



Jack Pine Wildlife Viewing Tour

Dedicated to Kirtland's Warbler Conservation

An Interpretive Proposal
March 1995

Jack Pine Wildlife Viewing Tour

Dedicated to Kirtland's Warbler Conservation

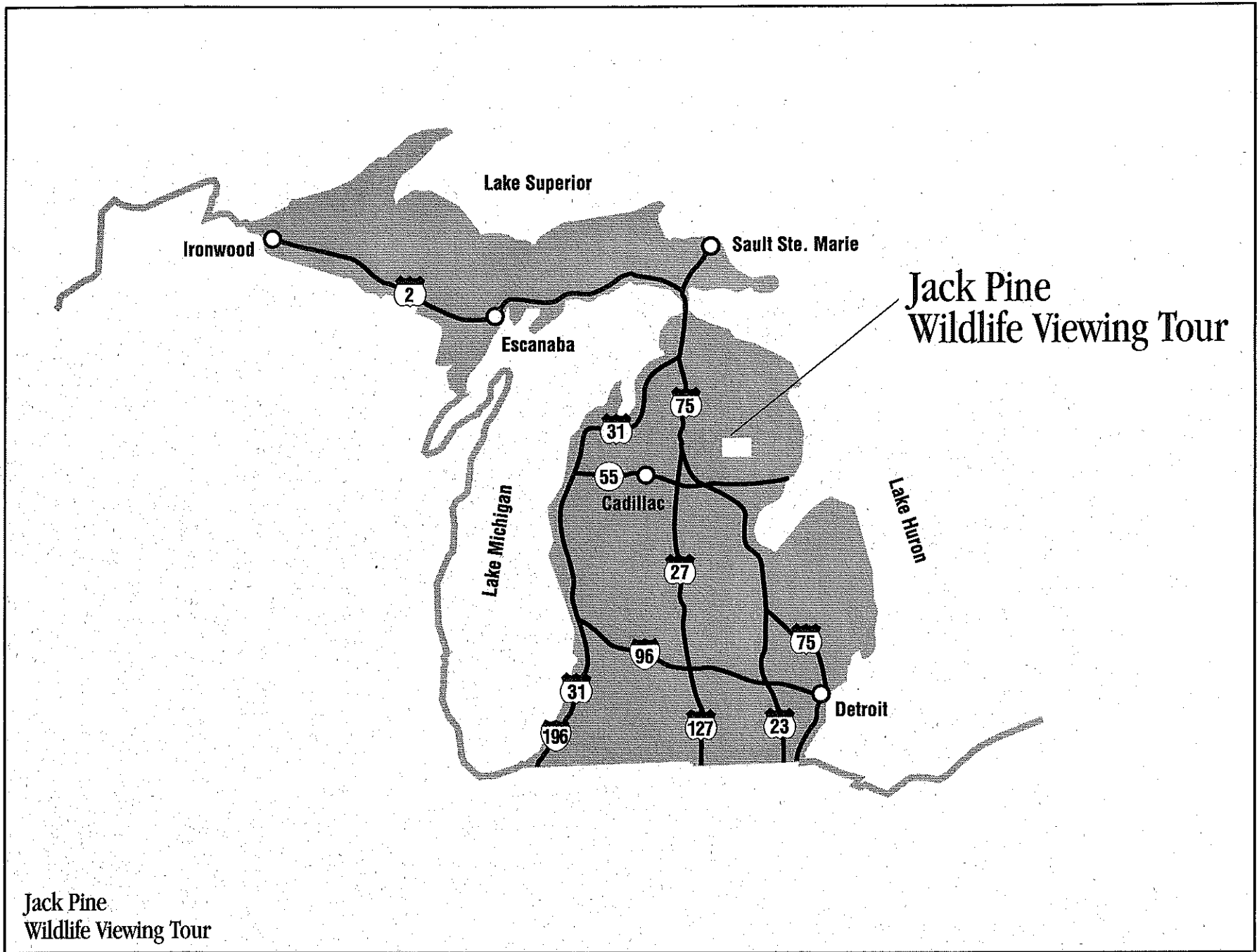
An Interpretive Proposal

Prepared by the Kirtland's Warbler Interpretive Team

For more information, contact **Connie Chaney**, U.S. Forest Service; **Bob Hess**, Michigan Department of Natural Resources; or **Dave Case**, D.J. Case & Associates. Addresses and phone numbers are listed in Appendix A.

March 1995





Jack Pine
Wildlife Viewing Tour

Jack Pine
Wildlife Viewing Tour

Table of Contents

Introduction	1
Tour Goals	3
Audiences	3
Guidelines	4
Tour Design	5
Tour Route-West Loop	9
Tour Route-East Loop	10
Site Descriptions	11
Costs	24
Appendix A-Interpretive Team	26





Introduction

The status of the federally endangered Kirtland's warbler in the year 2040 will depend, to a large degree, on how well we communicate today with the myriad interests who affect its plight.

"Wildlife management is people management" is a common refrain among wildlife conservationists. Public knowledge, understanding, and action play a particularly vital role in the recovery and conservation of the Kirtland's warbler and the jack pine ecosystem on which it depends.

The entire population of Kirtland's warblers nests in a nine-county area in the northern Lower Peninsula of Michigan and winters in the Bahama Islands. The warblers nest only in young jack pine forests found on special sandy soils. Maintaining these young forests requires an intensive forest management program. Current public concerns surrounding Kirtland's warbler management include:

- *Opposition to large clearcuts.*
- *Opposition to timber harvest in general.*
- *Concern about fire and fire management.*
- *Economic impacts of Kirtland's warbler management on local economies.*
- *Funding for Kirtland's warbler management.*
- *Kirtland's warbler management impacts on other desired wildlife species.*

In 1991, the Kirtland's Warbler Recovery Team assessed public attitudes and identified communications and education efforts needed to support Kirtland's warbler conservation. A communications plan was developed that recommended 16 actions for improving communications and education efforts. Many have already been implemented and the results have been encouraging. Action 9 was development of a self-guided Kirtland's Warbler Auto Tour.

Jack Pine
Wildlife Viewing Tour

A Team Approach

In September 1992 an Interpretive Team with representatives from agencies, local homeowners, and industry (Appendix A) was formed to develop the Auto Tour.

The Jack Pine Wildlife Viewing Tour takes visitors through a variety of habitats with a diversity of wildlife viewing opportunities—from beaver and trout, to deer, wild turkeys and bald eagles. However, the focus of the Tour is the jack pine ecosystem and the Kirtland's warbler. The interpretive information about other species and habitats, relates back to the jack pine ecosystem and Kirtland's warbler management. This broader approach minimizes the time visitors spend in critical endangered species habitat and attracts a broader range of people, helping market the Tour from a tourism standpoint.

Town's festival honors return of a feathered friend

"The festival is an unabashed attempt to bring tourist dollars into the county, which already has a well-established warbler trade. Federal officials see that as a healthy development.

"People are starting to understand that having a species this unique in their backyards is an asset, not a liability," said Joan Guiltroy, a spokeswoman for the Wildlife Service in Minneapolis. "They are starting to understand this is something to protect and preserve."

THE DETROIT NEW AND FREE PRESS, Saturday, June 11, 1994

This innovative Tour combines a diversity of interests—watchable wildlife, endangered species and neotropical migrant bird conservation, tourism, recreation, economic development, and transportation.

The Ribbon Cutting—A Successful Start

The 48-mile East Loop of the Jack Pine Wildlife Viewing Tour was officially opened at a ribbon-cutting ceremony on June 11, 1994. Attendees of the ceremony included representatives from partner organizations, corporations, local elected officials, and attendees of the 1st Annual Kirtland's Warbler Festival. Indications since the inception of the Tour are that the goals of the Tour are being achieved. A progress report has been prepared and provides details. Based on evaluation of the Tour to date, the Interpretive Team feels the goals, objectives, guidelines, and implementation tasks identified in 1993 are right on track.

Next Steps

The Interpretive Team will continue to guide development of the Tour. This interpretive proposal identifies work to be done in 1995 and 1996 to complete the Tour and achieve its full potential for interpretation of the jack pine ecosystem and Kirtland's warbler conservation. Timetables and funding needs are detailed on page 24 in the Cost Summary.

Up-close look at Kirtland's warblers' world and how it is created

The self-guided Kirtland's warbler auto tour south and east of Mio offers a scenic, educational diversion from more traditional Up North activities.

Forty-eight miles long, the tour is a habitat-forestry learning experience. It has more to do with jack pines than warblers and is designed to generate support for, and understanding of, jack pine management.

The Northwoods Call/early August issue



Tour Goals

1. Communicate important messages about Kirtland's warbler conservation to key groups of the public.
2. Create an additional economic asset dependent on Kirtland's warbler conservation.
3. Provide recreational opportunities for people who enjoy viewing wildlife.

Audiences

The Tour has been designed with two diverse audiences in mind:

1. Tourists (campers, visitors, wildlife enthusiasts).
2. Residents/homeowners in Kirtland's warbler management areas.

Guidelines

The following guidelines have been and will continue to be used to guide development of the Jack Pine Wildlife Viewing Tour:

1. Use a team approach. Work closely with the Recovery Team and use the expertise of all agencies, organizations, businesses and individuals involved in the Kirtland's warbler management.
2. Design the Tour in modular format so that sites can be added or enhanced as time and funding are available.
3. Keep in mind the temporal nature of the interpretation—sites/interpretive materials will have to be moved periodically as the habitat changes.
4. Make the sites "stand alone." Enhancements (interpretive panels, etc.) should stand alone because they will be spread out and may not be visited sequentially.
5. Provide variety in access, activities, and interpretive materials.
6. Develop the Tour brochure so that interpretation can occur as people are travelling; but, where acceptable, encourage people to get out, look, walk, and experience the land.
7. Capture the "specialness" of the Kirtland's warbler and its ecosystem and communicate with enthusiasm!
8. Be sure the biological needs of the Kirtland's warbler as identified in the Recovery Plan are the basis for Tour design and communications.
9. Emphasize the importance of the entire ecosystem, not only the Kirtland's warbler.
10. Emphasize the multiple benefits of the management practices that conserve the jack pine ecosystem.



Tour Design

The Jack Pine Wildlife Viewing Tour project and this proposal have eight major components:

1. *A series of wildlife viewing sites along a designated route*
2. *Directional signing*
3. *Interpretive information*
4. *Visitor facilities*
5. *A tour booklet*
6. *Marketing and promotion*
7. *Evaluation*
8. *Project coordination*

Viewing Sites and Route

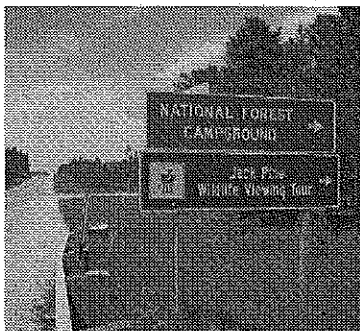
Two loops have been identified for the Tour route (see maps on pages 9 and 10). The East Loop is currently in use. Development of the West Loop proposal will be delayed until:

- *Funding for the East Loop is secured.*
- *Development of the East Loop is completed.*
- *Evaluation on the East Loop has been done.*

The East Loop currently has eight wildlife viewing sites and one side trip. Side trips offer visitors a chance to visit interesting areas, but are not on the main Tour route. By June 1995, two viewing sites and one side trip will be added to the East Loop. In 1997, an eleventh viewing site will be added to complete the East Loop.

Following the maps on page 9 and 10 are detailed descriptions of each site and the side trips on the East Loop including:

- *Location.*
- *Purpose for including the site on the Tour.*
- *Interpretive objectives—what people should know, feel, and do after visiting this site.*
- *A summary of existing site conditions, including enhancements completed for the Tour in 1994.*
- *Site enhancement needs for facilities and interpretation with estimated completion dates.*

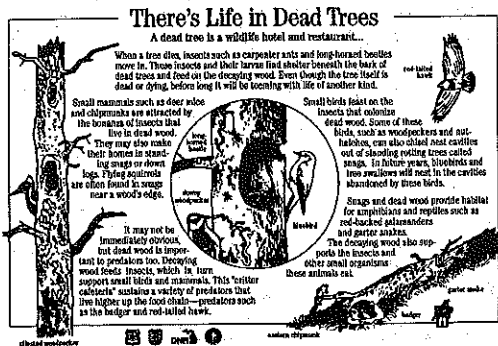


Signing

The Jack Pine Wildlife Viewing Tour logo is an identifying symbol for the Tour and is used in a variety of ways including signing. The logo incorporates three important elements:

- *Kirtland's warbler—the focus of the Tour.*
- *Jack pine—symbolic of the ecosystem of which the warbler is a part.*
- *Watchable wildlife logo—this “binoculars logo” has been developed and accepted as the national symbol identifying wildlife viewing sites.*

Each of the sites on the Tour is marked with a logo sign and a sign stating the name of the site. “Trail-blazing” signs have been erected to guide people along the route as they travel in counterclockwise direction. In 1995, additional trail-blazing signs will be added so that people can drive the Tour route from either direction.



Interpretive Information

Interpretive information and experiences are provided in a variety of ways on the Tour—interpretive signing, site specific brochures, and the Tour brochure.

The interpretive information is designed so that concepts and “connections” made at one site will be reinforced at other sites. However, it is important that sites stand alone since visitors may visit only a few sites on the route and not necessarily in sequential order.

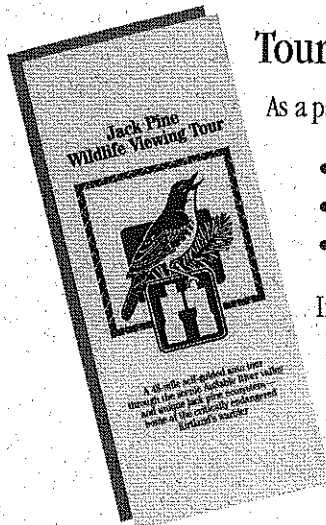
Details of interpretive signs are outlined in the site descriptions.



Visitor Facilities

An important component of a quality visitor experience is proper facilities such as restrooms and parking. Visitor facilities, such as viewing platforms and railings, are also needed to manage public use of the site to protect natural and cultural resources. A number of the sites have existing visitor facilities, while others have none. Facilities such as restrooms, picnic areas, food outlets also will be provided by private interests along the route.

Facility development needs are identified in the site descriptions.



Tour Brochure

As a part of the Tour, a brochure was developed to:

- *Guide visitors along the route.*
- *Provide additional information.*
- *Provide interpretive information.*

In 1994, a four-panel brochure of the Tour was developed and distributed free of charge through project partners and local businesses. Total distribution to date is approximately 7,000 copies. A second and expanded (both in size and content) edition of the Tour brochure will be developed by June 1995.

This edition also will be made available in a format for the visually impaired. An audio version of the brochure for visually impaired visitors is also being prepared.

The most important benefit of the brochure from a conservation standpoint is interpretation. Together, site interpretation materials and the Tour brochure provide a unique opportunity to interpret ecological concepts that are often difficult to do in a short time at a single site. The brochure helps reinforce and enhance messages communicated at the sites.

Based on evaluation efforts in 1995, the brochure may be expanded to a booklet. This booklet format would provide more space for interpretation as well as information about restaurants, campgrounds, and other recreational activities in the area.

Jack Pine
Wildlife Viewing Tour

Promotion

Promoting the Tour is an important part of its success—how many and what kinds of visitors use the Tour depend on how well the Tour is promoted. Promotion efforts in 1994 were closely coordinated with other communications and education efforts related to the Kirtland's warbler, especially the guided warbler tours provided by the U.S. Forest Service and U.S. Fish & Wildlife Service. An expanded cooperative promotion effort is being developed for implementation in the spring of 1995.

Evaluation

Ongoing evaluation of all aspects of this Tour is critical. Formal evaluation mechanisms for the Tour are being developed by the Department of Park and Recreation Resources at Michigan State University and will be in place for the 1995 viewing season.

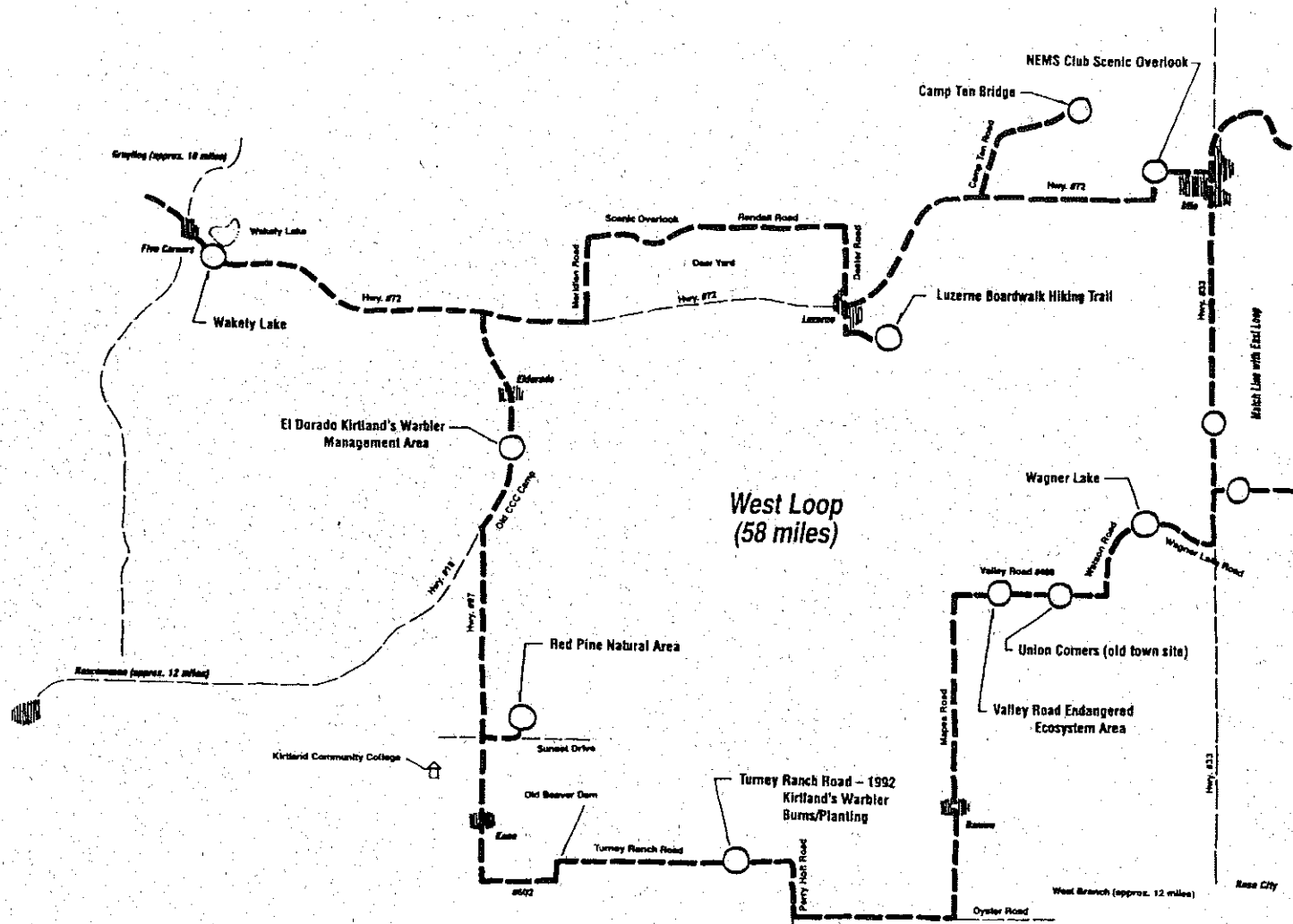
Information will be gathered on the amount of use, what types of people are or are not using the Tour, when they are using it, what visitors like and don't like about the Tour, and what types of things they are learning. The evaluation will also identify the economic benefits of the Tour. This information will be used to improve the Tour and to guide development of the West Loop.

Project Coordination

On an as needed basis, contractors will be hired to coordinate and implement various aspects of the project including Tour design, fund-raising, promotion, and facilitation.

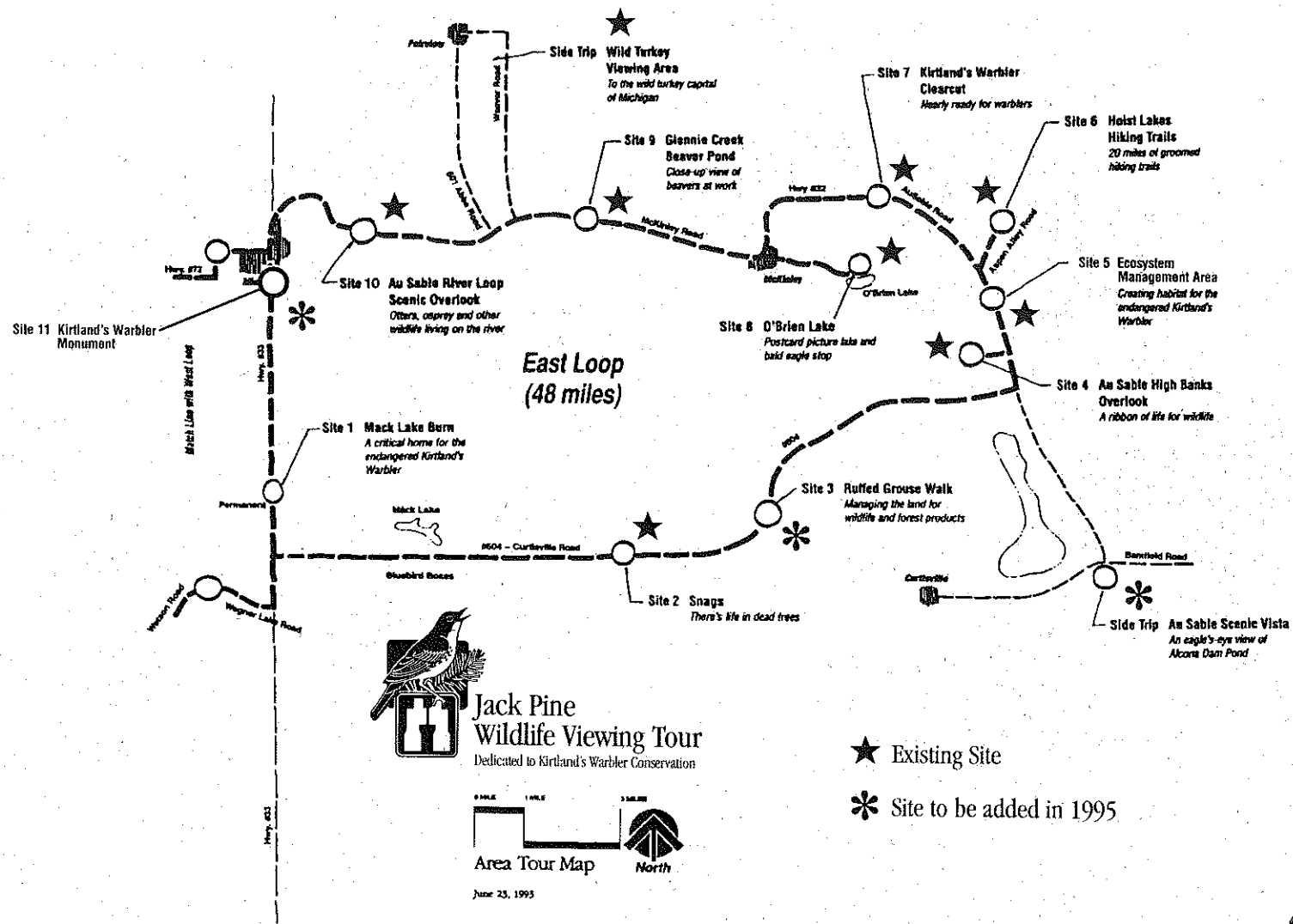


Tour Route-West Loop



Jack Pine
Wildlife Viewing Tour

Tour Route-East Route



Site 1-Mack Lake Burn

A critical home for the endangered Kirtland's warbler

Purpose

This site will serve as the first stop on the Jack Pine Wildlife Viewing Tour for both the East and West Loops. This site will attract visitors to and orient them on the Jack Pine Wildlife Viewing Tour.

Location

On west side of and adjacent to Michigan 33 just north of Curtisville Road (604) in an unoccupied area of the Mack Lake Burn.

Interpretive Objectives

Know

- Jack Pine ecosystem is home to the endangered Kirtland's warbler.
- The Mack Lake burn is part of the unique jack pine ecosystem.
- The Mack Lake burn is a critical area of habitat for the Kirtland's warbler.

Feel

- The jack pine ecosystem and Kirtland's warbler are special.

Do

- Continue on the Tour.
- Stay out of protected Kirtland's warbler habitat.

Existing Site

- None

Site Enhancement Needs

Facilities

- Hard surface pulloff and parking area to accommodate 12 cars and 3 motor homes/camper trailers.
- Foot trails leading to facilities.
- Fence or railing to restrict foot travel.
- Restrooms
- Drinking fountain
- Benches
- Trash cans

Interpretive

- Kiosk for Tour orientation.
- Four interpretive panels for site interpretation.
- Tour brochure rack/holder.

Completion

Site plan: July 1996

Site: September 1997



Jack Pine
Wildlife Viewing Tour

Site 2-Snags

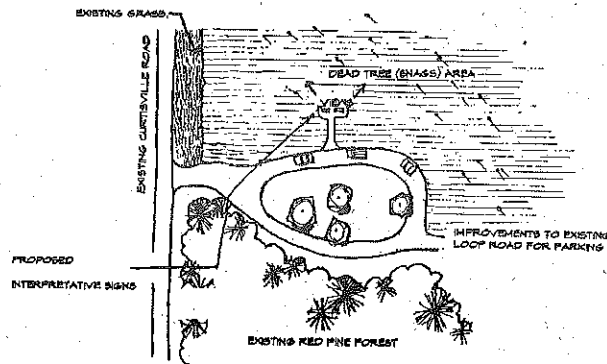
There's life in dead trees

Purpose

Give visitors a chance to see and learn about "dead trees" and their role in nature.

Location

On north side of Curtisville Road (604), one mile east of eastern edge of Mack Lake burn. Turnoff is on east side of clearing and adjacent to a red pine plantation. The site is approximately 70 yards north of Curtisville Road at the head of a small valley.



Interpretive Objectives

Know

- The standing trees were purposefully left when the timber was harvested to provide habitat for wildlife.
- Many kinds of wildlife depend on dead and fallen trees.
- Bird boxes are erected to imitate natural cavities.

Feel

- They can conserve wildlife through their actions when managing a forest on their land or cutting firewood.

Do

- Leave some dead, hollow and fallen trees when cutting firewood.
- Erect nest boxes where appropriate.

Existing Site

- Gravel entrance and loop for parking.
- Parking spaces to accommodate 6 vehicles and one motor home/camper trailer.

Site Enhancements Needs

Facilities

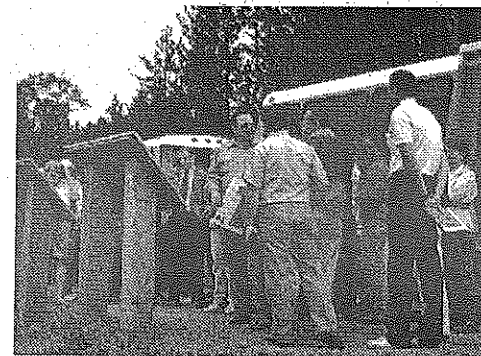
- Develop a short, accessible trail from parking area to crest of hill.

Interpretive

- Move existing interpretive signs and holders to crest of hill.

Completion

June 1995



Site 3-Ruffed Grouse Walk

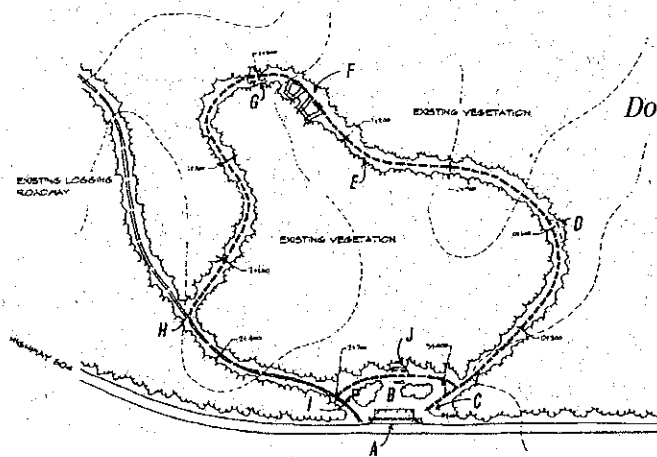
Managing the land for wildlife and forest products

Purpose

Provide visitors an opportunity to walk through aspen forests in different stages of maturity.

Location

On northwest side of 604, just north of Curtisville Road/604 junction.



Interpretive Objectives

Know

- The forest changes over time (succession).
- Different types of forests have different wildlife (contrast with jack pine ecosystem).
- Forest management/timber harvesting imitates natural processes.

Feel

- Timber harvesting can be compatible with wildlife conservation.

Do

- Walk the trail.

Existing Site

- Grassy area for development as parking.
- Logging trails for conversion to hiking trail.

Site Enhancements Needs

Facilities

- Provide pulloff and parking spaces to accommodate 8 vehicles and two motor homes/camper trailers.
- .25 to .5 mile accessible hiking trail with two benches.
- Restrooms

Interpretive

- One interpretive sign under a kiosk for orientation.
- Twelve numbered interpretive "sites" along trail.
- Four-panel interpretive brochure.
- Brochure holder adjacent to interpretive sign.

Completion

June 1995

Jack Pine
Wildlife Viewing Tour

Site 4-Au Sable High Banks Overlook

A ribbon of life for wildlife

Purpose

Give visitors a breathtaking view of the Au Sable River.

Location

Entrance to overlook is off Au Sable Road, just north of the intersection of Au Sable Road and 604 and south of the intersection of Au Sable Road and Sunny Lake Road (FS 4119).

Interpretive Objectives

Know

- A diversity of wildlife inhabit the river corridor—black bear, bank swallows (which nest here), and kingfisher.

Feel

- River/riparian areas are important and need to be protected.
- The Au Sable is a special river.

Do

- Support efforts to protect and manage watersheds, streams, rivers and other riparian areas.

Existing Site

- Parking area for four to six cars located 300 feet off the road. Parking for a motor home or trailer/camper is tight.
- Bulletin board.
- Accessible trail leading to overlook from parking lot. Gravel surface.
- Benches at overlook.

Site Enhancement Needs

Facilities—conceptual site plans are currently being developed by the U.S. Forest Service and the following enhancements are being considered:

- Cable stairway down to the water's edge.
- Bank stabilization at overlook point.

Facilities—additional facility enhancements that will be added under the auspices of the Tour include:

- Improvement of surface of trail from parking area to overlook.
- Benches with backrests.
- Designation of accessible parking area.

Interpretive—recommended as part of Tour.

- Two interpretive panels off to the side of benches at overlook.

Completion

Facilities—Ongoing

Interpretive—June 1995



Side Trip-Au Sable Scenic Vista

An eagle's-eye view of Alcona Dam Pond

Purpose

Provide visitors a scenic vista of Alcona Dam Pond and surrounding area. This site is currently being developed by the U.S. Forest Service in partnership with Alcona County unrelated to the Jack Pine Wildlife Viewing Tour.

Location

Four miles east of Curtisville and immediately south of the intersection of Au Sable Road and Bamfield Road (F30).

Interpretive Objectives

Know

- Bald eagles nest on Alcona Dam Pond.
- Bald eagles share the fishery resource with humans.

Feel

- Fortunate the bald eagle has made a comeback.
- The health of bald eagles and humans are intertwined.

Do

- Support efforts to protect bald eagles and their habitats, and maintain water quality.

Existing Site

- Gravel road leading to area cleared of trees for site development.
- Adjacent to private canoe livery with restrooms and a concession stand.

Site Enhancement Needs

Facilities

- Being developed by U.S. Forest Service.

Interpretive

- One interpretive panel relating to the bald eagle/fisheries resource.
- One pay telescope.

Completion

Facilities and interpretive—June 1995

Site 5-Ecosystem Management Area

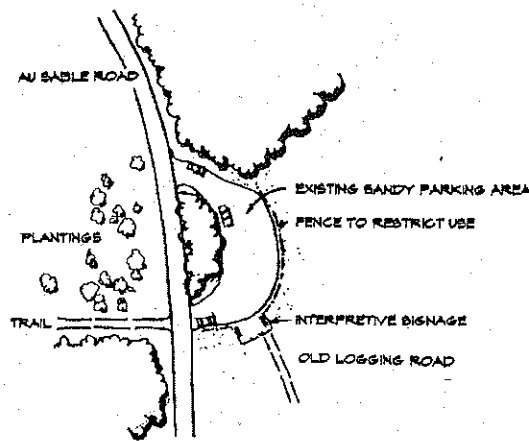
Creating habitat for the endangered Kirtland's warbler

Purpose

Let visitors see managed Kirtland's warbler habitat.

Location

Site is a former log landing on the east side of Au Sable Road about .25 miles south of the intersection of Au Sable Road and Aspen Valley Road (F32).



Interpretive Objectives

Know

- That management of this area as an ecosystem provides many benefits.
- The jack pine ecosystem benefits other types of wildlife.

Feel

- It's important for conservation agencies and organizations to continue habitat management program.

Do

- Support efforts to manage Kirtland's warbler habitat and the jack pine ecosystem.
- Stay out of protected Kirtland's warbler habitat.

Existing Site

- Former log landing with separate "entrance and exit."
- Sand/grass parking area for eight to ten cars. Has space for motor home or trailer camper.

Site Enhancement Needs

Facilities

- Develop a railing/fence to restrict use of area.
- Stabilize parking area with gravel.

Interpretive

- Two interpretive panels situated so that areas on both sides of the road can be interpreted.

Completion

Facilities and interpretive—June 1995



Site 6-Hoist Lakes Hiking Trails

20 miles of groomed hiking trails

Purpose

Provide visitors an opportunity to hike and view wildlife in a diverse mix of habitats.

Location

Parking area and restrooms are located on east side of Aspen Valley Road (F32) .25 miles north of the intersection of Aspen Valley Road and Au Sable Road.

Interpretive Objectives

Know

- There are many opportunities for viewing and learning about wildlife if you get out, walk, listen, and watch.

Feel

- Hiking in a semi-remote area like this is an enjoyable, rewarding experience.

Do

- Support efforts to protect and manage natural areas.
- Walk in the woods whenever you can.

Existing Site

- 20-plus miles of hiking trails through a variety of habitats including wetlands and along a trout lake. Designated a quiet area.
- Restrooms at trailhead. Not physically-challenged accessible.
- Parking area for eight to ten cars and two motor homes or camper/trailers.
- Trail brochure is available at trailhead.

Site Enhancement Needs

Facilities

- None

Interpretive

- Provide interpretive information in the Tour brochure to encourage people to hike the trails and preview what they are likely to see.
- Consider upgrading the wildlife viewing information in the trail brochure when it is reprinted.

Completion

Ongoing

Site 7-Kirtland's Warbler Clearcut

Nearly ready for warblers

Kirtland's warblers are now nesting in the plantation adjacent to the "Nearly Ready for Warblers" site. Also, the Alcona County Road Commission will be moving the existing road away from the occupied habitat. The site will remain until the County realigns the road. Then, the site will be moved away from occupied habitat, but still be nearby. Costs of site moving will be part of construction costs.

Until the road is moved, the site will be monitored to determine the activities of people stopping at the site, i.e. are people going into the habitat.

Purpose

Provide visitors an opportunity to see Kirtland's warbler habitat up close.

Location

Pulloff located adjacent to and on north side of Russell Road (F32/600), 200 feet west of intersection between Russell Road and Au Sable Road.

Interpretive Objectives

Know

- Kirtland's warbler nesting requirements—very picky.
- Why large clearcuts are necessary.
- Where Kirtland's warblers spend the winter.

Feel

- The Kirtland's warbler and jack pine ecosystem are worth all of this effort to maintain.
- The large, temporarily bare clearcuts are worth the long-term results.

Do

- Support efforts to manage Kirtland's warbler habitat.
- Stay out of protected Kirtland's warbler habitat.

Existing Site

Facilities

- Gravel pulloff and parking area for three to five cars or one motor home or camper/trailer.
- Railing to discourage use of planted area.

Interpretive

- Two interpretive panels.

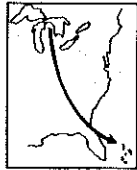
Site Enhancement Needs

- None

Nearly Ready for Warblers

Why are these clearcuts so large?

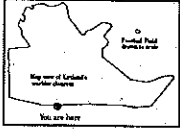
Studies have shown that Kirtland's warblers prefer large areas of jack pine forest for nesting. Before European settlement, vast areas of nesting habitat were maintained naturally by periodic wildfires. Today, forest managers imitate the effects of wildfires by creating large clearcuts and then replanting these areas with young jack pine trees. The clearcut in front of you is 551 acres in size. It was cut and replanted in 1998. To create the dense forest that Kirtland's warblers require, at least 1,200 seedlings must be planted on every acre of clearcut—that's nearly 400,000 trees out there!



Michigan 12,000

See you next spring



Kirtland's warblers nest in Michigan, but they don't hang around for the cold Michigan winters. Instead, they migrate to the sunny Bahamas—an island group in the Caribbean. The life and journeys of the Kirtland's warbler point out the need for all of us to show concern for things that happen far from this place. They also point out that what we do in our own backyards has far-reaching impacts on wildlife half the world away.

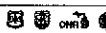


Map shows of Kirtland's warbler clearcut.

You are here

Jack pine management for Kirtland's warblers also benefits many other wildlife species, including deer, coyotes, and bluebirds. By allowing large clearcuts, we provide the Kirtland's warbler and other species with the special habitat they must have to survive. However this is only part of the story...







Site 8-O'Brien Lake

Postcard picture lake and bald eagle stop

Purpose

Give visitors the opportunity to view wildlife along the shore of a scenic north country lake.

Location

2.9 miles east of town of McKinley on sand trail.

Interpretive Objectives

Know

- The value of wetlands.
- How these habitats are different from Kirtland's warbler/jack pine habitats.
- How the wildlife here are different than in the Kirtland's warbler/jack pine habitats.

Feel

- Protecting and managing all types of ecosystems is important and worth our time and money.

Do

- Support efforts to protect wildlife habitat.

Existing Site

- Physically-challenged accessible board-walk down to fishing/wildlife viewing dock.
- Physically-challenged accessible restrooms.
- Parking for ten to twelve cars and two motor homes or camper/trailers.

Site Enhancement Needs

Facilities

- None

Interpretive

- None

Site 9-Glennie Creek Beaver Pond

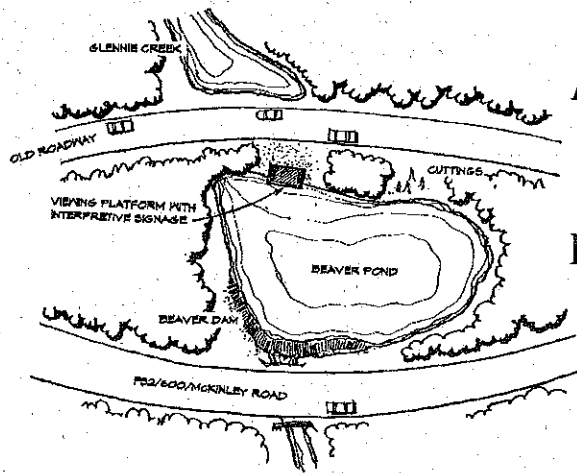
Close-up view of beavers at work

Purpose

Provide visitors a chance to view beavers and their work up close.

Location

Entrance is just before Glennie Creek on north side of McKinley Road 3.3 miles west of town of McKinley.



Interpretive Objectives

Know

- Beaver are interesting and unique animals.
- They change the landscape through their activities—this affects other wildlife.

Feel

- Beaver are abundant and can cause problems for humans.

Do

- Appreciate the diversity of wildlife in this area.

Existing Site

- Entrance to site is an old road—it's paved and in good condition. Road takes visitor directly adjacent to active beaver dam, lodge, and pond.
- Parking for six to eight cars and two motor homes or camper/trailers adjacent to pond.

Site Enhancement Needs

Facilities

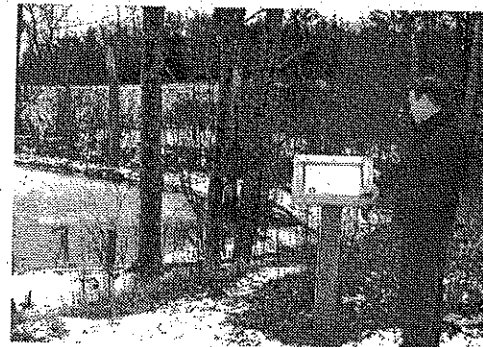
- Accessible viewing platform over the pond adjacent to the beaver dam.

Interpretive

- One interpretive panel positioned on the viewing platform.

Completion

Facility and interpretive—June 1995



Site 10-Au Sable River Loop Scenic Overlook

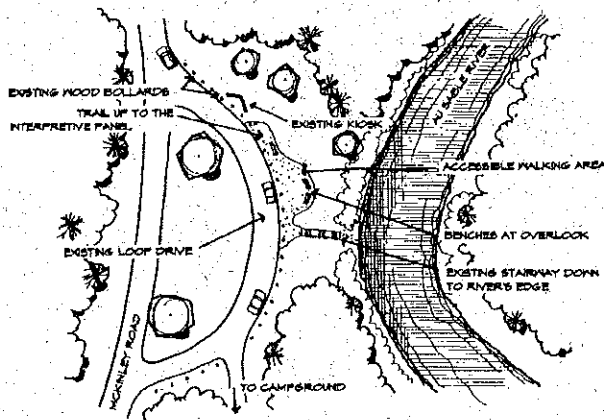
Otters and other wildlife living on the river

Purpose

Give visitors an opportunity to view wildlife from a scenic overlook.

Location

Entrance to overlook is on the south side of McKinley Road (F32/600), 400 feet west of the Perry Creek entrance or 2.4 miles east of the McKinley Road and Highway 72/33 intersection.



Interpretive Objectives

Know

- The Au Sable River is part of a "system" or watershed.
- The Au Sable is important to wildlife.

Feel

- A sense that the land, soils, waters, and wildlife are connected (ecosystem) and humans have a profound influence both consciously and unconsciously.

Do

- Support efforts to protect ecosystems.
- Do what they can through various actions to protect ecosystems.

Existing Site

- Separate entrance and exit.
- Parking area for eight to ten cars and two motor homes or camper/trailers.
- Adjacent to a primitive camping area.
- Benches at overlook.

Site Enhancement Needs

Facilities

- Add another bench with backrest.

Interpretive

- One interpretive panel, constructed low to the ground so as not to obstruct the view.

Completion

Interpretive—June 1995

Side Trip-Wild Turkey Viewing Area

To the wild turkey capital of Michigan

Purpose

Give visitors a chance to see an agricultural area in contrast to the other areas they have just visited.

Location

This side trip would not be a "site." It would consist of a 9.5 mile loop north of the main Tour route. From McKinley Road turn north on Weaver Road. Go four miles to Highway 72, then go west one mile to Fairview. In Fairview, turn south on Abbe Road (601) and go 4.5 miles back to McKinley Road, then continue west.

Interpretive Objectives

Know

- Different habitats produce different types of wildlife—contrast with species in jack pine and wetlands.
- The wild turkey has adapted to agricultural areas of northern Michigan.

Feel

- Surprised at how some animals (wild turkey) can adapt to different environments/habitats while others (Kirtland's warbler) cannot.

Do

- Support wildlife conservation, especially efforts to protect and manage ecosystems.

Existing Site

- None

Site Enhancement Needs

Facilities

- None

Interpretive

- All information will be included in the Tour brochure.



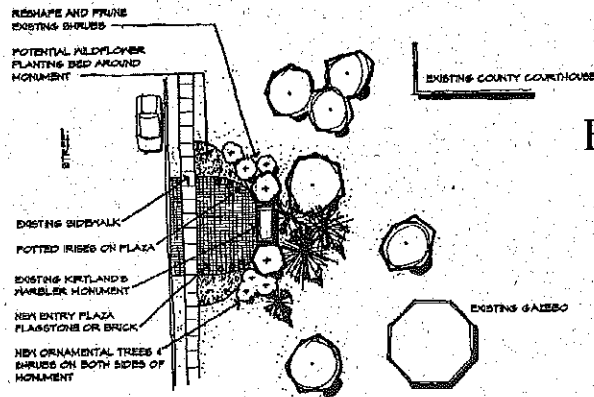
Site 11-Kirtland's Warbler Monument

Purpose

Dedicated by Roger Tory Peterson. Add a brochure holder and sign for orientation to the Jack Pine Wildlife Viewing Tour.

Location

Downtown Mio on M-33 in front of County Courthouse.



Interpretive Objectives

Know

- This area is home of the critically endangered Kirtland's warbler.

Feel

- Fortunate to have discovered this site.

Do

- Go on the Jack Pine Wildlife Viewing Tour.

Existing Site

- Large Kirtland's warbler in glass case.
- Two plaques.

Site Enhancement Needs

Facilities

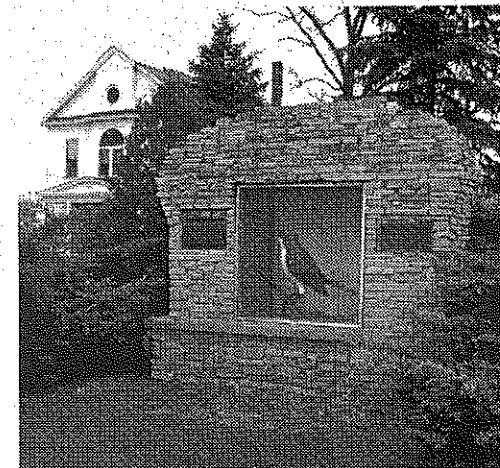
- Landscaping according to site sketch.

Interpretive

- One interpretive panel.

Completion

- Facilities and interpretive—June 1995



Jack Pine
Wildlife Viewing Tour

Cost Summary

Activity/Site	Interp. Enhancement	Cost		Facility Enhancements	Cost	
		1995	1996		1995	1996
Signing				directional - production site - production installation	2000 300 1000	
Tour Brochure (T.B.)	writing/design printing	1500 2500				
T.B. (vision impaired)		400				
T.B. (audio version)			1500			
Tour Booklet			7000			
Promotion		14000	10000			
Evaluation		10000	10000			
Project Coordination		11350	8000			
<i>Viewing Sites</i>						
Mack Lake	(1997)			site planning site development (1997)		3500
Snags	move existing signs	500		trail/surface	1000	
Ruffed Grouse	1 interp. sign 1 interp. sign holder kiosk brochure	2100 600 2500 2900		site plan trail/surface restrooms parking area 4 benches	2100 50000 12000 5250 3000	
Scenic Vista	1 interp. sign 1 interp. sign holder 1 pay telescope	2100 600 2000				
High banks	2 interp. signs 2 interp. sign holders	4200 1200		2 benches trail surface parking sign	1500 1000 100	
Ecosystem				gravel railing	3600 500	
Beaver Pond	1 interp. sign 1 interp. sign holder	2100 600				
Loop Overlook	1 interp. sign 1 interp. sign holder	2100 600		2 benches	1000	
Monument	1 interp. sign 1 interp. sign holder	2100 600		landscaping paving brick	1300 2500	
Totals		66550	36500		88150	3500



Appendix A

Mr. Gary Boushelle
Regional Wildlife Biologist
Michigan DNR Region II Hdqtrs.
8717 N. Roscommon Rd.
Roscommon, MI 48653
tele: 517 275-8732

Mr. Paul Call
Raw Material Manager
Weyerhaeuser
4111 W. 4 Mile Rd. • Grayling, MI 49738
tele: 517 348-2881

Mr. David J. Case
President
D.J. Case & Associates
607 Lincolnway West • Mishawaka, IN 46544
tele: 219 258-0100
fax: 219 258-0189

Ms. Sandy Caveney
Outdoor Recreation Planner
Huron-Manistee National Forest/Mio Dist.
401 Court St. • Mio, MI 48647
tele: 517 826-3252
fax: 517 826-6073

Ms. Connie Chaney
District Ranger
Huron-Manistee National Forest/Mio Dist.
401 Court St. • Mio, MI 48647
tele: 517 826-3252
fax: 517 826-6073

Mr. Michael DeCapita
Wildlife Biologist
U.S. Fish and Wildlife Service
Manley Miles Bldg. • Rm. 310, 1405 S. Harrison
East Lansing, MI 48823
tele: 517 337-6650
fax: 517 337-6899

Ms. Holly Gomez
Mio Pine Acres Campground and Cabins
1215 W. 8th St.
Mio, Michigan 48647
tele: 517 826-5590 1/800-829-2845

Ms. Erica Haspiel-Szlosek
Public Affairs Dept.
Huron-Manistee National Forest
1755 South Mitchell • Cadillac, MI 49601
tele: 616 775-2421, ext. 8726
fax: 616 775-5551

Mr. Robert Hess
District Wildlife Supervisor
Michigan DNR, Wildlife Division/Mio Dist.
140 Mount Tom Rd. • Mio, MI 48647
tele: 517 826-3211
fax: 517 826-3509

Mr. Phil Huber
Wildlife Biologist
Huron-Manistee National Forest/Mio Dist.
401 Court St. • Mio, MI 48647
tele: 517 826-3252
fax: 517 826-6073

Mr. Bill Mittig
District Forester
Michigan DNR Wildlife Division/Mio Dist.
149 Mount Tom Rd. • Mio, MI 48647
tele: 517 826-3211
fax: 517 826-3509

Mr. Kim O'Brien
Regional Director
The Ruffed Grouse Society
2423 Brookfield Drive
Midland, MI 48642-3262
tele: 517 835-3927

Mr. Bob Ojala
Extension Director
Oscoda County
P.O. Box 69 • Mio, MI 48647
tele: 517 826-3241
fax: 517 826-3657

Ms. Virgie Purchase
Mio Pine Acres Campground and Cabins
1215 W. 8th St. • Mio, Michigan 48647
tele: 517 826-5590 1/800-829-2845

Mr. Dave Smith
District Fisheries Biologist
Michigan DNR Wildlife Division/Mio Dist.
140 Mount Tom Rd. • Mio, MI 48647
tele: 517 826-3211
fax: 517 826-3509

Ms. Sandy Sokolak
U.S. Forest Service
5761 N. Skeel • Oscoda, MI 48750
tele: 517 739-0728
fax: 517 739-0347

Ms. Anne Todd
Mack Lake Homeowners' Association
271 Lakeview Dr. • Mio, MI 48647
tele: 517 826-3842

Mr. Jerry Weinrich
Wildlife Habitat/Research Biologist
Michigan DNR Houghton Lake Field Office
180 S. Harrison Road
Houghton Lake, MI 48629
tele: 517 422-5192
fax: 517 422-5191

Ms. Kate Winsor
Interpretive Specialist
U.S. Fish and Wildlife Service
Endangered Species Division
Whipple Fed. Bldg./1 Federal Dr.
Fort Snelling, MN 55111-4056
tele: 612 725-3276, ext. 244
fax: 612 725-3526



Special thanks are extended to the project partners who have supported the initial development of the Jack Pine Wildlife Viewing Tour:

ABT-Co.	Michigan Department of Transportation
Alcona County Road Commission	Michigan United Conservation Clubs
Chamber of Commerce for Oscoda County	Northeast Michigan Sportsmen's Club
Chevrolet/Geo Environmental	Oscoda County Road Commission
Consumers Power Company	Ruffed Grouse Society
Michigan Audubon Society	U.S. Fish & Wildlife Service
Michigan Consolidated Gas Company	U.S. Forest Service
Michigan Department of Natural Resources	Weyerhaeuser Company



The National Fish & Wildlife Foundation awarded a Challenge Grant for the development of this project. Through this arrangement, the Foundation matches contributions made by project partners.