

I have had the opportunity to make a careful study of a series of six normal sets of this species, numbering twenty-two eggs. Three distinct types of coloration are noticeable in comparing the various sets; the ground running from a pure white to a creamy or pinkish tint, marked more or less with lavender, ecru drab, vinaceous—or vinaceous cinnamon,—chestnut, and black; on some the lighter and on others the darker shades predominating. The markings on **one** set are almost wholly black; on another, vinaceous; and **an-** other has a preponderance of lavender. The contour is either ovate or elliptical ovate, and the average measurements of the twenty-two eggs is .81x.58 inch; the largest being .87x.62 inch and the smallest .75x.54 inch.

NOTES ON THE WINTER BIRDS OF WAYNE COUNTY, MICHIGAN.

BRADSHAW H. SWALES.

Since 1890 I have been interested in recording the various species of birds that either remain throughout the winter or appear casually as stragglers. To me this winter bird study has been both interesting and profitable. A tramp through the fields or the woodlands during the winter months possesses a zest in many respects that the balance of the year does not afford, as the bracing air and lack of insect pests more than offsets the cold and the wet. The following list made during the months of December, January, and February is, of necessity, incomplete as I have had neither the time nor opportunity to observe the winter ducks and have had but a limited time in the field. However, the number of species observed is no mean list for the so termed birdless winter, and I will take pleasure in adding to the same in the coming winter if possible.

1. *Merula migratoria*. Robin.—Rare. Occasionally several are met with during the winter in the city, but the majority of seasons pass without the bird wintering.
2. *Sialia sialis*. Bluebird.—Not a winter bird in any respect. The latest noted was a single male, seen Dec. 8, 1889. Occasionally noted in late February. The forerunner in the migrations. First seen in 1902, February 27.
3. *Certhia familiaris fusca*. Brown Creeper.—A regular winter resident. A pair or so can generally be seen throughout the winter. I heard *certhia* sing for the first time last February.
4. *Sitta carolinensis*. White-breasted Nuthatch.—Abundant.
5. *Sitta canadensis*. Red-breasted Nuthatch.—Not common, but occasionally noted.
6. *Regulus satrapa*. Golden-crowned Kinglet.—Fairly common some winters; in others entirely absent. Have never seen his ruby crowned cousin in winter.
7. *Parus atricapillus*. Chickadee.—Abundant.
8. *Parus bicolor*. Tufted Titmouse.—Probably can be observed every winter if searched for. I hear the cheery whistle ring through the cold, still woods nearly every winter.
9. *Ampelis cedrorum*. Cedar Waxwing.—Rare. Several flocks seen in January and February, 1896, and two in January, 1902.
10. *Lanius borealis*. Northern Shrike.—Common for the species.
11. *Lanius ludovicianus migrans*. Migrant Shrike.—Have seen but two; both in late February.
12. *Cardinalis cardinalis*. Cardinal.—A new straggler. I have seen but four. February 22, 1902, I noted a pair at Belle Isle on the outskirts of the woods. All the birds of this species I have ever seen here except in May have been in winter.
13. *Junco hyemalis*. Slate-colored Junco.—Fairly abundant.
14. *Spizella monticola*. Tree Sparrow.—Our common winter bird. A cheery companion on bleak days.
15. *Passerina nivalis*. Snowflake.—Very abundant during some winters; apparently absent in others. Earliest record I have is October 31.
16. *Spinus pinus*. Pine Siskin.—J. Claire Wood saw a flock in December, 1889.
17. *Spinus tristis*. Goldfinch.—Abundant.
18. *Loxia curvirostra minor*. Am. Crossbill.—Rare. Two were seen in January, 1892, by D. Anderson.
19. *Acanthis linaria*. Redpoll.—J. Claire Wood saw a flock February, 1897.
20. *Quiscalus quiscula æneus*. Bronzed Grackle.—One flock in February, 1891; an early spring arrival. Latest seen was one in December, 1894.
21. *Scolecophagus carolinus*. Rusty Blackbird.—J. Claire Wood shot one bird January 25, 1891. Occasionally noted in February.

22. *Sturnella magna*. Meadowlark.—Of late years a few remain throughout the winter in certain favored localities.

23. *Agelaius phoeniceus*. Red-winged blackbird.—Several flocks in late February, 1891, early arrivals.

24. *Molothrus ater*. Cowbird.—Several hung around my yard in January, 1890, feeding with the English Sparrows. Occasionally noted in late February.

25. *Corvus americanus*. Crow.—A number are resident; roosting in large flocks.

26. *Cyanocitta cristata*. Blue Jay.—Abundant.

27. *Octocoris alpestris practicola*. Prairie Horned Lark.—Fairly abundant every winter.

28. *Colaptes auratus luteus*. Northern Flicker.—A few are now seen every winter. During the past season of '01-'02, I observed the bird every month.

29. *Melanerpes erythrocephalus*. Red-headed Woodpecker.—Since 1896 this bird has wintered in considerable numbers at Belle Isle, our Island Park, situated in the Detroit river. Here their familiar call and bright plumage seem somewhat out of place during the deep snow and bare naked trees. Rare on the mainland.

30. *Dryobates pubescens medianus*. Downy Woodpecker.—Abundant.

31. *Dryobates villosus*. Hairy Woodpecker.—Fairly abundant.

32. *Nyctea nyctea*. Snowy Owl.—A few are taken every winter. During the season of '01-'02, in Wayne and the surrounding counties, this beautiful winter visitor was unusually abundant and many found their way to local taxidermists. This seems to have been the case in all the northern states. See Ruthven Deane in the Auk, 1902, July.

33. *Bubo virginianus*. Great Horned Owl.—Rather rare and found only in the largest pieces of timber. Resident.

34. *Megascops asio*. Screech Owl.—A fairly abundant bird.

35. *Nyctala acadica*. Saw-whet Owl.—Rare, possibly more common than supposed, as it is not often seen. One shot December 26, 1901, and two in January, 1902, in Grosse Point, by a farmer. One shot October 17, 1902, in the heart of Detroit.

36. *Syrnium nebulosum*. Barred Owl.—I have found this owl rare during the winter months.

37. *Asio accipitrinus*. Short-eared Owl.—More abundant during the past winter than I have ever noted the species to be. A flock of forty were seen in Grosse Point in January, 1902, by a local farmer. Occasionally flushed from the marsh grass bordering the river.

38. *Asio wilsonianus*. Long-eared Owl.—Resident. Seldom seen because of its nocturnal habits.

39. *Pandion haliaetus carolinensis*. Am. Osprey.—Rather rare migrant. Occasionally seen on the river in February.

40. *Falco sparverius*. Sparrow Hawk.—Generally several are observed every winter.
41. *Haliaeetus leucocephalus*. Bald Eagle.—Rather rare. One or two are generally seen every winter after the ducks on the river.
42. *Aquila chrysaetos*. Golden Eagle.—Very rare. James B. Purdy records one shot near Plymouth, in the Auk, January, 1902.
43. *Archibuteo lagopus sancti-johannis*. Am. Rough Legged Hawk.—A fairly common migrant for the species. Old Feather Boots is perhaps more often seen at the St. Clair Flats than in Wayne Co.
44. *Buteo lineatus*. Red-shouldered Hawk.—A few are resident here.
45. *Buteo borealis*. Red-tailed Hawk.—Resident; occasionally seen.
46. *Accipiter cooperi*. Cooper Hawk.—Occasionally seen in February.
47. *Accipiter velox*. Sharp-shinned Hawk.—Rare in winter; have seen but three or four.
48. *Circus hudsonius*. Marsh Hawk.—Occasionally seen; rather rare
49. *Zenaidura macroura*. Mourning Dove.—A few winter here. During the past winter a flock of seven remained at a barn on the outskirts of the city feeding in the barn yards and roosting in the hay stacks.
50. *Bonasa umbellus*. Ruffed Grouse.—Resident; fairly common.
51. *Colinus virginianus*. Bob-white.—Resident; common.
52. *Harelda hyemalis*. Old Squaw.—Said to be abundant on the river and St. Clair Flats during the winter.
53. *Clangula clangula americana*. Amer. Golden-eye.—Our most abundant winter duck.
54. *Aythya affinis*. Lesser Scaup Duck.—Abundant.
55. *Aythya marila*. Am. Scaup Duck.—Not as common as the smaller Bluebill.
56. *Aythya vallisneria*. Canvas-back.—Fairly abundant, especially at the St. Clair Flats.
57. *Aythya americana*. Red-head.—Abundant.
58. *Merganser serrator*. Red-breasted Merganser.—Not common.
59. *Merganser americanus*. Am. Merganser.—Fairly abundant.
60. *Larus delawarensis*. Ring-billed Gull.—Abundant on the river all winter.
61. *Uria lomvia*. Brünnich Murre.—I include this bird on the records of several taken December 26, 1896, near Gibraltar, as recorded in The Bull. Mich. Ornith. Club, January, 1897.

In conclusion, I would greatly desire any additions, correc-

tions or notes from local observers, to this list, and especially on the ducks. My thanks are due to Mr. J. Claire Wood and Alec Blaine, Jr., of Detroit, for many valuable records.

A FEW ADDITIONAL NOTES ON THE FLICKER.

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It has been suggested that I bring together the additional notes received subsequent to the publication of our coöperative investigation of the Flicker.

In connection with two obscure vernacular names, Mr. Ernest Ingersoll pertinently remarks: If *Woodquoi* really exists, it is probably allied to the English *Woodquest* (or *'queest*), for the Dove (*Columba palumba*), the root meaning of which appears to be the word "complainer." "*Wood-wall*," according to Skeat, is ancient *Woodwale*, and derived from old Dutch, meaning "a yellow bird."

Under the head of migration, some valuable notes relative to the retrograde movements of the bird, are contributed by Dr. Walter W. Mavis. In south New Jersey, in the region of the Upper Delaware Bay, which runs due south, some time in October of every year the migrating Flickers are found flying north just previous to and during a northwest storm. At this time the wind is generally high and the birds fly against it. This peculiarity of flight affects a large territory extending inland from the east shore of the bay some fifteen or twenty miles. While the birds prefer to breast a wind, it is also probable that they are reluctant to cross the lower part of the bay during such a storm which would tend to drive them seaward, rather preferring to return northward to the more narrow river where they could cross in comparative safety.

· Apropos to its enemies, I have to add another, my favor-