

United States
Department of
Agriculture

Forest
Service

Huron-Manistee
National Forests

Mio Ranger District
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Mio, MI 48647

Caring for the Land and Serving People!
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Date: January 17, 1995

Dear Friend of the Huron National Forest:

The Forest Service would like you to help us better manage the National Forest by providing input on some changes we are considering.

The Forest Service manages jack pine on the Huron National Forest for the Kirtland's Warbler, a federally endangered bird. Stands of mature jack pine trees are harvested by clearcutting and young trees are planted to provide nesting habitat. Without this type of management, the Kirtland's Warbler would likely become extinct.

Background

Prior to modern fire suppression, large natural wildfires frequently burned **thousands** of acres of jack pine forest on the dry sand plains. Most jack pine wildfires killed the older trees and caused millions of seeds to be released. In just a few years, these burned over areas were covered with young pine trees. These new stands¹ of young jack pine provided plenty of natural habitat for the Kirtland's Warbler. However, modern fire suppression has substantially decreased the frequency of wildfire, significantly reducing the amount of nesting habitat naturally produced for this bird.

While fire suppression is necessary to protect human life and property, it eliminates a natural disturbance factor from the jack pine ecosystem on which many species of animals, plants and insects depend. The Forest Service attempts to mimic the effects of natural wildfire by harvesting and planting jack pine. Management of National Forest system lands for the Kirtland's Warbler is guided by the Kirtland's Warbler Management Plan and the Huron-Manistee National Forests' Plan. **The Kirtland's Warbler Habitat Management Plan is more than ten years old and is presently being revised.**

New Information

Examination of our Kirtland's Warbler census data suggests that these birds prefer to nest in large stands (1000 acres +) of young jack pine. **It appears that birds nest in higher densities in larger stands, and these large stands are used for a longer period of time than smaller stands** (see Figure 1). The ecological attributes of large stands are more closely aligned with the habitat objectives of the Kirtland's Warbler Habitat Management Plan.

Proposal

Our current Forest Plan limits the size of jack pine clearcuts to 370 acres or less. In addition, two or more adjacent stands cannot be cut if their combined size would exceed 370 acres (see Figure 2a). These guidelines need to be changed to allow managers to best mimic the effects of natural jack pine wildfires and provide habitat that is best suited for all wildlife species of the jack pine ecosystem (Figure 3).

A proposed Forest Plan amendment was developed by a multi-disciplinary team to improve the design of Kirtland's Warbler habitat projects, with considerations for social values including visual quality, recreation, and fire protection. **We propose to amend the Forest Plan to allow a clearcut stand to be up to 500 acres. In addition, trees would have to be growing in this recently harvested stand before an adjacent stand is sold** (the actual proposed amendment can be found in Figure 2b).

To best manage the jack pine ecosystem, **we would like to reselect which stands are designated for Kirtland's Warbler management. In addition, we would like to designate additional stands of jack pine for Kirtland's Warbler management, while keeping the annual harvest level the same.** We have found that some of the stands that were originally proposed for Kirtland's Warbler management are not ecologically adapted to provide quality nesting habitat. These stands are better suited to grow tree species other than jack pine, or remain open as prairie. We would exclude these stands from Kirtland's Warbler management, while including others on the dry sand plains that are better suited for growing jack pine (Figure 4).

What are the advantages/disadvantages of the amendment?

The amendment would allow us to better simulate the effects of natural jack pine wildfires, significantly increasing use of this artificial habitat by the Kirtland's Warbler and other species of wildlife including the Upland Sandpiper, American Kestrel, and the

¹ A stand is an area of trees or other vegetation with similar characteristics.

Short-eared Owl. Large openings could provide an opportunity to bring back a significant number of Sharp-tailed Grouse. These birds were common in the northeast Lower Peninsula until the 1950s.

The amendment would provide us the opportunity to cluster acres, creating fewer but larger stands of nesting habitat. For example, instead of harvesting and planting five scattered 300-acre stands to attain 1500 acres of nesting habitat, we could harvest and plant three 500-acre stand in the same vicinity. Clustering clearcuts would reduce the number of scattered clearcuts (see Figure 3).

Designating additional stands of jack pine for Kirtland's Warbler management would give us a greater flexibility in the location and design of nesting habitat in the landscape. This would improve the productivity of nesting habitat, while providing for social values like visual quality.

The proposed amendment would not change the average 1100 acres harvested and planted each year on the Huron National Forest.

Visually, a clearcut of 500 acres won't look significantly different from a clearcut of 370 acres. Individual or clumps of large trees will still be retained to improve the visual quality of large clearcuts.

Purchasing and planting jack pine for the Kirtland's Warbler is costly. The Forest Service is attempting to create nesting habitat in an efficient and effective manner. Increasing the productivity of nesting habitat will greatly improve the economic efficiency of this program.

Warblers may use the improved nesting habitat for a longer period of time, potentially increasing the number of years an area is closed to public entry. If a stand of nesting habitat is occupied, it will be closed during the nesting season (May 1 to August 15 or September 10).

Larger jack pine stands, along with current efforts to restore dry sand prairies within the jack pine ecosystem, would improve implementation the Forest Service policy of ecosystem management.

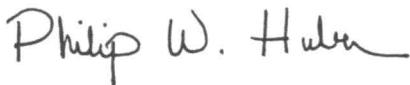
Each Kirtland's Warbler habitat project would still require site specific environmental analysis and documentation, which includes public involvement. Public involvement includes sharing your ideas on the specifics of each proposed project. Each project is then customized to best balance the needs of people, the Kirtland's Warbler and the jack pine ecosystem.

We want your opinion and ideas!

If you have any questions, please contact me or Connie Chaney (District Ranger) at the address above, or by telephone at 517-826-3252. You can also talk to Rex Ennis (Forest Biologist) at 1-800-821-6263. We are more than happy to meet with anyone interested in this proposal.

Thank you for taking the time to read about this project and I hope to here from you soon. We would like to have your responses back by February 17, 1995, so that we can move forward with this Forest Plan amendment and the revision of the Kirtland's Warbler Habitat Management Plan.

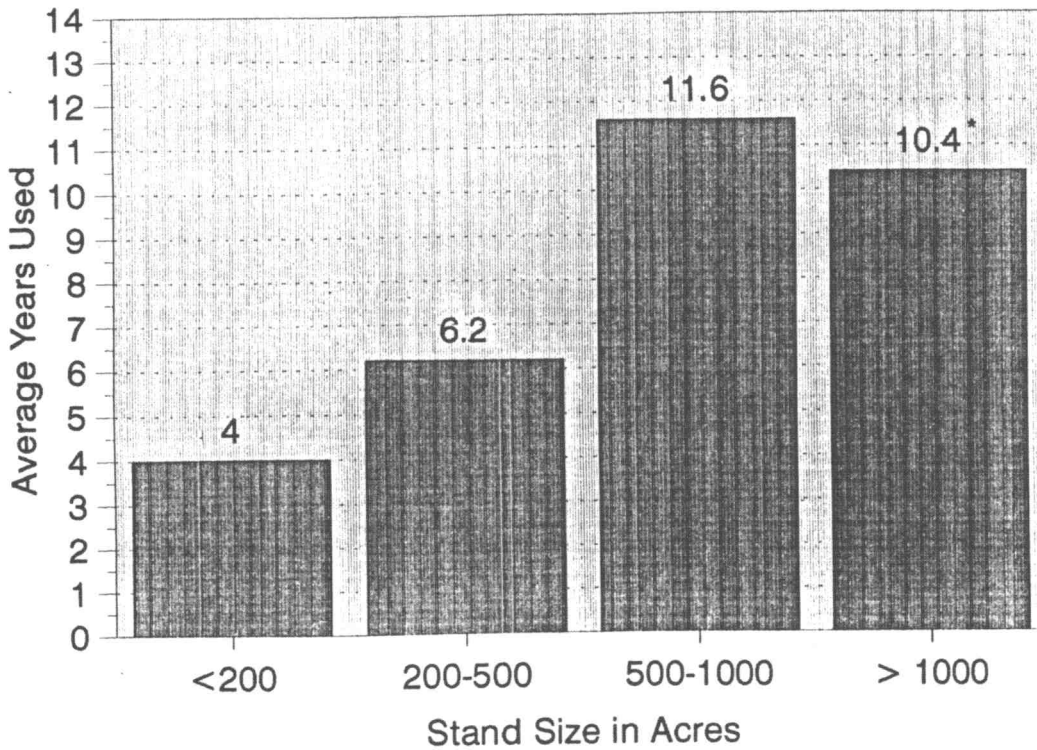
Sincerely,



Philip W. Huber
Wildlife Biologist
Mio Ranger District

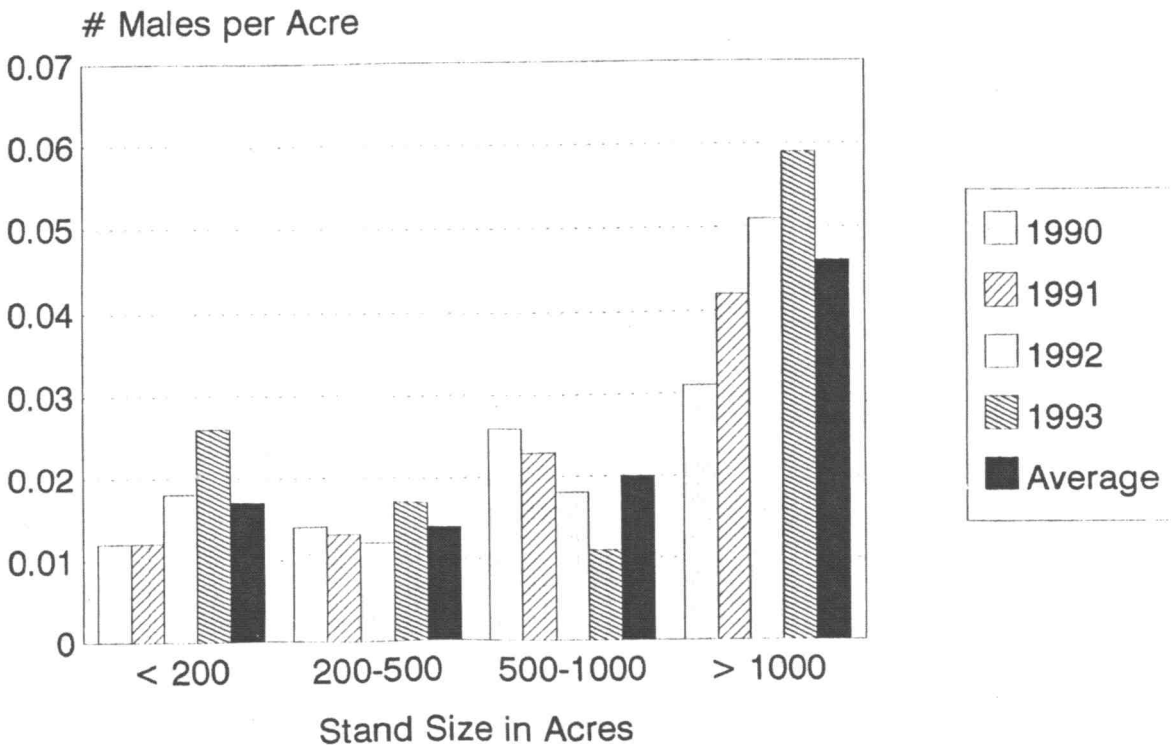
Enclosures
PWH/pwh

Kirtland's Warbler Stand Use



* Stands in this category are currently occupied and will most likely exceed 11.6 years.
 (Data from USFS, North Central Forest Experiment Station, Probst et. al.)

Density of Kirtland's Warblers by Stand Size



(Data from USFS, North Central Forest Experiment Station, Probst et. al.)

Figure 2. Current and Proposed Forest Plan Standards and Guidelines (IV-142).

Figure 2a. Current Forest Plan Standards and Guidelines (IV-142).

II. The Following Standards and Guidelines apply only to the even-aged silvicultural system.

A. Create temporary openings by the application of the even-aged silvicultural system.

- 1) The height of reestablished stands in Kirtland's warbler management units should be 5 feet or higher before an adjacent block is cut.
- 2) Temporary openings created by even-aged management will be 40 acres or less, except that in jack pine stands managed for Kirtland's warbler will be 370 acres or less.

Figure 2b. Proposed Forest Plan Standards and Guidelines (IV-142).

II. The Following Standards and Guidelines apply only to the even-aged silvicultural system.

A. Develop Kirtland's Warbler nesting habitat using even-aged silviculture and reforestation techniques as prescribed in the Habitat Management Strategy for the Kirtland's Warbler.

- 1) Design treatment blocks to replicate the effects of natural wildfire as prescribed in the Habitat Management Strategy.
- 2) Treatment blocks will be 500 acres or less, unless otherwise approved by the Regional Forester.
- 3) Treatment blocks will be reestablished (planted, seeded, or naturally regenerated) to 1000 or more trees per acre before an adjacent block is sold.

Figure 3. Various Configurations of Kirtland's Warbler Habitat

Figure 3a.

Natural Wildfire

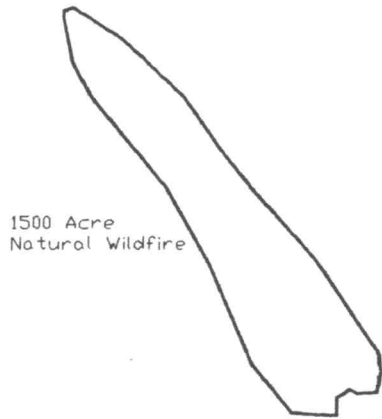


Figure 3b.

Current Management Scenario

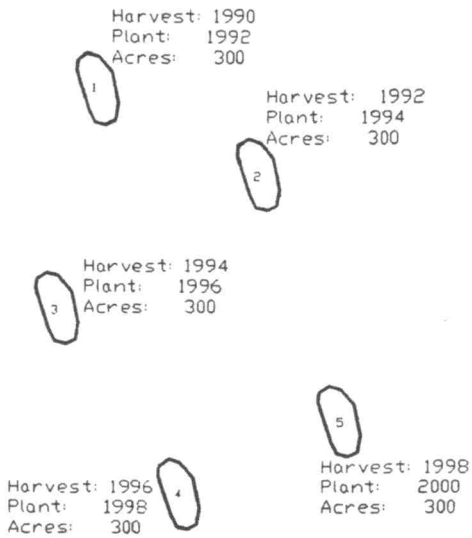


Figure 3c.

Proposed Management Scenario

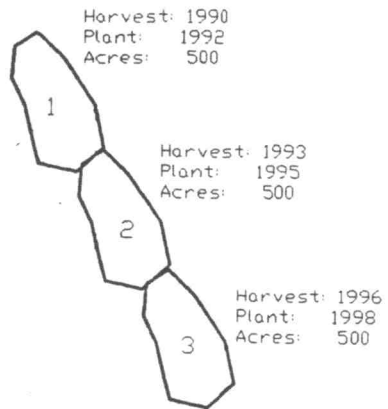


Figure 4. Kirtland's Warbler Management Areas and Dry Sand Plains on the Huron National Forest

