

## Report on the Spring Migration for the Years 1929 and 1930

Schedules recording the dates of occurrence of birds at stations in New Jersey and Pennsylvania were received from the following observers. Unless special year is mentioned schedules for both years were received.

We would appreciate requests for blank schedules from anyone willing to keep records of their observations and who have failed to receive them.

### NEW JERSEY

Cape May, H. Walker Hand	Mt. Holly, Nelson D. W.
Vineland, W. W. Fair	Pumyea (1930)
Vineland, Mrs. Alice K. Prince (1930)	Bordentown, Minnie V. Flynn
Collingswood, Julian K. Potter	Camden, T. E. McMullen (1929)
Haddonfield, Joseph W. Tatum	
Moorestown, Anna A. Mickle and Louisa M. Jacob	

### PENNSYLVANIA

Mt. Airy, Phila., Wm. Jay	Lansdowne, John D. Carter
Mt. Airy, Phila., Edw. S. Weyl (1929)	Glenolden, John A. Gillespie
Frankford, Phila., Richard F. Miller	Darlington, (Darling) Mary W. Daley
Ardmore, Wm. L. Baily (1930)	Paoli, H. D. McCann (1930)
Haverford, Wm. J. Serrill (1930)	Jeffersonville, R. J. Middleton (1929)
Haverford, Haverford College Nature Club (1929)	West Vincent, R. Louis Lloyd
	Doylestown, George Mac-Reynolds
	New Hope, Elizabeth C. Cox.

Cheltenham Twp. Montgy. Reading, Earl L. Poole (1930)  
Co., C. E. Underdown Lopez, Otto Behr (1929)  
(1929)  
Swarthmore, Saml. C.  
Palmer (1930)

As this report was prepared before the appearance of the new edition of the A. O. U. Check-List the nomenclature and sequence follow the old edition.

	1929		1930	
	First seen	General arrival	First seen	General arrival
Canada Goose . . . . .	Mar. 22		Mar. 7	
Green Heron . . . . .	Apr. 14	<b>Apr. 26</b>	Apr. 12	<b>Apr. 30</b>
Night Heron . . . . .	Feb. 9	<b>Feb. 24</b>	Mar. 1	<b>Apr. 13</b>
Spotted Sandpiper . . . . .	Apr. 26	<b>May 4</b>	Apr. 27	<b>May 3</b>
Solitary Sandpiper . . . . .	Apr. 29	<b>May 1</b>	Apr. 24	<b>May 4</b>
Killdeer . . . . .	Feb. 7	<b>Feb. 9</b>	Feb. 21	<b>Feb. 23</b>
Dove . . . . .	Feb. 17	<b>Mar. 13</b>	Feb. 25	<b>Mar. 9</b>
Osprey . . . . .	Mar. 23	<b>Apr. 7</b>	Apr. 10	<b>Apr. 13</b>
Turkey Vulture . . . . .	Mar. 3		Feb. 2	<b>Mar. 6</b>
Yellow-bill Cuckoo . . . . .	May 2	<b>May 3</b>	Apr. 29	<b>May 8</b>
Black-bill Cuckoo . . . . .	May 2	<b>May 7</b>	May 7	<b>May 11</b>
Kingfisher . . . . .	Feb. 2	<b>Mar. 17</b>	Feb. 2	<b>Mar. 1</b>
Yellow-Bellied Sapsucker . . . . .	Apr. 20	<b>Apr. 21</b>	Mar. 24	<b>Apr. 13</b>
Red-headed Woodpecker . . . . .	May 5	<b>May 10</b>	May 4	<b>May 4</b>
Flicker . . . . .	Feb. 17	<b>Mar. 12</b>	Feb. 22	<b>Mar. 18</b>
Whip-poor-will . . . . .	Apr. 10		Apr. 13	<b>Apr. 26</b>
Nighthawk . . . . .	May 11	<b>May 26</b>	May 6	<b>May 9</b>
Chimney Swift . . . . .	Apr. 15	<b>Apr. 20</b>	Apr. 18	<b>Apr. 28</b>
Hummingbird . . . . .	May 2	<b>May 12</b>	May 6	<b>May 11</b>
Kingbird . . . . .	Apr. 28	<b>May 4</b>	May 1	<b>May 4</b>
Crested Flycatcher . . . . .	Apr. 28	<b>May 4</b>	May 1	<b>May 4</b>
Phoebe . . . . .	Mar. 9	<b>Mar. 17</b>	Mar. 16	<b>Mar. 22</b>
Wood Pewee . . . . .	May 12	<b>May 16</b>	May 4	<b>May 12</b>
Acadian Flycatcher . . . . .	Apr. 27	<b>May 5</b>	May 3	<b>May 15</b>
Least Flycatcher . . . . .	May 3	<b>May 5</b>	May 5	<b>May 6</b>
Bobolink . . . . .	May 4	<b>May 5</b>	May 4	<b>May 10</b>
Cowbird . . . . .	Feb. 24	<b>Mar. 17</b>	Feb. 26	<b>Mar. 10</b>
Red-wing Blackbird . . . . .	Feb. 24	<b>Mar. 3</b>	Feb. 12	<b>Feb. 27</b>
Meadowlark . . . . .	Feb. 19	<b>Mar. 5</b>	Feb. 18	<b>Mar. 16</b>
Orchard Oriole . . . . .	May 9	<b>May 11</b>	May 2	<b>May 6</b>
Baltimore Oriole . . . . .	May 1	<b>May 4</b>	May 3	<b>May 5</b>
Rusty Blackbird . . . . .	Mar. 7	<b>Mar. 17</b>	Feb. 12	<b>Mar. 23</b>
Purple Grackle . . . . .	Feb. 18	<b>Mar. 3</b>	Feb. 4	<b>Feb. 22</b>
Vesper Sparrow . . . . .	Mar. 16	<b>Mar. 24</b>	Mar. 20	<b>Apr. 6</b>
Savannah Sparrow . . . . .	Feb. 26	<b>Apr. 9</b>	Feb. 16	<b>Apr. 2</b>
Grasshopper Sparrow . . . . .	Apr. 6	<b>Apr. 13</b>	Apr. 24	<b>May 3</b>
Chipping Sparrow . . . . .	Mar. 14	<b>Apr. 4</b>	Mar. 23	<b>Apr. 12</b>
Field Sparrow . . . . .	Mar. 17	<b>Mar. 22</b>	Mar. 5	<b>Mar. 22</b>
Swamp Sparrow . . . . .	Mar. 25	<b>Apr. 6</b>	Apr. 19	<b>Apr. 23</b>
Fox Sparrow . . . . .	Feb. 22	<b>Mar. 6</b>	Feb. 15	<b>Feb. 25</b>
Towhee . . . . .	Apr. 6	<b>Apr. 13</b>	Mar. 16	<b>Apr. 22</b>
Rose-breasted Grosbeak . . . . .	May 2	<b>May 8</b>	May 6	<b>May 6</b>
Indigo Bird . . . . .	Apr. 26	<b>May 8</b>	May 4	<b>May 17</b>
Scarlet Tanager . . . . .	May 2	<b>May 4</b>	May 3	<b>May 6</b>
Purple Martin . . . . .	Apr. 4	<b>Apr. 19</b>	Apr. 2	<b>Apr. 20</b>
Cliff Swallow . . . . .	May 4		May 6	
Barn Swallow . . . . .	Apr. 12	<b>Apr. 20</b>	Apr. 12	<b>Apr. 20</b>
Tree Swallow . . . . .	Apr. 7	<b>Apr. 21</b>	Apr. 10	<b>Apr. 20</b>
Bank Swallow . . . . .	Apr. 14	<b>Apr. 23</b>	Apr. 12	<b>Apr. 24</b>
Rough-wing Swallow . . . . .	Apr. 22	<b>Apr. 26</b>	Apr. 20	<b>May 4</b>
Cedar Waxwing . . . . .	Apr. 21	<b>May 18</b>	Mar. 8	<b>May 28</b>

	1929		1930	
	First seen	General arrival	First seen	General arrival
Red-eyed Vireo.....	May 1	<b>May 5</b>	May 4	<b>May 5</b>
Warbling Vireo.....	May 3	<b>May 12</b>	May 1	<b>May 8</b>
Yellow-throated Vireo.....	May 9	<b>May 12</b>	May 3	<b>May 4</b>
Solitary Vireo.....	Apr. 14	<b>Apr. 23</b>	Apr. 20	<b>May 1</b>
White-eyed Vireo.....	Apr. 23	<b>May 1</b>	Apr. 30	<b>May 4</b>
Black and White Warbler....	Apr. 20	<b>Apr. 21</b>	May 8	<b>May 10</b>
Worm-eating Warbler.....	May 8	<b>May 10</b>	May 8	<b>May 10</b>
Blue-winged Warbler.....	May 2	<b>May 4</b>	Apr. 30	<b>May 4</b>
Parula Warbler.....	May 1	<b>May 11</b>	May 4	<b>May 4</b>
Yellow Warbler.....	Apr. 21	<b>Apr. 26</b>	Apr. 27	<b>May 2</b>
Black-throated Blue Warbler..	May 4	<b>May 6</b>	May 2	<b>May 3</b>
Myrtle Warbler.....	Mar. 10	<b>Apr. 1</b>	Apr. 23	<b>Apr. 26</b>
Magnolia Warbler.....	May 5	<b>May 6</b>	May 1	<b>May 4</b>
Chest-sided Warbler.....	Apr. 30	<b>May 5</b>	May 3	<b>May 4</b>
Black-poll Warbler.....	May 3	<b>May 12</b>	May 7	<b>May 8</b>
Blackburnian Warbler.....	Apr. 30	<b>May 4</b>	May 1	<b>May 4</b>
Black-throated Green Warbler	Apr. 28	<b>May 4</b>	Apr. 19	<b>May 3</b>
Pine Warbler.....	Apr. 6	<b>Apr. 6</b>	Mar. 23	<b>Apr. 20</b>
Yellow Palm Warbler.....	Apr. 6	<b>Apr. 7</b>	Apr. 6	<b>Apr. 19</b>
Prairie Warbler.....	Apr. 25	<b>May 4</b>	May 1	<b>May 2</b>
Ovenbird.....	Apr. 26	<b>Apr. 27</b>	Apr. 30	<b>May 1</b>
Water-Thrush.....	Apr. 13	<b>Apr. 26</b>	May 1	<b>May 4</b>
Kentucky Warbler.....	Apr. 28	<b>May 5</b>	May 5	<b>May 6</b>
Maryland Yellow-throat.....	Apr. 21	<b>Apr. 25</b>	Apr. 28	<b>May 1</b>
Chat.....	May 2	<b>May 6</b>	May 2	<b>May 9</b>
Canada Warbler.....	May 7	<b>May 12</b>	May 4	<b>May 8</b>
Redstart.....	Apr. 28	<b>May 2</b>	May 2	<b>May 5</b>
Catbird.....	Apr. 23	<b>Apr. 28</b>	Apr. 30	<b>May 2</b>
Brown Thrasher.....	Apr. 8	<b>Apr. 10</b>	Apr. 15	<b>Apr. 26</b>
House Wren.....	Apr. 13	<b>Apr. 21</b>	Apr. 27	<b>Apr. 28</b>
Long-billed Marsh Wren.....	Apr. 27		May 6	<b>May 8</b>
Ruby-crowned Kinglet.....	Apr. 4	<b>Apr. 10</b>	Apr. 6	<b>Apr. 13</b>
Wood Thrush.....	Apr. 20	<b>Apr. 27</b>	Apr. 26	<b>May 1</b>
Wilson's Thrush.....	Apr. 27	<b>May 7</b>	May 4	<b>May 9</b>
Gray-cheeked Thrush.....	May 10	<b>May 15</b>	May 8	<b>May 9</b>
Olive-backed Thrush.....	Apr. 30	<b>May 10</b>	May 2	<b>May 7</b>
Hermit Thrush.....	Mar. 23	<b>Apr. 3</b>	Mar. 9	<b>Apr. 13</b>
Robin.....	Feb. 18	<b>Feb. 25</b>	Feb. 2	<b>Feb. 22</b>
Bluebird.....	Feb. 17	<b>Mar. 12</b>	Feb. 20	<b>Feb. 28</b>

*List of Other Species Reported during 1929, and  
Additional Notes on Species Contained in the Schedule*

*Autumn Dates Refer to Autumn of 1928  
Unless Otherwise Stated*

Pied-billed Grebe, *Podilymbus podiceps*. Bridesburg, March 22 (Miller); Reading, March 17 to May 12 (Poole).

Red-throated Loon, *Gavia stellata*. Wildwood, N. J., June 23 (Potter).

Herring Gull, *Larus argentatus*. Doylestown, March 24, on Turk Dam, 23 miles from tidewater (MacReynolds); Reading, April 3 to May 3 (Poole); Glenolden, April 3 to May 3 (Gillespie); Schuylkill River until April 12 (Weyl); Haddonfield, N. J., August 28 to April 20 (Tatum).

Laughing Gull, *Larus atricilla*. Cape May, N. J., March 31 (Hand).

Bonaparte's Gull, *Larus philadelphia*. Delaware City, Del., Jan. 20 (71) (Weyl.).

Black Tern, *Chlidonias n. surinamensis*. Wilmington, Del., May 4 and 6 (Weyl.)

Gannet, *Sula bassana*. Long Beach, N. J., March 24 (8) (McDonald).

Brown Pelican, *Pelecanus occidentalis*. Cape May, N. J., Sept. 19 (Hand).

Merganser, *Mergus americanus*. Doylestown, plentiful, Feb. 26, March 3, 17, 24, 5 to 22 each day (McReynolds); on the Schuylkill, Nov. 11 to March 20 (Weyl.).

Mallard, *Anas platyrhynchos*. Haddonfield, N. J., March 17 (Tatum); nested on Ridley Creek, Edgemont, Delaware Co., Pa., May 18 (Carter).

Wood Duck, *Aix sponsa*. Salem, N. J., nest and 18 eggs, April 18 (Miller).

Canvasback, *Nyroca valisineria*. Perry Point, Md., March 3 (10,000) (Yoder).

Canada Goose, *Branta canadensis canadensis*. Cape May, N. J., Oct. 26, March 24 (Hand).

Whistling Swan, *Cygnus columbianus*. Perry Point, Md. (5,000) March 3 (Potter); Cape May, N. J., Nov. 11 (1), Nov. 12 (4) and Nov. 13 (6) (Hand).

Black-crowned Night Heron, *Nycticorax n. naevius*. Merchantville, N. J., April 5, nests with sets of eggs (Miller).

Bittern, *Botaurus lentiginosus*. Camden, N. J., April 6 (McMullin); Salem, N. J., March 29 (Miller).

Least Bittern, *Ixobrychus exilis*. Bridesburg, April 25 (Miller).

American Egret, *Casmerodius egretta*. Moselem, Aug. 26 (Poole); Holmesburg, Aug. 3-Sept. 30 (Miller).

Snowy Egret, *Egretta thula thula*. Avalon, N. J., Sept. 23 (Livingston).

Little Blue Heron, *Florida caerulea*. Holmesburg, Aug. 30 and Essington, July 16 (Miller).

Green Heron, *Butorides virescens virescens*. Westtown, May 11, nest and five eggs (Carter).

King Rail, *Rallus elegans*. Essington, May 29, nest and 12 eggs (Miller).

Virginia Rail, *Rallus virginianus*. Moselem, May 5 (Poole); Essington, May 29, nest and nine eggs (Miller).

Sora, *Porzana carolina*. Moselem, May 5 (Poole).

Florida Gallinule, *Gallinula chloropusca chinnans*. Wilmington, Del., May 30, nests and 8, 15, and 13 eggs also downy chicks (Carter); Bridesburg, May 29, nest and 10 eggs, May 30, nest and 11 eggs (Miller).

Coot, *Fulica americana*. Bridesburg, March 22 (Miller).

Northern Phalarope, *Phalaropus lobatus*. Moselem, Aug. 26 (Poole).

Red Phalarope, *Crymophilus fulicarius*. Off Cape May, N. J., April 16, 1928, large numbers (Hand).

Woodcock, *Philohela minor*. Reading, March 7 and Pt. Pleasant, March 17 (7) (Poole); Wissahickon, March 16 (2) and 23 (Weyl); Cape May, N. J., migrating flights on Nov. 9, 21, 23, 26 and 28 also on March 11 (Hand); Moorestown, N. J., March 14 (Mickle); Haddonfield, N. J., March 14 (Tatum).

Wilson's Snipe, *Gallinago delicata*. Moselem, Jan. 19-May 12 (Poole); Jeffersonville, April 3 (Middleton); Salem, N. J., March 29 (Miller).

Sanderling, *Calidris leucophaea*. Brigantine, N. J., June 15 (Tatum.)

Greater Yellow-legs, *Totanus melanoleucus*. Cape May, N. J., March 29 (Hand); Haddonfield, N. J., May 10 (Tatum); Jeffersonville, March 27 (Middleton).

Hudsonian Curlew, *Numenius hudsonius*. Cape May, N. J., April 27 (Hand).

Upland Plover, *Bartramia longicauda*. Doylestown, June 2 (3) (MacReynolds); Jeffersonville, May 30 (6) (Middleton).

Ring-necked Pheasant, *Phasianus torquatus*. Holmesburg, May 17, nest and 14 eggs (Miller); Rahway, N. J., nest and 12 eggs, May 6 (Carter).

Bobwhite, *Colinus virginianus virginianus*. Cape May, N. J., Sept. 9, nest and 8 eggs (Hand).

Mourning Dove, *Zenaidura macroura carolinensis*. Ellisburg, N. J., April 6 (Carter).

Marsh Hawk, *Circus hudsonius*. Beckersville, Feb. 3 (Poole).

Sharp-shinned Hawk, *Accipiter velox*. Mt. Airy, July 4 (Weyl).

Cooper's Hawk, *Accipiter cooperi*. Jeffersonville, nest and eggs, May 26 (Middleton).

Broad-winged Hawk, *Buteo platypterus*. Jeffersonville, April 21 (Middleton); Mt. Airy, April 14 (Jay); and April 27 and May 12 and June 16 (Weyl).

Rough-legged Hawk, *Buteo lagopus s. johannis*. Jeffersonville, Jan. 25, Feb. 13, 15, 19 (Middleton); Delaware City, Del., March 3 (Potter).

Sparrow Hawk, *Falco sparverius sparverius*. Lopez, arrived March 24 (Behr).

Pigeon Hawk, *Falco columbarius columbarius*. Wyomissing, April 13 (Poole); Doylestown, April 21 (MacReynolds); Germantown, March 16 (Weyl).

Duck Hawk, *Falco peregrinus anatum*. Reading, March 31 (Poole); Philadelphia, City Hall, Feb. 5, 7, 11, 13 (Weyl).

Barn Owl, *Tyto pratincola*. Moselem, Jan. 19, and nest Gibraltar, April 1 (Poole); Ambler, Feb. 17 (5), Plymouth Meeting, July 11 and Feasterville, July 18 (2) (Weyl).

Long-eared Owl, *Asio wilsonianus*. Ambler, Feb. 17 (17) (Livingston); Salem, N. J., two nests, five eggs each, May 30 (Miller).

Great Horned Owl, *Bubo virginianus virginianus*. Ocean View, N. J., April 14, (Potter); near Reading, May 1, 3 full-fledged young (Poole).

Saw-whet Owl, *Cryptoglaux acadica*. Evansburg, March 3 (Jay); Pennsville, March 16 (Miller).

Yellow-billed Cuckoo, *Coccyzus americanus americanus*. Lansdowne, nest and eggs, May 23 (Carter).

Belted Kingfisher, *Ceryle alcyon alcyon*. Pennypack Park, Jan. 18–Feb. 3 (Miller).

Flicker, *Colaptes auratus luteus*. Cape May, N. J., large flight, Oct. 8 (Hand).

Chimney Swift, *Chaetura pelagica*. Edgemont, May 30, nest and three eggs, nest made mainly of liriodendron seed scales (Carter).

Ruby-throated Hummingbird, *Archilochus colubris*. Cape May, N. J., Oct. 2–4 (Hand).

Phoebe, *Sayornis phoebe*. Cape May, N. J., Oct. 8, abundant migration (Hand), Lansdowne, nest completed, April 9 (Carter).

Yellow-bellied Flycatcher, *Empidonax flaviventris*. Doylestown, May 22 (MacReynolds); Reading, May 16–19 (Poole); Mt. Holly, N. J., May 19 (Weyl).

Olive-sided Flycatcher, *Nuttallornis borealis*. Reading, May 26 (2) (Poole).

Horned Lark, *Otocoris alpestris alpestris*. Jeffersonville, Nov. 18, Feb. 22 (Middleton); Reading, Nov. 18–March 24, rather common (Poole).

Purple Grackle, *Quiscalus quiscula quiscula*. Mt. Airy, Jan. 11–13, Feb. 3 and 6 (Weyl).

Purple Finch, *Carpodacus purpureus purpureus*. Reading, Sept. 23–May 16 (Poole); Doylestown, Oct. 28–April 21 (MacReynolds); Jeffersonville, last April 9, none wintered (Middleton); Glenolden, arrived Oct. 7 (Gillespie); Haverford, Oct. 14–May 3 (Emlen, etc); arrived Nov. 12 (Weyl); last seen Mt. Airy, April 14 (Jay); Haddonfield, N. J., last April 23 none wintered (Tatum); Moorestown, N. J. (Mickle).

Pine Siskin, *Spinus pinus*. Reading, October 28 (Poole); Jeffersonville, Nov. 22 and 24 (Middleton); Haverford, last seen May 12 (Emlen etc.); Mt. Airy, last seen April 7 (15) (Jay); Glenolden, Oct. 29 (Gillespie); Haddonfield, N. J., March 24 (Tatum); Moorestown, N. J., April 24-27 (Mickle).

Henslow's Sparrow, *Passerherbulus henslowi*. Somerdale, Camden Co., N. J., May 4 (Miller).

Lincoln's Sparrow, *Melospiza lincolni*. Jeffersonville, Nov. 24-April 19, caught repeatedly in trap (Middleton).

Swamp Sparrow, *Melospiza georgiana*. Sharon Hill, nest and 4 eggs, May 22 (Carter).

Field Sparrow, *Spizella pusilla pusilla*. Wissahickon, Jan. 26 (6) (Weyl).

Tree Sparrow, *Spizella m. monticola*. Reading, Nov. 18-March 31 (Poole); Doylestown, Nov. 7-March 12 (MacReynolds); Jeffersonville, Nov. 12-April 3 (Middleton); Haverford, Oct. 17-March 17 (Emlen etc.); Mt. Airy, Nov. 24 (Weyl); Frankford, Nov. 8 (Miller); Glenolden, Nov. 10; (Gillespie); Haddonfield, March 3 (Tatum).

Junco, *Junco hyemalis hyemalis*. Reading, Oct. 4-May 2 (Poole); Doylestown, Oct. 7-May 5 (MacReynolds); Jeffersonville, Oct. 2-April 28 (Middleton); Mt. Airy, last seen May 1 (Weyl); Haverford, Oct. 2-May 4 (Emlen etc.); Darling, last seen April 27 (Daley); Frankford, first seen Oct. 3 (Miller); Glenolden, Oct. 2 (Gillespie); Haddonfield, N. J., Oct. 8-April 16 (Tatum); Moorestown, N. J., Oct. 3-April 25 (Mickle); Cape May, N. J., Oct. 5 (Hand).

White-throated Sparrow, *Zonotrichia albicollis*. Lopez, arrived April 30 (Behr); Reading, Sept. 22-May 16 (Poole); Doylestown until April 30 (MacReynolds); Jeffersonville, Sept. 21-May 19 (Middleton); Darling, to April 20 (Daley); Mt. Airy, to May 12 (Weyl); Frankford, arrived Sept. 24 (Miller); Glenolden, arrived Sept. 25 (Gillespie); Haddonfield, N. J., Oct. 11-May 3 (Tatum); Moorestown, N. J., Oct. 4-May 16 (Mickle).

White-crowned Sparrow, *Zonotrichia leucophrys leucophrys*. Reading, Oct. 1 and May 5-6 (Poole); Moselem, May 12 (Poole); Jeffersonville, May 6 (Middleton); Darling, May 15

(Daley); Haddonfield, N. J., May 10 (Tatum); Moorestown, N. J., May 12, 13, 15 (Mickle).

Towhee, *Pipilo erythrophthalmus erythrophthalmus*. Glendolen, two wintered (Gillespie); Wissahickon, Nov. 24 (Weyl).

Purple Martin, *Progne subis subis*. Nested at Darling, Delaware Co., Pa., every year from 1920 to 1926, none in 1927 to 1929 except for two transient visitors in 1928 (Daley).

Tree Swallow, *Iridoprocne bicolor*. Cape May, N. J., Oct. 4 in enormous numbers (Hand).

Northern Shrike, *Lanius borealis*. Feb. 3 (McDowell); Seaside Park, N. J., Cape May, N. J., Dec. 13 (Hand).

Migrant Shrike, *Lanius ludovicianus migrans*. Seaside Park, N. J., March 24 (McDowell).

Philadelphia Vireo, *Vireo philadelphia*. Doylestown, May 19 (MacReynolds).

Golden-winged Warbler, *Vermivora chrysoptera*. Doylestown, May 20 (MacReynolds); Reading, May 5, 9 and 10 (Poole); Mt. Airy, May 4 (Jay); Wissahickon, May 12 (Underdown).

Nashville Warbler, *Vermivora rubricapilla rubricapilla*. Reading, April 24–May 15 (Poole); Wissahickon, May 25 (2) (Weyl); Moorestown, N. J., May 9 (Mickle).

Tennessee Warbler, *Vermivora peregrina*. Reading, May 8 and 10 (Poole); Wissahickon, May 25 (2) (Weyl); Moorestown, N. J., May 9–15 (Mickle).

Cape May Warbler, *Dendroica tigrina*. Reading, May 10, 11–13 (Poole); Jeffersonville, May 12 (Middleton).

Chestnut-sided Warbler, *Dendroica pensylvanica*. Daylesford, June 29 (Weyl).

Bay-breasted Warbler, *Dendroica castanea*. Wyomissing near Reading, May 16 (Poole); Doylestown, May 13 and 14 (MacReynolds); Jeffersonville, May 25 (Middleton); Wissahickon, May 12, 18 (3) (Weyl).

Pine Warbler, *Dendroica pinus*. Nest completed at Weymouth, N. J., April 15 (Tatum).

Louisiana Water-Thrush, *Seiurus motacilla*. Doylestown, April 15 (MacReynolds); Darling, April 21 (Emlen etc.); Gladwyn, May 8 and Wissahickon, May 12 and 18 (Weyl); Cheltenham Twp., April 21 (Underdown).

Yellow-breasted Chat, *Icterus virens virens*. Edgemont, nest and one egg, May 30 (Carter).

Connecticut Warbler, *Oporornis agilis*. Wyomissing, near Reading, Sept. 28 (Poole).

Wilson's Warbler, *Wilsonia pusilla pusilla*. Doylestown, May 8 (2) (MacReynolds); Jeffersonville, May 7 (Middleton); Reading, May 12 (4) and May 13 (Poole).

Hooded Warbler, *Wilsonia citrea*. Reading, May 11 (Poole); Mt. Airy, May 2 (Jay); Haddonfield, N. J., May 10 (Tatum).

Pipit, *Anthus rubescens*. Reading, abundant, March 17 (500) to April 21 (Poole); Doylestown, abundant, April 7–May 5 (MacReynolds); Haverford, last seen March 12 (Emlen etc.); Glenolden, Feb. 10 (200) (Gillespie).

Mockingbird, *Mimus polyglottos polyglottos*. Haverford, Nov. 28–April 4.

Catbird, *Dumetella carolinensis*. Cape May, N. J., Dec. 6–9 (Hand).

Winter Wren, *Nannus hiemalis hiemalis*. Reading, Sept. 30–April 20 (Poole); Doylestown, Feb. 19–March 31 (MacReynolds); Jeffersonville, Oct. 1–Nov. 5, none wintered (Middleton); Darling, last seen April 14 (Daley); Haverford, Oct. 1–April 24 (Emlen etc.); Glenolden arrived Oct. 1 (Gillespie); Mt. Airy, arrived Nov. 4 (Weyl); Frankford, arrived Sept. 18 (Miller); Moorestown, N. J., Nov. 11 and Dec. 11 (Mickle).

Brown Creeper, *Certhia familiaris americana*. Reading, Nov. 10–April 20 (Poole); Doylestown, Oct. 12–April 21 (MacReynolds); Jeffersonville, April 14, none wintered (Middleton); Haverford, Oct. 11–April 24 (Emlen etc.); Glenolden arrived Oct. 14 (Gillespie); Frankford, Oct. 2 arrived (Miller); Haddonfield, N. J., last April 3 (Tatum); Moorestown, N. J., Sept. 28–April 23 (Mickle); Cape May, N. J., arrived Oct. 1 (Hand).

White-breasted Nuthatch, *Sitta carolinensis carolinensis*. Jeffersonville, Oct. 1–April 19 (Middleton); pair making nest, March 26–May 1 but no eggs were deposited (Carter).

Red-breasted Nuthatch, *Sitta canadensis*. Reading, April 24–May 10 (Poole); Haverford, May 3 (Emlen etc.); Mt. Airy, March 16 (Weyl); Haddonfield, N. J., March 31 (Tatum); Moorestown, N. J., Oct. 15–Dec. 11 (Mickle).

Black-capped Chickadee, *Penthestes atricapillus atricapillus*. Reading, resident abundant (Poole); Doylestown, Nov. 7–March 19 (MacReynolds); Jeffersonville, Oct. 31–April 5 (Middleton); Darling, February 6 (Daley); Haverford, Oct. 28–March 12 (Emlen etc.); Glenolden, Nov. 7 (Gillespie); Mt. Airy, Nov. 4 (Weyl).

Golden-crowned Kinglet, *Regulus satrapa satrapa*. Reading, Oct. 9–April 18, scarce in winter (Poole); Doylestown, Oct. 7–March 22 (MacReynolds); Jeffersonville none wintered (Middleton); Darling, to April 20 (Daley); Haverford, Oct. 8–April 19 (Emlen etc.); Glenolden, arrived Oct. 5 (Gillespie); Frankford, arrived Oct. 8 (Miller); Mt. Airy last seen, April 22 (Weyl); Moorestown, N. J., Oct. 6–April 5 (Mickle).

Blue-gray Gnatcatcher, *Poliopitila caerulea caerulea*. Ocean View, N. J., April 14 (2) (Underdown); Camden, N. J., April 21 (McMullin); Moorestown, N. J., April 13 (Mickle).

Veery, *Hylocichla fuscescens fuscescens*. Narberth, June 15, 26, 29 (Weyl).

*List of Other Species Reported during 1930, and  
Additional Notes on Species Contained in the Schedule*

*Autumn Dates Refer to Autumn of 1929  
Unless Otherwise Stated*

Pied-billed Grebe, *Podilymbus podiceps*. Richmond, March 18 (Miller); Moorestown, N. J., April 14 (Mickle).

Herring Gull, *Larus argentatus*. Glenolden, Nov. 2–May 11 (Gillespie).

Laughing Gull, *Larus atricilla*. Cape May, April 1 (Hand).

Red-breasted Merganser, *Mergus serrator*. April 1, Cape May, N. J. (Hand).

Mallard, *Anas platyrhynchos*. Two pairs bred on Lake Lillian, near Hammonton, N. J.

Black Duck, *Anas rubripes tristis*. Pennsgrove, N. J., March 28 nest and 8 eggs (Miller); Elmwood, Phila., May 21 (Miller).

Blue-winged Teal, *Querquedula discors*. Cape May, N. J., April 6 (Hand).

Wood Duck, *Aix sponsa*. Reading, Feb. 25, June 13, and 29, July 6 (Poole); Haddonfield, N. J., May 9 adult and 15 young (Tatum); Mt. Holly, N. J.; April 13–May 4 (Pumyea).

Egret, *Casmerodius egretta*. Reading, June 23–Oct. 3, 1929 and July 4, 1930; Holmesburg, Aug. 3–Sept. 30 (Miller); Pennsgrove, N. J., Aug. 14 (Tatum).

Great Blue Heron, *Ardea herodias herodias*. Reading, arrived March 30 (Poole).

Little Blue Heron, *Florida caerulea*. Reading, July 4–Sept. 15 and July 4, 1930 (Poole); Pennsgrove, N. J., Aug. 14 (Tatum).

American Bittern, *Botaurus lentiginosus*. Darling, May 21 (Daley); Haverford, May 4 (Emlen etc.); Weymouth, N. J., March 30 (Tatum); Pennsville, N. J., April 4 (Miller); Cape May, N. J., April 27 (Hand).

Least Bittern, *Ixobrychus exilis*. Richmond, May 8 (Miller); Bridesburg, nest and 5 eggs June 21 (Carter).

King Rail, *Rallus elegans*. Haverford, May 4 (Emlen etc.); Cape May, N. J., Jan. 23 (Hand).

Virginia Rail, *Rallus virginianus*. Moselem, May 4; downy young, Aug. 3 (Poole).

Sora, *Porzana carolina*. Reading, Sept. 29 (Poole).

Florida Gallinule, *Gallinula galeata*. Collingswood, N. J., May 1 (Potter).

Woodcock, *Philohela minor*. Haverford, March 1 (Emlen etc.); Byberry, nest and four eggs, April 5 (Miller); Cape May, N. J., flights on Feb. 16 and March 5 (Hand); Ellisburg, N. J., nest and eggs March 30 (Carter); Cape May, N. J., four young May 5 (Hand).

Wilson's Snipe, *Capella delicata*. Haverford, April 12 and May 4 (Emlen etc.); Mt. Holly, N. J., May 11 (Pumyea); Cape May, N. J., April 12 (Hand).

Greater Yellow-legs, *Totanus melanoleucus*. Cape May, N. J., April 1 (Hand).

Upland Plover, *Bartramia longicauda*. Mt. Holly, N. J., May 11 (2) (Pumyea).

Black-bellied Plover, *Squatarola squatarola*. Cape May, N. J., April 30 (Hand).

Ring-necked Pheasant, *Phasianus torquatus*. Torresdale, May 13, nest and 13 eggs (Miller).

Mourning Dove, *Zenaidura macroura carolinensis*, Bustleton, Dec. 8 (8) and Dec. 22 (25) (Miller).

Marsh Hawk, *Circus hudsonius*. Mt. Holly, N. J., Jan. 20 (Pumyea); Cape May Co., N. J., nest and 4 eggs, June 15 (Miller); Tuckerton, N. J., May 17, nest and 2 eggs (Carter).

Cooper's Hawk, *Accipiter cooperi*. Ambler, April 26, nest and 4 eggs (Carter); Evansburg, May 11, nest and 5 eggs (Miller); Mt. Holly, N. J., Jan. 1 (Pumyea).

Red-tailed Hawk, *Buteo borealis borealis*. Frankford, Oct. 29-April 6 (Miller).

Red-shouldered Hawk, *Buteo lineatus lineatus*. Frankford, Oct. 5-March 11 (Miller).

Broad-winged Hawk, *Buteo platypterus*. Haverford, March 15 (Emlen etc.); Glenolden, April 27 (Gillespie).

Pigeon Hawk, *Falco columbarius columbarius*. Reading, Oct. 2 and 3 (Poole).

Barn Owl, *Tyto pratincola*. Friedenburg, Feb. 28 and Angelica, May 2 (Poole).

Long-eared Owl, *Asio wilsonianus*. Evansburg, flock of 8, January (Miller).

Short-eared Owl, *Asio flammeus*. Near Reading, Jan. 11 (Poole).

Great Horned Owl, *Bubo virginianus virginianus*. Near Reading, Feb. 28 (Poole); Collingswood, N. J., nest and young (Miller), May 6.

Saw-whet Owl, *Cryptoglaux acadica*. Glenolden, Feb. 14 (Gillespie).

Belted Kingfisher, *Ceryle alcyon alcyon*. Walnut Hill. Feb. 2 (Miller).

Red-bellied Woodpecker, *Centurus carolinensis*. Frieden-  
burg, Jan. 10 specimen obtained (Poole).

Hairy Woodpecker, *Dryobates villosus villosus*. Moorestown, N. J., Sept. 28 and Feb. 11 (Mickle).

Olive-sided Flycatcher, *Nuttallornis borealis*. Birdsboro, May 11 (Poole).

Horned Lark, *Otocoris alpestris alpestris*. Glenolden, Nov. 5 (Gillespie); Mt. Holly, N. J., Jan. 4 flock of 25 (Pumyea).

Prairie Horned Lark, *Otocoris alpestris praticola*. Near Reading, March 9 (2) (Poole).

Fish Crow, *Corvus ossifragus*. Reading resident (Poole).

Evening Grosbeak, *Hesperiphona vespertina vespertina*. Near Reading, Jan. 25 (Poole); Cape May, N. J., Jan. 14, specimen found dead (Hand).

Pine Grosbeak, *Pinicola enucleator leucura*. Reading, Jan. 2 (9), Jan. 19 (12) and Feb. 2 (2) (Poole).

Purple Finch, *Carpodacus purpureus purpureus*. Doylestown, Oct. 10–May 6 (MacReynolds); New Hope, Nov. 18–May 5 (Cox); Paoli, Nov. 5 (McCann); Darlington, Jan. 18–May 3 (Daley); Ardmore, Feb. 22 (Baily); Frankford, Sept. 30–Nov. 19 (Miller); Glenolden, Oct. 20–April 30 (Gillespie); Moorestown, N. J., May 8 (Mickle); Haddonfield, N. J., April 23 (Tatum); Vineland, N. J., March 1–April 5 (Prince).

Snow Bunting, *Plectrophenax nivalis nivalis*. Brigantine, N. J., Jan. 26 (Tatum).

Pine Siskin, *Spinus pinus*. Swarthmore, March 29 (Palmer); near Reading, Dec. 8 (Poole).

Savannah Sparrow, *Passerculus sandwichensis savanna*. Bred at Maiden-creek Dam near Reading, young unable to fly, July 14 (Poole).

Nelson's Sparrow, *Ammospiza caudacutus nelsoni*. Maiden-creek Dam, near Reading, June 8, studied for three quarters of an hour and sketched (Poole).

Tree Sparrow, *Spizella monticola monticola*. Doylestown, Nov. 6–April 9 (MacReynolds); New Hope, Sept. 18–April 24 (Cox); Paoli, Nov. 19 (McCann); West Vincent, Nov. 7–April 12 (Lloyd); Frankford, Oct. 14–April 11 (Miller); Glenolden, Nov. 10–March 9 (Gillespie); Moorestown, N. J., last March 1 (Mickle).

Lincoln's Sparrow, *Melospiza lincolni*. Reading, May 8–12 (Poole).

Junco, *Junco hyemalis hyemalis*. New Hope, Sept. 22–April 23 (Cox); Doylestown, Oct. 6–April 22 (MacReynolds); Paoli, Oct. 6 (McCann); West Vincent, Oct. 14–April 30 (Lloyd); Frankford, Sept. 18–April 26 (Miller); Mt. Airy, May 7 (Jay); Glenolden, Oct. 6–May 4 (Gillespie); Moorestown, N. J., Oct. 6–April 29 (Mickle); Vineland to April 15 (Prince).

White-crowned Sparrow, *Zonotrichia leucophrys leucophrys*. Reading, May 4 (2) (Poole); Darlington, May 6 (Daley); Glenolden, May 3 and Oct. 20 (Gillespie).

White-throated Sparrow, *Zonotrichia albicollis*. New Hope, Sept. 8–April 22 (Cox); Doylestown, Oct. 4–May 16 (MacReynolds); Paoli, Oct. 17 (McCann); Darlington, Feb. 15–April 20 (Daley); Frankford, Sept. 20–May 24 (Miller); Mt. Airy, May 18 (Jay); Swarthmore, May 11 (Palmer); Glenolden Sept. 26–May 10 (Gillespie); Vineland, N. J., Nov. 24–April 22 (Prince); Moorestown, N. J., Oct. 6–May 15 (Mickle).

Fox Sparrow, *Passerella iliaca iliaca*. Doylestown, to March 28 (MacReynolds).

Purple Martin, *Progne subis subis*. Doylestown, two pairs bred in 1929 none in 1930 (MacReynolds).

Rough-winged Swallow, *Stelgidopteryx serripennis*. Nest in drain pipe at Toms River, N. J., June 21 (Lloyd).

Northern Shrike, *Lanius borealis*. Echville, Nov. 10 (Poole); New Hope, Dec. 22 (Cox).

Worm-eating Warbler, *Helmitheros vermivorus*. Evansburg, May 30, nest and 5 eggs (Miller).

Nashville Warbler, *Vermivora ruficapilla ruficapilla*. Reading, April 29 (Poole); Glenolden, May 11 (Gillespie).

Tennessee Warbler, *Vermivora peregrina*. Reading, May 11 (ten) (Poole); Moorestown, N. J., May 8 (Mickle).

Bay-breasted Warbler, *Dendroica castanea*. Ardmore, May 7 (Baily); Moorestown, N. J., May 8 (Mickle); Collingswood, N. J., May 8 (Potter).

Cape May Warbler, *Dendroica tigrina*. Reading, May 5 (Poole); Moorestown, N. J., May 8 (Mickle).

Blackburnian Warbler, *Dendroica fusca*. Cape May, N. J., May 19 (Hand).

Palm Warbler, *Dendroica palmarum palmarum*. Reading, May 6, carefully identified (Poole).

Louisiana Water-Thrush, *Seiurus motacilla*. Lansdowne, April 23 and nest and 4 eggs at Choptank Creek, Delaware (Carter).

Wilson's Warbler, *Wilsonia pusilla pusilla*. Reading, May 11 (Poole); Glenolden, May 11 (Gillespie).

Hooded Warbler, *Wilsonia citrina*. Reading, May 5 (Poole); Glenolden, April 30 (Gillespie); Moorestown, N. J., May 8 (Mickle).

Redstart, *Setophaga ruticilla*. Vineland, N. J., Aug. 30 (Prince).

Pipit, *Anthus rubescens*. Doylestown, March 5-30 (Mac-Reynolds); Reading, April 5 (Poole); Trappe, March 30 flock of 200 (Miller); Glenolden, May 29, two (Gillespie).

Mockingbird, *Mimus polyglottos polyglottos*. Glenolden, Dec. 15 (Gillespie); Mt. Holly, N. J., May 11, two, one singing (Pumyea); one resident all winter in Cape May (Hand).

Winter Wren, *Nannus hiemalis hiemalis*. New Hope, Nov. 23 and April 1 (Cox); Doylestown, Oct. 3 and Dec. 1 (Mac-Reynolds); Darlington, May 3 (Daley); Ardmore, April 20 (Baily); Frankford, Sept. 20 (Miller); Glenolden, Sept. 21-March 30 (Gillespie); Moorestown, N. J., Oct. 7 (Mickle).

Brown Creeper, *Certhia f. familiaris*. New Hope, Sept. 18–May 3 (Cox); Doylestown, Oct. 6–April 24 (MacReynolds); Ardmore, Oct. 26 (Baily); Darlington, April 30 (Daley); Frankford, Oct. 3–April 13 (Miller); Glenolden, Oct. 5–April 11 (Gillespie); Moorestown, N. J., Sept. 23–April 11 (Mickle); Haddonfield, N. J., April 23 (Tatum).

Red-breasted Nuthatch, *Sitta canadensis*. Ardmore, May 3 (Baily); Haverford, May 4 (Emlen etc.); Collingswood, N. J. May 3–6 (Potter).

Black-capped Chickadee, *Penthestes atricapillus atricapillus*. New Hope, Sept. 29–May 1 (Cox); West Vincent, Nov. 5–March 22 (Lloyd); Doylestown, Dec. 1–Jan. 24 (MacReynolds); Glenolden Nov. 24 (Gillespie).

Ruby-crowned Kinglet, *Regulus calendula calendula*. Doylestown, three on January 1 (MacReynolds).

Golden-crowned Kinglet, *Regulus satrapa satrapa*. New Hope, Nov. 30–March 1 (Cox); Doylestown, Oct. 6–April 21 (MacReynolds); Paoli, Oct. 8 (McCann); Darlington, April 12 (Daley); Frankford, Oct. 7–April 13 (Miller); Glenolden, Oct. 5–April 13 (Gillespie); Moorestown, N. J., Oct. 6–April 11 (Mickle); Mt. Holly, N. J., Jan. 4 three (Pumyea).