

OPPOSED WAVE PATTERN

For Kirtland's Warbler Planting

(Effective for all planting done
from March 28, 1980 forward)

Background: The opposed wave pattern for Warbler habitat planting was developed by the Kirtland's Warbler Recovery Team in the mid 1960's. Variations of it have been used since then with a tree spacing of 4' x 4'. Foresters have been concerned that the stocking was too heavy for good growth and that an acceptable merchantable wood product would not result in the fifty year rotation.

A compromise has now been worked out by Forest Management and Wildlife Divisions.

Objectives of Compromise Pattern (Refer to Examples A & B attached)

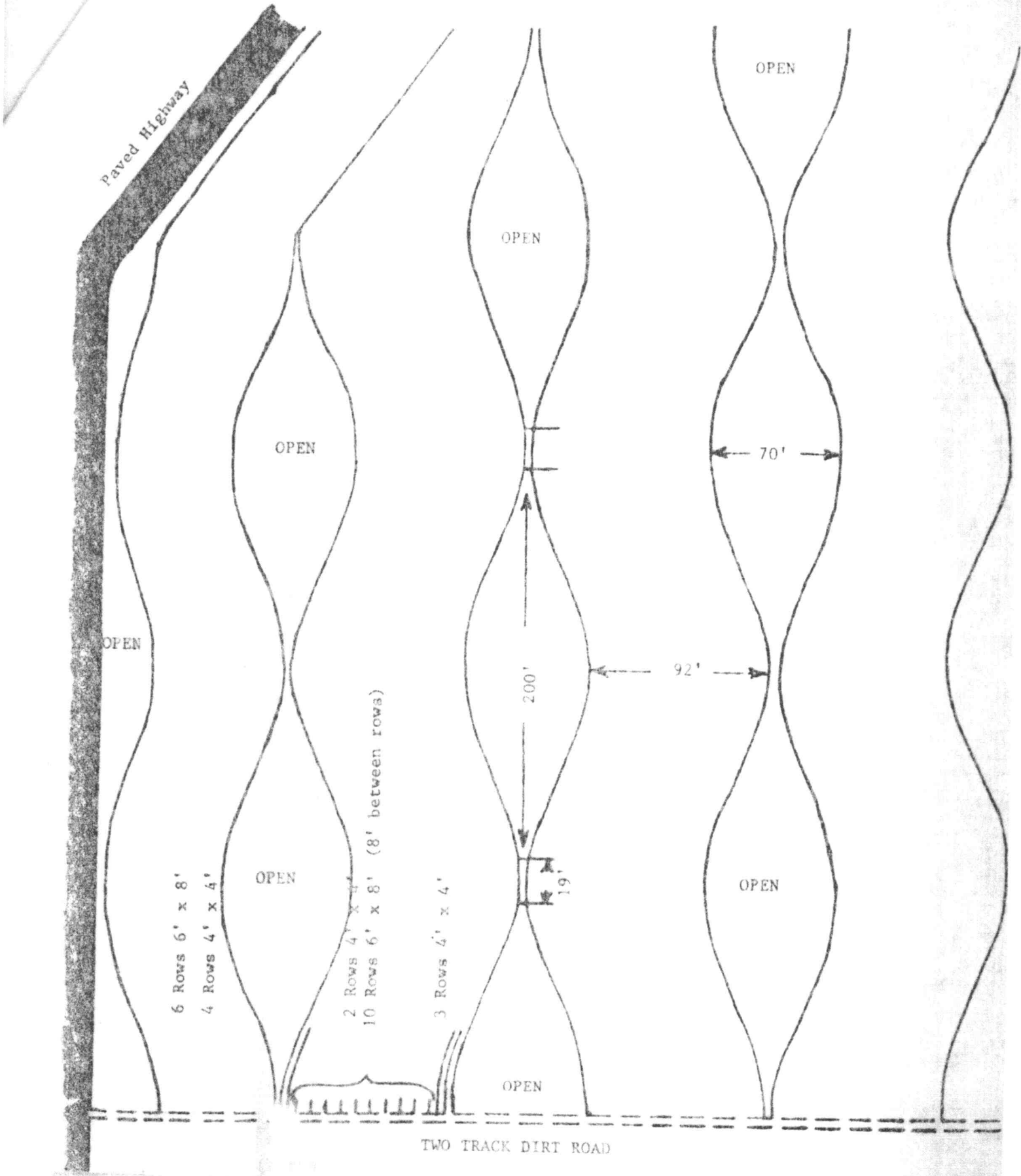
1. Continue to provide quality breeding habitat for the Kirtland's Warbler by retaining 4' x 4' spacing along edges of openings.
2. Away from openings use a spacing (6' x 8') that will allow for better tree growth and ultimately a merchantable wood product.
3. Increase total capabilities for planting new habitat. Increases in acres planted will come from the following sources: a) Wider spacing used back from the edges of the openings will conserve stock and allow 44% more acres to be planted than if 4' x 4' spacing were used. b) Increased wood production justifies Forest Management's increased involvement using funds and equipment not available before.

Variations: Variations in application of the planting pattern will be necessary depending on other influences such as roads, topography, ground conditions, visual impact, etc. For instance, in Example "A" attached, the openings go right up to a low use two track road but are separated from a major highway by a parallel planted strip. This strip separates the opening from the highway disturbance. The strip parallels the highway to discourage bikes from entering the area by traveling between rows. The strip continues the wave pattern to lessen visual impact.

In Example "B" a strip of straight rows can be used along well traveled roads where intrusion of vehicle or foot traffic is expected but visual impact is not of great concern.

Variations used must approximate the jack pine stocking levels shown in Example A and B (1135 trees per acre including the openings or 1513 trees per acre on area actually planted. Twenty-five percent (25%) of the area is to be made up of openings.

OPPOSING WAVE PATTERN
For Kirtland's Warbler Plantings
EXAMPLE A



OPPOSING WAVE PATTERN
For Kirtland's Warbler Planting
EXAMPLE B

