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A Nesting Survey of the Kirtland's Warbler,
Kirtland's Warbler Management Area, Huron
National Forest--1964.

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Introduction

Information is presented here from field work on the Kirtland's Warbler (Dendroica kirtlandii) during the 1964 season. Wherever meaningful, this information is related to that from a similar study in 1963. The 1963 work was under the direction of Andrew J. Berger, who, unfortunately, could visit the area only briefly in 1964 and is presently in India.

The purposes of this study were as follows:

1. The study of nesting activities of the Kirtland's Warbler with special attention to any second-nestings that could be found.
2. A determination of the extent of parasitism of Kirtland's nests by the Brown-headed Cowbird (Molothrus ater).
3. A determination of the extent of cowbird parasitism on nesting associates of the Kirtland's.
4. A census of singing male Kirtland's in the area included in the study.

The study area is that portion of the habitat created by the Mack Lake fire of 1946 lying within Sections 1, 2, 3, 10, 11, 12, T25N:R3E, Mentor Township, Osceola County, Michigan. This area, with the exception of Section 10, lies within the Kirtland's Warbler Management Area, Huron National Forest. Section 10 is included because the Kirtland's in that section are an integral part of the Mack Lake society. The study area comprises about 800 acres (Berger, 1961).

The count of singing males was 24. Observed nesting:

activities involved 18 pairs of warblers. With re-nestings and second-nestings there were 26 nests located during the season.

Portions of 37 days were spent in field work between 9 May and 2 August inclusive. The actual time was 192½ hours--23½ in May, 73 in June, 95 in July and one in August--with 268½ man-hours. This compares with parts of 20 days in 1963 with 86 hours--21 in June and 65 in July--and 154 man-hours. The relatively high number of hours in July reflects the search for late nests and second-nests during a time when singing is reduced and field work is more difficult.

Warbler nests were numbered consecutively in the order found. As many warblers as possible--consistent with the well-being of each life involved--were banded. The adult warblers were also color banded. Only one color band was used on each adult. Mayfield (1960:206) reports that of 222 Kirtland's Warbler nestlings banded over the years, only three have been found as returns on the nesting grounds. Although he attributes this to a lack of search in many nesting areas, we decided not to color band birds of the year. The common and scientific names of the birds mentioned in this report are taken from the American Ornithologists' Union, Check-list of North American Birds, 1957, fifth edition. We extend our appreciation to the U.S. Forest Service, Huron-Manistee Forests, for their cooperation in allowing us to enter the Kirtland's Warbler Management Area for this study. This appreciation applies especially to Mr. J.K. Adams, District Ranger in Mio.

Finally we offer our most heartfelt thanks to Andrew J. Berger who taught us all we know about the Kirtland's Warbler--and were he not away this season could teach us much more. We thank him for sharing his experience and equipment and for his friendship.

Census

The count for the study area was 34 singing males. The count for these same six sections in 1961 (the year of the second decennial census) was 35. The distribution of these males among the various sections for these two seasons is shown in Table 1. Berger has commented that the habitat at Mack Lake will continue providing nesting areas for the Kirtland's for 5-10 years. However, the steady 30+ singing male population will soon begin to fall off as the trees are already past suitable size in some areas.

Nests

Twenty-six nests were found in the 1964 season involving 18 pairs of warblers. Fourteen nests were found in 1963 involving 13 pairs of warblers. The distribution of these nests among the sections is shown in Table 2. Obviously considerable time was spent in Section 11. However, no special attention was given that section over any other. In the approximate west one-third of the habitat of Section 11 there was little warbler activity and no nests found. Of the 14 nests found there, five were re-nestings and one was a second-nesting.

Of interest this past season was Nest #1 which was

