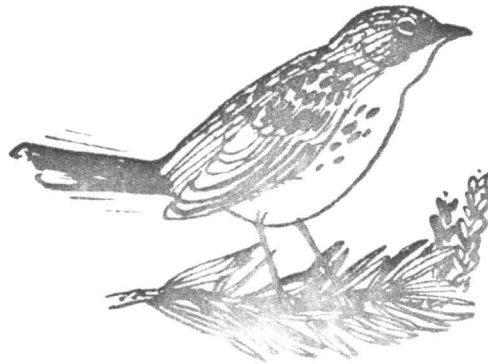


DRAFT
ENVIRONMENTAL ASSESSMENT
prepared by
The Michigan Department of Natural Resources
for
MANAGEMENT OF THE KIRTLAND'S WARBLER



May 6, 1977
Date

Sylvia M Taylor

SUMMARY

Need: The Kirtland's warbler, a federally designated endangered species, nests only in a small area in northern Michigan. Its breeding population remains critical and numbered only 400 in the spring of 1976 (down from an estimated 1000 plus in 1961). Failure to protect the nesting population and to provide for its needs may cause the extinction of this species. If the Kirtland's warbler is to be saved from this fate, efforts must be intensified to maintain, improve and expand suitable nesting habitat and to increase protection against disturbances. These include human disturbances and parasitism of the nests by cowbirds.

Objective: To develop and implement a recovery plan to produce a breeding population of 1000 pairs of Kirtland's warbler.

Expected Results and Benefits: The true value of the Kirtland's warbler cannot be easily assessed. Science is unable to qualify the total contribution of a single species to the ecosystem, and in the case of the warbler (where few economic benefits occur) it is even more difficult. The preservation of a species on its way to extinction (due to man's influence) is the greatest benefit to be derived.

Of direct benefit to the bird itself, this project will result in an expansion of suitable breeding habitat--one of the major factors limiting the population. Currently only 4000 to 5000 acres of good productive habitat is available, however, 30,000 to 36,000 acres are needed to produce and maintain the goal of 1000 pairs.

The criteria used for designation of critical habitat include:

1. Soil type - Grayling Sand.
2. Forest cover currently is jack pine, and where management for jack pine is feasible. Areas may contain a limited hardwood (oak) component.
3. Areas currently occupied or previously used by the species.
4. Tracts of about 320 acres or larger, preferably where five or more of them lie within two miles of each other. Tracts less than 320 acres, but not less than 80 acres, where they occur in close proximity to the larger tracts.
5. Lands preferably in public ownership (state or national forests).
6. Limited development potential or where development could be controlled.
7. Relatively level topography.

CRITICAL HABITAT-- KIRTLAND'S WARBLER



■ CRITICAL HABITAT



DESCRIPTION OF THE PROPOSED ACTION

Basis for the Proposed Action

The first objective of Kirtland's warbler management is to reverse the downward trend of the population. This is the greatest concern for the next 8 to 10 years. It is urgent because existing birds are at a very low level and they are the only source of stock which can be drawn upon to occupy new habitat as it develops. From this beginning it is the ultimate goal to develop enough breeding range habitat to support a stable wild population of 1000 pairs. It is recognized that this is a great increase over the present population of 200 pairs. It is, however, a realistic goal, which can be reached if the breeding range is the principal limiting factor in their growth. Most experts, including members of the Kirtland's Warbler National Recovery Team, believe it is the most important known limiting factor.

The most recent survey shows that active and potential Kirtland's warbler summer habitat is relatively limited. Jack pine cover with potential to provide the known nesting requirements occupies about 135,000 acres. This area includes all of the best sites on state and national forest lands. An additional several thousand acres of privately owned lands could have a potential for supporting the species but are not included in the total. At this time, the public lands offer the best, and perhaps only, opportunity for a successful management program. Even though acreage available for summer range development is limited, it is quite adequate to support our ultimate goal of 1000 pairs.

In an intensively managed forest the land manager has a number of options available concerning the distribution and size of harvest, the tree species to favor and the schedule of harvesting. All of these management options can directly affect the habitat of the Kirtland's warbler. Commercial harvest, special plantings, various stand treatment techniques, together with direct wildlife habitat management for the warbler, offer the most realistic means of attempting to meet the objectives of this action. A coordinated timber-wildlife management plan will achieve the desired nesting habitat objective while providing a continuous supply of forest products.

In order to reverse a population trend leading to extinction, the Kirtland's Warbler National Recovery Team strongly recommended that 135,000 acres be designated for management of the Kirtland's warbler. This is necessary to develop and maintain between 30,000 to 36,000 acres of habitat active and productive at all times.

By sustaining the amount of acreage through a planned rotation, an adequate amount of nesting habitat will be provided to maintain a secure Kirtland's warbler population. This will be most feasibly accomplished through carrying the jack pine to a commercial rotation age.

