11	River Forks Access 1001 Main St, Fredonia	5					•			R	•	•	•	No	Hunt	ing
12	<b>Snively Access</b> 9246 Cty Rd X-61, Wapello	6	34	•	•	•	•			L	•			No	Hunt	ing
13	<b>Toolesboro Mounds &amp; Museum</b> 6568 Toolesboro Ave., Wapello	5		•	•	•	•							No	Hunt	ing
14	Virginia Grove Recreation Area** 20406 55th St, Morning Sun	106	11	•	•	•	•	•		P		•		•	•	
15	<b>Wilson Prairie</b> 10400 Co Rd G44X, Muscatine	37						•						No	Hunt	ing
16	<b>Wykert's Landing</b> 1714 20th St., Oakville	R • No Hunting														
	17 <b>Louisa County Complex (Office)</b> - 12635 County Rd G56, Wapello - 319-523-8381 - M-F; 9am-3pm															
-	LCC Maintenance Shop - (call for										-523	-6493				
<u> </u>	* Equestrian Open May 21 to September 15															

## **Priorities of Work**

Following is a listing of all 18 County Conservation Board maintained areas by alphabetical order. Pages will list the main 911 address, current management goals and what facilities or amenities are present; each listing also has goals, objectives, and planned improvements with estimated dates of work and priority level. This document is meant to be a working document and tasks will be completed yearly and new tasks and projects will be added.

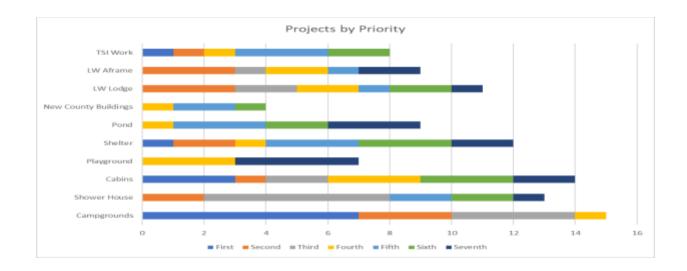
A meeting of the Louisa County Conservation Board on August 5, 2021 at 5:30 pm at the Louisa County Complex determined the top priorities for the coming years.

1<sup>st</sup> Priority: Campgrounds, in general came out as the overall top priority with Virginia Grove as the first location and Eden Park as the second followed by primitive sites at Indian Slough and Chinkapin. Providing a shower house at the campgrounds and full hook-up sites and/or a dump station also rated very high.

**2**<sup>nd</sup> **Priority:** Cabins – Virginia Grove, Eden Park, Snively, Langwood, and Chinkapin (respectively) were all discussed as places where cabins would be beneficial.

**3rd Priority:** Langwood Improvements. This includes either fixing up the current lodge with attached restrooms, better kitchenette and space or replacing the building all together. The A-frame was also set at a high priority with the same ideas – fix it up so it doesn't leak and is easier/safer to use, build a new bunkhouse or maybe build a new building that would contain both the bunkhouse and lodge.

Top Priorities - Large Projects					
Virginia Grove - Campground improvements, shower house, full hook-up campsites, lane back to					
the new addition & create more camping					
Virginia Grove - Land acquisition 50-acre Mabeus Addition to connect the three parcels of Virginia					
Grove, purchase agreement signed for September 2021.					
Langwood Education Center - Lodge improvements					
Langwood Education Center – A-frame improvements					
Eden Park – Playground, picnic shelter, restroom					
Eden Park – Campground & shower house					
Cabins – explore locations for cabins: Virginia Grove, Eden Park, Snively, Langwood, Chinkapin					
Shelters – Langwood, Eden Park, Hoover Nature Trail at Chinkapin Trailhead					
Ponds – Eden Park & Virginia Grove					
Timber Stand Improvement Projects - Virginia Grove (timber sale), Cairo Woods & Langwood					
Virginia Grove one-room schoolhouse					
Virginia Grove – work on getting the gravel road hard-surfaced to Virginia Grove					
Hoover Nature Trail at Chinkapin – finish adding amenities to trailhead & trail					
Evaluate the Hoover Nature Trail (county-wide) and make a plan					
New Maintenance Shed					
New Storage Building at the Complex					
Louisa Interpretive Center – Fundraising, progress, and completion of the building					



Top Priorities - Smaller Projects
My County Parks - online reservations and credit card payments
Boat Accesses – Spend more time making boat accesses more appealing and usable
Wykert's Landing – pave the landing
Sundial project at Chinkapin Bluffs
Handicapped Hunting Blinds – add to Cairo Woods, Chinkapin Bluffs and Baird Timber
Area Maps –update all area maps and make available
Trails – improvements, additions, connections, signage
Brochures – update brochures and make available
Habitat Management – control of invasive species
Trail cameras in areas
Continue to improve on educational efforts
Food Plots - sunflower, millet, corn & beans
Water Trail improvements – more access and improved signage
Butterfly habitat – increase habitat and educational efforts
Indian Slough – primitive campground back by old cabin site, steps & mowed area
Wilson Prairie – information about native, remnant prairie
Kiosks at all parks with rules, maps
Rental for canoes/kayaks and/or paddleboards
Transition all park signs to have the new logo & updated signs
Replace foot bridges at needed; railing on the bridge at the HNT at Chinkapin
Replace the bridge at Virginia Grove on the North side of the pond
Environmental Education – add adult events – recreation, fishing tournament, eagle viewing, adult camp

# Plan of Work Listed by Area

Following is a listing of all 18 County Conservation Board maintained areas by alphabetical order. Pages will list the main 911 address, current management goals and what facilities or amenities are present; each listing also has goals, objectives, and planned improvements with estimated dates of work and priority level. This document is meant to be a working document and tasks will be completed yearly and new tasks and projects will be added.

#### 1. Baird Timber – 18.5 acres

**Location:** Five miles south of Wapello, Iowa **911 Address:** 2851 "K" Avenue, Wapello, IA

Date Acquired: July 6, 1983

**Acquisition:** 18.5 acres were purchased from the Baird family (Robert, Paul and heirs) of the Morning Sun area. After three years of denial for a Wildlife Habitat Stamp Fund the County just purchased the

land for \$8,787.50.

Existing facilities: Small parking lot and ¼ mile walking trail Management focus: wildlife habitat, hunting & gathering

#### Goals:

- To maintain the short hiking trail
- To reduce or eliminate invasive species
- To improve timber habitat for wildlife
- To check and replace boundary signs as needed

#### **Objectives:**

 To create a current Forest Management Plan and work towards reaching the woodland management goals set forth in that document.

Planned Improvements for Baird Timber						
When	Item	Resources Needed	Priority	Completed		
yearly	Invasive Species Removal	crew/volunteers	Med			
2028	Forest Management Plan	DNR Forester	Med			
2020	New sign		High	2020		
2020	New trail cut		High	2020		
Yearly	More rock in parking lot		Med	annual		
2022	Handicapped hunting blind		High			



## 2. Cairo Woods Wildlife Area - 525 acres

**Location:** Five miles southeast of Columbus Junction, Iowa **911 Address:** 9032 "S" Ave, Columbus Junction, IA (Main Access)

#### **Dates Acquired:**

- March 15, 1984 Denning Tract 135 Acres \$65,000
- September 4, 1984 Schenk Tract .741 Acres (access) \$2,000
  - Received State Wildlife Habitat Stamp Funds: Total cost with appraisal was \$65,427.50. State provided75% or \$49,070.62 and local share was \$16,356.88.



- March 19, 1987 Boysen Tract (Columbus Junction State Bank) 252 Acres \$88,200
- March 24, 1987 Moore Tract 123 Acres \$12,651.60
- April 1987 Cassabaum tract 10 Acres \$3,500
- April 1987 Cotter Tract 5 Acres \$1,750
  - Received State Wildlife Habitat Stamp Funds: Total Cost with appraisal was \$147,725.
     State provided 75% or \$110,793.75 and local share was \$36,931.25.

**Restrictions:** Due to the fact that Wildlife Habitat Stamp Funds were used to purchase the property LCC is NOT allowed to provide public use facilities, even at our own expense for activities such as camping, picnicking and snowmobiling on areas acquired with the WHSF grants. Other than hunting, only those compatible activities such as fishing, hiking, nature study, cross-country skiing, etc. will be permitted. (Taken from the WHSF grant information from the lowa DNR).



**Existing trails:** 6 miles of hiking trails, open to equestrian use from May 21 to September 15 each year.

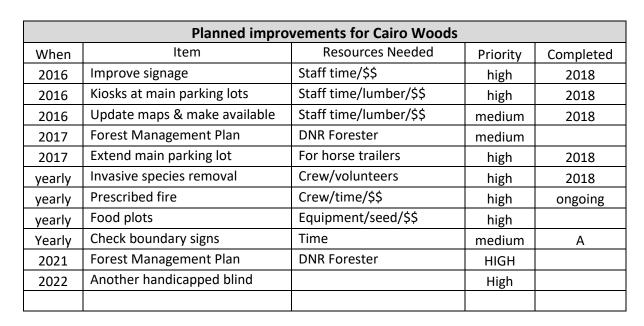
**Existing facilities:** Three rocked parking lots; handicapped turkey hunting blind, 3 ponds, food plots, farm field.

**Management focus:** For wildlife habitat purposes and compatible recreational uses such as hiking, equestrian, hunting, fishing and gathering.

#### Goals:

- To maintain the trail system & signs for hiking and equestrian usage
- To improve timber and prairie habitat for a diversity of wildlife
- To improve the diversity of ecosystems: prairie, woodlands, ponds, and creeks
- To promote and improve hunting and gathering on the area

- To create a current Forest Management Plan in FY20/21 with the help of DNR Forester
- Timber stand improvement (TSI) projects
- To utilize the skid steer and forestry mower for invasive species removal and trail maintenance
- To keep maps/brochures stocked for park users in kiosks
- To plant food plots for wildlife
- To work with local volunteers/sponsors/donors to build a second handicapped blind





# 3. Cappy Russell Access - 5 acres

Location: On the Iowa River approximately one-half mile west of Oakville, Iowa

911 Address: 6444 West Co. Rd X-71, Oakville, IA

Date Acquired: August 1, 1973

Existing facilities: Concrete boat ramp, graveled parking

lot, entrance sign

Management focus: Maintained as a boat access

#### Goals:

- To provide access to the lowa River
- To promote the Iowa River Water Trail
- To provide educational programs on and about the river and river ecosystems

- To provide at least one educational program per year on the Iowa River Water Trail
- To keep brochures stocked at kiosks
- To maintain access better with more rock and a clean landing
- To spend more time mowing and keeping sand/silt/mud off the landing

Planned Improvements							
When	Item	Resources Needed	Priority	Completed			
Yearly	Trim brush	Staff/volunteers	Medium				
Yearly	Maintain with rock	Rock/dump trucks/\$\$	Medium				
	Educational programs	Staff time	Medium				
yearly	Porta pot						
	Primitive camping						





## 4. Chinkapin Bluffs Recreation Area - 414 acres

Location: One mile southeast of Columbus Junction

911 Address: 14198 "R" Avenue, Columbus Junction, IA

Date Acquired: Original 262 acres acquired April 16, 1992; 136-acre wetland addition acquired

September 12, 2002; Hoover Nature Trail acquired December 2005

**Existing facilities:** Shelter, several picnic tables, grills, water, composting toilets, overlook deck, playground, Paw Paw Trial planting and 4 miles of hiking trails on top of the bluff, two trails leading down the bluff and connection to the Hoover Nature Trail at the base.

**Hoover Nature Trail** runs through the property for 2.02 miles, providing additional recreation opportunities. This trail was resurfaced, and a trailhead built in 2020.

Management focus: multi-use recreation area with trails, a reservable shelter, city water, playground and more. Hunting is allowed and food plots are planted. There is also a field that is cash rented by a local farmer that provides revenue.



## Goals:

- To improve the area as a diverse ecosystem with prairie, woodlands, ponds, and creeks
- To promote and improve hunting and gathering on the area
- To enhance, promote and build trails on the area for health and wellness
- To manage the park for a diverse group of visitors
- Maintain partnership with Paw Paw Trial (Patrick O'Malley)
- Improve and maintain amenities

- Add a 2-sided directional sign in the alley by Econo Mart
- Create a current Forest Management Plan
- Reduce mowing while maintaining aesthetics
- Check & repost boundaries on a regular basis
- Update/provide signage on trail increase signage between HNT and CB
- Continue to plant and improve food plots and dove plots
- Continue farm ground lease (currently with Clinton Ryan)
- Provide at least 3 educational programs each year at Chinkapin Bluffs
- Provide a UTV ride/ educational program at Chinkapin
- Build and install a handicapped hunting blind

Planned Improvements							
When	Item	Resources Needed	Priority	Completed			
2016	Kiosk on HNT	Lumber/time/TAP grant	Medium				
2018	Timber stand improvements	Crew/time	High	yearly			
yearly	Invasive species removal	Crew/time	High				
yearly	Improve/maintain trails	Grants/\$\$	High				
yearly	Prescribed fire	Staff/NCCC	High				
yearly	Food plots	Staff & time	High				
	Maintain/add amenities	Grants/donations	Medium				
yearly	Paw Paws	Continue research	Medium				
2023	Forest Management Plan	DNR Forester	High				
2021	Paint RR signal						
2024	Add a primitive cabin or two						
	Clean up around the	Forestry mower around all					
2021	windmill	the neat stuff down below					
2021	Fix chimney		Medium				
2021	Sundial		HIGH				
2022	Handicapped hunting blind	Money/volunteers	Medium				
	UTV ride/program						
	Add a primitive cabin		Low				







#### 5. Eden Park – 146 Acres

Location: Northeast of Columbus Junction, Near Gladwin, IA, on a hard surfaced road

911 Address: 17426 Co. Rd. X-17, Columbus Junction, IA

Date Acquired: Donated by Donna Eden in November of 2010 to be used as a "park."

**Existing facilities:** The rolling topography includes grasslands, wetlands, two creeks and forests. Quail strips were also planted. There is a cable parking lot, with a grass base. The old garage foundation is still intact, although we are not sure if it will stay or not.

Management focus: At this time hunting is NOT allowed, although the area is open to the public for hiking, bird watching and nature enjoyment. A Bio Blitz was held in 2014 to help identify the species present.



#### Goals:

- To improve wildlife habitat
- To provide educational programming on the area
- To create a pond on the area
- To move forward with planning and development of the area

- Explore the idea of a campground or cabins
- Continue the discussion with Ed Hoag about the big pond concept idea
- Build a lodge/shelter house and playground near the road with restrooms
- Look into a smaller pond, on the big creek ask NRCS
- Tuck neat areas back into the park so you come across it when you hike
- Picnic area shelter, playground and restrooms near entrance
- Maybe hold a UTV program there

Planned Improvements						
When	Item	Resources Needed	Priority	Completed		
yearly	Prescribed fire	Crew	High			
Yearly	Forest Management Plan	DNR Forester	Medium			
yearly	Timber stand improvement	Crew/time	Medium			
2019	Low water crossing		High	2020		
	Campground & Shower house	Funding/Plan	Med-High			
yearly	Invasive species removal	Crew/time	High			
yearly	Build/maintain trails	Grants/\$\$	Medium	2019		
	Maintain/add amenities					
2024	Picnic shelter & Playground					
2024	Restroom or porta pot					

## 6. Flaming Prairie Park – 72.55 acres

Location: Approximately 15 miles south of Muscatine, Iowa off Co Rd X-61

**911 Address:** 14624 Co. Rd. X-61, Muscatine, IA 52761

**Date Acquired:** In 1978 Grain Processing Company from Muscatine, IA donated the 72 acres of the main park that was used as match for a LAWCON grant. A 25-year recreational lease with the US Army Corps of Engineers for .55 acres (boat landing and road leading to it) was signed into effect starting August 1, 1980. The lease was renewed beginning August 1, 2005 and ending July 31, 2030.

**Existing facilities:** Two picnic shelters, 20-30-50 amp electrical service for 21 campsites, additional primitive campsites on the north end; two latrines, Mississippi River boat access and a natural

playground.

**Management focus:** For wildlife habitat, Mississippi River access, camping and other recreational use. Hunting is prohibited.

#### **Goals:**

- To increase campground usage
- To improve and increase shelter reservations
- To conduct at least two programs/year at Flaming Prairie

- To promote camping specifically at Flaming Prairie
- To schedule events/programs

Planned Improvements							
When	Item	Resources Needed	Priority	Completed			
2015	Remove wood features of playground	Time	High	х			
2016	Update maps & brochures	Staff & time	Medium				
2016	Work on willows in S. campground	Funding/fecon mower	High				
yearly	Invasive species removal	Crew/time	High				
yearly	Prescribed fire	Crew	High				
	Maintain/add amenities		Medium				
	Place to purchase firewood?		Medium				



## 7. Hickory Hollow Wildlife Area – 34.12 acres

Location: 1/4 mile East of Grandview, IA (behind the Cemetery)

**911 Address:** 12786 148<sup>th</sup> Street, Wapello, IA

Date Acquired: October 20, 2014 from The River

Products Company.

**Existing facilities:** Gravel parking lot and old Morton building. There is a buried septic system that could be utilized someday and city water run to the property (but not currently in use). Michael Creek runs through the area.

**Management focus:** This area was given with a 404 Permit for Indiana Bat mitigation on 28.8 acres of the property. This area cannot be developed or



cleared with the exception of soft trails for maintenance work and foot bridges for access. Habitat work (girdling cedars, invasive species removal) must be done prior to April 14 each year to avoid the Indiana Bat maternity season. Area can be used for hunting, gathering, hiking and bird watching.

#### Goals:

- To maintain in accordance with the Indiana Bat 404 permit requirements
- To create trails with footbridges over Michael's Creek for access to various parts of the park
- To make this a park that Grandview residents can easily walk to

- Girdle cedar trees on a yearly basis during the winter but prior to April 14 each year
- Remove or spray other invasive species including honeysuckle

Planned Improvements						
When	Item	Resources Needed	Priority	Completed		
2015	Hang boundary signs	crew/volunteers	High	2015		
2016	Kiosks at main parking lots	staff time/lumber/\$\$	High			
2016	Hang directional & main signs	Staff & \$\$	High	20??		
2017	Build soft trails	Staff & \$\$	Medium			
2017	Foot bridges	Staff & \$\$	Medium			
yearly	Invasive species removal	crew/volunteers	High			
yearly	Girdle cedars	Staff & \$\$	High			
yearly	Meet 404 requirements	Indiana Bat Permit	High			

## 8. Highway 61 Fishing Access - 1 acre

Location: Two miles north of Wapello, Iowa on US Highway 61

911 Address: 10726 Highway 61, Wapello, IA

Date Acquired: October 5, 1989

Existing facilities: Parking lot and access road

**Management focus:** Maintained as an access to the Iowa River for fishing. No boat ramp is provided, but light boats can be carried from

the parking lot during some water levels/conditions.

#### Goals:

- To maintain this area as a fishing access
- To make this area accessible as a canoe and kayak access

- To maintain a "road ends in water" sign and sign at the end of the parking lot
- To explore possibilities for making this area accessible for boats



Planned Improvements							
When	Item	Resources Needed	Priority	Completed			
2016	Better access for fishing	Time	High				
2017	Access for canoes/kayaks	Grants/\$\$	Medium				
2020	Boat access?	Grants/\$\$	Medium				

## 9. Indian Slough Wildlife Area - 1,100 acres

Location: Three miles northwest of Wapello, Iowa

911 Address: 1225 "L" Avenue, Wapello, IA (Main Access)

Date Acquired: From Nov. 25, 1985 to May 11, 1988

**Existing facilities:** Water control structures, access roads, four parking lots and mowed trails. Accesses include Turkey Run Access (closest to HWY 61), Rudisill Access (where the farm field lease is), Main Access and Kuder Lake Access.

**Management focus:** For wildlife habitat purposes and compatible recreational uses such as hunting, fishing, trapping, hiking and equestrian trails (open May 21 – September 15 annually).

**Features:** 3 miles of Iowa River shoreline on the South side of the property.

#### Goals:

To maintain Indian Slough as prime wildlife habitat for migrating ducks and geese and for other

game species such as deer, turkey, quail and pheasant

- To reduce invasive species and willow populations
- To conduct prescribed fire, mowing and spraying to keep willows and other invasive species under control
- To provide food plots and dove plots for wildlife and hunters
- To keep the Main Access Road accessible
- Work with NRCS to designate the area as Emergency Wetland Program (EWP).



	Planned Improvements				
When	Item	Resources Needed	Priority	Completed	
2016	Update maps / brochure	staff time/lumber/\$\$	High	2021	
2016	Berm project	Funding/equipment	High	2020-2021	
2016	Wetland mitigation project	DOT	High	2017	
yearly	Invasive species removal	crew/volunteers	Medium		
yearly	Prescribed fire	crew/time/\$\$	Medium		
yearly	Food plots	Sunflower seeds	High		
yearly	Maintain willows	Burning/mowing	High		
	Increase the number of trails				
2022	Add a primitive campsite	Along the river – ladder			

## 10. Langwood Education Center - 140 acres

## Includes the future site of the Louisa Interpretive Center (LIC)

**Location:** Three miles southeast of Grandview, Iowa

911 Address: 140019 "H" Avenue, Wapello, IA (911 address

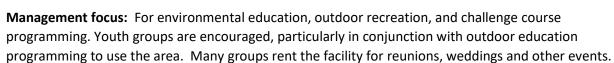
updated in FY13)

Phone: 319-729-4353

Date Acquired: Langwood (95 acres) acquired on June 1, 2000 for 4-H Foundation; LIC property (45 ac) was acquired from Tri-Rivers Conservation Foundation in FY11.

**Existing facilities:** Enclosed lodge with wood-burning stove and air conditioning window unit, unheated two-story Aframe dormitory, bathhouse with showers and restrooms, 5 electrical hookups for campers, high and low ropes

challenge course, septic system, boat house, canoes, fishing dock and bird viewing blind.



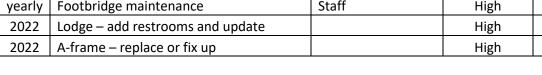
#### **Langwood Education Center Goals:**

- To rent Langwood at a reasonable price for scout and youth groups
- To update facilities with heat and air conditioning so that water can be available year round
- To improve current facilities including a restroom attached to the lodge
- To continue providing summer nature camps, field trips and ropes challenge course programs

#### **Langwood Education Center Objectives:**

- Develop a woodland management plan and keep current on woodland work
- Offer educational programs to the public, school groups, scouts, civic groups and more
- Promote and provide Challenge Course programs
- Develop a natural playground at Langwood

Langwood Education Center - Planned Improvements				
When	ltem	Resources Needed	Priority	Completed
2023	New restroom in lodge	Grant/\$\$	High	
2021	Promotional videos for LIC	CFLC Grant	High	2018
2019	Restroom Improvements (ceiling)		High	2019
2021	Add a furnace/AC Unit to lodge		High	2021
2021	Update electrical from pole to lodge		High	2021
yearly	Promote & continue ropes programs		High	
yearly	Trail maintenance	Crew	High	
yearly	Footbridge maintenance	Staff	High	
2022	Lodge – add restrooms and update		High	
2022	A-frame – replace or fix up		High	



2023	Gazebo – weddings & programs		High	
2024	Cabins – add cabins			
yearly Take care of erosion problems on the trail		High		

Much discussion was held by the Board as to what the next course of action should be for Langwood. Everyone agrees that the buildings are in major need of some renovations. Discussions included:

- Moving the Maintenance Shop out to Langwood
- Making major changes to the current lodge to add restrooms
- Renovating or removing the A-Frame and possibly replacing it with a cabin
- Building a whole new lodge in a different area of the park that would include a bunkhouse
- Talk was also head about opening the entire area up to the public
- NO Decisions were made on these topics. Further discussion is needed to determine the future of the LIC building and the Lodge and how the two can function together.

#### Louisa Interpretive Center (LIC) Goals:

- To build the Louisa Interpretive Center and grounds that will serve as a site of national, state and local interest along the Great River Road in Louisa County.
- Some Board Members are not in favor of moving forward with the LIC at this time. Due to conflicting viewpoints on construction of the building, the project has been lowered in priority for now.

#### Louisa Interpretive Center (LIC) Objectives:

- Revisit plans for the LIC and make sure they still are what we want/need
- Gain an updated cost opinion for the project
- Fundraise for the next phases of development
- Continue making progress toward the completion of the Center



	Louisa Interpretive Center (LIC) - Planned Improvements				
When	ltem	Resources Needed	Priority	Completed	
2016	Wetland trail & interpretive signs	Shive-Hattery	High	2020	
2018	Section 106 Mitigation		HIGH	2018	
2020	Build Wetland Interpretive Trail	Grants/\$\$\$	Medium	2020	
2021	Continue working on construction		High		
	Seek additional funding/fundraising	Tri-Rivers			

## 11. River Forks Access - 5 acres



Location: One mile east of Columbus Junction, Iowa

911 Address: 1001 Main Street, Fredonia, IA

Date Acquired: August 1, 1973

Existing facilities: Concrete boat ramp, parking lot,

access road

**Management focus:** Maintained as a boat access, with primitive camping, picnicking and fishing allowed.

#### Goals:

- To maintain this area as a boat access and parking lot
- To continue to promote the lowa River Water Trail

- To utilize this access while promoting the lowa River Water Trail
- Install a picnic table for visitors to use
- Keep the parking area and ramp open for the public
- Keep 3-5 areas clear along the shore for fishing



	Planned Improvements					
When	Item	Resources Needed	Priority	Completed		
2016	Install concrete bench	CJ United Fund grant	High	2015		
2016	Install a picnic table		High			
2019	Remove dead trees		High	2020		
	Clear space along shore for					
2020	fishing		High			
	Work to maintain the access					
2021	better	More rock	High			
2021	Pay for a Porta Pot thru summer		High			

## 12. Snively Access Campground - 6 acres

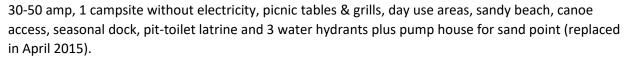
**Location:** On the west bank of the Odessa Wildlife Complex, approx. four miles east of Wapello, Iowa

911 Address: 9246 County Road X-61, Wapello, IA

**Date Acquired:** The original 25-year management lease was signed with the State of Iowa on May 5, 1985. The lease was updated and extended for another 25 years in June, 2007.

**Current management:** For camping, LCC events, picnicking and paddling, canoe and kayak access.

Existing facilities: 33 gravel campsites with electric 20-



#### Goals:

- Continue the partnership with the Iowa DNR for management of this area
- Promote camping and increase revenue from camping
- Promote the Odessa Water Trail

- Provide environmental education programs at Snively
- Promote camping
- Continue to offer camping coupons (purchasers get one free night)
- Maintain the gravel road into the campground
- Provide canoe loan weekends

	Planned Improvements					
When	Item	Resources Needed	Priority	Completed		
2016	Update maps & brochures	Time	High	2020		
2017	Bigger Day use area & parking		Low	2017		
2021	Removable camp pedestals in high water areas	2019 FEMA Money	High	2020		
2020	More water hook-ups	Grants?	Medium			
yearly	Invasive species removal	crew/time	Medium			
yearly	Provide firewood	Private vendor???	High			
	Other amenities - Wi-Fi or better cell reception?		Low			
2021	New entrance sign with icons, perpendicular to road		Medium			
2023	Cabin – primitive		low			



## 13. Toolesboro Mounds and Museum, National Historic Landmark - 6 acres



**Location:** Approximately 10 miles southeast of Wapello, Iowa

911 Address: 6568 Toolesboro Road, Wapello

**Date Acquired:** Annual agreements for maintenance signed in March with State Historical Society of Iowa started on May 19, 1990.

**Existing facilities:** Two well-preserved burial mounds, a visitor center and a small, restored prairie site

**Management focus:** As a national historic site for the preservation and exhibition of the unique cultural history found there and a point of interest on the Great

River Road and Mississippi River Trail. Also used for educational programs.

#### Goals:

- Continue yearly management agreements with the State Historical Society
- Promote Toolesboro as a National Historic Landmark along the Great River Road

- Provide and train interpretive staff for the museum
- Provide top notch grounds maintenance
- Offer educational programs at Toolesboro (at least 1 per year)
- Encourage individuals and groups to visit the museum

Planned Improvements				
When	ltem	Resources Needed	Priority	Completed
yearly	Remove Invasive from Prairie	Crew	Medium	2018
2017	Marketing Plan	State Historical Society	Low	
2018	Update brochures	State Historical Society	Medium	2017 - OSA
2018	Paint building	KIB Grant		2018
yearly	Keep grounds looking great	Staff	High	
yearly	Work on flowerbeds	Staff	High	
yearly	Public programs		High	
2021	New trail to other mounds		high	2021
2021	New sign, plant mounds		High	
2021	Fix leaky roof, fix siding, flooring?		High	
	Porta pot for summer visitors		Medium	

## 14. Virginia Grove Recreation Area - 106 acres

Location: Approx. 10 miles southwest of Wapello, Iowa

911 Address: 20406 55th Street, Morning

Sun, IA

Date Acquired: January 7, 1975 (main tract

only)

**Management focus**: For multi-use recreation, including hunting, fishing, camping, picnicking, and hiking

**Existing facilities:** Two shelters, 11 camp sites with 20-30-50-amp service plus two non-electric campsites near the windmill, latrine, playground equipment, pressurized water well, handicapped accessible fishing



dock, one room country schoolhouse, 2.5 miles of wooded hiking trails and a five-acre pond.

**Area Restrictions:** A LAWCON Grant was used to help provide the original amenities for Virginia Grove. This type of funding restricts certain non-outdoor recreation uses and doesn't allow the property to be sold, leased, or have easements.

#### Goals:

- Maintain Virginia Grove as a multi-use recreation area
- Continue working toward the woodland management plan
- Promote the park for camping, shelter usage and picnicking
- Promote environmental education and use the area for field trips & public programs
- Renovate the one-room schoolhouse to be enjoyed by the public

- Continue to schedule environmental education field trips and programs at Virginia Grove
- Promote camping online and on Facebook
- Improve the campground by adding full hook-ups and a shower house
- Cut and treat invasive species
- Seek funding for large projects such as shower house or schoolhouse improvements
- Build a cabin
- Design and add historic signs about Virginia Grove
- Maintain and improve foot bridges
- Work on getting the road paved to Virginia Grove



	Virginia Grove - Planned Improvements				
When	Item	Resources Needed	Priority	Completed	
2015	Forest Management Plan	DNR Forester	High	2016	
2016	Timber stand improvements	Plan/crew/time	High	yearly	
2017	Replace drinking fountain	Grants/\$\$	Medium		
2018	Maintain/add amenities	Grants/\$\$	Medium		
yearly	Invasive species removal	Plan/crew/time	High		
yearly	Improve/maintain trails	Grants/\$\$	High		
yearly	Prescribed fire		High		
2021	Timber Sale		Medium		
2021	Add campground fun	Horseshoe pit			
2021	Acquire Mabeus Addition		High		
2021	Fix Windmill				
2022	Build a full-hook-up campground	And shower house	High		
2023	Build a cabin		High		
2022	Add a shower house and/or dump station		High		
2022	More water hook-ups/septic				
2024	Renovations to schoolhouse				



#### 15. Wilson Prairie – 37 acres

**Location:** NE corner of Louisa County, 1.5 miles south of the Muscatine County line and 2.5 miles west of the Mississippi River.

911 Address: 10400 County Road G44X, Muscatine, IA

**Date Acquired:** December 6, 2019. This area was purchased with a County Conservation REAP Grant and a donation from Tri-Rivers Conservation Foundation because of its importance as a virgin, native prairie remnant.

**Current management:** Native prairie, pollinator and wildlife habitat

**Existing facilities:** This area is believed to be a native, remnant prairie. It is very rare for a parcel of land, such as this to be spared the disk and plow. The land came into the Wilson family in 1922 and they attest that it has not been farmed (row-cropped) during



their ownership. Aerial photos go back to the 1930's and support this statement. We were not able to 100% verify that the area had NEVER been plowed or disked, however soil samples showed high levels of organic materials in the soil and no mixing of the A-horizon. We do know that the area was grazed by cattle until 1999 and was hayed until 2019. The SE corner had a water source and was where the cows often stood. It has a small amount of disturbance, most likely from hooves and such. There is a unique depression in the NE corner that is possibly an old bison wallow.

#### Goals:

- Enhance and maintain this remnant prairie
- Utilize prescribed fire, mechanical removal and chemical application as needed for maintaining a high-quality native prairie with limited or no invasive species
- Protect this historic prairie from development and disturbance

- Maintain a mowed fire break around the perimeter of the area for burning and walking.
- Create a parking are in the disturbed SE corner large enough for a bus to pull in on field trips.
- Build an educational kiosk and provide educational programming on the area
- Provide at least 1 public program at Wilson Prairie each year

	Planned Improvements				
When	Item	Resources Needed	Priority	Completed	
2021	Build parking lot	Rock, some sort of border	Medium		
Yearly	Keep perimeter mowed	Mower & staff	High		
As	Prescribed fire & invasive				
needed	species removal	Fire crew	High		
	Educational information for				
	the kiosk about native				
2021	prairies		High		

# 16. Wykert's Landing – less than 1 acre

Location: On the Mississippi River, just west of Oakville, Iowa



911 Address: 1714 20th Street, Oakville, IA

Date Acquired: A ten-year Recreation Lease with the Army Corps of Engineers began March 2, 2012 Current management: Maintained as a boat access Existing facilities: Gravel boat ramp, parking lot

and access road

#### Goals:

- Continue the 10-year lease agreements with the US Army Corps of Engineers
- Maintain this area as a boat access and parking lot
- Continue to promote the Water Trails
- More emphasis on boat landings

#### **Objectives:**

- Install a picnic table and/or bench for visitors/angler to use
- Keep the parking area and ramp open for the public
- Work to keep it graveled better

	Planned Improvements				
When	Item	Resources Needed	Priority	Completed	
2015	Install Picnic Table??	Picnic table	low		
Yearly	Maintain rock	\$\$	High		
	Additional parking needed?		Medium		
	Replace signs – directional				
	and access		High		

In 2022 Louisa County Conservation will have to either renew or end the ten-year recreation lease with the USACOE. The Board discussed the possibility of giving this landing back to the Corps. The Board all agreed that we do want the public to be able to utilize this landing, but maybe we shouldn't be the organization to do that.

# 17. Louisa County Conservation Office - at the Louisa County Complex

Location: 12635 County Road G56, Suite 101, Wapello, IA 52653

Phone: 319-523-8381 General Email: Conservation@louisacoutyia.gov

Current offices held in the building include: Conservation, Jail, Sheriff and Probation. The west wing was prepped for Public Health and the Nest, however they haven't moved in due to the COVID pandemic.

**Existing Facilities:** Native prairie plantings for windbreak and habitat.

**Management focus:** mow the grounds, sometimes used for Environmental education, native prairie





#### Goals:

- Build a storage building at the complex that is weather, mouse and critter protected
- Develop a management agreement with the Supervisors for work at the Complex

- Maintain the prairie planting with mechanical removal, spraying and fire
- Plant butterfly habitat and conduct monarch programs
- Utilize outside space for field trips as needed
- Continue making improvements to the building for future inhabitants

Louisa	Louisa County Complex - Office Space				
When	Item	Resources Needed	Priority	Completed	
2015	Plant butterfly habitat		High	2015	
2022	Flagpole - improvements		High		
yearly	Maintain Native Prairie		High	yearly	
yearly	Mowing		High		
	Prescribed fire		High	As needed	
2024	Build additional storage building		Medium		

# 18. Maintenance Shop - 1 acre



Location: Just outside the west city limits of Wapello, Iowa

911 Address: 8299 K Avenue, Wapello, IA 52653

Phone: 319-523-6493

Date Acquired: May 4, 1977

**Current management:** Used for storage of equipment, materials and as a work site for the maintenance/field crew.

**Existing facilities:** An equipment storage and work shed, a small storage shed, and an outside nursery cooler, indoor

restroom and running water.

#### Goals:

- Continue improving the Maintenance Shop area to fit our needs
- OR build an entirely new shop

- Fix/replace the roof on the shop
- Build additional storage for equipment and vehicles
- Demolish some of the buildings
- Continue maintaining the shop and grounds

Louisa	Louisa County Maintenance Shop - 1 Acre					
When	Item	Resources Needed	Priority	Completed		
2023	Additional shed for equipment	Grant/\$\$	Medium			
2021	Removal of nursery cooler?		high			
	Build new lean-to					
	New roof on Shop?					
2025	Build a new shop?		Medium			

# **Louisa County Trails**

## **Hoover Nature Trail**

**Location:** Developed sections at Chinkapin Bluffs (2.02 miles) and east side of Morning Sun (2.6 miles).

Date Acquired: December 2005

**Current management:** Hiking and biking trails. There are six segments of undeveloped trail comprising a total of about 4.2 miles between Morning Sun and the Muscatine County line near Conesville. Total public ownership is 8.8 miles of the 16.8 mile corridor.

**Existing facilities:** There is one parking lot at Chinkapin Bluffs and one at Morning Sun off Division Street.



At the time of strategic planning, the Board is looking into the possibility of reducing the number of sections of Hoover Nature Trial owned by Louisa County and returning some sections to previous landowners or current landowners. The future of the Hoover Nature Trail is uncertain at this time.

Hoover Nature Trail at Chinkapin - Planned Improvements					
When	ltem	Resources Needed	Priority	Completed	
2016	Find matching funds for TAP grant	Grant/\$\$	High	2018	
2016	Connection to CB trails		High	2020	
2017	TAP Grant enhancements	Grant/\$\$	High	2020	
2017	Trailhead at Fairgrounds	Grant/\$\$	High	2020	
2017	Solve drainage issues	TAP funding	High	2020	
2017	kiosks with maps/brochures	TAP funding	High	2020	
2018	New trail to River on S side of wetland	continually	Medium	2020	
2021	Benches along trail	CFLC funding	High		
2022	Gazebo/interpretive panels for trail		HIGH		
2023	More amenities for trail	Benches, signs	HIGH		
	Boardwalks??		Low	_	
	Lengthen the trail - both directions?		Medium	_	

Hoover Nature Trail at Morning Sun – Planned Improvements					
When	Item	Resources Needed	Priority	Completed	
2020	Enhancements - benches, signage		High		
2020	Kiosks with maps/brochures		High		
2020	Grant to resurface		Medium		
	Look into reducing or adding to the segments of trail that we currently				
	own/manage				

#### Iowa River Water Trail – 72 river miles

Location: The Iowa River from Sturgis Ferry in Iowa City to the Mississippi River

What is a water trail: A water trail is similar to a trail on land. It provides the trail user with signs that are helpful along the route. These could include wayfinding signs, distance to access points, mileage, portages or bring attention to dangers along the trail such as low head dams.

**Current management:** Yearly check of signage and kiosks; lead a trip each year on the Water Trail and promote its use

**Existing facilities:** Boat accesses at Fredonia (River Forks), Wapello (Hwy 61 Access) and Schwob (managed by City of Wapello), Oakville (Cappy Russell) and the Ferry Landing on the Mississippi (managed by the US ACOE)



#### Goals:

- Maintain a website used to promote paddling on the lowa River at: IowaRiverWatertrail.com
- Maintain water trail signage and kiosks at boat accesses
- Promote the water trail by offering events both on and off the water
- Work with Pathfinders RC&D for a management plan
- Provide porta-pots at access points

- Continue water trail partnerships with the Iowa DNR
- Provide public paddling programs on the water
- Provide off-the-water programs
- Maintain brochures and websites

Planned Improvements					
When	Item	Resources Needed	Priority	Completed	
2015	Creation of Master Plan	Pathfinders RC&D	High	2020	
2015	Maps/brochures - need to print more - updates?		High	2020	
	Additional access points	Funding/\$\$	Medium		
	Amenities at accesses	Funding/\$\$	High		
	Porta pots at accesses	Funding/\$\$	High	2020 - grant	
	Publicity/marketing		Medium		

#### Odessa Water Trail – about 20 miles of trail

**Location:** On the 6,400 acre Odessa Wildlife Management Area and Louisa Division of Port Louisa National Wildlife Refuge.

**Current management:** Offer public paddling programs to promote use; provide canoe loan weekends for people to try paddling. This water trail was established due to the many chutes, channels, islands and peninsulas and always changing water levels that make Odessa difficult to navigate.

**Existing facilities:** Schaffer's Access (IDNR) is the main point of entry for the Odessa Water Trail. All currently signed trails start here and go out; Snively Campground is another major entry point. It is the only access with permanent restrooms, drinking water, electricity and camping. Other access points include Port Louisa National Wildlife Refuge inlet tubes (closed Sept. 15-Dec 15 yearly); Sand Run Access; Burris Ditch; and the Toolesboro landing. This trail has a segment on the Mississippi River from Port Louisa Access to Toolesboro Access. This segment does require a portage over/around the spillway at Lock & Dam 18

#### Goals:

- Improve and add signage on the Odessa Water Trail
- Promote the Odessa Water Trail
- Work with Pathfinders RC&D for a Management Plan

- Provide educational programs (of varying length and ability) on the water trail
- Maintain brochures & keep kiosks full
- Provide a boat dock at Snively for paddlers
- Porta pots at access points

Planned Improvements					
When	Item	Resources Needed	Priority	Completed	
2015	Creation of Master Plan	Pathfinders RC&D	High		
2017	Maps/brochures - updates	Grant/\$\$	Medium	2020	
2017	Increased signage	Management plan	High		
	Amenities at accesses	Grant/\$\$			
	Porta pots at accesses	Grant/\$\$	Medium		

# Benefits of Environmental Education

The goal of Louisa County Conservation's environmental education program is to create environmentally knowledgeable and aware citizens who enjoy and wisely use our natural resources and environment.

lowa offers a unique need for environmental education. It is often referred to as the most altered state in the nation. The lowa Territory was established in 1838 with a population of 22,859. By 1946 the population rose to 96,088. In 2019 the population of lowa was 3.155 million. The need for roads, schools, stores, houses and food has drastically reduced the amount of wild or natural areas. Iowa is also unique because only two percent of the land is in public ownership. With more people living in cities and towns people have become disconnected, at varying levels, from the land.

Environmental education aims to create an environmentally literate citizenry. The Governor's Conference on Environmental Education in 2010 focused on creating a statewide environmental literacy plan to be used as a roadmap for successful environmental education in alignment with the Iowa Core Curriculum. For that conference an Environmental Literacy Plan was developed by the Iowa Conservation Education Coalition (ICEC). That plan defined Environmental Literacy for Iowa:

Upon high school graduation, Iowans should have . . .

- A fundamental knowledge and understanding of the systems of the natural world and the interactions between the living and non-living and cultural environment.
- An understanding of the rights and responsibilities of each citizen and commitment to demonstrate the value of life long civic action for the environment based on scientific, economic, aesthetic and ethical considerations.
- The confidence, motivation, and commitment to demonstrate, embrace, and promote to others rights and responsibilities as an individual member of a community.

Louisa County Conservation is dedicated to creating environmentally literate citizens. We accomplish this by offering a diversity of programs and events focused on conservation, recreation and environmental education.

LCCB also serves a number of different groups of people:

- School groups through field trips, classroom programs and outdoor classroom programs
- Civic groups or clubs (Kiwanis, men's and women's groups)
- Youth groups (scouts, 4-H, church groups...)
- Senior citizens
- Public programs geared toward the general public and/or families
- Summer and Winter Nature Camps for kids
- Summer Rec programs
- Booth and activities at the Louisa County Fair



# Benefits of Outdoor Recreation

The Corona Virus pandemic that touched the entire world in 2019 had a big effect on outdoor recreation. Between the US President, Trump and various state governors, including Governor Reynolds from Iowa, much of Iowa was shut down. Production of various goods and services ceased, businesses were forced to shut their doors and only the most essential of businesses were allowed to operate in order to slow the spread of this highly infectious disease. In Iowa, we were ordered to close our public restrooms, playgrounds and campgrounds. In addition, restaurants, shopping centers and other places people go for entertainment were closed. In order to stay sane and get out of the house, our parks and trails became very important and busy for mental health. We saw increased numbers of people out turkey hunting in the spring, shed antler hunting and mushrooming. Some just walked the trails for exercise, maintaining a distance from others. Eventually the campgrounds were able to reopen and business was booming. People who had never camped before purchased equipment and headed to our parks. The need for parks, wildlife areas and open spaces was never as felt as it was during that year and the next couple years that followed.

Environmental Education (EE) and Recreational Programs and Services Louisa County Conservation takes great pride in our EE program. We have a diversified program that continues to improve year after year. Services that we provide include:

# **School Programming**

In FY20 LCC Naturalists educated 206 school groups with 4,436 students in attendance. School programs include:

- Field trips school groups bring students to our county parks and wildlife areas, Port Louisa National Wildlife Refuge, DNR areas and sometimes even city parks
- Classroom programs naturalist go into the classroom to teach environmentally themed programs
- Outdoor classroom programs some schools have created an outdoor natural area that can be used for educational programs. Morning Sun and Louisa-Muscatine both have reconstructed prairies that are used for education

#### **Public Youth Programming**

In FY20 Louisa County Conservation provided 115 public youth programs with 2,703 people in attendance. These programs are open to public and often have limited number of spaces to maintain a good ratio of adults to students.

- Nature Camps: seven summer nature camps and two winter nature camps were held in FY20 with an attendance of 323 youth.
- **Summer Rec:** was conducted in the cities of Morning Sun, Wapello and Columbus Junction with 2-week programs and Grandview with a shorter program.
- Nature Tots is a new program started that is geared at youth ages 2 through not yet in Kindergarten. It is a program where a tot and an adult come together to learn and explore.

# **Other Public Programs**

Louisa County Conservation also strives to provide programs open to the public geared toward adults, families and/or youth. In FY20, a total of 1,030 people attended public programs. The most highly attended programs include the Annual Halloween Hike (145 in FY20), paddling events (195 in FY20) and the Langwood Adventure Day (182).

- **Hunter Education** two classes are offered per year and staff is looking into offering the class in additional ways due to the current public health pandemic.
- **Display** The Louisa County Fair is the biggest event where we set up a display. There were 169 attendees at displays in FY20. In the past we have also held displays at Bald Eagle Days in the Quad Cities, at career fairs and health fairs.
- Halloween Hike Held annually in October at Virginia Grove. Educational skits and costumes are created, the path is lined with jack-o-lanterns or luminaries. There are typically around 50 volunteers who assist (closer to 200 when pumpkins are carved) and over 300 people who attend the event and learn about that year's theme. This program is a lot of work but also reaches an audience that we don't see the rest of the year. (It was pouring down rain in FY20, hence the small turnout.)
- Langwood Adventure Day this program's attendance surpassed the Halloween Hike in FY20. The program is free to the public, requires many sponsors and donors and provides families with the opportunity to try a variety of different outdoor things such as archery, fishing, shooting sports, paddling, Native American activities and more.



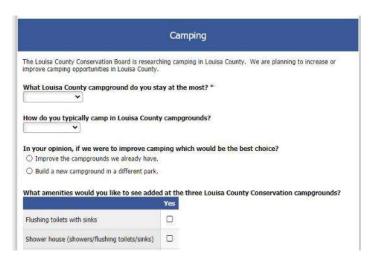
# Citizen Participation

In order to gain public input for the planning process, an online survey was used. Staff began with the Formsite survey created in FY14 and made some changes and updates. Some questions were completely deleted while others were changed, or new ones added. Due to extremely low participation back in 2014 (87 surveys returned), staff decided to offer both a short and long version of the survey. This allows people to share input, even if they don't want to dedicate too much time to it. The short survey was 4 question and took 1-3 minutes. The long survey had multiple questions and took between 6-20 minutes depending on how much time was spent. Also, if a person marked that they didn't camp they were not given the additional questions about camping, etc. A person could complete both surveys if they choose.

No in-person public input meetings were held due to the novel coronavirus pandemic which also forced the Board to push planning back a year or more later than anticipated.

Anyone who submits the full survey was allowed a place to put their name and contact info for a chance to win a prize for completing the survey. This year's surveys received much more attention with 151

completed surveys filled out. In addition, there were 53 surveys filled out that were incomplete. The data from the incomplete surveys has been retained by the board but is not included in this document. The reason for this is that we were told by multiple people that they randomly choose options just to see what the questions were and didn't realize that we would be able to see the results when they didn't actually submit them. Many of these are not finished and we believe the people did not intend for us to see the data.



Louisa County Conservation Staff also held a meeting in which the staff went through each of the 18 areas owned and/or managed by Louisa County Conservation and performed a SWOT analysis on each individual area. Staff discussed environmental education efforts in great detail also using the SWOT analysis. The data gathered from the staff will be used along with and separately from public input and Board Member input.

In addition, the Louisa County Conservation Board gathered multiple times throughout January 2021 through September 2021 to discuss plans and projects that are important to the Board.

# 2021 Public Needs Assessment Survey

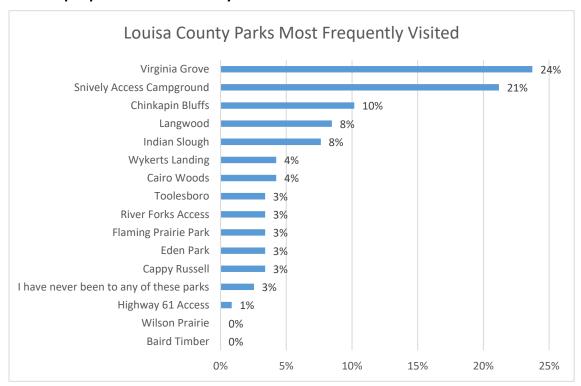
The purpose of this survey was to collect input from county residents and people who frequently use our parks or attend our education programs. Their opinions on conservation, programs, and facilities will assist the board in developing new facilities, programs and other activities in the next 5-10 years and beyond.

There were 118 people who completed the Long Survey. The following results are from those 118 respondents.

# Demographics of the long survey respondents (survey size of 118):

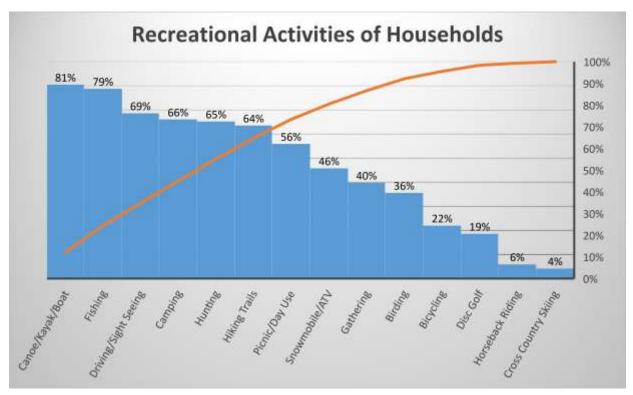
- Sex: 52% were female, 47% male and 1% would rather not say.
- Ages in household:
  - 37% of respondents have kids under 18 living at home
    - 13% of survey respondents had kids that were 5 and up in the household
    - 24% had kids between 6-18
  - Only 9% of the respondents had people aged 19-30 at home
  - o 31% had people from 31-50 years old
  - 23% had people over 51 living in the residence
- Residency: 86% were Louisa County Residents; 11% were from surrounding counties, 2% were out of state (TX & IL) and one from out of the country (Croatia – might be a mistake?)

# How do people use Louisa County Parks?



The top three most visited County Parks remained the same from 2014 to 2021. The biggest difference was that in 2014 8% said they had never been to a county park. In 2021, that number dropped to 3%.

# What activities are household members participating in?



The recreational activities of households has changed significantly since the 2014 survey. Below is a comparison of the top three most popular activities from 2014 responses versus 2021 responses. It was also noticed that the three least popular activities were also the least popular in 2014 with similar results.

		2021		2014
Highest	Canoe/kayak/boat	81%	Hike/Walk Trails	79%
Second	Fishing	79%	Driving/sightseeing	69%
Third	Driving/Sightseeing	69%	Picnic/Day Use	66%

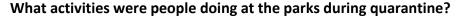
# How did Quarantine and the novel coronavirus affect the use of parks?

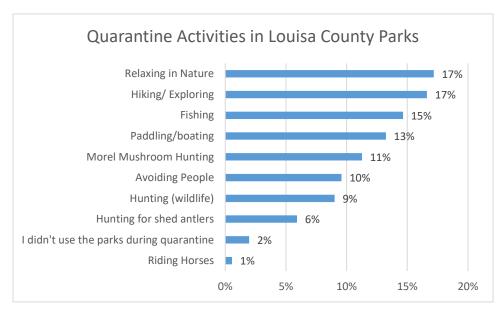
In March of 2020 our world changed with the novel coronavirus pandemic. Many of the businesses we typically support and the things we did for entertainment were closed or cancelled. We asked survey participants how the quarantine affected their use of Louisa County parks. 32% of respondents said they used parks and wild areas more than usual during the pandemic. 64% said there was no difference in their use of the parks. 4% stated that they avoided parks and wildlife areas.

Although we don't have any actual data on increased use of our parks during the pandemic, staff noticed a definite increase in the number of people out in the areas and number of vehicles in the parking lots at our parks and wildlife areas. Restrooms and campgrounds were closed as mandated by lowa's Governor Reynolds from March 15 through May 15 (self-contained units only) then completely

open on May 28 to all with restrooms open. As soon as campgrounds opened, they were very busy for the remainder of the camping season. Staff noticed and visited with people who purchased campers or tents and were camping for the first time ever, or first in a very long time.

We also noticed an increase in shed antler hunters, spring turkey hunters and people simply out walking for enjoyment and exercise.





# People also shared with us the following activities they participate in:

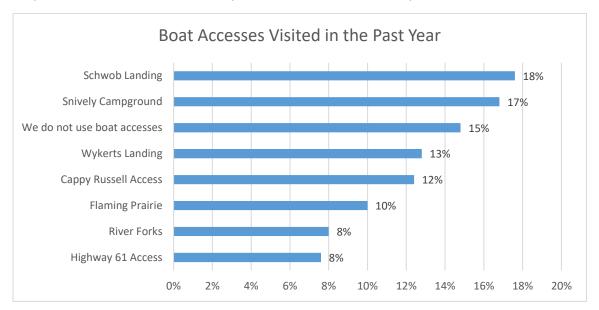
- Camping (9 people listed this) camping should have been on the list but it wasn't because the Governor had closed campgrounds at the beginning of the COVID!
- Searching for arrowheads
- Drinking beer
- Exercise
- General wildlife viewing
- Shooting or hunting
- Trail running
- Wildlife scavenger hunts
- Watching large groups of people on four-wheelers gathering
- None...don't need parks when you own your own ground that enables all that parks offer

The Louisa County Naturalists created a Facebook page, specifically to provide virtual environmental education. The events included geocaching, scavenger hunts in the parks, book ready and a variety of fun activities kids could do at home. 30% of the survey respondents knew about the site and visited it. Out of those, nearly half participated in the activities.

#### **Boat Accesses**

Participants were asked to mark all of the boat accesses they have used in the past year.

Snively was the most used access and although Schwob Landing is owned/managed by the City of Wapello it was included in this survey because it is located on and part of the Iowa River Water Trail.



The 2021 survey shows an increase in use of boat accesses. The 2014 survey had 42% of respondents stating that they didn't use boat accesses. This increase is likely due to the fact that canoeing, kayaking and boating were listed as the main recreational activities.

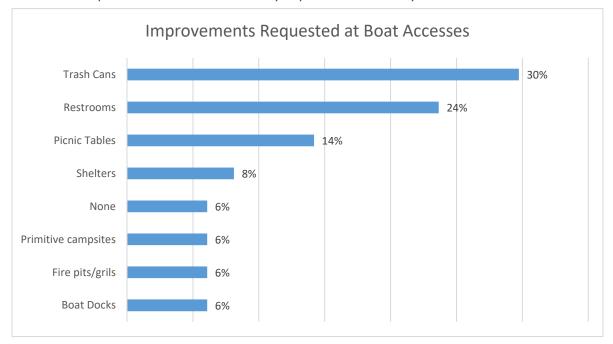
Out of the 81 people who responded about boat accesses:

- 58% were satisfied or very satisfied
- 33% were very unsatisfied \*this number is alarming\*
- 9% were unsure

Emphasis will be placed on boat landings over the next 5 years. Consistent and extreme flooding multiple times throughout the boating season is likely to blame for the "very unsatisfied" marks. The Conservation Board will be re-evaluating the rock budget and working to improve these conditions.



Participants were asked to mark what improvements they would like to see at Louisa County Boat Accesses. People were able to mark as many improvements as they wanted.



When asked if additional boat access is needed on the Iowa River, 84% were either unsure or said no; 15% believe yes, additional accesses are needed.

Additional places where boat accesses are needed:

- Cappy Russell
- Ferry landing
- Toolesboro
- At Hwy 70 bridge. Please get it finished
- Between Wapello and CJ on the south side
- Tri County-Gladwin area
- Highway 61 Access (5)
- Down near mud bottoms
- Roudybush Bottoms
- Iowa river at Indian slough for kayaking and canoeing
- North end of Iowa river. Mississippi River when it's flooded



• I'd like if Louisa county could take over the Ferry Landing boat access so it could be properly maintained. The bank next to the ramp is washed out and needs built back up a little bit because the river comes through right there and when the river is back

Survey respondents also wanted us to know the following about boat accesses in Louisa County:

• High water access (2)

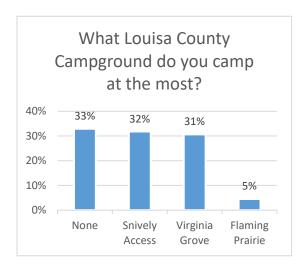
- Better access points, boat ramps & better/more parking (7)
- Lights
- Better parking at Wykerts and maybe markers so you know where it is when the water is high.
- Better picnic tables and water hook up at lake Odessa campground.
- Cappy Russell could use a wing damn or something so the current isn't so bad there next to the boat ramp along the bank
- Clean them up sooner in the spring
- Cleanliness, move access to areas away from sand bars
- Cleanup debris at river forks access. Need historical marker for Oakville car ferry they need to bring ferry back or bridge there (2)
- Clear rocks during low water in front of ramp
- Clearing of the duck weed. Makes ramps slick.
- Gravel in lot mud hole usually
- Keep up on mowing
- Maintenance to road at Snively
- Maintained regularly
- Paved ramps, paved lots
- Paved roads to Mississippi River landings
- Fredonia cleaned up... it is horrible
- River Forks parking lot needs leveled.
- Ramp needed at Hwy 61 access

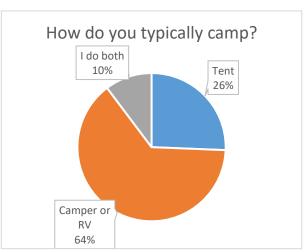


# Camping

Louisa County Conservation manages three campgrounds in Louisa County. Snively Access is along the Odessa Wildlife Management Area and allows paddling access to Odessa. Flaming Prairie features a Mississippi River Access. Virginia Grove has a 5-acre pond, playground and hiking trails. Since 2008 flooding has been a major problem at both Snively and Flaming Prairie, keeping the campgrounds closed for extended periods of time and greatly affecting camping revenue. 2019 featured one of the worst floods in terms of the amount of time water levels were high. 2020 featured the novel coronavirus which caused the Governor to close campgrounds, restrooms and playgrounds from March 15-May 28 with contained unit campers beginning to camp on May 15. After the closure camping numbers boomed.

75% of survey participants camp (compared to 66% in 2014). The remaining 25% do not camp and were not asked to answer the following questions about camping. 88 survey participants answered the following questions.





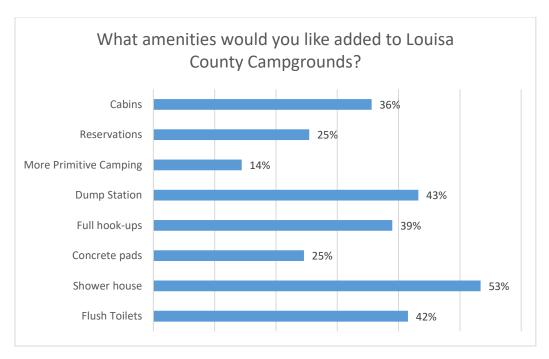
It is expected that camping would be higher at Flaming Prairie except for the fact that the park/campground has had to be closed until around August 1 each year since approximately 2008. The camping season is practically over by the time seep water from flooding recedes.

The fact that 33% of campers are not camping anywhere in the county is alarming. The Board will be working towards making campgrounds more appealing.

As we expected, the number of RV campers is much larger (64%) than the tent campers (26%).

In addition, 73% of respondents suggest that we improve campgrounds that we currently have rather than starting from scratch with a new campground.





Participants were asked to list the one improvement they would really like to see and where.

The following were listed for any or all of the campgrounds:

- Cabins (4)
- Dump Station (5)
- Full Hook-up Sites (4)
- More places to fill water
- Better maintenane

- Level Sites
- More primitive camping
- Camp site on the Iowa or Mississippi River
- Something similar to Marr Park

12 of the respondents requested improvements to Snively.

- Concrete Pads (2)
- Flushing Toilets
- Septic Hook-ups (4)

- Shower House (3)
- Dump station (2)
- Level Spots (2)

Snively Note\* The Conservation Board has looked repeatedly at the possibility of adding flushing toilets, a dump station, shower house or septic to Snively. While we know there is a great desire and need for these things, the proximity to the public water source and lack of land outside of the floodplain does not allow it. In order to add these amenities, we would most likely have to purchase land on top of the bluff and pump the effluent up to holding tanks on top of the bluff.

10 mentioned they would like improvements made to Virginia Grove.

- Cabins (4)
- Full Hook-ups (2)
- Habitat Improvement

- Modern Restrooms
- Shower house

# 3 to Flaming Prairie

Shower house

## Overall, what should the #1 priority be?

Improvements to campgrounds was mentioned most often as the #1 priority (22 respondents). The majority of comments included adding more amenities including shower houses, dump stations, cement pads, full hook-up sites and more. Other comments included the idea of taking reservations, adding additional spots or new campgrounds and adding security.

16 respondents chose maintenance. Improving and maintaining what we already have was listed many times. Others said long-term planning and increasing the economic impact. Four people's comments included not adding or purchasing more in their comments.



12 responses listed trails as a top priority. This included more trails for both biking and walking as well as expanding the trails we have.

10 people listed habitat management as the top priority. Removing invasive species, improving biodiversity, food plots and wildlife habitat were listed as important.

Also listed as top priorities was amenities (9 comments) such as improving infrastructure we currently have and adding more. Three people mentioned they would like to see cabins in the county, one would like disc golf.

8 people made ATV/UTV trails their top pick. Ideas included building a park for them, adding them or allowing designated routes through some parks.

There were six people who listed the addition of a shooting range.

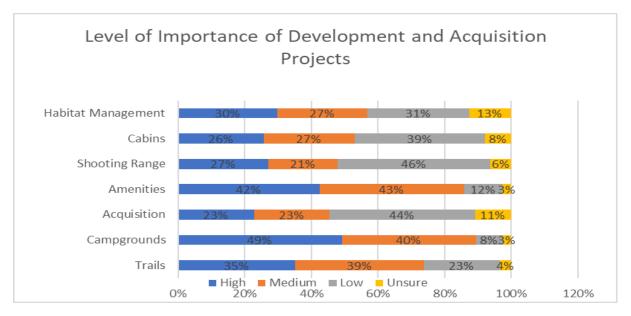
Four people ranked acquisition as their top priority that included adding land to parks we have or acquiring new areas.

Only 3 people listed restrooms or shower house which was surprising.



# **Development and Acquisition**

The question asked was, "Where should we focus our attention for parks and wildlife areas over the next 5-10 years?" (This question does not cover or include environmental education.)



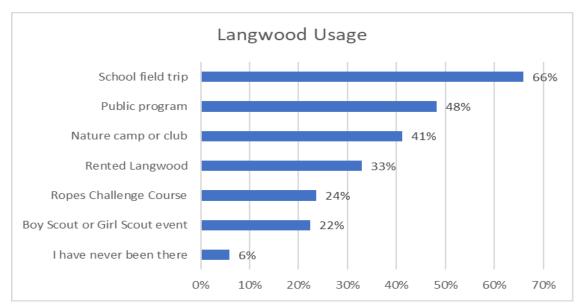
When looking at the percentages of "high" priority ratings: 49% listed campgrounds while 42% listed amenities as the highest priorities. These two are also listed as the top "medium" priorities with 40% and 43% respectively.

When looking at the projects rated with the "lowest" priority: Public shooting ranges (46% list as the lowest), land acquisition (44%) and cabins (39%) had the greatest percentages of low priority. 13% of respondents were unsure if we needed habitat management or to acquire more land (11%).

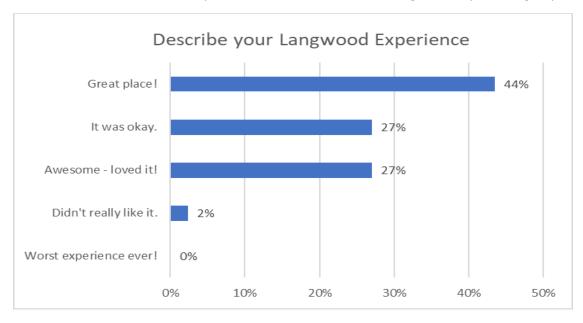


# **Langwood Education Center**

Langwood Education Center is open by reservation, or by attending a program or event at Langwood. It is not open to the general public to come and go as they please. The main ways that people visit Langwood are listed in the table below. Participants were asked to mark all of the reasons they have been to Langwood.

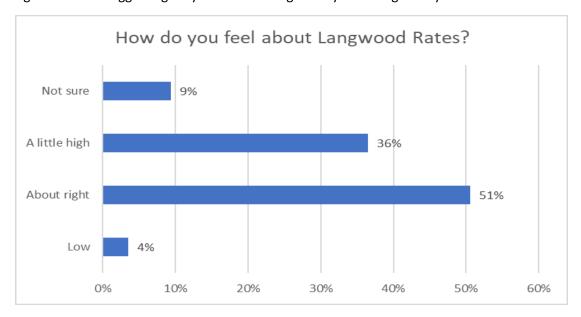


Eighty-five out of 118 people marked yes, they would answer questions about Langwood. Out of those 85 people, 66% had attended a school field trip to Langwood, nearly half had attended a public program, 41% had attended a nature camp or club and 33% had been to Langwood as part of a group rental.

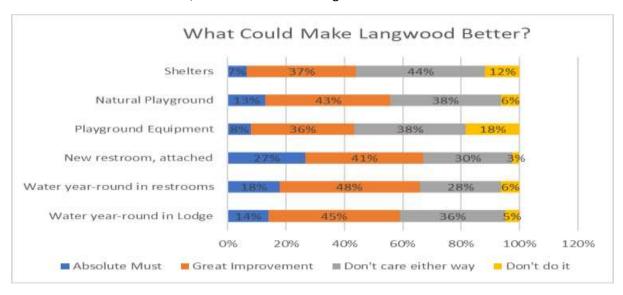


71% of survey respondents either thought Langwood was awesome or a great place. 27% thought it was "okay" and only 2% didn't really like it. No one thought it was the worst experience they had ever had.

People were also asked about the Langwood rates. Around half the people thought the rates were about right with 36% suggesting they were a little high. Only 4% thought they were too low.



We of course wanted to know, "What could make Langwood better?"



The majority of people responding to this survey question listed building a new restroom closer or attached to the lodge as an absolute must (27%) or a great improvement (41%), total ranking of 68%. It was closely followed by water on year-round in the restrooms and lodge with a total ranking of 66%. The lowest ranking item on the list was a traditional playground with 18% of people telling us "Don't do it".

# Any other improvements to Langwood or something you want us to know about Langwood?

- Several comments about opening Langwood to the public (12 people)
- Fix up buildings that are currently there or replace (6)
- Add camping (4 people)
- Stock more fish or improve fisheries (3)
- Add cabins
- Dust control for the neighbors
- Fix concrete at the lodge
- Heat and AC for restrooms and attach them to the lodge.

There were a few people who very much dislike Langwood stating that it is a private club for conservation people, someone called it a gated community that the public can't use, another said we should stop wasting money there.



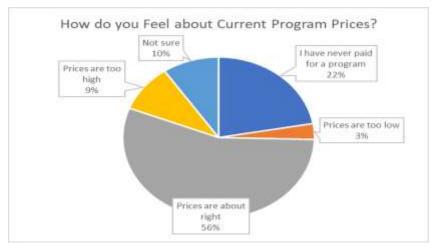


Although these comments are hard to digest, it is good for us to know that there are people who feel as if they are being left out. We should make it a priority to work to get more people, of all types of user groups to Langwood. Staff often feel as if Langwood is one of our best assets for environmental education and it is certainly an asset when it comes to bringing in revenue.

## **Environmental Education**

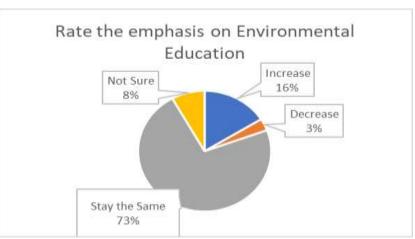
Louisa County is proud of its strong environmental education program. According to survey results: 79% were either "extremely satisfied" or "satisfied" while only 5% marked that they were "very dissatisfied."

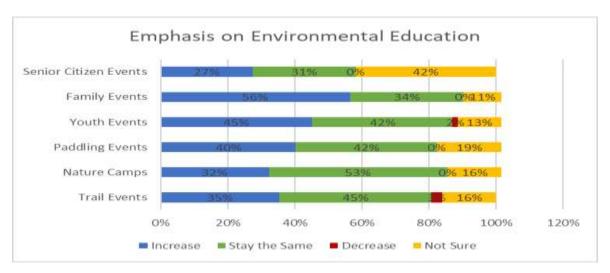
Only 53% of respondents attend educational programs held by Louisa County Conservation which is down by 20% from the 2015 survey.



Nearly half the respondents thought prices for programming were about right while only 9% thought the prices were too high. Louisa County Conservation stives to provide fun and education programming that is affordable by all.

People were also asked to rate the amount of emphasis that is placed on environmental education by the staff & board. An overwhelming 73% of people thought the emphasis should stay the same, suggesting that we have a great balance of EE. 16% thought we should increase programming.





People were also asked to rate if the emphasis on specific programming should Increase, decrease, stay the same or not sure. 56% of people thought family events should increase and 45% of people thought youth events should increase. Two people thought the number of trail events should decrease and one person though the number of youth events should decrease.

# Then people were asked if there are any environmental education programs that they would like to see offered in the County? The list was long.

- More events for adults
- Would like to see more hunter education classes offered in the county. (2)
- Outdoor cooking
- Fishing & Fisheries (3)
- Prairies & Restoration (2)
- Wild edibles
- Survival classes for kids
- Teen paddling or hiking. Since the schools are so small, help make friends all over the county.
- Community garden
- Bee keeping
- Sustainable agriculture
- Teach people how to set up shelters, start a fire, fish
- Predators
- Conservation history
- Maintaining and using kayaks and utv's
- More bio-blitzes
- Educating about the loss of biodiversity and understanding what we have and how to conserve.
- Plant identification
- Something that combines today's technology with the outdoors to get kid's interest.
- Less programs. Use the internet for this. Use the money to develop the land and stop wasting money here. We have the internet for EE.
- Kayak paddling, safety
- Wreath making
- UTV trail safety
- The raising and lowering of the waters explained to humans.
- I think Louisa county conservation does a good job of coming up with new ideas and programs.
- Compositing
- Car ferry at Oakville
- Honeybees
- Snowshoe making



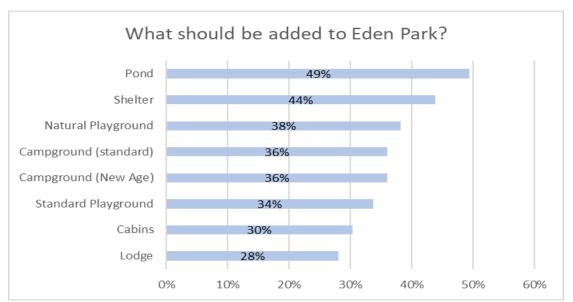
#### **Eden Park**

Specific Questions were asked about Eden Park, a 146-acre area, located on the paved road, X17, North and West of Columbus Junction. This area was gifted to Louisa County Conservation in 2010 by Donna Eden in her last will and testament. Her only request was for the area to be a "park." Participants were asked what they would like to see at Eden Park.



Nearly half of survey respondents (49%) wanted to see a pond built at Eden Park. The next highest rated amenities were a

shelter (44%) and natural playground (38%). There was a tie between building a standard campground and a new age campground with full hook-ups. Most people who marked camping did mark both options.



- I've been on the Riverside Casino Foundation Board. PLEASE tap into these resources. They give to out of county drives and love parks and recs.
- Restroom (5)
- Educational programs, ice skating, cross country skis for use
- No need for concrete pads. Just water at each site with dump station
- RRs! Shelter house. Picnic tables with shade trees.
- UTV Trails (7)
- Open back area for upland game hunting including birds, squirrel & rabbit.
- Rent cabins during hunting season.
- Lease this ground.
- Gun Range (2)
- Hunting Area (3)



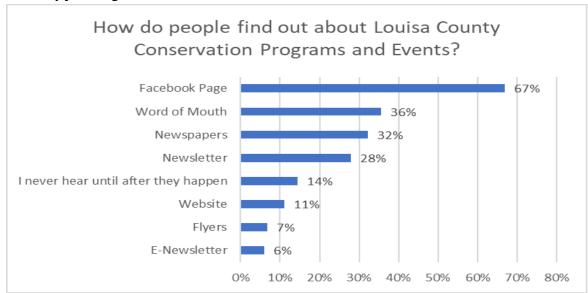
- Keep it natural, don't add anything that wasn't there as far as nature goes. (2)
- If no pond, then leave the creeks.
- Campground would ruin this area! My household loves this park.
- No cabins or campgrounds don't ruin the grounds by putting buildings up and taking away from wildlife habitat
- Concrete pads aren't important for each site.
- Trails with maps & Information (2)
- Equestrian Trails
- More interpretive signs covering everything from the wildlife, plant life and history of the area.
- Natural interactive play areas for kids.
- Shelter close to parking and maybe a smaller one that you may need to hike to.
- Bird/nature observation blinds.
- Disc Golf

Once again, the negative comments were tough to read and digest, however since they were applicable, I will list them here:

- Sell it and put it back on the tax rolls.
- No other use for this property
- Nobody is coming to Podunk Iowa to stay the night...give them something to do as well as the local people.



# **Publicity for Programs and Events**



According to the survey, most people (67%) find out about our programs and events through our two Facebook pages. We use a general "Louisa County Conservation" page for most posts, and the Naturalists also have an Environmental Education page for specific activities for kids and the public to try. Word of mouth came in second place with 36%, closely followed by the local newspapers (32%) and our Naturally Louisa County Newsletter (28%).



Publicizing events, meetings and other topic of interest is important to our mission. Louisa County Conservation also has a Snap Chat account and Instagram that we use to share photos of areas, publicize events and more.





# Strengths – Weaknesses – Opportunities – Threats: SWOT Analysis

SWOT analysis is an opportunity for the public to answer questions in their own words. Survey respondents who took the long version of the survey were given a chance to answer four questions.

- 1. In your opinion, what is Louisa County Conservation's greatest strength?
- 2. In your opinion, what is Louisa County Conservation's greatest weakness?
- 3. What opportunities are there, that haven't been done or thought of yet?
- 4. What imposing threats do you foresee for Louisa County Conservation?

Following are the responses, in the words of the participants. In cases where the same answer was given multiple times a (#) is behind the words denoting how many people provided that same response. For readability, they have been grouped.

# Strengths:

# **Environmental Education**

- Educational programming is great (6)
- Educational programs for all ages but especially youth
   (5)
- Environmental Education for students
- Naturalist enthusiast opportunities
- Reputable programs
- Langwood

# **Employees**

- Employees/staff are friendly and good people (3)
- Good people who love what they do (3)
- Staff care about the county
- Very active (2)
- Small personable group of employees
- Very dedicated staff and presence in the community

#### Habitat

- Great Water Resources with the confluences of the Cedar, Iowa and Mississippi rivers and the public area along with them.
- Diversity of parks and habitats managed
- Plenty of access to waterways
- Location
- Natural beauty and resources of this tri-river location.
- Great access to lots of diverse ecosystems
- Peace & Quiet

#### Land

- Public lands available (9)
- Many areas to explore, good upkeep on park conditions.
- Land acquisition

## Others:

- Keeping parks clean and maintaining them.
- There are options for many different activities.



- Variety of recreational activities across the country
- Why is the county conservation service to schools very well and they continue to provide many activities for the citizens throughout the four seasons.
- They also provide opportunities for all levels and age groups.

# Weaknesses

## **Lack of Funding**

- \$\$ for projects
- Conservation committee does lots of needless spending.
- Support from community
- Lack of funds... build cabins and modern campgrounds for more money.
- Funds and a lack of family driven recreational areas.
- Funds going to the wrong projects.
- Tax base-never enough money to go around.
- Their funds, which is not their fault.

# **Lack of Staff**

- Limited number of staff
- Note enough workers to keep all the parks and boat landings clean.
- Not enough staff for maintenance & park patrol.
- The Director
- Don't appeal to the elderly
- Leadership

#### **Areas and Amenities**

## **Boat landings:**

- Lack of boat ramps & high-water access
- Lack of areas for fishing
- Lack of amenities: at ramps, in parks and campgrounds (5)

#### Trails:

- Need more long-distance trails for hiking (2)
- Need UTV/ATV trails (4)
- They don't care about motorized vehicle recreation

#### Camping:

- Need more camping spots: on Mississippi and in other areas (2)
- No shower house or dump stations in campgrounds
- Need to promote camping more and Lake Odessa Area

#### •

## Other:

- Lack of development on existing properties to better serve people
- Not keeping up with the times
- Old or primitive parks
- Own too much land that isn't being used
- Parks need upgraded



- Public awareness of what is available for use
- Taking advantage of resources
- Importance of promoting prairie for insects and wildlife
- Too many properties, none as nice as they could be if we downsized and focus on what we have
- Too much emphasis on outdoor activities like hiking and paddling
- Too much ground not being utilized
- Too much money spent on bike trails that no one uses, spend money on developing UTV trails... this could bring in awesome revenue for the county
- Unwilling to use of property beyond growing grass and trees
- Longwood to be open to the public on certain days, or events more often

#### **Amenities:**

- Want disc golf
- Restroom availability at areas & trails

#### Maintenance:

- Poor management of parks and roads
- Need more focus on food plots
- Promote more debris clean-up
- Too much emphasis on habitat vs. access to the lands

#### **Environmental Education**

- Having a full schedule of activities and priorities that doesn't leave much room for new initiatives
- I would like to see more family events
- Senior programs
- Too many kayaking/paddling events held on Sunday. That is church day and cannot attend.
- Too many programs, too few staff to work them all

# **Opportunities**

#### **Areas and Amenities**

- ATV/UTV/snowmobile trails (11)
- Better trail system for hiking and bicycling
- Cahins
- Campgrounds (improvements, upgrades)
- Canoe rentals
- Cardboard boat races
- Shooting range (5)
- More places for power boating
- Winter Activities
- Do what ever we can to connect folks, especially younger folks to get them excited about the outdoors, and nature to protect nature. Programs to help young folks especially connect, and grow more caring, creative, confident, and resilient
- It would be fabulous to find parts of properties solely for ATV you TV writing even if short. Renting of cross country skis in the county and if possible promoting ice-skating which would maybe be a little more difficult and dependent upon whether
- More hunting ground
- More playground areas



- Pairing of county park with campground with use for horse and atv riding.
- Paved roads to Mississippi. Enhance fishing at Lake Odessa
- Plant some food on all the grounds for wildlife
- Please get a committee to study car ferry or bridge at Oakville at Mississippi River.
- Please please consider taking the old Hawkeye woods down by Oakville and make new a new camp site! The county really needs a new campground
- We need natural recreation that appeals to those who want to bring their family's to experience nature, but are not fans of primitive sites. It feels we have fulfilled the guy trip market. Now we need to fulfill the family outing market.
- Wedding venues....need more of them
- Utilize our natural assets in the County which are the Lake and River.

#### **Environmental Education**

- Adult outings or groups to join for hiking
- Opportunities for elderly
- "eat the weeds" foraging weekend or morel mushroom festival
- Annual ATV ride through state, local, fed land

#### **Additional ideas:**

• Foundation director or department needs to be more vocal. Endowments should be 1# priority. Tap into funds. Use to improve parks and accesses. Casino Foundation grants too

#### Threats:

#### **Funding**

- Mis-guided funding
- Lack of funding (10)
- Funding for improvements and maintenance
- No funds for improvements, due to having to care for the abundance of grounds we have.
- Loss of REAP funding.
- To many properties and not enough funds to take care of it
- Tight funding due to low county population and lack of industry in Louisa county to generate income without raising taxes
- Lack of community support
- Less funding down the road from state and federal money. Which means thinking outside of the box for new revenue replacement streams.
- Too much property has been taken from the tax rolls. We cannot continue this practice. We have too much property that we can't afford to maintain.
- Property taxes way to high per capita. Can't afford to improve!
- Loss of revenue to our communities due to lack of opportunities the residents want. People go and will continue to go out of county to meet their needs
- Having camped in other counties, their campsites are better maintained and more user friendly.
   They draw users and turn a profit. Louisa County doesn't appear to generate much revenue.

#### **Natural Resources**

- Vandalism
- Too Much Ground to take care of
- Too much RV/trailer campgrounds not encouraging primitive camping
- Too much property has been taken from the tax rolls. We cannot continue this practice. We have too much property that we can't afford to maintain.
- Droughts and flooding
- Not properly taking care of land that has been given or acquired.
- Owning too much property and not enough staff to maintain it
- Willow trees.
- Invasive species

## **Population / Community Support / Tourism**

- Lack of community involvement &/or support
- People leaving the County for better amenities (2)
- A continued loss of ethics towards land, water, and air conservation and biodiversity--everything is treated as a commodity, unfortunately even people and we need to foster care and value rather than waste



• Pressure to manage more for humans than wildlife

## Other:

- Mother Nature, inability to compete with north/northwest destinations.
- Youth and social media generation that don't get outside.
- Local Politicians
- Political influence
- Lack of support from the Supervisors. This is the only branch of the county that actually brings in revenue.
- Diminishing youth participation
- If they happen do take over the Ferry Landing, please still allow camping put there
- We may acquire more ground than we have people or funds to take care of. Without better access, the public might not appreciate what we have.
- Spending too much money on pipe dreams like education center at Langwood
- Loss of campgrounds not being kept up. Hated seeing the Ferry Landing camping and access go away. It was a great place to camp
- Technology
- Possible breaking of the levee near conservation areas around the rivers.
- Constantly blocking a gun range

- ruining all the grounds you own by putting buildings and campgrounds on them. We should put the natural resources first not trying to figure out ways to bring a bunch of people onto the grounds of the wildlife'
- Listen to what people want, help provide revenue for this area and its businesses. We will all grow broke buying land to provide more prairie grass to burn.
- hopefully none...
- Not seeing the potential revenue motorized recreation can bring
- Anti-hunters
- Government regulations
- Closing parks
- Those who don't want farm ground taken for public use. Limited funds during a waning farm economy. Look for ways to be self-sufficient.
- Interpretation Center money could be spent for lots more benefits in the county
- I have seen several parks and campgrounds
  "improved" to the point that they were too
  expensive to maintain and were more like motels
  than camps. Also leased to schools on just long
  terms that no dates were left open for individuals.

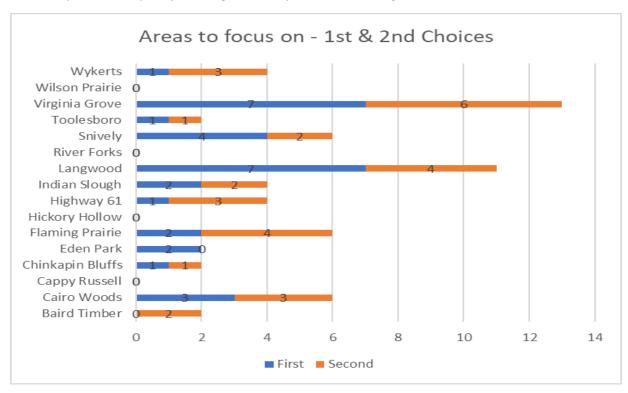




# You're Opinion Matters - Short Version

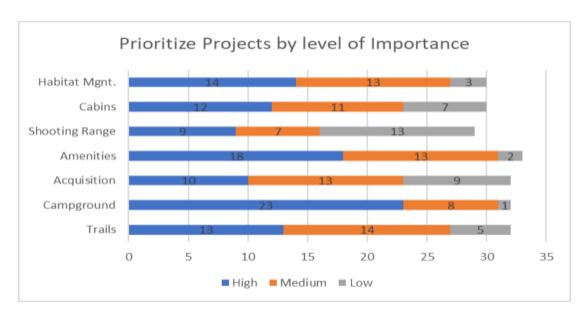
A shorter version of the survey was offered for people who didn't have the time or desire to take the longer version. There were only 4 questions, and it took only a few minutes to complete. Thirty-three (33) people took this survey.

The first question asked people to rank their top 5 areas of importance. This could be the areas they visit the most or areas they think we should focus on. Virginia Grove received 7 first rankings and 6 second rankings for a score of 13. Langwood came in second place with the same number of first place rankings but only 4 second place for a total of 11 votes. Third place was a tie between Snively, Flaming Prairie and Cairo Woods. When you add in the 3<sup>rd</sup>-5<sup>th</sup> choices, Virginia Grove and Langwood are a tie for attention and Snively jumps ahead of the others slightly. Toolesboro had very few 1<sup>st</sup> and 2<sup>nd</sup> votes, but it made up for those quickly, coming in fourth place with Flaming Prairie.

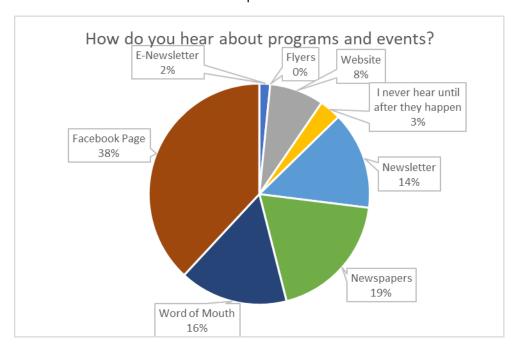


# We also asked people to prioritize projects by level of importance.

Campgrounds and Amenities (restrooms, shower house, shelters...) are too close to decide the winner. Campgrounds has more rankings as a high priority, but amenities has more points overall. Through both the Long and Short version of the survey we have heard that Camping is a high priority. The Board will work to improve and expand upon the campgrounds. We know that COVID gave camping a big push with little else to do and several people purchased campers and RV's in order to get out of the house an



We are always curious how people find out about programs and events that are happening. So we asked the same question on the short survey, How do you hear about programs and events. The data for the short survey is quite similar to that of the longer survey. The majority of people are using Facebook to learn about upcoming events. This time there were a few more people who read the local newspapers for their news with "word of mouth" coming in third. This is great data for us because we can use it to help us reach people better and hopefully continue to reduce the number of people who don't hear about stuff until after it has passed.



The final question asked was if there is anything else people would like to tell us. Only 5 people responded to this question, here are their answers:

- I would like to see more to do at Eden Park. That is a great area that has been added to our area!
- I'm a long-time leader of Boy Scout troop 560 in Cedar Rapids. We have enjoyed using Langwood each spring (usually) while doing a service project at Big Sand Mound. We love the trails and facilities and Langwood; we have interest in seeing them maintained (especially the A-frame and bathroom). We are looking forward to seeing the completion of the signed learning area in the reconstructed prairie. We have also camped at Flaming Prairie when coming for BSM Field Day. Improved restroom, other amenities there would be nice. We do not have experience of other Louisa Co. properties.
- Love camping would like electric.
- Thank you for providing high quality environmental education in schools and through camps for many years.
- Winter eagle watch would be enjoyed by many. Many of these parks would suffice.



# **2021 Staff Needs Assessment**

Current LCC Staff sat down in a meeting stretched over two days to discuss each individual area and determine SWOT analysis: strengths, weaknesses, opportunities and threats. Following are the results of those meetings.

#### **Boat Accesses:**

• In general – always need rock, cleaning stations

#### River Forks Access at Fredonia

- Strengths Easy to use, end of convict road, open space for people
- Weaknesses litter, always needs rocks,
- Opportunities programs with Convict road and river forks, pack it in, pack it out, picnic table or fire ring, porta pots
- Threats flooding, sediment deposits from flooding, litter, lack of funding

# Highway 61 Fishing Access located North of Wapello

- Strengths on a main road, people use it for fishing,
- Weaknesses entrance road is dangerous, ends in water, no landing, can't put a boat in
- Opportunities Maybe updated when the new HWY 61 comes thru, create new access, carry down canoe/kayak only launch
- Threats dangerous, hard to get on and off HWY 61, erosion of the bank, funding

# Cappy Russell Access at Oakville

- Strengths wonderful, nice and big, pretty location, plenty of parking, great for fishing, well
  used
- Weaknesses flooding and siltation, needs constant rock,
- Opportunities supporting local businesses, advertising places to buy stuff; picnic table, porta pots,
- Threats flooding and siltation, funding

## Wykerts Landing on the Mississippi River

- Strengths only Mississippi River access, serves the furthest SE side, well used, usable in high water
- Weaknesses so far on a gravel road, not nearly enough parking
- Opportunities paved ramp, more parking, picnic table
- Threats flooding, constantly needs rock

#### Additional boat access needed?

- HWY 70 on the Iowa Tri-Rivers
- Work on another access north of CJ Gladwin??
- Better access by tri-county bridge

#### Wildlife Areas:

#### **Baird Timber**

- Strengths good hunting, secluded area, has a nice quarter-mile trail
- Weaknesses small parking lot, needs rock,
- Opportunities extend trail, check perimeter signs

• Threats – invasive species taking over

#### Cairo Woods Wildlife Area

- Strengths trails are great, signage is great, hunting opportunities, equestrian opportunities, great for birding, make money on the farm fields, handicapped blind
- Weaknesses squishy parking lot, need rock on roads and parking areas,
- Opportunities need timber plan, timber sale, EE spotlight take porta pots for a month
- Threats Invasive species, funding

# Hickory Hollow Wildlife Area

- Strengths beautiful area, Indiana Bat Habitat
- Weaknesses neighbors, the entrance road
- Opportunities shelter, has city water run to it, foot bridge for access
- Threats dumping, litter

# Indian Slough Wildlife Area

- Strengths we can get to it again, huge, great habitat, trails are pretty good, lots of access points, bermed area will be nice, diversity of habitats, great for reducing flooding in other areas, lots of wildlife, bat poles,
- Weaknesses flooding, road to Kuder Lake needs work, irrigations is hard on the road to Kuder,
   Name is not culturally sensitive we should re-name it,
- Opportunities wood duck box project, EE spotlight, add trail signage, backcountry,
- Threats flooding, access,

# Parks/ Recreation Areas:

#### Chinkapin Bluffs Recreation Area

- Strengths Pretty, New Hoover Trail is amazing close to community and got lots of publicity, good variety of trails,
- Weaknesses need better signage for boundaries, fix rain garden fill it in
- Opportunities history about the old RR stuff, Interpretive signs, benches along the HNT, fix fireplace, install sundial, reduce mowing, native landscape learning garden, forest management plan, remove invasive species, EE
- Threats vandalism, invasives, erosion, terrain is steep for equipment

#### Flaming Prairie Park

- Strengths nice place when it isn't flooded, Mississippi River Access, Fishing, shelter and camping, great wetland, different from other areas, habitat connectivity to the River
- Weaknesses beaver dams,
- Opportunities building up the road, improve the boat landing,
- Threats high water, closed a lot, erosion along the road,

#### Virginia Grove Recreation Area

- Strengths doesn't flood, great trails & getting better, new bridge is great, honeysuckle getting better, handicapped deck is great, playground is great, beautiful hike from the campground to the pond, hike trails on the front end and hunt in the back end, multi-use area.
- Weaknesses need more mulch at the playground,
- Opportunities improve the prairie, better handicapped access from parking lot to deck, trail
  map sign at deck add a kiosk, fix up the one-room schoolhouse, shoreline restoration, remove
  dead ash along the sides, need another bridge on the back trail, bridge needs handrails and
  wider, clean out trees between the campground and playground, grind stumps/ remove trees in
  the way, mouse ramp in the urinal, shower house, dump station, more camp pads
- Threats invasive species, erosion on steep slopes and water ways

#### Eden Park

- Strengths length of the trail is nice, beautiful views, owl box and geocache were popular and got people out there, like the openness and not developed, on hard surface road, prairie is beautiful,
- Weaknesses invasive species need to keep up on
- Opportunities restroom, shelter, playground, bridge and parking on other side road, add wood duck boxes, add trails, add interpretive signs,
- Threats We don't want it over developed, keep it natural, no hunting it is a nice refuge area for wildlife

# Langwood Education Center/Louisa Interpretive Center

- Strengths Great facilities, woodsy camp feel, Paddling and fishing opportunities, open area for big games and archery, brand new wetland interp trail is awesome, ropes course is unique to lowa and provides revenue, LW bring in revenue,
- Weaknesses dated buildings, need restroom attached to lodge, water has to be off in winter, dorm isn't heated or cooled, erosion below the pond, ADA accessibility,
- Opportunities build conifer windbreak/buffer between LIC and LW, gazebo, additional shelter, bat box for education, reconnect the southern trail, need to replace the bridge, upgrade lodge with heat, air, restrooms and running water in all seasons, raising the fishing jetties so people can walk out on them, natural playground (check with ABEE, Inc.), gravel turn-around down below for emergencies, think about how to open LW when the LIC area is open, table rack for the lodge
- Threats funding, invasive species, sedimentation in the pond, mold/mildew in the a-frame, buildings need upgrades, neighbors' cats, buildings have sunk and water gets in at times

# **Snively Access**

- Strengths Location is great, on Odessa, lots of sites, loyal following of campers, great resource for Odessa programs and on Water Trail, restroom, geocache, running water and electricity, mosquito research
- Weaknesses not made for huge campers, hill is sketchy, threat of erosion

- Opportunities shelter, increase EE, running water/septic if possible, kayak launch for dock, plant some trees on water side
- Threats flooding, water on the North end, erosion of bank or sites, road

# **Toolesboro Mounds, NHL**

- Strengths really neat and unique site and draw to the county, one of 26 sites in the State, located along the MRT/GRR, visible from the road, paired with the Littleton Bros. Site, great partnership with the neighbors, neat little museum, great partnership between county, state and national, preserving a cultural resource, close to the Mississippi River,
- Weaknesses building could use some help/updates: carpet, toilet, well, septic, roof; long distance between the parking lot and museum, alarm system needs fixed
- Opportunities great educational opportunities, light on flagpole, add more picnic tables,
   expand/ build additional trail, seeding the mounds and removing trees from the other mounds,
- Threats erosion to mounds, invasive species in the prairie in the woods,

#### Wilson Prairie:

- Strengths remnant prairie, sand prairie so it is unique, different from all of our other areas, high quality habitat
- Weakness parking,
- Opportunity kiosk with educational info about prairies and remnant prairies, tie it into Big Sand Mound, increase opportunity for education, seed collection
- Threats invasives,

#### **Complex Office Space**

- Strengths set-up is good, prairie is great, great back-up location for programs
- Weaknesses EE stuff isn't available to the public there, lack of space and storage, conference room is too small for even a small meeting, natural landscaping outside the office
- Opportunities moving our office to the LIC once it is built, continuing to make the mower shed a more usable space, reinforce the walls
- Threats BOS wants to get rid of the prairie

# **Maintenance Shop**

- Strengths warm on one side; centrally located in the county,
- Weakness need a new roof, not enough space, need for additional indoor space
- Opportunities expansion, need a bigger building for storing equipment, internet/computer, move maintenance to LIC when we move, add an enclosed office space
- Threats no drinkable water, need culligan water system,

# **Environmental Education**

(Strengths – Even Better If's (EBI's) – where are we lacking? – Opportunities – threats)

Volunteers -

#### Field Trips:

- Strengths Great pattern established. Every grade at every elementary school. Worked hard to correlate to standards, sense of place in EE,
- EBI to reach more students in secondary schools
- Opportunities take groups to more areas,
- Threats not being able to go based on money, COVID and standards, weather, flooding, bussing

## **Ropes Course:**

- Strength unique, brings in revenue, EE can tie in with teambuilding for critical thinking skills,
- EBI more regular group of belayers, advertise for corporate groups,
- Opportunity maybe more low elements, t-shirts for sale,
- Threat erosion, woodpeckers, costs, flooding, availability of staff/belayers

# County Fair:

- Specific programs in addition to being there at a set time;
- Utilize the trail for a walk or program
- Archery goes over good kids want to do it.

## **Outdoor Classroom programs:**

- Using a lot more with schools unable to travel
- Encourage the students/teachers to take ownership over their learning area
- Working to build something at Wapello and Roundy for Outdoor Classroom space

#### Nature Camps (Summer & Winter):

- Really popular and fill up fast Attempt to reach more youth
- Work on advertising
- Families that come back year after year
- Opportunities for older kids
- Offer volunteering for older kids at the younger kid camps

# **Public Programs:**

- Strive to provide more programs that would appeal to adults
- Increase numbers when it is allowed
- Offer more paddles
- Continue Motts programs
- When able offer senior citizen field trips
- Get people out to all of our areas
- Teacher's workshop
- Paddles with litter clean-up and interp

#### Other:

#### Advertising goals

- Newsletter 4 times a year plus e-newsletters
- Facebook website emails instragram snapchat
- Press releases radio interviews tv shows
- Flyers –
- Campgrounds –
- Local cable tv channels

#### Prescribed fire

- Add more timber burns
- Meetings to set priorities for us and also with the TNC & FWS & DNR
- LIC & VG want to try to keep some prairie each year that isn't burnt for field trips

#### Acquiring property

- Parcel that would connect the three pieces of Virginia Grove
- Additional land adjacent to Virginia Grove to expand the park
- Boat access areas along the IA River
- Places for primitive camping along the river
- 25-acre pieces within Cairo Woods
- Areas that are continuous with areas we already own
- Areas that are along waterways (Michael Creek or IA River)
- Unique features (fens, remnant prairies)
- Parcel on top of Snively where we could do septic, parking or expand

#### Grant ideas – big grants!!

- Six more kayaks and additional trailer or Stand up paddleboards
- VG schoolhouse
- Louisa Interpretive Center
- Mini-excavator or other bigger equipment
- Wood-duck boxes

#### Things staff would like to have:

- LW Heat and water year round
- New building at Shop
- LW Natural playground
- Dump station
- Enclosed trailer to haul EE stuff in addition to archery trailer
- Shooting range not at LW low to no priority for staff have to be somewhere visible
- Low priority Sustainable Cabins EE impact

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### Appendix A: Louisa County Background

#### **Geographic Location**

Louisa County is located in Southeast Iowa. Louisa County covers 402 square miles of land with 16 square miles of water for a total of 418 square miles. It is ranked  $94^{th}$  (out of 99 counties) for size. There are approximately 28 people living per square mile. Data from: usa.com/Louisa-county-ia.htm from 2010-2014. Note: \*COVID put a delay on the new census data as they were collecting data at the beginning of the pandemic.

Founded in 1836, it is bordered on the North by Muscatine County, to the West by Washington County and to the South by Des Moines County. The Mississippi River forms the county's Eastern border. The Cedar and Iowa Rivers converge at Columbus Junction, just North of the HWY 92 Bridge and the Iowa River converges with the Mississippi River near Oakville.





The population in Louisa County was 11,178 according to the 2019 population estimate. This is a major decline from the 2000 census which reported 12,183 people in the county and 11,387 in 2010. Wapello is the county seat with a population of 2,005 in 2019.

- Wapello Pop. 2,005 stayed the same (all from the 2019 census)
- Columbus Junction pop. 2,229 (Increased by 330) \*now the most populated city\*
- Morning Sun pop. 783 decreased by 53
- Grandview pop. 430 decreased by 126
- Oakville pop. 210 Grew by 37
- Letts pop. 375 decreased by 9
- Columbus City pop. 391 didn't find new numbers for Columbus City!
- Fredonia pop. 294 Increased by 50
- Cotter pop. 35 decreased by 13
- Toolesboro is an unincorporated community, platted around 1837 by William L. Toole.

<sup>\*</sup>Data was gathered from: data.census.gov/

<sup>\*\*</sup> Note – at the time of gathering data the decennial census data was not complete so these are the best guess estimates.

#### **Historic settlement**

The first permanent settlement in the area now known as Louisa County was established in 1832, near the mouth of the Iowa River. The early settlers came via boat on the Mississippi and Iowa Rivers. Most of them settled on the edge of the forest, where the sod was more easily broken, where fuel and building material were available and where there was protection from fires that swept the prairie.

When Louisa County was established on December 7, 1836, the county was still part of the Wisconsin Territory. It was separated from the original Des Moines County which was divided into seven counties.

#### **Governmental Framework**

Louisa County's government consists of three county Board of Supervisors (BOS). They are each elected from equal-population districts. One serves as Supervisor Chair and it varies from year to year. Supervisor meetings are typically held every Tuesday morning.

The BOS appoints five members to the Louisa County Conservation Board. Board members serve five-year terms. The Conservation Board must be gender balanced, or a good attempt must be made to be gender balanced. If no one from the correct gender applies to be a Board Member or if they are unable to appoint someone the position must remain open and be advertised for six months before allowing a gender unbalanced board.

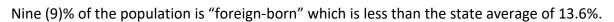
Other county positions (with staff from FY21) include: Assessor (Cathy Smith), Auditor (Sandi Sturgell), Community Services (Cyndi Mears), Conservation (Katie Hammond), County Attorney (Adam Parsons), CPC Administrator (Cyndi Mears), Emergency Management (Brian Hall), County Engineer (Adam Shutt), Environmental Health (Brian Thye), Public Health (Roxanne Smith), Recorder (Tammy Hayes), Sheriff (Brad Turner), Treasurer (Vicki Frank), Veterans Affairs (Adam Caudle), and Zoning Administrator (Bruce Hudsen).

### Appendix B: Demographics and Statistics

#### **Demographics**

Louisa County demographic information has been collected and analyzed. Population trends and characteristics are examined to better determine the audience we serve. The following statistics were taken from <a href="https://data.census.gov/cedsci/profile?g=0500000US19115">https://data.census.gov/cedsci/profile?g=0500000US19115</a>. The statistics are based on 2018 (or 2019) data. Due to COVID, the most updated statistics are not available at the time of completing this document. The rankings show where Louisa County is compared to all 99 counties in Iowa. Here are a few statistics:

- Total Population Ranked #67
- Louisa County's population has dropped 8% since 2000.
- Race:
  - 90.3% of the population is White
  - 1.1% African American
  - 16% Hispanic
  - 3.4% are Asian
  - 0% are Native Hawaiian and other Pacific Islander (\*Editor's note – this is the data from the Census Bureau, even though we know we have at least 2 families, about 9 native Hawaiian's living in our community!)
  - 3.4% are "some other race alone"
  - .9% are two or more races



- Age: the median age is 42
- Highest level of Education achieved:
  - 4% of the population has a master's, doctorate or professional degree
  - 11% have a bachelor degree
  - 20% have some college or an Associate degree
  - 38% are high school graduates (73% have finished High School if you include those who went on for higher education.)

Median household income for Louisa - \$56,673 in 2019 (US Median is \$62,843)

Louisa County employment rate is 63%

Poverty level – 10% of the population is living in poverty, which is lower than the national average of 12.3%. Of these, the largest demographic living in poverty are females aged 18-24.

Average commute to work is 22 minutes.



There are 3,833 jobs in Louisa County (2018 data): https://onthemap.ces.census.gov/

- 53.4% are in the 30-54 age group
- 24.2% are aged 55 or older
- 22.5% are 29 or younger

#### Other interesting facts about Louisa County:

- Louisa County does not have any (permanent) stoplights
- There is not a hospital in Louisa County – people use either Muscatine, Burlington, Washington or lowa City for hospitals
- There is not a community college, college or university in Louisa County
- The lowa DOT has been working for the past several years to make



HWY 61 4-lane. It is 4-Lane from Muscatine to just south of Grandview. From the South, a 4-lane project is nearly complete from Burlington to South of Mediapolis. The next project will be to complete the section from South of Mediapolis to North of HWY 78. Eventually the section from Grandview to HWY 78 that passes Wapello is expected to be complete.

#### **Occupation Numbers for Louisa County**

(Provided by the United States Census Bureau: https://onthemap.ces.census.gov/)

The following are Job statistics for Louisa County:

- 1,653 Live and work in Louisa County
- 2,180 Work in Louisa County, but live outside the county
- 3,708 Live in Louisa County, but work outside the county



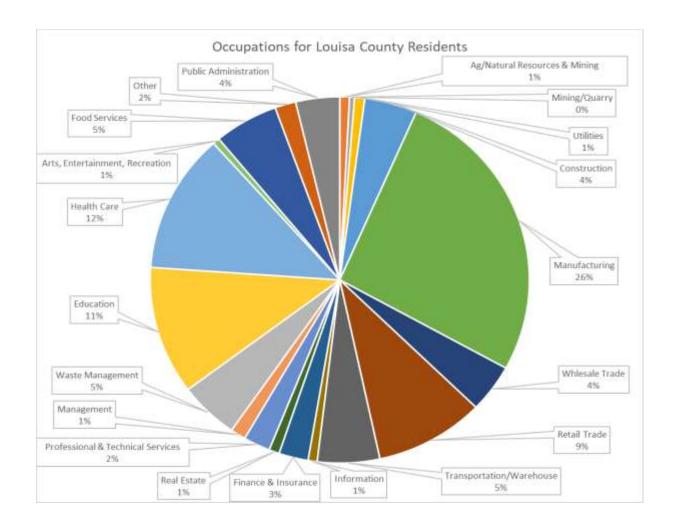
### Major Louisa County Employers – listed alphabetically

- Casey's General Store
- Care Initiatives
- Colonial Manor of Columbus Junction
- Columbus Community School district
- Econo Mart
- Louisa-Muscatine Community School District
- Tri-Oak Feeds
- Packers Sanitation Services
- S&J Tube
- Spencer Industries
- Tyson Foods
- Wapello Community School District



Analyzed based on 2018 data, of where workers live ("home").

(Numbers taken from the United States Census Bureau: <a href="https://onthemap.ces.census.gov/">https://onthemap.ces.census.gov/</a>)



### Appendix C: Natural Environment

Several elements comprise the County's natural environment. Climate, geology, drainage, topography and soils are all part of it. These elements must be monitored and maintained to promote the health of our natural resources so that residents and visitors can continue to enjoy our natural areas today and into the future. The condition of the natural environment affects the plants and animals that are able to find suitable habitat in the area.

Louisa County is a very rural community. We hold the confluence of the Cedar, Iowa and Mississippi Rivers. It is estimated that 16 square miles (or 3.8%) of Louisa County is covered in water. Woodlands are estimated to cover 38 square miles (or 9.96%) of the County (*Iowa 2013 Forest Reserve Report*).

#### Climate

Louisa County experiences all four seasons. According to www.USA.com, Louisa County ranks 6<sup>th</sup> in the state for highest average temperature, which is 51 degrees Fahrenheit. Temperatures range from bitter cold in the winters to extreme heat and humidity in the summers. On average Louisa County receives 37.31 inches of rain annually with an average of 68 days a year that receive .1 inch or more of precipitation. The average snowfall is 26 inches a year with approximately 43 days with more than 1 inch of snow on the ground. This is quite low for the state, putting us #81 for average annual snowfall. For those who live in Louisa County it is no surprise that we rank 5<sup>th</sup> in the state for an average annual humidity of 85%. Louisa County ranks #72 (out of 99 counties) with an average yearly wind speed of 16.78 mph.

#### Geology

Limestone bedrock is the primary geologic formation in Louisa County, which was deposited during the Mississippian and Pennsylvanian periods. Through the eons, glacial drift, loess and alluvium has deposited over the bedrock. As the Illinoian and Pre-Illinoian glaciers retreated, they left behind glacial till as the only sign they were once here.

Loess was windblown over the glacial drift during the late Wisconsin glacial period. In some upland areas of the county, loess can be found up to 10 feet thick. The alluvium in Louisa County is mostly a mixture of silt and clay, silt and sand or sand and gravel that has eroded from the hill slopes of loess and glacial drift.

Today several layers of limestone outcroppings are visible along slopes of major streams and tributaries in the county. In addition, there are several limestone quarries in the county, mostly in the southwest. Quarried limestone is used for road aggregate and for agricultural lime. One cave has been identified in the county near Morning Sun.

#### **Drainage & Topography**

(Taken from: Soil Survey of Louisa County, Iowa from February of 1988; p. 1-2)

Louisa County consists mostly of upland plains (62%), stream terraces (15%) and low bottom lands (23%). Lowland belts follow the Mississippi River, Cedar River and Iowa Rivers. The highest point in the county is in Morning Sun Township at 800 feet above sea level. The lowest elevation is the Mississippi River on the Des Moines County line at 528 feet above sea level.

Nearly all the eastern upland plain is drained by the Iowa River. However, and area 12 square miles in size is drained by short gulches and ravines. This area has two streams (Whiskey Run and Indian Creek) that are of any real length and lie in Grandview Township. Most of the western upland is drained by the Iowa River. There are a few areas drained by a Henry County watershed in the southwest corner of the county. Some widely scattered sink holes can be found throughout the county.

In the Northeast corner of the county likes an area known as the Great Sand Mound. This area is a remnant of an old stream terrace and makes up about 1.5 square miles. The area is known for a diversity plants and animals especially Herpetiles that are not found in many other places in lowa but thrive on the sandy soils and mounds.

Due to levees and dug ditches with pumping stations most of the bottomland can be cultivated. Without these terraces and levees the area would be more prone to flooding from the Mississippi River.

There are numerous sloughs in Louisa County, throughout the bottomlands. Muscatine Slough is the largest which extends into Muscatine County and is pumped into the Mississippi River via a drainage district.

The Odessa Wildlife Management Complex is connected to the south end of the Slough. This unique area is managed by the US Fish and Wildlife Service, Port Louisa National Wildlife Refuge on the North end and the Iowa Department of Natural Resources, Odessa Unit on the south portion of Odessa. Inlet/outlet tubes connect Odessa to the Mississippi River both on the upstream (north) and downstream (south) side of the area. The two organizations work cooperatively to manipulate water levels that mimic flooding and drought conditions that would naturally occur on the Mississippi River without the locks and dams. This area is managed for migrating shorebirds and waterfowl.

#### Soils

(To read more about soil formation see the 1985 Louisa County Soil Survey p. 139-142) Louisa County soils formed in various kinds of geologic material. Most of the upland soils including ridgetops formed in loess under prairie or forest vegetation. There are areas along the Mississippi River bluff with 15 feet of loess most likely blown in from the Missouri River.

Steeper slopes formed in glacial till under a native vegetation of trees. The major Pleistocene deposits of pre-Wisconsin glacial drift in Louisa County are Nebraskan, Kansan and Illinoian tills.

Bottomland and level to nearly level ground along the Iowa and Mississippi Rivers formed in alluvium. Which basically means water-transported sediment. The kind of sediment varies greatly based on from where and how far the sediment traveled before being deposited.

Louisa County soils were also formed from the weathering of limestone bedrock. There are few places in the county, mostly steep slopes, quarries and road cuts where the bedrock can be seen.

The Great Sand Mound soils were formed in Sandy eolian material, which consists mostly of fine quartz sand. It is believe to be deposited by water, but also reworked by the wind.

#### Wildlife Habitat

lowa has been deemed the most altered state in the nation. Since it's statehood in 1846, 99% of the prairies have disappeared; 95% of the prairie pothole wetlands have been drained and nearly 75% of the forests and savannas are gone. These habitat changes have greatly affected many of our wildlife species. Some species disappeared completely from lowa, some became quite rare to find, while others became much more abundant.

The following statistics on Iowa wildlife was taken from the book "A Country So Full of Game" by Jim Dinsmore. His book is a great recount of the history of wildlife in Iowa.

- 1 former lowa species is extinct (gone forever): passenger pigeon
- 10 species no longer have breeding populations in the state: bison, elk, black bear, mountain lion, lynx, swift fox, gray wolf, long-billed curlew, marbled godwit and whooping crane (sandhill cranes and prairie chickens barely missed being on this list!)
- 8 species seem to be holding their own (despite low numbers in the past): bobcat, red and gray fox, ruffed grouse, northern bobwhite quail, American woodcock, common snipe and American golden-plover
- 4 species were once extirpated from Iowa and are now quite common: deer, beaver,
   Canada goose and wild turkey

The future of our wildlife will depend greatly on our land management choices.

Other changes such as channelization of rivers and streams, soil erosion, chemical and air pollution, overgrazing, feed lots and livestock confinements have also contributed to the changes in suitable habitat and loss of plant and animal species.

In 1973 the U.S. Congress passed the Endangered Species Act. This provided for the protection of animals and plants that are endangered or threatened with extinction. In 1975 lowa's endangered and threatened species law was created (Chapter 481B - Endangered Plants and Wildlife) in the Iowa Code.

#### Louisa County, Iowa - Federally Listed Plant and Animal Species

(Information from: http://www.fws.gov/midwest/endangered/lists/iowa\_cty.html)

Indiana Bat Myotis Sodalis	Endangered	Caves, mines (hibernacula); small stream corridors with well-developed riparian woods;
	<u></u>	upland forests for foraging
Northern Long-eared bat	Threatened	Hibernates in caves and mines – swarming in
Myotis septentrionalis		surrounding wooded areas in autumn. Roosts
		and forages in upland forests during late
		spring and summer.
Prairie bush clover	Threatened	Dry to mesic prairies with gravelly soil.
Lespedeza leptostachya		
Western prairie fringed	Threatened	Wet prairies and sedge meadows.
orchid Plantanthera		
praeclara		
Higgins eye pearly mussel	Endangered	Mississippi River
Lampsilis higginsii		
Eastern massasauga	Candidate	
Sistrurus catenatus		

### State of Iowa - Federally Endangered, Threatened and Candidate Species

(Source updated April 2015:

http://www.fws.gov/midwest/endangered/lists/pdf/lowaStateList.pdf)

#### **Mammals**

- Indiana bat (E)
- Northern long-eared bat (T)

#### Birds

- Least tern (Interior population) (E)
- Piping plover (T)

#### Reptiles

Eastern Massasauga (C)

#### Fish

- Pallid sturgeon (E)
- Topeka Shiner (E and Critical Habitat)

#### Clams

- Higgins' eye pearly mussel (E)
- Sheepnose (E)

Spectacleacase (E)

#### **Snails**

Iowa Pleistocene snail (E)

#### **Insects**

Poweshiek Skipperling (E and PCH)

#### **Plants**

- Eastern prairie fringed orchid (T)
- Mead's milkweed (T)
- Northern wild monkshood (T)
- Western prairie fringed orchid (T)

#### Key to Status

- E Endangered
- T Threatened
- PCH Proposed Critical Habitat
- C Candidate

#### **Natural Communities**

Typically, natural areas in Iowa are broken into the following groups: woodland; wetland; prairie and savannah. There are approximately 2,000 species of plants and 600 species of vertebrates that live in Iowa. At least 60 plants and 33 animal species have disappeared. At least 400 plants and 15 animals have been introduced. Some invasive and exotic species have become large problems for land and wildlife managers.

The biggest influence on communities in Iowa has been due to humans both past and present. Humans are responsible for: converting prairies to agricultural land; draining wetlands; over hunting some species (such as the passenger pigeon); both starting and suppressing fires to control vegetation; channelization of streams; contributing to erosion problems; chemical pollution and so much more. Other influences include climate changes, extreme weather, and natural disasters such as flooding or tornados. Natural processes such as succession, population dynamics and lifecycles also influence communities.

As humans continue to destroy habitat (while building bigger cities, more roads, and pouring concrete...) it becomes even more important to protect the remaining pieces of our natural history. Education, smart management decisions, funding and a strong desire to protect and preserve are going to be key pieces to protecting the native plants and animals that call Iowa home.

#### Woodlands

Woodland types are often divided into three categories: oak-hickory forests; Northern hardwoods and bottom ground timbers.

Oak-hickory timbers are typically found in the uplands and on drier south and west slopes. White and red oaks, shagbark hickory and other hickories are the dominant species. Northern hardwoods are typically found on cooler and moister North and east facing slopes and contain sugar maples and basswood. Bottomland timbers are usually found along streams, creeks and rivers and include cottonwood, silver maple, green ash and hackberry.

#### **Prairie**

A variety of prairies can be found throughout Iowa and Louisa County. Prairie is typically found in areas too dry to support a woodland. Dry prairies (such as Big Sand Mound) often have plants such as little bluestem and sideoats grama. Yucca, skeleton weed and pasque flower are common forbs. Prickly pear cactus even grows in the sand prairies. Mesic prairies are by far the most common in Louisa County. They are wetter than the dry prairie and contain plants such as big bluestem, Indian grass, prairie dropseed, compass plant, rattlesnakes master and others. Wet prairies contain the water loving plants including many different types of sedges, smartweed, wild iris and swamp milkweed.

Some prairie plants and animals have adapted to pastures, fencerows and our reconstructed prairies. These species include: blue racers and harrier hawks. Other species disappeared

because there just wasn't enough prairie habitat to support them. Numerous insects depend on a specific prairie plant for survival. For example Monarch Butterflies lay their eggs on milkweed plants. Without milkweed the species will not survive.

#### Savannahs

Savannahs contain a mixture of prairie/grassland and woodland trees. The burr oak is the most common savannah tree with its thick, fire-resistant bark and deep tap root. Historically, savannahs were a transition area between prairie and woodland. With the confluence of the Cedar, Iowa and Mississippi Rivers in Louisa County it is expected that much of Louisa County was in savannah at the time of settlement. Indian Slough has an area with large burr oaks that is being managed as savannah.

#### Wetlands

Just like prairies, woodlands and savannas, there are various types of wetlands. They are classified by the amount of water and how long it is available to plants and wildlife.

Palustrine wetlands are very shallow and mostly covered with vegetation. They dry up during years of drought or little precipitation. Cattails, bulrush and smartweed are some of the common plants.

Lacustrine wetlands are often surrounded by palustrine wetlands. These contain more open water and are home to duckweed, water lily and pond weed. They are adversely affected by siltation, drainage and water quality problems.

Riverine wetlands contain plants from the first two types of wetlands and often contain trees as well. There are riverine wetlands all along the Iowa, Cedar and Mississippi Rivers.

Wetlands are home to a diversity of critters. Waterfowl (ducks and geese) are the best-known group but they are also many mammals (beaver, muskrat, mink...); birds (bitterns, herons, sandpipers...); herps (salamanders, frogs, snakes, turtles...); fish and more. Protecting and improving wetlands is a priority.

There is also at least one **fen** in Louisa County (on private property). A fen is a wetland area where groundwater comes to the surface. There is often a floating mat of dead and partially decomposed vegetation (peat) as well as live plants.

### Appendix D:

### Rules and Regulations of the Louisa County Conservation Board

#### **Section 1. Definitions**

Pursuant to the authority of Chapter 350.5 of the 1993 Code of Iowa, the Louisa County, Iowa Conservation Board hereby promulgates and places into effect the following regulations. The following terms, as used in these regulations, shall for the purpose of these regulations have the meanings assigned hereto, unless a different meaning is clearly indicated.

- A. The term "board" shall mean the Louisa County, Iowa Conservation Board.
- B. The term "director" shall mean the Executive director of the Louisa County, Iowa Conservation Board.
- C. The term "area" shall mean all or any part of the land and/or water owned, leased, managed or by other means under the control of the Louisa County, Iowa Conservation Board.
- D. The term "authorized representative" shall include park rangers and other persons designated from time to time by the director.
- E. The term "special use permit" shall mean any use permit, issued by the director pursuant to authorization by the board, and signed by the director or an authorized representative.
- F. The term "camp" or "camping" shall mean the use of a shelter, such as a tent, trailer, motor vehicle, tarpaulin, or sleeping bag for temporary residence at a campground.
- G. The term "campground" shall mean any area designated by the board for camping.
- H. The term "camping party" shall mean any individual, family or informal unorganized group of not more than five persons occupying one campsite.
- I. The term "camping unit" shall mean either a single tent not larger than 140 square feet in size at its base, pickup, camper, motor home, or converted bus, motor vehicle used for a camp by a camping party, except for those shelters used exclusively for dining purposes, plus at the option of said camping party, a second tent or an additional tent no larger than 140 square feet in size at its base, if the same is used and occupied members of that camping party.
- J. The term "family" shall mean a parent or parents with their unmarried children and not more than two other lineal relatives or not more than two minor guests.
- K. The term "campsite" shall mean a segment of a campground designated by the board for camping by a camping unit or camping party.
- L. The term "youth group" shall mean a group consisting of minor members of an established organization and under the leadership of at least one competent, mature adult for each eight minors occupying any number of camping units.
- M. The term "capacity" shall mean the maximum number of camping parties or camping units that the board shall from time to time determine may occupy an area, campground or campsite.
- N. The term "official signs" shall mean signs provided for in the Iowa State Department of Transportation Manuel on uniform Traffic Control Devices for Iowa Streets and Highways, and other signs designated from time to time by the board.
- O. The term "noise" shall mean any loud, confused or senseless shouting or outcry; a sound lacking in agreeable musical quality or which is noticeably unpleasant to a reasonable person.
- P. The term "minor" shall mean any unmarried individual who has not attained the age of 18 years.

Q. The term "organized group" shall mean the members, advisers, guests, or officials of any affiliate, chapter or other division of a legally recognized or organized association or organization.

**Section 2. Scope:** The provisions of these regulations shall apply to all areas.

#### Section 3. Fees, Charges, and Reservations:

- A. Fees or charges made for services or for the use of land facilities, equipment, materials or supplies on any area to be collected by the board or authorized concessionaires shall be prescribed and approved by the board.
- B. It shall be unlawful for any person or persons to enter or use any areas or facilities for which entrance fees, user fees or reservations are prescribed or required without paying said fee, or obtaining a reservation, except those persons on official business or authorized by special terms.

**Section 4. Preservation of Property:** No person shall injure deface, remove, disturb, nor in any manner destroy or cause to be destroyed any part of an area, nor any buildings, signs, structures, equipment, cultural artifact or other property found therein. It shall be unlawful to remove, injure or destroy any tree, flower, shrub, plant or other vegetation or any rock, or other mineral in any area, except so designated by the board. This provision shall not apply to berry picking, mushroom collection or nut gathering, provided such activity is for personnel use.

**Section 5. Traffic and Parking:** A speed limit of 15 miles per hour shall be observed, except where otherwise posted. All driving shall be confined to designated parking areas.

#### Section 6. Animals on Leash:

No privately owned animal shall be allowed to run at large in any county park or area, except by permission of the board or authorized representative. An animal shall be deemed as running at large unless the owner carries the animal or leads it by a leash or chain not exceeding six feet in length, or keeps it confined in or attached to a vehicle.

Animals used for hunting shall be allowed to run without a leash on areas open to hunting, provided owners maintain some control through visual, voice or other sound production method; and such activity is part of an actual legal hunt or training action. No privately owned animal shall be allowed without a leash on any area during the following times: March 15- July 15.

#### Section 7. Hunting:

- A. It shall be unlawful to hunt, pursue or molest any birds or wild animals on any area designated as a "no hunting area".
- B. No one may use or carry firearms, explosives or weapons of any kind, on any area designated as a "no hunting area", without the permission of the director or authorized representative, except this provision shall not apply to authorized use of any shooting range, or to approved hunter safety classes.
- C. No permanent deer stands, duck blinds or other hunter shelters shall be allowed on any area,
- D. Stationary blinds may be constructed using only the natural vegetation found on the area. No trees or parts of trees other than willows may be cut for use in constructing a blind. No other man-made materials of any type may be sued for building or providing access to a stationary blind.
- E. The use of any stationary blind constructed in violation of Section 7d. is prohibited.
- F. Any person who constructs or uses a stationary blind shall not have any proprietary right-of-ownership to the blind.

- G. Portable blinds may be constructed of any natural or man-made material, as long as it is a self-contained unit capable of being readily moved from one site to another. Portable blinds shall be prohibited from one-half hour after sunset until midnight each day.
- H. Portable blinds placed in trees and used for purposes other than hunting waterfowl may be left on an area for a continuous period of time beginning seven days prior to the open season for hunting deer or turkey and ending seven days after the final day of that open season. Portable blinds left on game management areas do not guarantee the owner exclusive use of the blind when unattended, or exclusive use of the site.
- I. The use of any spike, nail, pin, or other object driven or screwed into a tree is prohibited.
- J. Waterfowl decoys are prohibited on all county hunting areas from one-half hour after legal shooting time until midnight each day and decoys cannot be left unattended for over 30 minutes between midnight and one-half hour after sunset.
- K. It shall be unlawful to hunt, shoot or carry a loaded gun within 200 yards of any buildings, camping areas or picnic areas.

#### Section 8. Camping:

- A. Violation of any state law or any county park rule and regulation by any member of a camping party, youth group or organized group shall be cause for revocation of the camping privilege; and the entire camping party or group shall be required to leave the area.
- B. Campsites cannot be reserved.
- C. When any campground is open and in a usable condition, all charges and fees shall be in effect and shall be enforced as set forth in the official fee schedule approved by the board.
- D. No camping party, camping unit or group of any kind shall occupy a campsite for more than fourteen (14) consecutive days; and twenty-one (21) total days per calendar year in all parks and campgrounds.
- E. It shall be unlawful for more than one camping party, camping unit or group of any kind to occupy a campsite.
- F. It shall be unlawful to park any motor vehicle outside the parking area designated at each campsite, and not more than two (2) licensed vehicles shall be permitted to any campsite.
- G. All campers shall maintain quiet and avoid excessive noise, or other disturbances, in the campgrounds between the hours of 10:30 p.m. and 6:00 a.m.
- H. Campers shall restore their campsite to the same approximate condition or better than when they found it.

**Section 9. Noise Producing Devices:** It shall be unlawful to operate or use any radio, television, stereo, musical instrument, electric generating plants, power saws or any similar equipment in or on any area in such a manner as to create excessive noise and/or disturb other persons. Said equipment shall not be used outside of a camping unit between the hours of 9:00 p.m. and 9:00 a.m.

**Section 10. Public Address Systems Restricted:** It shall be unlawful to operate or use any public address system whether fixed, portable, or vehicular mounted, in or on any area except when such use or operation had been approved in writing by the director or an authorized representative.

**Section 11. Recreation Uses Only Allowed:** It shall be unlawful for any person to occupy any portion of any area for washing or repairing vehicles; advertising or political campaigning; hawking, peddling, or any other commercial activity; or any other purpose not primarily recreational, except concessionaires acting under the authority of a lease contract with the board.

**Section 12.** Use of Horses Restricted: It shall be unlawful to ride, lead or otherwise allow the entry of horses or horse drawn wagons on any road or trail in or on any area except for those trails and roads which the board shall from time to time designate by official signs or allow by special use permit.

**Section 13. ATV's and Snowmobiles Restricted:** It shall be unlawful to operate any snowmobile, tote bike, air sled, swamp buggy, all-terrain vehicle or any other land conveyance propelled by a gasoline or electrical engine and run on wheels, tracks or runners in or on any area, except for those trails and roads which the board shall from time to time designate. The board may issue special permits to use motorized vehicle on trails for handicap accessibility.

#### Section 14. Trapping:

- A. It shall be unlawful to trap or attempt to trap any wild animal in or on any area designated as a "no hunting area" except that protection of areas and facilities shall be accomplished as needed by the director or other authorized representative.
- B. No snares shall be permitted on any area.
- C. No leg hold trap larger than #2 double coil; nor any Conibear or similar body-gripping trap larger than #110 shall be allowed on land.

**Section 15. Sledding Equipment Restricted:** It shall be unlawful to use any part of a car body, plywood or metal sheet, or any similar device for use in any downhill winter sports activities in or on any area.

**Section 16. Swimming Restricted:** It shall be unlawful to swim in or on any ponds or waters in or on any area, except for those ponds or waters specifically designated from time to time by the board for those activities.

**Section 17. Reserving Park Facilities:** All shelter houses or other group facilities are generally available for reserving on a first-come basis. Reservations may be made by contacting the conservation board office. A minor may not reserve any facility.

**Section 18. Littering and Domestic Refuse Not Permitted:** No person shall place any waste, refuse, litter or foreign substances in any area or receptacle except those provided for that purpose. In areas not provided, all refuse must be taken with the user. It shall be unlawful to deposit garbage, refuse or litter from any household, business or from any source outside the park in containers provided for park users.

#### Section 19. Boats and Motor Vehicles:

- A. It shall be unlawful to leave any boat or motor vehicle on any area for more than twenty-four (24) hours without the permission of the director or an authorized representative. Any boat or motor vehicle left in violation thereof shall be removed and stored at the owner's expense, which expense shall not be less than \$100. If not reclaimed within six months of its removal, all such vehicles shall be considered abandoned and shall thereafter be disposed of as provided by law. A removal fee shall be set by the board and assessed for any boat or motor vehicle reclaimed by the owner.
- B. It shall be unlawful to operate any boat on any pond on any area with any motor, except for electric trolling motors.

**Section 21. Official Signs:** It shall be unlawful for any person to enter, use or occupy any area or facilities within said area in disregard of any official signs.

Section 22. Possession and Consumption of Beer Prohibited; Container Size Regulated: It shall be unlawful for any person to posses or consume beer, as defined in Section 123.3 (7) of the Code of Iowa between the hours of 10:30 p.m. and 6 a.m. in or on any area, except that beer may be possessed and consumed within a camping unit between said hours by an adult member of any camping party or group. No person or group shall bring, use or have in possession on any area, beer in a keg or any other container larger than one quart without first obtaining a special use permit from the director or authorized representative. The request for the special use permit shall be in writing at least two weeks prior to the date of the activity. Any beer possessed in violation of this rule shall be confiscated by the director or authorized representative and destroyed.

**Section 23. Adult Supervision:** Any minor, or group of minors, whether organized or not and not exceeding eight individuals, shall be accompanied by a minimum of one adult supervisor. For groups of minors exceeding eight individuals, one adult supervisor for each eight persons shall be required. Under no circumstances shall minors be allowed to camp at any authorized camping area without the proper number of adult supervisors.

**Section 24. Closing Time:** The board may designate closed hours for any or all of its areas.

**Section 25. State Park Rules:** All rules and regulation of the Louisa County Conservation Board shall take precedence over state park rules, unless otherwise prohibited by state law. In the absence of a comparable county park regulation, all other state park rules and regulation shall apply.

**Section 26.** Exceptions: Nothing in these rules and regulations shall prohibit or hinder the conservation board, its director, park rangers or duly authorized representative or any peace officer from performing official duties and responsibilities.

Adopted on April 3, 2002

### Appendix E: Maps



### Appendix F: Leases for Land Management

Flaming Prairie Park — US Army corps of Engineers

Snively Campground — Iowa DNR

Toolesboro Mounds, National Historic Site — State Historical Society



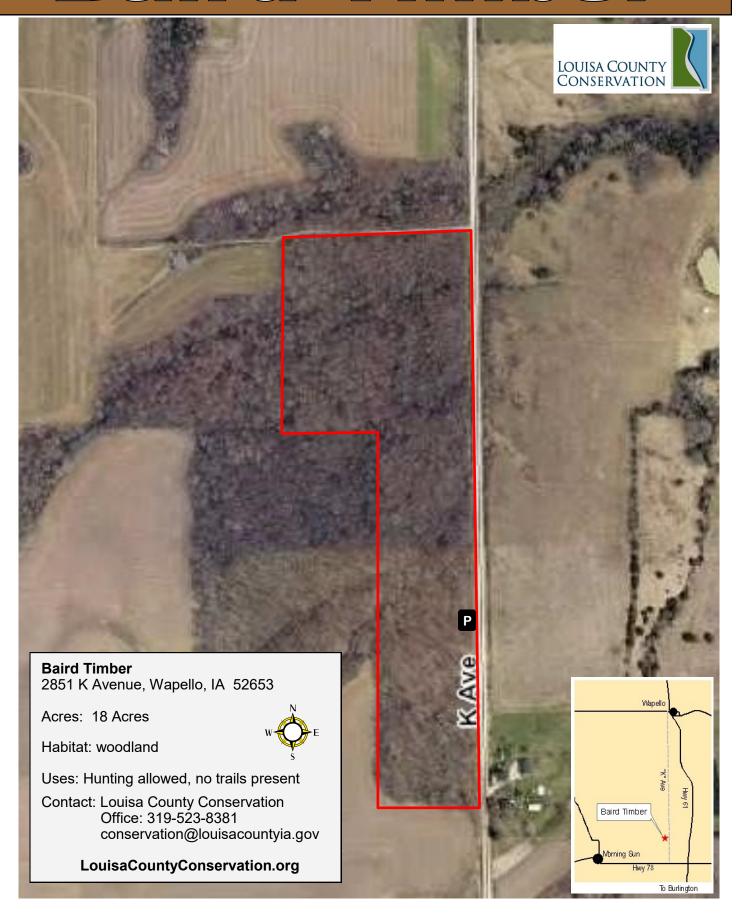
### Appendix G: Louisa County Trails Master Plan 2012



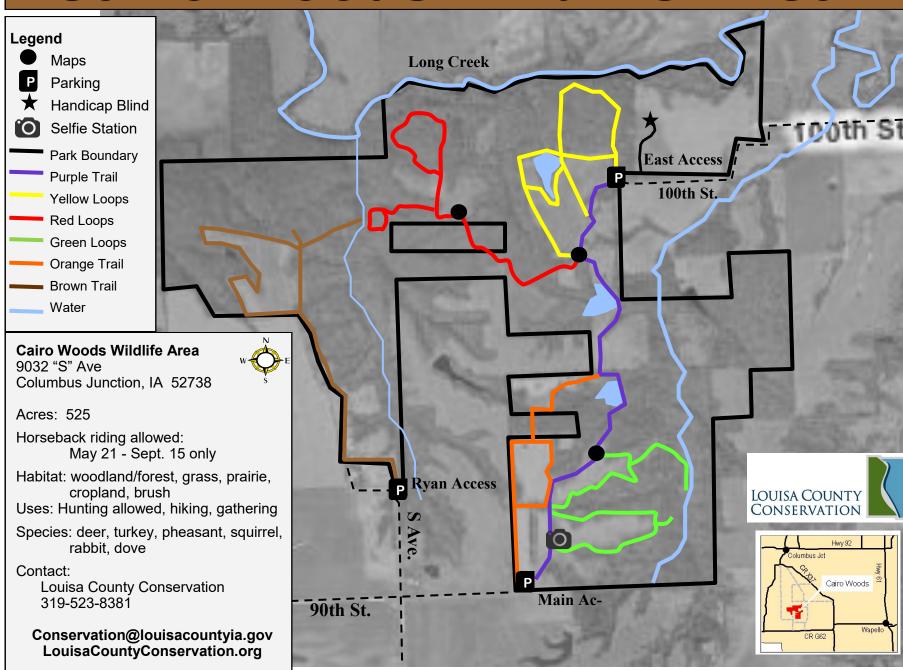
## Appendix H: Virginia Grove Recreation Area Forest Stewardship Plan



# Baird Timber



# Cairo Woods Wildlife Area



# Cappy Russell Access



### Cappy Russell - Iowa River Boat Access

6444 West Co. Rd. X71, Oakville, IA

Acres: 5 Acres

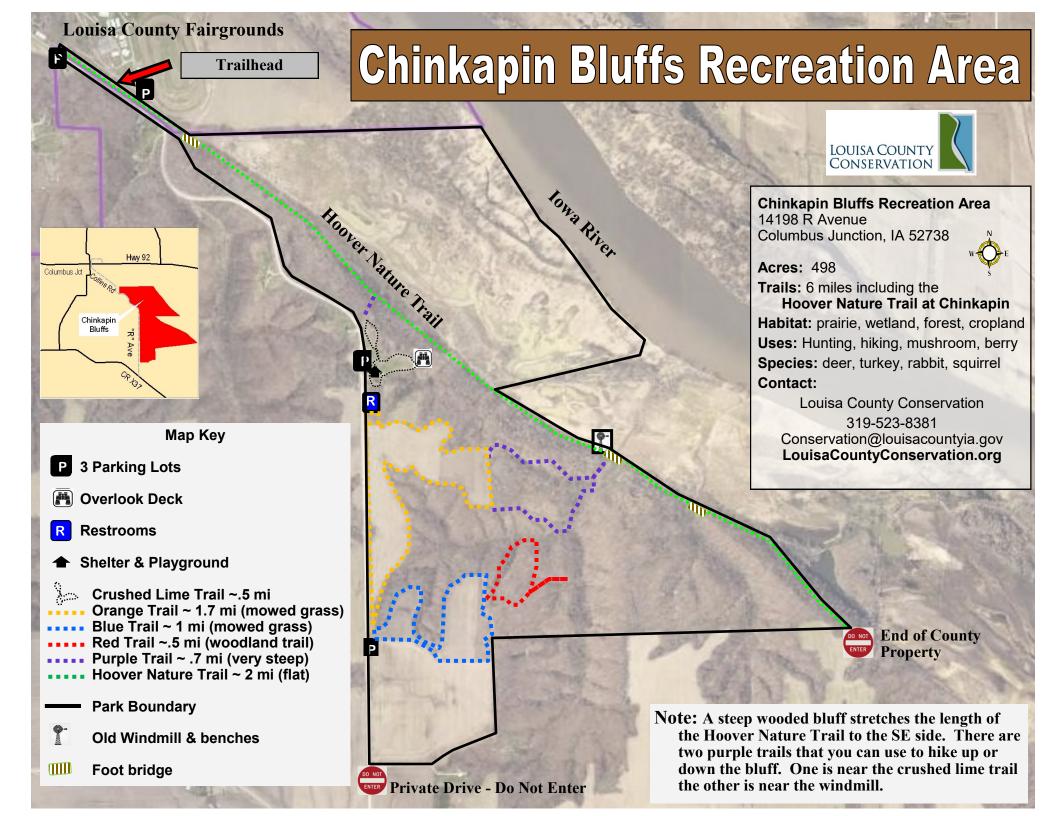
Amenities: Gravel parking area, paved boat landing, trash can and fishing line recycling

Uses: NO Hunting at Access - Boat Access to the Iowa River Water Trail & Mississippi River

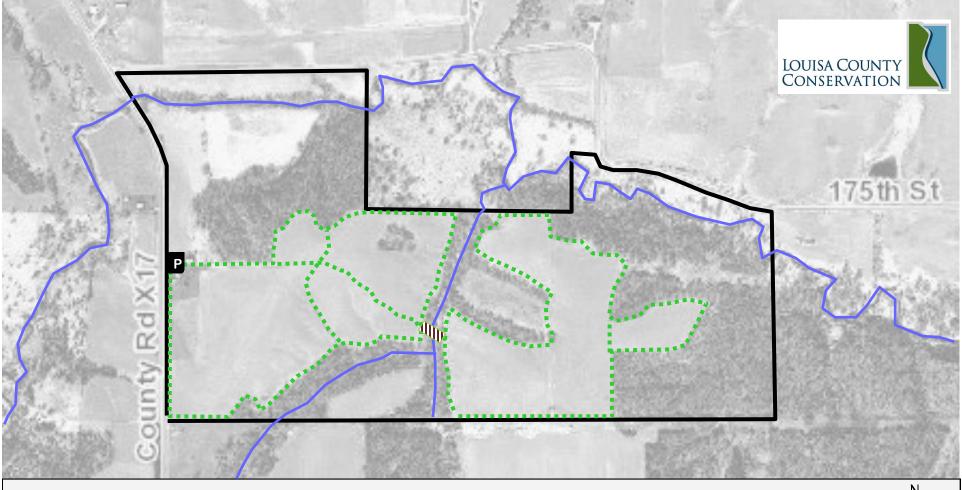
Contact: Louisa County Conservation Conservation@louisacountyia.gov

Office: 319-523-8381 LouisaCountyConservation.org





# Eden Park



### Eden Park - 146 Acres

### Hunting is NOT allowed.

17426 Co. Rd. X17, Columbus Junction, IA 52738

Habitat: Planted to a mix of cool and warm season grasses, woodlands, creeks and wetlands

Allowed uses: Hiking, birding, mushroom and berry picking, nature exploration

Contact: Louisa County Conservation 319-523-8381

conservation@louisacountyia.gov

LouisaCountyConservation.org



**IIII** Low water crossing

**Park Boundary** 

# Flaming Prairie Park



# Hickory Hollow



Hickory Hollow Wildlife Area - 12786 148th St., Grandview, IA 52752

Acres: 34.12

Habitat: steep forested hills, Michaels Creek

Uses: Hunting allowed (must be at least 200 yards from buildings); mushroom hunting,

nature exploration

Contact: Louisa County Conservation

319-523-8381

Conservation@louisacountyia.gov LouisaCountyConservation.org





# **Highway 61 Fishing Access**



Highway 61 Fishing Access - Iowa River 10726 Highway 61, Wapello, IA 52653

Acres: 1 Acres

 $W = \sum_{s=1}^{N}$ 

Amenities: small driveway and very limited parking. At the right water levels canoes/kayaks can be launched. There is no landing for motor boats.

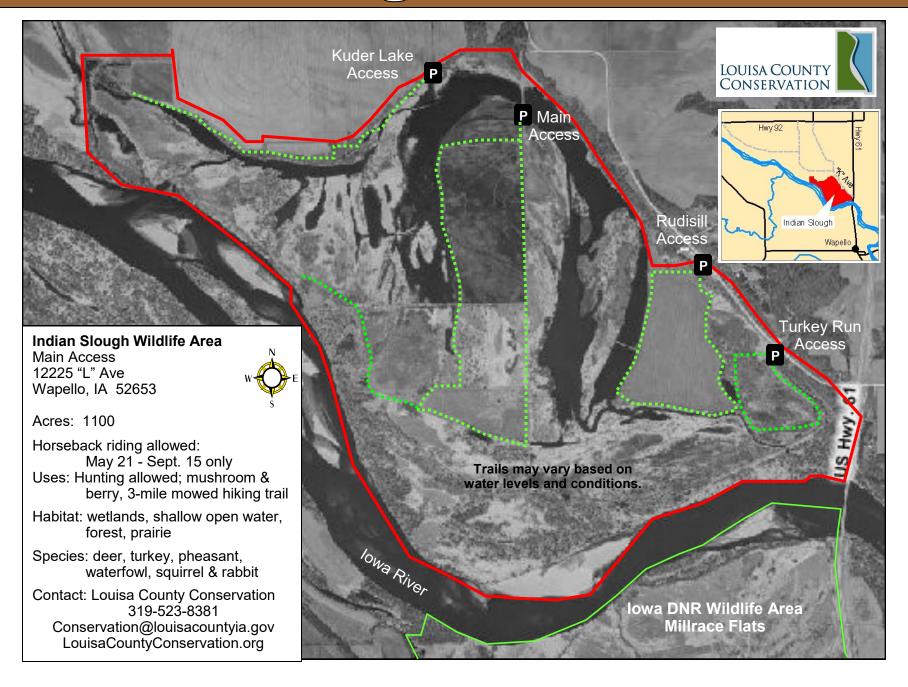
Uses: NO Hunting - paddling access to the Iowa River Water Trail, at some water levels.

Contact: Louisa County Conservation

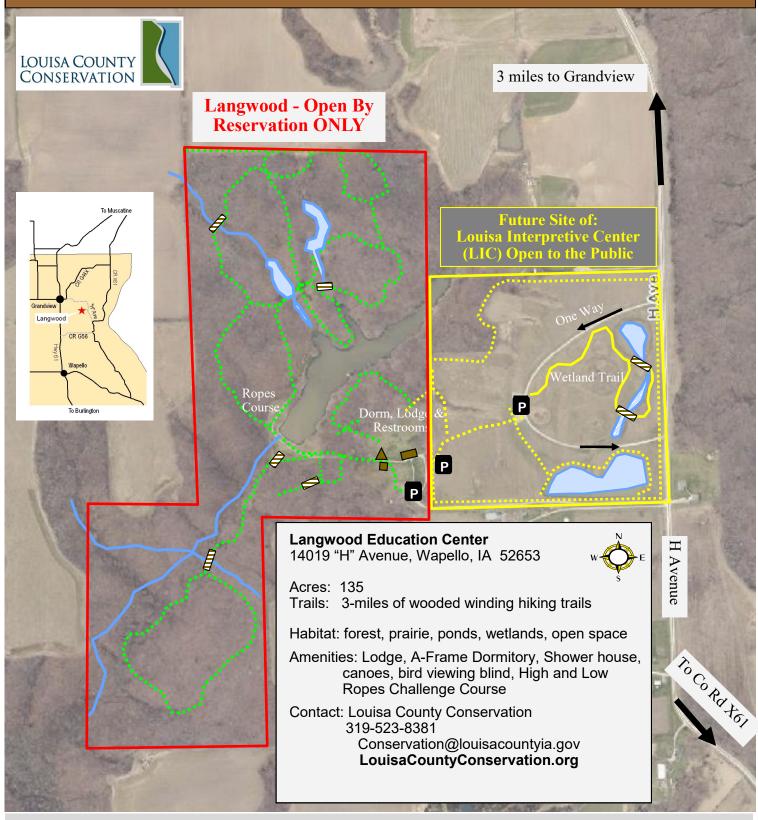
Office: 319-523-8381

Conservation@louisacountyia.gov LouisaCountyConservation.org

## Indian Slough Wildlife Area



# Langwood Education Center



Rent Langwood for your next group gathering - Open by reservation only.

Louisa Interpretive Center - is open to the public (Yellow Boundary & Trails)!

Hunting is NOT allowed on either property.

# River Forks Access



River Forks - Iowa River Boat Access 1001 Main St., Fredonia, IA 52738

Acres: 5 Acres

Amenities: Gravel parking area, paved boat landing, bench, trash can and fishing line recycling

Uses: NO Hunting at Access - Boat Access to the Iowa River Water Trail & Cedar River
Contact: Louisa County Conservation
Office: 319-523-8381
Conservation@louisacountyia.gov
LouisaCountyConservation.org

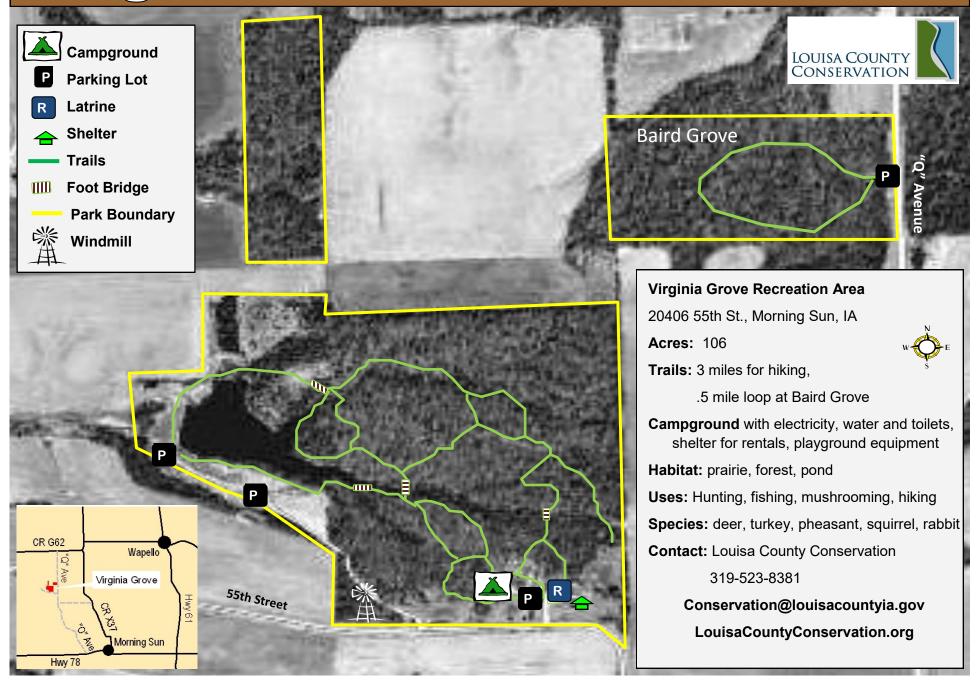
## **Snively Campground**



## **Toolesboro Mounds, National Historic Landmark**



## Virginia Grove Recreation Area



# Wilson Prairie



Wilson Prairie, 10400 Co. Rd. G44X, Muscatine, IA 52761

Acres: 37 Acres

Habitat: native, remnant prairie (this prairie is believed to have never been plowed)

Uses: **NO Hunting** - there is a mowed trail around the area that can be used as a walking path for birding, nature photography and more.

Contact: Louisa County Conservation

Office: 319-523-8381

Conservation@louisacountyia.gov LouisaCountyConservation.org

# Wykerts Landing



## Wykerts Landing - Mississippi River Boat Access

1714 20th Street, Oakville, IA

Acres: .5 Acres

Amenities: Gravel parking area, paved boat landing

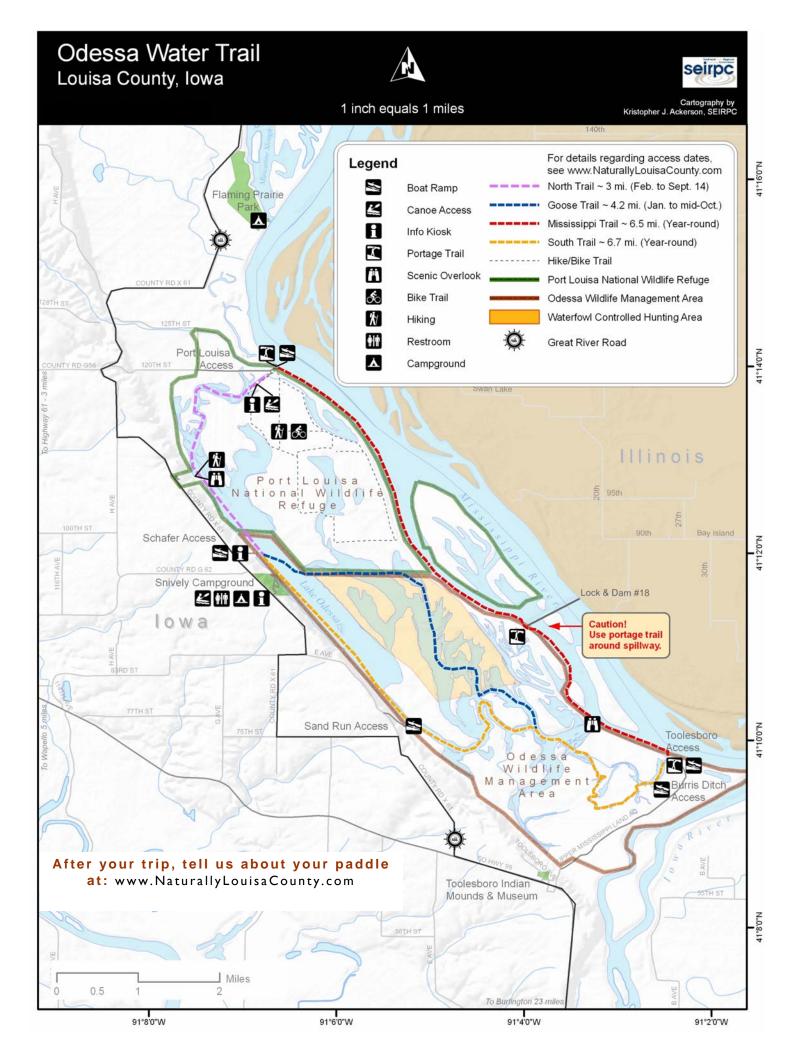
Uses: NO Hunting at Access - Boat Access to the Mississippi River

Contact: Louisa County Conservation

Office: 319-523-8381

W E

Conservation@louisacountyia.gov LouisaCountyConservation.org





Flaming Prairie

Contract No. W912EK-1-05-4180

#### DEPARTMENT OF THE ARMY

LEASE TO NON-STATE GOVERNMENTAL AGENCIES

FOR PUBLIC PARK AND RECREATIONAL PURPOSES

UPPER MISSISSIPPI RIVER NINE-FOOT CHANNEL PROJECT

POOL 17

## LOUISA COUNTY, IOWA

THIS LEASE is made on behalf of the United States, between the SECRETARY OF THE ARMY, hereinafter referred to as the Secretary, and Louisa County, Iowa, working through the Louisa County Conservation Board, hereinafter referred to as the Lessee,

#### WITNESSETH:

That the Secretary, by authority of Title 16, United States Code, Section 460d, and for the consideration hereinafter set forth, hereby leases to the Lessee, the property identified in Exhibit A, attached hereto and made a part hereof, hereinafter referred to as the premises, for public park and recreational purposes.

THIS LEASE is granted subject to the following conditions:

#### 1. TERM

Said premises are hereby leased for a term of Twenty-five years, beginning August 1, 2005 and ending July 31, 2030.

#### 2. CONSIDERATION

The consideration for this lease is the operation and maintenance of the premises by the Lessee for the benefit of the United States and the general public in accordance with the conditions herein set forth.

- d. Minor modifications to the Development Plan. Major modifications are to be accomplished by amendment to the Plan before proceeding to implement any changes in the development or management of the leased premises.
- e. Budget of the Lessee for carrying out all activities for the upcoming year.
- f. Personnel to be used in the management of the leased premises.
- g. Annual certification that all water and sanitary systems on the premises have been inspected and comply with Federal, state and local standards. Lessee will also provide a statement of compliance with the Rehabilitations Act and the Americans with Disabilities Act, as required in the condition on NON-DISCRIMINATION, noting any deficiencies and providing a schedule for correction.

The use and occupation of the premises shall be subject to the general supervision and approval of the District Engineer. During the term of the lease, the District Engineer will notify the Lessee of any updates to the existing project Master Plan affecting the premises and the Lessee may provide comments.

#### 6. STRUCTURES AND EQUIPMENT

The Lessee shall have the right, during the term of the lease, to erect such structures and to provide such equipment upon the premises as may be necessary to furnish the facilities and services authorized. Those structures and equipment shall be and remain the property of the Lessee, except as otherwise provided in the Condition on RESTORATION. However, no structures may be erected or altered upon the premises unless and until the type of use, design, and proposed location or alteration thereof shall have been approved in writing by the District Engineer. The District Engineer may require the Lessee, upon the completion of each of the proposed developments to furnish complete "as built" construction plans for all facilities.

#### 7. APPLICABLE LAWS AND REGULATIONS

a. The Lessee shall comply with all applicable Federal laws and regulations and with all applicable laws, ordinances, and regulations of the state, county, and municipality wherein the

#### 10. TRANSFERS, ASSIGNMENTS, SUBLEASES

- a. Without prior written approval of the District Engineer, the Lessee shall neither transfer nor assign this lease nor sublet the premises or any part thereof, nor grant any interest, privilege, or license whatsoever in connection with this lease.
- b. The Lessee will not sponsor or participate in timeshare ownership of any structures, facilities, accommodations, or personal property on the premises. The Lessee will not subdivide nor develop the premises into private residential development.

#### 11. FEES

Fees may be charged by the Lessee for the entrance to or use of the premises or any facilities, however, no user fees may be charged by the Lessee or its sub-lessees for use of facilities developed in whole or part with federal funds if a user charge by the Corps of Engineers for the facility would be prohibited under law.

## 12. ACCOUNTS, RECORDS AND RECEIPTS

All monies received by the Lessee from operations conducted on the premises, including, but not limited to, entrance, admission and user fees and rental or other consideration received from its concessionaires, may be utilized by the Lessee for the administration, maintenance, operation and development of the premises. Beginning 5 years from the date of this lease and continuing at 5-year intervals, any such monies not so utilized or programmed for utilization within a reasonable time shall be paid to the District Engineer. The Lessee shall establish and maintain accurate records and accounts and provide an annual statement of receipts and expenditures to the District Engineer. Annual or weekly entrance fees not collected on the Project, which also are honored at other recreational areas operated by the Lessee, are excluded from this requirement. The District Engineer shall have the right to perform audits or to require the Lessee to audit the records and accounts of the Lessee, third party concessionaires and sub-lessees, in accordance with auditing standards and procedures promulgated by the American Institute of Certified Public Accountants or by the state, and furnish the District Engineer with the results of such an audit.

provide an amount not less than that which is prudent, reasonable and consistent with sound business practices or a minimum Combined Single Limit of \$500,000.00, whichever is greater, for any number of persons or claims arising from any one incident with respect to bodily injuries or death resulting therefrom, property damage, or both, suffered or alleged to have been suffered by any person or persons, resulting from the operations of the Lessee, sub-lessees and concessionaires under the terms of this lease. The Lessee shall require its insurance company to furnish to the District Engineer a copy of the policy or policies, or, if acceptable to the District Engineer, certificates of insurance evidencing the purchase of such insurance. The District Engineer shall have the right to review and revise the amount of minimum liability insurance required.

- b. The insurance policy or policies shall specifically provide protection appropriate for the types of facilities, services and products involved; and shall provide that the District Engineer be given thirty (30) days notice of any cancellation or change in such insurance.
- c. In the event the Lessee is self-insured, the Lessee shall certify such self-insurance in writing in the minimum amount specified above to the District Engineer. The Lessee's insurance status shall not eliminate the requirement for its sub-lessees and concessionaires to have insurance from a reputable insurance carrier as set out above.
- d. The District Engineer may require closure of any or all of the premises during any period for which the Lessee and/or its sub-lessees and concessionaires do not have the required insurance coverage.

#### 17. RESTORATION

On or before the expiration of this lease or its termination by the Lessee, the Lessee shall vacate the premises, remove the property of the Lessee, and restore the premises to a condition satisfactory to the District Engineer. If, however, this lease is revoked, the Lessee shall vacate the premises, remove said property therefrom, and restore the premises to the aforesaid condition within such time as the District Engineer may designate. In either event, if the Lessee shall fail or neglect to remove said property and restore the premises, then, at the option of the District Engineer, said property shall either become the property of the United States without compensation therefore, or the

# 20. SUBJECT TO MINERAL INTERESTS

This lease is subject to all outstanding mineral interests. As to federally owned mineral interests, it is understood that they may be included in present or future mineral leases issued by the Bureau of Land Management (BLM), which has responsibility for mineral development on Federal lands. The Secretary will provide lease stipulations to BLM for inclusion in such mineral leases that are designed to protect the premises from activities that would interfere with the Lessee's operations or would be contrary to local laws.

#### 21. COMPLIANCE, CLOSURE, REVOCATION AND RELINQUISHMENT

- a. The Lessee and/or any sub-lessees or licensees are charged at all times with full knowledge of all the limitations and requirements of this lease, and the necessity for correction of deficiencies, and with compliance with reasonable requests by the District Engineer. This lease may be revoked in the event that the Lessee violates any of the terms and conditions and continues and persists in such non-compliance, or fails to obtain correction of deficiencies by sub-lessees or licensees. The Lessee will be notified of any non-compliance, which notice shall be in writing or shall be confirmed in writing, giving a period of time in which to correct the non-compliance. Failure to satisfactorily correct any substantial or persistent noncompliance within the specified time is grounds for closure of all or part of the premises, temporary suspension of operation, or revocation of the lease, after notice in writing of such intent. Future requests by the Lessee to extend the lease, expand the premises, modify authorized activities, or assign the lease shall take into consideration the Lessee's past performance and compliance with the lease terms.
- b. This lease may be relinquished by the Lessee by giving one (1) year prior written notice to the District Engineer in the manner prescribed in the Condition on NOTICES.

#### 22. HEALTH AND SAFETY

a. The Lessee shall keep the premises in good order and in a clean, sanitary, and safe condition and shall have the primary responsibility for ensuring that any sub-lessees and concessionaires operate and maintain the premises in such a manner.

be permitted if offered in connection with other approved activities. Advertising of such beverages outside of buildings is not permitted. Carry out package sales of hard liquor is prohibited.

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#### 25. NATURAL RESOURCES

The Lessee shall cut no timber, conduct no mining operations, remove no sand, gravel, or kindred substances from the ground, commit no waste of any kind, nor in any manner substantially change the contour or condition of the premises, except as may be authorized under and pursuant to the Development Plan described in the Condition on DEVELOPMENT PLANS herein. The Lessee may salvage fallen or dead timber; however, no commercial use shall be made of such timber. Except for timber salvaged by the Lessee when in the way of construction of improvements or other facilities, all sales of forest products will be conducted by the United States and the proceeds therefrom shall not be available to the Lessee under the provisions of this lease.

#### 26. DISPUTES CLAUSE

- a. Except as provided in the Contract Disputes Act of 1978 (41 U.S.C. 601-613) (the Act), all disputes arising under or relating to this lease shall be resolved under this clause and the provisions of the Act.
- b. "Claim," as used in this clause, means a written demand or written assertion by the Lessee seeking, as a matter of right, the payment of money in a sum certain, the adjustment of interpretation of lease terms, or other relief arising under or relating to this lease. A claim arising under this lease, unlike a claim relating to that lease, is a claim that can be resolved under a lease clause that provides for the relief sought by the Lessee. However, a written demand or written assertion by the Lessee seeking the payment of money exceeding \$50,000 is not a claim under the Act until certified as required by subparagraph c.(2) below.
- c. (1) A claim by the Lessee shall be made in writing and submitted to the District Engineer for a written decision. A claim by the Government against the Lessee shall be subject to a written decision by the District Engineer.
  - (2) For Lessee claims exceeding \$50,000, the Lessee shall

Non-State Park Lease 1 March 1994 provided in the Act, which is applicable to the period during which the District Engineer receives the claim, and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

P . . . . .

h. The Lessee shall proceed diligently with the performance of the lease, pending final resolution of any request for relief, claim, appeal, or action arising under the lease, and comply with any decision of the District Engineer.

#### 27. ENVIRONMENTAL PROTECTION

- a. Within the limits of their respective legal powers, the parties to this lease shall protect the project against pollution of its air, ground, and water. The Lessee shall comply promptly with any laws, regulations, conditions or instructions affecting the activity hereby authorized, if and when issued by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency having jurisdiction to abate or prevent pollution. The disposal of any toxic or hazardous materials within the leased area is specifically prohibited. regulations, conditions, or instructions in effect or prescribed by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency, are hereby made a condition of this lease. The Lessee shall require all sanitation facilities on boats moored at the Lessee's facilities, including rental boats, to be sealed against any discharge into the lake. Services for waste disposal, including sewage pump-out of watercraft, shall be provided by the Lessee as appropriate. Lessee shall not discharge waste or effluent from the premises in such a manner that the discharge will contaminate streams or other bodies of water or otherwise become a public nuisance.
- b. The Lessee will use all reasonable means available to protect the environment and natural resources, and where damage nonetheless occurs from the lessee's activities, the Lessee shall be liable to restore the damaged resources.
- c. The Lessee must obtain approval in writing from the District Engineer before any pesticides or herbicides are applied to the premises.

b. Occupying any lands, buildings, vessels or other facilities within the premises for the purpose of maintaining a full- or part-time residence is prohibited, except for employees residing on the premises for security purposes, if authorized by the District Engineer.

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#### 32. COVENANT AGAINST CONTINGENT FEES

The Lessee warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Lessee for the purpose of securing business. For breach or violation of this warranty, the United States shall have the right to annul this lease without liability or, in its discretion, to require the Lessee to pay, in addition to the lease rental or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

#### 33. OFFICIALS NOT TO BENEFIT

No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this lease or to any benefits to arise therefrom. However, nothing herein contained shall be construed to extend to any incorporated company if the lease be for the general benefit of such corporation or company.

#### 34. MODIFICATIONS

This lease contains the entire agreement between the parties hereto, and no modification of this agreement, or waiver, or consent hereunder shall be valid unless the same be in writing, signed by the parties to be bound or by a duly authorized representative; and this provision shall apply to this clause as well as all other conditions of this lease.

#### 35. DISCLAIMER

This lease is effective only insofar as the rights of the United States in the premises are concerned; and the Lessee shall obtain such permission as may be required on account of any other existing rights. It is understood that the granting of this lease

Non-State Park Lease 1 March 1994

	TRACT NO.  FIRST PROPERTY OF THE STATE OF TH	925	TRACT NO. A. T.	T d d I S S I S S I W
S89 47 E 1805.1"	T. S. E. S.		cer to true North.  to distance above Ohio River.  Section 32  of the 5th P. M.  GOV'T LOT 2	AL LEASE AREA (.84 acres)
30   29	31 32	1	Note: All bearings refer to true North.  Mileage refers to distance above  Part of GOVT. LOT 1, Section 32  Tap. 75 N., R. 2 W. of the 5th P. M.  LOUESA COUNTY, IOWA	MISSISSIPPI RIVER LOCK AND DAY NO. 17 FUBLIC PARK AND RECRECTIONAL LEASE CONT. NO. DACWZZ- Scale: 1" = 400' Scale: 1" = 400'

REHIELT RAR

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Boat Ramp Exhibit B Flaming Prairie

#### EXHIBIT "C"

#### PRELIMINARY ASSESSMENT SCREENING (PAS)

#### Contract No. W912EK-1-05-4180

- 1. REAL PROPERTY TRANSACTION: This action consists of granting a ten year lease to the Louisa County Conservation Board to use .8 acres (+/-) of Federal land for the operation and maintenance of a public park and recreational lease area.
- 2. COMPREHENSIVE RECORDS SEARCH: A search of the Real Estate records was conducted in September 2005 and included the following:
- A. Acquisition files for Tract FIa-14 dated December 31, 1940.
  - B. Plane Table map dated July 31, 1939.
  - C. Aerial photograph.

The District Engineering, Operations and Program and Project Management Divisions reviewed this action. They were asked to identify any records of hazardous materials being stored, released or disposed of on the property; however, no such records were identified in their review.

3. SITE INSPECTION: There was not a site inspection performed specifically for this PAS. There was no information revealed in the records search to indicate potential for hazardous materials to warrant a site investigation specifically for this PAS.

- 4. FINDINGS: The conclusion of this PAS is that there is no known history or present existence of hazardous materials on the property included in the lease.
- 5. This PAS is a real property transaction record to serve as documentation for the hazardous substance contamination condition of the property. The proposed real property transaction of granting a Public Park and Recreation Lease to Louisa County, Iowa, should proceed.

Prepared by:

W. Wood, Realty Specialist

Date: 0-03

\_Date: 11-16-05

E.W. Wood, Realty Specialist Federal Land Support Branch

Approved by:

Ralph J Werthmann

Chief, Real Estate Division

Exhibit C Page 2 of 3

#### ACCEPTANCE

Louisa County, Iowa, working through the Louisa County
Conservation Board, accepts the findings of this PAS and hereby
agrees that to the knowledge of Louisa County Conservation Board
there is no known history or present existence of hazardous
materials on the property included in the easement. The Louisa
County Conservation Board understands that this PAS will be used
as a basis for determining any environmental restoration required
under the terms of the lease.

Louisa County, Iowa

BY

Date.

Exhibit C Page 3 of 3

## CERTIFICATE OF AUTHORITY

I, Ke Purely, certify that I am the (name of certifying officer)
(official capacity of certifying officer) of the corporation named
as lessee herein; that <u>Julie Obde</u> (name of signer of lease)
who signed this lease on behalf of the grantee, was then
Executive Dreck of the corporation, that (official capacity of signer of license)
said lease was duly signed for and in behalf of said corpora-
tion by authority of its governing body, and is within the scope
of its corporate powers.
(Signature of certifying officer)

(CORPORATE SEAL)

#### MANAGEMENT AGREEMENT

## ODESSA WILDLIFE AREA SNIVELY ACCESS CAMPGROUND

This agreement is made and entered into by and between the Iowa Department of Natural Resources, (DNR), and the Louisa County Conservation Board.

The DNR and the Louisa County Conservation Board have jointly determined that it is in the public interest to transfer the care and maintenance of state-owned real property in Louisa County, Iowa, locally known as Snively Access Campground, containing 11 acres, more or less, more particularly described to wit:

A certain tract of land located in the Southeast part of Government Lot Six (6), Section Twenty (20), Township Seventy-Four (74) North, Range Two (2) West of the 5<sup>th</sup> P.M. described as:

Commencing at the West One-Quarter corner of said Section Twenty (20), Township Seventy-Four (74) North, Range Two (2) West of the 5<sup>th</sup> P.M.; thence East 1300.0 feet along the North line of the Northwest Quarter (NW ¼) of the Southwest Quarter (SW ¼) of said Section Twenty (20) to the intersection of said line with the centerline of the public highway; thence South 40° 02' East 1450.83 feet along said highway centerline to the point of beginning; thence South 40° 02' East along said highway centerline 263.97 feet to the South line of said Government Lot Six (6); thence North 89° 26' East 538.08 feet along said line to the present U.S. Government boundary line; thence North 31° 03' West 360.69 feet along said line to a government monument; thence North 26° 22' West 299.84 feet along the government boundary; thence South 89° 21' West 463.81 feet; thence South 26° 22' East 44.86 feet; thence South 30° 04' East 111.65 feet; thence South 23° 47' East 88.36 feet; thence South 6° 39' East 118.05 feet; thence South 51° 13' West 64.12 feet to the point of beginning; and the remainder of Government Lot Six (6) located within the green line on the attached Exhibit including U.S. Government Tract Fla-153, under an existing management agreement between the United States and the DNR.

This agreement is entered into under the authority joint authorities of Iowa Code Sections 350.7 and 461A.27 2006. Pursuant to said Sections, the parties mutually agree that the County shall undertake the development, care and maintenance of the state-owned real property described above according to the following terms and conditions:

**TERM OF AGREEMENT.** This agreement is effective on the date it is signed by the DNR and continues in full force and effect to and including December 31, 2032.

**INDEMNIFICATION.** The County agrees to hold harmless and indemnify the State of Iowa, the DNR, and any official or employee thereof from any and all claims, demands, losses, liabilities or legal expenses which might arise on account of injury to any person or damage to any property occurring in connection with the care and management by the County of the above-described premises except the County will not assume any responsibility for the acts or omissions of the State of Iowa or its agents.

**MANAGEMENT OF PREMISES**. The County agrees to develop, maintain and manage the premises covered by this agreement as an access area for the citizens thereof and for the people of the State of Iowa in substantially the same manner as state park areas are developed, maintained and managed by the DNR. Construction of the DNR's portion of new area boundary fences and fence maintenance shall be the responsibility of the County.

**BOUNDARY MANAGEMENT.** The County shall annually inspect the boundary of the premises covered by this agreement and submit a written report to the DNR if any changes, encroachments or boundary problems are discovered. The DNR shall be responsible for addressing any boundary problems affecting title to said premises.

**APPLICABILITY OF LAWS**. All laws, rules and regulations applying to the use of state park areas under the jurisdiction of the DNR shall apply to this property insofar as possible, taking into account the terms of this agreement.

**DNR'S USE OF PREMISES**. The DNR reserves the right to enter upon the premises at any time for any purpose in connection with programs of the DNR and temporarily use the area in such manner as to not materially interfere with the use of the area by the County.

**PRESERVATION OF NATURAL FEATURES**. No trees or other vegetation may be removed or other natural features of the area disturbed without permission of the DNR. Removal of vegetation deemed a public hazard is permitted.

**IMPROVEMENTS**. No improvements are to be made to the area until the development plans for such improvements have been submitted to and approved in writing by the DNR. All improved development shall be the express responsibility of the County.

COMMERCIAL USE OF PREMISES. The County may make commercial use of the premises covered by this agreement or permit commercial use by others in accordance with the County's adopted regulations. All permitted commercial uses shall be approved in writing by the DNR. Receipts from permitted commercial uses will be retained by the County and will be used to make improvements to and maintain the premises covered by this agreement. Commercial use shall not be construed to allow exclusion of the general public. Non-discriminatory access restrictions are allowed where necessary for safety considerations. The County may conduct agricultural operations for the benefit of wildlife and forest harvest may be conducted with the written approval of the DNR. Sale of timber from any such harvest shall be subject to approval of the DNR including, but not limited to, the right of the DNR to review and disapprove any or all bids for such sale. Receipts from agricultural operations and timber sales shall be retained by the County and shall be used to make improvements to and maintain the premises covered by this agreement.

**SURRENDER OF PREMISES**. At the expiration of the term of this agreement, or if either party cancels the agreement before expiration, the County will yield possession of the premises to the DNR and will, within 90 days after such time, remove all improvements, structures, and equipment thereon from said land. However, permanent structures may remain on the premises with specific written approval of the DNR. Said premises at the time of such delivery of possession shall be in as good order and condition as when the same was entered upon by the County.

**SIGNS**. All DNR signs (e.g., boundary, directional, area name or regulation) shall remain in place. The County may add additional signs as it deems necessary.

**EXPENDITURE OF FUNDS.** Nothing in this agreement shall obligate or bind either party to the expenditure of funds in excess of funds available to each party.

**PUBLIC USE OF PREMISES.** Nothing in this agreement shall deny the right of the public to enter upon and use the premises for any lawful purpose whatsoever.

**NONDISCRIMINATION**. It is agreed that, with respect to use of the premises covered by this agreement, the County will not exclude anyone from participation in, deny anyone the benefits of, or otherwise subject anyone to discrimination because of the person's race, color, national origin, age or disability.

**TERMINATION FOR CAUSE**. This agreement may be terminated upon 30 days' written notice to either party should it be determined that either party is failing to comply with the terms of the agreement.

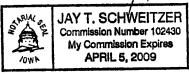
**TERMINATION BY MANDATE**. In the event the Iowa Legislature or any other duly elected or appointed body or official mandates that the DNR terminate this agreement, this agreement shall terminate upon 90 days written notice to the County.

This agreement is entered into under the authority of a resolution adopted at the regular meeting of the Louisa County Conservation Board on \_\_\_\_\_\_\_\_\_, as shown in the minutes thereof.

LOUISA COUNTY CONSERVATION BOARD
By:Chairperson
This agreement is entered into under the authority of a resolution adopted at the regular meeting of the Natural Resource Commission on, as shown in the minutes thereof.
IOWA DEPARTMENT OF NATURAL RESOURCES  Dipoly Director
Date: 1/11/10/5

Prepared by Gregory B Jones, Iowa Department of Natural Resources, Wallace State Office Bldg., Des Moines, Iowa 50319-0034, 515-281-5806.

STATE OF IOWA,CU_15GCOUNTY: This instrument was acknowledged before me on9 9 8 by  As Chairperson of the [insert name] County Conservation Board.
NOTARY PUBLIC FOR THE STATE OF IOWA
JAY T. SCHWEITZER



STATE OF IOWA,COUNT	Ύ:		
This instrument was acknowledged befo	re me on	June 19, 2009	_ by
Patricia L. Boddy as Deputy Dir	ector	of the lowa Departm	ent of
Natural Resources.			
NOTARY PUBLIC FOR THE STATE OF IOWA	ON A POWA	GREGORY B. JONES COMMISSION # 704406 MY COMMISSION EXPIRES 8/2/2009	

Exhibit Management Agreement Oddessa Wildlife Area Snively Access Campground

DNR Management

Louisa County Management

Section 20, T 74 N, R2W Louisa County

## Toolesboro Mounds National Historic Landmark Letter of Agreement, FY2022

Pursuant to the 2017 Interagency Agreement for management of the Toolesboro Mounds National Historic Landmark, the undersigned joint administrators of the Agreement, agree to the following <a href="maximum"><u>maximum</u></a> amounts of compensation by the State Historical Society of Iowa ("SHSI") to the Louisa County Conservation Board ("LCCB") for the following specified services and supplies during state fiscal year 2022 (July 1, 2021 - June 30, 2022):

	77716912			
Administration:	60 hours	\$28.49/hour	\$	1,709.40
	IPERS/FICA	17.09%	\$	292.14
	Worker's Comp	\$0.48/hour	\$ \$	28.80
Interpretation:	355 hours	\$10.56/hour	\$	3,748.80
	IPERS/FICA	17.09%	\$ \$	640.67
	Worker's Comp	\$0.48/hour	\$	170.40
Maintenance:				
Perso	onnel:			
	217 Hours	\$17.77/hour	\$	3,856.09
	IPERS/FICA	17.09%	\$ \$ \$	659.01
	Worker's Comp	\$0.48/hour	\$	104.16
Equip	1.5	,	*	
	Mower 150 hours	\$10.00/hour	\$	1500.00
	Truck and Misc. Items		\$ \$	300.00
Internet Access:	Six Months	\$43.00/month	\$	258.00
Miscellaneous: (cleaning supplies,				
photo copies, etc)			\$	325.00
		TOTAL	\$	13,592.47

NOTE: The SHSI shall reimburse the LCCB on a monthly basis upon receipt of an invoice and report detailing services and supplies rendered by the LCCB.

All invoices submitted by LCCB shall comply with all applicable rules concerning the payment of such fees, charges or other claims and shall contain appropriate documentation as necessary to support the fees or charges included on the invoice and all information reasonably requested by SHSI. SHSI shall pay all approved invoices in arrears and in conformance with Iowa Code Section 8A.514. SHSI may pay in less than sixty (60) days, however, an election to pay in less than sixty (60) days shall not act as an implied waiver of Iowa Code Section 8A.514. Notwithstanding anything herein to the contrary, SHSI shall have the right to dispute any invoice submitted for payment and withhold payment of any disputed amount if SHSI believes the invoice is inaccurate or incorrect in any way.

For unanticipated expenses in the designated Maintenance or Miscellaneous categories, LCCB must first seek written approval for individual payments for \$500 or more.

If funds anticipated for the continued fulfillment of this contract are at any time not forthcoming or insufficient, either through the failure of the State of Iowa to appropriate funds, discontinuance or material alteration of the program for which funds were provided, then the SHSI shall have the right to terminate this contract without penalty.

The undersigned agree that the site will be open Memorial Day to Labor Day, Wednesday – Sunday, 12:30pm-4:30pm and from Labor Day to October 31, Saturday, 12:30pm-4:30pm. An additional 33 hours will be allogated for tour groups.

Susan Kloewer, Administrator, SHSI

Katie Hammond, LCCB

6/10/21

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LOA-TM2018.DOC

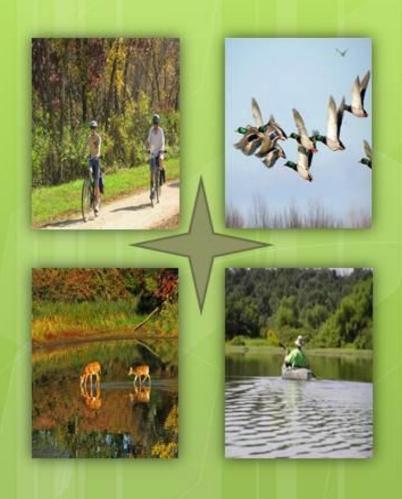
# Louisa County Trails Master Plan

# 2012



Bordered by the Mississippi River and with more than 15,000 acres of parks and natural areas, we're confident we have what you're looking for.

Spend some time in Louisa County, you'll feel better for it...





# Acknowledgements:

Louisa County Board of Supervisors

Special Thanks to Louisa County Trail Council Members

Louisa County Conservation Jeanne Mott - Chair Sherry Humphreys

National Park Service Larry Koehrsen Mallory Smith

Southeast Iowa Regional Planning Commission Julie Ohde Larry Roehl

Tri-Rivers Conservation Foundation Kathy Vance Kathy Vance

Louisa County Engineers Office Paula Buckman Roger Hunt

Muscatine Trails Group Jay Schweitzer Cathy Henry

#### Local Mayors:

Dan Wilson-Columbus Junction

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# **Executive Summary**

Louisa County features a beautiful, diverse landscape. From rolling hills to the lowlands of the Mississippi River basin, there's no shortage of areas to explore. The Louisa County Trails Master Plan was initiated to provide better accessibility to many of these areas by means of alternative transportation such as biking, hiking, and horseback riding. The planning effort was headed by the Louisa County Trails Council (LCTC) in partnership with the Southeast Iowa Regional Planning Commission (SEIRPC), and the National Park Service Rivers, Trails and Conservation Assistance Program (RTCA). The LCTC is comprised of local government officials, business owners, and interested citizens.

The vision of the LCTC is: "To provide access to Louisa County's natural resources, through development and promotion of a countywide trails system for a variety of users and interests."

Using this vision as their guiding force, the LCTC began the process of planning and promoting better trail opportunities for both visitors and citizens of Louisa County. The focus of the LCTC has been to promote and improve existing trails, as well as to identify new trail corridors that connect cities, other local attractions and trail systems in adjacent counties.

The proposed trail network may also increase tourism, acting as a catalyst for local economic growth through increased private business opportunities for trail amenities. In addition, a well-connected trail system helps promotes a healthy lifestyle, and provides an energy- efficient alternative transportation system.

## The Louisa County Trails Master Plan:

- Identifies strategies to promote and enhance existing trail facilities
- Outlines the opportunities for new trail development
- Identifies potential funding sources
- Addresses long-term maintenance issues
- Provides implementation guidance
- Encourages strong partnerships between the LCTC and local, state, and federal agencies to ensure a sustained effort towards trail development and enhancement in Louisa County

Specifically the Louisa County Trails Master Plan recommends:

#### Enhancement of Existing Trails

The current inventory of trail amenities and locations within Louisa County is not easily accessed by potential trail users. This plan outlines suggestions to better promote and identify existing trail amenities, as well as recommendations for improving them.

#### New Trails

New trails are proposed in several locations throughout Louisa County. These trails range from Signed/Shared road routes to designated off-road Shared Use trails.

#### *Implementation*

The LCTC will facilitate ongoing trail planning efforts for Louisa County by acting as the central point of contact for trail related efforts. Local governments, businesses and private citizens will work together to implement this plan.

#### Funding and Maintenance

There are many resources available to build and maintain trails. The plan identifies grant opportunities at federal, state and local levels, in addition to recommendations for ongoing fundraising efforts. The plan also discusses the roles and responsibilities of local organizations to ensure continued development and updating of the Louisa County Trails Master Plan.

# Introduction

The purpose of the Louisa County Trails Master Plan is to provide a comprehensive plan that can be used by government agencies and citizen-based interest groups to guide future trail development in Louisa County.

This plan supplements previous planning efforts such as the Iowa Trails 2000 Plan and Iowa's Mississippi River Trail Plan, in addition to local planning efforts in county parks and nearby cities. The plan takes into consideration connectivity to surrounding counties and their trail plans. When possible this plan can, and should, be used in conjunction with other local, regional, state, or federal plans to accommodate the implementation of new trails or the expansion of existing ones.

#### **Vision**

The LCTC has defined its vision as follows:

"To provide access to Louisa County's natural and cultural resources, through development and promotion of a countywide trails system for a variety of users and interests"

#### Goals

That vision will be created with these goals in mind:

- Promote and improve existing trails
- Identify viable links connecting area destinations and communities
- Develop a user friendly network of trails
- Develop facilities for multiple user groups and interests
- Communicate with surrounding counties and state agencies to cooperate and connect with adjacent trail systems
- Develop safe alternative travel options
- Increase tourism and economic development
- Improve health and welfare of residents

#### **Needs & Benefits**

Louisa County will greatly benefit from the development of a long range comprehensive trails plan. Having a plan in place not only gives better access to available funding through the demonstration that trails are important to this area, as shown by this comprehensive plan, but it also helps focus the efforts of the LCTC in applying for potential grants and using that money in the areas of the county that need it the most. Having a cohesive well thought out network of trails throughout Louisa County will increase tourism, and also create a

higher quality of living with increased health and wellness for local citizens, all the while providing access to the county's endless natural assets.

## **History of Trails in Louisa County**

Louisa County is a rural county which creates both challenges and opportunities relating to trail development. In the past, the lack of local funding, organization, and willing citizen partners has limited the development of a large scale trail system within the county.

Currently, one Signed Shared Road exists, the Mississippi River Trail (MRT) that runs north to south throughout the county along The Great River Road (a National Scenic Byway). This national trail starts in Itasca, Minnesota and offers over 3,000 miles of on-road bikeways as it winds its way to the Gulf of Mexico.

Portions of a Shared Use Trail can be found in Louisa County, though the developed sections are currently short and not contiguous. The Hoover Nature Trail began in the early 1990's as a converted railroad line with the ultimate goal of connecting the Cities of West Branch and Burlington. Land was acquired and several segments were completed with a crushed limestone surface but the project lost its momentum with the death of the organization's founder. Louisa County Conservation owns pieces of the former railroad corridor (both developed and undeveloped) and it remains a great option for future trail development.

Several park trails are found in areas owned by Louisa County, cities and the U.S. Fish and Wildlife Service. These areas offer attractive trails for short hikes (up to 5 miles).

Recently, communities throughout Louisa County have been looking more seriously at expanding their local trail opportunities. These communities include the Cities of Wapello, Morning Sun, and Columbus Junction. This local interest helped spark the desire to form an interconnected countywide network of trails, so that people could spend a day or a weekend traveling from one community/area attraction to another by trail.

Louisa County has two state-designated water trails (Iowa River Water Trail, and Odessa Water Trail), an asset that will be tied into planning efforts for the land based network proposed in this document.

# **Public Participation**

The Louisa County Trails Master Plan was developed with the trail user in mind so it relies on input not only from the LCTC, but also from local citizens and trail users. Opportunities for public participation included: LCTC meetings, public listening sessions and questionnaires.

## **Louisa County Trails Council Meetings**

The LCTC is the primary advisory group relating to the development of this trails plan. The committee is comprised of members representing both public and private interests. For a complete listing of LCTC members please reference the acknowledgements section of the plan on page 2.

The LCTC meets on a regular basis at different locations throughout Louisa County. Anyone interested in participating is welcome to attend and can contact the LCTC, or Louisa County Conservation, using the contact information found in the acknowledgements section of this plan.

With help from Southeast Iowa Regional Planning Commission, and the National Park Service's RCTC program information was gathered from the public listening sessions, online questionnaires, and other research efforts.

## **Public Meetings & Listening Sessions**

Public input was sought during three public listening sessions held on October 27, 2011. These sessions were held in three different locations in an effort to accommodate the busy schedules of Louisa County's residents.

The sessions were publicized through local radio stations, newspapers, emails, personal invitations, and public flyers. Approximately 46 participants took part in the meetings and ranged in age from 17 to 80.

Participants were given a brief description of the trail planning process and offered a chance to ask questions. Working in small groups, they were given aerial photos and asked to identify potential trails throughout the county, assuming no restrictions on cost or other resources. A large group discussion was held to wrap up each meeting.

Based on the interest of participants, the following nonmotorized trails types were identified during the meetings:

Shared Use Trails

Shared/Signed Roadways

Equestrian Trails

While some meeting participants expressed need for, ATV parks and trails, it was decided that motorized trails were beyond the scope of this document. The hope is that ATV enthusiasts will undertake a similar planning process to address those types of trails.

#### **Questionnaires**

At the end of the Public Listening Sessions, participants were invited to fill out questionnaires with additional information regarding trail development in Louisa County. These same questionnaires were also made available online or by calling Louisa County Conservation to request a copy by mail. The public was informed through local newspapers and the Naturally Louisa County newsletter how to access the questionnaire.

A summary of the questionnaire, and public listening sessions can be seen in Appendix C in the back of this plan.

# **Definitions**

To help understand the differences between the types of trail facilities discussed in this plan, definitions are provided below.

#### **AASHTO**

The terms in this section are from the American Association of State Highway and Transportation Officials (AASHTO) 1999 publication, "Guide for the Development of Bicycle Facilities."

#### Shared Use Trail

A shared-use trail serves as part of a transportation circulation system and supports multiple recreation opportunities, such as walking, bicycling, and in-line skating. A shared-use trail typically has a surface that is asphalt, concrete, or firmly packed crushed aggregate.

#### Shared Roadway

A Shared Roadway is a motor vehicle road which is also open to bicycle traffic. In Iowa, that includes all roads except Interstate Highways. In this plan, routes recommended for this category include roadways which typically have lower traffic counts and are already being used by cyclers. Signage may be included along the route alerting motorists to the possibility of bicycle traffic.

#### Signed Shared Roadway

Signed Shared Roadways are similar to Shared Roadways except that wayfinding signage indicates a specific route to follow. These types of trails provide continuity to other bicycle facilities in the area. The signing also warns vehicular traffic in the area of the presence of bicyclists, further enhancing the safety of these corridors compared to unmarked routes.

### Other Terms Used in this Plan

Because AASHTO definitions refer specifically to trails that are used by bicycles, other terms are used in this document to describe trails that are not specifically designed for bicycle traffic.

#### Park Trails

These trails are located within parks and wildlife areas. Some are walking/hiking/running only, while others may allow bicycles, mountain bikes and equestrian. Most are natural surface, though some may have a gravel, chipped limestone or even a hard-surface.

#### Water Trails

Water trails are recreational routes on waterways with a network of public access points supported by broadbased community partnerships. Water trails provide both conservation and recreational opportunities.

#### Equestrian Trails

Equestrian trails are designed and built for the intended users to be mounted on horseback. Surfacing is typically dirt, mowed grass, or finely crushed and compacted natural stone.

# Shared Use Trails

Louisa County offers a tremendous variety of natural landscapes that appeal to many outdoor enthusiasts. One purpose of this plan is to develop non-motorized access connecting towns, attractions and outdoor recreation areas. Shared Use Trails offer users a different experience than riding on or next to a road. An interesting trail that takes users through a variety of scenery, with stops and amenities along the way, can become an attraction itself.

Ideally, Shared Use Trails would be hard surfaced which offers the benefits of easier maintenance and a more desirable travel surface, especially for bicycles and mobility impaired users. Given funding constraints, that will not always be possible so, when funds are sufficient to cover the costs, hard surfacing can be implemented. Otherwise, a chipped limestone or similar surface will be used. If funding allows, an adjacent soft surface trail should be included for equestrian use.

## **Hoover Nature Trail (existing and proposed)**

Louisa County has several segments of an existing shared use trail, which are a portion of the former Hoover Nature Trail. There are both opportunities to improve the existing trail and to extend the trail.

Hoover Nature Trail (HNT)



Location: The Hoover
Nature Trail (HNT) project
was intended to connect 15
towns and 6 counties West
Branch south to Burlington
along the abandoned Rock
Island Railway corridor.
The planned trail route runs
through the middle of Louisa
County.

Length: Louisa County Conservation owns three segments of developed trail: 2 miles just outside of Columbus Junction in Chinkapin Bluffs Recreation Area; 1.6 miles near Morning Sun and 1 mile west of the Indian Hills Golf & Country Club. In addition, Louisa County owns 6 segments of undeveloped trail comprising a total of about 4.2 miles between Morning Sun and the Muscatine County line near Conesville.

Total public land ownership totals 8.8 miles along this 16.8 mile corridor.

**Management:** The three developed segments are kept mowed and trimmed by Louisa County Conservation. The undeveloped segments are not maintained as public areas. One privately owned segment that has been developed, is maintained as a trail by Louisa County Conservation and public use is allowed. Otherwise, the

private segments are maintained by the individual owners.

**Opportunities:** With so many segments of trail in public ownership, there is the opportunity to expand the developed portion of the trail and work toward a longer trail, ultimately connecting the Columbus Junction area to Wapello, to Morning Sun and Muscatine and Des Moines Counties.

The last part of the operational rail line - between Columbus Junction and the Tyson packing plant - closed after a portion of the bridge was damaged in the 2008 flood. The rails have been removed and Tyson has indicated a willingness to donate the land to be used as a public trail.

#### **Current Challenges:**

- Potential trail users are unfamiliar with the trail
- A section of trail at Chinkapin Bluffs Recreation Area has erosion issues because of water control problems in the watershed
- The Iowa Natural Heritage Foundation leads website visitors to believe that the trail is more complete than it is. This causes confusion and frustration to visitors from outside Louisa County.

#### **Recommendations for Current Developed Segments:**

- Improved signage
- Create a trail map showing existing developed segments, lengths and description of surfacing
- Improved marketing and maps on lccb.org, NaturallyLouisaCounty.com and inhf.org
- Continue to work with City of Columbus Junction, Louisa County Fair Board, Louisa County Secondary Roads and NRCS on drainage/watershed issues.

#### **Recommendations for Expansion:**

 Work toward development of trail from Muscatine to Des Moines counties (need 8 miles of easements to complete the original route).

- Complete a study to determine current ownership and management of undeveloped segments.
- Using the current priorities list, divide trail into segments and complete the following for each:
  - Meet with owners of the former railroad right-of-way and landowners adjacent to undeveloped segments in public ownership since they may be using the land to determine interest in trail development.
  - Develop plans for any needed realignment and property acquisition.
  - Develop trail surface no less than 10' wide with 2' shoulders. Surface to be asphalt or concrete where possible, otherwise chipped limestone or similar surface.



Existing stretches of the Hoover Nature Trail are maintained by the Louisa County Conservation Office. Regional trail enthusiasts have recently begun an attempt to revive this trail corridor and complete the route as originally planned



### **Proposed Shared Use Trails**

In addition to expansion of the existing Hoover Nature Trail corridor, two other corridors are being recommended as possibilities for development of Shared Use Trails. When making these selections from the options presented by LCTC members and at the public sessions, the following criteria were considered: connections to other trails, amenities, towns and natural resource areas; scenic beauty; and presence of abandoned rail beds.



East & West Abandoned Rail Corridor

Location: Southern Louisa County along an abandoned rail bed running from Morning Sun to the Mississippi River.

Length: 10.6 miles

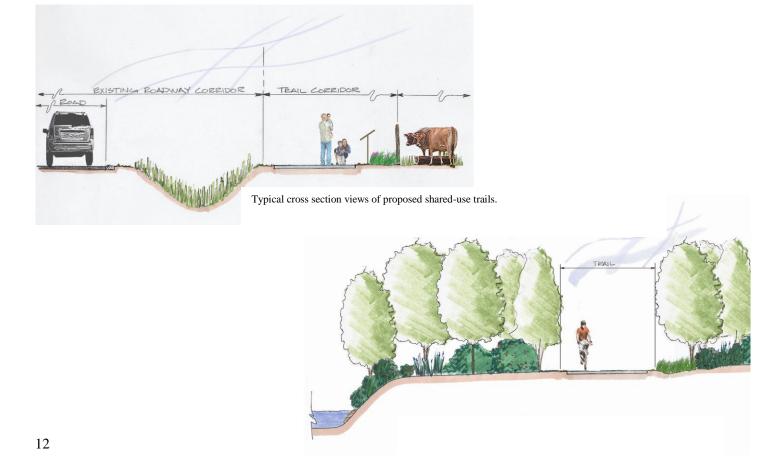
**Connections:** Morning Sun, Oakville, Mississippi River Levee Corridor, Iowa 78/H22 Corridor, Mississippi River Trail (MRT)

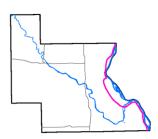
**Opportunities:** Some of the pre-existing grading that was done to construct the original rail line is still in place. The corridor runs near some interesting wetlands and through scenic bluffs. A bridge is still in place on the Mississippi River.

**Challenges:** All land is in private ownership so acquisition and easements would be needed for the entire length. Some segments may be located in or very near wetlands. The bridge on the Mississippi River was abandoned many years ago and would need assessment to determine whether it could become part of the trail.

#### **Recommendations:**

- Complete ownership study.
- Meet with landowners to determine interest in selling or giving easements for the trail.
- Develop plans for any needed realignment and property acquisition/easement.
- Create plan and priorities based meetings with landowners.
- Develop bridge as either an overlook or connection to Illinois





Mississippi River Levee Corridor

**Location:** Eastern Louisa County running north and south the length of the county along the Mississippi River levee system

Length: 23.5 miles

**Connections:** Muscatine County, Mississippi River Trail

(MRT), Flaming Prairie Park, Port Louisa National Wildlife Refuge, Lake Odessa WMA, East & West Abandoned Rail Corridor, Wykert's Landing, Ferry Landing, Des Moines County

**Opportunities:** Connection to the Mississippi River, scenic beauty; access to thousands of acres of natural areas; multi-modal access points (water trail accesses, boat ramps, Great River Road, MRT); multiple agency involvement which could mean access to a variety of funding sources; would draw visitors to Louisa County

**Challenges:** Multiple owners/managers of the levee system with different management mandates and philosophies; building on a sand levee; portions of levee closed in fall/early winter; non-contiguous sections at Michael Creek and Iowa River.

#### **Recommendations:**

- Develop map showing ownership/management of all levee segments
- Create plan for development of trail based on information from inter-agency meetings
- Meeting with all agencies to discuss feasibility and overcoming obstacles



Enjoy the natural beauty of the Mighty Mississippi River while recreating along this proposed trail route

### Klum Lake/Langwood Corridor

**Location:** Northeast Louisa County following H Ave from Grandview to the MRT

**Length:** 4.2 miles

Traffic Counts: 220

Vehicles/day

Connections: Grandview,

MRT, Langwood, Klum Lake WMA

**Opportunities:** This will be a crucial link between the MRT and the future Louisa Interpretive Center. A shared use trail would be the best connection with a bike lane as the second choice. This road is on Louisa County's 5 year plan for paving and the shared use trail should be incorporated at that time.

**Challenges:** The hill up the bluff is steep presenting challenges with both the road and the shared use trail.

### **Recommendations:**

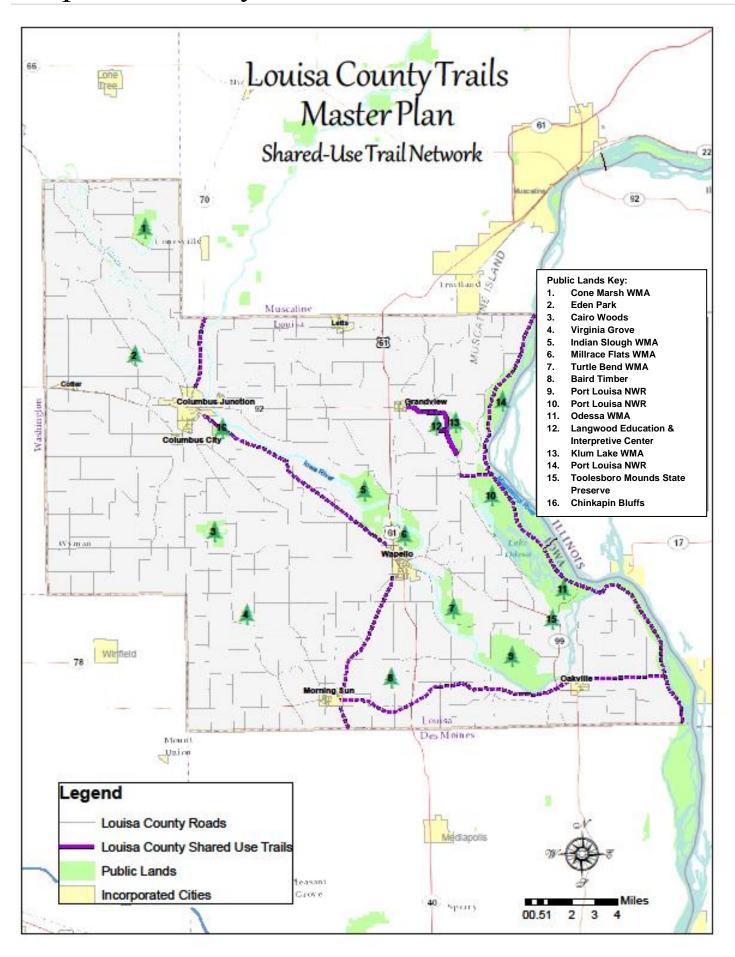
 Keep in close contact with the Louisa County Board of Supervisors and the county engineer as the paving project progress.



Trail users can stop and enjoy this scenic view of Klum Lake, along with many others on this short section of trail



### Proposed County-Wide Shared-Use Trail Network



### Park Trails

Louisa County has more than 17,000 acres of natural resources in public ownership. From wildlife refuges to city parks, many of these areas offer trails for hiking, jogging, dog walking, hunting, nature appreciation and more. Some also allow bicycles but because there is not hard surfacing, it is not suitable for road bikes. This section lists an inventory of the existing trails with suggestions to make these trails more enjoyable for users.

### General Recommendations

One of the most heard comments at the public listening sessions was that potential trail users weren't familiar with area trails or needed more information to feel comfortable using them. With that in mind, the following suggestions would make all of existing trails more user-friendly:

- Updated trail maps available online, in print form at the managing agency office and at the trailheads, where feasible. Maps should show distances, trail surfacing and amenities.
- A website where users could access information about all trails in the county and download or view maps. With some modifications, www.NaturallyLouisaCounty.com could fulfill this purpose.
- Directional signs on the trail, where needed.



Cairo Woods Wildlife Area

**Location:** 10 miles south of Columbus Junction/10 miles west of Wapello

**Length:** approximately 6 miles; area is 525 acres

**Ownership:** Louisa County Conservation

**Current Conditions & Amenities:** The service roads through this area are also available for use as trails. The natural-surface trails winds through the timber and grasslands. There are also a few small ponds. Parking lots at three accesses. Equestrian use is allowed from May 21 – September 15 on designated segments.

**Opportunities:** Chance to see wildlife; shaded during summer, fairly flat/level, and great black berry picking.

**Challenges:** Trail maps need updating. This area was purchased with Wildlife Habitat Stamp funds and hunting must be allowed. In addition, that funding source restricts development of amenities.

### **Recommendations:**

- Ensure that equestrian trail signage is up-to-date
- Be sure that trail users are aware that hunting is allowed on the area



Cairo Woods is a favorite stop for local berry-pickers, mushroom hunters, hikers, and horseback riders, and also offers great hunting opportunities



### Chinkapin Bluffs Recreation Area

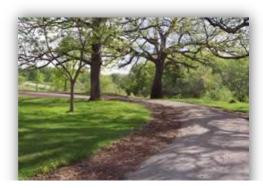
Location: adjacent to east side of

Columbus Junction

**Length:** approximately 4 miles;

park is 498 acres

Ownership: Louisa County Conservation



Chinkapin Bluffs offers hiking, biking, hunting, and picnicking, along with unparalleled views of the Iowa River Valley

Current Conditions & Amenities: A network of natural- surface trails winds through and along the edge of the timber connecting to the Hoover Nature Trail at the base of the Bluff. A chipped limestone trail winds through the picnic/playground area. Other amenities at the park include a shelter, water, electricity, restroom, parking lots, playground, and overlook deck.

**Opportunities:** Chance to see wildlife; shaded during summer, variety of trail surfaces; good parking areas and amenities on site. Some wayfinding signs are in place on the trail.

**Challenges:** Trail maps need updating. Some trails are very steep. Hunting is allowed on the area which keeps some trail users away.

#### **Recommendations:**

- Install maps in kiosks
- Interpretive signage along the trail
- Request review of hunting regulations

### Chautauqua Park

**Location:** Columbus Junction

**Length:** approximately 1 mile; park is less than 5 acres

**Ownership:** City of Columbus Junction



**Current Conditions & Amenities:** A natural surface trail through the timber is currently being established at the park. The park has a playground, restrooms, parking lot, two shelters and open fields for sports.

**Opportunities:** In town with chance to connect to routes in Columbus Junction. Might be able to connect to Chinkapin Bluffs if access can be obtained on private property.

**Challenges:** Steep bluffs through the timber may make trail design a challenge.

### **Recommendations:**

- Complete trail
- Consider connections to other routes in town



Chatauqua Park is situated in a mature forest setting and offers a variety of opportunities for trail users including: restrooms, water, shelter, playground, and recreational fields



Indian Slough Wildlife Area

**Location:** 3 miles NW of Wapello

**Length:** varies; area is 1100 acres

Ownership: Louisa County

Conservation

**Current Conditions & Amenities:** This is a wetland area in the floodplain of the Iowa River. Mowed service roads and prescribed fire breaks can be used for hiking trails. The same mowed trails are open to equestrian use May 21 – September 15. There are several parking lots on the area but only the Main Access is adjacent to the mowed trails.

**Opportunities:** Chance to see wildlife, especially water birds; flat/level; can also use kayaks and canoes at some water levels.

**Challenges:** Mowed trails vary from year to year so maps will just be of the area, not showing specific trails. This area was purchased with Wildlife Habitat Stamp funds and hunting must be allowed. In addition, that funding source restricts development of amenities. Because this floodplain area is open to the river, it floods during high water.

### **Recommendations:**

• Ensure that users are aware that hunting is allowed on the area.



Best known for its wetlands, try Indian Slough for short canoe trips, hunting, and hiking

Langwood Education & Louisa Interpretive Center

**Location:** 3 miles SE of

Grandview

Length: several miles are

planned; the Interpretive area is 38 acres and adjacent to

Langwood Education Center & Camp

90-acre Langwood Education Center

Ownership: Louisa County Conservation

**Current Conditions & Amenities:** Future site of the Louisa Interpretive Center building, currently site preparation has been done and the area has wetlands, prairie, entrance road, pond and parking lot.

**Opportunities:** A series of trails connecting the building with the wetlands, pond, prairie and Langwood is planned. There will be interpretive signage along the trail that all ties into the theme of "Land, Place, Home."

**Challenges:** Funding is the biggest challenge. All trails must be built to federal specifications so will be expensive.

### **Recommendations:**

Continue to seek funding



The Louisa Interpretive Center is the hub of outdoor education activities for area schools and youth groups, and the perfect place to hold a family reunion or retreat



LJ Thompson River Road
Park

Location: Wapello

**Length:** approximately 1.5 miles; park is 75 acres

Ownership: City of Wapello

Current Conditions & Amenities: Crushed limestone trail through mowed park and unmowed prairie. Other amenities at the park include two shelters, overlook deck, water, electricity, restroom, parking lot, benches playground.

**Opportunities:** In town with opportunity to link to other walking routes. Trail surface can accommodate strollers and most bicycles.

**Challenges:** Some wet spots on the trail. Some users are leery of walking through the prairie because of possible encounters with wildlife.

#### **Recommendations:**

Interpretive signage along the trail



Acquired as a location for innovative wetland water treatment, this park has a nice trail system winding through native grass plantings, and offers disc golf, and on overlook deck

Port Louisa National Wildlife Refuge – Overlook Trail

**Location:** 6 miles NE of

Wapello

**Length:** approximately 3 miles; area is 2609 acres

Port Louisa NWR Louisa Division

Ownership: U.S. Fish and Wildlife Service

**Current Conditions & Amenities:** This natural surface trail connects two overlook decks on the Refuge. There are interpretive kiosk panels with maps at each end of the trail, along with parking lots.

### **Opportunities:**

Excellent
wildlife viewing
opportunities.
Part of the trail is
level, other parts
are steep; good
parking areas. A
short walk on the
gravel road
connects this and
the other refuge trail.



Wildlife viewing opportunities abound at the crown jewel in Louisa County's outdoor treasures

**Challenges:** There are some erosion and drainage issues on the steep sections of trail. Parts of the trail are flooded during high water.

### **Recommendations:**

Address erosion and drainage issues



Port Louisa National Wildlife Refuge – Louisa Division Service Road

Location: 8 miles NE of Wapello

Length: approximately 5 miles;

area is 2609 acres

Ownership: U.S. Fish and Wildlife Service

Current Conditions & Amenities: Gravel service road can be used by hikers and bicycles though is not suitable for road bikes with narrow tires. Winds through beautiful wetlands and grasslands. Parking lot, access to Mississippi River and Odessa Water Trail. Kiosks with interpretive information in parking lots. Fishing with accessible fishing dock.

**Opportunities:** Excellent wildlife viewing opportunities. flat/level; good parking areas. A short walk on the gravel road connects this and the other refuge trail.

**Challenges:** Area is closed during fall migration – September 15 to December 31. Parts of the trail may be inaccessible during high water.

#### **Recommendations:**

none



Port Louisa offers visitors the opportunity to see an abundance of wildlife species in prairie, wetland, forest,, and open water settings

Toolesboro Mounds & Museum

Location: 7 miles SE of

Wapello

**Length:** varies; park is 5

acres



**Ownership:** Owned by State Historical Society and managed by Louisa County Conservation

**Current Conditions & Amenities:**, Trail is mowed in prairie each year – less than ½ mile in length. Area has prehistoric Native American burial mounds and a small museum that is open seasonally.



The Hopewellian mounds at Toolesboro are reminders of the area's past civilizations. These mounds are remnants of a once flourishing ancient culture from around 200 B.C. to 300 A.D.

**Opportunities:** Good amenities on site, great waypoint and connection for other trails.

**Challenges:** Museum is only open seasonally. Trails that require digging would not be allowed on the area because of the historic resources.

### **Recommendations:**

none



Virginia Grove Recreation Area

Location: 5 miles NW of

Morning Sun

**Length:** approximately 2.5 miles; park is 106 acres

Ownership: Louisa County Conservation

Current Conditions & Amenities: A network of natural surface trails winds through the timber and around the 5-acre pond. Other amenities at the park include a shelter, campground, water, electricity, restroom, parking lots, playground, historic schoolhouse, and accessible fishing dock.

**Opportunities:** Chance to see wildlife; most of trail is shaded during summer, fairly flat/level; good parking areas and amenities on site.

**Challenges:** Trail maps need updating. Bridges are in need of repair and some drainage issues need to be addressed on parts of the trail. Hunting is allowed on the area which keeps some trail users away.

### **Recommendations:**

- Repair bridges & address drainage issues
- Interpretive signage along the trail
- Request review of hunting regulations



This quiet park has a little of everything, from a small pond to a historic schoolhouse

### Signed Shared Roadways

Louisa County currently has one Shared Signed Roadway. The Mississippi River Trail (MRT) is a national bicycle route that runs from Minnesota to Louisiana along and near the Mississippi River.

R

Mississippi River Trail (MRT)

**Location:** The Louisa County portion of the MRT follows County Roads X61 and 99.

Length: 22 miles (in Louisa

County)

Traffic count: 810

Connections: Muscatine County, Des Moines County, Port Louisa National Wildlife Refuge, Flaming Prairie Park, Odessa WMA, Snively Campground, Toolesboro Mounds & Museum, Oakville, Cappy Russell Access, Odessa Water Trail, Iowa River Water Trail

### **Opportunities:**

- Part of a national trail
- In the corridor of the Great River Road National Scenic Byway
- Already a popular route with local riders

### **Challenges:**

- No paved shoulders or separate bicycle lane
- Lacks signage

**Recommendations:** As is the case in most shared road scenarios the preferred option for this route would include an off-road separated corridor trail that would increase the safety and comfort levels for both bicyclists and vehicle traffic. Due to restrictions resulting from costs and other physical conditions that would make this

type of development difficult, the proposed recommendation is to include a minimum of a 4' paved shoulder with appropriate signage along the entire MRT route through Louisa County.

In areas where space is limited, achieving a 4' paved shoulder could be accomplished by using one or a combination of different approaches, such as moving the rumble strip (if one is needed) under the fog line. This action will typically result in the addition of 1 foot of usable paved shoulder. Another option could be the reduction of lane width, thus creating more room for paved shoulders. With relatively low traffic counts, the MRT route through Louisa County could utilize this approach to help acquire the needed space for paved shoulders.

Since the route is already identified and signage has been acquired and is in the process of being implemented, the focus for this stretch of the Louisa County Trails Master Plan should center on the completion of paved shoulders. Louisa County has already submitted plans for improvements to county road X99 with the inclusion of a paved shoulder, and the new Iowa River Bridge northwest of Oakville includes bike lanes in both directions as well. These efforts are a great start and need to be continued to help make the Louisa County MRT stretch a safe and enjoyable trail for potential users.

### Shared Roadways

With an abundance of county roads with relatively low traffic counts, Louisa County offers bicycle riding opportunities to riders with some experience who are interested in on-road riding. Shared Roadways are a way to help cyclers find routes that make connections and are interesting to ride. Most of the suggested routes in this section are already being used by cyclists from Louisa and surrounding counties for extended bike rides. Designating routes as Shared Roadways will mainly involve providing maps to users and possibly adding "Share the Road" signs to alert motorists to the possibility of bicycle traffic.

#### General Recommendations

- Create a Shared Roadways map and make it available to the public on websites and in print
- Install "Share the Road" signs
- When upgrading/resurfacing Shared Roadways, consider adding 4' hard surface shoulders with rumble strip separation from vehicular traffic



County Rd G 28 Corridor

**Location:** Northwest Louisa County on County Rd G 28 and County Rd X 14

Length: 3 miles

Traffic Counts: 890

Vehicles/day

**Connections:** Muscatine County, Johnson County

Opportunities & Challenges: This corridor will provide a continuous signed route for an already regularly used shared road route in Muscatine County. This lightly traveled road is paved, however has no paved shoulders.



Eden Park Corridor

**Location:** Northwest of Columbus Junction on County Rd X 17

Length: 2.6 miles

**Traffic Counts: 350** 

Vehicles/day

Connections: Eden Park, Highway 92

**Opportunities & Challenges:** This corridor will provide access to Eden Park from Highway 92.

Highway 70 Corridor

**Location:** North of the City of Columbus Junction on Iowa

Highway 70

**Length:** 3.6 miles

**Traffic Counts:** 1,710

Vehicles/day

Connections: City of Columbus Junction, Muscatine

County

**Opportunities & Challenges:** Highway 70 is a moderately traveled paved highway providing direct access to Muscatine County trails from the City of Columbus Junction. This stretch of shared road route parallels the proposed off-road Cedar River Trail corridor, and can serve as a short term connection to Muscatine County for off-road users until the off-road trail is completed.





### North Loop Corridor

**Location:** North-Central Louisa County on County Rd X 43 and

County Rd G 40

Length: 17 miles

Traffic Counts: 420 Vehicles/day

Connections: Fredonia, Letts,

**Muscatine County** 

**Opportunities & Challenges:** This is already a popular route with local cyclists, and some riders make it a loop

by using Highway 92 or using gravel roads



### Highway 92 Corridor

**Location:** Northern Louisa County running east to west from the City of Cotter to the City of Grandview

Length: 14 miles

**Traffic Counts: 3,270** 

Vehicles/day

**Connections:** Cotter, Columbus Cities, Grandview, North Loop corridor, Eden Park, County Road W 66 corridor, US 61 corridor

**Opportunities & Challenges:** The highway 92 corridor makes up a large portion of the North Loop corridor and is also an important section of the Eden Park corridor. The remaining stretches of the corridor will connect the City of Cotter in the West to the City of Grandview in the East.

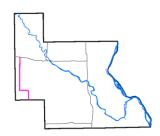
It is not recommended to open this route for use prior to the implementation of significant safety upgrades for trail users.

### Recommendations:

- Pave a minimum of a 4' shoulder, ideally 6' or more because of the heavy truck traffic this route sees. If possible install safety barriers or develop a grade separated trail away from the main vehicular travel lanes.
- Install proper signage ("Share the Road", "Bike Route", etc.)

### County Rd W66/G62 Corridor

Location: West Louisa County running north and south from the City of Cotter to the City of Wyman, ending at the Henry County line



Length: 10.7 miles

**Traffic Counts:** 410 Vehicles/day

Connections: Cotter, Wyman, Henry County,

Washington County, G62 corridor

Opportunities & Challenges: The north south paved roadway that connects Cotter and Wyman will offer trail users a connection from the northern set of trails in Louisa County to those in the south and central portions of the county. The lightly traveled roadway will not require any significant work prior to signing the route. The route will also give riders an option to travel west from Wyman to the Washington County line (1 mile) or south to the Henry County line, or continue east on the G62 corridor with access to the remaining trail corridors throughout the county.

County Rd G 62 Corridor

Location: Central Louisa County running east to west from the unincorporated town of Wyman in to County Road X61



Length: 17 miles

**Traffic Counts:** 420-1,140

Vehicles/day

**Connections:** Wyman, Wapello, South Columbus Communities Loop, Odessa WMA, Port Louisa National Wildlife Refuge, Washington County, Mississippi River Trail (MRT)

**Opportunities & Challenges:** The G62 corridor will be a critical east to west route that will provide great access to all portions of the overall trail system throughout the county by using one of several connections. Most of the

paved roadway is light traffic, however it is narrow and does not have paved shoulders and there are areas that see close to 1,200 vehicles per day, requiring paved shoulders or some other form of safety measures to be implemented in that area. The G62 corridor is the backbone for the loop complex between Columbus Junction, Morning Sun, and Wapello.

The far eastern portion of the G62 corridor will provide a short connection between the City of Wapello and the MRT route to the east (4 miles)



South Columbus Loop

**Location:** West Central Louisa County starting at the City of Columbus Junction following County Rd's X 17, X 37, and G 62.

Length: 20.1 miles

Traffic Counts: 290 Vehicles/day (X 17), 420 Vehicles/day (G 62), 640 Vehicles/day (X 37)

**Connections:** Columbus Junction, G62 Corridor

Opportunities & Challenges: This loop is already a popular route for cyclists in the area, and will follow lightly traveled paved roadways that will need no immediate work prior to designating the route. The loop will also provide access to the Cairo Woods Wildlife Area, something that many citizens identified as a priority at the public listening sessions (more access to natural areas).

Morning Sun to Wapello Loop

**Location:** South Central Louisa County starting at Morning Sun and following County Rd X 37, G62, US 61, 40<sup>th</sup> Street, M Avenue

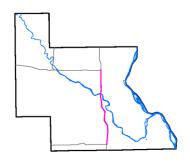


Length: 20.3 miles

**Traffic Counts:** 400 Vehicles/day (X 37), 1,140 Vehicles/day (G 62), 3,640 Vehicles/day (US 61), 440 Vehicles/day (40<sup>th</sup>/M)

**Connections:** Morning Sun, Wapello, Virginia Grove Recreation Area, Columbus Communities, South Columbus Loop, Cairo Woods Wildlife Area, Baird Timber Area

Opportunities & Challenges: This corridor will provide a continuous signed route for a loop trail that provides access to both local cities and natural areas. The County Rd G62 and US 61 stretches of this corridor are major concerns because of the traffic counts and the associated safety risks.



#### US 61 Corridor

Location: Central Louisa County running north and south from Des Moines County to the City of Grandview.

Length: 14.2 miles

**Traffic Counts:** 4590

Vehicles/day

**Connections:** Des Moines County, Newport, Wapello, Grandview, G62 Corridor, Iowa 78/H22 Corridor, Iowa 92 Corridor

**Opportunities & Challenges**: This corridor is being mentioned for future development in conjunction with the Iowa DOT as they redesign the US 61 highway corridor over the next 10+ years.

As it stands this corridor is not safe to designate as a bicycle route due to extremely high traffic counts and inadequate separation for trail users from the vehicular traffic.

If this corridor can be included in DOT plans and implemented in a safe manner for trail users and vehicle passengers, it will be a valuable north/south route that will provide direct access to nearly all of the remaining county wide trail segments.

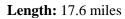
Once the corridor hits the City of Grandview we recommend following County Rd G44X north to the Muscatine County line in an effort to connect to the MRT route, as well as get away from the high traffic US 61 roadway.

### Recommendations:

- Maintain working contact with DOT planners through the development process for the US 61 redesign/construction
- If possible advocate for an off-road facility that would give separation between vehicular and alternative transportation options for maximum safety. If that's not possible, a 6'-10' paved shoulder with rumble strip separation would be adequate.

### Iowa 78/H22 Corridor

Location: Southern Louisa County running east/west from the Henry County line to Oakville



**Traffic Counts:** 440-1,760 Vehicles/day

depending on the stretch of roadway

**Connections:** Henry and Des Moines counties, Morning Sun, Oakville, MRT, US 61, Newport

**Opportunities & Challenges:** This narrow paved roadway has stretches with relatively high traffic counts, requiring safety measures to be implemented. It is a critical east to west route for the southern half of the county providing access to the remaining trail corridors.

From the City of Morning Sun east to the City of Oakville, this corridor will parallel the proposed off-road route that follows an abandoned rail line. This should be considered when determining the amount of upgrades that will be done to the shared road portion of this corridor, to avoid duplicating services.



Location: Southeast Louisa County along Highway 99 from Toolesboro (MRT) to the City of Wapello

Length: 6.2 miles

**Traffic Counts: 810** 

Vehicles/day

### **Connections:**

Wapello, Toolesboro, MRT, Turtle Bend WMA, Lake Odessa WMA

**Opportunities & Challenges:** County Rd 99 is a narrow paved highway with relatively low traffic counts. There are currently no paved shoulders, low traffic counts do not require them for safe use, but they are desirable.





County Rd G 56 Spur

**Location:** East central Louisa from County Road X61, west to US Highway 61 on County Rd G 56

Length: 2.9 miles

**Traffic Counts: 430** 

Vehicles/day

Connections: Mississippi River Trail (MRT), Port Louisa National Wildlife Refuge, Louisa County Conservation Office

**Opportunities & Challenges:** County G 56 is a paved rural highway with low traffic counts that can provide access from the US 61 Corridor to the MRT route and the Lake Odessa WMA. It is a narrow roadway lacking paved shoulders.

County Rd G 44X Corridor

**Location:** Northeast Louisa County on County Road G 44X from Grandview to Muscatine County/MRT

route

Length: 6.6 miles **Traffic Counts: 640** 

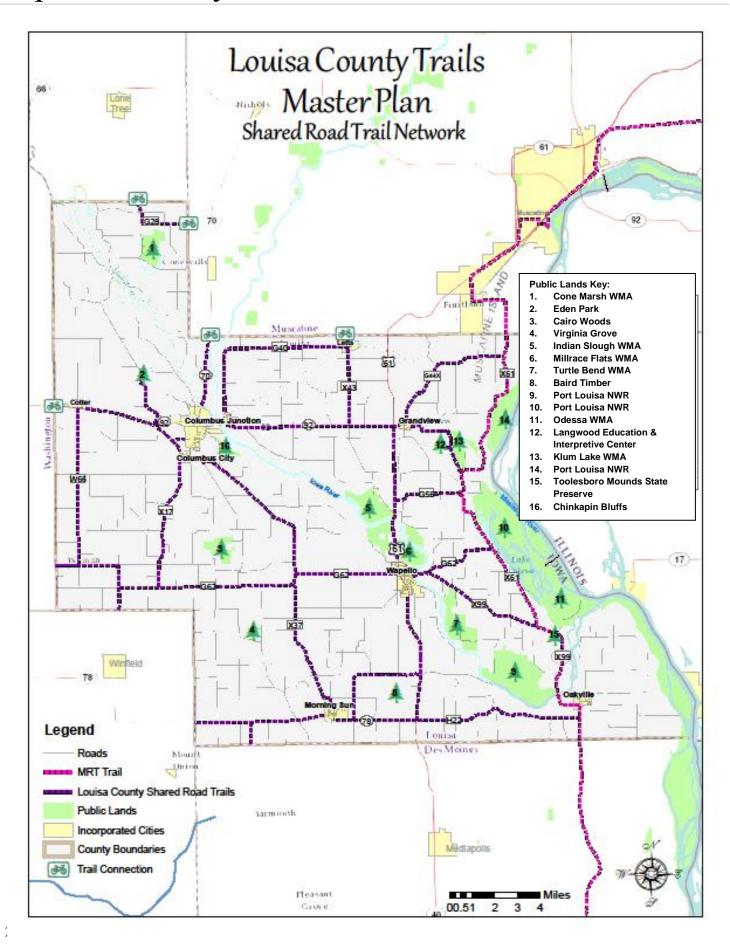
Vehicles/day

Connections: Muscatine County, Grandview, MRT

Opportunities & Challenges: This popular on-road route is already enjoyed by area cyclists and provides a paved country highway with light traffic. It will provide a continuous route for cyclists coming from and heading into Muscatine County from the north where existing bike routes are in place.



### Proposed County-Wide Shared Road Trail Network



### **Equestrian Trails**

Louisa County is home to an enthusiastic group of equestrian riders who currently rely mainly on private trails and county roads. Horseback riding is allowed on trails within two county-owned areas but only on a limited basis.

Equestrian paths are planned for all Shared Use Trails. See the Shared Use Trails section for descriptions of the existing and proposed trails. In addition, several equestrian only trails have been proposed. These corridors could be developed to offer a series of loop system trails of varying lengths for riders to choose from.

### **Existing Equestrian Trails**

Cairo Woods Wildlife Area

**Location:** 10 miles south of Columbus Junction/10 miles west of Wapello

**Length:** approximately 5 miles; area is 525 acres

Ownership: Louisa County Conservation

**Current Conditions & Amenities:** Equestrian use is allowed on most service roads through this area which are marked with signs. The natural-surface trails wind through the timber and grasslands. Parking lots are available at the two accesses where equestrian use is allowed though the East Access lot is too small for horse trailers. Equestrian use is allowed from May 21 – September 15.

**Opportunities:** Chance to see wildlife; mostly shaded during summer.

**Challenges:** Trail maps need updating. This area was purchased with Wildlife Habitat Stamp funds and hunting must be allowed. In addition, that funding source restricts development of amenities.

#### **Recommendations:**

- Keep trees trimmed high enough for riders on horseback.
- Ensure that equestrian trail signage is up-to-date
- Be sure that trail users are aware that hunting is allowed on the area

Indian Slough Wildlife Area

Location: 3 miles NW of Wapello

Length: 4 miles; area is 1100 acres

Ownership: Louisa County Conservation

Current Conditions & Amenities: This is a wetland area in the floodplain of the Iowa River. Mowed service roads and prescribed fire breaks can be used for horseback riding from May 21 to September 15. The Main Access parking lot is large enough for horse trailers.

**Opportunities:** Chance to see wildlife, especially water birds; flat/level.

**Challenges:** Mowed trails vary from year to year so mapping the trails will be difficult from year to year. This area was purchased with Wildlife Habitat Stamp funds and hunting must be allowed. In addition, that funding source restricts development of amenities. Because this floodplain area is open to the river, it floods during high water.

#### **Recommendations:**

None

### **Proposed Equestrian Trails**

Please See Map on Page 30.

Cedar River Corridor: 3.2 miles

North Central Loop; Letts to Grandview: 16.4 miles

Southwest Central Loop: 42 miles

Chinkapin to Cairo Loop: 18.7 miles

Chinkapin to Morning Sun Loop: 34 miles

Cairo to Morning Sun Loop: 27 miles

Morning Sun to Wapello Loop: 16.8 miles

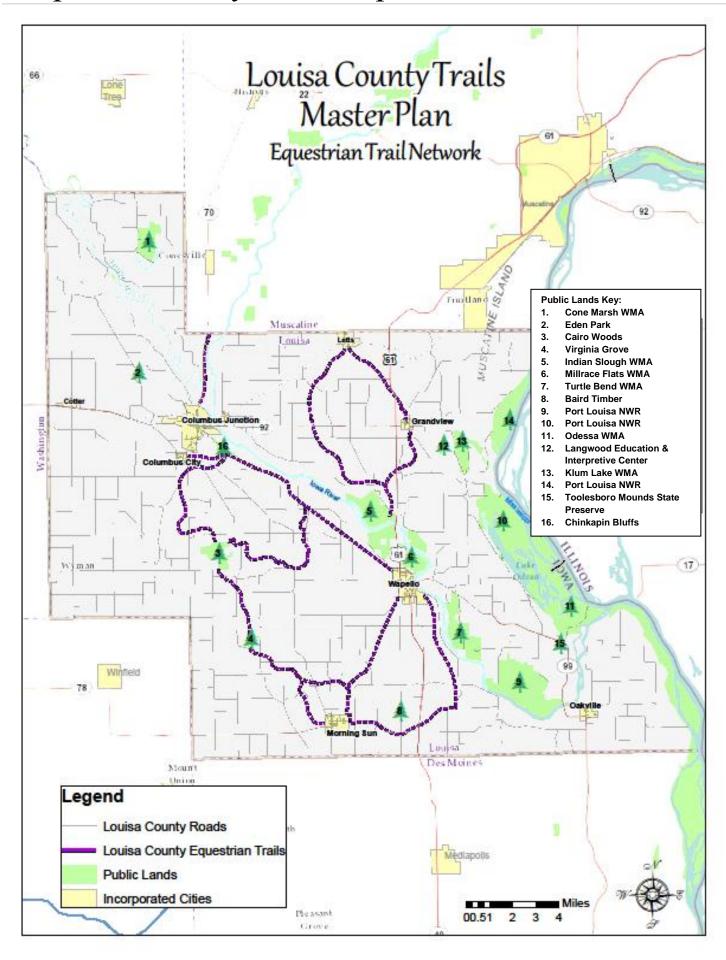
Morning Sun Loop: 7 miles

Equestrian trails require specific amenities that traditional Shared Use trails do not, mainly the ability to park large horse trailers and offer the room necessary to stage your horses for the upcoming ride. Water access would be ideal, but not necessary as most trailers will have a water supply on them for the horses.

The equestrian loops identified in this plan will provide challenges to implement because of their reliance on privately owned land. It is recommended to start making contacts and locating land owners who are willing to allow the corridor through their land/sell easements for the trail. Let the trail map itself that way, rather than mapping a specific route.

Equestrian trails don't require a tremendous amount of construction work, and in many instances require nothing more than proper signage being installed, but they are still difficult to implement because they rely on privately owned land in most instances. The areas shown on the map were identified as desirable locations for trails, however the specific corridor depicted is not necessarily the location the trail must go, it is merely a spatial reference for desirable locations and general connectivity to other trails.

## Proposed County-Wide Equestrian Trail Network



### Water Trails

Louisa County has two water trails designated through the Iowa Water Trails program. One winds through Port Louisa National Wildlife Refuge, Odessa Wildlife Management Area and the Mississippi River. The other is on the Iowa River, bringing paddlers from Iowa City to the mouth of the Mississippi River.

One overall need is for a canoe/kayak rental business in the county.

#### Odessa Water Trail

**Location:** 5 miles east of Wapello on Odessa Wildlife Management Area, Port Louisa National Wildlife Refuge and the Mississippi River

**Length:** approximately 20 miles or marked trail; area is 6,400 acres

Ownership: U.S. Fish & Wildlife Service, Iowa Department of Natural Resources; Louisa County Conservation helps coordinate water trail promotion.

Current Conditions & Amenities: There are five official launch points for the Odessa Water Trail – three have boat ramps, one has walk-down access and the other can be difficult to launch from, depending on the water level. All accesses have adequate parking. There is a permanent restroom at one launch. There is good way finding signage from the highways to the accesses. A website and brochure/maps are available at several locations. There are kiosks with maps and interpretation at two accesses. There is one campground.

**Opportunities:** Offers a unique experience for paddlers, winding through backwaters with many opportunities to view wildlife. The area is very large and offers opportunities for multi-day trips.

For details regarding access dates Legend see www.NaturallyLouisaCounty.com \* North Water Trail (Feb. to Sept. 14) Boat Ramp Ž. Goose Water Trail (Jan. to mid-Oct.) Canoe Access Mississippi Water Trail (Year-round) H Info Kiosk South Water Trail (Year-round) Ĺ Portage Trail ----- Hike/Rike Trail Scenic Overlook Port Louisa National Wildlife Refuge <del>o</del> Bike Trail Odessa Wildlife Management Area \* Hiking Waterfowl Controlled Hunting Area ili Restroom Great River Road Å Campground 1 50 PE 益納人自 lowa T > 1"Take nothing but pictures; Leave nothing but wake;" Mounds & Museum 

**Challenges:** Restrooms are lacking at most accesses.

#### **Recommendations:**

- Provide seasonal restrooms at accesses
- Improvements to launch point in Port Louisa NWR

Location: From Iowa City to the Mississippi River

Length: 72 miles total, about 46 in Louisa County

Ownership: Accesses in Louisa County owned by Louisa County Conservation, City of Wapello and Army Corps of Engineers. Louisa County Conservation helps coordinate water trail promotion.

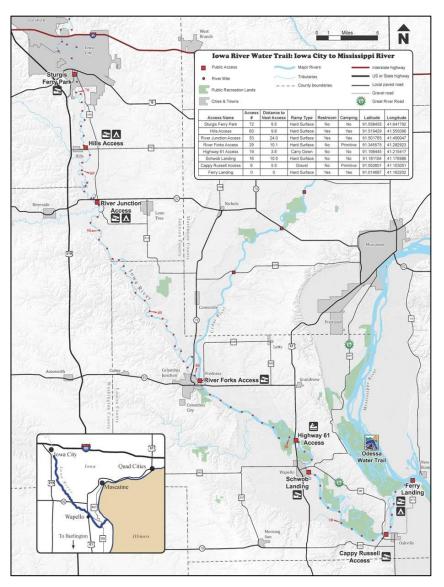
Current Conditions & Amenities: There are five official launch points in the county – four have boat ramps, one is inaccessible since the flood of 2008. All accesses have adequate parking. There is a permanent restroom at one launch. There is good way finding signage from the highways to the accesses. A website and brochure/maps are available at several locations. There are kiosks with maps and interpretation at two accesses. There is one primitive campground and camping is allowed at two other accesses.

**Opportunities:** Offers great opportunities for wildlife viewing and scenic beauty. The river is wide and has many sandbars at low water levels. Connects to the Mississippi and Cedar Rivers.

**Challenges:** Restrooms are lacking at most accesses.

#### **Recommendations:**

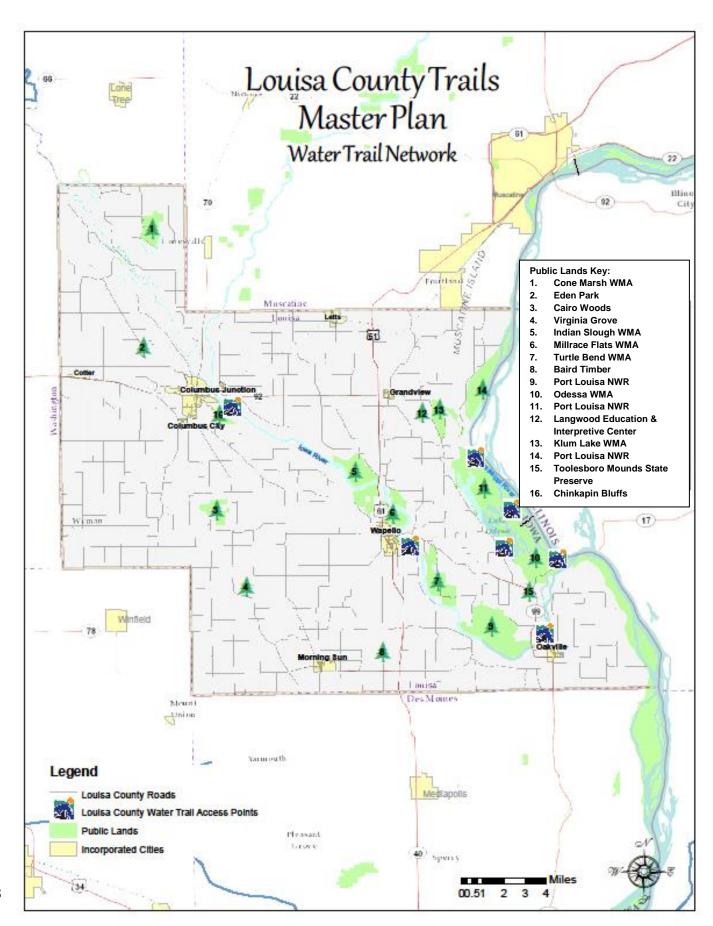
- Provide seasonal restrooms at accesses
- Improvements to Highway 61 access



### Proposed Cedar River Water Trail

Louisa County is currently looking into partnerships with Muscatine, Cedar and Linn Counties to create a water trail on the Cedar River from Cedar Rapids to Columbus Junction, at the confluence of the Cedar and Iowa Rivers.

### County-Wide Water Trail Network - Access Points



### Signing Recommendations

Implementing signage along a trail corridor is an important aspect of successful trail design, and one that is often times overlooked. Signage increases the safety for trail users, aids in trail navigation, provides trail rules/restrictions, interprets of natural features, offers directions to local amenities, and provides other way-finding needs.

All trail projects should include signage, and should be considered from the beginning stages of development. Because the circumstances around each individual trail are unique, sign plans should be developed individually on a case-by-case basis to ensure the best fit for any particular set of circumstances. However, a countywide sign plan with some common signage would help users more easily find different trails.

According to the Iowa Trails Plan 2000, there are five basic types of signs to consider when developing signage for a trail system:

Directional signage – trail names, road names, mileage to area attractions, direction arrows, or any other navigational information

Cautionary signage – signs that warn trail users of potential trail hazards i.e. steep grades, blind curves, road crossings, etc.

Regulatory signage – provide rules and regulations specific to a trail, or section of trail

*Interpretive signage* – educational information on the local environment. Can include information on wildlife, local history, farming technology, etc.

Objective signage – contains information regarding trail conditions such as width, grade, obstacle height, or any other special concern that could impact a trail user. For instance a handicapped individual in a wheelchair could not use a trail with steep grades, or one that is not at least 36" wide.

The following is a set of general guidelines to help with signage placement along a trail corridor (*Iowa Trails* 2000):

- All trail signage needs to be located in a clearly visible area
- Trail signs should have a standard distance from the trail edge. 3'6" is preferred.
- Lettering greater than two inches in height is recommended for directional signs
- Text should be avoided on regulatory or cautionary signs wherever possible
- Multiple signs may be mounted on the same post, but the primary message should be in the top position on the post.

### Implementation

Implementation of the Louisa County Trails Plan will require additional work to be performed in order for trail corridors to be developed. This work will include professional engineering, planning, construction, and maintenance among others. The following sections will outline the general process and roles and responsibilities for the successful long term implementation of this plan.

### **Priority Projects**

The LCTC will periodically review the Louisa County Trails Master Plan on a bi-annual basis to help maintain the accuracy and integrity of the planning document and the recommendations it makes. These bi-annual reviews will mainly consist of monitoring the priority projects, a list of the top 5 trail projects for that upcoming year. This list will provide the guidance needed to help direct funding to those areas of the county-wide trail system that need it the most. When previously listed projects are completed they will then be replaced with the next priority project as determined by the LCTC during their bi-annual review process. Appendix A lists details and status on each year's priority projects.

### **Funding Opportunities**

It is likely that a majority of the trail recommendations found in this document will require the acquisition of additional funding in order to pay for their implementation. Funding may be available through federal, state and local grant opportunities as well as through fundraisers and public donation. The methods needed in order to fund any section of trail will vary greatly depending on the County's policies, local fund availability, and a number of other factors. Some options available will include one, or a combination of the following types of funding. Please reference Appendix B for detailed grant opportunities in our region.

Current Revenues – This funding source is the preferred option because it eliminates the presence of future interest charges, however it is also one the most difficult areas to pull the necessary funding from in order to build trails because of the recent economy and the resulting budget constraints that communities are experiencing.

Grants-In-Aid — There are a large number of financial cost-share programs offered by the Federal and

State Governments to help with trail construction. These programs will typically pay a percentage of the project under the condition that the applicant will provide matching funds at a defined level.

Fundraising – Several successfully implemented trail systems across the nation have relied on yearly fundraising campaigns to help offset the costs of continued maintenance and future development. The possibilities for these types of opportunities are limitless, be it through a traditional style fundraiser like a bake sale or golf outing, or a more abstract idea such as a polar plunge or snow shoe softball tournament, any idea that will produce local donations is a good one.

Borrowing – While borrowing funds in today's economy is not a favorable proposal, the sale of bonds can be, and is, a legitimate option for the procurement of the necessary funding needed to construct a trail project. The sale of bonds provides for a more equitable distribution of costs between present and future trail users, but will also incur interest costs that will increase the price of the project.

Gifts and Trusts – Land or monetary donations and endowments are one option to help support the long term maintenance, or the initial construction, of a trail project. Trusts have proven to be a successful method for providing and maintaining trail facilities in many towns throughout the country.

Endowment Fund – When building new trails, include in the cost establishment of an endowment fund to be used for ongoing maintenance costs.

Other – Some other sources may include local foundations, service clubs, support groups, or not-for-profit organizations to name a few. These types of sources are frequently used for trail maintenance and upkeep however can be used to help raise funds for trail development as well.

Funding Opportunities, under the resource center in the appendices, lists existing federal, state, and local funding sources. These sources are subject to change on a yearly basis and as such will require constant maintenance in keeping the list accurate over time, something that can coincide with the bi-annual updating of the priority projects described earlier.

### **Roles and Responsibilities**

Ensuring long term success for the implementation of this plan will rely on the assignment of roles and responsibilities to local agencies and citizen groups. While it is acceptable to identify individuals for particular roles, it is recommended to task an agency, or a department within an agency, with a particular task so in the event that a staffing change is made the role and/or responsibility will still be clearly with the agency rather than the individual who no longer works there.

Roles and responsibilities can include anything that the LCTC determines they would like to maintain as an annual function of the implementation of the trails plan. The following four sections describe basic roles and responsibilities such as trail planning, trail maintenance, trail operation, and communication. These four main functions are the foundation to successfully implementing any trail planning effort, however as stated earlier can include any number of additional roles/responsibilities as deemed necessary by the LCTC.

Organizations that typically get tasked with these roles and responsibilities include the trail committee (LCTC), county conservation offices, county engineers, local/regional planners (no city planners in Louisa County, so SEIRPC), local trail advocates (equestrian group, bike clubs, etc.). Maintenance efforts can also look to local groups such as the 4H clubs, boy scouts, local high school community service programs (Silver Cord), and other service organizations that have the time and willingness to help the cause.

### **Trail Planning Strategies and Policies**

Successfully implementing this plan will require the development of a variety of trail facilities including Shared Use Trails, paved shoulders, Signed/Shared

roadways, and bike lanes. Below are some strategies/policies to help implement those recommendations:

Preserving and maintaining current trails increases local support for the development of additional trail facilities throughout the county.

Iowa DOT and other state and federal agencies should be consulted based on the funding sources being used for each specific project. Each funding source has specific procedures that need to be followed, and those rules and regulations are clearly defined once an award is granted. SEIRPC can facilitate the compliance of all federal and state regulations.

Emphasis should be placed on completing national, state, and regional trail corridors that pass through Louisa County. Developing quality facilities for these larger scale trails will increase the local desire for an interconnected countywide trail system.

Corridors identified in this plan as Signed/Shared roadways should have continuous paved shoulders, increasing usage and safety for both the trail user and vehicle traffic. Areas that need rumble strips can look to place those features right next to, or underneath, the fog line to give bikers more shoulder to operate in.

Ongoing public outreach and trail advocacy will be critical to the success of this plan. Many Signed/Shared roadways, even though they are clearly marked, are newer concepts to Iowa and will result in the need for educational efforts for both cyclists and vehicle drivers to ensure safe use of the facility.

Once the plan has been adopted by local communities and put into action it is recommended that trail development be included as a portion of other new developments occurring in and around the trail corridors identified in this plan. There are a number of methods that can be used to accomplish this, such as land dedication ordinances, subdivision codes, dedicated easements, or proffers to list a few.

### **Trail Maintenance and Operation**

Ongoing trail maintenance and operation costs should be considered from the early stages of trail development. Yearly costs will be incurred in the maintenance of any trail system, and should be considered as an additional line item to the budget of the adopting agency to ensure fund availability on a yearly basis. Many of the grants available for trail development and construction do not allow those funds to be used for trail maintenance, resulting in the need for the trail owners to identify how the maintenance will be funded. In most scenarios the agency or group that was responsible for constructing a trail, is then responsible for ongoing trail maintenance costs/duties.

### **Operations**

Trail operation is the term describing the day-to-day management of a trail and its usage. Responsibilities as they pertain to trail operation include:

- Marketing
- Law Enforcement
- Fee Collection (if applicable)
- Special Events
- Maps and Brochures
- Other Functional Considerations

Many of the responsibilities of trail operation will rely on the day-to-day implementation of previously set policies regarding trail use. The following are some common tips to help with trail operation:

Create an adopt-a-trail program to help reduce long term maintenance costs, and to help cultivate a local pride of ownership in the trail.

Assist local law enforcement with the development of a citizen patrol type of program that will help minimize criminal activity.

Whenever possible try to eliminate graffiti targets such as blank walls, fences, etc. Where walls may be necessary, install a vegetative screen in front of it to reduce the potential for graffiti.

Trail maintenance costs can be difficult to predict on a yearly basis and will depend on several factors such as: trail length, surface, geographic location, irrigation,

allowed uses, law enforcement demands, and countless other potential variables.

Trails should be accessible to maintenance and emergency vehicles.

#### Maintenance

Maintenance of a trail consists of all the activities necessary to provide a safe and usable trail surface for potential users. Typical maintenance activities will include, but are not limited to:

- Mowing
- Brush Removal
- Repair/Replace Damaged Amenities (signs, benches, etc.)
- Trail Surface Repair
- Drainage

These activities are critical to maintaining the highest quality experience for trail users, and also extending the useful life of that facility. Typical trail construction has a useful life of 20 years before needing serious attention, depending on the type of trail and surfacing used in the construction of that trail. Forming partnerships with local government entities and citizen interest groups and organizations will help ensure that adequate resources are available to maintain the trail network.

### Communication

Trail planning is a long process that can take years before any progress is seen on the ground, so constant communication will be critical as the LCTC begins implementing the recommendations in this plan. It will be necessary for the LCTC to actively engage local communities, interest groups, and citizens throughout the development and implementation of each phase of this plan. Frequent updates and the opportunity to help take part in the development of a proposed trail facility will increase the local sense of ownership and pride in that trail, and will result in a higher level of participation as compared to a project that is completely developed and implemented with little to no public contact or input.

For trails that affect multiple jurisdictions, cooperation between those different entities will decrease overall costs by sharing expenses, and increase the strength of potential grant applications by showing the benefit of the project to multiple areas and how all involved entities are working together towards the successful completion of the project.

The LCTC should also have a representative assigned to check in with surrounding counties at least every 6 months to see what may be happening in neighboring counties that could affect Louisa County trails in the future. Keeping regular contact with neighboring counties will enhance the trail systems for both counties in the long run by providing connections between the two counties that otherwise may not have happened for any other reason than poor communication.

# Appendices

Appendix A: Priority Projects

### Appendix B: Funding Sources/Grant Opportunities

The following list is not intended to be an all-inclusive list for trail funding opportunities. Grant opportunities are constantly changing, especially on the local level, so the list presented below addresses the most common and well-established state, regional and national programs.

### **State and Regional Programs**

Program: State Recreational Trails Program

Agency: Iowa Department of Transportation

Website: www.dot.state.ia.us

Description: The State Recreational Trails Program funds public recreational trails. The grant requires a 25% local match and the trail must be maintained as a public facility for a minimum of 20 years. Projects must be part of a statewide, regional, area-wide, or local trail plan. State agencies, counties, and eligible cities and non-profit organizations may sponsor applications.

Deadline: January 2<sup>nd</sup> and July 1<sup>st</sup>

Max. Amnt: N/A

Program: Federal Recreational Trails Program

Agency: Iowa Department of Transportation

Website: <u>www.dot.state.ia.us</u>

www.fhwa.dot.gov/envrionment/rectrails/index.htm

Description: This program is intended to provide and maintain motorized and non-motorized recreational trails and trail-related projects. Public agencies, non-profit organizations and private organizations (and/or individuals) are eligible to sponsor. Private sponsorship will require a public agency co-sponsor. Minimum 20% local match is required. Trails resulting from successful applications must be maintained as a public facility for a minimum of 20 years. Must have Iowa DOT recommendation and Iowa Transportation Commission approval. FHWA environmental concurrence is required. Projects must conform to federal funding regulations.

Deadline: October 1<sup>st</sup>

Max. Amnt: Set by DOT

Program: Transportation Enhancements Program - Regional

Agency: Iowa Department of Transportation

Website: www.sysplan.dot.state.ia.us/rpampocontact.htm

Description: The Federal Transportation Enhancements Program funds enhancements or preservation activities of transportation related projects. Trail projects may fall into one of three categories: Trails and bikeways, historic preservation, or scenic and natural resources. A 20% local match is required.

Deadline: Varies

Max. Amnt: Varies annually

Program: Federal Transportation Enhancements Program - Statewide

Agency: United States Department of Transportation

Website: www.fhwa.dot.gov/environment/te/index/htm

Description: The Federal Transportation Enhancements Program funds enhancements or preservation activities of transportation related projects. Trail projects may fall into one of three categories: Trails and bikeways, historic preservation, or scenic and natural resources. A 30% local match is required.

Deadline: October 1<sup>st</sup>

Max. Amnt: N/A

Program: Federal Surface Transportation Program (STP)

Agency: Regional Planning Office (SEIRPC, Burlington)

Website: <a href="www.sysplan.dot.state.ia.us/rpampocontact.htm">www.sysplan.dot.state.ia.us/rpampocontact.htm</a>

Description: Bicycle and pedestrian facilities, transit capital improvements and transportation planning activities. A 20% local match is required.

Deadline: Varies

Max. Amnt: Varies

Program: Federal Safe Routes To School (SRTS) Program - Statewide

Agency: Iowa Department of Transportation

Website: www.dot.state.ia.us/saferoutes

Description: Funds infrastructure and non-infrastructure programs that encourage youth and their families to choose walking, bicycling and other active ways to get to and from school. 100% federal share – no local match required; reimbursement grants.

Deadline: October 1<sup>st</sup>

Max. Amnt: \$250,000

Program: Resource Enhancement and Protection (REAP)

Agency: Iowa Department of Natural Resources

Website: <a href="http://www.state.ia.us/dnr/organiza/reap/">http://www.state.ia.us/dnr/organiza/reap/</a>

Description: The Iowa DNR will fund recreation enhancement projects that deal with trails and preserving natural areas from improper land use. Typical projects include trails, arboretums, rest rooms, shelter houses, picnic facilities, museums, parks, preserves, and forests. REAP provides up to 100% of project costs, but may partially fund certain projects depending on yearly allocations to the program. No local match is required.

Deadline: August 15

Max. Amnt: Varies based on population

Program: Land and Water Conservation Fund

Agency: Iowa Department of Natural Resources

Website: www.iowadnr.com/grants/landwater.htmls

Description: The Land Water Conservation Fund provides 50% grants for acquisition and development of outdoor recreation areas and facilities. Grants are made to the State of Iowa or its political subdivisions.

Deadline: March 15th

Max. Amnt: N/A

Program: Community Attractions and Tourism (CAT)

Agency: Iowa Department of Economic Development

Website: www.visioniowa.org/cat.html

Description: The CAT program funds community attractions and tourism development activities that enhance the economic impact of tourism. Some trails may meet these criteria. One-third of the funds available through the CAT program shall be allocated to projects in cities with populations of 10,000 or less, and /or counties that are among the 33 least population counties in Iowa. If any portion of these funds has not been awarded by April 1<sup>st</sup>, the funds shall be available for any community or county in the state. Eligible applications include a city, county, public organization, or school district in cooperation with a city or county. Any of these entities may co-apply; if a school district applies they must do so as a co-applicant. 50% local match is required.

Deadline: Quarterly

Max. Amnt: N/A

### **Nationwide Programs**

Program: Economic Development Administration

Agency: United States Department of Commerce

Website: www.doc.gov/eda/html/prgtitle.htm

Description: This agency offers grants for public facilities, including port facilities, tourism facilities, planning

assistance etc. Public works projects can include trail and other recreational facilities. A 50% match is

required.

Deadline: N/A Max. Amnt: N/A

Program: Wildlife Conservation and Appreciation

Agency: U.S.Fish and Wildlife Service

Website: www.fws.gov/

Description: The Wildlife Conservation and Appreciation program funds initiatives for which the principal purpose is

to provide opportunities for the public to use and enjoy fish and wildlife through non-consumptive activities. Uses: trail development and acquisition pertaining to non-game wildlife enjoyment, including

trails and waterways.

Deadline: March, July and December

Max. Amnt: \$250,000 per state

Program: Bikes Belong

Agency: Bikes Belong Coalition, Ltd

Website: http://bikesbelong.org/site/index/.cfm

Description: Bikes Belong's goal is putting more people on bikes. They seek to assist local organizations, agencies,

and citizens in developing bicycle facilities that will be funded by TEA-21. Local match is required.

Deadline: August and November

Max. Amnt: \$10,000

Program: The National Trails Endowment

Agency: American Hiking Society

Website: www.americanhiking.org/alliance/fund.html

Description: This program was established to provide grants to trail organizations working to establish, protect and

maintain America's foot trails. Grants will be awarded to trail organizations and other non-profits with a

trail-related focus.

Deadline: November 1<sup>st</sup>

Max. Amnt: N/A

Program: Community Facilities Loans

Agency: Community Facilities Loans

Website: www.rurdev.usda.gov/

Description: This program provides grants to assist in the development of essential community facilities in rural areas

and towns of up to 20,000 in population. Grants are authorized on a graduated scale. Applicants located in small communities with low populations and low incomes will receive a higher percentage of grants. Grants are available to public entities such as municipalities, counties, and special-purpose districts, as well as non-profit corporations and tribal governments. In addition, applicants must have the legal authority necessary for construction, operation, and maintenance of the proposed facility and also be unable to obtain needed funds from commercial sources at reasonable rates and terms. Community facilities loans fund the construction, enlargement, extension, or otherwise improvement of community

facilities. Trail benefits could include improved access through utilities extensions.

Deadline: N/A Max. Amnt: Varies

### Appendix C: Community Involvement Process

Public Input Questionnaire

### Louisa County Regional Trails Council

Public Meeting Questionnaire: October 27, 2011 (3 meetings)

### Vision Planning

We are in the early stages of creating a vision for the design and development of Recreational Trails in Louisa County. We are seeking your input to help us define and develop that vision. This questionnaire is one tool to get that input. Please return your questionnaire to the registration table or put it in the box marked completed questionnaires before you leave.

Visit	or Use and Experience
1. Pl	lease circle the non-motorized trail uses you would support:
	a. Walking
	b. Bicycling
	c. Horse/equestrian
	d. Running
	e. Operation of electric wheelchairs and similar devices for the mobility impaired
	f. Access to rivers for fishing, canoe and kayaking, etc.
	g. In-line skating
	h. Pet walking
	i. Any other uses (list)
2. W	hat would be <b>your</b> primary use of recreational trails?
	ninking of all the uses above, do you see any significant potential for conflict among any of the trail uses listed above? s, what are they?

4. What other kinds of activities would you	and your household want a trail to provide?
5. Please circle the services/products you a	nd your household would like to be able to access from a trail:
a. Restaurant	
b. Farmers market	
c. Convenience store/grocery	store
d. Variety of shopping opport	unities
e. Bicycle repair and support	
<ul> <li>a. Bicycle rental</li> <li>b. Historic/cultural features</li> <li>c. Motel/hotel</li> <li>d. Bed &amp; breakfast</li> <li>e. Other (list)</li> </ul>	
6. Have you or your family ever used any	rails in the surrounding area or state?
If yes, which trail is your favorite?	Trail
Why is it your favorite?	
Socio Economic Benefits	
7. Creation of a trail would provide many be	enefits. Please rate their importance to you.
1 is NOT important, 2 is MODERA	TELY important, 3 is VERY important.
Benefits	Rating
Health/fitness	
Opportunity to train for running, walking, b	iking events
Site for running, walking, biking events	
Recreation/fun	
Economic opportunity for businesses	
Opportunity for outdoor education	
Non-motorized transportation between com-	munities, neighborhoods
Opportunity to socialize	

Be outdoors, experience nature				
Access to other recreation sites				
Access to cultural/historic sites				
Tourism				
Safety				
Environmental Green Space				
Can you think of other benefits besides those listed above? If yes, what are they?				
8. If you had a vision for a trail, what would it include?				
9. What are your concerns regarding the development of trail in Louisa County?				
10. In your mind, what are some special places in our county that a trail should highlight (e.g. natural resources cultural/historic resources, recreation opportunities, etc.)				

# **Louisa County Trails Council Survey 2011**

This survey was made available at the public input meetings on October 27, 2011. After the meeting it was available online and advertised through local newspapers.

#### **Total Respondents = 35**

Received at the meetings = 21 Online respondents = 14

# Question 1. Please check all of the non-motorized uses you would support:

Walking	32
Bicycling	28
Horse/equestrian	18
Running	20
Operations of electric wheelchairs and similar devices for the mobility impaired	12
Access to rivers for fishing, canoe and kayaking	22
In-line skating	7
Pet walking	20
Other: ATV riding	1
Other: cross country skiing	3
Other: snow shoeing	2
Other: Ag Center	1
Other: golf carts	1
Other: cross country running	1

# Question 2. What would be your primary use of recreational trails?

walking/running/hiking/exercise	23
Bicycling	16
Horse/equestrian	7
In-line skating	2
Pet walking	1
enjoying nature	3
Other	2

walking/running/hiking/exercise	23
Bicycling	16
Horse/equestrian	7
In-line skating	2
Pet walking	1
enjoying nature	3
Other	2

#### Question 3.

# Thinking of all the uses above, do you see any significant potential for conflict among any of the trail uses listed above? If yes, what are they?

horseback riding and ATV's

Have been on many trails where pets were not on leashes.

biking&horse's

Horses would probably need their own trail

Bicycles & Skaters may spook horses. Walkers, bicyclists, and skaters may not appreciate the fecal matter left behind by horses.

just be courteous and aware of others

horses and bicycling and pet walkers

yes, bikes and horses

yes-personality conflicts

horse crap, bad manners

no not with trail etiquette

from experience there can be conflict but with education it can all work out. Courtesy is the key

possible if horses are with motorized vehickes

yes but always conflicts but users can always emphasize common ground and avocate for all kinds of trails.

horses

none but take into a account the new 4-lane Hwy 61

horse riding and bicycling

pets on leash

making it wide enough for wheelchair accessbility

#### Question 4.

#### What other kinds of activities would you and your household want a trail to provide?

**IDENTIFICATION OF PLANTS** 

wildlife viewing

picnic area along trail

all the above

ATV trails

Places where you could stop and take photos of wildlife

bird watching, access to parks

cross country trails

signage about nature, trees

camping

education, recreation

wooded area

historical info, tree id

nature hikes

snowmobile riding

biking, running. A place to view wildlife

educational stops along the trail

safe exercising

golf carts for handicapped

maybe cross country skiing

# Question 5. Please indicate all of the services/products you and your household would like to be able to access from a trail:

Restaurant	17
Farmers market	8
Convenience Store/Grocery Store	16
Variety of shopping opportunities	6
Bicycle repair and support	5
Bicycle rental	9
Historic/cultural features	16
Motel/Hotel	6
Bed & Breakfast	7
Other	10

waterways, prairies, towns country store drinking water/cooling off campground resting ice cream restrooms map kiosks

Wooded areas/scenic views

# Question 6. Have you or your family ever used any trails in the surrounding area or state?

No	8
Yes	27

Which trail is your favorite?	Why is it your favorite?
HOOVER	CLOSE TO WHERE WE LIVE
Smokey Mountain trail	scenary
geode state park trail	beautiful scenery around the lake
water trails	love 2 paddle.
Hoover	Close
Lake Geode	Virginia Grove
Shimek Equine Trails	Has an extensive amount of trails, so it makes it worth it to load up and spend the day or
	longer there.
Shimek Forest	visual
Hoover trail	only one near
Britton Timbers	no hunting
Shimek Forest	lick creek
Root River	river
Chickapin	proximity to where I live
Shimek forest, Brushy Creek	lots of trails, showers, water ect
Cedar Bluff, Loud Thunder, Big Hollow	cedar bluff
Wldcat Den	rugged rocks, forest, fall colors
Backbone State Park	scenic trail along river and through the woods
Moline to Savanna Illinois	no auto traffic, lots of small towns to visit
Decorah	Lake Geode

Big Hollow	Horse trails
canoe wisc. trail	water trail
Coralville, Muscatine, Kewash	close and no motor vehicles allowed
muscatine river front	hard surfaced
Quad cities	Lots of scenery, access to shopping, meals, length of trail, surface of trail
Ledges State park trails	nice hiking and scenic views

# Question 7. Creation of a trail would provide many benefits. Please rate their importance to you.

1 = NOT important 2 = MODERATELY important 3 = VERY important

Health/fitness	2.8
Opportunity to train for running, walking, biking events	2.5
Site for running, walking, biking events	2.4
Recreation/fun	2.8
Economic opportunity for businesses	2.2
Opportunity for outdoor education	2.4
Non-motorized transportation between communities,	
neighborhoods	2.4
Opportunity to socialize	2.1
Be outdoors, experience nature	2.8
Access to other recreation sites	2.6
Access to cultural/historic sites	2.4
Tourism	2.4
Safety	2.6
Environmental Green Space	2.5

#### Can you think of other benefits besides those listed above? If yes, what are they?

Creating a better enviornment to live within louisa county for youth and recreational adults alike. quiet time - away from roads and factories

connect visitors with towns people

survival skills

# Question 8.

#### If you had a vision for a trail, what would it include?

put one near swinging bridge in columbus junction and one at Toolsboro and have south of Tyson in columbus junction near where the bridge collapsed

a variety of terrains and scenery

Keep up the good work

Multi use areas that would support responsible ATVing and other trail users.

A nice, extensive equine trail system that was nicely maintained...that would draw other riders to the area. We have a lot of local people that have horses, but just no place to go for nice rides...other than riding along the road.

good accessibility, wooded and open space

a trail that would connect all the communities and their historical sites

scenic

length, access

enough mileage to make it fun, woods

something mowed good surface, trees, loop trail-come back to where you started

along the river and through the woods

through the woods with hills

paved trails remote from autos and pass through small towns

water access, wildlife and plants

build the economy through trails

different sites to see, a trail for horses that includes bridges to cross

biking on trails with no motor vehicles

rest areas, interpretive signs, car parking

off road, hard surface, trail linking cities together

Off road trail, hard surface for hiking thru a wild area with water close by and some hills. This trail would allow hikers to hike two days and camp at least one night without having to cross major roads or make loops.

#### Question 9.

#### What are your concerns regarding the development of trails in Louisa County?

money and taking farmland out of production

Making sure they can be supported financially and offer a variety of uses.

There won't be any/many maintained equine trails Most trails are for walkers/runners and bicyclists There is a pretty larger horse community in Iowa, Illinois and Missouri, and more trails for us, especially locally would be wonderful!

no eminant domain, voluntary lease of land. Take no farm ground out of production

safety

expanded dates, being able to ride without conflict with hunters

lack of public interest

selling the idea to the rest of the community

maintenence

soil erosion, water quality

up keep, closings like in fall for hunting

funding

developing momentum

New 4-lane Hwy 61 and there being a conflict

funding

there being construction in the way or taking away from another trail

money

tax payers ney sayers, land owners

buy in from farmers

takes money to build them!

#### Question 10.

In your mind, what are some special places that a trail should highlight (natural resources, cultural/historic resources, recreation opportunities, etc)?

You need to run more about naturly louisa calendar of events in River Rambler and other tourism outdoor publications

Lake Odessa Port Iouisa Refuge

Unique scenic and historical places.

It would be nice to have them go along Lake Odessa, the nature preserve, the parks. It would be neat to have a trail system at Virginia Grove that would meet up with the trail system (if it was maintained more) at Cairo Woods.

Cario Woods, river trails,

Lake Odessa

Langwood, Burris City, Oakville

Lake Odessa and all the other natural areas

river front-sugar bottom bike trail

rails to trails, lowa river, mississippi river

Langwood and Indian Slough

Toolesboro

Iowa river, Indian Slough, Toolesboro Mounds

ATV trails needed

natural resources

**Great River Road** 

lake odessa, mississippi river levee, railroad CJ to Wapello

lots!!



# Prepared for:

# **Louisa County Conservation Board-Virginia Grove**

12635 County Road G56, suite 106 Wapello, Iowa 52653 (319) 523-8381

Written by Iowa DNR District Forester:

# **Lisa Louck**

260 Mulberry Street, suite 4 Wapello Iowa 52653 (319) 523-2216 lisa.louck@dnr.iowa.gov

**Date of Original Plan Completion:** 5/12/2015

Revision date(s):









# **Property Description**

**Legal property description:** T73N, R04W, section 9 Marshall twp. Louisa County

Nearest city or town: Morning Sun

Total ownership acreage: 77 Total forested acreage: 62.5

Total acreage covered by this plan: 62.5

Number of unique stands of trees: 10

**Basic topography:** Gentle, rolling hillsides with flat, upland ridges.

**Soils:** Soils found on your woodland areas include Lindley, Clinton, Ashgrove, Inton, Keomah and Givin. Clinton and Lindley make up vast majority and are generally found on uplands. The Inton, Ashgrove, Keomah and Givin soils are found in smaller veins throughout. The Givin and Keomah soils are wetter and less well drained. All soils are capable of supporting a wide variety of native woodland species.

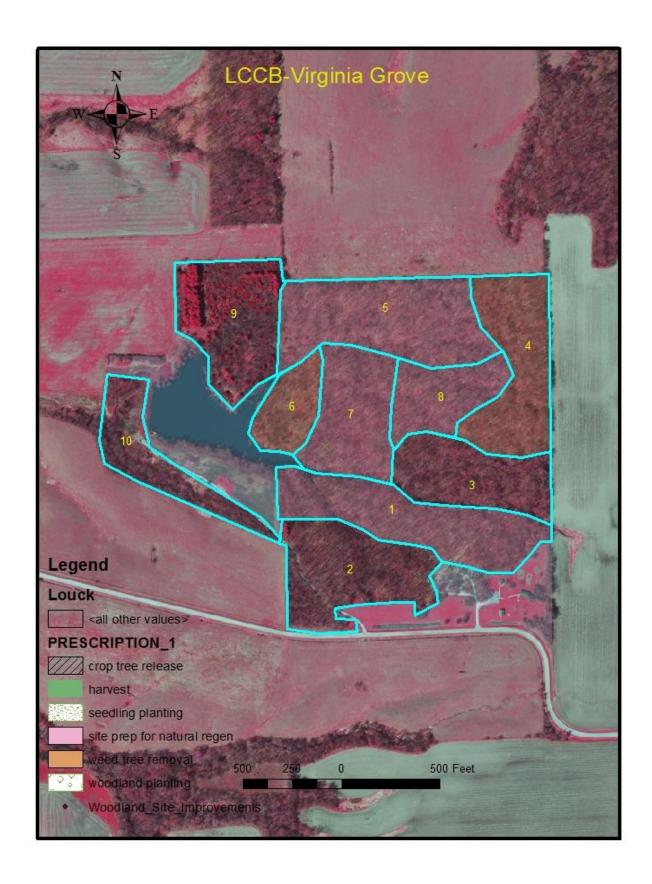
**Road Conditions:** There is a road running the SW border of property leading to pond and dam. There are trails throughout that are walking trails.

Which watershed is the property located in: Otter Creek, lowa River

**Forest Health Issues (Invasive species, diseases):** There is honeysuckle and multi-flora rose present in many areas of the timber. There is also some garlic mustard present. These species should be controlled wherever possible and should be a part of any TSI work. Information is attached with this plan for honeysuckle and Garlic mustard.

**Property History:** This property has been in LCCB ownership for some years, with improvements of trails, campgrounds, shelter houses, etc. being made and maintained. No harvest activity or recent TSI activity has occurred on site.

**Forest Management Goals:** The primary goals include diversity of wildlife and habitat, recreation and healthy forest management for sustainability for the long term.



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### Forest Natural Resources Enhancement and Protection

# **Protect Special Sites & Social Considerations**

**Special sites:** None known, please review and adjust plan if such sites are found.

Adjacent stand or ownership concerns: None known, please re-evaluate plan if concerns arise

**Recreation:** Recreation is a goal and will be considered in management decisions.

Access: Access to all sides by road or owners property/easement

#### Air, Water, and Soil Protection

What **goals** do you have, or what **steps will you take** to conserve, protect and enhance your forest's air, water and soil resources?

**Soil protection:** Follow Best Management Practices (BMP's) when harvesting or doing any work near streams. BMP guidelines available

**Roads:** Road construction for forest work to be done according to BMP's, All roads/trails to be left clear after work is completed.

**Streams, wetlands, ponds, lakeshore:** Identify all water resources before beginning any work and take steps to minimize any risks

**Effects of Natural Disasters:** A well stocked and healthy stand of trees is often better able to withstand natural disasters than an unmanaged stand.

# Fish, Wildlife and Biodiversity

Describe the resources on your property and the activities you are planning to accommodate your goals.

**Fish &Wildlife:** Many species of wildlife are present on property.

State and Federal threatened or endangered species - plants or animals: This property is within the Indiana Bat habitat range. Follow applicable guidelines when cutting in areas of possible habitat, which include not cutting down or disturbing any loose barked trees from April 1-September 30. Further information is available upon request

# **Management of Forest Resources**

Protection from Pests: Monitoring for diseases/insects

Prescribed Fire/Burns: Not planned at this time

**Management Plan Implementation Constraints:** None known, possible constraints include unavailability of contractor, lack of cost share funds, lack of personal funds, ect. Please contact relevant state or federal agency if cost share is involved and plan cannot be implemented.

**Best Management Practices/Permits:** Your forester or state/federal agency can provide information on lowa and National "Best Management Practices (BMP'S)" guide. BMP's are applicable for harvesting work, stream work, trail construction, dirt moving, ect.

#### Stand Level Information

Tree Size Classes Diameter at breast height (DBH)

Sawtimber: 18" above Small Sawtimber: 12-16" Pole: 5-12" Sapling: 2-5" Seedling: <2"

# Stand 1 Objectives/Current Conditions

Stand 1 Acres: 8.2

**Objectives:** To manage for mixed hardwood growth and regeneration.

General description, including density/structure, forest type and diameter size class: This stand is located north of the campground and south of the creek/drainage that dissects property East/West and runs into pond. The species here include scattered sawtimber bur oak, black oak, some shagbark hickory, basswood, black cherry with a few white oak and hackberry. The pole trees include shagbark hickory, elm, some hackberry, bitternut hickory, and a few mixed oaks. The sapling trees are elm, hackberry and shagbark hickory. There is honeysuckle present throughout most of stand, with 1-2" average caliper and heavy in some spots. The understory and mid-story is representative of the next generation of forest species with no work or alteration. In other words, as you look around the mid-story and understory layers of any forest, what you see is what you get. The shade tolerant species like hackberry, elm, bitternut hickory, and to a lesser extent, shagbark hickory are able to thrive and grow in this shaded condition until the oak overstory dies or is harvested. When sunlight does reach these shade tolerant species, they take over canopy and make it nearly impossible for shade intolerant species like oak to compete or establish. Because oak component is important wildlife resource and because oak forests are declining rapidly in lowa, it is important to do work, where possible, to maintain oak resource and component. The average size of entire stand is 13.5" diameter at breast height (d.b.h.) and the average sawtimber size is 22". The stocking percentage is around 80-85%, indicating some thinning can be done.

# Stand 1 Desired Future Stand Condition

A stand with less honeysuckle and greater diversity of regenerating species.

# Stand 1 Forest Management Activities

Forest Health Management Activities/Monitoring: A Site Preparation for Natural Regeneration (SPNR) can be done here. While SPNR will be recommended in many stands throughout this park, the methods of achieving this will vary based on presence of honeysuckle, desirable amounts of seed trees, etc. A fecon mowing to control honeysuckle would be helpful in this stand, as a manual removal is impractical at the density of honeysuckle. A follow up RX burn (1-3 times over 1-4 years/seasons) can be done to control sapling elm, hackberry and any honeysuckle re-sprouts. These projects alone may open up canopy enough to allow sunlight to forest floor, as well as scarify ground for seeding of bur, black and white oaks. After the fecon and/or RX burning, re-evaluate site for need of weed tree removal (pole hackberry, bittrernut hickory) and also for presence of oak seedlings.

The end goal will be sufficient sunlight to forest floor to regenerate oaks or complete a woodland planting.

Harvesting/Post Harvest Activities/slash management: A harvest of oaks can be completed when sufficient seedling and sapling are present. A harvest of the few shagbark hickory, basswood, hackberry could be included in another harvest. The goal of harvest is to have 2-3 over 10-20 years that selects trees to be cut at time best for forest/seed.

# Stand 2 Objectives/Current Conditions

Stand 2 Acres: 7.5

**Objectives:** To manage for mixed hardwood growth and diversity.

**General description, including density/structure, forest type and diameter size class:** This stand is located south of stand 1 along south border of property. The species here include very scattered bur oak and black oak, with more prevalent pole shagbark hickory, bur oak, basswood, with some white oak, black oak, cherry and hackberry. The sapling trees are elm and hackberry. The honeysuckle is moderate throughout. The average size is 11.3 and the stocking percentage is about 85%.

#### Stand 2 Desired Future Stand Condition

A stand with increased growth of diversity of desirable trees

# Stand 2 Forest Management Activities

Forest Health Management Activities/Monitoring: Crop tree release to favor white oak, bur oak, black oak with secondary crop tree species shagbark hickory, cherry and basswood. For trees to grow at full potential in this denser stand, they need full sunlight to most of crown/canopy. Crop trees should be released on four sides whenever possible. Competing trees can be girdled or cut down, whichever is needed (trees near trail may be cut to prevent falling later, but trees in interior of forest can be left standing for valuable habitat). Trees that are cut may need to be treated with chemical to prevent re-sprout. Trees that are girdled can be double girdled (at least 4" apart). There are less oaks present so first identifying these and clearing canopy space around these crop tree crowns to release from competition is recommended. After this is completed, going back through to identify more crop trees by choosing cherry, hickory and basswood will help these also. Marking crop trees with band around tree at 4.5' and then marking an "x" on trees that need to be cut can be done so chainsaw girdling work can be completed quicker is ideal process. Your district forester can mark this for you, or you can hire a consulting forester to mark and complete cutting/girdling work. This is a moderate priority stand as the composition is desirable and waiting too long will allow already suppressed oaks to continue decline.

# Stand 3 Objectives/Current Conditions

Stand 3 Acres: 5.8

**Objectives:** To manage for mixed hardwood diversity.

General description, including density/structure, forest type and diameter size class: This stand is located north of stand 1 and runs against the east property line. These species present here include very scattered sawtimber shagbark hickory, with black and white oak found in small amounts. The pole trees include shagbark hickory and bitternut hickory, with cherry and elm also present. There is sapling elm. Honeysuckle is present, especially in the east part of stand closer to the edge. The average size is 12" and the stocking percentage is about 85%.

#### Stand 3 Desired Future Stand Condition

A stand with increased diversity.

# Stand 3 Forest Management Activities

Forest Health Management Activities/Monitoring: No action at this time based on other needs elsewhere. There are very few seed trees to allow for natural regeneration. For the most part, the "crop"

trees of shagbark and bitternut hickory are already thriving and need to release in immediate future. This area may have a weed tree removal followed by a woodland planting to increase diversity in the future. If any fecon work is done, the eastern side of stand could be considered if time and funds allow. If any woodland burning is done in nearby stands, trying to burn through here also would be beneficial to minimize some honeysuckle, though the fuel may not be sufficient.

# Stand 4 Objectives/Current Conditions

Stand 4 Acres: 7.1

**Objectives:** To manage for growth and increased diversity of regeneration layer.

General description, including density/structure, forest type and diameter size class: This stand is located north of stand 3 along the eastern property border and extends to NE corner of property. The species here include mostly sawtimber bur oak, with some hackberry and shagbark hickory. The pole trees include shagbark hickory, elm, bitternut hickory, hackberry, few honey locust and cherry. The sapling trees are hackberry (prevalent) and shagbark hickory. The honeysuckle is moderate to scattered, heavier near eastern edge. The average size is 13.5" with the average sawtimber size at 21". The stocking percentage is around 65-70%.

# Stand 4 Desired Future Stand Condition

A stand with increased seedling/sapling oak component

# Stand 4 Forest Management Activities

Forest Health Management Activities/Monitoring: Site Preparation for Natural Regeneration (SPNR). A light weed tree removal of bitternut hickory, hackberry, some hickory and locust can be done to open up space and sunlight near and around existing sawtimber (seed) oaks. Remove stems down to 2" and chemically treat as needed and applicable. A RX burn may work well here with enough oak leaf litter for fuel. This is a lower priority stand based on low stocking percentage (lowering stocking too much below 60% is too open for forest growth) and also priority in other stands. However, any RX burning work that can be completed here to keep honeysuckle down is recommended in near term. This RX burning may be easier over larger tracts than trying to cut off at stand boundaries, some of which are lines based on composition with no drainage separating one stand from another.

# Stand 5 Objectives/Current Conditions

Stand 5 Acres: 9.4

**Objectives:** To manage for oak regeneration and continued growth of existing best oaks.

General description, including density/structure, forest type and diameter size class: This stand is located at the north border of the property, and is west of stand 4 and north of main east/west drainage leading to pond. The species here include sawtimber white oak, with some bur oak and shagbark hickory as well as a few black oak. The pole trees are elm and cherry, with very little hackberry or hickory. There is very little honeysuckle shrub throughout. The average size is 14.7" overall, and the average sawtimber size is 22.8". This stand has some of the higher concentrations of sawtimber oaks, unlike some other stands where the seed trees are much more scattered. The stocking percentage is around 80%.

#### Stand 5 Desired Future Stand Condition

A stand with oak regeneration and remaining seed oaks.

# Stand 5 Forest Management Activities

Forest Health Management Activities/Monitoring: A shelterwood harvest could be completed here to start process of oak regeneration. Harvesting close to 40% of existing white oak canopy, as well as most shagbark hickory, bur oak and declining black oak, will open up needed space and sunlight to forest floor for oak regeneration. The "worst first" of white oak trees will be removed to leave best genetics and value for later, final harvest after a new oak forest has started. A follow up of a weed tree removal of some elm and black cherry and/or RX burning will keep understory open while we wait for a good white oak seed year (this happens every 4-10 years). It is possible to harvest after a good seed year to both wait for sufficient seed and scarify ground, but this is hard to time with many people, multiple areas and numerous projects/priorities that may change over 10 years time. By completing shelterwood harvest first, the canopy is opened enough and you can more easily time RX burns to coincide with good seed crop (spring before fall acorn drop or 2-3 years after oak seed crop/germination to keep competition down). A RX burn would be good to have the year prior to harvest (fall, winter or spring) to start things out.

Harvesting/Post Harvest Activities/slash management: Tree tops are left as is 8" and below on ground, this valuable wood could be used for firewood, bucked up to break down faster or left as habitat.

# Stand 6 Objectives/Current Conditions

Stand 6 Acres: 2.8

**Objectives:** To manage for mixed oak regeneration and growth.

**General description, including density/structure, forest type and diameter size class:** This stand is located south of stand 5 and is bordered to west by pond. The species here include sawtimber white oak, bur oak and black oak. These are somewhat scattered in areas and thicker in others. The pole trees include bur oak, shagbark hickory, elm, cherry and some white and black oak. The average size is 14" here and the average sawtimber size is 21.7". The stocking level is around 70% in most spots.

#### Stand 6 Desired Future Stand Condition

A stand with increased growth of most desirable species.

# Stand 6 Forest Management Activities

**Forest Health Management Activities/Monitoring:** Site Preparation for Natural Regeneration (SPNR). A light weed tree removal of hickory and some elm can be done to open up space and sunlight near and around existing sawtimber (seed) oaks. Remove stems down to 2" and chemically treat as needed and applicable. A RX burn may work well here with enough oak leaf litter for fuel. Any pole oaks can be released around to allow continued growth. This stand could be included with stand 5 for a shelterwood harvest, though less would be taken in harvest to leave enough seed trees.

Stand 7 Objectives/Current Conditions

Stand 7 Acres: 6.0

**Objectives:** To manage for oak regeneration and mixed hardwood growth.

General description, including density/structure, forest type and diameter size class: This stand is located east of stand 6 with an east/west trail intersecting through north part of stand. The species here include sawtimber white oak, with some cherry, hackberry and shagbark hickory. The pole trees are shagbark hickory, bitternut hickory and elm, with some walnut also present. The sapling and seedling species include hackberry, bitternut hickory and buckeye. The average size is 13.1" with the average sawtimber size 25". The stocking level is around 70%.

### Stand 7 Desired Future Stand Condition

A stand with increased oak regeneration.

# Stand 7 Forest Management Activities

Forest Health Management Activities/Monitoring: Site Preparation for Natural Regeneration (SPNR). A light weed tree removal of bitternut hickory and some elm can be done to open up space and sunlight near and around existing sawtimber (seed) oaks. Rx burning can be started here to control buckeye from becoming too prevalent. With the larger average diameter of sawtimber trees a shelterwood harvest could be looked at here with stands 5, but a RX burn to minimize buckeye is recommended first. Try to protect walnut from RX burning, though most is large enough to withstand it. Remove vines from walnuts.

Harvesting/Post Harvest Activities/slash management: see stand 5.

# Stand 8 Objectives/Current Conditions

Stand 8 Acres: 4.1

**Objectives:** To manage for oak regeneration and continued growth of existing best oaks.

**General description, including density/structure, forest type and diameter size class:** This stand is located east of stand 7, north of stand 3 and west of stand 4 and has the highest concentration of sawtimber white oaks. The trees here include majority sawtimber white oak with some cherry. The pole trees are shagbark hickory and elm. A north/south trail and the main east/west trail intersect in this stand. The average size is 17.3" and the average sawtimber size is 20.8". The stocking level is around 70%.

#### Stand 8 Desired Future Stand Condition

A stand with oak regeneration and remaining seed oaks.

# Stand 8 Forest Management Activities

Forest Health Management Activities/Monitoring: A shelterwood harvest could be completed here to start process of oak regeneration. Harvesting close to 50% of existing white oak canopy as well as some cherry will open up needed space and sunlight to forest floor for oak regeneration. The "worst first" of white oak trees will be removed to leave best genetics and value for later, final harvest after a new oak forest has started. A follow up of a weed tree removal of some elm and hickory and/or RX burning will keep understory open while we wait for a good white oak seed year (this happens every 4-10 years). It is possible to harvest after a good seed year to both wait for sufficient seed and to scarify ground, but this is hard to time with many people, multiple areas and numerous projects/priorities that may change over 10 years time. By completing shelterwood harvest first, the canopy is opened enough and you can more easily time RX burns to coincide with good seed crop (spring before fall acorn drop or 2-3 years after oak

seed crop/germination to keep competition down). A RX burn would be good to have the year prior to harvest (fall, winter or spring) to start things out.

Harvesting/Post Harvest Activities/slash management: Tree tops are left as is 8" and below on ground, this valuable wood could be used for firewood, bucked up to break down faster or left as habitat.

# Stand 9 Objectives/Current Conditions

Stand 9 Acres: 7.1

**Objectives:** To manage for young mixed hardwood growth and diversity.

General description, including density/structure, forest type and diameter size class: This stand is located in the NW corner of the property, north of pond. There is some planted areas here, including a small patch of planted white pine and a larger patch of planted walnuts. The natural woodlands here consist of pole cedar, honey (thorny) locust, few cherry, elm and shagbark hickory. Some of these areas are open canopy with heavier ground cover, both native plants and invasive honeysuckle and olive. The planted walnuts are within the natural timber. There is some willow, silver maple and ash in the bottom drainages leading to pond. There is also honeysuckle, dogwood and some olive around edges of this area.

#### Stand 9 Desired Future Stand Condition

A stand with increased growth of the most desirable species.

# Stand 9 Forest Management Activities

**Forest Health Management Activities/Monitoring:** Crop tree release to favor walnut, best formed walnut in planting. A light thinning of white pine to maintain good growth and lower branching is recommended. The rest of stand is low enough stocking level to wait many years before more action is needed.

# Stand 10 Objectives/Current Conditions

**Stand 10 Acres**: 4.5

**Objectives:** To manage for edge and mixed hardwood growth.

**General description, including density/structure, forest type and diameter size class:** This stand is located along the road leading back to pond dam between this road and SW property border. The species here include pole and sapling honey locust, elm, cherry, some walnut with heavy dogwood shrub along the edges. There is some honeysuckle present.

#### Stand 10 Desired Future Stand Condition

A stand with continued growth

# Stand 10 Forest Management Activities

Forest Health Management Activities/Monitoring: No action at this time. Re-evaluate in 5-10 years.

# **Recommended Management Activity Schedule and Tracking**

Stand	Unit (Acres/ Feet, etc)	(Acres/ Practice	Treatment Activity Short Description	Dates		Incentive Program (s)	Net Cash Flow (optional)	
			(or reference to description in Plan)	Planned	Completed	Used?	Cost	Income
1	8.2		SPNR, fecon	2017-				
2	7.5		Crop tree release	2017				
3	5.8		No action, re-evaluate 2020					
4	7.1		SPNR, weed tree removal	2018-				
5	9.4		Shelterwood harvest, RX burn, weed tree	2016-				
6	2.8		SPNR-Weed tree	2016				
7	6.0		SPNR-RX burn	2016- 17				
8	4.1		Shelterwood, Rx burn, weed tree	2016-				
9	7.1		Crop tree release	2017				
10	4.5		No action, re-evaluate 2020					

American Tree Farm Program I certify that this Forest Management Plan meets the requirements of the American Forest Foundation's American Tree Farm System.						
ATFS Inspecting Forester	Number		Date			
Certified Tree Farm Number: (e.g. AL 1234)		Date of ATFS Certification: _				