

TRANSACTIONS
OF THE
Nova Scotian Institute of Science.

SESSION OF 1915-16.

ANNOTATED LIST OF BIRDS OF YARMOUTH AND VICINITY,
SOUTHWESTERN NOVA SCOTIA.—By E. CHESLEY ALLEN,
Yarmouth, N. S.

(Read 8 November 1915)

The following notes are based upon observations made throughout a period of seventeen years.

While the greater part of the observations were made in or within easy walking distance of Yarmouth, a few are on specimens sent in to Yarmouth taxidermists from the adjoining counties of Digby and Shelburne. Where, however, birds are mentioned as having come in to local taxidermists without any mention of the locality from which they came, it should be understood that such birds were taken within the limits of the three counties.

Where particular localities are mentioned, it should be understood that they are in Yarmouth County unless otherwise stated.

The lack of observations on the shore and sea birds, as compared with those on the land birds, should not be taken

as any indication of the scarcity of the former in this vicinity. The writer has given most of his attention to the land birds, and the few observations on the other groups are presented for what they are worth.

Where dates for "first appearance," "becoming common," "last appearance," etc., are given, the number of years on which the average date was reckoned is enclosed in parentheses. Except in two or three cases the writer is not responsible for the birds reported as "taken" or "shot".

The numbers and nomenclature are those used by the American Ornithologists' Union. The list contains 170 species and subspecies.

2. *Colymbus holboellii* (Reinh.). HOLBOELL'S GREBE.—
One observation only. A specimen shot at Sand Beach, Jan. 1, 1906.
6. *Podilymbus podiceps* (Linn.). PIED-BILLED GREBE.—
Two observations only. A specimen in winter plumage and without ear-tufts taken off Yarmouth, Nov. 16, 1906(?), and brought in to local taxidermist. Another shot at Barrington Passage, by Chas. Weddleton, about Mar. 15, 1915.
7. *Gavia immer* (Brünn.). LOON.—Breeds in all our secluded woodland lakes where there are islands. July 17, 1906, a nest with the usual two eggs was found very close to the water's edge on a small island in a lake near Deerfield. We did not observe the bird leave the nest, but on July 18th we paddled noiselessly around the end of the island and surprised the old bird. She launched herself into the water and splashed along over the surface for about seventy-five yards using her wings as paddles with great effect, then dived to reappear a quarter of a mile up the lake. On the night of July 21st. and also on the 24th and 25th we had much rain,

and both the old birds were much distressed, calling mournfully all night. We visited the nest on the evening of the 26th and found that the lake had risen so that the eggs were half submerged. One old bird was observed a few yards away. More rain followed and next day the eggs were completely submerged. We neither heard nor saw either old bird that day, or thereafter except at a distance and at long intervals. The fact that loons nest so near the water's edge and that they are thus exposed to danger by sudden elevations of the water may in part answer the question asked by one naturalist—Why such wary, strong birds with apparently so few natural enemies do not increase in numbers. July 28, 1911, on the lake at Deerfield, two old loons were noticed close in shore in a gravelly cove. Closer observation showed that they were attended by two very small young. We judged the latter to be not more than a week old. We immediately pushed off in the boat, and rowed between the loons and the open lake. One old bird immediately dived and reappeared out in the lake. He(?) soon disappeared. The other old bird remained with the young until very closely pressed to the shore when she too went under but reappeared just outside the boat where she remained to watch proceedings. The youngsters, when left alone, immediately submerged themselves, reappearing in the same place. This they continued to do for some time, remaining under each time, on an average, fourteen seconds, and above, two or three seconds if undisturbed. Any sudden motion on our part, however, would send them down immediately. They were constantly watching for an opening, and soon separated, swimming rapidly along the shore,

and being most of the time under water. We confined our attention to one of the babies and found that at each reappearance we were gaining upon him. When, however, we judged that his next reappearance would bring him within our grasp he failed to appear; and it was only after waiting a minute or more that we discovered that he had doubled beneath our boat and was away in our rear paddling bravely toward his retreating parent and brother. It is evident that the instinct for self-preservation develops very early in the little loons.

11. *Gavia stellata* (Pont.). RED-THROATED LOON.—One specimen seen, which was shot in the Tusket River, Nov. 23, 1905.
31. *Uria lomvia lomvia* (Linn.). BRÜNNICH'S MURRE.—A specimen was brought to me Feb. 22, 1908, by a gunner who said that they had been about the harbour for two or three weeks.
34. *Alle alle* (Linn.). DOVEKIE.—A few (not more than half a dozen) brought in to local taxidermists each winter.
35. *Megalestris skua* (Brünn.). SKUA.—On May 25, 1910, a specimen from Shelburne Co., consigned to a dealer in Boston was intercepted by the game warden here.
38. *Stercorarius longicaudus* Vieill. LONG-TAILED JAEGER.—One observation. A specimen brought in to local taxidermist in late summer of 1910. This was evidently a young bird as it was in immature plumage.
39. *Pagophila alba* (Gunn.). IVORY GULL.—Dec. 9, 1905, while the coal steamer "Coban" was nearing Sable Island, an ivory gull came aboard. It was captured and brought into Yarmouth for mounting.

40. *Rissa tridactyla tridactyla* (Linn.). KITTIWAKE.—Not more than three observations in seventeen years. All winter birds, brought in to taxidermists.
47. *Larus marinus* Linn. BLACK-BACKED GULL.—Apparently irregular along our coasts in winter, and begins to visit the fresh water lakes as soon as they are open in the spring. A large, and apparently increasing colony breeds on several small islands in Lake George, twelve miles north of Yarmouth. The nests, containing normally three eggs, are situated on the ground. Some are at the roots of stumps, some among the thick bushes, and some among the pebbles on the beach. The shallow hollows are edged with coarse sticks, and lined with tufts of grass, dead leaves, feathers, or other soft material. Two cases have been noted in which the clutch of eggs included one egg of a very pale blue color with obscure lavender markings. Fragments of fishes of large size may be found about the islands. The Bay of Fundy shore is only four miles west of the colony. A visit to the colony June 9, 1912 showed over one hundred nests with eggs, many nests still unused, and about forty young not more than three or four days old. We estimated that there were more than a thousand adult birds in the colony. Another visit was made July 15, 1913. The colony seemed larger than in 1912, nests being found in places not used then. Hatching was practically done, and most of the young were well grown. Many were able to give us a good chase in the boat. We were banding them. They are not, however, rapid swimmers, and good steady pulling soon brings the boat up to them. But their habit of turning suddenly off at right angles makes them difficult to capture.

They never dive to avoid capture, and when caught are able to put up a good fight.

51. *Larus argentatus* Pont. HERRING GULL.—In company with the large colony of Black-backed Gulls at Lake George, is a smaller colony of Herring Gulls, their numbers being roughly in the ratio of one to ten of the former. Their nests seem to be confined to one island, the most heavily wooded of all those used by the gulls.
70. *Sterna hirundo* Linn. COMMON TERN.—Common about our shores in summer. I have never visited any of its reported breeding-places off our coasts.
106. *Oceanodroma leucorhoa* (Vieill.). LEACH'S PETREL.—One was found alive, but unable to rise, on Main St., Yarmouth, Nov. 19, 1909. Three years before, I found the dried body of one at the foot of a ventilating flue in the South End School.
117. *Sula bassana* (Linn.). GANNET.—A specimen in immature gray plumage shot off Chegoggin Point, Oct. 29, 1904, and another in white plumage shot off Yarmouth, Nov. 8, 1904.
129. *Mergus americanus* (Cass.). AMERICAN MERGANSER.—Two male specimens both from Digby Co. sent to taxidermists here. One Feb. 15, 1904, the other Jan. 15, 1912.
130. *Mergus serrator* (Linn.). RED-BREADED MERGANSER.—A female or young male shot at Arcadia, Dec. 25, 1900. A male in fine plumage shot off Yarmouth, Feb. 28, 1904.
132. *Anas platyrhynchos* Linn. MALLARD.—A male specimen sent to taxidermist here from Shelburne Co., about Nov. 5, 1904. Another brought in the same fall.

133. *Anas rubripes* Brewst. BLACK DUCK.—Remains with us in flocks throughout the winter. Breeds in our inland meadows and in coves along our salt marshes. Pairing is apparently complete by May 15. I usually find young broods about June 15.
137. *Mareca americana* (Gmel.). BALDPATE.—A male (one of three) was shot at Little River, Yarmouth Co., Jan. 9, 1912. Mr. Benj. Doane, local taxidermist, had a female shot near Yarmouth some years before.
139. *Nettion carolinense* (Gmel.). GREEN-WINGED TEAL.—Two males shot at Arcadia, Dec. 20, 1901.
140. *Querquedula discors* (Linn.). BLUE-WINGED TEAL.—One specimen (male) brought in to local taxidermist, from the vicinity of Clarke's Harbour, Apr. 19, 1906.
144. *Aix sponsa* (Linn.). WOOD DUCK.—One specimen (male) sent from Shelburne Co., about Sept. 1, 1908.
146. *Marila americana* (Eyt.). REDHEAD.—One specimen (male) shot at Yarmouth in winter of 1902-3. Another male sent from Seal Island, Feb. 29, 1914.
147. *Marila vallisneria* (Wils.). CANVASBACK.—A male shot at Clarke's Harbour, Oct. 29, 1905.
148. *Marila marila* (Linn.). AMERICAN SCAUP DUCK.—Common along our coast in winter.
151. *Clangula clangula americana* Bonap. AMERICAN GOLDEN-EYE.—Common along our coast in winter.
153. *Charitonetta albeola* (Linn.). BUFFLEHEAD.—Two notes only. A specimen (male) sent from Shelburne Co., Apr. 5, 1906. Another male taken near Yarmouth during Dec. 1909.
162. *Somateria spectabilis* (Linn.). KING EIDER.—Two males sent here from Shelburne Co., Mar. 15, 1906, and Feb. 1, 1909.

166. *Oidemia perspicillata* (Linn.). SURF SCOTER.—They were common along our shore during the winter of 1905. I have no other record of them.
167. *Erismatura jamaicensis* (Gmel.). RUDDY DUCK.—One sent in that was taken at Cape Sable Island, Jan. 5, 1909.
- 169a. *Chen hyperboreus nivalis* (Forst.). GREATER SNOW GOOSE.—One was shot near Comeau's Hill, Yarmouth Co., about Nov. 1, 1911, in immature plumage.
172. *Branta canadensis canadensis* (Linn.). CANADA GOOSE.—Spring migration of this species is less observed now than a few years ago. I have two mid-winter observations. Two seen Jan. 7, 1907. Flock of forty flying north, Dec. 11, 1910.
173. *Branta bernicla glaucogastra* (Brehm.). BRANT.—I have seen not more than two in seventeen years.
190. *Botaurus lentiginosus* (Montag.). AMERICAN BITTERN.—Found in solitary pairs breeding in our swamps, meadows, and tidal marshes. First appearance (4 years) May 2. Last appearance (4 years) Oct. 14. The mating call is heard as soon as it arrives, and continues as late as June 2. A nest was found at Arcadia, June 20, 1914. The four eggs were laid on a rude mat of rushes in the swamp. The old bird positively refused to be frightened from her nest, and could be lifted or pushed aside without deserting her charge.
194. *Ardea herodias herodias* Linn. GREAT BLUE HERON.—This bird remains about some of our lakes and streams all summer, but I have yet to find them breeding. Earliest recorded appearance, May 28. Last appearance (3 years) Sep. 26.

200. *Florida caerulea caerulea* (Linn.). LITTLE BLUE HERON.
—One note only. A specimen seen in the flesh,
at taxidermist's, Oct. 21, 1913.
212. *Rallus virginianus* Linn. VIRGINIA RAIL.—One taken
at Yarmouth, Nov. 15, 1908.
215. *Coturnicops noveboracensis* (Gmel.). YELLOW RAIL.—
One shot at Little River, Yarmouth Co., Dec. 14,
1904.
219. *Gallinula galeata galeata* (Licht.). FLORIDA GALLINULE.
—One caught by the foot in a trap near Yarmouth,
Dec. 14, 1909.
228. *Philohela minor* (Gmel.). AMERICAN WOODCOCK.—
Apparently more common as a fall migrant than a
spring migrant. A few breed in this vicinity.
In two cases observed, July 13, and July 22, 1910,
the young were able to fly just well enough to avoid
being caught. Two winter observations,—one re-
mained about an open brook during first half of
Feb. 1900, one found dead Jan. 1, 1905. First
appearance (5 years) Apr. 4. Last appearance
(4 years) Nov. 3.
230. *Gallinago delicata* (Ord.). WILSON'S SNIFE.—Summer
resident. Undoubtedly it breeds here, as the
aerial nuptial performance of the males may be
heard and observed over most of our meadows during
the nesting season, but I have yet to find the eggs
or young. First appearance (8 years) Apr. 20.
Last appearance (5 years) Oct. 30. The "bleating"
of the males may be heard from the time of their
arrival till June 10.
231. *Macrorhamphus griseus griseus* (Gmel.). DOWITCHER.
—Two shot at Crawley's Island, Yarmouth Co.,
July 7, 1903. The only observation.

239. *Pisobia maculata* (Vieill.). PECTORAL SANDPIPER.—Numbers of them about our coast during first half of Oct. 1908. The only observation.
242. *Pisobia minutilla* (Vieill.). LEAST SANDPIPER.—Mixed flocks of this and the next species are common along our shores in late summer and fall.
246. *Ereunetes pusillus* (Linn.). SEMIPALMATED SANDPIPER.—Common in late summer and fall.
248. *Calidris leucophaea* (Pall.). SANDERLING.—Several seen on Port Maitland Beach, Sep. 7, 1903, and on Sep. 17 of the same year several were brought in to taxidermist here.
254. *Totanus melanoleucus* (Gmel.). GREATER YELLOW-LEGS.—Common during the fall migrations, remaining about our shores till after the middle of Oct.
258. *Catoptrophorus semipalmatus semipalmatus* (Gmel.). WILLET.—Summer resident, but more common during the fall migrations. They show all evidence of breeding in our locality, though I have not yet found nest or young. First appearance (5 years) May 4.
263. *Actitis macularia* (Linn.). SPOTTED SANDPIPER.—Breeds along our shores, streams, and lakes. First appearance (5 years) May 17. Nests with eggs usually found during first ten days of June. Some interesting observations were made in regard to the young along the lake shore at Deerfield. These young birds, which accompany their parents along the gravelly beach, when alarmed, are in the habit of taking refuge in the fringe of low bushes that border the beach along its upper side, and when they once reach this cover it is quite useless to look for them. On three separate occasions, however,

their retreat to the bushes was cut off, and invariably they took to the water, swimming buoyantly and with perfect ease out on the lake. When pursued while swimming they immediately dived, swimming about a foot beneath the surface and for a distance of fifteen or twenty feet. When swimming beneath the surface the feet were not used at all, being carried straight behind, the bird propelling itself by quick, regular, downward beats of its little wings. Though apparently perfectly adapted for locomotion either on or below the surface of the water, the youngster in every case showed restlessness in that element, and constantly watched for an opening to reach the shore and the bush cover. The wing feathers mature very rapidly, and the young are often able to fly while the head and body are still clothed only in down.

270. *Squatarola squatarola* (Linn.). BLACK-BELLIED PLOVER
—Occurs here during both spring and fall migrations.
274. *Ægialitis semipalmata* (Bonap.). SEMIPALMATED PLOVER.—Very common during the fall migrations. Often found in company with least and semipalmated sandpipers. I have but one spring observation, May 3, 1901.
- 298c. *Canachites canadensis canace* (Linn.). CANADA SPRUCE PARTRIDGE.—Seldom seen near the coast, and said to be becoming less common in the interior. Oct. 31, 1907, one appeared in the street at the north end of the town, and, after posing for several camera exposures, wandered off.
- 300a. *Bonasa umbellus togata* (Linn.). CANADA RUFFED GROUSE; "BIRCH PARTRIDGE."—Apparently becoming less common. Drumming first heard (5 years) Apr. 5, and may be heard every month till Oct.,

when it becomes common again. Ernest Thompson Seton, in "Redruff," says, "By a strange law of nature, not wholly without parallel among mankind, all partridges go crazy in the November moon of their first year." I have the following notes that may be of interest. At Argyle, Oct. 1, 1900, a young but full grown grouse of that season, flew from somewhere and alighted at my feet as I stood on the doorstep of my boarding house, remaining long enough to allow me to pick it up, when it immediately struggled to escape. At Yarmouth, Oct. 22, 1907, one was seen on the railway track near the harbour, flying up and down and finally disappearing. Another specimen flew in broad daylight through the window of a house on William St. On Nov. 2, 1907, a young grouse was caught while flying about the freight sheds on the Dominion Atlantic Railway wharf, but when liberated flew off. Our Yarmouth specimens show two color phases, red and gray, with intermediate specimens.

Phasianus torquatus (Gmel.). RING-NECKED PHEASANT.

—A number of these birds (fifty or more) have been liberated here during the last five years, and are said to be multiplying rapidly. The mating call of the male is heard as early as Mar. 26, and is becoming one of the spring sounds of the woods, while reports of young broods come in from all over the western part of the country at least.

316. *Zenaidura macroura carolinensis* (Linn.). MOURNING DOVE.—Only five observations of this species during seventeen years.
325. *Cathartes aura septentrionalis* Wied. TURKEY VULTURE.—One shot at Clarke's Harbour, Shelburne Co., fall of 1892*. One shot at Seal Island, Shel-

*This specimen is now in the Provincial Museum, Halifax, accession No. 2196

- burne Co., about 1896. One taken at Kemptville, Yarmouth Co., Nov. 10, 1909.
331. *Circus hudsonius* (Linn.). MARSH HAWK.—I find this our most common species in the fall, but uncommon during spring and summer.
332. *Accipiter velox* (Wils.). SHARP-SHINNED HAWK.—Common during the fall migration.
334. *Astur atricapillus atricapillus* (Wils.). GOSHAWK.—Not at all common with us. I have but two observations; both in winter.
337. *Buteo borealis borealis* (Gmel.). RED-TAILED HAWK.—Only four observations; all of birds brought in to taxidermists.
- 347a. *Archibuteo lagopus sancti-johannis* (Gmel.). ROUGH-LEGGED HAWK.—One shot near Yarmouth, about Nov. 23, 1906.
352. *Haliaeetus leucocephalus leucocephalus* (Linn.). BALD EAGLE.—Only one observation in life; one seen Feb. 10, 1906. An average of perhaps one in a season brought in to local taxidermists, from this and neighbouring counties.
360. *Falco sparverius sparverius* Linn. SPARROW HAWK.—Rare here. Two observations only: Oct. 6, 1907; Jan. 17, 1910.
364. *Pandion haliaeetus carolinensis* (Gmel.). OSPREY; "FISH HAWK."—With the exception of a pair that shows every indication of breeding about the lakes at Deerfield each season, I have very few records of this species.
365. *Aluco pratincola* (Bonap.). BARN OWL.—On Dec. 16, 1910, Mr. W. H. Robbins, of Tusket, found an owl in his barn. Mr. Robbins endeavored to catch it, but it escaped, and next morning was found

dead outside the barn. The weather at the time was severely cold. The bird proved to be the above species.

366. *Asio wilsonianus* (Less.). LONG-EARED OWL.—Rare here. One observation only, Dec. 30, 1909.
367. *Asio flammeus* (Pont.). SHORT-EARED OWL.—Rare here. Mr. Doane, taxidermist here, says he has not received more than two or three in twenty years.
368. *Strix varia varia* Barton. BARRED OWL.—I have found this to be the most common of our owls.
372. *Cryptoglaux acadica acadica* (Gmel.). SAW-WHET OWL.—I have never observed a live specimen of this species, but one or two are taken in this vicinity each winter.
375. *Bubo virginianus virginianus* (Gmel.). GREAT HORNED OWL.—Not uncommon inland.
376. *Nyctea nyctea* (Linn.). SNOWY OWL.—A few appear in this vicinity each winter. Earliest recorded date, Oct. 27. Unusually common in the winter of 1902-3. In the fall of 1905 we received our share of the great migratory wave of these owls that swept down across the continent.
- 377a. *Surnia ulula caparoch* (Mull.). HAWK OWL.—One shot near Yarmouth, Oct. 26, 1905. The only observation in the period covered by this paper.
387. *Coccyzus americanus americanus* (Linn.). YELLOW-BILLED CUCKOO.—A specimen was taken alive and sent to Yarmouth from Cape Sable Island, Oct. 8, 1913.
388. *Coccyzus erythrophthalmus* (Wils.). BLACK-BILLED CUCKOO.—Decidedly uncommon here except in one season, the summer of 1900, when they were rather common.

- 390 *Ceryle alcyon* (Linn.). BELTED KINGFISHER.—Not common. Seems less so than formerly. First appearance (6 years) Apr. 28. Last appearance (8 years) Oct. 16.
393. *Dryobates villosus leucomelas* (Bodd.). NORTHERN HAIRY WOODPECKER.—Rather uncommon resident.
- 394c. *Dryobates pubescens medianus* (Swains.). DOWNY WOODPECKER.—Resident. A little more common than the last.
400. *Picoides arcticus* (Swains.). ARCTIC THREE-TOED WOODPECKER.—Three observations only: A pair at Argyle, Apr. 6, 1901; a male near Yarmouth, Dec. 27, 1904; another male near Yarmouth, Jan. 20, 1906.
402. *Sphyrapicus varius varius* (Linn.). YELLOW-BELLIED SAPSUCKER.—Summer resident. Not uncommon inland. First appearance (4 years) Apr. 30.
- 405a. *Ceophlæus pileatus abieticola* (Bangs). NORTHERN PILEATED WOODPECKER.—I have seen this species only twice in life: Apr. 25, 1904, and Oct. 31, 1904. On the former occasion the spring call was heard. It was much like the "if-if-if--" of the Yellow Hammer but the syllable "if" was not repeated as many times as in the Yellow Hammer's call. This bird had, also, the Yellow Hammer's trick of drumming on a dead limb.
- 421a. *Colaptes auratus luteus* Bangs. NORTHERN FLICKER; "YELLOW HAMMER."—Our most common woodpecker. Summer resident, but occasionally observed in winter. First appearance (10 years) Apr. 6. Last appearance (8 years) Oct. 29.
420. *Chordeiles virginianus virginianus* (Gmel.). NIGHT-HAWK.—Common summer resident. Seems to favor burned forest tracts. First appearance (4 years)

- May 28. Last appearance (4 years) Sept. 20. The "booming" may be heard until after the middle of August.
423. *Chætura pelagica* (Linn.). CHIMNEY SWIFT.—Tolerably common summer resident. As common in woodland as in settled areas. First appearance (11 years) May 15. Last appearance (6 years) Aug. 23.
428. *Archilochus colubris* (Linn.). RUBY-THROATED HUMMINGBIRD.—A few seen each season. First appearance (5 years) May 21. Last appearance (9 years) Sept. 16. Five nests found: July 18, 1904, nest with young well feathered; July 9, 1905, nest with eggs, young appeared July 25; July 10, 1905, another nest just vacated, family still in neighbourhood. July 1, 1906, nest with, probably, eggs; July 21, 1906, another nest with eggs or small young, judging from action of old bird.
444. *Tyrannus tyrannus* (Linn.). KINGBIRD.—Tolerably common summer resident. Seems very irregular as to first appearance, but regular in disappearance. First appearance (4 years) May 24. Last appearance (7 years) Sep. 8. Unusually large flocks seen Sep. 4, 1904, and Sep. 1 to 8, 1907.
459. *Nuttallornis borealis* (Swains.). OLIVE-SIDED FLY-CATCHER.—Rather uncommon summer resident. Nests near Yarmouth.
461. *Myiochanes virens* (Linn.). WOOD PEWEE.—Fairly common summer resident in the wooded regions.
463. *Empidonax flaviventris* Baird. YELLOW-BELLIED FLY-CATCHER.—Rather uncommon summer resident. Nests in our county.
- 466a. *Empidonax trailli alnorum* Brewst. ALDER FLY-CATCHER.—Common summer resident.

467. *Empidonax minimus* W. M. & S. F. Baird. LEAST FLYCATCHER.—Very common summer resident. May be called the most domestic of our flycatchers, building about our gardens and ornamental trees. First appearance (8 years) May 16. Last appearance (4 years) Aug. 22.
474. *Otocoris alpestris alpestris* (Linn.). HORNED LARK.—One to three observations each winter. Earliest recorded appearance in fall, Nov. 8, 1908. Latest recorded appearance in spring, Mar. 17, 1914.
477. *Cyanocitta cristata cristata* (Linn.). BLUE JAY.—Resident. More common inland than near the coast.
484. *Perisoreus canadensis canadensis* (Linn.). CANADA JAY.—Tolerably common resident. One seen carrying nesting material Mar. 12, 1905.
- 486a. *Corvus corax principalis* Ridgw. NORTHERN RAVEN.—Not uncommon. Resident.
488. *Corvus branchyrhynchos branchyrhynchos* Brehm. CROW.—Abundant resident. Begins to nest by Mar. 31. More apparent about the town during severe winter weather, and when snow is on the ground.
494. *Dolichonyx oryzivorus* (Linn.). BOBOLINK.—I have found it uncommon in Yarmouth Co., except in one locality—the salt marsh at the head of Yarmouth Harbour, where a number are to be found in the breeding season.
495. *Molothrus ater ater* (Bodd.). COWBIRD.—Five records: May 16, 1903, a male; Aug. 3, 1910, a female; Apr. 21, 1911, a male; Oct. 1, 1911, a male; Oct. 22, 1911, two males.
498. *Agelaius phœniceus phœniceus* (Linn.). RED-WINGED BLACKBIRD.—I have seen but two in seventeen years: Dec. 19, 1908; and Apr. 3, 1899.

501. *Sturnella magna magna* (Linn.). MEADOW LARK.—
One taken at Comeau's Hill in fall of 1908. Another at Emerald Island off Shelburne Co., Feb. 20, 1912. This was said to be one of three or four on the island at the time.
507. *Icterus galbula* (Linn.). BALTIMORE ORIOLE.—One shot on Green Island, off Yarmouth, May 10, 1908.
509. *Euphagus carolinus* (Mull.). RUSTY BLACKBIRD.—
Rather common summer resident, nesting in our swamps. First appearance (8 years) Mar. 27.
- 511b. *Quiscalus quiscula æneus* Ridgw. BRONZED GRACKLE.—
The following records only.—One Jan. 13, 1904, with English Sparrows. One Oct. 18, 1904. On Oct. 26, 1905, at Mood's Mill, about ten miles east of Yarmouth a flock of over thirty were seen. Feb. 23, 1908, one seen with English sparrows. In summer of 1914 a pair nested at the south end of the town. The same pair returned in 1915.
515. *Pinicola enucleator leucura* (Mull.). PINE GROSBEEK.—
Generally considered a winter bird only in Nova Scotia, but my records show observations for every month but September. In July, 1911, Mr. Harrison Lewis, a very careful and accurate observer, found old birds feeding fledgelings on the Mood Road, about ten miles from Yarmouth. During a few fine days in January, 1906, I had an opportunity to observe several in song about an open sunny clearing near Yarmouth. The song resembled that of the purple finch, but was interspersed with a few very robin-like notes. Like the purple finch, too, the grosbeaks were sometimes observed to sing on the wing. I have heard the song since in March, April, and June.

517. *Carpodacus purpureus purpureus* (Gmel.). PURPLE FINCH.—Common summer resident. First appearance very irregular; as late as Oct. 27. Song period from first appearance till middle of July.
- , *Passer domesticus domesticus* (Linn.). HOUSE OR ENGLISH SPARROW.—Abundant resident. They are observed “house hunting” here as early as Mar. 14, and nest building is common during last week in Mar. In the fall months a local migration is noticeable from the town to the country about July 1, and returning about Oct. 1, the attraction to the country being, probably, the grain fields, as clouds of sparrows are seen about them during July, Aug., and Sept.
521. *Loxia curvirostra minor* (Brehm.). AMERICAN CROSSBILL.—Occurs very irregularly here; some seasons common, then none observed for three or four years. I have observed it in Jan., May, Jun., Jul., Aug., and Sep.
522. *Loxia leucoptera* Gmel. WHITE-WINGED CROSSBILL.—Less common than the last. Observed from Aug. to Jan.
528. *Acanthis linaria linaria* (Linn.). REDPOLL.—Though I am keeping all Redpoll notes under this specific name, it is possible that some of my observations may have been of other species of Redpolls. One observation in Dec.; all others confined to Feb. and Mar.
529. *Astragalinus tristis tristis* (Linn.). AMERICAN GOLD-FINCH.—Mostly a summer resident, though an occasional winter flock may be seen here. I feel sure from observations at Deerfield that they nest there, though I have not found the nest or young.

533. *Spinus pinus pinus* (Wils.). PINE SISKIN.—Irregular here. Common in 1901 and 1902; also in 1906, 1907, 1908. I have seen none since. On June 16, 1907, a male was observed in full song. The song was typically finch-like, being a confused ramble, and uttered while on the wing, the bird spreading wings and tail and displaying all the yellow to the utmost. Song again heard during June, 1908.
534. *Plectrophenax nivalis nivalis* (Linn.). SNOW BUNTING; SNOWFLAKE.—Winter visitor. Very irregular in its abundance from year to year. Some winters none are observed; during others it is common. Unusually common in 1904. Earliest recorded date Nov. 10. Latest date, Feb. 16.
540. *Poæcetes gramineus gramineus* (Gmel.). VESPER SPARROW.—Observed here as a fall migrant only. First appearance (5 years) Oct. 7. Last appearance (4 years) Nov. 30.
- 542a. *Passerculus sandwichensis savanna* (Wils.). SAVANNAH SPARROW.—Abundant summer resident. First appearance (7 years) Apr. 22. Last appearance (4 years) Oct. 5.
- 549.1a. *Passerherbulus nelsoni subvirgatus* (Dwight). ACADIAN SHARP-TAILED SPARROW.—Found common about our salt marshes. Doubtless breeds near Bunker's Island and on marsh at the head of Yarmouth Harbour, but up to the present I have not found the nests.
558. *Zonotrichia albicollis* (Gmel.). WHITE-THROATED SPARROW.—Common summer resident. First appearance (6 years) May 1. Last appearance (8 years) Oct. 18. Song period from first appearance to Oct. 1.

559. *Spizella monticola monticola* (Gmel.). TREE SPARROW.—All my observations of this species are in Feb. and Nov.
560. *Spizella passerina passerina* (Bech.). CHIPPING SPARROW.—Seems irregular in its occurrence here. Most common in Sep. and Oct., less so in May and June, and isolated observations in Nov., Dec., and Jan.
563. *Spizella pusilla pusilla* (Wils.). FIELD SPARROW.—One observation only, Nov. 24, 1907.
567. *Junco hyemalis hyemalis* (Linn.). SLATE-COLORED JUNCO.—Abundant. Mostly summer residents, but a few are seen in winter. Date of becoming common (7 years) Mar. 27. Song period continues to near the end of July. Nesting does not appear to become common till May 1. I have two records of juncos departing from their own simple song and attempting to imitate other birds. In one case the song of the song sparrow was attempted, and in the other that of the robin.
581. *Melospiza melodia melodia* (Wils.). SONG SPARROW.—Abundant. Mostly summer residents, but a few remain all winter. Date of becoming common (13 years) Mar. 28. Nesting not common till May 1. One nest, loosely built, in top of young spruce, ten feet from the ground. Song period normally extends to middle of Aug., but is frequently heard in Oct., with that of other birds which revive their songs again at this season.
583. *Melospiza lincolni lincolni* (Aud.). LINCOLN'S SPARROW.—One record only; Sand Beach, near Yarmouth, June 22, 1906.
584. *Melospiza georgiana* (Lath.). SWAMP SPARROW.—Common summer resident. First appearance (2 years) Apr. 21. Last appearance (2 years) Oct. 8.

585. *Passerella iliaca iliaca* (Merr.). FOX SPARROW.—Observed during four fall migrations and once in spring. First appearance in fall (4 years) Oct. 27. Last appearance in fall (4 years) Nov. 6. Observed a flock, Apr. 7, 1907. They remained about the town for a few days, treating us to their song, which reminded one of that of the purple finch but was shorter.
595. *Zamelodia ludoviciana* (Linn.). ROSE-BREADED GROSB-EAK.—One observation only: a male in song at Mood's Mill, summer of 1906.
608. *Piranga erythromelas* Viell. SCARLET TANAGER.—One taken at Arcadia, three miles from Yarmouth, about 1912. Though I saw the bird I failed to record the date. Two or three others have been received by taxidermists here.
610. *Piranga rubra rubra* (Linn.). SUMMER TANAGER.—A male found dead in the garden of J. Bond Gray, Yarmouth, Apr. 20, 1913. Had been dead two or three days. This specimen is now in the Provincial Museum, Halifax (Acces. No. 4130).
612. *Petrochelidon lunifrons lunifrons* (Say.). CLIFF SWALLOW.—Abundant summer resident. First appearance (10 years) May 17. Last appearance (6 years) Aug. 25. Nest building is common by May 25.
613. *Hirundo erythrogaster* (Bodd.). BARN SWALLOW.—Abundant summer resident. First appearance (10 years) May 3. Last appearance (9 years) Sep. 9. Completed nests containing eggs are not uncommon by June. 1.
614. *Iridoprocne bicolor* (Vieill.). TREE SWALLOW.—Abundant summer resident. First appearance (10 years) Apr. 29. Last appearance (6 years) Aug. 23.

Breeds very commonly with us, nesting in hollow trees and bird-houses.

616. *Riparia riparia* (Linn.). BANK SWALLOW.—A few breed at the lower end of Bunker's Island, near the mouth of Yarmouth Harbour, and doubtless in other suitable localities along our shore, but as they seem to show a decided preference for the sea-shore we seldom see them even a mile or two inland. Latest date observed, Sep. 16.
619. *Bombycilla cedrorum*, Vieill. CEDAR WAXWING.—Most years this species occurs here as a summer resident only. First appearance (4 years) June 1. Last appearance (4 years) Sep. 17. A flock (forty or fifty) remained about Yarmouth during the third week of Nov., 1912. Two dead ones were brought to me. One had the berries of black alder (*Ilex verticillata*) in its throat. During the third week of Feb. 1913, there were many about the town. At this time three dead and one apparently paralyzed were brought to me. The above are my only winter records for this species, and, judging from the number of casualties, they do not seem to make a success of wintering here.
621. *Lanius borealis* Vieill. NORTHERN SHRIKE.—Only three certain records: Dec. 27, 1905; Nov. 10, 1908; Jan. 9, 1910.
624. *Vireosylvia olivacea* (Linn.). RED-EYED VIREO.—Common summer resident, but I am not near enough to its favored haunts to get good dates for its arrival or departure.
626. *Vireosylvia philadelphica* Cass. PHILADELPHIA VIREO.—One record; a specimen shot near Norwood, Yarmouth Co., Jul. 9, 1904.

629. *Lanivireo solitarius solitarius* (Wils.). BLUE-HEADED VIREO.—Four records only: Aug. 24, 1904; Sep. 25, 1904; July 20, 1910; July 23, 1910.
636. *Mniotilta varia* (Linn.). BLACK-AND-WHITE WARBLER.—Common summer resident. First appearance (7 years) May 16. Last appearance (5 years) Sep. 23.
645. *Vermivora rubricapilla rubricapilla* (Wils.). NASHVILLE WARBLER.—I have only one certain record of this species. On the nights of Sep. 9, and 10, 1909, many birds were killed at the light near the mouth of Yarmouth Harbour. A basket containing sixty-five was handed to me. It contained: Oven-birds 1, Black-throated Green Warblers 7, Black-throated Blue Warblers 1, Parula Warblers 1, Wilson's Warblers 3, Black and White Warblers 1, Yellow Warblers 2, Magnolia Warblers 1, Blackburnian Warblers 4, *Nashville Warblers* 1, Northern Waterthrushes 7, Savannah Sparrows 5, Maryland Yellowthroats 13, Redstarts 13, Red-eyed Vireos 4, Wood Pewee 1.
- 648a. *Compothlypis americana usneæ* Brewst. NORTHERN PARULA WARBLER.—Fairly common summer resident. First appearance (3 years) May 15. Latest date seen Aug. 28, excepting observation under Nashville warbler above.
652. *Dendroica æstiva æstiva* (Gmel.). YELLOW WARBLER.—About the town of Yarmouth this is our most common warbler. First appearance (11 years) May 13. Last appearance (7 years) Sep. 9.
654. *Dendroica cærulescens cærulescens* (Gmel.). BLACK-THROATED BLUE WARBLER.—Only five observations in seventeen years: Jul. 12, 1903; Jul. 7 and 9, 1904; Oct. 18, 1906, and Sep. 11, 1909.

655. *Dendroica coronata* (Linn.). MYRTLE WARBLER.—An abundant summer resident, and fairly common winter resident. Date of becoming common in spring (9 years) Apr. 29. It remains common as late as the middle of Oct. Oct. 8, 1909, a partial albino was observed. Entire head and neck, bill, and feet white, a very few dark streaks on body and tail, and wings about half white. The yellow patches, however, of the crown, rump, and sides of breast were retained faintly, and served, with the company the bird was in, to identify it.
657. *Dendroica magnolia* (Wils.). MAGNOLIA WARBLER.—Common summer resident. First appearance (6 years) May 20. Last appearance (3 years) Sep. 26.
659. *Dendroica pensylvanica* (Linn.). CHESTNUT-SIDED WARBLER.—Fairly common summer resident. First appearance (4 years) May 21.
660. *Dendroica castanea* (Wils.). BAY-BREADED WARBLER.—One observation in seventeen years,—a male in song, June 4, 1911.
661. *Dendroica striata* (Forst.). BLACK-POLL WARBLER.—This warbler makes its appearance about the town of Yarmouth about May 15, and its song may be heard among the ornamental trees for a few days. After this, throughout the breeding season, it may be found in the spruce woods covering the west cape near Yarmouth Harbour.
662. *Dendroica fusca* (Mull.). BLACKBURNIAN WARBLER.—Rather uncommon summer resident. I have seen the old birds feeding young during July. Earliest date seen, May 13.
667. *Dendroica virens* (Gmel.). BLACK-THROATED GREEN WARBLER.—Abundant summer resident. First appearance (9 years) May 17. Last appearance (6

- years) Sep. 20. Song period from first appearance to about July 25. I have found them nesting as early as May 21.
- 672a. *Dendroica palmarum hypochrysea* Ridgw. YELLOW PALM WARBLER.—Rather uncommon summer resident, and nests in our county; but very common during the fall migrations. First appearance (3 years) Apr. 25. Last appearance (6 years) Oct. 15.
674. *Seiurus aurocapillus* (Linn.). OVEN-BIRD.—Common summer resident inland. First appearance (4 years) May 17. Last appearance (3 years) Aug. 27. While camping at Mood's Mill we noticed that the common cry of "Teach-er, Teach-er,---" ceased after Aug. 7, but that the aerial song continued through the month. A nest was found at Carleton, Yarmouth Co., May 24, 1912, nearly completed. It was in a hollow of the ground, and dome-shaped, with the entrance at the side.
675. *Seiurus noveboracensis noveboracensis* (Gmel.). WATER-THRUSH.—Eight or ten observed in seventeen years. At Carleton, Yarmouth Co., a pair was observed feeding young July 4, 1904. Latest observation, Sep. 21.
679. *Oporornis philadelphia* (Wils.). MOURNING WARBLER.—Four observations only: June 1903, one; July 7, 1904, one; July 16, 1904, a female; July 30, 1911, a pair.
681. *Geothlypis trichas trichas* (Linn.). MARYLAND YELLOW-THROAT.—Our most common warbler in low places. First appearance (8 years) May 17. Last appearance (8 years) Sep. 20.
685. *Wilsonia pusilla pusilla* (Wils.). WILSON'S WARBLER.—Five observations only. Seen with young at Deerfield, Aug. 10 and 13, 1908. See note under Nashville warbler.

686. *Wilsonia canadensis* (Linn.). CANADIAN WARBLER.—Rather uncommon summer resident. Evidently breeds here, as it has been seen feeding young several times. Earliest date seen May 24. Latest Aug. 29.
687. *Setophaga ruticilla* (Linn.). REDSTART.—Abundant summer resident. First appearance (5 years) May 19. Last appearance (5 years) Sep. 1.
697. *Anthus rubescens* (Tunstall). AMERICAN PIPIT.—Two observations. A large flock seen Sep. 26, 1906, and another in the fall of 1903.
704. *Dumetella carolinensis* (Linn.). CATBIRD.—An uncommon summer resident in this vicinity. Earliest date seen May 23. Latest, Oct. 3.
722. *Nannus hiemalis hiemalis* (Vieill.). WINTER WREN.—Sep. 30, 1905, one observed; Oct. 26, 1905, one. July 16, 1906, at Mood's Mill, and from then on to the end of the month in that locality one was heard in full song. On July 30 two were heard. These are the only observations of this species.
726. *Certhia familiaris americana* (Bonap.). BROWN CREEPER.—Rare in summer, but during some winters it is rather common, being found in company with the kinglets and chickadees.
727. *Sitta carolinensis carolinensis* Lath. WHITE-BREASTED NUTHATCH.—I have not seen more than a dozen in seventeen years.
728. *Sitta canadensis* Linn. RED-BREASTED NUTHATCH.—More common here than the last, and becomes abundant some years during the fall migrations. On May 24, 1912, at Carleton, an adult was observed feeding a fledgeling. The latter, however, was well developed and almost weaned from parental care. Nesting evidently began early.

735. *Penthestes atricapillus atricapillus* (Linn.). BLACK-CAPPED CHICKADEE.—Abundant resident. Nesting begins as early as Apr. 20. In two cases observed, the sitting bird would allow herself to be stroked while on the nest, and was only driven off by jarring the stump.
- 740a. *Penthestes hudsonicus littoralis* (Bryant). ACADIAN CHICKADEE.—A record of the comparative abundance of this and the last species, kept carefully for three years, shows that the Acadian chickadee may be found here at any time, but is more common during the winter than the summer months; and that the Black-cap is generally more abundant at any time of year. While I have never found the nest, I have seen them feeding young here in July.
748. *Regulus satrapa satrapa* Licht. GOLDEN-CROWNED KINGLET.—Common winter resident, and a few remain with us throughout the summer. Observed in every month except June. Heard in song in Apr. 1909, and July 1910.
749. *Regulus calendula calendula* (Linn.). RUBY-CROWNED KINGLET.—Fairly common summer resident. First appearance (4 years) Apr. 30.
756. *Hylocichla fuscescens fuscescens* (Steph.). WILSON'S THRUSH; VEERY.—An uncommon summer resident. Occurs very locally and may be found in the same place year after year. I know of only three "tangles" in Yarmouth Co. where I can be reasonably sure of hearing its wild ringing song.
- 757a. *Hylocichla aliciae bicknelli* Ridgw. BICKNELL'S THRUSH.—Found in only one locality about Yarmouth, as far as my observations are concerned. A number of them summer on the West Cape near the mouth of the harbour, and probably nest there.

- 758a. *Hylocichla ustulata swainsoni* (Tschudi). OLIVE-BACKED THRUSH.—Only twice observed. Aug. 11, 1904, one; July 10, 1905, four or five, probably one family.
- 759b. *Hylocichla guttata pallasi* (Cab.). HERMIT THRUSH.—Common summer resident. First appearance (4 years) Apr. 26. Last appearance (5 years) Oct. 22.
761. *Planesticus migratorius migratorius* (Linn.). AMERICAN ROBIN.—Abundant summer resident. A few remain over all winter. First appearance (10 years) Mar. 25. Become common ((11 years) Mar. 29. Nesting commonly by Apr. 30. Last appearance (8 years) Nov. 14.
766. *Sialia sialis sialis* (Linn.). BLUEBIRD.—Only seven observations in all: five in fall and two in spring. I have been told that they nested here in Yarmouth, and at Carleton. In May, 1911, a pair appeared and paid some attention to nesting boxes on a farm about three miles from Yarmouth but in a day or two they disappeared.