

outskirts of Beaumaris on August 29. It was confined to the brush heaps and the snake fences.

Olbiorchilus hiemalis.—Winter Wren. But two birds seen—one on September 1, another on the 4th. This is a fairly common summer resident on the island and breeds in the dense brush.

Certhia familiaris americana.—Brown Creeper. Very common everywhere.

Sitta caroliensis.—White-breasted Nuthatch. Common.

Sitta canadensis.—Red-breasted Nuthatch. On September 1 we saw one in a small birch near the cabin which was secured. No others were noted.

Parus atricapillus.—Chickadee. An abundant species everywhere.

Hylocichla fuscescens.—Wilson's Thrush. Two birds seen, on August 27 and 30. This is a common summer bird on the island.

Hylocichla guttata pallasii.—Hermit Thrush. On September 3rd we secured one bird in the center of the island. A common breeder here.

Merula migratoria.—American Robin. On the island this was far from common but we found it much more numerous on the mainland near Beaumaris.

Sialia sialis.—Bluebird. On August 29, on quite an extended trip on the mainland back of Beaumaris, we found this present in some numbers in all cleared land. Five were seen August 31.

Detroit, Mich.

TWO ALL-DAY RECORDS IN NORTHERN OHIO.

BY LYNDS JONES.

There are migrations and migrations of the birds in May, and the migrations which appeal most to the most ardent among us are those which certain conditions of weather make conspicuous by reason of the great abundance of bird life on one or more days. As far as northern Ohio is concerned the experiences of more than ten years in the study of the migrations make it possible to formulate certain laws which govern the movements of the birds northward across that region. These laws are not new, nor are they laws which have not been announced already, but they are of sufficient importance to bear repetition.

Considered purely from the standpoint of migration, warm weather accompanied by clear or fair skies during the night

incite the birds to movement northward. Cloudy nights—with the sky obscured—are unfavorable for bird movements even if the weather be warm. Cold nights, even if the sky be clear, do not induce much movement. Some birds migrate on cold clear nights. For a large movement of the birds, assuming that the time of year has arrived for such movement, at any given place which will be manifest on the next day, two conditions seem to be necessary. First, the temperature must be relatively high and the sky clear or nearly so for many leagues south of the given place; and second, to the north of the place the sky must be overcast, or the temperature low, in that place or immediately north of it.

During the present season the weather conditions during the last week in April and the first week in May were favorable for the northward movement of the smaller and later migrating birds over most of the Mississippi Valley, and eastward, at least as far as Lake Erie and southern Michigan. Most of the second week in May was cold, with northerly winds prevailing. Many birds had arrived during the favorable weather, but remained in northern Ohio and adjacent regions because of the storm and cold of the second week in May. Then followed favorable weather south, but cloudiness over Lake Erie nights up to May 16. The birds moved up to the cloud barrier and remained there. On the 14th and 15th the country teemed with all sorts of birds except the divers and ducks which had gone north earlier. Not only were species unusually numerous, as the appended lists will prove, but individuals were enormously numerous.

These two lists—Rev. W. F. Henninger, for Tiffin, Ohio, May 15th; and the writer, for Oberlin, May 14th—are given together, and the appended list of birds which were not seen but were clearly present, for the purpose of indicating the status of bird life during these two days as far as could be determined. It will be noticed that the 129 species found at Oberlin on the 14th establishes a new record for that place. However, the conditions which so profoundly influence so large a proportion of the whole bird life of a region and not the size

of the list, are the important things. These "All day" studies merely furnish the data.

The two lists which are appended may be considered fairly representative of the north-western parts of the State of Ohio during May 14th and 15th. It may be argued that because the lists were not made on the same day they are not therefore comparable. To that I would reply that the weather was such that the bird population must have been practically the same on the two days. The region about Tiffin is further removed from Lake Erie than Oberlin, and nowhere approaches near enough to it to be influenced by it, and that fact will explain the lack of the distinctively water birds, but otherwise the two regions are alike. The Oberlin region, therefore, supplies the lake shore conditions which complete the northern Ohio conditions affecting bird movements.

At Oberlin, on the 14th of May, the day opened rainy, with nearly continuous showers until nearly mid-day, with clearing skies in the afternoon. At 2:30 a. m. the temperature stood at 58, but a northerly breeze, shifting to north-easterly, and increasing to brisk, cooled the air to 48 during nearly the entire day. The early part of the day was spent in the woods, fields, and orchards south of Oberlin, the afternoon in work along the lake shore and the woods, fields and swamps bordering the lake. Thirteen out of a possible sixteen hours were spent a-field.

At Tiffin, on May 15th, the day began partly cloudy, but clearing, with a temperature of 50, ranging to 80 by mid-afternoon, with almost no wind. The work covered the region about Tiffin, including every sort of topography. The work began at 3:30 a. m., and closed at 8:30 p. m., with about two hours lost during the day at times when there was little probability of loss in records.

The participants in this work were Rev. W. F. Henninger, Tiffin, and Lynds Jones, Oberlin. It is to be regretted that other regions in the northern parts of the state are not also represented.

Species recorded at both places—Tiffin and Oberlin.

Green Heron,
Yellow-legs.

Scarlet Tanager.
Barn Swallow.

Solitary Sandpiper.	Rough-winged Swallow.
Spotted Sandpiper.	Bank Swallow.
Killdeer.	Cedar Waxwing.
Bob-white.	Migrant Shrike.
Mourning Dove.	Red-eyed Vireo.
Red-tailed Hawk.	Warbling Vireo.
Sparrow Hawk.	Yellow-throated Vireo.
Yellow-billed Cuckoo.	Black and White Warbler.
Black-billed Cuckoo.	Blue-winged Warbler.
Belted Kingfisher.	Golden-winged Warbler.
Hairy Woodpecker.	Nashville Warbler.
Downy Woodpecker.	Tennessee Warbler.
Red-headed Woodpecker.	Northern Parula Warbler.
Northern Flicker.	Cape May Warbler.
Chimney Swift.	Yellow Warbler.
Ruby-throated Hummingbird.	Black-throated Blue Warbler.
Kingbird.	Myrtle Warbler.
Crested Flycatcher.	Magnolia Warbler.
Phoebe.	Cerulean Warbler.
Wood Pewee.	Chestnut-sided Warbler.
Green-crested Flycatcher.	Bay-breasted Warbler.
Trail's Flycatcher.	Black-poll Warbler.
Least Flycatcher.	Blackburnian Warbler.
Blue Jay.	Black-throated Green Warbler.
American Crow.	Palm Warbler.
Bobolink.	Oven-bird.
Cowbird.	Water-Thrush.
Red-winged Blackbird.	Northern Yellow-throat.
Meadowlark.	Yellow-breasted Chat.
Orchard Oriole.	Wilson's Warbler.
Baltimore Oriole.	Canadian Warbler.
Bronzed Grackle.	American Redstart.
American Goldfinch.	Catbird.
Vesper Sparrow.	Brown Thrasher.
White-crowned Sparrow.	House Wren.
White-throated Sparrow.	White-breasted Nuthatch.
Chipping Sparrow.	Tufted Titmouse.
Field Sparrow.	Chickadee.
Song Sparrow.	Blue-gray Gnatcatcher.
Lincoln's Sparrow.	Wood Thrush.
Swamp Sparrow	Wilson's Thrush.
Towhee.	Olive-backed Thrush.
Cardinal.	Hermit Thrush.
Rose-breasted Grosbeak.	American Robin.
Indigo Bunting.	Bluebird.
Grasshopper Sparrow.	

Birds recorded at Tiffin by W. F. Henninger not recorded at Oberlin.

Sharp-shinned Hawk.	Mourning Warbler.
Yellow-bellied Flycatcher.	Pine Warbler.
Purple Martin.	Red-breasted Nuthatch.
Blue-headed Vireo.	Golden-crowned Kinglet.
Pectoral Sandpiper.	

Birds recorded at Oberlin by Lynds Jones not recorded at Tiffin.

Herring Gull.	Great Horned Owl.
Common Tern.	Yellow-bellied Sapsucker.
American Bittern.	Whip-poor-will.

King Rail.	Prairie Horned Lark.
Virginia Rail.	Rusty Blackbird.
Sora.	Savanna Sparrow.
Florida Gallinule.	Cliff Swallow.
American Woodcock.	Tree Swallow.
Least Sandpiper.	Orange-crowned Warbler.
Greater Yellow-legs.	Prairie Warbler.
Bartramian Sandpiper.	Louisiana Water-Thrush.
Semipalmated Plover.	American Pipit.
Marsh Hawk.	Winter Wren.
Red-shouldered Hawk.	Short-billed Marsh Wren.
Bald Eagle.	Long-billed Marsh Wren.
Barred Owl.	Ruby-crowned Kinglet.
Screech Owl.	Gray-cheeked Thrush.

Species not recorded which were certainly in northern Ohio on the days when these records were made.

Black Tern.	Lesser Scaup Duck.
Least Bittern.	Great Blue Heron.
Ruffed Grouse.	Turkey Vulture.
Cooper's Hawk.	Broad-winged Hawk.
American Long-eared Owl.	Red-bellied Woodpecker.
Nighthawk.	Lark Sparrow.
Carolina Wren.	

It thus appears that there were not less than 150 species of birds in northern Ohio during the period covered by May 14 and 15. Of these 138 were actually recorded.

A NEW RECORD FOR THE PRAIRIE WARBLER IN OHIO.

BY W. F. HENNINGER.

On May 11th, at about 3 p. m., I ran across four individuals of the Prairie Warbler (*Dendroica discolor*) in our favorite Warbler woods here, one and one-half miles south-east of Tiffin. Some of the tall timber in these woods was cut a year ago and on some saplings, with Myrtle Warblers all around me, I spied these rarities, and was favored by all four with their song, so frequently heard last year in Virginia and southern Ohio. Evidently they were migrants, as on May 15th, on our "All day with the birds," when I wanted to show Mr. Karl Heilmann these birds, none were to be found, in spite of the most diligent and painstaking search. This is a new record for the Prairie Warbler in the state, and especially interesting, as none seem to have been reported from this corner of our commonwealth.