

In the collection of Dr. A. Miller, of North Manchester, Ind., there are probably 175 species of parasitic fungi and perhaps twenty-five species of the Slime Moulds, if I may, for convenience, still place them among the fungi.

Nearly a complete list of the Phanerogams may be found in the herbarium of Mr. John N. Jenkins, North Manchester, Ind., who has done valuable work in collecting these forms.

BIRDS OF WABASH COUNTY. BY ALBERT B. ULREY AND WILLIAM O. WALLACE.

The present list enumerates 188 species of the birds of Wabash County. Under each species are given notes concerning its abundance and in some instances we have incorporated other observations which pertain to the life-history of the species.

Most of the work was done at intervals during the years 1890 to 1893. Part of the observations were made in the extreme northern portion of the county in the Eel River valley, near North Manchester. About an equal amount of work was done in the Wabash valley near Wabash, and some observations were made nine miles north of Lagro by Mr. Orrin Ridgley.

We have included in the list only those species identified by us, and with only a few exceptions skins of each species have been preserved. We have noted the breeding habits of those species only which came under our own observation. We may expect to find two hundred or more birds within the county. The list is quite complete in warblers, containing 31 species, one of them the very rare *Dendroica kirtlandi*. Perhaps three more would complete the list to be found in the county. We shall probably find *Protonotaria citrea*, *Helminthorus verivivorus* and *Geothlypis formosa*. The deficiencies in our list are mainly among the water birds. Our only large stream, the Wabash, flows nearly eastward here and is not rich in migrating water birds. The region in the northwestern part of the county, containing numerous small lakes, has not contributed many species to our list, because only a few of the rarer birds taken there by the hunters have been identified by us.

The Wabash River flows in a northerly direction to Logansport, where it bends abruptly to the east and continues in this direction through the county. Near Wabash one of the tributaries of the Wabash River flows nearly due southward. A heavy growth of timber extends along the stream northward some distance from the Wabash and ends abruptly at a large tract of land under cultivation. During the spring migrations the birds collect in the north edge of this

woodland in great numbers. It seems that in their northward migrations along the Wabash River the birds attempt to follow the wooded region of the smaller stream instead of pursuing the eastward course of the Wabash, and on reaching the open fields find themselves in a sort of trap. It was at this place that a large per cent. of the birds inhabiting the woodland were taken.

1. *Podylimbus podiceps* Linnæus. Pied-billed Grebe. Rather common migrant.

2. *Colymbus auritus* L. Horned Grebe. Two specimens were taken November 27, 1895, after a severe storm.

3. *Urinator imber* Gunner. Loon. Great Northern Diver. Not infrequently taken on the lakes. Five or six were taken on the Wabash River near Wabash.

4. *Larus argentatus smithsonianus* Coues. American Herring Gull. One specimen taken as it flew over the house four miles west of Wabash. The specimen was taken by Mr. E. Wright and is now in his possession.

5. *Larus philadelphie* Ord. Bonaparte's Gull. One specimen taken on Lake Maxinkuckee. It will probably be taken here.

6. *Sterna forsteri* Nutt. Forster's Tern. Several specimens were taken on Lake Maxinkuckee.

7. *Hydrochelidon nigra surinamensis* Gmel. Black Tern. Probably taken here. We have a specimen from the same place as the last.

8. *Phalacrocorax dilophus* Sw. and Rich. Double-crested Cormorant. A male and female were taken on Long Lake, November 15, 1890.

9. *Merganser americanus* Cassin. American Merganser. Not uncommon migrant and winter resident.

10. *Lophodytes cucullatus* Linnæus. Hooded Merganser. Rare. Three specimens taken.

11. *Anas boschas* Linnæus. Mallard. Abundant migrant; sometimes taken in midwinter, and three were killed July 3, 1892, by Mr. E. Wright. Hunters report its breeding, but we have not observed it.

11a. *Anas obscura* Gmelin. Black Duck. One specimen taken at Wabash.

12. *Anas discors* Linnæus. Blue-winged Teal. Only one specimen. It was taken April 15, 1891.

13. *Aix sponsa* Linnæus. Wood Duck. Abundant summer resident. I have taken the young when still unable to fly. Wallace.

13a. *Spatula clypeata* L. Spoon Bill. Only one specimen taken. Wabash.

14. *Aythya affinis* Eyt. Lesser Scaup Duck. A specimen was taken on Long Lake, November 15, 1890.

15. *Charitonetta albeola* Linnæus. Butter Ball. One specimen from Long Lake. Occasionally killed on Eel River by hunters.
16. *Branta canadensis* Linnæus. Canada Goose. One specimen taken; frequently seen migrating.
17. *Olor columbianus* Ord. Whistling Swan. One specimen taken November 15, 1894, on Long Lake.
18. *Botaurus lentiginosus* Montag. American Bittern. Several specimens known to have been taken.
19. *Botaurus exilis* Gmelin. Least Bittern. Two specimens taken, April 19 and May 1, 1894.
20. *Ardea herodias* Linnæus. Great Blue Heron. Common summer resident.
21. *Ardea egretta* Linnæus. American Egret. A specimen taken just beyond the north line of Wabash County, in Kosciusko County.
22. *Ardea virescens* Linnæus. Green Heron. Abundant summer resident. Breeds.
23. *Nycticorax nycticorax nevius* Bodd. Black-crowned Night Heron. Two specimens taken. One at North Manchester and one at Wabash.
24. *Rallus virginianus* Linnæus. Virginia Rail. One specimen taken at Rock Lake, in Fulton County just across the line, September 1, 1894.
25. *Porzana carolina* Linnæus. Carolina Rail. Not infrequently taken by hunters.
26. *Fulica americana* Gmel. American Coot. Abundant migrant.
27. *Philohela minor* Gmel. American Woodcock. Not very common.
28. *Gallinago delicata* Ord. Wilson's Snipe. I took a specimen January 1, 1892, and the same winter two were killed between December 25th and January 1 by a friend of mine. I have seen them in midsummer. Wallace.
29. *Tringa maculata* Vieillot. Jack Snipe. Very common during migrations, especially in September. It may be found at this time in great abundance along the Wabash River in company with the Solitary Tattler and Killdeer.
30. *Tringa minutilla* Vieillot. Least Sandpiper. Rare. One specimen taken from a flock of Solitary Tattlers, August 29, 1893.
31. *Tringa bairdii* Cones. Baird's Sandpiper. Rare. Only one specimen taken. This is apparently the only record of the bird in the State. [Proc. Ind. Acad. Sci. 1893, p. 118].
32. *Totanus melanoleucus* Gmelin. Greater Yellow-legs. I have never seen this bird except on September 24 and 25, 1893, when I observed a number along the river, three of which I shot. Wallace.

33. *Totanus solitarius* Wilson. Solitary Tattler. Very common summer resident. Breeds.
34. *Bartramia longicauda* Bechst. Upland Plover. One specimen taken from a flock of three.
35. *Actitis macularia* Linnæus. Spotted Sandpiper. Very common summer resident. Breeds.
36. *Egialites vocifera* Linnæus. Killdeer. Abundant summer resident. Breeds.
37. *Colinus virginianus* Linnæus. Bob-white. Formerly very abundant, but much less so since the winter of 1892-3, when they were destroyed in great numbers by the severe cold and snow.
38. *Bonasa umbellus* Linnæus. Pheasant. Formerly common, now becoming rare.
39. *Tympanuchus americanus* Reich. Prairie Hen. Occasionally taken on the prairie region near Wabash.
40. *Meleagris gallopavo* Linnæus. Wild Turkey. Formerly common, now probably extinct. The last one known to have been taken was in 1880.
41. *Ectopistes migratorius* Linnæus. Wild Pigeon. Formerly abundant, but none have been seen recently.
42. *Zenaidura macroura* Linnæus. Turtle Dove. Very common resident. Breeds.
43. *Cathartes aura* Linnæus. Turkey Buzzard. Abundant summer resident. Breeds in hollow logs, trees, etc.
44. *Circus hudsonius* Linnæus. Marsh Hawk. Rather common about prairie regions. Extremely variable in color. Breeds.
45. *Accipiter cooperi* Bonaparte. Cooper's Hawk. Common. Probably our most common injurious hawk.
46. *Buteoborealis* Gmelin. Red-tailed Hawk. Abundant resident. Breeds.
47. *Buteolineatus* Gmelin. Red-shouldered Hawk. One specimen taken.
48. *Buteolatissimus* Wilson. Broad-winged Hawk. Two specimens taken.
49. *Falco sparverius* Linnæus. American Sparrow Hawk. Quite abundant resident. Breeds.
50. *Strix pratincola* Bonaparte. American Barn Owl. A single specimen taken by Mr. Frank Bell at North Manchester.
51. *Asio wilsonianus* Less. American Long-eared Owl. A specimen was taken near the north county line. It is in the collection of Mr. M. L. Galbreath.
52. *Asio accipitrinus* Pallas. Short-eared Owl. Four specimens taken at Wabash and one just north of the county line in Whitley County.

53. *Syrnium nebulosum* Forst. Barred Owl. Quite abundant resident.
54. *Nyctala acadica* Gmelin. Saw-whet Owl. One specimen taken November 20, 1894.
55. *Megascops asio* Linnaeus. Screech Owl. Abundant, both red and gray phases.
56. *Bubo virginianus* Gmelin. Great Horned Owl. Abundant resident. Breeds.
57. *Nyctea nyctea* Linnaeus. Snowy Owl. A specimen of this owl was taken near Roann, probably during the winter of 1891-2, another near North Manchester during the winter of 1893 and one in 1894.
58. *Coccyzus americanus* Linnaeus. Yellow-billed Cuckoo. Abundant summer resident. Breeds.
59. *Coccyzus erythrophthalmus* Wilson. Black-billed Cuckoo. One or two specimens taken. Perhaps rather common.
60. *Ceryle alcyon* Linnaeus. Belted Kingfisher. Abundant summer resident. Breeds.
61. *Dryobates villosus* Linnaeus. Hairy Woodpecker. Abundant resident.
62. *Dryobates pubescens* Linnaeus. Downy Woodpecker. Abundant resident. Breeds.
63. *Sphyrapicus varius* Linnaeus. Yellow-bellied Woodpecker. Common migrant.
64. *Ceophloeus pileatus* Linnaeus. Pileated Woodpecker. Formerly common, but none have been seen recently.
65. *Melanerpes erythrocephalus* Linnaeus. Red-headed Woodpecker. Abundant, some years resident. Breeds.
66. *Melanerpes carolinus* Linnaeus. Red-bellied Woodpecker. Abundant resident, more common in winter.
67. *Colaptes auratus* Linnaeus. Flicker. Abundant resident. Breeds.
68. *Antrostomus vociferus* Wilson. Whip-poor-will. Abundant summer resident.
69. *Chordeiles virginianus* Gmelin. Night Hawk. Common summer resident, more common in late summer.
70. *Chetura pelagica* Linnaeus. Chimney Swift. Abundant summer resident. Breeds.
71. *Trochilus colubris* Linnaeus. Ruby-throated Humming-bird. Common summer resident. Breeds. On May 19, 1894, two were found dead after a few days cold weather.

72. *Tyrannus tyrannus* Linnaeus. Kingbird. Very common summer resident. Breeds.
73. *Myiarchus cinerascens* Linnaeus. Crested Fly-catcher. Common summer resident. Breeds.
74. *Sayornis phoebe* Latham. Phoebe. Abundant summer resident. Breeds.
75. *Coutopus virens* Linnaeus. Wood Pewee. Very common summer resident. Breeds.
76. *Empidonax flaviventris* Baird. Yellow-bellied Fly-catcher. Not very common migrant.
77. *Empidonax acadicus* Gmelin. Acadian Fly-catcher. A common migrant.
78. *Empidonax minimus* Baird. Least Fly-catcher. Not very common migrant.
79. *Otocorys alpestris praticola* Hensh. Prairie Horned Lark. Resident. Breeds. More abundant during severe cold in winter.
80. *Cyanocitta cristata* Linnaeus. Blue Jay. Abundant resident. Very destructive to young birds and eggs.
81. *Corvus americanus* Aud. American Crow. Abundant resident. Breeds.
82. *Dolichonyx oryzivorus* Linnaeus. Bob-o-link. Summer resident. Breeds. Formerly rare or wanting. Becoming more common every summer.
83. *Molothrus ater* Bodd. Cow bird. Abundant summer resident.
84. *Agelaius phoeniceus* Linnaeus. Red-winged Blackbird. Abundant summer resident breeding in swamps.
85. *Sturnella magna* Linnaeus. Meadow Lark. Common summer resident and often seen in mid-winter. Breeds.
86. *Icterus spurius* Linnaeus. Orchard Oriole. Common summer resident. Breeds.
87. *Icterus galbula* Linnaeus. Baltimore Oriole. Probably more abundant than the last species. Breeds.
88. *Scolecophagus carolinus* Müll. Rusty Blackbird. Rather common migrant.
89. *Quiscalus quiscula inuus* Ridgway. Crow Blackbird. Abundant summer resident, sometimes seen in mid-winter.
90. *Coccythraustes respertina* Coop. Evening Grosbeak. Two pair were taken just beyond the north county line in Whitley County, one pair of which is in the collection of Mr. M. L. Galbreath, Collamer, Ind.

91. *Carpodacus purpureus* Gmel. Purple Finch. Migrant, not very common.

92. *Loxia curvirostra minor* Brehm. American Crossbill. Two specimens seen September 11, 1894, in the cemetery at Wabash.

93. *Acanthus linaria* Linnaeus. Redpoll Linnet. Several flocks were seen during the winter of 1889-90. This is the only time they have been noted in the county except a record of the same date by Mr. D. C. Ridgley, nine miles north of Lagro.

94. *Spinis tristis* Linnaeus. American Goldfinch. Abundant resident. Breeds.

95. *Spinus pinus* Wils. Pine Siskin. One shot from a flock of goldfinches which came to feed on the mulleins in our yard January 10, 1892. (Wallace.)

96. *Calcarius lapponicus* Linnaeus. Lapland Longspur. This bird was first taken by Mr. Orrin Ridgley in the fall of 1891. At Wabash one was taken in 1892, and during the winter of 1893-94 they were common, coming in September and remaining until March 15. All were in company with Horned Larks.

97. *Pooecetes gramineus* Gmel. Bay-winged Bunting. Very abundant summer resident.

98. *Passer domesticus* Linnaeus. European House Sparrow. "English Sparrow." Very abundant resident. Not so abundant as in 1892. A great many were destroyed during the winter of 1892-93.

99. *Anmodramus sandwichensis saranna* Wils. Savanna Sparrow. Migrant, not common.

100. *Anmodramus savannarum passerinus* Wils. Grasshopper Sparrow. Abundant summer resident. Breeds.

101. *Chondestes grammacus* Say. Lark Sparrow. Not very common summer resident. Breeds. More common during migrations.

102. *Zonotrichia leucophrys* Forst. White-crowned Sparrow. Abundant migrant, occasionally seen as late as June 10.

103. *Zonotrichia albicollis* Gmel. White-throated Sparrow. Much more abundant than the last species. Its peculiar note, once heard, is not readily forgotten.

104. *Spizella monticola* Gmel. Tree Sparrow. Abundant winter resident.

105. *Spizella socialis* Wils. Chipping Sparrow. Very common summer resident. Breeds.

106. *Spizella pusillo* Wils. Field Sparrow. Abundant summer resident. Breeds.

107. *Junco hyemalis* Linnæus. Slate-colored Junco. Snowbird. Common winter resident, but more abundant in fall and spring.
108. *Melospiza fasciata* Gmel.. Song Sparrow. Abundant resident. Breeds.
109. *Melospiza georgiana* Lath. Swamp Sparrow. Migrant, not common.
110. *Passerella iliaca* Merr. Fox Sparrow. Common early migrant.
111. *Pipilo erythrophthalmus* Linnæus. Towhee. Chewink. Common summer resident. Breeds. A few remain over winter.
112. *Cardinalis cardinalis* Linnæus. Cardinal Grosbeak. A common resident, less so than formerly. Breeds.
113. *Habia ludroiciana* Linnæus. Rose-breasted Grosbeak. Summer resident, sometimes abundant and sometimes wanting. Breeds.
114. *Passerina cyanea* Linnæus. Indigo Bunting. Very common summer resident. Breeds.
115. *Spiza americana* Gmel. Black-throated Bunting. Very abundant summer resident. Breeds.
116. *Piranga erythromelas* Vieill. Scarlet Tanager. Common summer resident. Breeds.
117. *Progne subis* Linnæus. Purple Martin. Summer resident, abundant in cities. Breeds.
118. *Petrochelidon lunifrons* Say. Cliff Swallow. Summer resident, breeds, but is not so common as formerly. It has been driven out by the English Sparrow.
119. *Chelidon erythrogaster* Bodd. Barn Swallow. Abundant summer resident. Breeds.
120. *Tachycineta bicolor* Vieillot. Tree Swallow. Not often seen. They were observed in some abundance in the fall of '93.
121. *Clivicola riparia* Linnæus. Bank Swallow. Common along the Wabash River. Breeds.
122. *Stelgidopteryx serripennis* Aud. Rough-winged Swallow. Only two specimens taken.
123. *Ampelis garrulus* Linnæus. Bohemian Waxwing. A specimen was taken near the Wabash County line and is now in the collection of Mr. M. L. Galbreath.
124. *Ampelis cedrorum* Vieill.. Cedar Bird. Common resident. Breeds late in summer.
125. *Lanius borealis* Vieill. Northern Shrike. Butcher Bird. Winter resident, not abundant.

126. *Lanius ludovicianus excubitorides* Swainson. White-rumped Shrike. Common summer resident. Breeds. The typical species may also be found here.
127. *Vireo olivaceus* Linnaeus. Red-eyed Vireo. Abundant summer resident. Breeds.
128. *Vireo philadelphicus* Cassin. Philadelphia Vireo. Rather rare migrant.
129. *Vireo gilvus* Vieill. Warbling Vireo. Common summer resident. Breeds.
130. *Vireo flavifrons* Vieill. Yellow-throated Vireo. Abundant migrant.
131. *Vireo solitarius* Wils. Blue-headed Vireo. Migrant; not common.
132. *Mniotilta varia* Linnaeus. Black and White Warbler. Abundant in woodland during migrations.
133. *Helminthophila pinus* Linnaeus. Blue-winged Warbler. Summer resident, never very common. Breeds.
134. *Helminthophila chrysoptera* Linnaeus. Golden-winged Warbler. Migrant; not so common as the last.
135. *Helminthophila ruficapilla* Wils. Nashville Warbler. An abundant migrant.
136. *Helminthophila celeta* Say. Orange-crowned Warbler. Rare. One specimen taken May 15, 1892.
137. *Helminthophila peregrina* Wils. Tennessee Warbler. Abundant migrant; most common in fall, when they may be found in great abundance along the rivers.
138. *Compothlypis americana* Linnaeus. Parula Warbler. A rare migrant; two specimens taken.
139. *Dendroica tigrina* Gmel. Cape May Warbler. Migrant; not common.
140. *Dendroica aestiva* Gmel. Yellow Warbler. Very common summer resident. Breeds.
141. *Dendroica cerulea* Gmel. Black-throated Blue Warbler. Migrant; common. In the fall of 1893 it was probably our commonest warbler. It is fond of the dense woodland.
142. *Dendroica coronata* Linnaeus. Yellow-rumped Warbler. The earliest of the warblers to arrive and the last to go in the fall. It is probably our most abundant warbler.
143. *Dendroica maculosa* Gmel. Magnolia Warbler. Not very common. Its habits of seclusion make it seem less common than others of equal abundance.
144. *Dendroica cerulea* Wils. Cerulean Warbler. Rather common. So far it has been found only during the migrating season.

145. *Dendroica pennsylvanica* Linnaeus. Chestnut-sided Warbler. Common migrant.

146. *Dendroica castanea* Wils. Bay-breasted Warbler. Not common; most frequently seen in the fall.

147. *Dendroica striata* Forst. Black-poll Warbler. Rather rare migrant.

148. *Dendroica blackburniae* Gmel. Blackburnian Warbler. Abundant migrant.

149. *Dendroica dominica albiflora* Baird. Sycamore Warbler. Rather rare migrant.

150. *Dendroica virens*. Gmel. Black-throated Green Warbler. Very abundant migrant.

151. *Dendroica vigorsii* Aud. Pine-creeping Warbler. Only two specimens taken in the county.

152. *Dendroica kirtlandi* Baird. Kirtland's Warbler. The only specimen known in the State was taken May 4, 1892. This is the twenty-second specimen reported from North America. Little is known of its life history. I took it in a thicket. It was alone, there being no other birds in the near vicinity of it. It seemed to be an active fly catcher, not having the motions of the other *Dendroica*, being less active. It would dart off after an insect and then return to the same perch. Another specimen was taken May 7, 1895. Early in the morning I heard a bird singing in the thicket of plum trees near the house. The song was strange to me, and consisted of a loud ringing note repeated three times in quick succession, suggesting that of the Wrens or Maryland Yellow Throat. I did not go to look for it at once, but as it continued singing for some time I finally got my gun and went to look for it. It had flown over into the orchard then, but soon returned to the plum thicket and was constantly uttering that peculiar note. I finally caught sight of it and watched it for some time, not thinking of its being the rare *kirtlandi*. It moved with the grace and ease of a vireo or fly-catcher. Wallace. [Proc. Ind. Academy of Science. 1893, pp. 119, 120].

153. *Dendroica discolor* Vieill. Prairie Warbler. One specimen was taken May 2, 1892.

154. *Dendroica palmarum* Gmel. Red poll Warbler. Abundant migrant.

155. *Seiurus aurocapillus* Linnaeus. Oven-bird. Very common summer resident.

156. *Seiurus noveboracensis* Gmel. Short-billed Water Thrush. Rather rare migrant.

157. *Seiurus motacilla* Vieill. Large-billed Water Thrush. Summer resident; more common than the last. Arrives as early as April 3.

158. *Geothlypis agilis* Wils. Connecticut Warbler. Only one specimen taken.
159. *Geothlypis philadelphia* Wils. Mourning Warbler. Found in dense thickets. It was rather common in the spring of 1892, but has not been seen since.
160. *Geothlypis trichas* Linnæus. Maryland Yellow-throat. Abundant summer resident.
161. *Icteria virens* Linn. Yellow-breasted Chat. Summer resident, not common.
162. *Sylvania mitrata* Gmel. Hooded Warbler. One specimen was taken September 13, 1893.
163. *Sylvania pusilla* Wils. Black-capped Yellow Warbler. Three specimens were seen during the spring of 1892, but it has not been noted since.
164. *Sylvania canadensis* Linnæus. Canadian Fly-catching Warbler. A common migrant.
165. *Setophiga ruticilla* Linnæus. American Redstart. Summer resident, but much more common during migrations.
166. *Anthus pennsylvanicus* Lath. American Titlark. A migrant of irregular occurrence, but in some seasons very abundant.
167. *Galeoscoptes carolinensis* Linnæus. Cat-bird. Abundant summer resident. Breeds.
168. *Harporhynchus rufus* Linnæus. Brown Thrasher, Brown Thrush. Abundant summer resident.
169. *Thryothorus ludovicianus* Lath. Carolina Wren. Rather rare resident. Some seasons none are seen.
170. *Thryothorus bewickii* Aud. Bewick's Wren. Rather common summer resident.
171. *Troglodytes aedon* Vieill. House Wren. Common summer resident. Breeds.
172. *Troglodytes hyemalis* Vieill. Winter Wren. Common migrant. Probably some remain throughout the winter.
173. *Certhia familiaris americana* Bonap. Brown Creeper. Common migrant. Occasionally seen in midwinter.
174. *Sitta carolinensis* Lath. White-breasted Nuthatch. Common resident.
175. *Sitta canadensis* Linnæus. Red-breasted Nuthatch. One specimen taken Sept. 15th, 1891.
176. *Parus bicolor* Linnæus. Tufted Titmouse. Very common resident.

177. *Parus atropillis* Linnaeus. Black-capped Chickadee. Abundant winter resident.
178. *Regulus satrapa* Licht. Golden-crowned Kinglet. Common winter resident.
179. *Regulus calendula* Linnaeus. Ruby-crowned Kinglet. Common migrant.
180. *Poliophtila coerules* Linnaeus. Blue-gray Gnatcatcher. Common summer resident.
181. *Turdus mustelinus* Gmel. Wood Thrush. Common summer resident.
182. *Turdus fuscescens* Steph. Wilson's Thrush. Migrant. Not so common as the preceding.
183. *Turdus ustulatus swainsonii* Cab. Olive-backed Thrush. Rather common migrant.
184. *Turdus aonalaschkei pallasii* Cab. Hermit Thrush. Common migrant. Our most abundant Thrush.
185. *Merula migratoria* Linnaeus. American Robin. Very abundant summer resident. Breeds.
186. *Sialia sialis* Linnaeus. Blue Bird. Abundant summer resident. Breeds.

NOTES ON A COLLECTION OF FISHES OF DUBOIS COUNTY, INDIANA. W. J. MOENKHAUS.

The following list of fishes is offered as a slight addition to our knowledge of the fishes of Indiana. The list is based on a collection made during the second week in September, 1893, in Patoka River and Short Creek near Huntingburg, Dubois County, Indiana. It has been withheld from publication thus long because I have hoped that further work might be done in the same streams, but as each year makes this more improbable, it is perhaps best to publish the list as it is. Very little is known of the fishes of the Patoka River, investigations having been made only near its mouth, at the city of Patoka, by Jordan and Evermann, some years ago. (Jordan, Bull. U. S. Fish Com. VIII, 1890).

The Patoka River flows from east to west across about one-half the width of the State. In its course it passes through the southern part of Orange County and through the middle of Dubois, Pike and Gibson counties, emptying into the Wabash a few miles south of the mouth of the White River. In the vicinity of Huntingburg where it was fished, the channel is from 75 to 100 yards in width. The stream is everywhere obstructed along the banks and oftentimes entirely across