

BIRD CALENDAR

of the

CLEVELAND BIRD CLUB

31st Year, Bulletin No. 2

April – May, 1935

Founded by Dr. Francis H. Herrick, 1905

Dr. S. Charles Kendeigh, Editor

Biological Laboratory

Western Reserve University

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The warm early spring of February and March shifted during April and May into a cold late one. The mean monthly temperature during April was 1.6° below normal and during May, 4.5°. Precipitation was about normal for the first three months of the year but during April was 1.10 inches below normal and during May 1.25 inches.

Month	Mean Temperature	Normal Temperature	Total Precipitation	Normal Precipitation
April	44.6°F	43.2°F	1.34 in.	2.44 in.
May	53.4	57.9	1.87	3.12

The following people contributed records to the present number of the Calendar:

- | | |
|-----------------------|---------------------|
| John Aldrich (Museum) | S. Charles Kendeigh |
| S. Prentiss Baldwin | Margarette E. Morse |
| B.T. Barnes | Ralph O'Reilly |
| James Bruce | Merit B. Skaggs |
| M.E. Foote | J. Paul Visscher |
| Francis Gilliland | M.B. Walters |
| E.C. Hoffman | A. B. Williams |
| Dale C. Kellogg | |

Since John Aldrich turned in a combined report for the Cleveland Museum of Natural History involving five or more members of its staff, the number of contributors to this bulletin is at least nineteen – the largest yet.

The combination report of Aldrich was the largest submitted, including records on 170 species and covering 40 trips. The next longest list is that of Merit B. Skaggs with 161 species, and this is an individual list. Ralph O'Reilly wins the distinction of having been the most active individual in the field during this two month period, since he turned in a report of 35 trips.

The following table gives the total number of trips by all observers for each month and also an approximation of the total time spent in the field, mileage covered, habitat, etc.

	April	May
Number of trips	67	76
Observers per trip	1.4	1.3
Hours per trip	2.5	3.0
Miles on foot per trip	3.0	3.1
Miles per hour	1.2	1.0
Percentage of time in denser woods	45	48
“ “ “ “ open country	25	32
“ “ “ “ marshes	15	7
“ “ “ along lakes and streams	15	13

The total number of trips for the first five months this year is 271, an average of 1.7 trips per day. The total for the same months in 1934 was only 200.

The number of species listed in this bulletin is 200. Of these, 115 are new for the year. The list for the year now totals 208. This is less than had been recorded last year at this time.

The following records are of more unusual species and deserve special attention. Unfortunately, comment by the observer on the conditions of identification are lacking on some of the rarer species.

Red-throated Loon (B.T.B) – May 19 (1) In front of Coast Guard Station at Ashtabula Harbor, observed for 10 minutes with 6x glasses at 50-100 yards. Red throat patch was seen plainly twice. Identification further corroborated by S.V. Wharram.

Greater Scaup Duck (O'R) – April 7 (1)

Cooper Hawk (S.C.K.) – May 11 (1)

Rough-legged Hawk (J.A.) – May 25 (1)

Bald Eagle (S.C.K.) – May 11 (2), 18 (1)

Broad-winged Hawk (O'R, M.E.M., S.C.K., J.A.) – Apr. 6 (1), 27 (7), 28 (3), May 4 (1), 5 (1, 1)

Ruffed Grouse (M.B.S.) – Apr. 14 (2)

Hudsonian Curlew (O'R, M.E.M., M.B.S.) – Apr. 19 (2), 25 (45, 1)

Black-bellied Plover (M.E.F., M.B.S.) – May 19 (6, 3 – Bay Bridge)

Stilt Sandpiper (M.B.S.) – May 19 (9)

Dowitcher (M.B.W.) – Apr. 24 (2)

Screech Owl (M.E.M.) – May 18 (1)

Short-eared Owl (M.B.W.) – May 8 (1)

Red-bellied Woodpecker (M.E.M., D.C.K., J.A.) – Apr. 28 (1), May 5 (1, 1, 3), 11 (1), 12 (1), 19 (2)

Yellow-bellied Flycatcher (M.B.S., S.C.K., J.A.) – May 11 (1), 26 (1, 1)

Short-billed Marsh Wren (M.B.S., J.A.) – May 18 (2), 19 (2), 26 (1)

Bewick Wren (D.C.K.) – Apr. 28 (1 – near Bowling Green)

Pipit (J.A., J.B.) – May 5 (2), 8

White-eyed Vireo (D.C.K.) – May 12 (1)

Golden-winged Warbler (M.E.M., D.C.K.) – May 12 (2), 14 (1)

Prairie Warbler (Mrs. M.B. Skaggs) – May 16 (1)

Pine Warbler (M.B.W., J.A.) – Apr. 26 (1), May 12 (15)

Connecticut Warbler (J.A.) – May 12 (1), 26 (2)

Lincoln Sparrow (J.B., J.A.) – May 12 (1), 19 (7), 22

Monthly indices of abundance have been worked out for the more common species in various habitats and are presented in the tables below. These indices were computed by multiplying together the average number of individuals seen per trip by the percentage of the trips on which the species was recorded. Average indices for the two months, April and May, are also given for comparison with the same months in 1934. It is hoped that in this way variations in the abundance of the various species from year to year may be followed, and perhaps with the aid of collaborators living in other parts of the state we may someday be able to compare abundance in different localities as well as variations in distribution.

BIRDS OF THE DENSER WOODS

Index of Abundance

	April	May	Average: 1935	Average: 1934
Cardinal	314.9	181.5	248.2	156.4
Blue Jay	179.1	86.8	133.0	51.1
Golden-crowned Kinglet	156.6	- - -	(April)	78.7
Tufted Titmouse	116.3	117.4	116.8	128.4
Towhee	130.5	92.6	111.6	117.8
Black-throated Green Warbler	- - -	123.1	(May)	83.2
Hermit Thrush	106.5	- - -	(April)	rare
Ovenbird	- - -	104.2	(May)	164.0
Downy Woodpecker	91.8	39.8	65.8	42.5
Wood thrush	- - -	82.8	(May)	123.8
Olive-backed Thrush	- - -	52.1	(May)	rare
White-breasted Nuthatch	46.0	33.3	39.6	54.2
Crested Flycatcher	- - -	35.2	(May)	75.1
Black-capped Chickadee	12.1	26.7	19.4	72.4
Brown Creeper	18.1	- - -	(April)	45.9
Yellow-bellied Sapsucker	14.4	- - -	- - -	- - -
Veery	- - -	10.9	(May)	11.7
Rose-breasted Grosbeak	- - -	9.6	(May)	19.9
Hairy Woodpecker	6.4	5.1	5.8	7.9
Louisiana Water Thrush	- - -	6.1	(May)	7.3
Blue-gray Gnatcatcher	- - -	4.6	(May)	rare
Red-tailed Hawk	0.9	3.7	2.3	0.8
Cerulean Warbler	- - -	2.6	(May)	8.3
Barred Owl	2.5	1.1	1.8	1.4
Red-shouldered Hawk	0.0	1.4	0.7	2.3
Pileated Woodpecker	0.2	1.3	0.8	rare
Carolina Wren	0.1	1.3	0.7	1.1

A consideration of those species in the above table with an index of abundance of over 9.0 shows that 7 species have increased, 8 decreased, and 2 remained the same in abundance as in 1934. The most noteworthy changes are the marked increases in the cardinal and blue jay and the decrease in the chickadee. Some of the other changes in abundance may be due to differences in time of migration. In the twenty-two species where comparative figures are available for the two years, the average index for all species is 54.3 in 1935 and 57.0 in 1934. This would indicate that during April and May forest birds as a whole were about equally abundant this year as last.

BIRDS OF THE OPEN COUNTRY
(Open woods, shrubby fields, farmland, cities)

	Index of Abundance		Average: 1935	Average: 1934
	April	May		
Robin	2237.7	1229.3	1733.5	853.8
Slate-colored Junco	851.8	- - -	(April)	591.7
Song Sparrow	801.7	598.5	700.1	516.0
Starling	739.1	690.0	714.6	453.0
Bronzed Grackle	661.3	409.3	535.3	216.4
Cowbird	417.6	567.5	492.6	365.2
Mourning Dove	358.0	465.5	411.8	282.2
Goldfinch	15.3	465.1	240.2	165.6
Barn Swallow	- - -	393.2	(May)	159.5
Flicker	387.6	220.9	304.2	168.0
English Sparrow	364.9	320.0	342.4	- - -
Yellow Warbler	- - -	361.1	(May)	237.2
Chimney Swift	- - -	292.4	(May)	7.5
Crow	289.2	181.0	235.1	308.8
Cedar Waxwing	263.8	85.2	174.5	4.6 (May)
Purple Martin	- - -	255.0	(May)	97.5
House Wren	- - -	221.3	(May)	198.2
Meadowlark	185.2	145.0	165.1	225.2
Phoebe	172.1	73.6	122.8	73.0
Catbird	- - -	164.3	(May)	104.0
Field Sparrow	103.5	147.3	125.4	103.5
Killdeer	104.0	58.4	81.2	70.0
Bob-white	71.1	133.1	102.1	36.4
Chipping Sparrow	12.3	64.5	38.4	45.4
Baltimore Oriole	- - -	52.1	(May)	48.4
Tree Sparrow	50.2	- - -	(April)	38.0
Red-headed Woodpecker	0.8	44.7	22.8	9.4
Bluebird	34.4	28.3	31.3	66.7
Bobolink	- - -	27.6	(May)	70.4
Brown Thrasher	- - -	25.0	(May)	16.5
Vesper Sparrow	22.2	22.8	22.5	52.0
Kingbird	- - -	18.5	(May)	19.0
Blue-winged Warbler	- - -	16.1	(May)	21.0
Ring-necked Pheasant	3.2	15.8	9.5	9.0
Indigo Bunting	- - -	13.0	(May)	22.3
Warbling Vireo	- - -	10.9	(May)	10.5
Prairie Horned Lark	10.5	6.7	8.6	20.8
Turkey Vulture	3.8	9.4	6.6	15.4
Sparrow Hawk	4.1	1.4	2.8	8.1
Grasshopper Sparrow	- - -	1.8	(May)	6.5
Henslow Sparrow	- - -	1.4	(May)	rare
Migrant Shrike	0.6	1.1	0.8	22.1
Upland Plover	- - -	1.1	(May)	6.6
Sharp-shinned Hawk	0.6	0.7	0.6	1.8

Considering all species (42) in the above table with comparative figures on abundance for 1935 and 1934, the average index for 1935 is 215.2 and for 1934, 136.8. This indicates that birds in the open country are better than one and one-half times as abundant this year as last. Eight of the more common species (with index over 10) show, however, a marked decrease (at least 25%) in abundance. These species are meadowlark, bluebird, bobolink, vesper sparrow, indigo bunting, prairie horned lark, turkey vulture, and migrant shrike.

BIRDS OF THE MARSH

	Index of Abundance		Average: 1935	Average: 1934
	April	May		
Red-winged Blackbird	526.7	530.9	528.8	477.4
Coot	334.5	35.0	184.8	62.6
Baldpate	120.3	- - -	- - -	- - -
Northern Yellowthroat	- - -	110.5	(May)	84.3
Tree Swallow	61.7	52.6	57.2	21.8
Great Blue Heron	6.6	100.0	53.3	22.6
Blue-winged Teal	38.1	20.5	29.3	12.6
Black Duck	33.0	7.3	20.2	44.2
Shoveller	30.4	0.9	15.6	uncommon
Mallard	19.7	15.9	17.8	4.2
Black-crowned Night Heron	- - -	15.0	(May)	17.4
Marsh Hawk	8.1	6.3	7.2	6.0
Pied-billed Grebe	13.6	0.5	7.0	29.8
Water-thrush (Northern & Grinnell)	- - -	8.3	(May)	18.0
Green Heron	- - -	6.3	(May)	24.8
Swamp Sparrow	2.2	4.7	3.4	10.4
Florida Gallinule	- - -	4.0	(May)	5.2
Rusty Blackbird	3.7	- - -	- - -	- - -
Wilson Snipe	2.6	0.3	1.4	2.4
American Bittern	- - -	1.5	(May)	0.6
Pintail	0.8	- - -	- - -	- - -
Sora Rail	- - -	0.4	(May)	2.8
Virginia Rail	- - -	0.2	(May)	2.1

Averaging the indices of abundance for 19 species in the above table gives for 1935 an index of 55.6 and for 1934, 44.7. Of those species with an index of at least 10, seven species show an increase in abundance of at least 25% and five species show a decrease.

BIRDS OF THE OPEN LAKE, LAKE SHORE, AND STREAMS

	Index of Abundance		Average: 1935	Average: 1934
	April	May		
Lesser Scaup Duck	549.8	28.6	289.2	609.4
Herring Gull	153.4	349.8	251.6	157.9
Common Tern	- - -	279.6	(May)	79.1
Rough-winged Swallow	- - -	235.1	(May)	23.4
Spotted Sandpiper	- - -	142.1	(May)	90.3
Bonaparte Gull	199.4	11.4	105.4	93.6 (April)
Bank Swallow	- - -	91.6	(May)	174.7
Ring-billed Gull	24.1	58.8	41.4	26.1
Belted Kingfisher	55.2	82.9	69.0	44.9
Red-breasted Merganser	48.5	- - -	(April)	38.2
Ring-necked Duck	14.6	- - -	- - -	- - -
Bufflehead	7.9	- - -	- - -	- - -

Ten species in the table with comparative figures give an average index of abundance for 1935 of 164.8 and for 1934 of 133.8. Only two species, the lesser scaup duck and the bank swallow, show lower indices in 1935.

The National Association of Audubon Societies is back of a campaign for the complete closing of the hunting season on waterfowl this autumn. Waterfowl of various species have decreased alarmingly in abundance during the last few years due to excessive hunting and the effects of drought and drainage in drying up their natural breeding habitats. Because of this, it is argued, that unless the birds are given complete protection for the coming year and unless their breeding places return to normal, their numbers will be still further decreased with the possibility of eliminating hunting altogether for several years to come. In the light of this knowledge, it is of interest to compare the indices of abundance on a few species of ducks in northern Ohio for 1934 and 1935.

	Index of Abundance											
	January		February		March		April		May			
	1935	1934	1935	1934	1935	1934	1935	1934	1935	1934		
Black Duck	5.8	197.3	1.4	189.7	134.2	1.8	33.0	74.9	7.3	13.6	181.7	477.3
Lesser Scaup Duck	29.9	557.7	100.2	1055.4	42.0	292.8	549.8	1193.8	28.6	25.1	750.5	3124.8
Golden-eye	1.0	9.6	6.8	171.1	4.3	9.8	- -	- -	- -	- -	12.1	190.5
Blue-winged Teal	- -	- -	- -	- -	- -	- -	38.1	16.1	20.5	9.0	58.6	25.1
Mallard	- -	- -	- -	- -	- -	- -	19.7	6.5	15.9	1.8	<u>35.6</u>	<u>8.3</u>
											Grand total	1038.5 3826.0

Three of these five species show a marked decrease in abundance since last year. Unfortunately the data are not sufficiently ample to permit comparison of a similar sort for the other species. The above records do indicate, however, that the diminution in waterfowl noted in other parts of the country also occurs in northern Ohio and gives reason to believe that drastic measures, to eliminate this decrease in numbers, are in order.

Four waves of migration were reported for February and March in the last Calendar. At the end of March it was noted that the migration was about a week ahead of its normal schedule. The migration slowed up during the first two-thirds or more of April due to lower temperatures. New arrivals came slowly and scatteringly and it was not until the 24th that the next or 5th definite wave could be said to have occurred. Migration then progressed very rapidly, with the 6th wave coming on April 27-28. As far as number of new arrival are concerned this was the largest wave of the season, with 28 species making their first appearance. This brought the migration back to about normal in time. A smaller 7th wave came on May 5th and the 8th on May 11-12. At the time of the 9th wave, May 18-19, probably the peak of the spring migration was reached as regards actual number of species and individuals present in the region. The number of new arrivals in this wave was not large but it brought in the bulk of individuals of many species whose earliest migrants had come in preceding waves. The last or 10th wave occurring on May 25-26 had only one new species recorded but it ushered into and through the region the last big mass of migrating individuals. When this wave had passed on only a few straggling individuals remained of those species that nest further north. As far as time is concerned, the migration during May was about average or possibly a little late.

SPRING MIGRATION

SPECIES	FIRST RECORD	RECORD OF MAXIMA	LAST RECORD
Golden-crowned Kinglet	Mar. 30 (1, 2)	Apr. 19-25	Apr. 28 (6, 2, 1, 1, 6)
Brown Creeper	Mar. 30 (2)	Apr. 14-22	May 19 (1)
Upland Plover	Apr. 1 (1)	Apr. 18-19	- - -
Tree Swallow	Apr. 1 (15)	Apr. 28, May 5, 19	- - -
Bonaparte Gull	Apr. 2 (2)	Apr. 20-21, 28	May 30 (1)
Common Loon	Apr. 3 (1)	Apr. 10-28	May 19 (1)
Red-breasted Merganser	Apr. 6 (12)	Apr. 17-21	May 19 (7)
Broad-winged Hawk	Apr. 6 (1)	Apr. 27- 28	- - -
Purple Martin	Apr. 6 (1)	Apr. 19, 28, May 12, 18-19, 25	- - -
Greater Yellow-legs	Apr. 7 (1)	Apr. 28	May 11 (1)
American Bittern	Apr. 14 (1)	- - -	- - -
Barn Swallow	Apr. 14 (1)	May 5, 12, 18-19	- - -
Savannah Sparrow	Apr. 14 (2)	May 18-19	May 19 (1, 1, 1)
Woodcock	Apr. 16 (1)	- - -	- - -
Ruby-crowned Kinglet	Apr. 16 (1)	Apr. 28, May 5, 12, 18-19	May 26 (15)
Louisiana Water-thrush	Apr. 16 (1)	Apr. 12], 18	- - -
Ruddy Duck	Apr. 19 (30)	- - -	May 8
Goldfinch	Apr. 19 (3)	Apr. 28, May 5, 11-12, 18-19, 25-26	- - -
Common Tern	Apr. 20 (9)	- - -	- - -
Chimney Swift	Apr. 20 (8)	Apr. 28, May 11-12, 18-19, 25-26	- - -
Rough-winged Swallow	Apr. 21 (1)	Apr. 28, May 5, 12, 18-19	- - -
Wood Duck	Apr. 21 (2)	- - -	- - -
Florida Gallinule	Apr. 23 (1)	8.19 [sic]	- - -
Yellow Warbler	Apr. 23 (1)	Apr. 28, May 12, 18-19, 25-26	- - -
Bobolink	Apr. 24 (1)	May 11-12, 18-19	- - -
Olive-backed Thrush	Apr. 24 (2)	May 12, 18-19, 24-25	May 30 (2)
Wood Thrush	Apr. 24 (1)	Apr. 28, May 12, 18-19	- - -
White-throated Sparrow	Apr. 24 (8)	Apr. 28, May 5, 12, 18	May 26
Myrtle Warbler	Apr. 24 (4)	Apr. 28, May 5, 12, 18-19	May 26 (1)
Cape May Warbler	Apr. 24 (1)	May 12	May 25 (1)
Dowitcher	Apr. 24 (2)	- - -	- - -
House Wren	Apr. 25 (1)	Apr. 28, May 5, 11-12, 18-19	- - -
Black-throated Green Warbler	Apr. 26 (1)	May 12, 19	- - -
Pine Warbler	Apr. 26 (1)	- - -	May 12 (15)
Red-headed Woodpecker	Apr. 27 (1)	May 12, 18, 19	- - -
Water-thrush (No.& Grinn.)	Apr. 27 (1)	May 18-19	- - -
Black-crowned Night Heron	Apr. 27 (15)	- - -	- - -
Northern Yellow-throat	Apr. 27 (6)	May 11-12, 18-19	- - -
Catbird	Apr. 27 (4)	May 5, 11-12, 18-19, 26	- - -
Rose-breasted Grosbeak	Apr. 27 (1)	May 18-19	- - -
Blue-gray Gnatcatcher	Apr. 27 (1)	May 11, 19	- - -
Ovenbird	Apr. 27 (1)	May 5, 11-12, 18-19	- - -
White-crowned Sparrow	Apr. 27 (3)	May 12, 18	May 26 (2)
Black and White Warbler	Apr. 27 (3)	May 12, 18-19	May 26 (2, 1, 1)
Lesser Yellow-legs	Apr. 27 (20)	Apr. 28	May 12 (2)
Osprey	Apr. 27 (1)	- - -	- - -
Whip-poor-will	Apr. 27 (1)	- - -	- - -
Sora Rail	Apr. 28 (1)	- - -	- - -
Green Heron	Apr. 28 (4, 2)	May 18-19	- - -
Henslow Sparrow	Apr. 28 (2)	May 18	- - -

SPECIES	FIRST RECORD	RECORD OF MAXIMA	LAST RECORD
Grasshopper Sparrow	Apr. 28 (5, 1, 1)	May 11-12	- - -
Warbling Vireo	Apr. 28 (1)	May 12, 18-19	- - -
Indigo Bunting	Apr. 28 (1)	May 18-19	- - -
Kingbird	Apr. 28 (2, 1, 2)	May 18-19, 25-26	- - -
Cerulean Warbler	Apr. 28 (1, 1)	May 18-19	- - -
Crested Flycatcher	Apr. 28 (1)	May 18-19	- - -
Palm Warbler	Apr. 28 (4, 1, 1, 7)	May 12, 18-19	May 19 (3, 3, 2, 1, 1)
Semipalmated Sandpiper	Apr. 28 (4)	- - -	May 25 (3, 25)
Pectoral Sandpiper	Apr. 28 (30, 6)	- - -	- - -
Solitary Sandpiper	Apr. 28 (2)	- - -	May 26 (2, 1)
Bank Swallow	Apr. 28 (2, 6, 7)	May 12, 18-19	- - -
Spotted Sandpiper	Apr. 28 (8, 2, 2, 1, 1)	May 5, 12, 18-19, 25	- - -
Virginia Rail	Apr. 29 (1)	- - -	- - -
Blue-winged Warbler	Apr. 29 (1)	May 12, 18-19	- - -
Veery	May 1 (1)	May 18	- - -
Baltimore Oriole	May 1 (1)	May 12, 18-19	- - -
Gray-cheeked Thrush	May 3 (1)	- - -	May 24 (2)
Caspian Tern	May 4 (2)	- - -	May 25 (3)
Least Bittern	May 5 (1)	- - -	- - -
King Rail	May 5 (1)	May 19	- - -
Red-backed Sandpiper	May 5(3)	May 19	May 25 (2, 2)
Black Tern	May 5 (1, 12)	May 25	- - -
Pipit	May 5 (2)	- - -	May 8
Yellow-throated Vireo	May 5 (1)	May 12, 18	- - -
Parula Warbler	May 5 (5)	- - -	May 25
Scarlet Tanager	May 5 (1)	May 18-19	- - -
Redstart	May 6 (4)	May 12, 18-19	- - -
Blackburnian Warbler	May 6 (10)	May 12, 18-19	May 30
Chestnut-sided Warbler	May 7 (1)	May 12, 19	May 26 (1, 1)
Nighthawk	May 7	May 24-26	- - -
Long-billed Marsh Wren	May 8 (1)	- - -	- - -
Ruby-throated Hummingbird	May 9	May 18-19	- - -
Least Flycatcher	May 9 (1)	May 18-19	May 26 (4,2,1)
Philadelphia Vireo	May 9 (1)	- - -	May 26 (2, 2)
Nashville Warbler	May 9	May 12, 18-19	May 26 (6)
Magnolia Warbler	May 9 (1)	May 12, 18-19	May 30 (2)
Bay-breasted Warbler	May 9	May 12, 19	May 27 (1)
Black-throated Blue Warbler	May 10 (2)	May 12, 19	May 24 (1)
Black-poll Warbler	May 10 (2)	- - -	May 29
Black-billed Cuckoo	May 10 (1)	- - -	- - -
Blue-headed Vireo	May 10 (1)	May 12	May 22 (1)
Yellow-bellied Flycatcher	May 11 (1)	- - -	May 26 (1, 1)
Acadian Flycatcher	May 11 (1, 1)	- - -	May 27 (1)
Red-eyed Vireo	May 11 (2)	May 19, 26	- - -
Orange-crowned Warbler	May 11 (1)	May 19, 25	May 25 (2, 6, 1)
Yellow-breasted Chat	May 11 (2, 1, 1)	- - -	- - -
Hooded Warbler	May 11 (2)	- - -	- - -
Wilson Warbler	May 11 (1)	May 26	May 30 (2)
Canada Warbler	May 11 (1)	May 26	May 30 (1)
Wood Pewee	May 12 (2, 1, 1)	- - -	- - -
Cliff Swallow	May 12 (2)	- - -	- - -
Golden-winged Warbler	May 12 (2)	- - -	May 14 (1)
Tennessee Warbler	May 12 (6, 2)	May 12, 19	May 26 (1)
Connecticut Warbler	May 12 (1)	- - -	May 26 (2)

SPECIES	FIRST RECORD	RECORD OF MAXIMA	LAST RECORD
Mourning Warbler	May 12 (1)	- - -	May 30
Lincoln Sparrow	May 12 (1)	- - -	May 22
Prairie Warbler	May 16 (1)	- - -	- - -
Piping Plover	May 18 (1, 1)	- - -	- - -
Yellow-billed Cuckoo	May 18 (1)	- - -	- - -
Alder Flycatcher	May 18 (1)	- - -	- - -
Short-billed Marsh Wren	May 18 (2)	- - -	- - -
Semipalmated Plover	May 19 (6)	May 25	May 25 (14, 5)
Black-bellied Plover	May 19 (6, 3)	- - -	May 19 (6, 3)
Ruddy Turnstone	May 19 (3)	May 25	May 25 (40, 5)
Hudsonian Curlew	May 19 (2)	May 25	May 25 (45, 1)
Least Sandpiper	May 19 (4)	- - -	May 24 (1)
Stilt Sandpiper	May 19 (9)	- - -	May 19 (9)
Sanderling	May 25 (1)	- - -	May 25 (1)

OTHER LAST RECORDS

- April 14 – Canada Goose
- April 20 – Fox Sparrow (1)
- April 21 – Canvasback Duck (1), American Golden-eye (1), American Merganser 92)
- April 28 – Pintail (6), Gadwall (3), Tree Sparrow (3)
- April 29 – Bufflehead (8)
- May 1 – Yellow-bellied Sapsucker (1), Slate-colored Junco (1)
- May 4 – Green-winged Teal (2)
- May 5 – Horned Grebe (1), Rusty Blackbird (6), Golden-crowned Kinglet (2, 2)
- May 11 – Ring-necked Duck (2), Hermit Thrush (2)
- May 19 – Wilson Snipe (1)
- May 25 – Baldpate (2)
- May 26 – Shoveler (2), Lesser Scaup Duck (1, 1)

Thinking that it might be of interest and perhaps some value to gather together in one place the records of spring migration in different localities over Ohio and adjacent regions, requests were sent to several ornithologists for their cooperation. This met with enthusiasm, some sending in interesting additional notes and comments that unfortunately cannot be include here and we report in the table below the migration at five localities. The species are listed in the order of their occurrence at Cleveland and after each date the figure in parentheses indicates the number of days this date is earlier (indicated by a minus sign) or later (indicated by a plus sign) than the date of arrival of the species in Cleveland. We take pleasure in acknowledging our indebtedness for these records as follows:

Wheeling, W.Va. – Brooks Bird Club, Oglebay Park (published in the Redstart)

Zanesville, O. – Dr. Lawrence E. Hicks

Youngstown, O. – Vincent P. McLaughlin, Jr.

Toledo, O. – Louis B. Campbell

London, Ont. – W.E. Saunders

COMPARISON OF SPRING MIGRATION IN DIFFERENT LOCALITIES

SPECIES	WHEELING W.VA.	ZANESVILLE O.	YOUNGSTOWN O.	TOLEDO O.	LONDON ONT.
Crow	Winters	Winters	Winters	Mar. 5 (+23)	- - -
Meadowlark	Winters	Winters	Winters	Feb. 24 (+14)	Mar. 2 (+20)
Robin	Winters	Winters	Feb. 22 (+5)	Feb. 17 (+5)	Mar. 5 (+21)
Song Sparrow	Winters	Winters	Winters	Mar. 17 (+32)	Mar. 5 (+20)
Bluebird	Winters	Winters	Feb. 5 (-26)	Mar. 3 (+3)	Mar. 5 (+5)
Mourning Dove	Mar. 6 (+8)	- - -	Winters	Mar. 3 (+3)	- - -
Killdeer	Winters	Winters	Mar. 10 (+7)	Mar. 3 (+2)	Mar. 4 (+3)
Ring-necked Duck	Mar. 17 (+16)	- - -	Mar. 10 (+1)	Mar. 9 (+8)	Mar. 20 (+19)
Red-winged Blackbird	Mar. 6 (+4)	Mar. 5 (+3)	Mar. 10 (+8)	Mar. 2 (0)	Mar. 2 (0)
Bronzed Grackle	Mar. 7 (+5)	Mar. 1 (-!)	Feb. 24 (-6)	Mar. 3 (+1)	Mar. 5 (+3)
Yellow-bellied Sapsucker	- - -	Mar. 14 (+9)	Apr. 7 (+32)	Mar. 30 (+25)	Apr. 9 (+34)
Rusty Blackbird	Mar. 6 (0)	Mar. 27 (+21)	Mar. 24 (+18)	Mar. 9 (+3)	Mar. 28 (+22)
Cowbird	- - -	Mar. 6 (-3)	Mar. 17 (+8)	Mar. 2 (-7)	Mar. 6 (-3)
Mallard	- - -	Winters	Mar. 10 (-1)	Mar. 20 (+9)	- - -
Canada Goose	- - -	Feb. 28 (-11)	Mar. 16 (+5)	Mar. 24 (+13)	Mar. 28 (+17)
Whistling Swan	- - -	- - -	Mar. 24 (+13)	Mar. 23 (+12)	- - -
Pied-billed Grebe	Apr. 25 (+41)	Apr. 2 (+18)	Mar. 24 (+9)	Mar. 24 (+9)	Apr. 25 (+21)
Turkey Vulture	- - -	- - -	Apr. 27 (+43)	Mar. 31 (+16)	Mar. 23 (+8)
Baldpate	Apr. 11 (+27)	Apr. 2 (+18)	Mar. 10 (-5)	Mar. 9 (-6)	Mar. 17 (+2)
Migrant Shrike	- - -	Winters	- - -	Mar. 23 (+7)	- - -
Phoebe	Mar. 16 (0)	Mar. 6 (-10)	Mar. 21 (+5)	Mar. 15 (-1)	Mar. 26 (+10)
Wilson Snipe	Mar. 9 (-7)	Mar. 14 (-2)	Mar. 17 (+1)	Mar. 17 (+1)	- - -
Hooded Merganser	- - -	Winters	Mar. 24 (+8)	Mar. 9 (-7)	- - -
Blue-winged Teal	Apr. 6 (+19)	Mar. 22 (+4)	Mar. 24 (+6)	Mar. 23 (+5)	- - -
Shoveller	Mar. 18 (0)	Mar. 26 (+8)	Mar. 17 (-1)	Mar. 16 (-2)	Apr. 19 (+32)
Brown Thrasher	Apr. 7 (+17)	Apr. 2 (+12)	Apr. 14 (+24)	Apr. 14 (+24)	Apr. 21 (+31)
Field Sparrow	Mar. 23 (0)	Mar. 19 (-4)	Mar. 24 (+1)	Mar. 23 (0)	Apr. 11 (+19)
Swamp Sparrow	Mar. 16 (-7)	Mar. 24 (+1)	Mar. 24 (+1)	- - -	Apr. 19 (+27)
Fox Sparrow	- - -	Mar. 5 (-19)	Mar. 30 (+6)	Mar. 10 (-14)	Mar. 26 (+2)
Chipping Sparrow	Mar. 24 (-2)	Mar. 26 (0)	- - -	Apr. 6 (+11)	Apr. 19 (+24)
Vesper Sparrow	Mar. 23 (-3)	Mar. 14 (-12)	Mar. 24 (-2)	Mar. 30 (+4)	Mar. 27 (+1)
Coot	Apr. 6 (+11)	Mar. 22 (-4)	Ma. 17 (-9)	Mar. 9 (-17)	Apr. 19 (+24)
Hermit Thrush	Apr. 20 (+21)	Mar. 26 (-4)	Apr. 14 (+15)	Mar. 24 (-6)	Mar. 30 (0)
Upland Plover	- - -	Apr. 10 (+9)	Apr. 21 (+20)	- - -	Apr. 21 (+20)
Tree Swallow	Apr. 22 (+21)	Apr. 15 (+14)	Apr. 1 (0)	Apr. 7 (+6)	Apr. 20 (+19)
Common Loon	- - -	Apr. 9 (-6)	Winters	- - -	Mar. 29 (-5)
Broad-winged Hawk	Apr. 21 (+15)	Apr. 24 (+18)	Apr. 26 (+20)	Apr. 20 (+14)	- - -
Purple Martin	Apr. 2 (-4)	Apr. 4 (-2)	Apr. 7 (+1)	Apr. 3 (-3)	Apr. 20 (+14)
Greater Yellow-legs	- - -	Apr. 23 (+16)	May 5 (+18)	Mar. 23 (-15)	- - -
Bittern	Apr. 19 (+5)	Mar. 26 (-19)	Apr. 7 (-7)	Mar. 23 (-22)	Apr. 2 (+2)
Barn Swallow	Apr. 20 (+6)	Apr. 15 (+1)	Apr. 14 (0)	Apr. 20 (+6)	Apr. 20 (+6)
Savannah Sparrow	Apr. 20 (+6)	Apr 9 (-5)	Apr. 1 (-13)	Apr. 7 (-7)	Mar. 27 (-18)
Ruby-crowned Kinglet	- - -	Mar. 30 (-17)	Apr. 7 (-9)	Apr. 14 (-2)	Apr. 19 (+3)
Louisiana Water-thrush	Mar. 31 (-16)	Apr. 8 (-8)	Apr. 21 (+5)	Apr. 28 (+12)	Apr. 19 (+3)
Chimney Swift	Apr. 21 (+1)	Apr. 22 (+2)	Apr. 28 (+8)	Apr. 20 (0)	Apr. 25 (+5)
Rough-winged Swallow	- - -	Apr. 22 (+1)	Apr. 28 (+7)	Apr. 20 (-1)	Apr. 24 (-3)
Yellow Warbler	Apr. 23 (0)	Apr. 23 (0)	- - -	Apr. 25 (+2)	Apr. 30 (+7)
Bobolink	Apr. 26 (+2)	May 3 (+9)	Apr. 28 (+4)	Apr. 27 (+3)	Apr. 27 (+3)
Olive-backed Thrush	May 11 (+17)	May 7 (+13)	May 5 (+11)	Apr. 27 (+3)	May 8 (+14)
Wood Thrush	Apr. 22 (-2)	Apr. 24 (0)	Apr. 28 (+4)	Apr. 28 (+4)	Apr. 24 (0)
White-throated Sparrow	Apr. 28 (+4)	Mar. 26 (-29)	Apr. 20 (-4)	Apr. 14 (-10)	Apr. 24 (0)

COMPARISON OF SPRING MIGRATION IN DIFFERENT LOCALITIES

SPECIES	WHEELING W.VA.	ZANESVILLE O.	YOUNGSTOWN O.	TOLEDO O.	LONDON ONT.
Myrtle Warbler	Apr. 19 (-5)	Apr. 24 (0)	Apr. 28 (+4)	Apr. 16 (-8)	Apr. 19 (-5)
Cape May Warbler	May 19 (+25)	May 8 (+14)	May 5 (+11)	May 12 (+18)	May 10 (+16)
House Wren	Apr. 20 (-5)	Apr. 22 (-3)	Apr. 21 (-4)	Apr. 20 (-5)	Apr. 28 (+3)
Black-throated					
Green Warbler	Apr. 22 (-4)	Apr. 30 (+4)	Apr. 27 (+1)	May 8 (+12)	Apr. 28 (+2)
Water-thrush (No. & Grinn)	- - -	- - -	May 1 (+4)	Apr. 23 (-4)	May 6 (+9)
Northern Yellow					
Throat	May 12 (+15)	Apr. 30 (+3)	Apr. 30 (+3)	Apr. 27 (0)	- - -
Catbird	Apr. 10 (-17)	Apr. 30 (+3)	Apr. 28 (+1)	Apr. 27 (0)	Apr. 29 (+2)
Rose-breasted					
Grosbeak	Apr. 21 (-6)	May 10 (+13)	Apr. 28 (+1)	May 9 (+12)	May 9 (+12)
Blue-gray					
Gnatcatcher	Apr. 20 (-7)	Apr. 18 (-9)	Apr. 28 (+1)	Apr. 28 (+1)	- - -
Ovenbird	May 5 (+8)	Apr. 30 (+3)	May 10 (+13)	May 9 (+12)	May 13 (+16)
White-crowned Sparrow	Apr. 28 (+1)	Apr. 30 (+3)	- - -	Apr. 28 (+1)	- - -
Black & White Warbler	Apr. 30 (+3)	Apr. 23 (-4)	Apr. 21 (-6)	Apr. 27 (0)	Apr. 27 (0)
Lesser Yellow-legs	Mar. 31 (-27)	Apr. 23 (-4)	May 5 (+8)	Apr. 7 (-20)	Apr. 29 (+2)
Whip-poor-will	May 13 (+16)	Apr. 24 (-3)	May 3 (+6)	Apr. 28 (+1)	May 4 (+7)
Green Heron	Apr. 28 (0)	Apr. 23 (-5)	Apr. 28 (0)	Apr. 26 (-2)	Apr. 28 (0)
Grasshopper Sparrow	Mar. 31 (-28)	Apr. 9 (-18)	Apr. 27 (-21)	Apr. 26 (-2)	Apr. 28 (0)
Warbling Vireo	Apr. 27 (-1)	May 8 (+10)	Apr. 28 (0)	Apr. 27 (-1)	Apr. 29 (+1)
Indigo Bunting	May 3 (+5)	Apr. 30 (+2)	May 5 (+7)	Apr. 27 (-1)	May 19 (+21)
Kingbird	May 5 (+7)	Apr. 30 (+2)	Apr. 27 (-1)	Apr. 27 (-1)	Apr. 28 (0)
Cerulean Warbler	May 4 (+6)	May 3 (+5)	Apr. 28 (0)	May 8 (+10)	- - -
Crested Flycatcher	Apr. 28 (0)	Apr. 30 (+2)	Apr. 28 (0)	May 4 (+8)	Apr. 28 (0)
Palm Warbler	- - -	Apr. 24 (-4)	Apr. 27 (-1)	Apr. 27 (-1)	May 10 (+12)
Semipalmated Sandpiper	- - -	May 13 (+15)	May 5 (+7)	May 4 (+6)	- - -
Solitary Sandpiper	Apr. 28 (0)	Apr. 24 (-4)	May 5 (+7)	Apr. 27 (-1)	May 1 (+2)
Bank Swallow	- - -	Apr. 15 (-13)	May 12 (+14)	Apr. 27 (-1)	Apr. 26 (-2)
Spotted sandpiper	Apr. 20 (-8)	Apr. 20 (-8)	Apr. 21 (-7)	Apr. 25 (-3)	Apr. 24 (-4)
Blue-winged Warbler	Apr. 27 (-2)	May 8 (+9)	Apr. 28 (-1)	- - -	- - -
Veery	May 12 (+11)	May 13 (+12)	May 5 (+4)	Apr. 28 (-3)	May 9 (+8)
Baltimore Oriole	Apr. 28 (-3)	Apr. 30 (-1)	Apr. 28 (-1)	Apr. 27 (-4)	May 7 (+6)
Red-backed Sandpiper	- - -	- - -	Apr. 21 (-14)	May 4 (-1)	- - -
Black Tern	May 5 (0)	- - -	May 5 (0)	Apr. 28 (-7)	- - -
Yellow-throated Vireo	May 4 (-1)	May 8 (+3)	Apr. 28 (-7)	Apr. 27 (-8)	May 13 (+8)
Parula Warbler	May 10 (+5)	May 10 (+5)	May 8 (+3)	May 9 (+4)	May 12 (+7)
Scarlet Tanager	Apr. 28 (-7)	May 1 (-4)	- - -	May 8 (+3)	May 13 (+8)
Redstart	Apr. 27 (-9)	May 1 (-5)	May 1 (-5)	May 8 (+2)	May 9 (+3)
Blackburnian Warbler	May 5 (-1)	May 10 (+4)	May 5 (-1)	Apr. 27 (-9)	May 9 (+3)
Chestnut-sided					
Warbler	May 4 (-3)	May 13 (+6)	May 8 (+1)	May 8 (+1)	May 10 (+3)
Nighthawk	May 20 (+13)	May 8 (+1)	May 13 (+6)	May 10 (+3)	May 12 (+5)
Ruby-throated					
Hummingbird	May 12 (+3)	Apr. 30 (-9)	May 10 (+1)	May 9 (0)	May 13 (+4)
Least Flycatcher	May 8 (-1)	May 7 (-2)	Apr. 28 (-10)	May 4 (-5)	May 9 (0)
Philadelphia Vireo	- - -	May 13 (+4)	- - -	- - -	- - -
Nashville Warbler	May 5 (-4)	Apr. 30 (-9)	Apr. 27 (-12)	Apr. 27 (-12)	May 9 (0)
Magnolia Warbler	May 5 (-4)	Apr. 30 (-9)	Apr. 28 (-11)	May 9 (0)	May 10 (+1)
Bay-breasted Warbler	May 12 (-3)	May 13 (+4)	May 8 (-1)	May 12 (+3)	- - -
Blk.-thr. Blue Warbler	May 5 (-5)	May 3 (-7)	May 5 (-5)	May 9 (-1)	May 9 (-1)
Black-poll Warbler	May 12 (+2)	May 13 (+3)	May 21 (+11)	May 17 (+7)	May 21 (+11)
Black-billed Cuckoo	May 4 (-6)	May 13 (+3)	- - -	May 11 (+1)	- - -

COMPARISON OF SPRING MIGRATION IN DIFFERENT LOCALITIES

SPECIES	WHEELING W.VA.	ZANESVILLE O.	YOUNGSTOWN O.	TOLEDO O.	LONDON ONT.
Blue-headed Vireo	Apr. 30 (-10)	May 8 (-2)	Apr. 15 (-25)	Apr. 27 (-13)	May 9 (-1)
Wood Pewee	May 12 (0)	May 8 (-4)	May 5 (-7)	May 11 (-1)	May 23 (+11)
Red-eyed Vireo	May 4 (-7)	Apr. 30 (-11)	May 5 (-6)	May 12 (+1)	May 18 (+7)
Wilson Warbler	May 12 (+1)	May 14 (+3)	May 12 (+1)	May 12 (+1)	May 20 (+9)
Hooded Warbler	Apr. 30 (-11)	May 13 (+2)	May 17 (+6)	- - -	- - -
Canada Warbler	May 12 (+1)	May 14 (+3)	May 10 (-1)	May 12 (+1)	May 14 (+3)
Golden-winged Warbler	May 12 (0)	- - -	May 10 (-2)	May 8 (-4)	- - -
Tennessee Warbler	May 4 (-8)	Apr. 30 (-12)	May 10 (-2)	May 4 (-8)	- - -
Connecticut Warbler	- - -	May 14 (+2)	May 12 (0)	May 30 (+18)	May 21 (+9)
Mourning Warbler	- - -	May 13 (+1)	May 12 (0)	May 19 (+7)	May 28 (+16)
Lincoln Sparrow	- - -	- - -	May 12 (0)	May 18 (+6)	- - -
Yellow-billed Cuckoo	May 12 (-6)	May 8 (-10)	Apr. 28 (-20)	May 24 (+6)	- - -
Alder Flycatcher	- - -	May 7 (-11)	- - -	May 13 (-5)	May 24 (-6)
Semipalmated Plover	- - -	May 13 (-6)	- - -	Apr. 28 (-21)	- - -
Ruddy Turnstone	- - -	- - -	- - -	May 5 (-14)	- - -
Least Sandpiper	- - -	May 13 (-6)	May 5 (-14)	May 5 (-14)	- - -
Sanderling	- - -	- - -	- - -	May 18 (-7)	- - -

In order to condense the above data, the following additional table is presented.

AVERAGE NUMBER OF DAYS MIGRATION EARLIER (-) OR LATER (+) THAN AT CLEVELAND
WHEELING ZANESVILLE YOUNGSTOWN TOLEDO LONDON

All species during February and March except waterbirds.	-3.5	-4.6	+2.1	+5.8	+6.3
Water birds through- out spring	+5.9	+1.1	+1.6	-3.8	+13.1
All species during April and May except water birds & warblers.	+2.9	+0.4	+2.1	+1.0	+7.5
Warblers only	0.0	+0.5	+0.6	+2.4	+6.1

Interpretation of the records at this time will be left with our readers. We wish merely to caution them here that some of the differences to be noted may be due to one region being more thoroughly canvassed by a larger number of observers than another region. Perhaps by selecting such species as the vesper sparrow, purple martin, house wren, Baltimore oriole, redstart, red-eyed vireo, and the like a truer comparative picture of the migration may be obtained than by taking the averages, since the first arrivals of these common species in any locality will not be easily overlooked.

N.B. The following was omitted between Hooded Merganser and Blue-winged Teal on page 10:

SPECIES	WHEELING W.VA.	ZANESVILLE O.	YOUNGSTOWN O.	TOLEDO O.	LONDON ONT.
Green-winged Teal	- - -	- - -	Mar. 17 (+1)	Mar. 16 (0)	Apr. 20 (+35)
Pintail	- - -	Mar. 8 (-8)	Mar. 10 (-6)	Winters	Mar 29 (+13)
Great Blue Heron	- - -	Apr. 2 (+17)	Mar. 17 (+1)	Mar. 20 (+4)	Apr. 28 (+43)