

KIRTLANDS WARBLER...

LAND PROTECTION
PLAN

LAND PROTECTION PLAN

KIRTLAND'S WARBLER WILDLIFE MANAGEMENT AREA

I. PROBLEM/NEED

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. If creation of suitable nesting habitat does not continue in the future, the population will decline to extinction.

Kirtland's Warbler habitat management can be divided into short-term (next seven years) or emergency objectives and into long-term (beyond seven years) objectives. The short-term objectives are to maintain, improve and expand areas that are now providing or have the potential to provide suitable nesting habitat during the critical period between now and 1986. Hopefully, this emergency effort will help to arrest the downward slide of the population and even provide for some immediate improvement. The long-term objective is to generate new Kirtland's Warbler nesting habitat that will eventually provide for a minimum of 1,000 pairs on a sustained basis.

Authority for this action is the Endangered Species Act of 1973 (87 Stat. 884).

II. PROGRAM OBJECTIVES

The purpose of this project is to protect 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.

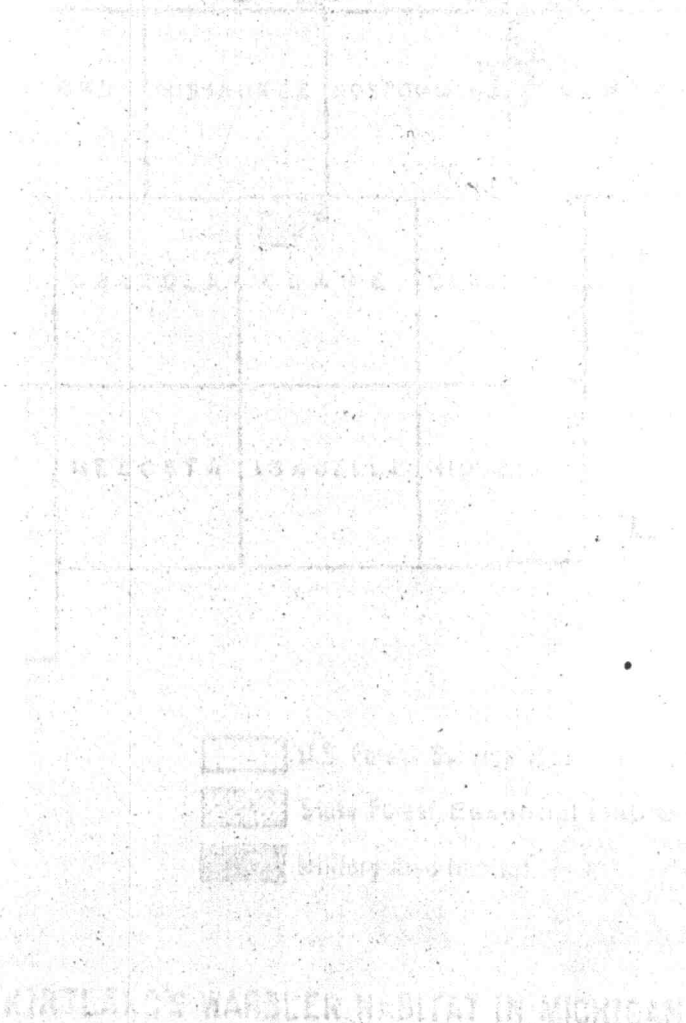
Kirtland's Warblers require highly specific breeding habitats. Nearly all nests are found on jack pine stands 5 to 20 feet in height (8-21 years old) which have resulted from forest fire. Habitat consists of jack pine thickets interspersed with small openings. Tracts should be 80 acres or preferably 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 Plan 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 plan 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. Another 4,500 acres have been identified for protection by federal acquisition of privately owned inholdings in the State Forest.

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. Prescribed burning and cutting is necessary to insure sufficient nesting habitat for the Kirtland's Warbler.

The protection and management of these lands are identified and described in the "Kirtland's Warbler Recovery Plan," the "Management Plan for Kirtland's Warbler Habitat in Michigan," and the "Regional Resource Plan." Copies of these documents are on file and available for inspection in the Region 3 Office of Endangered Species.





-  U.S. Forest Service Essential Habitat
-  State Forest Essential Habitat
-  Military Area Habitat

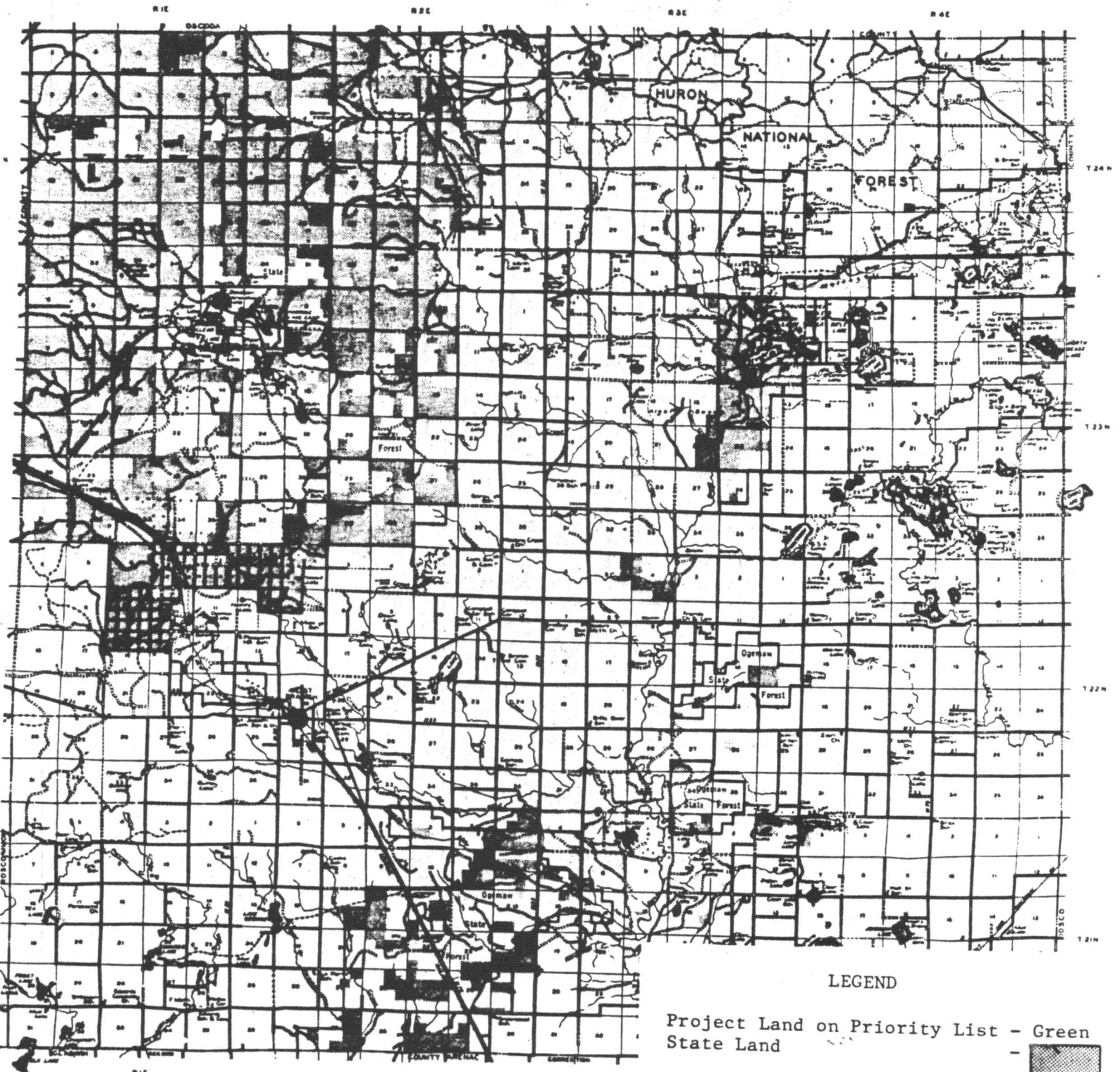
KIRTLAND'S WARBLER HABITAT IN MICHIGAN

U.S. Fish and Wildlife Service essential habitat will be interspersed within the State Forest essential habitat (inholdings in State Forest)

1979

KIRTLAND WARBLER MANAGEMENT AREA

OGEMAW COUNTY, MICHIGAN



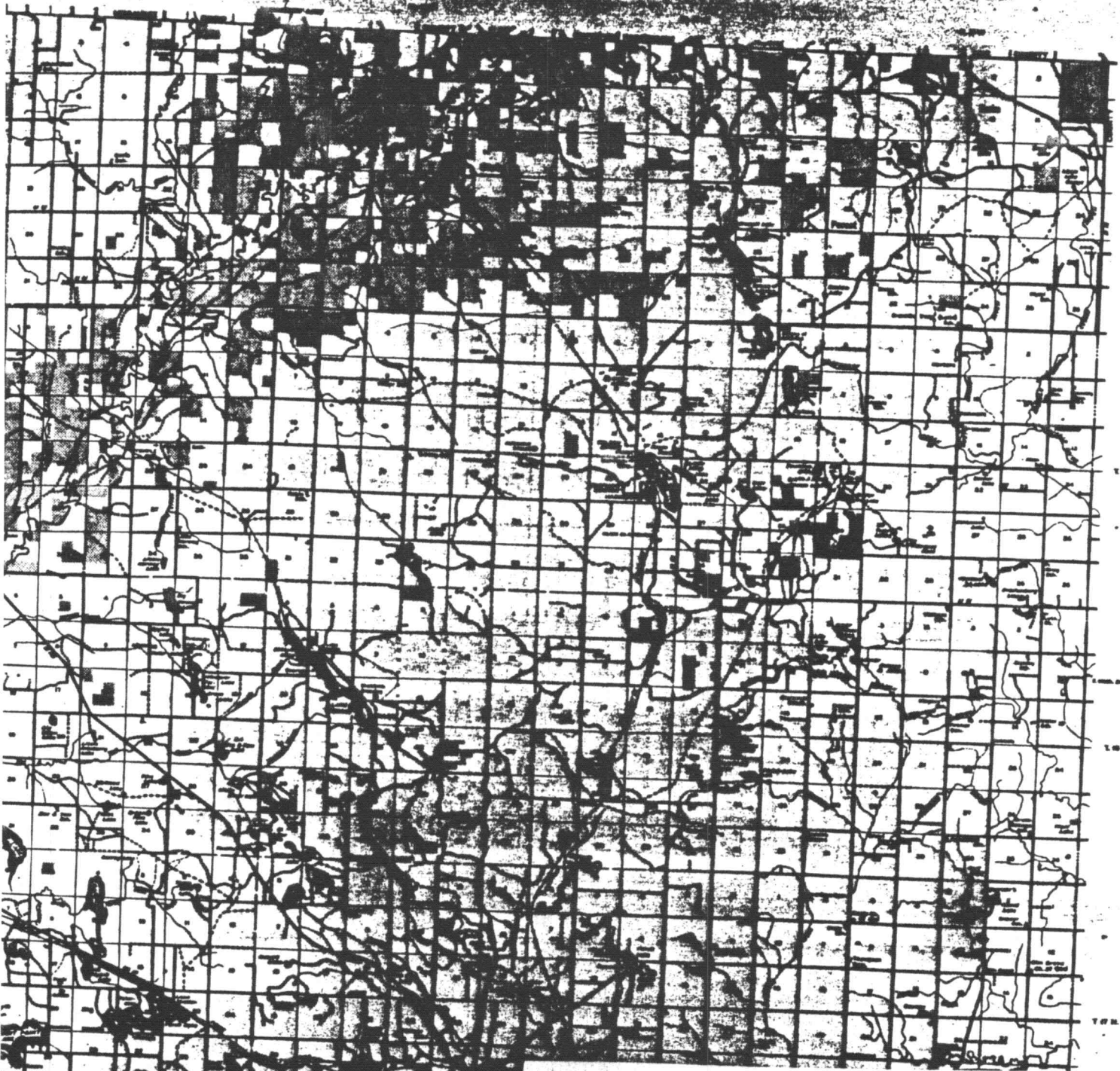
LEGEND

Project Land on Priority List - Green
State Land - [shaded pattern]



KIRTLAND WARBLER MANAGEMENT AREA

CLARE COUNTY, MICHIGAN



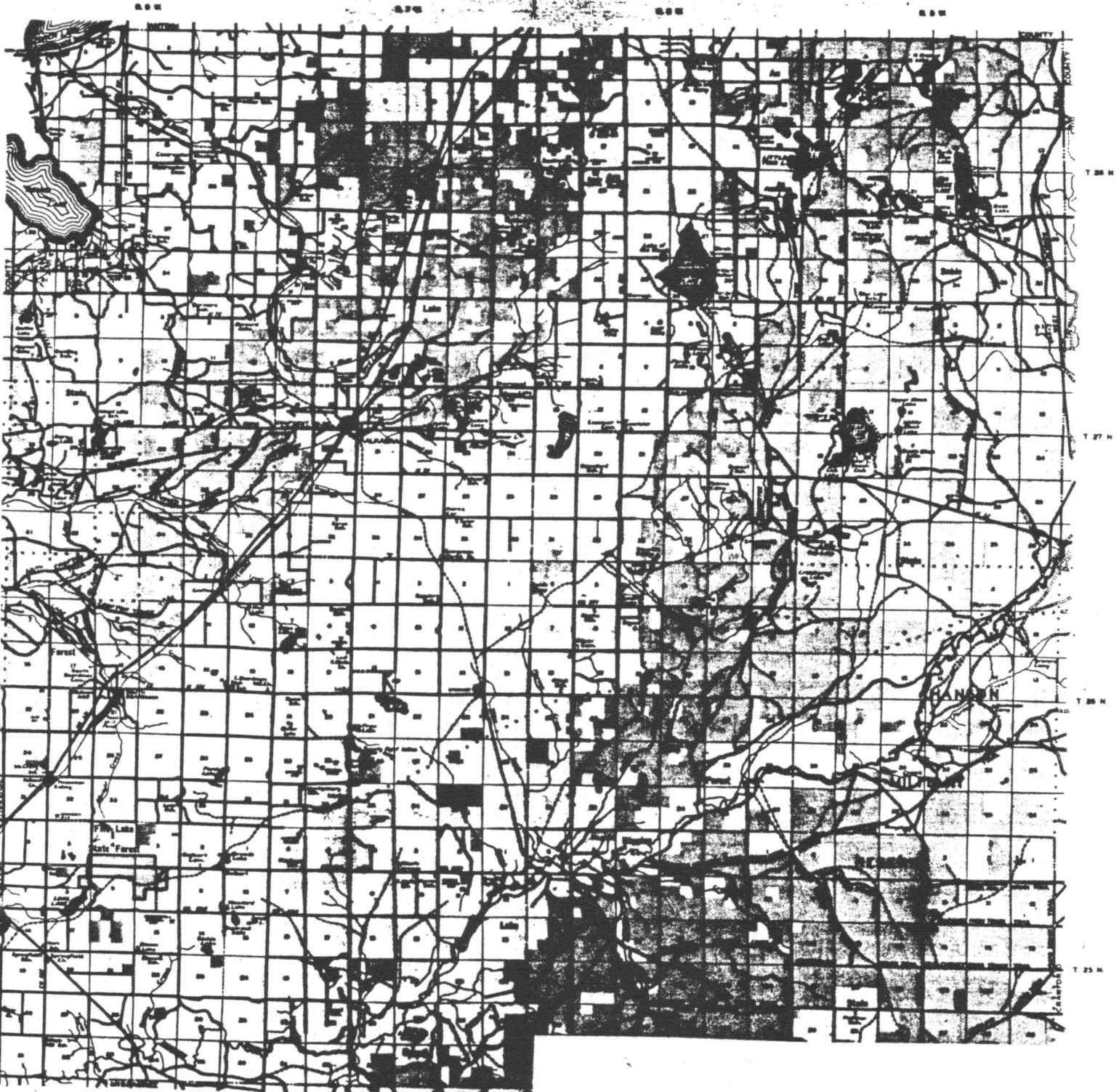
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Project Land on Priority List - Green
State Land -



KIRTLAND WARBLER MANAGEMENT AREA

KALKASKA COUNTY, MICHIGAN

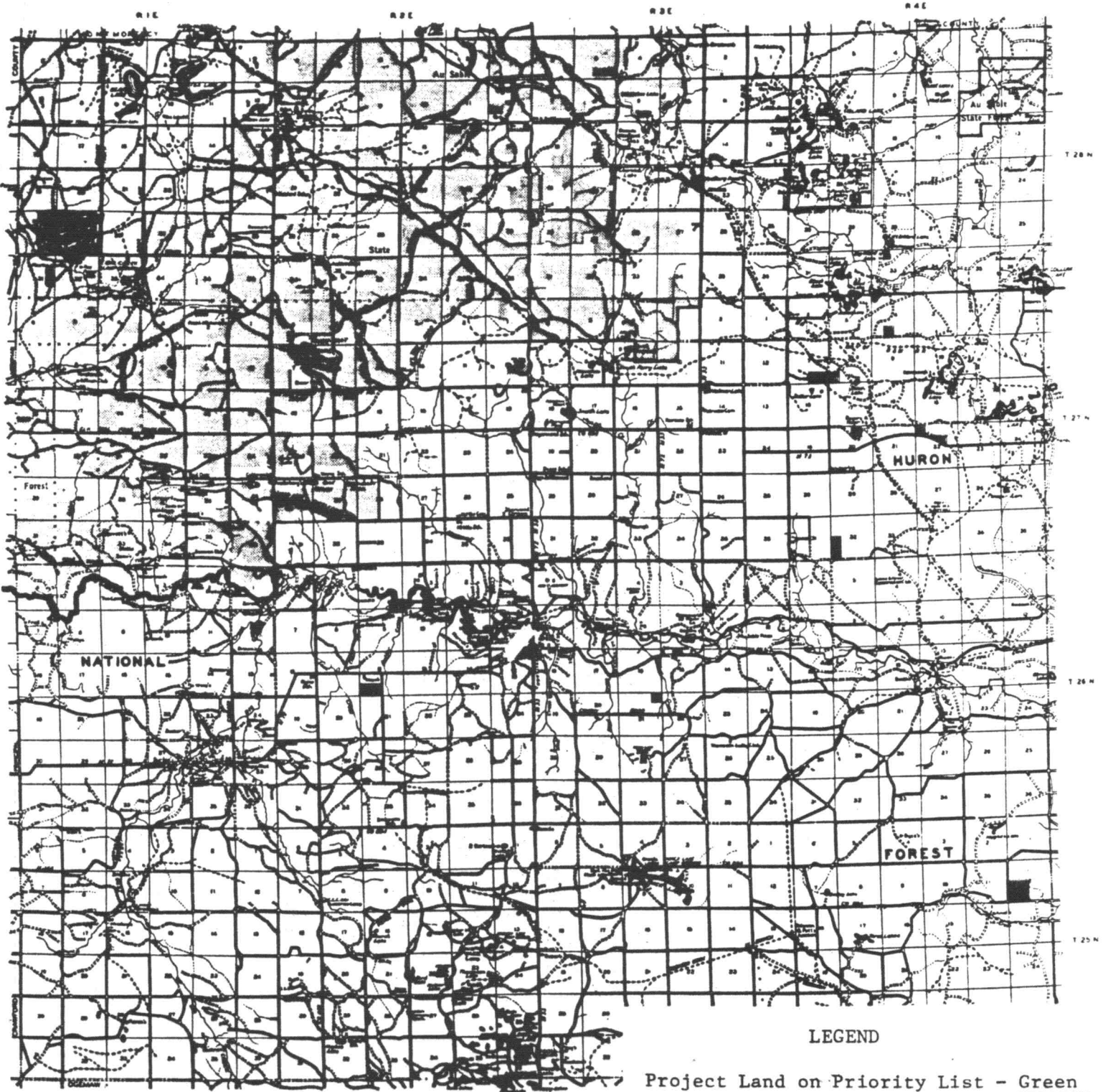


LEGEND

Project Land on Priority List - Green
State Land - [stippled pattern]

KIRTLAND WARBLER MANAGEMENT AREA

OSCODA COUNTY, MICHIGAN



LEGEND

Project Land on Priority List - Green
State Land - [shaded box]

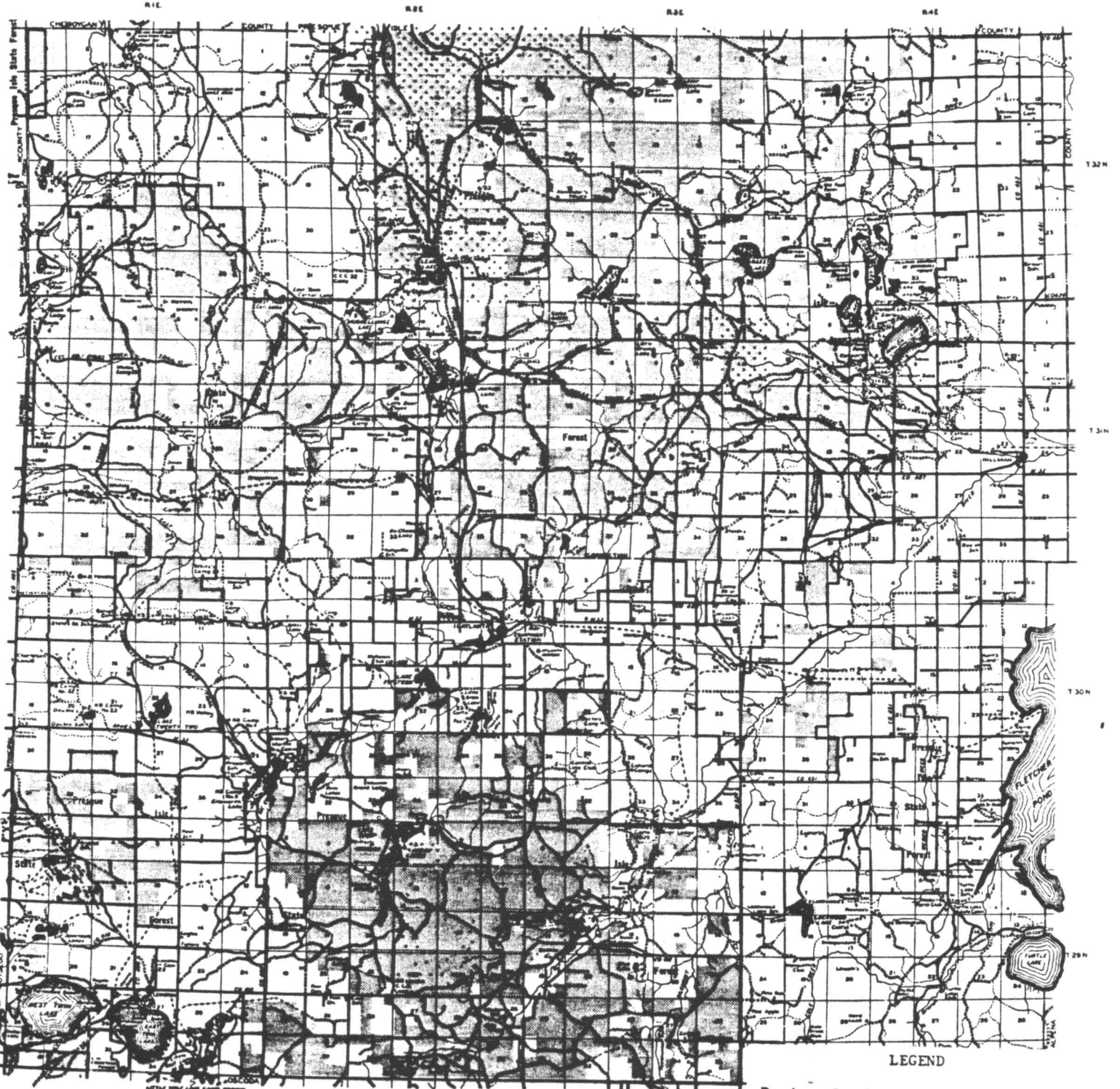
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KIRTLAND WARBLER MANAGEMENT AREA
MONTMORENCY COUNTY, MICHIGAN



LEGEND

Project Land on Priority List - Green
 State Land - [shaded box]

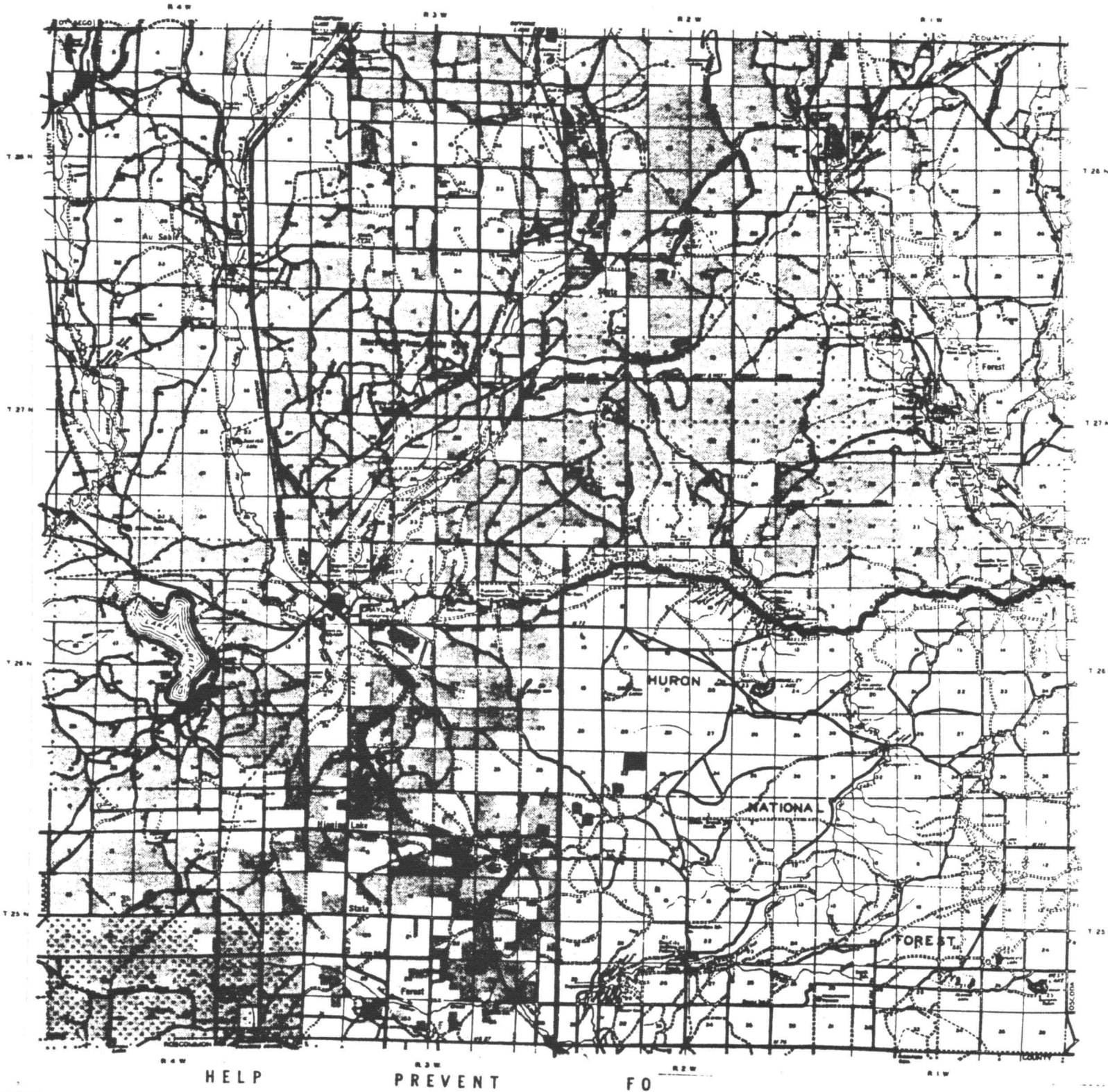
HELP

PREVENT

FOREST

KIRTLAND WARBLER MANAGEMENT AREA

CRAWFORD COUNTY, MICHIGAN



LEGEND

Project Land on Priority List - Green
State Land - [stippled pattern]

III. RESOURCE PROTECTION ALTERNATIVES REVIEWED

Both the Forest Service and the State have closure orders and post the tracts to protect the bird when it actually occupies the habitat, and disturbance has not been a problem on private property. Because the forest fires that historically created nesting habitat must be controlled, drastic manipulation, including controlled burning, is needed to provide the same conditions.

Because the value of the rights required in an easement or other agreement for the above habitat manipulation would approach the cost of fee acquisition, less than fee acquisition has been ruled out on these particular inholdings.

The Forest Service is pursuing acquisition of inholdings within their boundaries. The State has no authorized source of funding for non-game habitat acquisition and is concentrating their resources on habitat manipulation.

As scattered tracts lying within the State Forest boundaries are acquired, the State manages 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 an existing management agreement.

IV. SUMMARY OF ALTERNATIVES

All tracts have been selected because they are inholdings within existing management areas, and the management required precludes means of protection other than fee acquisition.

V. SOCIO-CULTURAL IMPACTS

The cultural resources of the area will not be affected do to the size and scope of the project in relation to area of the project. The impact of acquiring 4,500 acres in scattered tracts in a five county area (18.4 million acres) will be minimal.

The region's economy is based on timber production and recreation. "An Economic Analysis of the Joint U.S. Forest Service, Michigan Department of Natural Resources Management Plan for Lands Designated as Kirtland's Warbler Critical Habitat" states the following:

"Direct and indirect economic impact on the region's economic base should be minor. Some increase in tourism is anticipated which would provide stimulus for the wholesale and retail trade sectors of the economy. Timber volumes are not expected to decline relative to their current levels, making the impact on forestry and forest products sectors negligible. Future timber production will be

increased relative to the existing stands as the new plantations reach their rotation age and are harvestable. The increased harvest volumes should provide some improvement in employment and regional income, assuming that demand for jack pine pulpwood can handle the increased volumes available.

Most of the expected changes in abundance and diversity of wildlife and recreational activities under the Warbler Habitat Management Plan cannot be quantified at this time. It should be noted, however, that even very conservative estimates of the recreational value resultant from wildlife on these lands far exceeds the value realized from harvest of timber on either an annual or cumulative basis. Value of the expected increases in these wildlife dependent recreational activities will undoubtedly far overshadow any loss of revenue from timber harvests resulting from implementation of this plan as compared to the timber management prescription."

VI. COORDINATION

The Kirtland's warbler project has been ongoing for over ten years so local landowners, communities, governments and interest groups are aware of the proposal.

A public meeting was held June 6, 1981. Only two people expressed other than support for the program and they were concerned with the harvestability of the timber produced by the project.

State officials have reviewed and signed the management plan and various cooperative agreements concerning management and land acquisition.

Each landowner has been sent a letter inquiring whether they would be interested in selling their property. Overall, the landowners response has been positive in that approximately 50% said they would be interested in selling. We have not received any negative comments from the landowners.

The management project has been through the A-95 process.

VII. FINDINGS AND RECOMMENDATIONS

The U.S. Forest Service owns 54,640 acres of dedicated warbler habitat, the State of Michigan owns 71,665 acres, and the U.S. Fish and Wildlife Service owns 595 acres that are adequately protected now and for the future.

Acquisition will adhere as closely as possible to the following priority list within the constraints of price, willing sellers, etc., until project management acreage requirements are met.

Realty Land Acquisition Feasibility Report

- I. Ownership Pattern: Fifty-eight owners are identified on the revised high priority list. Eight of the properties have multiple owners ranging from four to 26 owners. The revised priority list is attached for your information. The ownership pattern has changed since 1979 due to property subdivision and transfers of title.
- II. Potential Willing/Unwilling Sellers: During 1979, the Michigan DNR contacted a large proportion of the landowners. At that time, the majority of the landowners would consider selling their property. Recent Service contacts with landowners indicate a high proportion of willing sellers.
- III. Government Attitude: Favorable - the State government fully supports these acquisitions. Local government has not expressed opposition to the project.
- IV. Legislative Requirements: None.
- V. Relocation Plan Summary: The acquisition of the proposed property will require little or no relocation cost because the tracts to be acquired are generally unimproved and vacant. No displacement of landowners or tenants is anticipated.
- VI. Estimate of Value: Land cost for 4,500 acres is \$2,250,000.
- VII. Revenue Sharing: The shared revenue payment to local units of Government is estimated to be \$16,875 based upon 3/4 of one percent of \$2,250,000.

SUMMATION OF ACQUISITION COSTS:

Direct cost of land and improvements:	\$2,250,000
Indirect cost of acquisition, appraisals title, closing, etc.	<u>100,000</u>
TOTAL	\$2,350,000

Engineering Assessment

The property the United States will be acquiring will be managed by the Michigan Department of Natural Resources. No Service improvements will be necessary due to the DNR management.

KIRTLAND'S WARBLER LAND ACQUISITION
 Priority List
 Revised February 16, 1983

Priority	County	Description	Acres
1	Crawford	T27N, R1W, Sec. 28, NW $\frac{1}{4}$	160
2	Ogemaw	T24N, R2E, Sec. 30, S 907.5 ft. of S 1,815 ft. of NE $\frac{1}{4}$, except that part of E $\frac{1}{2}$ NE $\frac{1}{4}$ of SE $\frac{1}{4}$ NE $\frac{1}{4}$	51
3	Ogemaw	T24N, R2E, Sec. 30, N 907.5 ft. of S 1,815 ft. of NE $\frac{1}{4}$, except that part of E $\frac{1}{2}$ NE $\frac{1}{4}$ of SE $\frac{1}{4}$ NE $\frac{1}{4}$	51
4	Ogemaw	T24N, R2E, Sec. 30, NE $\frac{1}{4}$, except S 1,815 ft.	50.9
5	Ogemaw	T24N, R1E, Sec. 3, 5/14 Int., N $\frac{1}{2}$	320
5a	Ogemaw	T24N, R1E, Sec. 3, 5/14 Int., N $\frac{1}{2}$	320
5b	Ogemaw	T24N, R1E, Sec. 3, 2/5 Int., N $\frac{1}{2}$	320
5c	Ogemaw	T24N, R1E, Sec. 3, 2/5 Int., N $\frac{1}{2}$	320
6	Ogemaw	T24N, R2E, Sec. 31, E $\frac{1}{2}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ NE $\frac{1}{4}$	120
7	Kalkaska	T25N, R5W, Sec. 22, E $\frac{1}{2}$ SE $\frac{1}{4}$	80
8	Ogemaw	T24N, R1E, Sec. 17, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	20
9	Ogemaw	T24N, R2E, Sec. 18, NW $\frac{1}{4}$ SE $\frac{1}{4}$	40
10	Ogemaw	T24N, R1E, Sec. 17, W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	20
11	Ogemaw	T24N, R2E, Sec. 18, S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	50

Priority	County	Description	Acres
12	Crawford	T26N, R3W, Sec. 34, SE $\frac{1}{4}$	160
13	Crawford	T26N, R2W, Sec. 32, S $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$ and N $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$	80
14	Oscoda	T27N, R1E, Sec. 32, SW $\frac{1}{4}$	160
15	Ogemaw	T24N, R1E, Sec. 35, NE $\frac{1}{4}$ NW $\frac{1}{4}$	40
15a	Ogemaw	T24N, R1E, Sec. 35, NW $\frac{1}{4}$ NW $\frac{1}{4}$	40
16	Ogemaw	T24N, R1E, Sec. 15, N $\frac{1}{2}$ N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$, except E 8 rods of W 32 rods; also S $\frac{1}{2}$ N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$	39
17	Ogemaw	T23N, R1E, Sec. 17, SE $\frac{1}{4}$	160
18	Ogemaw	T23N, R1E, Sec. 19, NW Fr 1 $\frac{1}{4}$	174.49
19	Ogemaw	T23N, R1E, Sec. 29, E $\frac{1}{2}$ SW $\frac{1}{4}$	80
20	Ogemaw	T24N, R1E, Sec. 13, N $\frac{1}{2}$ NE $\frac{1}{4}$	80
21	Ogemaw	T24N, R1E, Sec. 34, NW $\frac{1}{4}$ NE $\frac{1}{4}$	40
22	Ogemaw	T24N, R1E, Sec. 34, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	20
23	Ogemaw	T24N, R1E, Sec. 20, E $\frac{1}{2}$ NW $\frac{1}{4}$	80
24	Ogemaw	T24N, R1E, Sec. 18, NE $\frac{1}{4}$ NE $\frac{1}{4}$	40
25	Ogemaw	T24N, R1E, Sec. 17, N $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$	40
26	Crawford	T25N, R3W, Sec. 1, SW $\frac{1}{4}$ SE $\frac{1}{4}$	40
27	Ogemaw	T24N, R1E, Sec. 14, SW $\frac{1}{4}$ SW $\frac{1}{4}$	40
28	Crawford	T25N, R2W, Sec. 6, NW $\frac{1}{4}$ SE $\frac{1}{4}$	40

Priority	County	Description	Acres
29	Crawford	T24N, R2W, Sec. 6, SE $\frac{1}{4}$ NW $\frac{1}{4}$	40
30	Crawford	T25N, R2W, Sec. 6, NE $\frac{1}{4}$ SE $\frac{1}{4}$	40
31	Crawford	T26N, R2W, Sec. 32, SE $\frac{1}{4}$ SW $\frac{1}{4}$	40
32	Crawford	T25N, R2W, Sec. 5, NW $\frac{1}{4}$ SE $\frac{1}{4}$	40
33	Oscoda	T28N, R1E, Sec. 30, SE $\frac{1}{4}$ SE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$	46
34	Oscoda	T28N, R1E, Sec. 31, NE $\frac{1}{4}$ SE $\frac{1}{4}$	40
35	Oscoda	T28N, R1E, Sec. 31, SE $\frac{1}{4}$ NE $\frac{1}{4}$	40
36	Oscoda	T27N, R1E, Sec. 31, E $\frac{1}{2}$ SW $\frac{1}{4}$	80
37	Oscoda	T27N, R1E, Sec. 31, SE $\frac{1}{4}$ NW $\frac{1}{4}$	40
38	Crawford	T26N, R2W, Sec. 32, S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$	40
39	Crawford	T26N, R2W, Sec. 32, N $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$	40
40	Ogemaw	T24N, R2E, Sec. 31, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	20
40a	Ogemaw	T24N, R2E, Sec. 31, N $\frac{1}{2}$ S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	10
40b	Ogemaw	T24N, R2E, Sec. 31, S $\frac{1}{2}$ S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	10
41	Ogemaw	T24N, R2E, Sec. 18, S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$	30
42	Oscoda	T28N, R1E, Sec. 29, part of the SW $\frac{1}{4}$ SW $\frac{1}{4}$	14
43	Clare	T20N, R5W, Sec. 18, W $\frac{1}{2}$ NW $\frac{1}{4}$	80
43a	Clare	T20N, R5W, Sec. 18, E $\frac{1}{2}$ NW $\frac{1}{4}$	80
44	Clare	T20N, R5W, Sec. 17, Und $\frac{1}{2}$ Int in SE $\frac{1}{4}$ NW $\frac{1}{4}$	20

Priority	County	Description	Acres
44a	Clare	T20N, R5W, Sec. 17, Und ½ Int in SE¼NW¼	20
45	Clare	T20N, R5W, Sec. 9, NW¼NE¼	40
45a	Clare	T20N, R5W, Sec. 9, NE¼NE¼	40
45b	Clare	T20N, R5W, Sec. 9, SW¼NE¼	40
45c	Clare	T20N, R5W, Sec. 9, SE¼NE¼	40
46	Clare	T20N, R5W, Sec. 30, E½NW¼	80
47	Clare	T20N, R5W, Sec. 30, NW¼SW¼	40
48	Clare	T20N, R5W, Sec. 22, NW¼NE¼	40
49	Clare	T20N, R5W, Sec. 30, SW¼NE¼	40
50	Clare	T20N, R6W, Sec. 13, E½SE¼	80
51	Clare	T20N, R6W, Sec. 13, SW¼SE¼	40
52	Clare	T20N, R6W, Sec. 23, E½SE¼	80
53	Clare	T20N, R6W, Sec. 23, NE¼	160
54	Clare	T20N, R6W, Sec. 14, SE¼	160
55	Clare	T20N, R5W, Sec. 6, NW¼SE¼	40
56	Clare	T20N, R5W, Sec. 6, SW¼NE¼	40
57	Ogemaw	T24N, R2E, Sec. 18, SE¼	160
58	Montmorency	T32N, R2E, Sec. 9, SW¼SW¼ lying south of road Sec. 16, NW¼NW¼	70
59	Montmorency	T32N, R2E, sec. 21, SW¼SW¼	40

The following documents are available for inspection in the Region 3 Office of Endangered Species:

Environmental Assessment for Management of the Kirtland's Warbler. This proposal complies with the National Environmental Policy Act of 1969 (NEPA).

Land acquisition "Addendum to the Environmental Assessment for Management of the Kirtland's Warbler."

Realty land acquisition "Feasibility Report."

Management Plan for Kirtland's Warbler Habitat in Michigan.

Closure Order Huron National Forest Michigan.

Kirtland's Warbler Nesting Area Rule R299.331(1) of the Michigan Administrative Code.

An Economic Analysis of the Joint U.S. Forest Service Michigan Department of Natural Resources Management Plan for Lands Designated as Kirtland's Warbler Critical Habitat.

U.S. Fish and Wildlife Service Public Meeting on preservation of the Kirtland's Warbler.

Kirtland's Warbler Recovery Plan.

Section 7 consultation was completed June 23, 1980 in compliance with the Endangered Species Act.