

KIRTLAND'S WARBLER

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
HURON-MANISTEE NATIONAL FORESTS  
CADILLAC, MICHIGAN 49601

Bill Irvine

IN REPLY REFER TO:

2630

January 30, 1968

Mr. Harold Mayfield  
Rural Route  
Waterville, Ohio 43566

Dear Mr. Mayfield:

After four growing seasons, the 500 acres we burned in 1964 on the Kirtland's Warbler Management Area shows no promise of producing enough jack pine reproduction to provide even sub-marginal nesting habitat for the warblers. Because of this and the accelerated decline in the warbler use of the 1946 Mack Lake burn, we believe we should wait no longer to re-plant the 1964 burn to produce nesting habitat.

What we have tentatively proposed to do is divide the 500 acre burn into 80 to 90 acre blocks. In one block we will plant jack pine but select about 25% of the block (concentrating on blueberry patches) to be left unplanted. We will do the same in the second block, leaving about 40% open. In the third block jack pine will be planted in a "checker board" pattern. That is, plant one chain strip leaving alternate strips unplanted in one direction and then plant one chain strips at right angles to the first strips. This will produce a pattern of 25% open, 25% dense stocking and 50% of regular stocking. The fourth block will also be planted to jack pine but in a "wave" pattern. Here we will plant two chain strips turning back and forth on about a one chain radius. Then the next 2-chain strip will oppose the adjacent strip so that there will be a series of openings of about two chains in diameter left between the strips. The outside rows will be planted as dense as possible and will overlap where the strips meet to produce dense patches. This will leave about one third of the block open. The fifth and sixth blocks will be planted to red pine using the "checker board" and "wave" patterns as described above.

I hope I have made the above descriptions so they can be understood. What we are hoping to do is establish a pattern that will be the most conducive to warbler nesting. The comparison of these patterns may aid us. To go a bit further, I plan to analyze the cover distribution and densities of some of those areas showing the highest population in 1961. The Section 5 and 8, T25N, R3E area is one to be analyzed. In your 1961 report you mention<sup>an</sup> irregular area of 640 acres



