

## THE SPRING MIGRATION OF 1901.

WITH AN AVERAGE TABLE FOR LORAIN COUNTY, OHIO.

BY R. L. BAIRD.

Beginning with New Year's day I spent every possible minute that could be spared from other school work in the field with note-book and field-glasses. As I was unable to be in school the last six weeks of the winter term, an especial opportunity offered for such work.

This paper will be divided into three main heads: first, the field in which I have mainly worked; second, the migration itself and its attendant conditions; and third, a migration table for Oberlin and the vicinity which I have made out from Mr. Lynds Jones's check-books from 1896 to 1900 and from my own.

The principal scene of work has been Oberlin and its vicinity. Outside of this immediate neighborhood I have worked mainly between Oberlin and Lake Erie, a distance of twelve miles. Nearly every week this territory was gone through, either a-wheel or on foot, generally the latter. The route usually taken was in a direction slightly northwest from Oberlin to Beaver Creek, south of South Amherst, and from there its course was followed to the lake. Through most of this distance the creek flows through a wide valley with steep sides, a large part of which is well wooded. In places there are evergreen groves. Just south of South Amherst is a cemetery in which small evergreen trees are very thick, shading most of the ground. In the early part of the year I found this quite a favorite resort for birds, there being always a large number of individuals as well as species.

For three miles south from Lake Erie there are comparatively heavy woods and frequent slashings of second-growth timber. The land is much cut up and there are numerous

runs and small creeks whose banks are covered with alders and sumac bushes.

Oak Point, a summer resort on the lake shore, half-way between Lorain and Vermilion, is always the main objective point in these tramps. Here there are fairly thick woods and several swamps which are more abundant in species than any other place I have visited in the county. It has proved the best place for ducks and the shore birds.

Near Oberlin the best place has been found to be a woods a mile south of town, known as the South Woods. This woods is quite dense with tall, straight, slender trees. Along the edges is a thick second growth of small trees and on the northern side a slashing with many bushes and brush piles.

A mile northeast of town is another woods as good, perhaps, as the South Woods, but not so easy of access. A little farther beyond is a woods known as the Black Swamp woods. This has promise of rich finds for the one who can work it up, but so far as I know it has never been thoroughly gone over. It is very difficult to work for two reasons: first, the swamps render it almost impenetrable, especially during the spring; and secondly, the mosquitoes are almost unendurable. The southern division of the L. S. & M. S. railway runs past this woods, and as far as I have gone along the track, species and individuals have been abundant, and in the latter part of May nests were found at every few steps.

Black River would be good working ground, I think, but as it is farther away it is inconvenient to visit frequently. Several times I did get over and was rewarded each time by finding new species. It is said that birds migrate along the water-courses. The amount of water in the river, on account of the Elyria water-works dam, ought to afford a good resting-place to migrating water birds. The river averages six feet deep and is from thirty to eighty feet wide for several miles where it is nearest to Oberlin. The banks are well wooded.

In the town itself there are two places worth mentioning: a block in the south-western part of town, and the college

campus. On the first a part is almost as wild as any woods. There is in it a perfect tangle of willow trees, Osage orange hedge, and grape-vines. Through this Plum Creek flows. Next to this section is an orchard, and beyond the latter the station and reservoir of the city waterworks. Upon the reservoir I recorded nineteen species of water and shore birds alone during the spring. Many of these were rare, and to find them here in town is the more remarkable. There are dwellings, too, all along one side of the block.

The campus seems to be a favorite place for the birds and especially for the warblers. On May 18, when the warbler migration was at its height, I found thirteen species in the grove, back of the college chapel, which is not more than a hundred feet square. Besides the warblers there were at least twenty-five to thirty other species present. I have watched the campus for several years, and it seems as if more species were coming there each year. Two, at least, have come this year that have not been recorded there before, the Red-shouldered Hawk and the Indigo Bunting. The latter has been seen along the streets leading up to the campus from the south, but never before on the campus itself.

So much for the field. The season was remarkable for its long continued cold weather. January opened up cold, but a warm wave came on the 7th which continued until the 28th, except for one cold snap on the 19th. The prevailing winds were northerly for the first few days, but from the 10th to the first of March they were almost uniformly from the west. There was no movement of birds whatever in January.

February was remarkable for its long and steady cold. There were but four clear days in the month. I examined the thermometer regularly at breakfast time, and on only seven days was the temperature above 20° Fahrenheit. The ground was covered with snow the whole month. But one species arrived during this time. On the 16th the temperature was 25°, also on the 17th; on the 18th, 32°. Blue-

birds came on the 17th; very few, however, if more than one or two. One was reported each of the remaining days of the month.

On the morning of March 1st the temperature rose to  $32^{\circ}$ , with the wind blowing steadily from the south. It continued warm for four days, when the first definite bird wave appeared. Four species arrived and four departed. The arrivals were Rusty Blackbird, Robin, Killdeer, and Canada Goose. This was the only definite wave of this month. The remainder of the month was characterized by rainy and cloudy weather, there being only four clear days. The wind was exceedingly fickle, often changing as many as three times a day, blowing very frequently in the evening and afternoon from the opposite direction from what it did in the morning. However, during this time there were thirteen scattering arrivals and two departures.

April was but a continuation of the March weather, being damp and chilly. The prevailing winds were northerly and the average morning temperature was  $38.6^{\circ}$ . There was no definite wave this month, all the arrivals being scattering. The bird population was greatly increased, Meadowlarks especially being abundant and Mourning Doves and Flickers common. During the month there were thirty-nine arrivals and twenty-one departures, no more than three or four occurring in one day.

The month of May, too, was damper and colder than usual. The average morning temperature was  $50^{\circ}$ . The winds were northerly and steadier than in April. During the month fifty-seven species arrived and thirty-seven departed. There were two very definite waves. The first came on the opening day when fifteen species arrived and two departed. This was the warmest day of the year up to this time. The temperature then fell till the 5th, when it rose to  $50^{\circ}$ . On the following day, the 6th, was the best defined wave of the season. Twenty species arrived and three departed.

The season has been characterized by the long continued

cold and damp weather, and consequently by the later arrival of most of the species by nearly a week on the average.

That the figures I have given above for the three months of March, April, and May may be the more easily compared, I will arrange them tabularly as follows:—

	ARRIVALS.	DEPARTURES.	TOTAL MOVE'T.	PERCENT.
March.....	17	6	23	12.9
April.....	39	21	61	34.1
May.....	57	37	94	53

As to the records for the year. On March 1st we found a Brown Creeper. This was distinctively a winter record. The whole month preceding had been cold, with a foot of snow on the ground. No other one was recorded till more than a month later. I may add that in the last two months (January and February, 1902,) we have found a good many of the Creepers here. Before this I believe they had not been recorded here as winter residents. Mr. Jones made one new county record, the Hooded Warbler, on May 9.

The following average spring migration table is made out from the records of six years from this vicinity. Those after which I have placed an M are migrants and remain here but a short time. Those with no mark remain through the summer. Those that stay here during the winter, but leave in the spring, I have not included. There are about forty winter residents here. A few individuals of those which I have indicated as summer residents are found here during the winter, but I think it may be questioned whether they are the same individuals that are here in the summer. They may be visitors from farther north. Among such are the Robin, Bluebird, Flicker, Mourning Dove, Song Sparrow, Meadowlark, and others. The dates under which I have placed such in the list are those on which the numbers have increased very plainly, probably by migrants.

[The following table is like the series published in "Bird Lore" during 1901, but attempts to give all of the migratory birds of the county based upon the average of actual records.—ED.]

## February 15-28.

Bluebird.	Robin.
-----------	--------

## March 1-10.

Song Sparrow.	Mallard, M.
Bronzed Grackle.	Red-winged Blackbird.
Killdeer.	Meadowlark.
Rusty Blackbird, M.	

## March 10-20.

Flicker.	Shoveller, M.
Ruby-crowned Kinglet, M.	Black Duck, M.
Mourning Dove.	Canada Goose, M.
Towhee.	Fox Sparrow, M.
Cowbird.	Belted Kingfisher.
Yellow-bellied Sapsucker, M.	Migrant Shrike.

## March 20-31.

Woodcock.	Pintail Duck, M.
Sparrow Hawk.	Brown Creeper, M.
Phoebe.	American Merganser, M.
Field Sparrow.	Green-winged Teal, M.
Vesper Sparrow.	Great Blue Heron.
Red-head Duck, M.	

## April 1-10.

Wilson's Snipe, M.	American Coot, M.
Chipping Sparrow.	Red-breasted Merganser, M.
Pied-billed Grebe, M.	Ring-necked Duck, M.
Lesser Scaup Duck, M.	American Crossbill, M.
Purple Martin.	

## April 10-20.

Chimney Swift.	American Scaup Duck, M.
Bartramian Sandpiper.	Swamp Sparrow, M.
Buffle-head Duck, M.	Horned Grebe, M.
Barn Swallow.	Wood Duck, M.
White-throated Sparrow, M.	Ruddy Duck, M.
Red-breasted Nuthatch, M.	Bald-pate, M.
Cooper's Hawk.	Hooded Merganser, M.
Spotted Sandpiper.	Myrtle Warbler, M.
Hermit Thrush, M.	Brown Thrasher.

## April 20-30.

Red-headed Woodpecker.	Grasshopper Sparrow.
Yellow Warbler.	Bank Swallow.
House Wren.	Blue-gray Gnatcatcher, M.
Warbling Vireo.	Tree Swallow, M.
Baltimore Oriole.	Green Heron.
Catbird.	Palm Warbler, M.
Cliff Swallow.	Lark Sparrow, M.
Black-throated Green Warbler, M	Wilson's Thrush.
Bobolink.	Solitary Sandpiper.
Red-eyed Vireo.	Blue-winged Teal, M.
Oven-bird.	Pine Warbler, M.
Louisiana Water-Thrush.	American Bittern.
Kingbird.	Greater Yellow-legs, M.
Crested Flycatcher.	Prairie Warbler, M.
Least Flycatcher, M.	Savanna Sparrow, M.
Maryland Yellow-throat.	Rough-winged Swallow.
Blue-winged Warbler.	Scarlet Tanager.
Black and white Warbler	Nashville Warbler, M.
Wood Thrush.	American Redstart.
Olive-backed Thrush, M.	

## May 1-5.

Black-throated Blue Warbler, M.	Yellow-throated Vireo.
Magnolia Warbler, M.	Chestnut-sided Warbler, M.
Rose-breasted Grosbeak.	Blackburnian Warbler, M.
Indigo Bunting.	Orchard Oriole.
Orange-crowned Warbler, M.	Whip-poor-will.
White-crowned Sparrow, M.	Yellow-breasted Chat.
Cerulean Warbler.	Green-crested Flycatcher.
Water-Thrush.	Long-billed Marsh Wren.
Blue-headed Vireo, M.	

## May 5-10.

Wood Pewee.	Hooded Warbler, M.
Cape May Warbler, M.	Golden-winged Warbler, M.
Parula Warbler, M.	Bay-breasted Warbler M.
Lincoln's Sparrow, M.	Canadian Warbler, M.
Common Tern.	Ruby-throated Hummingbird.
Wilson's Phalarope, M.	Tennessee Warbler, M.
King Rail.	Black-billed Cuckoo.
Virginia Rail.	Yellow-billed Cuckoo.
Sora.	

## May 10-15.

Traill's Flycatcher, M.	Gray-cheeked Thrush, M.
Black-poll Warbler, M.	Short-billed Marsh Wren.
Bay breasted Warbler, M.	Wilson's Warbler.
Mourning Warbler, M.	Turnstone, M.
Least Sandpiper.	Nighthawk.
Black Tern.	