kept in the house over night and the next morning when they were put back in the nest about nine o'clock, the old birds came at once to feed them. These nestlings uttered a faint peep, and the strongest one gave a suggestion of the adult trill.

The male Pine Warbler is an incessant singer, sometimes while sitting motionless for many minutes but more commonly while moving slowly about among the thick branches and creeping around the limbs, cones, and tufted foliage, very much like a Chickadee. The song is a fine trill, rather unpretentious but not altogether unmusical. It resembles the song of the Junco for which it may easily be mistaken. It is usually compared with the trill of the Chipping Sparrow but is more musical than the utterance of that bird and has often an echoing or rattling quality quite characteristic. Occasionally the trill is followed by a few additional notes that are more pleasing in character.

In the fall the Pine Warbler is still to be found in the evergreen forests of the northern part of the state during the first half of September, and the last migrants do not cross the southern boundary until near the middle of October.

Reference.—Chapman, F. M., The Warblers of North America, 1907 (life history on pages 201-205; illustrated).

KIRTLAND’S WARBLER: Dendroica kirtlandi (BAIRD)
(Named for Dr. Jared P. Kirtland of Ohio.)
(Plate 67)

General Range.—Eastern United States and in winter the Bahamas. Breeds in a limited area in the jack-pine region of the northern part of the lower peninsula of Michigan (Oscoda, Crawford, and Roscommon counties), which is the only locality known at present. Winters in the Bahamas. Has been reported in migration in the following states: South Carolina, Georgia, Florida, Virginia, Missouri, Ohio, Indiana, Illinois, Wisconsin, southern Michigan, Minnesota, and in Ontario.

Minn. Status.—The inclusion of Kirtland’s Warbler among Minnesota birds is based entirely, to the present time, on a single specimen taken by Dr. H. M. Guilford near Minneapolis on May 13, 1892. This specimen is now in the University Museum collection, having been kindly donated by Dr. Guilford. Miss Eleanor Jilson, of St. Paul, believes that she saw one of these Warblers at Frontenac, on Lake Pepin, on May 13, 1921, and Miss Mary Mills, of Preston, Fillmore County, reported seeing one near that place on August 27, 1923, but sight identifications of a bird so rare and so easily confused with one or two other species are not entirely convincing.

Dr. Guilford recorded the capture of his specimen in the Auk (10:86, 1893) as follows: “I took an adult male Kirtland’s Warbler on May 13, 1892, near Minneapolis. When first seen it was in company with White-throated Sparrows in a narrow hedge of small plum trees that divided two ploughed fields. It had flown down and was feeding on the ploughed ground, when I shot it.”

This Warbler was first described by Professor Spencer F. Baird in the Annals of the Lyceum of Natural History of New York (5:217-218, 1852), accompanied by a colored plate. Professor Baird says: “This species, which was shot near Cleveland, Ohio, by Mr. Chas. Pease, May 13, 1851, is appropriately dedicated to Dr. Jared P. Kirtland, of Cleveland, a gentleman to whom, more than anyone living, we are indebted for a knowledge of the natural history of the Mississippi Valley.”

It was not until 1903 that its summer home was discovered by Mr. Norman A. Wood in the jack-pine barrens in the northern part of the southern peninsula of
Michigan. To the present time no other breeding-place has been found and no other winter home than the Bahamas, though between the two places it is widely scattered in migration, as shown under the general range above.

On its nesting-grounds in Michigan it has been found only in sandy jack-pine country and in scattered, loose colonies. It is somewhat terrestrial in habits, a tail-wagger like the Palm Warbler, and builds a well-concealed nest on the ground. The eggs are described as being white, spotted and blotched with reddish-brown and chocolate, chiefly at the larger end where they form a wreath. The average size is .73 x .55.

The male has a loud, forcible, musical song, delivered with upturned head from a dead stub or from among the branches of a pine tree. The song has been said to have the quality of an Oriole song, by others is said to suggest the song of the Maryland Yellowthroat, and is represented by the syllables "Chip-chip-chee chee chee-r-r-r" uttered rapidly, or at times "Wichy-chee-chee-chee-r-r" (Norman A. Wood in Chapman's The Warblers of North America).

FIELD MARKS.—The specimen in our Museum resembles more closely a female Magnolia Warbler than anything else but is larger and lacks the white of the wings and tail of that species. It has been thought that the species might be confused with an autumnal Myrtle or a lightly marked Canada Warbler. Barrows says, in Michigan Bird Life, "Our only warbler which combines black-streaked pale yellow under parts, black-streaked bluish-gray upper parts, and white-marked outer tail-feathers. In addition, it has white on both eyelids, forming practically a white eye-ring, and the whitish wing-bars, if present at all, are narrow, dull and inconspicuous."

The above account has been included here not only because of the special interest that attaches to a bird of such rarity and such unique distribution, but more particularly because it seems highly probable that it will some day be found nesting somewhere in the extensive jack-pine barrens of northern Minnesota, and these facts, brief as they are, may assist in the discovery. Such a find will be a red-letter day for the fortunate discoverer.


WESTERN PALM WARBLER: Dendroica palmárum palmárum (GMELIN)

GENERAL RANGE.—Interior of North America, and in winter to the Bahamas, West Indies, and southern Mexico. Breeds from southern Mackenzie and northern Manitoba south to northern Minnesota. Winters from southern Florida and the Bahamas to the Greater Antilles and Yucatan; occurs casually in migration on the Atlantic slope, mainly in autumn. Casually in Ohio, Massachusetts, New York (Long Island), and New Jersey. Accidental in California, Montana, and Colorado.

A second subspecies, the Yellow Palm Warbler, D. p. hypochrysea, breeds in eastern Canada, Newfoundland, and Maine and winters mainly from northern Florida to Louisiana.

MINN. RANGE.—A common spring and fall migrant throughout the state and a rare summer resident in the northern part as far south, at least, as northern Aitkin County and as far west as the evergreen groves of eastern Marshall County.

MINN. MIGRATION DATES.—So. MINN. Spring: (earliest, Apr. 11, 1917, Winona, Winona Co.; Apr. 17, 1927, St. Paul) average of 35 dates, Apr. 11-May 6, Apr. 29; of 16 dates, May 17-31, May 21 (latest, May 31, 1924, St. Paul). Fall: (earliest, Aug. 30, 1927, Frontenac, Goodhue Co.) average of 11 dates, Sept. 5-23, Sept. 16; of 10 dates,