A SHORT SUMMER OUTING IN NEWFOUNDLAND, 1911.

BY EDWARD ARNOLD.

In 1894 the writer made a collecting trip through the Canadian Provinces of Manitoba, Saskatchewan, and Alberta, and enjoyed the novel experience so much that for nine years following he put in a good part of the months of May and June enjoying field work in Saskatchewan and Alberta, despite mosquitoes and other winged pests, which flourish so abundantly during the early summer in those localities; during those years taking many sets of Richardson's Pigeon Hawk (Falco columbarius richardsoni), Sprague's Pipit (Anthus spraguei), Nelson's Sparrow (Passerherbulus nelsoni nelsoni). Leconte's Sparrow (Passerherbulus lecontei), Baird's Sparrow (Ammodramus bairdi), Marbled Godwit (Limosa fedoa), Western Willet (Catoptrophorus semipalmatus inornatus), Upland Plover (Bartramia longicauda), Avocet (Recurvirostra americana), Piping Plover (Ægialitis meloda), Wilson's Phalarope (Steganopus tricolor), Black-necked Stilt (Himantopus mexicanus), Woodcock (Philohela minor), Killdeer (Oxyechus vociferus), also about twenty different kinds of ducks, besides many other species too numerous to mention here.

The years 1905, 1906, 1907, found me during the months of June studying the nesting habits of Kirtland's Warbler (Dendroica kirtlandi) in Northern Michigan, my home State. In April, 1908, I moved to Montreal and the following year took such sets as Sharp-shinned Hawk (Accipiter velox), Broad-winged Hawk (Buteo platypterus), Savanna Sparrow (Passerculus sandwichensis savanna), Slate-colored Junco (Junco hyemalis hyemalis), and other birds of various kinds found nesting in the vicinity of Montreal and adjacent townships. In my collecting trips around Montreal I was frequently accompanied by my friend Mr. W. J. Brown, an enthusiastic field naturalist, who has accumulated a very fine collection of sets of eggs of the local birds found breeding in the Province of Quebec. Mr. Brown and myself often discussed Newfoundland as a desirable field to explore and our plans were finally made to put in the early part of the season of 1911 collect-

ing there, our special desiderata being sets of Fox Sparrows (Passerella iliaca iliaca), Greater Yellow-legged Plover (Totanus melanoleucus), Pigeon Hawk (Falco columbarius columbarius), Tennessee Warbler (Vermivora percgrina), and Ruby-crowned Kinglet (Regulus calendula calendula). We left Montreal via the Intercolonial Railway and after a pleasant ride through the Provinces of Old Quebec, New Brunswick, and Nova Scotia, arrived at North Sydney, Mr. Beers, of Bridgeport, Conn., accompanying us, having met us en route. There we boarded a steamer for Port aux Basques, Newfoundland, a distance of 110 miles. The trip was very rough and many of the passengers were sea sick. We arrived at Port aux Basques early the next morning — weather foggy and lots of ice and snow discernible on the bleak forbidding shores.

The summer there is short. On our journey over the Reid-Newfoundland Railway ice and snow could often be seen from the car window and during the first week of June the bushes and trees were just beginning to show the green of the opening leaves. Along the Humber River we picked fine bunches of trailing arbutus. which was just in its prime the first week in June. On the upper levels, during the early part of June, water froze every night, forming on edge of ponds a small coating of ice each morning. The snow was from three to six feet deep on the sides of the hills and we could walk on the top of it until 9 or 10 o'clock without sinking in over an inch or two. Notwithstanding this cold weather many birds had made their nests; some had laid their eggs, and others had young or were incubating their eggs,—such species as the Fox Sparrow (Passerella iliaca iliaca), Savanna Sparrow (Passerculus sandwichensis savanna), Least Sandpiper (Pisobia minutilla), Greater Yellow-legs (Totanus melanoleucus), Wilson's Snipe (Gallinago delicata), Welch's Ptarmigan (Lagopus welchi), were already incubating their eggs, and a Myrtle Warbler (Dendroica coronata) was building close to our camp. The Rubycrowned Kinglets (Regulus calendula calendula) were in full song: the bird considering its size is a marvellous, rich singer, its note being a distinctive feature of every place we stopped to collect or make observations.

The Reid-Newfoundland is narrow gauge, but very comfortable, dining and sleeping cars are carried on all passenger trains; the meals are very good and the service excellent. Mixed trains are also in service on alternate days. The road runs through a most picturesque territory. Generally speaking, the physical features of the island are of a rocky, mountainous, barren nature, comprising vast stretches of spruce woods and bogs, well watered in many places by streams, lakes or ponds, large and small. Fire has devasted many localities on both sides of the Humber River, leaving unsightly stretches of blackened skeletons of once handsome trees.

The fishing is excellent in all the streams and in many of the ponds and lakes, trout and salmon rising freely to the fly.

The Fox Sparrow (Passerella iliaca iliaca) is a common resident breeder, large, conspicuous and handsome, a vigorous sweet singer heard at all hours of the day and at times at sunset. Its clear, rich bell-like notes rise among the evergreen woods filling the air with delicious melody, beginning lustily and at length closing softly, frequently drowned by the music of the wind in the tree tops. This species is an early breeder. We found young in the nests and others flying around during the first week in June. We located a few nests with young in different stages of growth and also later nests containing in each instance but three eggs — which appears to be the normal complement in almost every instance. The nests are made of grass, moss, rootlets, twigs, etc., the lining fine hay, rootlets, caribou hair, etc., and are usually placed on the ground at the foot of a small spruce, sometimes from 2 to 5 feet up in the branches of spruce trees. The eggs are greenish, spotted and blotched with reddish brown of various shades, in some instances so heavy and numerous that the ground color is almost obscured. It is the characteristic sparrow of the island and in evidence at many points along the railway. We thoroughly enjoyed the beautiful bell-like notes of the Hermit Thrush and White-throated Sparrow, found quite common at many of our Greater Yellow-legs (Totanus melanoleucus), stopping places. Least Sandpiper (Pisobia minutilla), and Wilson's Snipe (Gallinago delicata), were the waders most in evidence, especially on the elevated plateaus in the vicinity of the small lakes and ponds. The Greater Yellow-legs (Totanus melanoleucus) is very noisy and frequently followed us persistently, yelping its alarm notes.

The notes of the Wilson's Snipe (Gallinago delicata) could be heard at all hours of the night and often during the day. We flushed a number of these birds and found several nests with eggs or young in the vicinity of the nest. Spotted Sandpipers (Actitis macularius) were frequently in evidence and breeding.

As a result of our trip we observed the following birds and obtained nests and eggs as given below:

- 1. Gavia immer. Loon.— One pair seen on a small pond on June 6. At this date the birds had not started to lay.
- 2. **Cepphus grylle.** Black Guillemot.— Fairly abundant. Breeding on the "banks" on June 10.
- 3. Larus hyperboreus. Glaucous Gull.—Common. Several pairs had their nests built out on large boulders in the center of ponds, but as the water was very cold and over our heads in depth, we could not examine them.
- 4. Larus marinus. Great Black-backed Gull.—Generally distributed along the western coast and breeding. A few pairs were found nesting on small islands in ponds adjacent to the Bay of Islands on June 10.
- 5. Larus argentatus. Herring Gull.—Common resident. Observed everywhere off the "Banks" of Newfoundland, but their numbers are being rapidly decimated by the fishermen.
- 6. **Sterna hirundo**. Common Tern.—We saw a small colony at Bay of Islands on June 7. At this date they apparently had not started to build.
- 7. Oceanodroma leucorhoa. Leach's Petrel.—Several burrows of this species were located on an island June 10, but as the holes invariably ran under a large rock, a pickaxe was necessary to examine the contents.
- 8. Mergus americanus. Merganser.— Nest found May 19 on the banks of the Humber River, containing nine fresh eggs.
- 9. Clangula clangula americana. Golden-Eye.— Nest containing eight fresh eggs found in a dead tree near the Humber River on May 21.
- 10. **Somateria dresseri**. Eider.— Saw two birds of this species at St. Georges Bay on June 9.
- 11. Branta canadensis canadensis. Canada Goose.— Common breeder. At the time of our visit the young were already hatched and when they were approached the anxious parents were heard "honking" in the vicinity.
- 12. **Botaurus lentiginosus**. BITTERN.— One individual heard "pumping" on June 1 and was undoubtedly breeding.
- 13. Gallinago delicata. WILSON'S SNIPE.— A very abundant species and noted wherever there was bog. Birds were heard overhead continuously from 9.30 p. m. to 4.30 a. m., June 9. A nest containing three fresh eggs was found on a mound in a spruce bog on June 8. On June 12 another

was located where the young had just left, as evidenced by the egg shells lying about.

- 14. Pisobia minutilla. Least Sandpiper.— Common. Several nests examined between June 3 and 16; one had three eggs and two others had four eggs each in various stages of incubation. The sets were simply laid in depressions in moss off the margins of "ponds."
- 15. **Totanus melanoleucus**. Greater Yellow-legs.— Saw a number on the elevated plains where the bird's harsh cries may be heard at times. A nest of this species was found on June 3 with four badly incubated eggs, which were simply laid on a hill adjoining a large tract of spruce bog. On June 13 two others were discovered in a similar location, four handsomely marked eggs being the complement in each case.
- 16. Totanus flavipes. Yellow-legs.— Saw several individuals on the barrens, but no nest was found.
- 17. Actitis macularius. Spotted Sandpiper.—Common along the shores of lakes and streams, and breeding abundantly.
- 18. **Lagopus welchi**. Welch's Ptarmigan.—In a dry place in a large area of spruce bog, and at one of the highest points reached by the railway, we flushed a bird of this species off her nine fresh eggs on June 6. The nest was merely a depression in moss amongst spruce sprouts and thinly lined with feathers and grasses. Two other birds were seen on the barrens in the same neighborhood, but investigation failed to reveal any more nests.
- 19. Astur atricapillus atricapillus. Goshawk.— We saw a few in the mountain regions, but they are not very common.
- 20. Falco columbarius columbarius. Pigeon Hawk.—On June 6 a noisy pair were located in some heavy spruce timber at the base of a small precipice. After carefully looking for the nest in the trees, it was eventually found with four young on a ledge of rock on the mountain side.
- 21. Pandion haliaëtus carolinensis. Osprey.— Not numerous. A few birds seen flying from the sea inland. A breeding resident.
- 22. Ceryle alcyon. Belted Kingfisher.— Fairly common along the Humber River, where a nest of seven fresh eggs was taken on July 1.
- 23. **Dryobates villosus terrænovæ**. Newfoundland Woodpecker.— Common in the mountainous country and breeding in large dead birch trees which have been charred by forest fires.
- 24. **Dryobates pubescens medianus.** Downy Woodpecker.—Probably common, but we only saw half a dozen.
- 25. Picoides arcticus. Arctic Three-toed Woodpecker.— Saw three birds in the higher levels.
- 26. Colaptes auratus luteus. Northern Flicker.— Common. Flushed one bird out of a hole in a dead birch on June 9. The nest contained young.
- 27. Chordeiles virginianus virginianus. Nighthawk.—Saw a number flying over the cliffs at Bay of Islands.
- 28. **Tyrannus tyrannus**. Kingbird.— A few specimens were seen along the shore of the Humber River.

- 29. **Empidonax trailli alnorum**. Alder Flycatcher.— This species apparently had just arrived about June 10 at Bay of Islands and a few days later were quite common.
- 30. Empidonax minimus. Least Flycatcher.— A few birds seen and heard along the Humber River.
- 31. **Perisoreus canadensis nigricapillus**. Labrador Jay.— A pair or more of these birds were observed at every point and a few of them used to feed around our camp.
- 32. Corvus corax principalis. Northern Raven.— Fairly common, especially in and about the Bay of Islands. One pair had their nest of sticks on the cliffs of Gregory Island, but the young had already left June 8.
- 33. Corvus brachyrhynchos brachyrhynchos. Crow.—We saw a few birds along the railway line.
- 34. **Euphagus carolinus.** Rusty Blackbird.—A nest containing four fresh eggs found June 4. It was placed five feet up in a small spruce at edge of pond.
- 35. Pinicola enucleator leucura. PINE GROSBEAK.—Several old nests of this species were found; the birds are fairly common.
- 36. Loxia curvirostra minor. Crossbill. Saw two individuals at Bay of Islands.
- 37. **Acanthis linaria linaria.** REDPOLL.—Saw a flock of six or seven near the Humber River on June 7.
- 38. Passerculus sandwichensis savanna. Savannah Sparrow.—Abundant and nesting in spruce bogs. Several nests found on June 17 sunk in caribou moss and lined with grasses. This bird was also nesting on an island many miles out at sea.
- 39. Zonotrichia leucophrys leucophrys. White-crowned Spar-ROW.— We saw but three birds in stunted spruce woods.
- 40. **Zonotrichia albicollis**. White-throated Sparrow.—A common resident and abundant breeder. Many nests found on the ground in spruce woods during the month of June, the sets ranging from two to four eggs.
- 41. Spizella monticola monticola. TREE SPARROW.— A few birds seen at Bay of Islands in the spruce woods.
- 42. Spizella passerina passerina. Chipping Sparrow.— Common, especially at Bay of Islands.
- 43. Junco hyemalis hyemalis. Slate-colored Junco.— Not many birds seen. A nest with three incubated eggs was located on the ground in spruce woods on July 18.
- 44. **Melospiza lincolni lincolni**. Lincoln's Sparrow.— A few seen along the Humber River.
- 45. Melospiza georgiana. Swamp Sparrow.—Only two birds noted.
- 46. **Passerella iliaca iliaca**. Fox Sparrow.— A very interesting and abundant species; a wonderful singer. This bird's flute-like notes were heard at all times of the day in the stunted spruce country.

- 47. Iridoprocne bicolor. Tree Swallow.— We saw several specimens at St. Georges Bay.
- 48. Riparia riparia. Bank Swallow.—Several pairs were starting to nest in some low-lying sand-pits at St. George's Bay on June 10.
- 49. Mniotilta varia. Black and White Warbler.— A fairly common breeder. Nesting in spruce woods about June 15.
- 50. Dendroica æstiva æstiva. Yellow Warbler.— Several specimens noted at Bay of Islands amongst the alders on June 7. A nest with four badly incubated eggs was found on June 27 in a birch tree.
- 51. Dendroica coronata. Myrtle Warbler.— On June 9 we saw a bird of this species carrying nesting material. Not very common.
- 52. **Dendroica magnolia**. Magnolia Warbler.—Six or seven birds seen in the stunted spruce country along the Humber River on June 8.
- 53. **Dendroica pensylvanica**. Chestnut-sided Warbler.— Rare only two birds noted in some mixed woods on June 8.
- 54. **Dendroica castanea**. Bay-breasted Warbler.—Two individuals noted at Grand Lake on June 8.
- 55. **Dendroica striata**. Black-poll Warbler.— The most abundant warbler seen during our visit. They were everywhere in the spruce country. A nest with four fresh eggs was found on June 27 in a small spruce tree.
- 56. Dendroica virens. Black-throated Green Warbler.— Heard many in the large hemlocks and pines at Bay of Islands on June 10.
- 57. **Dendroica palmarum hypochrysea.** Yellow Palm Warbler. We heard this species singing every morning early around our camp at Grand Lake.
- 58. Seiurus noveboracensis noveboracensis. Water-Thrush.—Fairly abundant. A nest found on June 4 in the upturned roots of a tree. The bird had not started to lay.
- 59. Geothlypis trichas trichas. Maryland Yellow-throat.—Common among the alders and willows along the Humber River.
- 60. Wilsonia pusilla pusilla. Wilson's Warbler.—Common and observed wherever we pitched our camp.
- 61. Wilsonia canadensis. Canada Warbler.— Fairly common in the spruce woods.
- 62. Nannus hiemalis hiemalis. Winter Wren.—Heard this species singing at all hours of the day in damp evergreen woods.
- 63. Sitta canadensis. Red-breasted Nuthatch.—Saw several in the mountainous country where they were breeding.
- 64. Penthestes atricapillus atricapillus. Chickadee.— Common all over the country.
- 65. Regulus calendula calendula. Ruby-crowned Kinglet.—Very abundant. This species, like *Passerella iliaca*, is a very interesting one and a delightful singer. For such a small body the bird has extraordinary powers of song, and from the tops of stunted spruce can be heard at all hours of the day.

On June 4 a nest with four fresh eggs was found. On June 9, 15 and 28, three others of nine eggs each, respectively, were discovered, all the nests being suspended from the branches of stunted spruce trees. They were built of moss, fine strips of bark and heavily lined with feathers of various birds.

- 66. **Hylocichla fuscescens fuscescens**. VEERY.— Not as common as the following species, but a few were seen at different points.
- 67. **Hylocichla guttata pallasi.** HERMIT THRUSH.— Abundant. A nest found on June 4 contained three fresh eggs. Two other nests were located June 14 and 16, each containing three fresh eggs. Another wonderful singer. It was worth making the trip just to hear the present species, the White-throated Sparrow, the Fox Sparrow and Ruby-crowned Kinglet sing their beautiful notes.
- 68. **Planesticus migratorius migratorius**. Robin.— Abundant everywhere. Nesting commonly the first week in June.

NOTES ON BIRDS BREEDING IN THE MOUNTAINS OF VIRGINIA.

BY H. B. BAILEY.

DURING a trip to the mountains of Virginia in July and August, 1910. I was struck by the large number of young birds seen daily on my tramps, and as many species were supposed to raise only one brood in our hot climate, I decided this season to find as many evidences of actual second and third broods as possible. this object in view I visited Goshen the first week in June and was surprised to find every species had hatched their young and many laying again, thus being as far advanced as at our home on the seaboard. The following notes were made at Goshen, June 3-10; Massanetta Springs (near Harrisonburg), July 7-28, and August 16-30; Hot Springs, July 29-August 4; Old Sweet Springs (one mile over the border in West Virginia), August 6-15. The elevation is over 2000 feet, and the season was very hot and dry. Well kept farms predominate, the woods having generally been cut off. My principal disappointment was in not finding Juncos and Thrushes on the mountain tops. The species observed (especially