

## A LIST OF THE BIRDS SEEN IN MARION COUNTY

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This paper is limited to Marion County and includes the writer's observations over a five-year period from 1926 to 1930<sup>1</sup>. Two hundred and fourteen (214) species are included and the extreme dates on all migratory forms are recorded. The most intensive work has been limited to the spring migration and fall records are somewhat incomplete.

Marion County is rather favorably situated in respect to the summer and winter ranges of a large number of birds. It lies on the northern boundary of the nesting range of many species and, likewise, in the winter, numerous northern dwelling forms range down into central Indiana. The county contains 400 square miles of land, about one-half of which is included in the city of Indianapolis. Cultivated fields, woodlands, and meadows comprise the rest of its territory with the exception of a few small towns.

Marion County is liberally endowed with streams and ponds and these form natural waterways for the numerous waterfowl which migrate through central Indiana. The chief stream is the West Fork of White River which flows in a south-westerly direction through the central part of the county. Big and Little Eagle Creek run down the west side of the county emptying into White River in south Indianapolis, while Fall Creek drains the north-eastern part of the county above its entrance into White River below Riverside Park. There are numerous small streams in the county which attract land birds, but are seldom visited by waterfowl.

Bacon's Swamp in northeastern Indianapolis has been a splendid spot for both water and landbirds in the past, but a recent real estate project in that section has enveloped it and it is doomed to disappear as a bird refuge unless the land is bought up and set aside for that purpose. This swamp is the largest body of still water in the county. There are no lakes of any consequence with the exception of Indian Lake lying north-east of Fort Benjamin Harrison. It may be a good place for ducks, but the writer has never done field work in that region.

The fact that Indianapolis covers about one-half of the entire area has naturally affected the bird life of the county. The protection against hunting which the city offers to game birds is offset by the fact that certain forms are driven to the surrounding rural districts because their natural habitats are destroyed.

It may be worth-while to mention a few of the choice bird habitats in the county. A favorite territory lies along White River from Maywood (just south of Indianapolis) to the southern border of the county. There are numerous river ponds in this region and they afford excellent feeding grounds for migrating ducks. White River, near the north county line, is also an excellent place for waterfowl. Within Indianapolis, Riverside Park offers protection to both land and water forms. White River is also good in the region of the Warfleigh Bridge.

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For nesting birds, especially warblers, the Boy Scout Reservation is probably the best locality in the county. Here are found heavily wooded hills and dense overgrown ravines made by small brooks which empty into Fall Creek. This habitat offers excellent nesting sites for Louisiana water-thrushes, oven-birds, and Kentucky warblers and these birds are seldom found elsewhere in the summer. The Scout Camp is also an excellent place for migrating land birds of all kinds, and its nearest rival is the Butler University campus. There, warblers are found in profusion in early May and September and often fifteen to twenty different species can be identified in a single day.

The various species and the status of each in the county, according to the author's observations will now be considered.

The nomenclature for the most part follows the "Handbook Of Birds Of Eastern North America," by Frank M. Chapman, revised edition, 1912.

\*Indicates that the nomenclature follows recent changes as illustrated by "Birds of Massachusetts And Other New England States," by Edward Howe Forbush, Vols. I-III, 1925-1929.

Explanation of abbreviations:

- P.R.—Permanent Resident.
- S.R.—Summer Resident.
- W.R.—Winter Resident.
- T.V.—Transient Visitor.
- W.V.—Winter Visitor.

1. (3) *Colymbus auritus* Linn. Horned Grebe. Rare T.V., April 2-15; Sept. 27, 1930 (1 seen).
2. (4) *Colymbus nigricollis californicus* (Heerm.). Eared Grebe. Occasional T.V., April 9, 1927. Two seen with a Horned Grebe.
3. (6) *Podilymbus podiceps* (Linn.). Pied-billed Grebe. Common T.V., Feb. 15-April 27; Sept. 20-Nov. 8.
4. (7) *Gavia immer* (Brunn.). Loon. V. Rare T.V., May 12, 1928 (1 seen).
5. (51) *Larus argentatus* Pont. Herring Gull. Uncommon T.V., in spring, Feb. 8-April 7; no fall records.
6. (54) *Larus delawarensis* Ord. Ring-billed Gull. V. Rare T.V., March 19, 1927 (1 seen); Feb. 4, 1929 (2 seen); Dec. 17, 1928 (1 seen).
7. (70) *Sterna hirundo* Linn. Common Tern. V. Rare T.V., Sept. 23, 1930 (1 seen).
- 8\*. (77) *Chlidonias nigra surinamensis* (Gmel.). Black Tern. V. Rare T.V., May 23, 1927 (common); Sept. 27, 1930 (1 seen).
- 9\*. (120) *Phalacrocorax auritus auritus* (Less.). Double-crested Cormorant. V. Rare T.V., April 17, 1927 (1 seen); April 2, 1928 (1 seen); Sept. 27, 1930 (29 in one flock).
- 10\*. (129) *Mergus americanus* Cass. Merganser. Common T.V., may winter, Feb. 3-May 1; Oct. 26-Dec. 22.
- 11\*. (130) *Mergus serrator* Linn. Red-breasted Merganser. Uncommon T.V. in spring, Feb. 11-April 28; no fall records. Common in 1928.
12. (131) *Lophodytes cucullatus* (Linn.). Hooded Merganser. V. Rare T.V., March 23-May 4; Nov. 23, 1930 (2 males seen).
- 13\*. (132) *Anas platyrhynchos* Linn. Mallard. V. Common T.V., may winter, Feb. 3-May 12; Sept. 27-Dec. 17.

14. (133) *Anas rupripes* Brewst. Black Duck. Common T.V., may winter, Feb. 3-May 5; Nov. 3-Dec. 17.
15. (135) *Chaulelasmus streperus* (Linn.). Gadwall. Occasional T.V., March 27, 1927 (1 male); Oct. 18, 1930 (a pair).
16. (137) *Mareca americana* (Gmel.). Baldpate. F. Common T.V., in spring; Feb. 22-April 28; Oct. 18, 1930 (1 male).
17. (139) *Nettion carolinense* (Gmel.). Green-winged Teal. Uncommon T.V., Feb. 17-April 21; Oct. 18-Nov. 8.
18. (140) *Querquedula discors* (Linn.). Blue-winged Teal. V. Common T.V., March 29-May 17; Sept. 27-Oct. 18.
19. (142) *Spatula clypeata* (Linn.). Shoveller. F. Common T.V. in spring, March 8-May 5; no fall records.
- 20\*. (143) *Dafila acuta tzitzihoa* (Vicill.). American Pintail. Common T.V., Feb. 3-April 1; Oct. 18-Dec. 17.
21. (144) *Aix sponsa* (Linn.). Wood Duck. Rare S.R., Common T.V., March 10-Oct. 26. Saw two females with young on June 2, 1928.
22. (146) *Marila americana* (Eyt.). Redhead. V. Rare T.V., March 10-April 23; no fall records.
- 23\*. (147) *Marila valisineria* (Wils.). Canvas-back. V. Rare T.V., Feb. 12-March 27. More common in 1926.
- 24\*. (148) *Marila marila* (Linn.). Scaup Duck. V. Rare T.V., Feb. 13, 1926 (1 male); Feb. 27, 1927 (a pair).
25. (149) *Marila affinis* (Eyt.). Lesser Scaup Duck. Abundant T.V., Jan. 4-May 22; Oct. 18-Nov. 23. The most common duck within the limits of Indianapolis.
26. (150) *Marilla collaris* (Donov.). Ring-necked Duck. F. Common T.V., in spring, Feb. 27-April 17; no fall records.
- 27\*. (151) *Glaucionetta clangula americana* (Bonap.). Golden-eye. Uncommon T.V., in spring, Feb. 3-May 4; no fall records.
- 28\*. (153) *Charitonetta albeola* (Linn.). Buffle-head. V. Rare T.V., March 8-April 14; no fall records.
- 29\*. (154) *Clangula hyemalis* (Linn.). Old-squaw. Rare T.V., Feb. 3-March 16; no fall records.
30. (167) *Erisimatura jamaicensis* (Gmel.). Ruddy Duck. V. Rare T.V., March 6-April 5; Nov. 23, 1929, (1 male).
31. (172) *Branta canadensis canadensis* (Linn.). Canada Goose. F. Common T.V., in fall, March 2, 1929 (1 seen on White River); Oct. 23-Nov. 8.
- 32\*. (190) *Botaurus lentiginosus* (Montag.) Bittern. Rare S.R., F. Common T.V., March 31—.
33. (191) *Ixobrychus exilis* (Gmel.). Least Bittern. V. Rare T.V., May 14, 1927 (3 seen at Bacon's swamp.)
34. (194) *Ardea herodias herodias* Linn. Great Blue Heron. F. Common S.R., Common T.V., March 27-Dec. 3.
- 35\*. (200) *Florida caerulea* (Linn.). Little Blue Heron. Occasional T.V., April 10, 1926 (1 seen).
- 36\*. (201) *Butorides virescens virescens* (Linn.). Green Heron. Common S.R., Abundant T.V., April 14-Oct. 2.
37. (202) *Nycticorax nycticorax naevius* (Bodd.). Black-crowned Night Heron. F. Common S. R., March 24-Oct. 4.

38. (208) *Rallus elegans* Aud. King Rail. F. Common T.V., in spring, April 22-May 12; July 23, 1930 (a S.R?).
39. (212) *Rallus virginianus* Linn. Virginia Rail. V. Rare T.V., May 2, 1926 (1 seen); April 22, 1927 (1 seen). Both records at Bacon's Swamp.
40. (214) *Porzana carolina* (Linn.). Sora. F. Common T.V., April 21-May 18; Sept. 27, 1930 (2 seen). Common at Bacon's Swamp in the spring.
41. (221) *Fulica americana* Gmel. Coot. Common T.V., March 19-June 2; Nov. 1-11. Rare in fall of 1930.
- 42\*. (228) *Rubicola minor* (Gmel.). Woodcock. Rare S.R., Uncommon T.V., May 6-Nov. 3.
43. (230) *Gallinago delicata* (Ord.). Wilson's Snipe. Common T.V., March 24-May 3; Sept. 20-Nov. 8.
44. (239) *Prisobia maculata* (Vieill.). Pectoral Sandpiper. Common T.V., in spring, March 16-May 15; Oct. 18-26.
45. (240) *Pisobia fuscicollis* (Vieill.). White-rumped Sandpiper. Occasional T.V., April 10, 1926 (6 seen).
46. (242) *Pisobia minutilla* (Vieill.). Least Sandpiper. F. Common T.V., in spring May 11-22; Sept., 1927, (1 record).
47. (243a) *Pelidna alpina sakhalina* (Vieill.). Red-backed Sandpiper. Occasional T.V., May 22, 1926 (4 seen).
48. (246) *Ereunetes pusillus* (Linn.). Semipalmated Sandpiper. F. Common T.V., in spring, April 24-May 22; Sept., 1927 (one record).
- 49\*. (248) *Crocethia alba* (Pall.). Sanderling. Occasional T.V., May 9, 1926 (5 seen).
50. (254) *Totanus melanoleucus* (Gmel.). Greater Yellow-legs. F. Common T.V. in Spring, April 7-May 1; Oct. 18, 1930 (1 seen).
51. (255) *Totanus flavipes* (Gmel.). Yellow-legs. Common T.V. in spring, March 15-May 15; no fall records.
- 52\*. (256) *Tringa solitaria solitaria* Wils. Solitary Sandpiper. Common T.V., April 5-May 17; July 8.—
53. (258) *Catoptrophorus semipalmatus semipalmatus* (Gmel.). Willet. Occasional T.V., April 24, 1926 (1 seen).
54. (261) *Bartramia longicauda* (Bechst.). Upland Plover. Occasional T.V., April 2, 1927 (20-25 seen in one flock).
55. (262) *Tryngites subruficollis* (Vieill.). Buff-breasted Sandpiper. Occasional T.V., May 22, 1926 (1 seen).
56. (263) *Actitis macularia* (Linn.). Spotted Sandpiper. Common S.R., V. Common T.V., April 5-Oct. 18.
- 57\*. (270) *Squatarola squatarola cyanosuræ* Thayer and Bangs. American Black-bellied Plover. Occasional T.V., April 24, 1926 (30 seen in one flock).
- 58\*. (272) *Pluvialis dominica dominica* (Mull.). Golden Plover. V. Rare T.V., March 27-April 24; no fall records.
- 59\*. (273) *Oryechus vociferus* (Linn.). Killdeer. Common S.R., Abundant T.V., Feb. 5-Nov. 8.
- 60\*. (274) *Charadrius semipalmatus* Bonap. Semipalmated Plover. Uncommon T.V. in spring, May 9-22; no fall records.
61. (289) *Colinus virginianus virginianus* (Linn.). Bob-white. Uncommon P.R., Apparently decreasing in number in the rural districts.
62. (316) *Zenaidura macroura carolinensis* (Linn.). Mourning Dove. V. Common S.R. A few flocks of 20-40 birds winter regularly.

63. (325) *Cathartes aura septentrionalis* Wied. Turkey Vulture. V. Common S.R., Feb. 2-Nov. 8.
64. (331) *Circus hudsonius* (Linn.). Marsh Hawk. Uncommon P.R., Common. T.V.
65. (332) *Accipiter velox* (Wils.). Sharp-shinned Hawk. Rare P.R., Uncommon T.V.
66. (333) *Accipiter cooperi* (Bonap.). Cooper's Hawk. Rare T.V., may nest, Jan. 11-May 15. Sept. 27-Dec. 17.
67. (334) *Astur atricapillus atricapillus* (Wils.). Goshawk. Occasional W.R. A pair wintered below Maywood in 1925-1926. Last seen on April 10, 1923
68. (337) *Buteo borealis borealis* (Gmel.). Red-tailed Hawk. F. Common. S.R., Uncommon W.R.
69. (339) *Buteo lineatus lineatus* (Gmel.). Red-shouldered Hawk. F. Common S.R., Uncommon W.R.
- 70\*. (343) *Buteo platypterus* (Vieill.). Broad-winged Hawk. V. Rare S.R., Uncommon T.V., Feb. 7-Oct. 26.
71. (347a) *Archibuteo lagopus sancti-johannis* (Gmel.). Rough-legged Hawk. V. Rare T.V., Feb. 2-April 24; Nov. 8, 1930 (1 seen).
- 72\*. (360) *Cerchneis sparveria sparveria* (Linn.). Sparrow Hawk. Common P.R.
73. (364) *Pandion haliaëtus carolinensis* (Gmel.). Osprey. V. Rare S.R., Uncommon T.V., April 10-Oct. 4.
- 74\*. (365) *Tyto alba pratincola* (Bonap.). Barn Owl. Rare P.R. (5 records).
75. (366) *Asio wilsonianus* (Less.). Long-eared Owl. V. Rare P.R., May 15, 1927 (a pair with four young).
76. (367) *Asio flammeus* (Pont.). Short-eared Owl. V. Rare P.R., Uncommon T.V., June 4, 1927 (3 young seen).
77. (368) *Strix varia varia* Barton. Barred Owl. Common P.R.
78. (373) *Otus asio asio* (Linn.). Screech Owl. Common P.R.
79. (375) *Bubo virginianus virginianus* (Gmel.). Great Horned Owl. V. Rare P.R. (3 records).
80. (387) *Coccyzus americanus americanus* (Linn.). Yellow-billed Cuckoo. Common S.R., May 10-Sept. 27.
81. (388) *Coccyzus erythrophthalmus* (Wils.). Black-billed Cuckoo. Common T.V., May 8-June 4; —Sept. 27.
- 82\*. (390) *Ceryle alcyon alcyon* (Linn.). Belted Kingfisher. V. Common S.R., Rare W.R.
83. (393) *Dryobates villosus villosus* (Linn.). Hairy Woodpecker. Common P.R.
84. (394) *Dryobates pubescens medianus* (Swains.). Downy Woodpecker. Abundant P.R.
85. (402) *Sphyrapicus varius varius* (Linn.). Yellow-bellied Sapsucker. F. Common T.V. in spring, Feb. 20-30; Oct. 12, 1930 (3 seen).
86. (406) *Melanerpes erythrocephalus* (Linn.). Red-headed Woodpecker. Abundant S. R., Occasional W.R. (1927), April 21-Sept. 30.
87. (409) *Centurus carolinus* (Linn.). Red-bellied Woodpecker. F. Common P.R. Rare in Indianapolis.
88. (412a) *Colaptes auratus luteus* Bangs. Northern Flicker. V. Common S.R., Uncommon W.R.
89. (417) *Antrostomus vociferus vociferus* (Wils.). Whip-poor-will. Rare S.R., May 7—.

90. (420) *Chordeiles virginianus virginianus* (Gmel.). Nighthawk. Common S.R., May 2-Oct. 13.
91. (423) *Chaetura pelagica* (Linn.). Chimney Swift. Common S.R., April 12-Oct. 13.
92. (428) *Archilochus colubris* (Linn.). Ruby-throated Hummingbird. Common S.R., May 1-Sept. 20.
93. (444) *Tyrannus tyrannus* (Linn.). Kingbird. Common S.R., April 17-August 18.
94. (452) *Myiarchus crinitus* (Linn.). Crested Flycatcher. Common S.R., April 23—.
95. (456) *Sayornis phoebe* (Lath.). Phoebe. Common S. R., March 13-Oct. 11.
96. (459) *Nuttallornis borealis* (Swains.). Olive-sided Flycatcher. Occasional T.V., May 26, 1929 (1 seen).
97. (461) *Myiobanes virens* (Linn.). Wood Pewee. Common S.R., May 10-Sept. 27.
- 98\*. (463) *Empidonax flaviventris* (W.M. and S.F. Baird). Yellow-bellied Flycatcher. V. Rare T.V., May 6-18; no fall records.
99. (465) *Empidonax virescens* (Vieill.). Acadian Flycatcher. F. Common S.R., May 10-Sept. 27.
100. (466) *Empidonax trailli trailli* (Aud.). Traill's Flycatcher. F. Common S.R., May 18—.
- 101\*. (467) *Empidonax minimus* (W.M. and S.F. Baird). Least Flycatcher. F. Common T.V., April 17-May 15; —Sept. 27.
102. (474b) *Otocoris alpestris praticola* Hensh. Prairie Horned Lark. F. Common T.V., Jan. 19-May 5; Oct. 1-Dec. 11. May be a very rare P.R.
103. (477) *Cyanocitta cristata cristata* (Linn.). Blue Jay. Common S.R., Uncommon W.R.
104. (488) *Corvus brachyrhynchos brachyrhynchos* Brehm. Crow. Abundant P.R.
105. (493) *Sturnus vulgaris* (Linn.). Starling. Common S.R., Uncommon W.R. My first record in the county for the Starling is Jan. 31, 1927. Since then they have been rapidly increasing in number. Starlings nest in Flicker holes in the big Sycamore trees along White River south of Indianapolis. They migrate through in immense flocks in early March and early October. When migrating the Starling commonly flocks with Grackles, Red winged Blackbirds, Cowbirds, Rusty Blackbirds and even with Crows.
106. (494) *Dolichonyx oryzivorus* (Linn.). Bobolink. F. Common S.R., April 30-Sept. 16.
107. (495) *Molothrus ater ater* (Bodd.). Cowbird. V. Common S.R., March 1-Oct. 18.
108. (498) *Agelaius phoeniceus phoeniceus* (Linn.). Red-winged Blackbird. V. Common S.R., Jan. 20-Nov. 23. A few winter occasionally.
109. (501) *Sturnella magna magna* (Linn.). Meadowlark. V. Common S.R., Rare W.R.
110. (506) *Icterus spurius* (Linn.). Orchard Oriole. V. Rare S.R., F. Common T.V., May 3—.
111. (507) *Icterus galbula* (Linn.). Baltimore Oriole. Common S.R., April 23—.

112. (509) *Euphagus carolinus* (Müll.). Rusty Blackbird. F. Common T.V., Feb. 11-April 10; Oct. 18-29.
113. (511b) *Quiscalus quiscula aeneus* Ridgw. Bronzed Grackle. Abundant S.R., Rare W.R. Fairly common in winter of 1928.
114. (517) *Carpodacus purpureus purpureus* (Gmel.). Purple Finch. Uncommon T.V., Feb. 4-May 10; Sept. 20-Oct. 26.
115. (529) *Astragalinus tristis tristis* (Linn.). Goldfinch. Common S.R., Uncommon W.R.
- 116\*. (533) *Spinus pinus* (Wils.). Pine Siskin. V. Rare T.V., may winter, Jan. 12-April 29; Oct. 27. 1930 (1 seen).
117. (—) *Passer domesticus domesticus* (Linn.). House Sparrow. Abundant P.R.
118. (540) *Pooecetes gramineus gramineus* (Gmel.). Vesper Sparrow. Common S.R., March 19-Oct. 4.
119. (542a) *Passerculus sandwichensis savanna* (Wils.). Savannah Sparrow V. Rare T.V., April 28-May 4. Sept. 27, 1930 (7 seen).
120. (546) *Ammodramus savannarum australis* Mayn. Grasshopper Sparrow. Common S.R., April 8—.
121. (549.1) *Passerherbulus nelsoni nelsoni* (Allen). Nelson's Sparrow. Occasional T.V., Sept. 27, 1930 (1 seen).
122. (552) *Chondestes grammacus grammacus* (Say). Lark Sparrow. V. Rare T.V., April 26, 1930 (1 seen).
123. (554) *Zonotrichia leucophrys leucophrys* (Forst.). White-crowned Sparrow. F. Common T.V., May 1-15; Oct. 4-18.
124. (558) *Zonotrichia albicollis* (Gmel.). White-throated Sparrow. V. Common T.V., March 30-May 26; Sept. 27-Nov. 18.
125. (559) *Spizella monticola monticola* (Gmel.). Tree Sparrow. Common W.R., Nov. 8-April 16.
126. (560) *Spizella passerina passerina* (Bech.). Chipping Sparrow. F. Common S.R., March 24-Oct. 26.
127. (563) *Spizella pusilla pusilla* (Wils.). Field Sparrow. Abundant S.R., March 1-Sept. 27.
128. (567) *Junco hyemalis hyemalis* (Linn.). Slate-colored Junco. V. Common W.R., Oct. 4-May 4.
129. (581) *Melospiza melodia melodia* (Wils.). Song Sparrow. Abundant P.R.
130. (583) *Melospiza lincolni lincolni* (Aud.). Lincoln's Sparrow. Rare T.V. in spring, April 10-May 18; no fall records.
131. (584) *Melospiza georgiana* (Lath.). Swamp Sparrow. Common T.V., March 17-May 11; Sept. 27-Oct. 18.
132. (585) *Passerella iliaca iliaca* (Merr.). Fox Sparrow. Common T.V., Feb. 3-April 15; Oct. 26-Nov. 9.
133. (587) *Pipilo erythrophthalmus erythrophthalmus* (Linn.). Towhee. Common S.R., Feb. 3-Nov. 9. A pair wintered in 1928-1929.
134. (593) *Cardinalis cardinalis cardinalis* (Linn.). Cardinal. V. Common P.R.
- 135\*. (595) *Hedymules ludovicianus* (Linn.). Rose-breasted Grosbeak. Common T.V., May 4-19; Sept. 20-Oct. 4.
136. (598) *Passerina cyanea* (Linn.). Indigo Bunting. Abundant S.R., May 1-Oct. 4.

137. (604) *Spiza americana* (Gmel.). Dickcissel. Common S.R., May 3—.
138. (608) *Piranga erythromelas* Vieill. Scarlet Tanager. Rare S.R., F. Common T.V., April 30-Sept. 27. Nests at the Boy Scout Reservation.
139. (611) *Progne subis subis* (Linn.). Purple Martin. Common S.R., April 10-Aug. 14.
140. (612) *Petrochelidon lunifrons lunifrons* (Say). Cliff Swallow. V. Rare T.V., May 9-15; no fall records.
- 141\*. (613) *Hirundo erythrogastra* Bodd. Barn Swallow. Common S.R., April 9-Oct. 18.
142. (614) *Iridoprocne bicolor* (Vieill.). Tree Swallow. Uncommon T.V. in spring, April 21-May 17; Oct. 18, 1930 (4 seen).
143. (616) *Riparia riparia* (Linn.). Bank Swallow. V. Rare S.R., F. Common T.V., April 9—.
144. (617) *Stelgidopteryx serripennis* (Aud.). Rough-winged Swallow. V. Common S.R., April 19—. More common than the Bank Swallow.
145. (618) *Bombycilla garrula* (Linn.). Bohemian Waxwing. Occasional T.V., May 21, 1926 (1 seen); May 29, 1927 (2 seen).
146. (619) *Bombycilla cedrorum* Vieill. Cedar Waxwing. F. Common S.R., Irregular W.V. Sometimes entirely absent in winter.
147. (622c) *Lanius ludovicianus migrans* Palmer. Migrant Shrike. Uncommon S.R., F. Common T.V., March 20—.
148. (624) *Vireosylva olivacea* (Linn.). Red-eyed Vireo. V. Common S.R., April 28-Sept. 27.
149. (626) *Vireosylva philadelphica* Cass. Philadelphia Vireo. V. Rare T.V., May 1-25; Sept. 17-27.
150. (627) *Vireosylva gilva gilva* (Vieill.). Warbling Vireo. Common S.R., April 21-Sept. 27.
- 151\*. (628) *Lanivireo flavifrons* (Vieill.). Yellow-throated Vireo. V. Rare T.V., April 23-May 7; no fall records.
152. (629) *Lanivireo solitarius solitarius* (Wils.). Blue-headed Vireo. Uncommon T.V., April 29-May 20; Sept. 20-Oct. 11.
153. (631) *Vireo griseus griseus* (Bodd.). White-eyed Vireo. Uncommon S.R., F. Common T.V., April 26—.
154. (636) *Mniotilta varia* (Linn.). Black and White Warbler. V. Rare S.R., Common T.V., April 21-Sept. 27.
155. (637) *Protonotaria citrea* (Bodd.). Prothonotary Warbler. Rare S.R., April 7—.
156. (639) *Helmitheros vermivorus* (Gmel.). Worm-eating Warbler. Rare T.V., may nest, May 8-14; July 11-Sept. 16.
157. (641) *Vermivora pinus* (Linn.). Blue-winged Warbler. Rare S.R., April 19-Oct. 14.
158. (642) *Vermivora chrysoptera* (Linn.). Golden-winged Warbler. Rare T.V., May 1-26; no fall records.
- 159\*. (645) *Vermivora ruficapilla ruficapilla* (Wils.). Nashville Warbler., Common T.V., April 21-May 20; Sept. 27-Oct. 14.
160. (646) *Vermivora celata celata* (Say). Orange-crowned Warbler. Occasional T.V., May 15, 1927 (2 seen); May 20, 1930 (2 seen).
161. (647) *Vermivora peregrina* (Wils.). Tennessee Warbler. Common T.V., May 4-20; Sept. 16-Oct. 14.



- 162\*. (648a) *Compsothlypis americana pusilla* (Wils.). Northern Parula Warbler. V. Rare T.V., May 7, 1927 (3 seen); May 19, 1930 (1 seen); Sept. 20, 1930 (1 seen).
163. (650) *Dendroica tigrina* (Gmel.). Cape May Warbler. F. Common T.V., May 3-21; Sept. 19-Oct. 4.
164. (652) *Dendroica aestiva aestiva* (Gmel.). Yellow Warbler. F. Common S.R., V. Common T.V., April 23—.
165. (654) *Dendroica caerulescens caerulescens* (Gmel.). Black-throated Blue Warbler. Rare T.V., May 5-20; Sept. 16-27.
- 166\*. (655) *Dendroica coronata coronata* (Linn.). Myrtle Warbler. Abundant T.V., April 5-May 22; Sept. 27-Oct. 30.
167. (657) *Dendroica magnolia* (Wils.). Magnolia Warbler. V. Common T.V., May 3-22; Sept. 16-Oct. 4.
168. (658) *Dendroica cerulea* (Wils.). Cerulean Warbler. Rare S.R., May 1—. Nests at the Boy Scout Reservation.
- 169\*. (659) *Dendroica pennsylvanica* (Linn.). Chestnut-sided Warbler. Common T.V., May 1-19; Sept. 20-Oct. 7.
170. (660) *Dendroica castanea* (Wils.). Bay-breasted Warbler. V. Common T.V., May 5-20; Sept. 15-Oct. 11. Abundant in fall of 1930.
171. (661) *Dendroica striata* (Forst.). Black-poll Warbler. Common T.V., May 4-25; Sept. 20-Oct. 9.
172. (662) *Dendroica fusca* (Müll.). Blackburnian Warbler. F. Common T.V., in spring, April 29-May 20; no fall records.
173. (663a) *Dendroica dominica albilora* Ridgw. Sycamore Warbler. F. Common S.R., April 5—.
174. (667) *Dendroica virens* (Gmel.). Black-throated Green Warbler. V. Common T.V., April 25-May 20; Sept. 16-Oct. 14.
- 175\*. (671) *Dendroica vigorsi* (Aud.). Pine Warbler. V. Rare T.V., April 27, 1926 (uncommon); May 11, 1927 (1 seen); Sept. 20, 1930 (1 seen).
176. (672) *Dendroica palmarum palmarum* (Gmel.). Palm Warbler. V. Common T.V., April 23-May 17; Oct. 18-26.
177. (673) *Dendroica discolor* (Vieill.). Prairie Warbler. V. Rare T.V., April 27-30, 1926 (1 seen); May 12, 1928 (1 seen).
178. (674) *Seiurus aurocapillus* (Linn.). Oven-bird. Rare S.R., V. Common T.V., April 30-Oct. 11.
179. (675) *Seiurus noveboracensis noveboracensis* (Gmel.). Water-Thrush. F. Common T.V., April 21-May 15; Sept. 16-27.
180. (676) *Seiurus motacilla* (Vieill.). Louisiana Water-Thrush. V. Rare S.R., Uncommon T.V., April 2—.
181. (677) *Oporornis formosus* (Wils.). Kentucky Warbler. Rare S.R., F. Common T.V., May 1—.
182. (678) *Oporornis agilis* (Wils.). Connecticut Warbler. V. Rare T.V., May 10-20 (3 records); no fall records.
183. (679) *Oporornis philadelphia* (Wils.). Mourning Warbler. Rare T.V., May 12-25; no fall records.
184. (681) *Geothlypis trichas trichas* (Linn.). Maryland Yellow-throat. V. Common S.R., Abundant T.V., April 17-Sept. 27.
185. (683) *Icteria virens virens* (Linn.). Yellow-breasted Chat. F. Common S.R., Common T.V., May 1—.
186. (685) *Wilsonia pusilla pusilla* (Wils.). Wilson's Warbler. F. Common T.V., May 10-20; Sept. 20, 1930 (2 seen).

- 187\*. (686) *Wilsonia canadensis* (Linn.). Canada Warbler. F. Common T.V., May 10-21; Sept. 27, 1930 (1 seen).
188. (687) *Setophaga ruticilla* (Linn.). Redstart. F. Common S.R., V. Common T. V., April 28-Sept. 27.
- 189\*. (697) *Anthus rubescens* (Tunstall). Pipit. F. Common T.V., April 10-May 1; Oct. 18-27.
190. (703) *Mimus polyglottos polyglottos* (Linn.). Mockingbird. V. Rare S.R., May 3—.
191. (704) *Dumetella carolinensis* (Linn.). Catbird. V. Common S.R., April 21-Sept. 27.
192. (705) *Troglodytes rufum* (Linn.). Brown Thrasher. Common S.R., March 31-Sept. 27.
193. (718) *Thryothorus ludovicianus ludovicianus* (Lath.). Carolina Wren. Common P.R.
194. (719) *Thryomanes bewicki bewicki* (Aud.). Bewick's Wren. V. Rare S.R., Common T.V., March 18—.
- 195\*. (721) *Troglodytes aëdon aëdon* Vieill. House Wren. Abundant S.R., April 5-Oct. 4.
196. (722) *Nannus hiemalis hiemalis* (Vicill.). Winter Wren. Uncommon W.R., Oct. 11-April 18.
- 197\*. (724) *Cistothorus stellaris* (Naumann). Short-billed Marsh Wren. Local S.R., V. Rare T.V., April 3-Sept. 27. The Short-billed Marsh Wrens nest in a meadow several miles south of Maywood. Four or five pairs nested there in the summer of 1930. They appear to be very rare elsewhere in the county.
198. (725) *Telmatodytes palustris palustris* (Wils.). Long-billed Marsh Wren. Rare S.R., May 11-Sept. 27.
- 199\*. (726) *Certhea familiaris americana* Bonap. Brown Creeper. Common W.R., Oct. 26-April 23.
200. (727) *Sitta carolinensis carolinensis* Lath. White-breasted Nuthatch. Uncommon S.R., Common W.R.,
201. (728) *Sitta canadensis* Linn. Red-breasted Nuthatch. V. Rare T.V., March 6-May 24; V. Rare W.V., Dec. 24, 1929 (1 seen).
202. (731) *Baeolophus bicolor* (Linn.). Tufted Titmouse. Abundant P.R.
203. (735) *Penthestes atricapillus atricapillus* (Linn.). Chickadee. Occasional W.V.
204. (736) *Penthestes carolinensis carolinensis* (Aud.). Carolina Chickadee. Abundant P.R.
205. (748) *Regulus satrapa satrapa* Licht. Golden-crowned Kinglet. Uncommon W.R., Common T.V., Oct. 11-April 21.
206. (749) *Regulus calendula calendula* (Linn.). Ruby-crowned Kinglet. Common T.V., March 30-May 12; Oct. 4-18.
207. (751) *Polioptila caerulea caerulea* (Linn.). Blue-gray Gnatcatcher. F. Common S.R., Common T.V., April 5—.
208. (755) *Hylocichla mustelina* (Gmel.). Wood Thrush. Common S.R., April 19-Sept. 27.
209. (756) *Hylocichla fuscescens fuscescens* (Steph.). Veery. V. Rare T.V., April 21-May 15; Sept. 27, 1930 (2 seen).
210. (757) *Hylocichla aliciae aliciae* (Baird). Gray-checked Thrush. Uncommon T.V. in spring, May 1-25; no fall records.

211. (758a) *Hylocichla ustulata swainsoni* (Tschudi). Olive-backed Thrush. V. Common T.V., April 22-May 27; Sept. 20-27.
212. (759b) *Hylocichla guttata pallasi* (Cab.). Hermit Thrush. Common T.V., March 6-May 1; Oct. 17-18, 1930 (common).
213. (761) *Planesticus migratorius migratorius* (Linn.). Robin. Abundant S.R., Occasional W.R., Jan. 30-Nov. 8.
214. (766) *Sialia sialis sialis* (Linn.). Bluebird. Common S.R., Feb. 2-Nov. 8.

## UNUSUAL BIRDS SEEN IN JOHNSTON COUNTY

These birds were seen along White River a few miles south of the Marion County line. They were recorded so close to the county and are of such a rare occurrence that the author deems it worth while to mention them.

1. (43) *Larus leucopterus* Faber. Iceland Gull. Occasional T.V., April 2, 1927 (1 seen).

2. (47) *Larus marinus* Linn. Great Black-backed Gull. Occasional T.V., April 2, 1927 (1 seen). The Great Black-backed Gull is probably the outstanding bird in the entire list from the point of view of rareness. It was seen with seven Herring Gulls and one Iceland Gull. They were on the ground in a plowed field and excellent comparisons in regard to size and color were obtained. The Great Black-backed Gull was an immature bird and had a band of buff spots across its breast. Its larger size and heavier build were very conspicuous.

3. (300) *Bonasa umbellus umbellus* (Linn.). Ruffed Grouse. Occasional T.V., Oct. 11, 1930 (1 seen).

It seems necessary to explain the significance of the terms which are used in regard to frequency. In general, it is obvious that most waterfowl and certain land birds demand habitats near large streams and ponds and will seldom be found elsewhere. This fact must be taken into consideration in determining the frequency of such species. The terminology used in this paper is based on a percentage system. However, such a system should not be rigidly adhered to, and only field trips covering a region where the habitat is of such a nature that the bird would be likely to occur, were considered. Furthermore the writer has limited himself to those field trips which lasted at least half a day and covered several miles of good bird territory.

In view of these facts the following scale has been drawn up on a percentage basis:

Abundant.....	90-100
V. Common.....	80-90
Common.....	60-80
F. Common.....	30-60
Uncommon.....	10-30
Rare.....	5-10
V. Rare.....	less than 5.

"Occasional" is difficult to classify on a percentage basis. It has been interpreted to mean that the region in which the bird has been seen lies on the border of its range and consequently such species may not be recorded over a period of several years.

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