

**KIRTLAND WARBLER SURVEY
MUNISING RANGER DISTRICT 1998**

INTRODUCTION METHODS :

Various jack pine stands on the Munising District between the ages of 5-20 years old and larger than 20 acres were surveyed for Kirtland warblers (Fig. 1). On 10-12, 15-18 June 1998 field crews of 2-3 people (K. Doran, Jim Shatel MidNR, and Kate Schoeneich Pictured Rocks) visited potential locations using auditorial and visual methods in order to record possible male Kirtland warbler songs between 0600 hrs. and 0930 hrs. at various locations throughout the pine stands. Plots were located on two track roads going through or around the plantations and/or by walking through the pine stand. We did not play tapes at any of the sites but rather relied on hearing or seeing birds on territories. A list of all bird species heard and seen at each plot was recorded (Fig. 2).

RESULTS AND OBSERVATIONS:

No Kirtland warblers were heard or seen in any of the jack pine stands on the Munising Ranger District. Much of the stand structure and composition seems similar to the other areas where Kirtlands have currently been detected, but climate, micro sites maybe subtle enough and lack non obvious characteristics. The overall stand size (acres) have less continuity of same age class. The other noted observation is the bird species mix is not similar in comparison as the 8-mile area. We do not pick up palm warblers, lincolns sparrows, eastern towhees group assemblages as the 8-mile location. The large jack pine salvage cuts are just now getting into age class attributes as they are about 5 years of age and are potentially reaching desirable maturity.

While on the surveys two dark eyed junco nests and four chipping sparrow nests were located.

Fig. 1 List of compartments and stands with acres surveyed for Kirtland Warblers on Munising District (North Unit) 1998.

<u>COMPARTMENT</u>	<u>STANDS</u>	<u>ACRES</u>
36	02	59
48	01	104
49	48	50
65	07	60
66	22	45
69	01	55
69	10	66
89	03	71
89	15	65
92	2	311
92	65	130
92	26	128
92	24	33
92	02	311
92	65	130

We also surveyed through compartments 50 and 61. Both have substantial amounts of jack pine. In C- 61 some of the former jack pine salvage cut areas are now reaching ages of possible occupancy.

Fig 2. List of birds heard or seen on Kirtland Warbler Survey 1998 Munising Ranger District.

- | | |
|-----------------------------|----------------------------------|
| 1. Sandhill Crane | 20. Brown Thrasher |
| 2. Ruffed Grouse | 21. Cedar Waxwing |
| 3. Mourning Dove | 22. Red-eyed Vireo |
| 4. Northern Flicker | 23. Nashville Warbler |
| 5. Eastern Wood-Pewee | 24. Black-and-White Warbler |
| 6. Least Flycatcher | 25. Chestnut-sided Warbler |
| 7. Blue Jay | 26. Yellow-rumped Warbler |
| 8. American Crow | 27. Black-throated Green Warbler |
| 9. Common Raven | 28. Pine Warbler |
| 10. Black-capped Chickadee | 29. Ovenbird |
| 11. White-breasted Nuthatch | 30. Savannah Sparrow |
| 12. Red-breasted Nuthatch | 31. Song Sparrow |
| 13. Eastern Bluebird | 32. Chipping Sparrow |
| 14. Swainson's Thrush | 33. Dark-eyed Junco |
| 15. Veery | 34. White-throated Sparrow |
| 16. Hermit Thrush | 35. Brown-headed Cowbird |
| 17. American Robin | 36. Northern Oriole |
| 18. Gray Catbird | 37. Saw whet owl |
| 19. Black-billed Cuckoo | 38. Gray Jay |