

KIRTLAND'S WARBLER HABITAT

CRAWFORD, OSCONDA, CLARE,  
KALKASKA, AND OGEMAW COUNTIES, MICHIGAN

An Acquisition Proposal  
Presented To The  
Land Acquisition Review Committee

*Dec-1979*

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## I. INTRODUCTION

Decline in the population of Kirtland's warblers from approximately 1,000 birds in 1961 to about 400 birds at the present resulted in the species being placed on the Federal endangered species list. The population has not decreased across its entire nesting range, but collapsed into the center of its range where nesting continues at normal density. This fact coupled with habitat studies done in these areas indicate that suitable nesting habitat is the key to the survival of the Kirtland's warblers. The purpose of this project is to acquire privately owned lands inhabited by or suitable for Kirtland's warblers. These tracts are inholdings which limit or restrict habitat management on larger tracts already in public ownership.

## II. LOCATION MAPS

Map A. General Location of Proposed Acquisition

Map B. Specific Location of Proposed Acquisitions

## III. SUMMARY OF PROPOSED LAND ACQUISITION

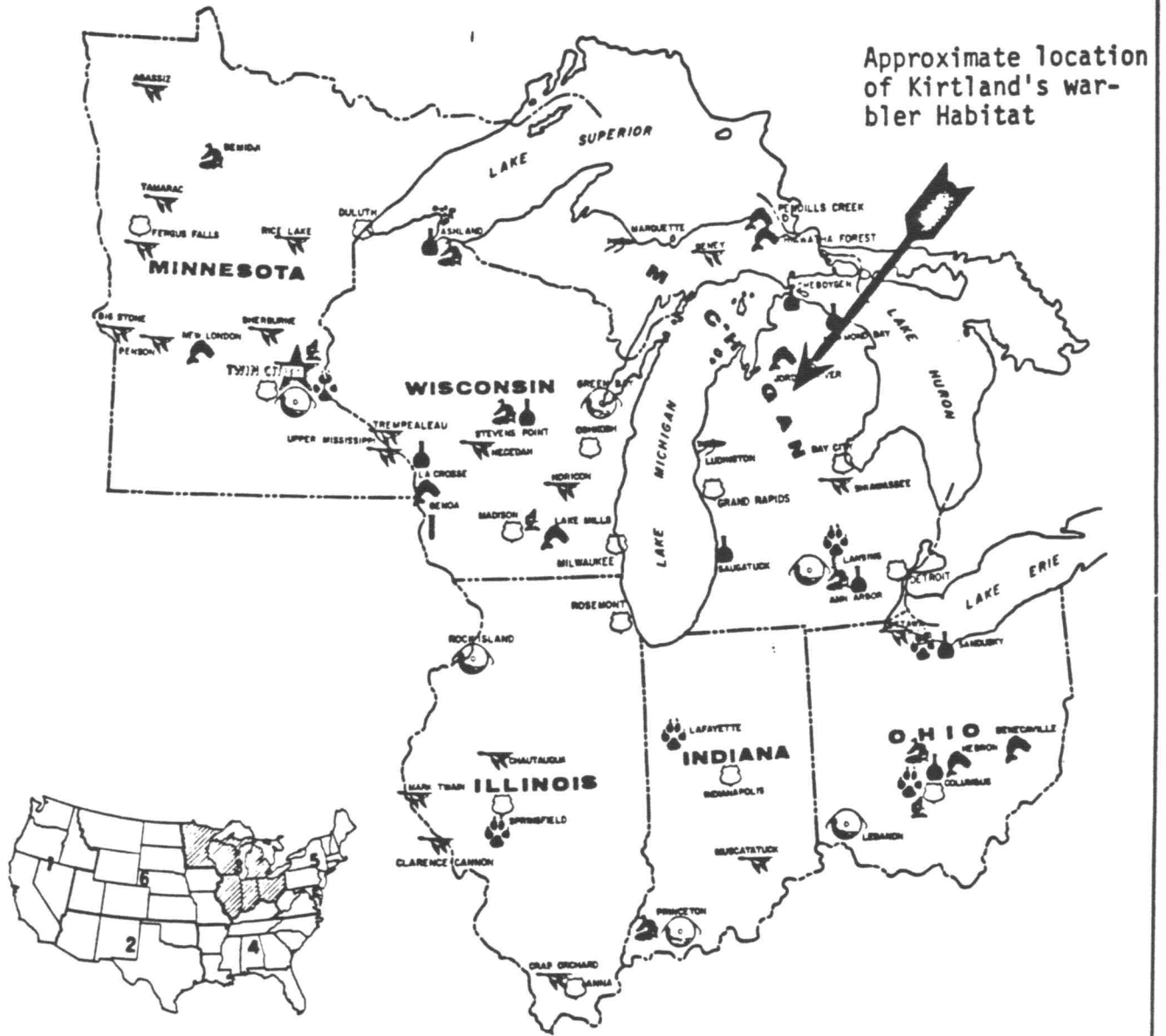
1. Unit Designation: Kirtland Warbler Habitat
2. Purpose of Acquisition: To acquire critical Kirtland warbler nesting habitat in order to reverse a downward population trend of an endangered species.
3. State: Michigan; County: Ogemaw, Kalkaska, Crawford, Oscoda and Clare
4. Acquisition Authority: Endangered Species Act of 1973 (Stat. 884)
5. Migratory Bird Conservation Areas: Not Applicable
6. State Conservation Department Attitude: The Michigan Department of Natural Resources is in favor of FWS land acquisition. A management agreement between the Service and Michigan DNR will allow the State to manage these lands with the Service retaining primary jurisdiction. Subsequent land exchanges between the State and Service will consolidate ownerships that will result in more efficient management of the areas.
7. Priority in Flyway Acquisition Plan (waterfowl refuges only): Not applicable.
8. Proximity to Similar Areas (Federal, State, or Private): The majority of the tracts are inholdings or lie adjacent to Michigan State Forest lands.
9. Benefits to Endangered Species: Kirtland warbler nesting habitat will be protected from development and managed specifically for Kirtland warbler.

# UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

NORTH CENTRAL REGION

## REGION 3 STATIONS



Approximate location of Kirtland's warbler Habitat

### LEGEND

- Animal Damage Control
- REGIONAL OFFICE
- Enforcement
- Herpetology Biology Lab
- Area Office (ES)
- Enhancement Biologist
- National Fish Hatchery
- National Wildlife Refuge
- Sea Lamprey Control
- RESEARCH**
- Wildlife
- Fishery

# STATE OF MICHIGAN



10. General Public Attitude: Favorable - a large proportion of landowners contacted have indicated a willingness to sell the property.
11. Map: Attached showing part of proposed acquisition.
12. Land Acreage: Approximately 4,500 acres are identified as high priority at this time. The Michigan DNR has identified other areas of a lower priority for later acquisition.
13. Number of Ownerships: Sixty-one ownerships are identified at this time. The estimated number of owners necessary to acquire 4,500 acres is within a range of 50 to 100 landowners.
14. Types of Land: The land is primarily unimproved Jack pine forest.
15. Estimated Cost:
 

Land and Improvements:	\$2,250,000
Acquisition Costs:	100,000
Total	\$2,350,000
16. Water Supply: Riparian doctrine - groundwater only.
17. Flood Hazards: None
18. Buildings: Several small cabins exist on the proposed acquisition.
19. Utilities: Not applicable
20. Reservations and Exceptions to Title: Unknown
21. Estimated Development Costs: None
22. Habitat Improvement: Controlled burning, removal of overstory pines or hardwoods, insect and disease control, fire control and reseedling. Management will be performed by Michigan DNR under Management Agreement.
23. Estimated Annual Operating Costs: Minimal - due to management by Michigan DNR. The Michigan DNR will continue to manage the land after any land has been exchanged for consolidation.
24. Estimated Annual Revenue Sharing Payments: \$16,875

#### IV. JUSTIFYING INFORMATION

The Kirtland warbler probably never was an abundant bird. Population estimates in 1951 and 1961 indicate about 1,000 birds. A 1971 census showed 201 males, or about 400 total birds. The counts declined further to about 179 males in 1975.

Kirtland's warblers require highly specific breeding habitats. Nearly all nests are found on jack pine stands 5 to 20 feet in height (8-21 years old) which have resulted from forest fire. Habitat consists of jack pine thickets interspersed with small openings. Tracts should be 80 acres or preferably larger to attract the warblers.

The habitats are generally limited to a specific soil type, Grayling sand. Grayling sand is low in fertility and supports sparse ground cover beneath the jack pine stands.

The Kirtland's Warbler Recovery Team states that between 36,000 and 40,000 acres of habitat are necessary to maintain a self sustaining population of 1,000 pairs. To maintain this designated habitat acreage, the Recovery Team recommends that 135,000 acres be managed on a rotational basis. The U.S. Forest Service has designated 54,640 acres and the State of Michigan 71,665 acres to be managed for the Kirtland's warbler.

Management consists of providing on a rotational basis the distinctive breeding habitat through cutting and burning tracts of jack pine on public land. Private inholdings limit these intensive management techniques. Acquisition of privately owned tracts and incorporating them into the larger tracts of public land is necessary for habitat management. Prescribed burning and cutting is necessary to insure sufficient nesting habitat for the Kirtland's warbler.

As these scattered tracts, lying within the State Forest boundaries, are acquired, the State will manage them under a Cooperative Agreement. After a number of parcels are acquired, they may be conveyed to the State in exchange for blocks of lands outside the State forest boundaries. Management of all lands acquired for Kirtland's warbler habitat will be performed by the State under the Management Agreement.

#### V. ENGINEERING INFORMATION

No construction is planned for these tracts.

#### VI. REALTY INFORMATION

Name of Area:	Kirtland's Warbler, endangered species habitat.
Purpose of the Cost Data:	The estimate of value is meant to be used to determine current over-all value of the lands proposed for acquisition. This may change depending on the decision to include additional tracts currently being identified by the Michigan DNR.

Location: North-central part of the lower peninsula Michigan with Ogemaw, Crawford, Oscoda, Kalkaska, and Clare Counties.

Area: Kirtland warbler habitat is mostly jack pine on sandy soils. Most of the tracts are private inholdings within the Ogemaw State Forest. These tracts are actively being sub-divided into 10-acre parcels. The area has a wide appeal to non-local buyers in the surrounding larger cities for seasonal recreational purposes. Some summer and hunting cabins also exist.

The most desirable tracts are small acreages with surfaced primary road frontage. The least desirable are the larger tracts without access. The corresponding market value, as shown by the sales in the area, range from a high of \$850 per acre to a low of \$200 per acre for the two mentioned extremes.

Ownership: Private individuals own each of the tracts mentioned.

Highest and Best Use: Seasonal recreational purposes.

Current Estimated Acquisition Costs (2/21/80)

4,500 acres at \$500.00 per acre =	\$2,250,000
Administrative costs =	<u>100,000</u>
	\$2,350,000

The above estimated costs are based upon land values for February 1980. The property will probably increase in value over the next five year period at a rate of 12% per year.



State: \_\_\_\_\_  
Project No: \_\_\_\_\_

U. S. FISH AND WILDLIFE SERVICE  
ENVIRONMENTAL ACTION MEMORANDUM

In response to the Council of Environmental Quality's regulations and the Fish and Wildlife Service procedures for implementing the National Environmental Policy Act, and the Executive Orders on Floodplain and Wetland Management, I have determined that the following action:

- \_\_\_ a categorical exclusion or minor action consisting of maintenance or renovation having effects essentially unaltered from existing conditions. The project is compatible with the purposes for which the lands were acquired. Applicable grants of right-of-way are approved.
- found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact. The project is compatible with the purposes for which the lands were obtained. Applicable grants of right-of-way are approved. The proposed action will be implemented following a 30-day public review period, unless modified or cancelled for cause.
- \_\_\_ found to have significant impacts; and, therefore, a "Letter of Intent" to enter Scoping and prepare an Environmental Impact Statement will be completed before the project is considered further.
- \_\_\_ denied because it is not compatible or causes undue environmental damage.

Charles A. Hugglett  
Acting Regional Director, FWS, Region 3

FEB 22 1980

Date

Initiated by: (1) Thomas J. Helldrake 2-17-80  
(FA) (AFF)  
Concurred by: (2) David H. Langford 2/21/80  
(FA) (AFF)  
Compliance by: (3) [Signature] 2/22/80  
(EC) (LWR)  
Reviewed by: (4) Jan W. Jick 2/21/80  
(LWR)  
Recommended by: (5) Donald A. Smith 2/21/80  
(AE) (DD)  
Surnamed by: (6) \_\_\_\_\_

Distribution:

~~FA Project File~~  
~~Wash., DC (OEC)~~  
~~Wash., DC (FA)~~  
~~State~~  
~~Environmental File~~

FINDING OF NO SIGNIFICANT IMPACT

FEB 23 1980

Date: \_\_\_\_\_

I have determined that the acquisition of Kirtland's warbler habitat is not a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environment Policy Act of 1969. Accordingly, I have issued this Finding of No Significant Impact and declare that an environmental impact statement will not be required.

Supporting References:

1. Kirtland's Warbler Recovery Plan
2. Management Plan for Kirtland's Warbler Habitat
3. Environmental Assessment for Management of the Kirtland's Warbler

Charles A. Hughlett  
Regional Director, FWS Region 3

Fish and Wildlife Service  
U. S. Department of the Interior

Addendum to the Environmental Assessment for Management  
of the Kirtland's Warbler  
dated July 1, 1977

The original assessment identified the need for land acquisition. This addendum documents the land acquisition procedures used by the Fish and Wildlife Service and the impacts of these procedures.

## Abstract

The U. S. Fish and Wildlife Service proposes to protect and preserve approximately 4,500 acres in Kalkaska, Crawford, Clare, Oscoda and Ogemaw Counties in Michigan.

The Endangered Species Act of 1973 (87 Stat. 884) provides authorization to acquire by purchase, donation or otherwise lands, waters or interests therein for endangered species.

The proposed acquisition would protect these areas from detrimental development and contribute to efforts to prevent extinction of the endangered Kirtland's warbler. Decline in the population of Kirtland's warblers from over 1,000 pairs in 1961 to 200 pairs at present, resulted in the species being placed on the Federal endangered species list.

The population has not decreased across its entire nesting range but collapsed into the center where nesting continues at normal density. This fact coupled with habitat studies indicates that suitable nesting habitat is the key to the survival of the Kirtland's warbler. The purpose of this project is to acquire privately owned land inhabited by or suitable for Kirtland's warblers. These tracts are inholdings which limit or restrict habitat management on larger tracts already in public ownership.

### I. Purpose and Need

#### A. Purpose of Action

The U. S. Fish and Wildlife Service proposes to acquire approximately 4,500 acres to enhance the management of Kirtland's warbler habitat.

A cooperative agreement has been drafted enabling the Michigan Department of Natural Resources to manage these lands with The Service retaining primary jurisdiction. Subsequent land exchanges between the Service and the State will consolidate ownerships that will result in more efficient management of the areas.

#### B. Objectives of Action

Protection and preservation of the Kirtland's warbler habitat will be guided by objectives delineated in the Kirtland's Warbler Recovery Plan, the Management Plan for Kirtland's Warbler Habitat, and the original Environmental Assessment for Management of the Kirtland's Warbler.

The acquisition of these inholdings will facilitate the intensive management of the surrounding public land. This management is planned to provide habitat necessary to support 1,000 breeding pairs. This is considered the necessary number of birds to have a self-sustaining population.

This management provides for timber harvest on a rotational schedule and provides for outdoor recreation and environmental education use of the area at times of the year the birds are not actually nesting. The nesting season runs from May 1 to August 15.

## II. Alternatives

### A. Introduction

Six alternatives are discussed in attempting to attain the objectives of providing habitat for the Kirtland's warbler.

### B. Alternatives

1. Federal Acquisition The U. S. Fish and Wildlife Service proposes to acquire in fee title, land necessary to insure the survival of the endangered Kirtland's warbler.

Management of these areas will be achieved through a cooperative agreement with the Michigan Department of Natural Resources.

Management practices are outlined in the "Recovery Plan" and "Habitat Management Plan." They consist of maintaining a large enough acreage of land in the correct successional stage to provide nesting habitat for 1,000 pairs of warblers. This management is to be accomplished on a rotational basis and includes commercial timber harvest, burning, seeding, planting, and protection of nesting colonies.

Public use by hikers, cross country skiers, birdwatchers, hunters, environmental educators and others will be allowed except when these uses would actually conflict with warbler nesting. Nesting takes place on the 20% of the land that the trees are in the 10 - 20 year old range and only between the dates of May 1 to August 15.

All acquisition will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646). This Act provides for the equitable treatment of persons who are displaced by public land acquisition. The Act also provides for financial as well as advisory assistance to owners and tenants in obtaining replacement housing, relocation of business and farming operations and provides for reimbursement of actual expenses for moving personal property up to 50 miles.

The Fish and Wildlife Service will negotiate with landowners on a willing seller basis. All properties will be appraised and fair market value offers made to the landowners. The Service prepares the purchase agreement and all subsequent closing documents and pays the closing costs. Landowners will not incur any "out of pocket" expenses in selling property to the Service.

The Service pays annual revenue sharing payments to the townships in order to help alleviate any hardship for tax loss due to lands being removed from private ownership. These payments are to be passed through to local units of government on a proportional basis and are based upon 3/4 of 1 percent of the land value, or 25 percent of any net receipts derived from the land or 75 cents per acre, whichever is greater.

2. Easements Easements could be obtained whereby the landowner agrees not to destroy the habitat, but would maintain control and limited use of the area. The owner would be compensated for this by a one time payment that would place these encumbrances on the title to the property. Easements are obtained through negotiated sale with the individual landowner and do not involve condemnation procedures. Under this proposal, lands would be retained in private ownership. Local units of government would continue to receive tax revenues from private landowners. The initial cost to the Service would be slightly less than initial fee acquisition costs. However, overall costs for easement acquisitions may be comparable to fee costs because of the type of easement interests the Service would be acquiring in order to achieve management requirements. Violation of the easement agreement would result in the prosecution of the landowner. This prosecution results in a considerable cost to the Federal Government.
3. Alternative Boundaries The boundaries of the tracts were established because of their suitability for warbler habitat and their proximity to land already in public ownership and committed to management of the warbler. The proposed tracts are adjacent to or surrounded by public land and their acquisition is necessary to provide manageable units of a size required by nesting warblers.

The acreages to be set aside as warbler habitat are those recommended in the "Recovery Plan."

4. Acquisition by State Conservation Agency The Michigan D.N.R. has a land acquisition program for the purpose of conservation of wildlife resources. Under this alternative the impacts and benefits would be essentially the same with minor exceptions.

The state and private conservation agencies recognize the importance of these areas, but no funds are available or expected to be available for acquisition in the foreseeable future. If the present population decline is to be reversed, immediate action is needed.

5. Zoning or Administrative Regulation Zoning to provide for the intensive management required on the areas would likely amount to removing the rights as discussed in the section on easements without compensation to the landowners. At best, this would be unfair to the present owners.

6. No Action Under this alternative, the lands proposed for acquisition would remain in private ownership. Local units of government would continue to receive tax revenues from private landowners. Since the size of the present population of Kirtland's warbler is precariously low, and on the decline, this would probably result in the extinction of the species.

### III. Affected Environment

The tracts of land consist of what are commonly called Jack Pine Barrens. A description of the area and the ecological community is contained in the original assessment.

### IV. Environmental Consequences

#### A. Introduction

This section will evaluate the impacts of acquisition only; the original assessment describes the impact of management on the ecological community.

#### B. Direct Impacts

1. Federal Acquisition The primary objective of this proposal is to save the Kirtland's warbler from extinction. Federal acquisition would permit intensive management of large tracts of land needed.

Public ownership would preclude further private recreational development of the tracts. The degree of public use of the tracts would increase.

The warbler population requires a specific habitat type for nesting, but the precise location of that habitat is of lesser importance. Therefore, land will be purchased from willing sellers only.

2. No Action The Kirtland's warbler faces potential extinction - due to loss of nesting habitat. Private development would be unrestricted.

#### C. Indirect Impacts

1. Federal Acquisition Because these tracts are largely undeveloped they offer the open space and appropriate setting for a wide variety of outdoor activities. These activities would be allowed on the areas to the extent that they are compatible with nesting habits of the birds.

2. No Action The tracts would remain in private ownership and the increased benefits of public use would not be realized. The cost of warbler management efforts would be significantly increased because of the care needed to protect the inholdings from fire.

D. Environmental Effects

The change in ownership of land will have no effect on the environment. The effects of the management that could take place as a result of putting the land in public ownership are discussed in the original assessment.

E. Energy Requirements or Depletable Resources Required

An increased use of energy could result during the management of the area. The nature of this proposal to protect and preserve the area lends itself to the safeguarding and wise use of the natural resources and limits utilization of energy.

F. Relationship between Local Short Term use of Man's Environment and Maintenance of Long Term Productivity

The principal relationship between short versus long term use of man's environment involves the preservation of an endangered species and the natural ecosystem associated with it versus its possible destruction in the near future. Federal acquisition for habitat preservation involves a trade-off between private recreational development and preservation and public recreation. There would be long term preservation of a natural resource without foreclosing any future use options of the area. There is no evidence indicating that the proposed action will create a less diverse, unsafe, or unstable environment for future generations for the sake of short term benefits.

G. Irreversible and Irretrievable Commitments of Resources

1. Federal Acquisition The commitment of land resources would be reversible with little difficulty. There would be a commitment of some energy resources involved in managing the area that would be irretrievable.
2. No Action The commitment of the ecosystem for less natural recreational development, including seasonal homes, would be largely irreversible. Some energy resources involved in this development would be irretrievable.

The potential extinction of the Kirtland's warbler would be irreversible.



V. Consultation and Coordination with Others

U. S. Fish and Wildlife Service  
U. S. Forest Service  
Michigan Department of Natural Resources  
Michigan Department of State  
Kirtland's Warbler Recovery Team

VI. Prepared by

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