

## Report of the Spring Migration of 1919

FORTY-SIX schedules were returned by our corps of migration observers during 1919 as listed below. Additional observers are always desired and names of persons interested and able to keep such a record will be received with thanks if sent to Dr. Witmer Stone, Academy of Natural Sciences, Logan Square, Philadelphia.

### *New Jersey*

Cape May, H. W. Hand.	S. S. Haines, M. A.
Atlantic City, Mrs. N. S. Cromie.	Linton, W. B. Evans, Miss L. M. Jacob.
Vineland, Mrs. A. K. Prince.	Moorestown, Mrs. V. Wierman.
Downstown, W. W. Fair.	Allentown, Miss Emma Gordon.
Camden, J. K. Potter.	Bordentown, Miss M. V. Flynn.
Audubon, J. W. Tatum.	
Mt. Holly, N. D. W. Pumyea.	
Beverly, D. G. Baird.	
Moorestown, Miss A. A. Mickle,	

### *Pennsylvania*

Concordville, Miss E. P. and J. F. Styer.	Cobb's Creek Park—W. Phila. G. G. Mahy and E. P. Richardson.
Media, Dr. J. P. Moore.	
Swarthmore, Dr. S. C. Palmer.	Chestnut Hill, W. H. Trotter.
Swarthmore, P. E. Howard.	Germantown, Stewardson Brown.
Swarthmore, H. M. Harrower.	
Addingham, D. E. Culver.	Mt. Airy, S. A. and R. W. Barker.
Kintnersville, &c., R. L. Lloyd.	Mt. Airy, A. F. Hagar.
Lansdowne, J. D. Carter.	Ardmore, W. L. Baily.
Lansdowne, W. E. Roberts.	Haverford, W. J. Serrill.

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| Haverford, G. T. Scoville.                                 | George School, Edw. Cocks<br>and O. Raymond. |
| Haverford, Edw. Woolman.                                   | Oaks, C. K. Roland.                          |
| Merion-Cynwyd, G. Beatty, Jr.                              | Buckingham, Miss S. C. Cox.                  |
| West Chester, R. P. Sharples.                              | Buckingham, Miss. E. Broad-<br>hurst.        |
| West Chester, Miss S. C. De<br>Haven.                      | Doylestown, Geo. MacRey-<br>nolds.           |
| West Chester, Dr. C. E.<br>Ehinger.                        | Collegeville, W. A. Kline.                   |
| West Chester — Westtown<br>School, C. K. Himmels-<br>bach. | Altoona, H. A. McGraw.<br>Lopez, Otto Behr.  |
| Hatboro, Rev. A. Patman.                                   |  |
| Langhorne, H. W. Fowler.                                   |  |

NAME.	Moorestown, N. J.	N. 1; E. 12.	Garden, N. J. N. O; E. 2.	Audubon, N. J. S. 4; E. 5.	Media, Pa. S. 2; W. 12.	Swarthmore, Pa. S. 3; W. 10.	Lansdowne, Pa. S. 1; W. 6.	Addingham, Pa. S. 1; W. 8.	Haverford and Ardmore, Pa. N. 4; W. 8.	Merton and Gyn- wyd, Pa. N. 3; W. 4.	W. Philadelphia. N. O; W. 4.	Germanstown, Phila. N. 6; W. 1.	Chestnut Hill, Phila. N. 8; W. 1.	Frankford, Phila. N. 5; E. 5.	Bulk Arrival, 1919.
Canada Goose	Apr. 12	Apr. 26							May 5		Apr. 22	May 3		Apr. 21	Apr. 21
Green Heron	May 8	May 3		Apr. 13	May 10	May 18			Apr. 13		Apr. 18	May 3		Apr. 21	Apr. 19
Night Heron	Apr. 23	Apr. 10		May 11	Apr. 26	May 3		May 4	Apr. 13		Apr. 18	Apr. 19		Apr. 21	Apr. 19
Spotted Sandpiper	Apr. 21	Apr. 20		May 14	May 10	May 14		May 3	Apr. 13		May 18	May 4		Apr. 29	May 2
Solitary Sandpiper	May 6	May 8		May 14	May 8	May 14			May 2		May 9	May 9		May 2	May 8
Killdeer	Mar. 1	Res.		Mar. 2	Mar. 13	Mar. 5			Apr. 11		Apr. 7	Apr. 7		Mar. 6	Mar. 13
Dove	Mar. 3	Feb. 16		Mar. 23	Mar. 7	Mar. 2			Mar. 2	Mar. 20	Feb. 26	Apr. 6	Mar. 23	Mar. 27	Mar. 9
Osprey	Apr. 12	Res.		Mar. 2	Mar. 30	Apr. 8		May 11	Apr. 13		Apr. 18	Apr. 22		Apr. 17	Apr. 17
Turkey Vulture	Res.	Feb. 8		Mar. 2	Res.	Res.		Mar. 9	Mar. 30		Apr. 18	Apr. 7		Mar. 13	
Yellow-billed Cuckoo	May 7	May 18		May 24	May 24	May 5			May 3		May 14	May 5	May 18	May 19	May 12
Black-billed Cuckoo	May 6	Res.		Mar. 23	Res.	Mar. 30			Apr. 7		Mar. 8	Mar. 23	Mar. 25	Apr. 8	Mar. 30
Kingfisher	Res.	Res.		Mar. 23	Apr. 12	Apr. 17		Apr. 3	Apr. 12		May 2	Apr. 22		Apr. 12	Apr. 12
Yellow-bellied Sapsucker	Res.	Apr. 9		Res.	Apr. 12	Apr. 13			Apr. 12		May 2	Apr. 22		Apr. 30	Apr. 30
Red-headed Woodpecker	Mar. 23	Res.		Mar. 23	Apr. 12	Apr. 17		May 11	May 5		Mar. 8	Apr. 22	May 4	Apr. 30	Apr. 30
Flicker	Mar. 16	Mar. 9		Jan. 14	Mar. 7	Mar. 19			Mar. 26	Mar. 20	Feb. 22	Mar. 21	Mar. 20	Mar. 25	Mar. 17
Whip-poor-will	Apr. 23	May 5		Res.	May 1	May 3			Apr. 23	Apr. 23	May 12	May 2	May 2	Apr. 23	Apr. 23
Nighthawk	May 13	May 5		May 11	Apr. 29	Apr. 13			May 23		May 14	May 27	May 29	May 29	May 14
Chimney Swift	Apr. 22	Apr. 30		May 11	Apr. 30	Apr. 13		Apr. 14	Apr. 13		Apr. 21	Apr. 21	Apr. 21	Apr. 19	Apr. 20
Hummingbird	May 7	May 18		May 14	May 17	May 17			May 13		May 17	May 9	May 9	Apr. 13	Apr. 13
Kingbird	May 7	May 8		May 16	May 15	May 14		May 4	May 4		May 3	May 5	May 5	May 6	May 8
Crested Flycatcher	May 3	May 3		May 9	May 3	May 4		May 4	Apr. 27	May 9	May 14	May 4	May 18	May 6	May 4
Phoebe	Mar. 31	Apr. 2		Mar. 23	Mar. 14	Mar. 9			Mar. 23	Apr. 19	Mar. 28	Mar. 23	Mar. 22	Mar. 25	Mar. 23

NAME.	Moorestown, N. J.	Camden, N. J.	Audubon, N. J.	Media, Pa.	Swarthmore, Pa.	Lansdowne, Pa.	Adingham, Pa.	Haverford and Ardmore, Pa.	Merion and Gwynyd, Pa.	West Philadel- phia.	Germanstown, Phila.	Chestnut Hill, Phila.	Frankford, Phila.	Bulk Arrival, 1919.
Wood Pewee . . . . .	May 13	May 11	May 9	May 23	May 5	. . . . .	. . . . .	May 15	. . . . .	May 14	May 20	May 15	May 21	May 15
Acadian Flycatcher . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	May 13	. . . . .	. . . . .	May 3	. . . . .	May 25	May 25	May 18	May 18	May 13
Least Flycatcher . . . . .	May 13	. . . . .	May 11	. . . . .	May 3	May 3	. . . . .	May 11	. . . . .	. . . . .	. . . . .	. . . . .	May 22	May 3
Bobolink . . . . .	May 9	. . . . .	May 9	. . . . .	May 18	. . . . .	May 11	May 5	. . . . .	. . . . .	. . . . .	May 3	. . . . .	May 9
Cowbird . . . . .	. . . . .	. . . . .	. . . . .	Mar. 4	Mar. 25	Apr. 3	. . . . .	Apr. 8	. . . . .	Apr. 18	May 3	. . . . .	Feb. 28	Mar. 26
Red-winged Blackbird . . . . .	Feb. 28	Jan. 26	Mar. 2	. . . . .	Mar. 1	Mar. 7	. . . . .	Mar. 2	Apr. 15	Mar. 12	Apr. 12	. . . . .	Mar. 4	May 2
Meadowlark . . . . .	Res.	Res.	Res.	Res.	Res.	Feb. 12	. . . . .	Res.	Res.	Mar. 8	Mar. 16	. . . . .	Mar. 1	Mar. 2
Orchard Oriole . . . . .	May 7	May 4	May 14	May 16	May 18	May 4	. . . . .	May 4	. . . . .	May 16	. . . . .	. . . . .	May 4	May 4
Baltimore Oriole . . . . .	May 2	May 11	May 16	Apr. 28	Apr. 30	May 6	May 5	May 2	Apr. 30	May 17	May 8	May 4	May 4	May 4
Rusty Blackbird . . . . .	Apr. 22	Jan. 26	Mar. 2	. . . . .	Apr. 18	. . . . .	. . . . .	Mar. 23	. . . . .	Mar. 31	. . . . .	. . . . .	Mar. 17	Mar. 23
Purple Grackle . . . . .	Feb. 12	Feb. 22	Mar. 2	Feb. 28	Feb. 26	Feb. 26	. . . . .	Feb. 2	Feb. 22	Feb. 28	Feb. 27	Feb. 22	Feb. 22	Feb. 22
Vesper Sparrow . . . . .	Mar. 26	Mar. 26	Apr. 13	Mar. 19	May 14	. . . . .	. . . . .	Mar. 1	Apr. 8	Apr. 31	Apr. 20	. . . . .	Mar. 8	Mar. 26
Savannah Sparrow . . . . .	. . . . .	Mar. 23	May 9	. . . . .	May 14	. . . . .	. . . . .	Apr. 8	. . . . .	Apr. 9	Apr. 20	. . . . .	Mar. 29	Mar. 29
Grasshopper Sparrow . . . . .	May 3	. . . . .	May 9	. . . . .	May 4	. . . . .	. . . . .	Apr. 18	. . . . .	Apr. 19	May 27	. . . . .	May 2	May 2
Chipping Sparrow . . . . .	Mar. 25	Apr. 6	May 9	Apr. 1	Apr. 6	Apr. 8	. . . . .	Mar. 23	Apr. 8	Mar. 27	Apr. 6	Apr. 4	Apr. 7	Apr. 6
Field Sparrow . . . . .	Mar. 8	Res.	Feb. 8	Mar. 30	Mar. 21	Mar. 20	. . . . .	Feb. 15	Apr. 8	Mar. 8	Apr. 6	Mar. 23	Mar. 21	Mar. 23
Swamp Sparrow . . . . .	May 6	Feb. 2	Jan. 14	. . . . .	May 8	. . . . .	. . . . .	Mar. 29	Apr. 29	Apr. 7	Apr. 16	. . . . .	Apr. 14	Apr. 15
Fox Sparrow . . . . .	Mar. 26	Mar. 2	Mar. 2	. . . . .	Mar. 1	Mar. 15	. . . . .	Mar. 1	Mar. 2	Feb. 26	Mar. 4	Mar. 13	Mar. 4	Mar. 2
Chewink . . . . .	Apr. 21	Apr. 12	Jan. 14	Apr. 14	Apr. 20	Apr. 13	Apr. 14	Apr. 6	Apr. 29	Apr. 7	Mar. 16	Mar. 16	Apr. 18	Apr. 13
Rose-breasted Grosbeak . . . . .	May 5	May 11	May 9	. . . . .	May 8	May 8	. . . . .	May 5	May 9	. . . . .	May 8	May 3	May 6	May 8
Indigobird . . . . .	Apr. 30	May 11	May 14	May 27	May 3	May 4	May 10	May 4	May 8	May 9	May 11	May 7	May 11	May 9
Scarlet Tanager . . . . .	May 5	May 7	May 9	May 3	May 4	May 6	May 3	May 4	May 10	May 12	May 5	May 4	May 4	May 4
Purple Martin . . . . .	Apr. 1	. . . . .	May 1	May 10	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	Apr. 21	. . . . .

NAME.	Moorestown, N. J.	Camden, N. J.	Audubon, N. J.	Media, Pa.	Swarthmore, Pa.	Lansdowne, Pa.	Addingham, Pa.	Haverford and Ardmore, Pa.	Merton and Gwynyd, Pa.	West Philadel- phia.	Germantown, Phila.	Chestnut Hill, Phila.	Frankford, Phila.	Bulk Arrival, 1919.
Cliff Swallow . . . . .	Apr. 14	Apr. 15	Apr. 13	Apr. 21	Apr. 18	Apr. 18	Apr. 20	Apr. 18	May 9	Apr. 18	Apr. 13	Apr. 20	Apr. 12	Apr. 17
Barn Swallow . . . . .	Apr. 13	Apr. 30	Apr. 13	Apr. 21	Apr. 18	Apr. 18	Apr. 20	Apr. 14	Apr. 29	Apr. 17	Apr. 13	Apr. 20	Apr. 12	Apr. 17
Tree Swallow . . . . .	May 11	Apr. 30	May 16	Apr. 21	Apr. 18	Apr. 18	Apr. 13	Apr. 18	Apr. 19	Apr. 30	May 8	Apr. 18	Apr. 26	Apr. 19
Bank Swallow . . . . .	May 6	Apr. 19	May 14	Apr. 21	May 18	Apr. 18	Apr. 13	Apr. 20	Apr. 19	May 7	Apr. 19	Apr. 19	Apr. 24	Apr. 30
Rough-winged Swallow . . . . .	Apr. 21	May 18	May 17	Apr. 11	May 6	Mar. 9	May 5	Feb. 12	May 3	Apr. 19	May 5	May 5	Mar. 13	Apr. 12
Red-eyed Vireo . . . . .	May 4	May 7	May 1	May 3	May 8	May 3	May 5	May 3	May 8	May 14	May 5	May 5	May 6	May 5
Warbling Vireo . . . . .	May 2	May 11	May 14	May 3	May 15	May 6	May 6	May 3	May 3	May 15	May 13	May 11	May 19	May 6
Yellow-throated Vireo . . . . .	May 5	May 11	May 14	May 3	May 4	May 7	May 7	May 14	May 3	May 16	May 13	May 11	May 28	May 7
Solitary Vireo . . . . .	Apr. 22	May 11	May 11	May 3	May 3	May 3	May 3	May 3	May 3	May 14	May 14	May 14	May 3	May 3
White-eyed Vireo . . . . .	Apr. 30	May 3	May 14	May 4	May 4	May 5	May 5	May 11	May 10	May 12	May 12	May 12	May 4	May 5
Black and White Warbler . . . . .	Apr. 27	Apr. 28	May 1	May 4	Apr. 21	May 6	May 6	Apr. 26	Apr. 25	Apr. 21	Apr. 26	Apr. 27	May 3	Apr. 27
Worm-eating Warbler . . . . .	May 8	May 8	May 17	May 4	May 4	May 4	May 4	May 25	May 4	May 17	May 9	May 9	May 18	May 9
Blue-winged Warbler . . . . .	May 3	May 4	May 9	May 9	Apr. 28	May 16	May 16	May 11	May 10	May 30	May 5	May 4	May 6	May 5
Parula Warbler . . . . .	Apr. 27	May 3	May 1	May 3	May 3	May 2	May 2	May 4	Apr. 30	May 3	May 11	May 15	May 3	May 4
Yellow Warbler . . . . .	May 5	May 9	May 14	May 25	May 7	May 15	May 15	May 3	May 10	May 9	May 8	May 4	May 3	May 3
Black-throated Blue Warbler . . . . .	Apr. 15	Apr. 19	Jan. 14	May 25	Apr. 13	Apr. 17	Apr. 19	Apr. 13	Feb. 22	Apr. 19	Apr. 22	Apr. 22	Apr. 18	Apr. 17
Myrtle Warbler . . . . .	May 8	May 15	May 14	May 8	May 8	May 12	May 12	May 5	May 5	May 16	May 10	May 15	May 3	May 10
Magnolia Warbler . . . . .	May 8	May 11	May 17	May 6	May 6	May 8	May 8	May 6	May 6	May 12	May 6	May 7	May 11	May 8
Chestnut-sided Warbler . . . . .	May 5	May 7	May 11	May 5	May 5	May 8	May 8	May 11	May 5	May 16	May 8	May 28	May 11	May 6
Black-poll Warbler . . . . .	May 8	May 10	May 17	May 12	May 12	May 9	May 9	May 6	May 6	May 10	May 6	May 11	May 18	May 10
Blackburnian Warbler . . . . .	May 2	May 8	May 8	May 7	May 3	May 3	May 3	Apr. 28	May 10	May 3	May 8	May 4	May 11	May 3
Black-throated Green Warbler . . . . .	May 2	May 8	May 8	May 7	May 3	May 3	May 3	Apr. 28	May 10	May 3	May 8	May 4	May 11	May 3

## PROCEEDINGS OF THE

NAME.	Moorestown, N. J.	Camden, N. J.	Audubon, N. J.	Media, Pa.	Swarthmore, Pa.	Lansdowne, Pa.	Addingham, Pa.	Haverford and Ardmore, Pa.	Merton and Gwynyd, Pa.	W. Philadel- phia.	Germantown, Phila.	Chestnut Hill, Phila.	Frankford, Phila.	Bulk Arrival, 1919.
Pine Warbler . . . . .	Apr. 6	Apr. 12	. . . . .	. . . . .	Apr. 18	. . . . .	Apr. 13	Apr. 6	Apr. 19	May 3	Apr. 26	Apr. 27	Apr. 19	Apr. 13
Yellow Palm Warbler . . . . .	Apr. 12	Apr. 6	Apr. 27	Apr. 4	Apr. 13	Apr. 16	Apr. 13	Apr. 6	Apr. 19	Apr. 18	Apr. 26	Apr. 27	Apr. 19	Apr. 13
Prairie Warbler . . . . .	May 11	May 4	May 16	. . . . .	May 4	. . . . .	. . . . .	. . . . .	May 10	May 14	May 20	. . . . .	. . . . .	May 11
Ovenbird . . . . .	May 3	May 7	May 9	May 3	Apr. 30	Apr. 27	May 4	May 2	May 10	May 2	May 4	Apr. 27	May 4	May 3
Water Thrush . . . . .	May 12	May 11	May 9	. . . . .	May 7	May 3	May 6	May 3	. . . . .	May 12	May 8	Apr. 20	May 16	May 7
Kentucky Warbler . . . . .	. . . . .	May 11	. . . . .	. . . . .	May 4	May 2	May 5	May 4	May 10	May 12	May 8	May 5	May 11	May 5
Maryland Yellow-throat . . . . .	Apr. 23	May 4	Apr. 27	May 7	May 3	May 2	May 8	May 2	May 10	May 2	May 5	May 9	May 4	May 3
Chat . . . . .	May 6	May 7	May 11	May 12	May 4	. . . . .	May 15	May 4	. . . . .	May 12	May 5	May 15	May 6	May 7
Canada Warbler . . . . .	May 6	May 18	May 14	. . . . .	May 14	May 19	. . . . .	May 12	. . . . .	May 15	May 18	May 11	May 11	May 13
Redstart . . . . .	May 6	May 3	May 11	May 20	May 8	May 8	May 17	May 3	May 10	May 12	May 5	May 7	May 4	May 6
Catbird . . . . .	Apr. 22	May 3	May 1	May 1	May 3	May 3	May 3	May 3	May 10	May 3	May 4	May 4	May 4	May 3
Brown Thrasher . . . . .	Apr. 21	Apr. 20	May 1	Apr. 15	Apr. 18	Apr. 29	Apr. 21	Apr. 6	Apr. 29	Apr. 28	May 5	Apr. 20	Apr. 18	Apr. 20
House Wren . . . . .	Apr. 22	Apr. 27	May 9	Apr. 25	Apr. 18	Apr. 17	Apr. 30	Apr. 17	Apr. 18	Apr. 21	Apr. 29	Apr. 28	May 3	Apr. 21
Long-bill'd Marsh Wren . . . . .	. . . . .	May 17	. . . . .	. . . . .	Apr. 18	Apr. 17	Apr. 30	Apr. 17	Apr. 18	Apr. 21	Apr. 29	Apr. 28	May 3	Apr. 21
Ruby-crowned Kinglet . . . . .	Apr. 16	Apr. 13	Apr. 13	. . . . .	Apr. 10	Apr. 8	Apr. 12	Apr. 6	Apr. 19	Apr. 14	Apr. 14	Apr. 21	Apr. 17	Apr. 13
Wood Thrush . . . . .	May 3	May 4	May 1	Mar. 3	May 2	Apr. 26	May 3	May 2	Apr. 27	May 2	May 4	May 4	May 3	May 3
Wilson's Thrush . . . . .	May 6	May 8	May 14	. . . . .	May 3	May 13	. . . . .	May 3	. . . . .	May 2	May 9	May 11	May 3	May 8
Gray-checked Thrush . . . . .	. . . . .	May 19	May 17	. . . . .	May 3	May 13	. . . . .	May 15	. . . . .	May 15	. . . . .	. . . . .	May 3	May 8
Olive-backed Thrush . . . . .	May 8	May 8	May 9	. . . . .	May 8	May 8	. . . . .	May 8	. . . . .	May 14	May 18	Jun. 1	May 14	May 8
Hermit Thrush . . . . .	Apr. 12	Apr. 17	Apr. 27	Mar. 25	Mar. 23	Mar. 31	Apr. 14	Apr. 8	Apr. 8	Apr. 14	Apr. 14	Apr. 7	Apr. 8	Apr. 8
Robin . . . . .	Jan. 25	Jan. 19	Feb. 9	Feb. 28	Feb. 2	Feb. 28	Jan. 20	Feb. 27	Res.	Mar. 3	Feb. 23	Mar. 1	Feb. 28	Feb. 27
Bluebird . . . . .	Res.	Feb. 26	Mar. 2	Feb. 28	Feb. 17	Feb. 15	. . . . .	Mar. 1	Feb. 22	Mar. 8	Mar. 21	Mar. 2	Mar. 1	Feb. 28

NAMES.	Cape May, N. J. E. 13; S. 72.	Atlantic City, N. J. E. 42; S. 42.	Vineyard, N. J. E. 7; S. 32.	Downtown, N. J. E. 11; S. 28.	Mt. Holly, N. J. E. 19; N. 3.	Concordville, Pa. W. 20; S. 5.	West Chester, Pa. W. 24; N. 0.	Westtown, Pa. W. 21; S. 2.	Beverly, N. J. E. 13; N. 8.	Bordentown, N. J. E. 25; N. 13.	Allentown, N. J. E. 31; N. 16.	Oaks, Pa. W. 17; N. 12.	Hatboro, Pa. E. 3; N. 19.	George School, Pa. E. 11; N. 18.	Buckingham, Pa. E. 4; N. 26.	Doylstown, Pa. E. 1; N. 26.	Collegeville, Pa. W. 16; N. 18.	Altoona, Pa. W. 176; N. 38.	Lopez, Pa. W. 60; N. 103.
Flicker.....	Res. Apr. 22	Res. Apr. 15	Mar. 24	Mar. 24	Mar. 5	Mar. 17	Mar. 3	Apr. 5	Mar. 13	Feb. 28	Apr. 4	Mar. 29	Mar. 20	Mar. 13	Mar. 2	Res.	Mar. 30	Apr. 5	Apr. 7
Whip-poor-will.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nighthawk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chimney Swift.....	Apr. 27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hummingbird.....	May 18	May 13	May 17	.....	May 18	May 14	May 10	Apr. 20	Apr. 13	Apr. 19	Apr. 25	Apr. 23	.....	.....	.....	.....	.....	.....	.....
Kingbird.....	Apr. 27	May 8	May 1	Apr. 28	May 3	Mar. 4	May 11	May 6	May 8	Apr. 2	May 3	May 11	.....	.....	.....	.....	.....	.....	.....
Crested Flycatcher.....	May 4	.....	May 9	May 5	May 3	Mar. 26	Mar. 20	Apr. 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Phoebe.....	.....	.....	Apr. 22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bobolink.....	.....	.....	May 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cowbird.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Red-winged Blackbird.....	Res. Apr. 16	Res. Mar. 8	Mar. 21	Mar. 2	Feb. 25	Feb. 23	Mar. 2	Mar. 2	Feb. 22	Feb. 26	Mar. 25	Mar. 13	Mar. 8	Mar. 3	Mar. 4	Mar. 23	Mar. 22	Mar. 5	.....
Baltimore Oriole.....	.....	.....	May 4	May 12	Mar. 4	May 2	May 5	May 4	May 2	May 3	May 6	May 8	May 7	May 2	May 4	May 5	May 18	May 5	.....
Purple Grackle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chipping Sparrow.....	Mar. 23	.....	Mar. 12	Mar. 31	Apr. 6	Apr. 8	Apr. 4	Apr. 13	Mar. 30	Apr. 12	Apr. 7	Apr. 15	Mar. 25	Apr. 13	Apr. 8	Apr. 8	Apr. 12	Apr. 13	Apr. 23
Chewink.....	.....	.....	Apr. 22	May 4	Apr. 13	Apr. 19	Apr. 18	Apr. 20	Apr. 13	Apr. 28	.....	Apr. 30	.....	Apr. 27	May 13	Apr. 13	Apr. 15	Apr. 20	Apr. 28
Indigobird.....	May 11	May 8	May 9	.....	May 11	May 4	May 9	May 6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Tanager.....	.....	.....	May 8	May 12	May 11	May 4	May 9	May 6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Purple Martin.....	Apr. 6	.....	Apr. 7	Apr. 5	Apr. 7	.....	Apr. 4	.....	Apr. 13	Apr. 11	May 16	May 17	.....	.....	.....	.....	.....	.....	.....
Barn Swallow.....	Apr. 23	Apr. 18	May 9	Apr. 25	Apr. 19	Apr. 26	Apr. 10	May 3	Apr. 27	Apr. 20	May 5	Apr. 21	.....	Apr. 20	Apr. 18	Apr. 17	Apr. 21	Apr. 9	Apr. 20
Red-eyed Vireo.....	.....	.....	May 8	.....	May 4	May 4	.....	May 7	May 4	May 1	May 12	May 5	May 15	May 6	May 16	May 18	May 11	May 4	May 13
Black-and-white Warbler.....	.....	.....	Apr. 16	May 30	May 11	Apr. 22	May 3	Apr. 23	.....	Apr. 27	Apr. 28	May 15	Apr. 24	.....	May 17	May 1	May 2	May 5	Apr. 20
Chestnut-sided Warbler.....	.....	.....	.....	May 12	May 6	.....	May 8	.....	May 11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ovenbird.....	Apr. 23	May 8	May 8	Apr. 30	May 2	May 2	May 7	Apr. 20	May 4	May 2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maryland Yellowthroat.....	Apr. 23	May 3	May 4	May 4	Apr. 30	May 2	Apr. 28	May 4	Apr. 27	May 6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chat.....	.....	.....	May 15	May 30	May 25	May 18	Apr. 29	May 13	May 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Catbird.....	May 4	May 3	Apr. 17	May 5	May 2	May 3	May 2	Apr. 27	May 4	May 2	May 7	May 3	May 10	May 4	May 5	May 4	May 4	May 15	May 16
Brown Thrasher.....	Apr. 23	Apr. 30	Apr. 15	Apr. 28	Apr. 13	Apr. 23	Apr. 21	Apr. 21	Apr. 27	Apr. 15	May 14	May 2	.....	.....	.....	.....	.....	.....	.....
House Wren.....	Apr. 23	May 5	Apr. 14	May 5	Apr. 27	Apr. 21	Apr. 18	Apr. 28	Apr. 23	May 2	Apr. 27	May 7	May 6	May 6	May 16	May 4	May 12	May 3	Apr. 23
Wood Thrush.....	May 4	May 8	May 15	May 4	May 2	May 4	Apr. 27	May 4	May 3	May 2	Apr. 27	May 7	May 6	May 6	May 16	May 4	May 14	Apr. 22	Apr. 12
Hermit Thrush.....	.....	.....	Apr. 22	Apr. 9	.....	Apr. 22	Apr. 19	Apr. 3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Robin.....	Res. Jan. 24	Jan. 19	Jan. 18	Jan. 18	Feb. 9	Jan. 15	Jan. 4	Mar. 2	Feb. 12	Res. Feb. 10	Res. Feb. 2	Mar. 4	Feb. 20	Res. Mar. 1	Feb. 6	Mar. 2	Feb. 12	Mar. 4	.....
Bluebird.....	Res. Apr. 15	Res. Feb. 28	.....	.....	Mar. 1	Feb. 24	Mar. 8	Apr. 4	Feb. 7	Res. Feb. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....

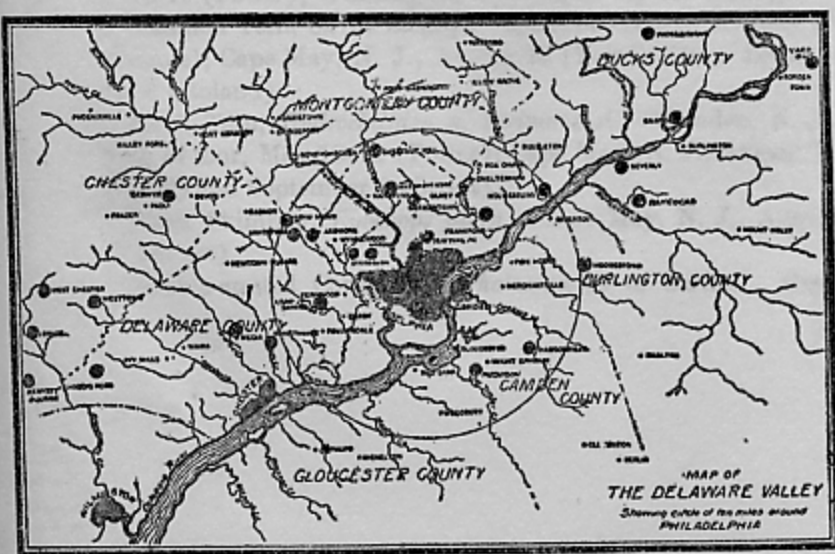


TABLE II.  
SPRING MIGRATION, 1919.  
EARLIEST DATES OF ARRIVAL OF  
THIRTY-TWO SPECIES AT NINETEEN  
STATIONS OUTSIDE THE PHILADELPHIA  
CIRCLE.

List of Other Species Reported by Observers during 1919, and  
Additional Notes on Species Contained in the Schedule.

Autumnal Dates Refer to Autumn of 1918

Unless Otherwise Stated.

Holboel's Grebe, *Colymbus holboelli*. Fish House, N. J., May 13-15 (Potter).

Horned Grebe, *Colymbus auritus*. Fish House, N. J., May 15 (Miller); Chambersburg, May 3 (Mahy); Newton Hamilton, April 27 (McGraw).

Pied-billed Grebe, *Podilymbus podiceps*. Beverly, N. J., April 20-May 4 (Baird); Fish House, N. J., April 20 (Potter); Media, April 15 (Moore); Oaks, September 23 (Roland); Altoona, May 25 (McGraw).

Loon, *Gavia immer*. Atlantic City, N. J., May 3 (Cromie); Fish House, N. J., April 16 (Potter); Media, six flying over April 30 (Moore); Williamsport (above), June 5 one (Carter).

Herring Gull, *Larus argentatus*. Fish House, N. J., June 8 (Potter); Beverly, N. J., April 20 (Baird); Mt. Holly, N. J., April 3 (Pumyea); Gwynedd Valley, April 5 (Miller); Oaks, March 27 (Roland); Cobb's Creek, April 17; West Chester, May 8 (Ehinger); Frankford, April 20 (Miller).

Ring-billed Gull, *Larus delawarensis*. Cape May, N. J., September 1 (Baird),

Black-headed Gull, *Larus atricilla*. Cape May, N. J., April 6 (Hand); Atlantic City, N. J., April 16 (Cromie); Stone Harbor, N. J., May 18, nest and eggs (Carter).

Bonaparte's Gull, *Larus philadelphia*. Fish House, N. J., April 19 (Potter); Wilmington, Del., April 17, ten (Mahy).

Common Tern, *Sterna hirundo*. Atlantic City, N. J., May 15 (Cromie); Cape May, N. J., August 13 (Baird); Oaks, September 6 (Roland).

Black Tern, *Hydrochelidon n. surinamensis*. Camden, N. J., flock of four, May 10-11 (Potter); Cape May, N. J., August 17 (Baird) and September 6 (Street).

Black Skimmer, *Rynchops nigra*. Cape May, N. J., August 17 (Street).

Double-crested Cormorant, *Phalacrocorax a. auritus*. Cape

May, N. J., April 13 (Hand); Barnegat Bay, N. J., May 24 (Woolman).

Merganser, *Mergus americanus*. Cape May, N. J., April 13 (Hand); Beverly, N. J., January 22-March 2 (Baird); Fairmount Park, March 30 (Hagar); Oaks, winter resident on the Schuylkill (Roland).

Red-breasted Merganser, *Mergus serrator*. Fish House, N. J., April 6 (Potter).

Mallard, *Anas platyrhynchos*. New Lisbon, N. J., April 21 (Scoville).

Black Duck, *Anas rubripes tristis*. Cape May, N. J., July 6 (Baird); Fish House, N. J., April 18 (Potter); Richmond, July 1 eight (Miller); Oaks, all winter (Roland).

Pintail, *Dafila acuta*. New Lisbon, N. J., March 29 (Spencer) and April 31 (Scoville).

Ring Neck, *Marila collaris*. Delaware River below Phila., December 8 (Huber).

Lesser Scaup, *Marila affinis*. Oaks, May 30 (Roland).

Golden-eyes, *Clangula c. americana*. Oaks, January 28 (Roland).

Wood Duck, *Aix sponsa*. Cape May, N. J., June 22 (Baird); Mt. Holly, N. J., March 21 and April 11 (Pumyea); Oaks, May 5 and 7, three (Roland).

Canada Goose, *Branta canadensis*. Vineland, N. J., flocks of 100, April 9 (Prince); Riverton, N. J., April 16 (G. S. Morris).

Whistling Swan, *Olor columbianus*. Mt. Holly, N. J., January 24, one came down unable to fly (Pumyea).

Bittern, *Botaurus lentiginosus*. Cape May, N. J., September 12 (Baird); Andover, N. J., May 31 (Carter); Mt. Holly, N. J., May 28 (Pumyea); Chambersburg, May 3 (Mahy); Haverford, May 3 (Scoville); Swarthmore, May 4 (Harrower).

Least Bittern, *Ixobrychus exilis*. Camden, N. J., nest finished May 11, young hatched June 1, climbed out on the branches June 8 and had left by June 14 (Potter).

Great Blue Heron. *Ardea h. herodias*. Oaks, January 1, 1919 (Roland); Doylestown, April 17 (MacReynolds); Mt. Airy, April 4 (Hagar).

Egret, *Herodias egretta*. Beverly, N. J., July 29, 1919 (Street).

Little Blue Heron, *Florida caerulea*. Cape May, N. J., August 17 (Street).

Night Heron, *Nycticorax n. naevius*. Moorestown, N. J., December 25, 1918 (Linton and Mickle).

Clapper Rail, *Rallus crepitans*. Cape May, N. J., nest and eggs May 18 (Hand).

Virginia Rail, Cape May, N. J., June 29, young just hatched (Potter).

Little Black Rail, *Creciscus jamaicensis*. Island Beach, N. J., July 4, nest and eggs (Stuart).

King Rail, *Rallus elegans*. Camden, N. J., May 11, two (Potter); Pensauken, N. J., May 15 (Miller).

Sora, *Porzana carolina*. Camden, N. J., May 11, two (Potter); Bridesburg, May 16 (Miller).

Red Phalarope, *Phalaropus fulicarius*. George School, December 15, 1918 (Cocks); Lenape, Chester Co., Pa., December, about the 15th (Ehinger), both specimens in the Academy of Natural Sciences Collection.

Woodcock, *Philohela minor*. Cape May, N. J., large flight November 21-23 (Hand); nest and eggs, March 23 (Hand); Mt. Holly, N. J., March 24 and June 1 (Pumyea); Fish House, N. J., April 19 (Potter); Altoona, March 22 and April 5 (flight song), (McGraw); Doylestown, March 6-30 (MacReynolds); Media, April 18, two adults and two young (Moore); Torresdale, April 1 and June 15 (Miller); Frankford, June 13 (Miller); Lima, March 7 (McDaniel); Westmont, May 26 (Potter).

Wilson's Snipe, *Gallinago delicata*. Cape May, N. J., January 12, three, and March 30 (Hand); Camden, N. J., April 6 (Potter); Richmond, March 18-May 12 (Miller); Altoona, March 23 (McGraw); Shirleysburg, April 21 (McGraw); Chambersburg, May 3 (Mahy).

Knot, *Tringa canutus*. Two-mile Beach, N. J., August 30 and September 6 (Street).

Pectoral Sandpiper, *Pisobia maculata*. Doylestown, March 27 (MacReynolds).

Least Sandpiper, *Pisobia minutilla*. Cape May, N. J., August

9 (Baird); Atlantic City, N. J., May 3 (Cromie); Camden, N. J., May 10-21, five to fifty (Potter); Oaks, May 26 (Roland).

White-rumped Sandpiper, *Pisobia fuscicollis*. Camden, N. J., May 21 (2) and 24 (1) (Potter).

Red-backed Sandpiper, *Pelidna alpina sakhalina*. Camden, N. J., May 11 (1) (Roland and Potter).

Semipalmated Sandpiper, *Ereunetes pusillus*. Cape May, N. J., August 2 (Baird); Camden, N. J., May 16-31 (Potter).

Sanderling, *Calidris leucophaea*. Cape May, N. J., July 23 (Baird).

Greater Yellowlegs, *Totanus melanoleucus*. Cape May, N. J., April 20 (Hand); Atlantic City, N. J., May 3 (Cromie); Cape Pt., N. J., June 8, one (Miller); Gloucester, N. J., May 4 and 13 (Miller); Camden, N. J., April 28-June 1, one to twenty (Potter); Oaks, September 11, 1918 (Roland).

Lesser Yellowlegs, *Totanus flavipes*. Camden, N. J., May 11-18, 2 to 10 (Potter).

Willet, *Catoptrophorus semipalmatus*. Barnegat Bay, N. J., May 24 (Woolman); Cape May, N. J., August 17, 23 and Sept. 6 (Street).

Upland Plover, *Bartramia longicauda*. Mount Holly, N. J., May 4 (Pumyea); Oaks, May 30 and June 27 (Roland); Doyles-town, April 20 (MacReynolds); Gwynedd Valley, April 12 (Miller); Bound Brook, June 17 (Carter); Altoona, May 18 (McGraw).

Black-bellied Plover, *Squatarola squatarola*. Cape May, N. J., August 31 and Sept. 6 (Street); May 11 (Hand).

Killdeer, *Oxyechus vociferus*. Buckshutem, N. J., nest and 3 eggs, May 1 (Prince); Bridgeton, N. J., November 15, 1919, fifty (Roberts); Camden, N. J., nest and 5 eggs April 20 (Potter); Richmond, January 11 (Miller).

Semipalmated Plover, *Aegialitis semipalmata*. Stone Harbor, N. J., May 30 (Miller); Cape May, N. J., August 2 (Baird); Atlantic City, N. J., May 29 (Cromie); Camden, N. J., May 16-25, 2 to 10 (Potter).

Piping Plover, *Aegialitis meloda*. Cape May, N. J., August 5 (Baird) and August 23 (Street).

Turnstone, *Arenaria interpres morinella*. Cape May, N. J.,

May 11 (Hand); Two-mile Beach, N. J., August 30 and September 6 (Street); Camden, N. J., May 21, one (Potter).

Ruffed Grouse, *Bonasa umbellus umbellus*. Altoona, more plentiful than for several years, nest and 6 eggs April 22, and female with ten young June 22 (McGraw).

Hungarian Partridge, *Perdix perdix perdix*. Maple Shade, N. J., April 21, a pair (Miller).

European Pheasant, *Phasianus colchicus*. Gwynedd Valley. November 2 (Miller).

Dove, *Zenaidura macroura carolinensis*. Cape May, N. J., January 12, flock of 90 (Hand), Wyndmoor, April 18, flock of 16 (Miller); West Philadelphia, nest May 2 (Mahy).

Marsh Hawk, *Circus hudsonius*. Newton, N. J., nest with 3 eggs and 2 young, May 30 (Carter); Moorestown, N. J., October 11, 1918 (Evans).

Broad-winged Hawk, *Buteo platypterus*. Doylestown, January 12 to April 18 (MacReynolds); Swarthmore, April 14 (Palmer).

Rough-legged Hawk, *Archibuteo lagopus sancti-johannis*. Richmond, February 25 (Miller).

Duck Hawk, *Falco peregrinus anatum*. Corson's Inlet, N. J., October 16 (Huber); Oaks, November 19 (Roland).

Pigeon Hawk, *Falco columbarius*. Doylestown, October 7 and 12, November 24 and March 3 and 7 (MacReynolds).

Osprey, *Pandion haliaetus carolinensis*. Maurice River, N. J., March 26 (Prince); Moorestown, N. J., September 5, 1918 (Evans); Media, March 30, April 18 (Moore).

Barn Owl, *Aluco pratincola*. Gloucester, N. J., January 5, Fish House, N. J., April 5, and Merchantville, N. J., May 9 (Potter); Gwynedd Valley, May 9 (Miller); Oaks, August 8 to September 15, adult and two young of the year (Roland).

Long-eared Owl, *Asio wilsonianus*. Gloucester, N. J., five wintered (Potter); Haverford, January 26 and October 25 (Scoville); Gwynedd Valley, April 5 (Miller); Paoli, nest in the spring of 1918, two young appeared middle of June (Baily).

Barred Owl, *Strix varia varia*. Swarthmore, November 18 (Mercer).

Saw-whet Owl, *Cryptoglaux acadica acadica*. Camden, N. J., December 8, 1918 (Potter).

Screech Owl, *Otus asio asio*. Vineland, N. J., young flying May 23 (Prince).

Great Horned Owl, *Bubo virginianus virginianus*. Concordville, January 26 (Styer).

Kingfisher, *Ceryle alcyon alcyon*. Holmesburg, January 5 (Miller).

Red-headed Woodpecker, *Melanerpes erythrocephalus*. Mount Holly, N. J., all winter, 1918-19, breeding 1919 (Pumyea); Moorestown, N. J., October 29, 1918 (Evans); West Chester, wintered (Ehinger); Pocono Summit May 25 and Mt. Pocono, May 28 (Carter); Altoona, a pair wintered October 19, 1918, to March 9, 1919 (McGraw).

Sapsucker, *Sphyrapicus varius varius*. Moorestown, N. J., October 4, 1918 (Evans); Chester Heights, February 9 (Hannum).

Flicker, *Colaptes auratus luteus*. Gwynedd Valley, January 11 and 15 (Miller); Frankford, February (Miller).

Chimney Swift, *Chaetura pelagica*. Last seen at Vineland, N. J., October 10 (Prince); Moorestown, N. J., September 19 (Evans).

Hummingbird, *Archilochus colubris*. Last seen at Vineland, N. J., September 25 (Prince).

Whip-poor-will, *Antrostomus vociferus*. Moorestown, N. J., last seen September 21 (Evans); Vineland, N. J., September 15 (Prince).

Alder Flycatcher, *Empidonax trailli alnorum*. Newton, N. J., May 30 (Carter).

Yellow-bellied Flycatcher, *Empidonax flaviventris*. Camden, N. J., May '23, two (Potter); Altoona, May 26 and 28 (McGraw).

Horned Lark, *Otocoris alpestris alpestris*. Moorestown, N. J., October 23, 1918 (Evans); Oaks, November 10, 1918 (Roland); George School, January 19, flock of 20 (Cocks); Altoona, March 19-21 (McGraw).

Fish Crow, *Corvus ossifragus*. Colwyn, Pa., April 2 (Carter).

Raven, *Corvus corax principalis*. Center Co., Pa., March 12, nest and three eggs (Harlow).

Bobolink, *Dolichonyx oryzivorus*. Moorestown, N. J., August.

9, 1918 (Evans); Bound Brook, June 17, 2 pair feeding young (Carter).

Evening Grosbeak, *Hesperiphona vespertina vespertina*. New Lisbon, N. J., February 22, flock of 20 females and 7 males (Street and other members D. V. O. C.).

Purple Finch, *Carpodacus purpureus purpureus*. Beverly, N. J., last seen May 4 (Bair); West Chester, April 18 (Ehinger).

Red Crossbill, *Loxia curvirostra minor*. Mt. Holly, N. J., February 9, 1919, and November 11, 1919 (Pumyea).

Goldfinch, *Astragalinus tristis tristis*. Cape May, N. J., thousands in the autumn, November 21-25 (Hand); a flock of 200 at Cape May, February 9 (Baird); very common in the spring migration, West Chester, April 20-26 (DeHaven and Ehinger); Mt. Airy, April 13 (Hagar); Germantown, April 11 (Barker); Haverford, May 13 (Woolman); Allentown, N. J., May 18 (Gordon).

Pine Siskin, *Spinus pinus*. Beverly, N. J., April 6-May 3 (Baird); West Chester, April 25 (Ehinger); Haverford, April 29 (Scoville); Swarthmore, February 25-March 1, April 14-18 and April 23-May 12 (Harrower and Palmer); Gwynedd Valley, October 13, 1918 (Huber).

Snow Bunting, *Plectrophenax nivalis nivalis*. Cape May, N. J., January 19, fifty, and February 16, abundant (Roland); Corson's Inlet, N. J., November 9 (Huber).

Vesper Sparrow, *Pooecetes gramineus gramineus*. Olney, early December, 1919 (G. S. Morris).

Ipswich Sparrow, *Passerculus princeps*. Corson's Inlet, November 9 (Huber).

Henslow's Sparrow, *Passerherbulus henslowi henslowi*. Cape May, N. J., June 8, fledgeling (Miller); Salem, N. J., April 12 (Stuart); Newton, N. J., May 30 (Carter).

White-crowned Sparrow, *Zonotrichia leucophrys leucophrys*. Downstown, N. J., May 12 (Fair); Concordville, May 7-11 (Styer); West Chester, May 8 (Ehinger) and May 13 (Sharples).

White-throated Sparrow, *Zonotrichia albicollis*. Vineland, N. J., September 25-May 2 (Prince); Mt. Holly, N. J., September 29-May 18 (Pumyea); Haverford, October 9-April 13, Mount Airy, October 10-May 18 (Hagar); Moorestown, N. J.,

September 23–May 18 (Mickle); Frankford, September 23–May 20 (Miller); Doylestown, October 4–December 25, January 31, and April 20–May 14 (MacReynolds); Cobb's Creek, September 27–May 24 (Mahy); West Chester, October 25–April 15 (Ehinger). Last seen at Westtown, April 30, Addingham, May 4 (Culver); Swarthmore, May 18 (Howard); Altoona, May 4 (McGraw); Beverly, N. J., May 15 (Baird), Atlantic City, N. J., April 22 (Cromie); Tobyhanna, nest and four eggs, May 28 (Carter).

Tree Sparrow, *Spizella monticola monticola*. Cobb's Creek, November 23–February 22 (Mahy); arrived West Chester, October 19 (Ehinger); last seen at Beverly, N. J., April 13 (Baird); Mt. Holly, N. J., April 13 (Pumyea).

Junco, *Junco hyemalis hyemalis*. Moorestown, N. J., September 26 to May 3 (Wiermann and Mickle); Mt. Holly, N. J., October 3–May 3 (Pumyea); Beverly, N. J., September 16–April 27 (Baird); Downstown, N. J., October 13–April 27 (Fair); Cobb's Creek, October 8–May 3 (Mahy); Mt. Airy, October 1–May 10 (Hagar); West Chester, October 21–April 28 (Ehinger); Doylestown, October 7–April 13 (MacReynolds); arrived West Chester, October 9 (DeHaven); Haverford, October 9 (Scoville); Frankford, October 3 (Miller); last seen at Concordville, May 3 (Styer); Addingham, April 30 (Culver); Swarthmore, May 3 (Harrower).

Swamp Sparrow, *Melospiza georgiana*. Island Road, Delaware Co., June 8, nest and 5 eggs (Carter); Newton, N. J., May 30, nest and 4 eggs (Street).

Fox Sparrow, *Passerella iliaca iliaca*. Arrived at Frankford October 16 (Miller); wintered as follows: Haddonfield, N. J., January 11 (Mahy); Bustleton, January 7, four (Miller).

Towhee, *Pipilo erythrophthalmus erythrophthalmus*. Moorestown, N. J., December 25, 1918 (Linton and Mickle).

Cardinal, *Cardinalis cardinalis cardinalis*. Lansdowne, nest begun April 12; 2 eggs April 25; 3 eggs April 26; 2 eggs May 6; 1 young and 1 egg May 11–May 16 (Carter).

Cedar Waxwing, *Bombycilla cedrorum*. Doylestown, June 1, twenty-five.

Golden-winged Warbler, *Vermivora chrysoptera*. Moorestown,

N. J., May 8 and 11 (Linton and Mickle); Camden, N. J., May 11 (Potter); Haverford, May 12 (Scoville); Swarthmore, May 7, 11 and 12 (Palmer and Howard); Altoona, May 15 (McGraw).

Nashville Warbler, *Vermivora ruficapilla*. Moorestown, N. J., May 14 (Linton) and May 11 (Haines); Camden, N. J., May 4 (Potter); Lansdowne, May 9-11, several (Carter); Haverford, May 5 (Scoville), May 14 (Serrill); Swarthmore, May 9-18 (Harrower); W. Philadelphia, May 12-17 (Richardson); Gwynedd Valley, May 18 (Miller); Altoona, May 18 (McGraw); Pocono Lake, nest and one egg May 26, four eggs May 29 (Carter).

Tennessee Warbler, *Vermivora peregrina*. West Philadelphia, May 16 (Mahy); Concordville, May 7-17 (Styer); Lansdowne, May 22 (Carter); Haverford, May 11 (Scoville) and May 13 (Serrill); Swarthmore, May 3 (Palmer) and May 18 (Harrower and Howard); Gwynedd Valley, May 22 (Miller); West Chester, May 11 (Ehinger); Doylestown, May 21 (MacReynolds); Altoona, May 25, common (McGraw); Pocono Lake, May 26 (Carter); Moorestown, N. J., May 18-22 (Wiermann); May 8 (Linton) and May 6 (Evans).

Parula Warbler, *Compsothlypis americana usneae*. Vineland, N. J., last seen October 11 (Prince).

Yellow Warbler, *Dendroica aestiva aestiva*. Chester, feeding young in nest June 20 (Carter).

Cape May Warbler, *Dendroica tigrina*. Moorestown, N. J., May 10-22 (Wiermann); Camden, N. J., May 5 (Potter); Beverly, N. J., May 19 (Baird); Concordville, May 5-16 (Styer); West Chester, May 8 (Ehinger); Swarthmore, May 7 (Palmer) and May 9-22 (Harrower); Haverford, May 10 (Scoville) and May 11 and 24 (Serrill); Collegetown, May 11 (Kline); Doylestown, May 18 (MacReynolds); Altoona, May 18 (McGraw).

Black-throated Blue Warbler, *Dendroica caerulescens*. Last seen at Mt. Airy, June 8 (Hagar); Vineland, N. J., September 25 (Prince).

Bay-breasted Warbler, *Dendroica castanea*. Mt. Holly, N. J., May 18 and 25 (Pumyea); Audubon, N. J., May 17 (Tatum);

Moorestown, N. J., May 18 (Linton and Mickle); Camden, N. J., May 18-29 (Potter); Beverly, N. J., May 19 (Baird); Concordville, May 18 (Styer); West Chester, May 18 (Ehinger); Swarthmore, May 18-27 (Harrower); Haverford, May 15 (Scoville); West Philadelphia, May 12 (Mahy); Doylestown, May 14-25 (MacReynolds); Altoona, May 15-22 (McGraw); Pocono Lake, May 26 (Carter).

Water-Thrush, *Seiurus noveboracensis noveboracensis*. Vineland, N. J., last seen September 24 (Prince); Newton, N. J., May 30 (Carter).

Louisiana Water Thrush, *Seiurus motacilla*. Doylestown, May 22 (MacReynolds); Wissahickon, April 15, singing (Miller).

Kentucky Warbler, *Oporornis formosa*. May 11, first record here (Potter).

Mourning Warbler, *Oporornis philadelphia*. Moorestown, N. J., May 8 (Linton and Mickle).

Hooded Warbler, *Wilsonia citrina*. Cape May, N. J., May 4 (Hand); Swarthmore, May 16 (Harrower); Haverford, May 11 and 14 (Serrill); Altoona, May 4 (McGraw).

Wilson's Warbler, *Wilsonia pusilla pusilla*. Audubon, N. J., May 14 (Tatum); Swarthmore, May 8 (Howard); Haverford, May 17 (Serrill); West Philadelphia, May 24 (Richardson); West Chester, May 18 (Ehinger); Doylestown, May 21 (MacReynolds).

Redstart, *Setophaga ruticilla*. Buckshutem, N. J., May 31-July 4, at the same place in which they bred in a former year (Prince); Moorestown, N. J., August 20, 1918 (Evans).

Titlark, *Anthus rubescens*. George School, April 12 (Cocks); Doylestown, abundant in the spring, March 30, April 8 and 13 (MacReynolds); Gwynedd Valley, April 11 (Miller).

Catbird, *Dumetella carolinensis*. Moorestown, N. J., December 25, 1918 (Linton and Mickle).

Brown Thrasher, *Toxostoma rufum*. Cape May, N. J., January 19 (Roland).

Mockingbird, *Mimus polyglottos polyglottos*. Vineland, N. J., April 27-May 23 (Prince); Cape May, N. J., June 22-July 4 (Baird); Kennett Square, one wintered (Sharples).

Short-billed Marsh Wren, *Cistothorus stellaris*. Newton, N. J., May 30, four nests, 2 eggs, 7 eggs and two empty (Street and Carter).

Long-billed Marsh Wren, *Telmatodytes palustris palustris*. Cape May, N. J., February 16 (Roland).

Winter Wren, *Nannus hiemalis hiemalis*. Vineland, N. J., October 16 (Prince).

Red-breasted Nuthatch, *Sitta canadensis*. Atlantic City, N. J., April 16 (Cromie); Haddonfield, N. J., January 30 (Mahy); Moorestown, N. J., October 4–December 25 and May 8 (Evans); Concordville, May 2 (Styer); West Chester, November 2 (Ehinger); West Philadelphia, September 14 (Mahy); Mt. Airy, May 15 (Hagar); Altoona, May 4 (McGraw).

Black-capped Chickadee, *Parus atricapillus atricapillus*. Unusually common, Doylestown, October 12–April 7 (MacReynolds); West Chester, arriving October 24 (DeHaven); Concordville, George School, etc., without dates.

Carolina Chickadee, *Parus carolinensis carolinensis*. Westmont, N. J., nest and eggs May 3 (Potter).

Blue-gray Gnatcatcher, *Poliophtila caerulea caerulea*. Atlantic City, N. J., April 15 (Cromie); York, April 8 (Farquahr).

Ruby-crowned Kinglet, *Regulus calendula calendula*. Frankford, arrived September 23 (Miller).

Golden-crowned Kinglet, *Regulus satrapa satrapa*. Moorestown, N. J., October 20–April 16 (Mickle); Frankford, September 30–April 18 (Miller); West Chester, October 16–April 6 (Ehinger).

Brown Creeper, *Certhia familiaris americana*. Moorestown, N. J., October 6–December 25 (Mickle); Doylestown, March 30–April 30 (MacReynolds); Altoona, March 15–April 20 (McGraw); Mt. Airy, April 20 (Hagar).

Veery, *Hylocichla fuscescens fuscescens*. Vineland, N. J., last seen September 25 (Prince); Concordville, May 28 (Styer).

Wood Thrush, *Hylocichla mustelina*. Pocono Lake, all summer, May 26–August 3 (Carter).

Wheat-ear, *Oenanthe oenanthe*. Lansdale, October 7, 1919 (J. R. Gillen, specimen collected and exhibited before the Club).