

2630 Habitat

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Definition of critical habitat for  
Kirtland's Warblers

District Rangers, Harrisville, Mio and Texas RD's

A strict definition of critical habitat is not possible nor particularly desirable. Local conditions and needs may require modifications of the specific guidelines. However, it is desirable to have a general guide to aid in recognition of potential areas of critical habitat and to provide a management goal. We have identified the Kirtland's Warbler critical habitat on the Huron with the guidelines set forth in the preliminary draft of the HW Recovery Plan.

Empirical observations on nesting habitat has shown that there is a very high correlation of warblers nesting in jack pine stands which have less than 25% of the stocking in deciduous tree species and that occur on Grayling sand. Virtually all of these stands that have been occupied were regenerated following a burn, either naturally or by planting. Exceptions include nesting in red pine stands adjacent to occupied jack pine stands. There are also records of warblers nesting in jack pine stands on Deer Park, Rubicon and Crosswell sand soils adjacent to Grayling sand. They've also been found on Kalkaska sand where the A and B horizons have been mostly lost through erosion.

In identifying the critical habitat, the first consideration was selecting those areas where it is known that birds have nested. A few of these areas were not selected because of changes such as development or conversion.

After the suitable known nesting areas were identified the selection of additional critical habitat was based on soil and vegetative cover. Here, the initial consideration was those stands that occur on Grayling sand. The stands selected were composed primarily of jack pine. Stands with more than 20 square feet BA of oak were eliminated unless they were needed to maintain cutting block integrity.

Past management has converted many suitable areas to red pine, but it is not believed that this acreage will be needed to accomplish the Kirtland's Warbler objective for the Forest. Some small red pine stands within or adjacent to a critical habitat cutting block should be considered for conversion to jack pine where needed to enlarge a block, facilitate burning, etc.

Stand size is another major consideration. The Recovery Plan states:

"Tracts (i.e. cutting blocks) 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 blocks."

In the implementation of this guide it has been found that using a block size range of 200 to 400 acres was more practical than the "320 or more" guide and that, in some cases smaller blocks may be necessary to allow a sustained rotation within a warbler unit.

There has been some confusion about the terminology regarding areas, units and blocks. At a meeting with IWR representatives on March 11, it was agreed to standardize our terms and refer to critical habitat as management areas, sustaining units and cutting blocks. The smallest division is a cutting block which is composed of one or several stands that would be eventually cut at one time. A sustaining unit is a collection of five blocks that will support a permanent colony of nesting warblers at a relatively constant population level. Management areas are similarly a collection of adjacent units such as the Mack Lake or Pine River management areas.

We are now preparing maps for your District that shows those stands that have been identified as critical habitat. Phil Schempf is also in the process of developing the Management Area Plans for the Kirtland's Warbler critical habitat. He will be working with the IMA's in delineating the cutting blocks.

It must be pointed out that some of the stands that have been identified as critical habitat may be necessarily deleted when closer examination is made. Also, there may be some stands within proximity of the management areas that will be added as critical habitat. Some of this could be stands where the jack pine has been cut, the area roller chopped and no reproduction present. Here the stand could be burned and planted to jack pine in a 2/1 habitat configuration. Another situation could be where the jack pine has been cut and not the oak. Here the oak could be killed, the stand burned and planted to jack pine. Such stands should be on Grayling sand.

We know that you have had some questions and this has created problems. We hope that this clarified what is being done. This has not been a simple task and there are always problems when changes of this magnitude are being made.

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A better understanding by all should simplify the identification and management of this critical habitat. We are now developing a more detailed work program to complete the field inventory and management plan phase. We will be assigning some definite tasks for you to complete.

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