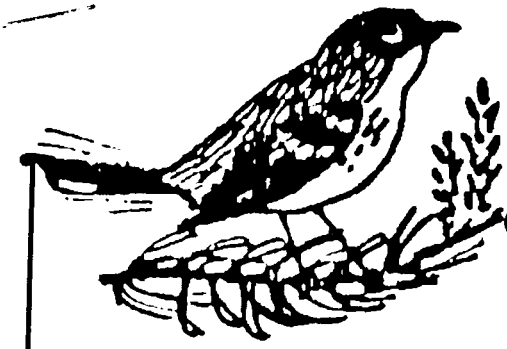

Kirtland's Warbler Recovery Team

Care of: Huron-Manistee National Forests, 1755 S. Mitchell,
Cadillac, MI 49601

April 29, 1996

William F. Spinner, Forest Supervisor
Hiawatha National Forest
2727 North Lincoln Road
Escanaba, MI 49829

Dear Mr. Spinner:

The Kirtland's Warbler Recovery Team (Team) continues to be extremely interested in the recent occurrence of Kirtland's warblers, Dendroica kirtlandii, in the Upper Peninsula (UP) of Michigan, including sightings of females in 1995. At the 1995 summer meeting we learned that eight male Kirtland's warblers were found in four counties of the UP. This level of occupancy represents a continued increase from two in 1994 and one in 1993, as predicted from population increases in the main breeding range. Additional efforts by UP biologists during the summer determined that at least two mated pairs were present and nesting likely occurred. This is the first well-documented occurrence of mated Kirtland's warblers in the UP and the first ever found outside the Lower Peninsula of Michigan. It highlights the continued growth of the Kirtland's warbler population which reached a record high of 766 males estimated in 1995. The Kirtland's warbler is clearly responding to ecosystem management practices. Much of the recent population response was related to wildfire created habitat, yet the 1995 census found 439 singing males (57 percent of the total) in areas specifically planted and managed for warbler habitat. The Team recognizes that challenges remain to ensure adequate nesting habitat occurs within appropriate ecosystems if we are to meet and sustain the recovery plan goals.

The presence of this endangered songbird in the UP presents additional opportunities to incorporate its habitat requirements into your xeric ecosystem management prescriptions for timber, wildlife and recreation. These objectives can be achieved through the application of ecosystem management principles with small or moderate alteration to existing practices while continuing to provide benefits to a wide variety of wildlife, plants and humans. We recognize

that the UP contains a substantial amount of xeric systems located across a variety of ownerships and that an existing group of partners exists to address these ecosystem management opportunities through Eastern UP Partner in Ecosystem Management (EUPPEM). As is the case in the Lower Peninsula, a cooperative and collaborative ecosystem management approach is needed to ensure a sustained and coordinated habitat condition across a broad landscape.

The xeric systems in the UP could represent an important component to the Kirtland's warbler recovery efforts. They would provide additional breeding habitat, they would act as potential buffers against catastrophic events in the Lower Peninsula, they would help maintain species genetic diversity, and they would provide habitat to mitigate habitat loss from global warming. The Team is encouraged by the natural immigration of the Kirtland's warbler to the UP and believes that its habitat requirement can be met there within the context of xeric ecosystem management. We encourage you to work with the Team to ensure that these habitats and their future populations become sources of Kirtland's warblers for sustained periods of time and not act as sinks which would decrease population levels.

The Team recognizes that two key actions are necessary for the survival and recovery of the Kirtland's warbler: 1) provide adequate breeding habitat and 2) control brown-headed cowbirds. breeding habitat and cowbird parasitism have been the primary limiting factors affecting Kirtland's warbler recovery. The population response that occurred in the Lower Peninsula of Michigan during the last eight years clearly reflects this. There has been a greater than 20% per year growth in the population during this eight year period, after having a stable population of around 200 pair for a 20 year period . Management opportunities in the UP need to recognize these two factors. A large landscape approach using a hierarchical classification system, including pre-European settlement maps, existing landsat imagery, and ecological classification systems, could be used to identify potential Kirtland's warbler habitat. Within these areas, managers should address habitat patch size, adjacency and connectivity of habitat, and suitable tree stocking densities. Recent research with Kirtland's warbler habitat in the Lower Peninsula shows that size of breeding habitat affects the age in which it is first occupied, densities of warbler pairs, and longevity of occupancy. Large areas greater than 500 acres appear to best meet these requirements.

Kirtland's warblers generally do not occupy breeding habitat until it becomes 6-8 years old and then it becomes unsuitable after 18-24 years. Managers must also consider adjacency and connectivity opportunities within an area. Kirtland's warblers and their offspring return to the same patches of habitat year after year, thus requiring the consideration of sustained habitat within areas over long periods of time. Within these sites dense tree stocking is critical to successful breeding. Stem densities generally greater than needed for normal Jack pine reforestation are required for Kirtland's warblers. Current jack pine reforestation efforts for Kirtland's warbler include stocking densities of 1600 trees per acre, with 75% of the area

stocked, leaving many small medium openings scattered across the area. In addition to adequate breeding habitat, control of brown-headed cowbirds is critical. Prior to initiation of cowbird control less than one young per pair per year was produced, with nearly 70% of nests parasitized. This level of productivity is not sufficient to maintain the warbler population given its documented annual rates of survival and mortality. With cowbird control, nest parasitism is very low and levels of production are nearly three (3) young per pair per year. This production level has been adequate to assure survival and allow the population to expand as available habitat increased. We endorse efforts within the UP to implement cowbird control in areas occupied by Kirtland's warblers and to continue census efforts for Kirtland's so that you will know where to implement these control measures. At this time, based upon the number of Kirtland's warblers, we are not recommending implementing any area closures as is being done in lower Michigan.

The Recovery Team views the continued existence, the increasing number of individuals occupying suitable breeding habitat, and the documented occurrence of two mated pairs in the UP as very encouraging signs for future Kirtland's warbler occupancy. We encourage and support your consideration and implementation of Kirtland's warbler habitat needs into your broader ecosystem management strategies within xeric systems in the UP. Through these efforts, we believe that additional areas will support warblers and contribute to the successful recovery of an endangered species found only in Michigan and ecosystems largely influenced by humans.

We continue to be available to assist UP managers in understanding these ecosystem management strategies needs and invite interested parties to view conditions and management strategies being implemented in the Lower Peninsula. Through cooperative efforts such as these, we believe that a more rapid and successful recovery effort for the Kirtland's warbler will be achieved, while addressing a wide variety of ecosystem values.

Sincerely,

Kenneth Ennis

KENNETH REX ENNIS
Kirtland's Warbler Recovery Team, Team Leader

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