

NOTES ON THE SPRING BIRD MIGRATION OF 1914 AT ANTIGONISH,
NOVA SCOTIA.—BY HARRISON F. LEWIS, Quebec, P. Q.

(Read 10 May, 1920)

The County of Antigonish lies in the eastern part of the Nova Scotian peninsula on the south shore of St. George's Bay, an arm of the Gulf of St. Lawrence. With the exception of two weeks in late December and early January, the period from August 25, 1913, to June 27, 1914, was spent by me in the county, my residence being in the small town of Antigonish, the county town.

In the spring of 1914, a record of the migration was made for the Biological Survey of the United States Department of Agriculture. The time spent in making observations for this record consisted chiefly of the early morning hours every day with additional time later in the day on Saturdays and Sundays. There was then no thought of publishing the results of these observations, but, in view of the scarcity of published records of the birds of Antigonish County, to which my attention has since been called, and of the improbability of additional similar work on my part in the county, it may be advisable to make readily accessible such data as were obtained. As far as I know, or have been able to find out, the only previous publications relating directly to the birds of this county are the four brief ones hereinafter quoted in their respective appropriate connections.

The coming of spring is normally later in Antigonish County than it is in western and central Nova Scotia. This is due to the large fields of heavy ice which form in winter in the Gulf of St. Lawrence, and which, in melting, cool the winds which blow from them across the land to the southward. The spring of 1914 was said by the inhabitants of the county to be somewhat later than the average. Snow in the woods was knee-deep on April 25. About two inches of snow fell on the night of May 1-2. On May 15 the shore of St. George's Bay was found to be strewn with great blocks of ice, some of them three or four feet thick, while large fields of ice could be seen floating in the bay. Heavy frosts, accompanied by the formation of thin ice on dishes of water left out-of-doors, occurred once or twice in early June. These conditions are the cause of the lateness of the arrival of many species of birds. Where I have any especial

reason to think that the date of arrival as observed for a particular species is, or may be, inaccurate, this fact has been indicated in this paper.

Of the species herein recorded from Antigonish County, the following are stated by Chapman ('Handbook of Birds of Eastern North America revised edition, 1912, p. 30) to be characteristic of the Alleghanian fauna: Black-billed Cuckoo, Kingbird, Bobolink, Chipping Sparrow, Blue-headed Vireo, Catbird, and White-breasted Nuthatch.

Taking one species, such as the Fox Sparrow, for instance, the following items are recorded concerning it in this paper in the order here stated: serial number, scientific name, vernacular name, date first seen, number of individuals observed on the date first seen, date next seen, date of becoming common, estimated degree of abundance, date last seen, remarks. So far as they are applicable or were noted, similar items are recorded in similar order for each of the other species in the list of migrants. The nomenclature used is that of the 1910 edition of the 'A. O. U. Check-List'. Terms indicating degrees of abundance are used in the following relative order: rare, uncommon, not common, tolerably common, common, very common, abundant, very abundant. A species is not recorded as breeding unless its nest was seen by me in the county; other species were observed as summer residents, presumably breeding, unless otherwise stated.

1. *Sterna hirundo*. Common Tern.—First seen, May 21 (13); next seen, May 23; common, May 21; a very common summer resident; breeds. On June 13th I visited Mahoney's Beach, at the western side of the entrance to Antigonish Harbor, and there found about 50 pairs of this species nesting. The beach on which the nests were placed is a long, narrow ridge of sand, forming part of the mainland, and separating the waters of Antigonish Harbor from those of St. George's Bay. Much of it is covered with the usual low herbage of our sand beaches; other parts are bare white sand. I counted 49 nests containing eggs; of which 23 were hollowed in the sand, while the 26 others were hollowed in dry bunches or windrows of seaweed which had been thrown above ordinary high-tide mark by the storms of winter. On June 21 I again visited this colony, when I found but one nest containing eggs. As a search revealed no trace of the other eggs or of any young Terns, it seems probable that

the colony, so easily accessible, had been raided by human enemies in the interval between my two visits.

2. *Anas rubripes*.—Black Duck.—First seen, March 28 (2); next seen, April 10; apparently uncommon.

3. *Branta canadensis canadensis*.—Canada Goose.—First seen, March 19 (10); next seen, March 29 common, March 19; common; last seen, May 7; a transient only. Apparently these birds pause in their migration for some time at this point, until conditions farther north are favorable for a resumption of their movement to their breeding grounds. During April the great shallow areas in Antigonish Harbor form the feeding-ground of large flocks of Canada Geese, containing several thousand individuals.

4. *Botaurus lentiginosus*.—American Bittern.—First seen, May 10 (1); next seen, May 13; common, May 21; common.

5. *Ardea herodias herodias*.—Great Blue Heron.—First seen, April 27 (1); next seen, April 30; not common.

6. *Gallinago delicata*.—Wilson's Snipe.—First seen, April 20 (2); next seen, April 22; not common. When passing through Antigonish County in 1917, I saw a single bird of this species on the upper South River on April 10.

7. *Actitis macularia*.—Spotted Sandpiper.—First seen, May 13 (2); next seen, May 15; common, May 17; common.

8. *Aegialitis semipalmata*.—Semipalmated Plover.—First seen, May 15 (5); next seen, May 23; not common. Probably not an accurate record of first arrival. The only place where I observed this species was Mahoney's Beach.

9. *Aegialitis meloda*.—Piping Plover.—First seen, May 23 (2); next seen, June 13; rare. Perhaps not an accurate record of first arrival. The only place where I observed this species was Mahoney's Beach, at the mouth of Antigonish Harbor. When I visited the Beach on May 15, none were seen, but 2 were there at the time of my next visit, on May 23. The greatest number of individuals seen in one day was 4, seen June 13.

10. *Pandion haliaetus carolinensis*.—Osprey.—First seen May 9 (1); next seen, May 17; uncommon.

11. *Ceryle alcyon*.—Belted Kingfisher.—First seen, April 30 (1); next seen, May 2; common, May 5; tolerably common.

12. *Colaptes auratus luteus*.—Northern Flicker.—First seen April 20 (1); next seen April 26; common, April 28; common

13. *Chordeiles virginianus virginianus*.—Nighthawk.—First seen, May 29 (1); next seen, May 30; uncommon.

14. *Chaetura pelagica*.—Chimney Swift.—First seen, May 22 (2); next seen, May 23; common, May 25; common. (This record published in "A Cooperative Study of Bird Migration" by Charles H. Rogers, 'Bird-Lore', Vol. XVI, No. 4, p. 272, July-August, 1914.)

15. *Archilochus colubris*.—Ruby-throated Hummingbird.—First seen, May 31 (1); next seen, June 1; common, June 1; very common.

16. *Tyrannus tyrannus*.—Kingbird.—First seen, May 21 (2); next seen, May 22; common, May 22; common.

17. *Nuttallornis borealis*.—Olive-sided Flycatcher.—First seen, May 25 (1); next seen, May 27; uncommon.

19. *Myiochanes virens*.—Wood Pewee.—First seen, May 30 (1); next seen, May 31; uncommon.

19. *Empidonax flaviventris*.—Yellow-bellied Flycatcher.—First seen, May 25 (3); next seen, May 30; common, May 30; common.

20. *Empidonax traillii alnorum*.—Alder Flycatcher.—First seen, May 28 (1); next seen, May 30; common, June 3; common

21. *Empidonax minimus*.—Least Flycatcher.—First seen May 19 (1); next seen, May 20; common, May 21; common,

22. *Otocoris alpestris* subsp. ?—Prairie (?) Horned Lark.—First seen, March 24 (1); next seen, March 25; common, March 27; tolerably common; last seen, April 18. Although Horned Larks were observed as transients only, all my observations of them in the field led me to believe them to be Prairie Horned Larks, *O. a. praticola*. It is possible that their breeding-grounds were in some of the great pasture areas in Antigonish County, some miles from Antigonish town.

23. *Dolichonyx oryzivorus*.—Bobolink.—First seen, May 16 (1); next seen, May 18; common, May 21; common.

24. *Agelatus phoeniceus phoeniceus*.—Red-winged Blackbird.—First seen, May 2 (1); next seen, May 23; rare summer resident; breeds. Probably not an accurate record of first arrival. An account of my discovery of a nest and eggs of this species in a swamp near the mouth of Antigonish Harbor has been published in 'The Auk', Vol. XXXI, No. 4, pp. 537-538, October, 1914.

25. *Euphagus carolinus*.—Rusty Blackbird.—First seen, April 8 (5); next seen, April 9; common, April 11; tolerably common transient rare in summer.

26. *Quiscalus quiscula aeneus*.—Bronzed Grackle.—First seen, April 7 (1); next seen, April 8; common, April 12; common.

27. *Carpodacus purpureus purpureus*.—Purple Finch.—First seen, May (1); next seen, May 10; common, May 11; common. Although individuals of this species not infrequently pass the winter in Nova Scotia, my notes lead me to believe that migrants usually do not arrive until late April or early May.

28. *Astragalinus tristis tristis*.—Goldfinch.—First seen, May 26 (1); next seen, May 27; common, May 28; very common. Individuals of this species also are known to winter in Nova Scotia, but it would appear from my notes that the migrants generally arrive in the latter half of May.

29. *Pooecetes gramineus gramineus*.—Vesper Sparrow.—First seen April 28 (3); next seen, April 29; common, April 28; tolerably common.

30. *Passerculus sandwichensis savanna*.—Savannah Sparrow.—First seen, April 26 (2); next seen, April 27; common, April 30; common.

31. *Passerherbulus nelsoni subvirgatus*.—Acadian Sharp-tailed Sparrow.—First seen, June, 3 (1); next seen, June 4; uncommon.

32. *Zonotrichia albicollis*.—White-throated Sparrow.—First seen, May 8 (1); next seen, May 9; common, May 9; abundant summer resident; breeds. It will be observed that this species arrived on the night of May 7-8, and that the Fox Sparrow departed on the same night. At Halifax, N. S., in 1918, the Fox Sparrow departed and the White-throated Sparrow arrived on the night of April 28-29. In both of these instances the Fox Sparrow had been a very common transient. The feeding habits of these two species appear to be essentially similar, as they both feed largely on the ground among bushes, and it is possible that this fact, in combination with the comparative scarcity of food in early spring, when much of the ground is still snow-covered, may have aided in causing these species to be thus complementary in Nova Scotia at that season.

33. *Spizella passerina passerina*.—Chipping Sparrow.—First seen, May 9 (2); next seen, May 10; common, May 15; very common summer resident; breeds.

34. *Junco hyemalis hyemalis*.—Slate-colored Junco.—First seen, March 24 (1); next seen, April 4; common, April 7; abundant summer resident; breeds.

35. *Melospiza melodia melodia*.—Song Sparrow.—First seen, April 4 (1); next seen, April 5; common, April 7; very common. First song heard April 5, when, of 4 birds seen, one only was heard to sing.

36. *Melospiza lincolni lincolni*.—Lincoln's Sparrow.—First seen, May 19 (1); next seen, May 20; common, May 20; tolerably common.

37. *Melospiza georgiana*.—Swamp Sparrow.—First seen, April 30 (1); next seen, May 5; common, May 9; tolerably common.

38. *Passerella iliaca iliaca*.—Fox Sparrow.—First seen, April 13 (4); next seen, April 14; common, April 14; very common; last seen, May 7; a transient migrant only. Antigonish appears to lie on an important highway of migration for this species. Probably most of these birds were on their way to Newfoundland.

39. *Zamelodia ludoviciana*.—Rose-breasted Grosbeak.—First seen, May 25 (3); next seen, May 27; common, May 27; common. Nowhere else has it been my good fortune to find this species as common as I found it about Antigonish.

40. *Petrochelidon lunifrons lunifrons*.—Cliff Swallow.—First seen, May 22 (25); next seen, May 23; common, May 22; common. The accuracy of this date of arrival seems questionable, although I watched carefully for this species.

41. *Hirundo erythrogaster*.—Barn Swallow.—First seen, May 15 (9); next seen, May 16; common, May 15; common summer resident; breeds.

42. *Iridoprocne bicolor*.—Tree Swallow.—First seen, April 26 (1); next seen, April 28; common, May 15; common.

43. *Riparia riparia*.—Bank Swallow.—First seen, May 23 (5); next seen, May 30; common, May 30; locally common summer resident; breeds. Found only about earthen banks along the shore of St. George's Bay. As I did not visit that shore between May 15 and May 23, the above date of arrival may not be accurate.

44. *Bombycilla cedrorum*.—Cedar Waxwing.—First seen, May 27 (9); next seen, June 5; irregular in occurrence.

45. *Vireosylva olivacea*.—Red-eyed Vireo. First seen, May 25 (4); next seen, May 27; common, May 27; common.

46. *Lanius solitarius*.—Blue-headed Vireo.—First seen, May 20 (1); next seen, May 21; common, May 23; tolerably common.

47. *Mniotilta varia*.—Black-and-White Warbler.—First seen, May 16 (1); next seen, May 18; common, May 20; common.

48. *Vermivora ruficapilla ruficapilla*.—Nashville Warbler.—First seen, May 25 (1); next seen, May 30; rare.

49. *Compsothlypis americana usneae*.—Northern Parula, Warbler.—First seen, May 16 (1); next seen, May 18; common, May 20; 21 very common.

50. *Dendroica aestiva aestiva*.—Yellow Warbler.—First seen May 19 (1); next seen, May 20; common, May 20; very common

51. *Dendroica caerulescens caerulescens*.—Black-throated Blue Warbler.—First seen, May 23 (1); next seen, May 24; uncommon.

52. *Dendroica coronata*.—Myrtle Warbler.—First seen, April 21 (2); next seen, April 22; common, May 5; common.

53. *Dendroica magnolia*.—Magnolia Warbler.—First seen, May 14 (1); next seen, May 16; common, May 21; very abundant. I consider this to be the most abundant summer resident bird about Antigonish. If my experience in a number of other localities in Nova Scotia is typical, I should judge this to be the most abundant Warbler, perhaps the most abundant summer resident bird, in the province as a whole.

54. *Dendroica pensylvanica*.—Chestnut-sided Warbler.—First seen, May 24 (1); next seen, May 25; rare.

55. *Dendroica striata*.—Black-poll Warbler.—First seen, May 25 (3); next seen May 27; common, May 28; common. Although I have no reason to suppose that this species is a summer resident in Antigonish County, I can now find no record of the date of its departure for the summer.

56. *Dendroica fusca*.—Blackburnian Warbler.—First seen, May 27 (1); next seen, May 30; not common.

57. *Dendroica virens*.—Black-throated Green Warbler.—First seen, May 9 (1); next seen, May 10; common, May 17; abundant. The second Warbler in point of abundance.

58. *Dendroica palmarum hypochrysea*.—Yellow Palm Warbler.—First seen, April 24 (1); next seen, May 9; common, May 9; very common transient; probably not generally common as a summer resident. I have no similar migration record for this or any like species. In comparison with records of arrival in

other parts of Nova Scotia in other years, April 24 appears to be a normal date of arrival for this bird. The individual seen on that date at Antigonish was clearly observed in the bare branches of an apple tree. On the days immediately following I sought faithfully for this Warbler, or I always tried to obtain dates of second observations as close to arrival dates as possible, and, as day after day went by without my seeing anything more of the species, I hunted for it the more persistently. Yet it was not observed again until fifteen days after the first individual was seen; then, on May 9, it suddenly became common.

59. *Seiurus aurocapillus*.—Oven-bird.—First seen, May 18 (1); next seen, May 20; common, May 20; very common.

60. *Seiurus noveboracensis*.—Water-Thrush.—First seen, May 17 (2); next seen, May 19; common, May 20; common transient; not common summer resident. In most of western Nova Scotia this bird appears to be uncommon or rare. About Antigonish I found it, by comparison, rather more common as a summer resident and very much more common as a transient visitor in spring. In summer it is confined to deep, swampy woods, where there is stagnant water, but in the migration its cheerful song sounds not only in such places, but along every brook and river and body of fresh water, large or small. Apparently Antigonish is on the main highway followed by individuals of this species which breed in Cape Breton and Newfoundland, and, perhaps, eastern Labrador. The comparative rarity of the species in western Nova Scotia would seem to indicate that these eastern migrants enter the province by way of the Isthmus of Chignecto.

61. *Oporornis philadelphia*.—Mourning Warbler.—First seen May 30 (1); next seen, May 31; not common. More common than I have found it elsewhere in Nova Scotia.

62. *Geothlypis trichas trichas*.—Maryland Yellow-throat.—First seen, May 21 (4); next seen, May 22; common, May 22; common.

63. *Wilsonia pusilla pusilla*.—Wilson's Warbler.—First seen, May 25 (3); next seen, May 28; uncommon; last seen, May 28; observed as a transient only.

64. *Wilsonia canadensis*.—Canadian Warbler.—First seen, May 25 (1); next seen, May 27; common, May 29; common.

65. *Setophaga ruticilla*.—Redstart.—First seen, May 21 (2); next seen, May 22; common, May 22; very common.

66. *Anthus rubescens*—American Pipit.—My only observation of this species at Antigonish was of one bird seen in a plowed field on May 20.

67. *Dumetella carolinensis*.—Catbird.—First seen, May 28 (6); next seen, May 30; common, May 28; common.

68. *Nannus hiemalis hiemalis*—Winter Wren.—First seen, May 8 (1); next seen, May 9; not common.

69. *Regulus calendula calendula*.—Ruby-crowned Kinglet.—First seen, April 27 (1); next seen, April 30; common, May 2; common.

70. *Hylocichala guttata pallasi*.—Hermit Thrush.—First seen May 1 (1); next seen, May 8, common.

71. *Planesticus migratorius migratorius*.—Robin.—First seen, March 26 (1); next seen, March 28, common; April 9, very common. (This record published in "A Cooperative Study of Bird Migration," by Charles H. Rogers, 'Bird Lore', Vol. XVI, No. 3, p. 182, May-June, 1914).

Unfortunately regular notes on birds not observed as spring migrants were not made. From occasional notes on rare or unusual occurrences, or events of particular interest, however, the following additional data concerning the birds of Antigonish County may be supplied. Certain familiar species, which were presumably common or abundant, must, from lack of record, here be conspicuous by their absence.

72. *Heredia hyemalis*.—Old Squaw.—One male observed on St. George's Bay, not far from the entrance to Antigonish Harbor, January 31, 1914.

73. *Bonasa umbellus togata*.—Canada Ruffed Grouse.—A not common permanent resident.

74. *Coccyzus erythrophthalmia*.—Black-billed Cuckoo.—The familiar, characteristic notes of a Cuckoo distinctly heard June 20, 1914, doubtless emanated from one of this species.

75. *Sphyrapicus varius varius*.—Yellow-bellied Sapsucker.—A pair observed September 27, 1913.

76. *Cyanocitta cristata cristata*.—Blue Jay.—My only records are of several observations of the species during January and February, 1914.

77. *Perisoreus canadensis canadensis*.—Canada Jay.—Recorded in September and October, 1913, and January, 1914.

78. *Corvus brachyrhynchos brachyrhynchos*.—Crow.—Common permanent resident.

79. *Pinicola enucleator leucura*.—Pine Grosbeak.—My only observation was of a flock of 8 or 9, containing no adult males, seen near Maryvale, April 18, 1914

80. *Passer domesticus domesticus*—English Sparrow.—A common permanent resident in Antigonish town

81. *Loxia curvirostra minor*.—American Crossbill.—A small flock, containing several adult male, was observed at close range, May 2, 1914, near Mahoney's Beach. The birds were feeding in low spruce trees and on the ground. A few Crossbills were seen during the winter, but the species was not determined.

82. *Acanthis linaria linaria*.—Redpoll.—Seen in small flocks during the winter and early spring.

83. *Plectrophenax nivalis nivalis*.—Snow Bunting.—Recorded as seen occasionally in small flocks from January 11 to March 7.

84. *Spizella monticola monticola*.—Tree Sparrow.—My only observation was of a single individual, March 7, 1914.

85.—*Lanius borealis*.—Northern Shrike.—Single individuals observed several times in winter and early spring. Heard singing in January and February.

86. *Certhia familiaris americana*.—Brown Creeper.—Several observed in song in heavy deciduous woods in late April.

87. *Sitta carolinensis carolinensis*.—White-breasted Nuthatch.—Observed several times in autumn and winter, principally on shade trees in Antigonish town.

88. *Sitta canadensis*.—Red-breasted Nuthatch.—My only observation of this species was of a pair seen January 24, 1914. (See "A Problem in Food-Supply and Distribution" "Bird-Lore," Vol.XVI, No. 2, p. 113, March-April, 1914.)

89. *Penthestes atricapillus*.—Chickadee.—Common; particularly noticeable in winter.

90. *Penthestes hudsonicus littoralis*.—Acadian Chickadee.—Common permanent resident in coniferous woods.

91. *Regulus satrapa satrapa*.—Golden-crowned Kinglet.—Noted in February, 1914. Doubtless observed, but not recorded, in other seasons also.