

by J. H. Carnell, taxidermist, and a flock of some six or eight seen by Mr. Henry Gilbert on the Kenebecasis River in August, 1880, from which he obtained a male and female.

19. *Æthya vallisneria*.—CANVAS-BACK.—Carnell has mounted one of this species taken within the Province, and E. C. Sutton, Esq., of Sutton, who is familiar with their appearance, saw a flock on the St. John River, about four miles from the city, several times during the fall of 1879.

20. *Pelecanus erythrorhynchus*. AMERICAN WHITE PELICAN.—One of these birds in the collection of the Natural History Society was shot on the shore of the Gulf of St. Lawrence near Pt. du Chene by Mr. Robert Bustin, and I have very good authority for announcing the occurrence of another at Cape Spencer, some five miles east of St. John, during the first week in April, 1881.

NOTES ON THE SUMMER BIRDS OF THE UPPER ST. JOHN.

BY CHARLES F. BATCHELDER.

DURING the spring of 1879 Messrs. W. A. Jeffries and J. Amory Jeffries spent some time at Grand Falls, New Brunswick, collecting and studying the birds of that neighborhood; and at about the same time Mr. J. Dwight, Jr., and myself were similarly engaged at Fort Fairfield, Aroostook Co., Maine.

Owing to the limited time of our stay the number of species observed was not large, but as it included almost all the commoner summer residents,—the species really characteristic of the fauna of the region—it has been thought worth while to lay the results of our observations before the public, especially as the fauna is in some respects peculiar. One might be led to expect, from the latitude of the region, that the fauna would be thoroughly Canadian in its character. Our experience shows, however, that it has a strong tinge of the Alleghanian.

Grand Falls is situated on the right bank of the St. John River at about N. Lat. $47^{\circ} 03'$, and W. Long. $67^{\circ} 50'$. The river below the falls runs through a narrow valley, almost all of which is under cultivation. On the higher land above the falls and about the town are farms devoted chiefly to hay, potatoes and buckwheat. The country is hilly, and is scantily watered, the few

rapid streams and brooks draining directly into the river. There are no lakes or ponds, except a few insignificant puddles, although there are occasional cedar swamps and "barrens." The tributary streams below the falls have cut narrow steeply walled ravines in their passage to the river. These were cold and damp, and apparently without birds.

In some places forests of hard woods exist, tall maples, elms and birches that have no doubt stood there for ages. There is but little underbrush in these woods, and they have a rather park-like aspect. The second growth and the woods on the low lands along the river consist of firs, spruces and hemlocks of all sizes, and often have an almost impenetrable underbrush. Where fires have spread large tracts are stripped of their woods, and are covered with fallen trunks overgrown with vines, with here and there tall dead "stubs" still standing.

Mr. W. A. Jeffries' observations extended from May 21 to June 19. He was joined by his brother on the 9th of June. During the ten days following this latter date the weather was cold—there was a frost June 15, and rain fell every day except the 9th and the 15th.

Fort Fairfield is twenty miles south of Grand Falls. It is situated on the Aroostook River, about five miles in an air line west of its junction with the St. John. It is in a rolling country containing but few ponds and swamps, and watered merely by small brooks which empty into the Aroostook River. The river itself is broad, with a rapid current, and flows between banks which though not very high, are yet never swampy. Much of the original forest has been removed, especially in the neighborhood of the town and along the river, where the stretches of wooded land are interspersed with clearings, pastures and cultivated fields, large crops of buckwheat and potatoes being raised on the fertile soil. The woods are mostly evergreen—the several species of *Abies* and the arbor vitae—intermingled, of course, with a few yellow birches and an occasional maple, but few tracts being wholly covered by deciduous trees.

Our collecting was done mostly within two or three miles of the town. Our notes were made between June 14 and July 1. On our arrival we found the trees by no means in full leaf, and were told that the season was very backward, and had been very wet. Heavy frosts occurred on the 15th and 19th of the month.

The nights were generally cold, the days warm—even hot during the latter part of our stay.

Fort Fairfield is 415 feet above the sea, and has a mean annual temperature of 38.11° F.

Through the kindness of Mr. H. A. Purdie I have been enabled to supplement our observations by extracts from some manuscript notes on the birds occurring at Houlton, Maine, made by Mr. Robert R. McLeod. These notes were written in 1877, and are based on his experience during a residence of four years at Houlton.

This town is in the southeastern part of Aroostook County, on the Meduxnekeag River about twelve miles from its junction with the St. John. It is forty-five miles south of Fort Fairfield, its Latitude being 46° 8'. I quote the following from Mr. McLeod's notes: "The country round about is well watered with lakes and streams. Much of the land is under cultivation, but where it is not, the old forests are standing in great tracts of many miles in extent. The first snow falls about the 10th of November, and it generally remains on the fields till the middle of April, and in the woods until the last of May."

At each locality several species, that would doubtless have been much more abundant had local conditions been favorable, were absent or represented by but few individuals.

All statements are given on the authority of both the observers at the locality to which they refer, except in some few cases, in which the initials of the observer are appended. All references to Houlton are, unless otherwise stated, on the authority of Mr. McLeod.

1. *Turdus migratorius* Linn. ROBIN.—Rather common at Fort Fairfield. At Grand Falls it was abundant everywhere.
2. *Turdus fuscescens* Steph. WILSON'S THRUSH.—Rare at Grand Falls. On June 16 a nest with four fresh eggs was found on top of a stump. Not met with at Fort Fairfield. Mr. McLeod says that it appears at Houlton by May 15, and by the 10th of June becomes common. Breeds.
3. *Turdus pallasi* Caban. HERMIT THRUSH.—Common. One nest taken May 30 at Grand Falls was about three feet from the ground in a small fir tree.
4. *Turdus ustulatus swainsoni* (Caban.) Coes. OLIVE-BACKED THRUSH.—Common at Grand Falls, especially in the hard woods and more open fir woods. At Fort Fairfield it appeared to be rather common, though seldom seen. Common and breeding at Houlton.

5. *Mimus carolinensis* (Linn.) Gr. CATBIRD.—At Houlton "very rare. A pair has bred in this vicinity each year since I have been here" (R. R. McL.). Not met with at Fort Fairfield or Grand Falls.
6. *Sialia sialis* (Linn.) Hald. BLUEBIRD.—At Grand Falls they were frequently seen, as many as seven or eight in the course of a day. Apparently not common at Fort Fairfield. At Houlton "very rare," one pair breeding.
7. *Parus atricapillus* Linn. BLACK-CAPPED CHICKADEE.—At Grand Falls it was not uncommon. Some days four or five pairs would be seen, on others none at all. At Fort Fairfield it was not very common, though seen occasionally. At Houlton "very common."
8. *Parus hudsonicus* Forst. HUDSONIAN CHICKADEE.—About half a dozen were seen at Grand Falls, mostly in hardwood brush or small woods. It was not seen at Fort Fairfield.
9. *Sitta carolinensis* Gmel. WHITE-BELLIED NUTHATCH.—Common in the hard woods at Grand Falls. Breeding.
10. *Sitta canadensis* Linn. RED-BELLIED NUTHATCH.—One shot at Fort Fairfield. Both species are said to be common at Houlton.
11. *Certhia familiaris* Linn. BROWN CREEPER.—Seen occasionally at Fort Fairfield. Breeds. Rare at Grand Falls. "Common" at Houlton.
12. *Troglodytes aedon* Vieill. HOUSE WREN.—At Grand Falls one pair was noticed which had a nest in the frame work of a barn.
13. *Anorthura troglodytes hyemalis* (Vieill.) Coues. WINTER WREN.—This species is common at Houlton,* and no doubt occurs throughout this region; it was seen and heard at Grand Falls, but not observed at Fort Fairfield.
14. *Mniotilta varia* (Linn.) Vieill. BLACK-AND-WHITE CREEPER.—We saw several at Fort Fairfield. Not seen at Grand Falls.
15. *Helminthophaga ruficapilla* (Wils.) Bd. NASHVILLE WARBLER.—Apparently not very common at Fort Fairfield. It was not observed at Grand Falls.
16. *Dendroeca aestiva* (Gmel.) Bd. YELLOW WARBLER.—Rather common at Fort Fairfield. Not met with at Grand Falls.
17. *Dendroeca caerulescens* (Linn.) Bd. BLACK-THROATED BLUE WARBLER.—Rather common at Fort Fairfield. At Grand Falls it was common in hard woods where the underbrush was thick.
18. *Dendroeca coronata* (Linn.) Gray. YELLOW-RUMPED WARBLER.—It was common at Fort Fairfield. At Grand Falls it was rare during May. All had left before the 9th of June.
19. *Dendroeca maculosa* (Gm.) Bd. BLACK-AND-YELLOW WARBLER.—Common.
20. *Dendroeca pennsylvanica* (Linn.) Bd. CHESTNUT-SIDED WARBLER.—Common.
21. *Dendroeca blackburnæ* (Gm.) Bd. BLACKBURNIAN WARBLER.—This bird was seldom seen while we were at Fort Fairfield, and was not met with at Grand Falls.
22. *Dendroeca virens* (Gm.) Bd. BLACK-THROATED GREEN WARBLER.—Rather common at Fort Fairfield. Not met with at Grand Falls.

* For an account of its breeding at Houlton see this Bulletin, Vol. IV, pp. 37-39.

23. *Dendroeca tigrina* (Gm.) Bd. CAPE MAY WARBLER.—I shot a male at Fort Fairfield, June 23, in a thick second growth of spruces on the edge of a path.

24. *Siurus auricapillus* (Linn.) Swains. GOLDEN-CROWNED THRUSH.—Rather common at Fort Fairfield. At Grand Falls it was seen only in the hard woods, where it was not common.

25. *Siurus nævius* (Bodd.) Coues. WATER THRUSH.—Breeding at Fort Fairfield, but not very common. It was not met with at Grand Falls.

26. *Geothlypis philadelphia* (Wils.) Bd. MOURNING WARBLER.—Common in suitable places. It was almost sure to be found in "burnt lots," where the fallen trunks lay, half hidden by a luxuriant growth of tall weeds, or thickly overrun with vines. Under the shelter thus afforded they undoubtedly nested, safely screened from the most searching eyes.

27. *Geothlypis trichas* (Linn.) Caban. MARYLAND YELLOWTHROAT.—Common.

28. *Myiodiotes pusillus* (Wils.) Bp. WILSON'S BLACK-CAP.—At Fort Fairfield this bird was common. We usually found them in thickets of willow bushes, often in rather wet places. The birds were apt to go in companies of three or four or more. June 23 Mr Dwight caught a young bird, just able to fly two or three yards at a time. The nest was no doubt close at hand, but the ground among the willow bushes was covered so deeply with brush that a diligent search for the nest showed nothing—except that it was not built in the bushes. The youngster showed in the most marked way the energy of disposition and restless activity that characterize the adults. The species was not common at Grand Falls.

29. *Myiodiotes canadensis* (Linn.) Aud. CANADA FLYCATCHING WARBLER.—Rare at Grand Falls, but common at Fort Fairfield.

30. *Setophaga ruticilla* (Linn.) Swains. REDSTART.—This species was exceedingly abundant at Grand Falls wherever there were hard woods. It was a common bird at Fort Fairfield.

31. *Hirundo erythrogastra* Bodd. BARN SWALLOW.—Common.

32. *Tachycineta bicolor* (Vieill.) Caban. WHITE-BELLIED SWALLOW.—At Grand Falls it was common in suitable localities. None were seen about the town. It was abundant at Fort Fairfield.

33. *Petrochelidon lunifrons* (Say) Lawr. EAVE SWALLOW.—Common at Grand Falls. Abundant at Fort Fairfield.

34. *Cotile riparia* (Linn.) Boie. BANK SWALLOW.—Common.

35. *Progne subis* (Linn.) Bd. PURPLE MARTIN.—Common, breeding in martin-houses at Fort Fairfield. This bird seems to be generally distributed throughout eastern Maine and the adjoining parts of New Brunswick, where there are settlements. While on our way to Fort Fairfield we noticed it at a number of places between Bangor and Woodstock, N. B., as well as at various points along the St. John River between Fredericton, N. B., and Fort Fairfield. It is also common at Houlton.

36. *Ampelis cedrorum* (Vieill.) Bd. CEDARBIRD.—It was not uncommon at Grand Falls. At Fort Fairfield we found it common.

37. *Vireo olivaceus* (Linn.) Vieill. RED-EYED VIREO.—Common.
38. *Vireo philadelphicus* Cass. PHILADELPHIA VIREO.—Taken only at Grand Falls in May, singing in the hard woods.
39. *Vireo solitarius* Vieill. SOLITARY VIREO.—This species was apparently not very common at Fort Fairfield. It was not seen at Grand Falls. Mr. McLeod gives it in his notes as "quite common" at Houlton.
40. *Pyrrangra rubra* (Linn.) Vieill. SCARLET Tanager.—Not rare in the hard woods at Grand Falls. The people there call them "war-birds." We did not see them at Fort Fairfield, though we have reason to think that they occur. At Houlton Mr. McLeod says they are "rare." They arrive May 29. I have not found the nest, but have a young one taken here. They remain all summer."

Recent Literature.

DR. COUES' NEW CHECK LIST AND DICTIONARY.*—Judging from advance sheets lately received, this new treatise by Dr. Coues will occupy a previously unclaimed place among ornithological works; for, as its title indicates, it is much more than a catalogue of North American birds. Its novel feature is a dictionary of etymology, orthography and orthoëpy of scientific names, to which is devoted the lower portion of each page of the running list. In this department the generic, specific and varietal names—duplicated from the text above with the addition of the diacritical marks for quantities, accents and division of syllables—are exhaustively treated; their derivation and meaning being explained, their construction scrutinized, their spelling revised, and their applicability in each particular case carefully considered. The erudition and scholarly research involved in this undertaking must be apparent to the most casual reader. The practical value of the work is equally plain, and perhaps it is not too much to say that it calls for a fuller measure of gratitude on the part of ornithologists than anything which its versatile author has hitherto produced.

A detailed consideration of the Check List proper must necessarily be deferred until the appearance of the complete work; pending this, we may simply say that the plan followed by Dr. Coues is essentially to make a second edition of his original list, with all the required additions and corrections to date, and such revision of nomenclature as seemed desirable

*The Coues Check List of North American Birds, revised to date and entirely rewritten under direction of the author, with a Dictionary of the Etymology, Orthography and Orthoëpy of the scientific names, the Concordance of previous lists, and a Catalogue of his Ornithological Publications. Boston: Estes and Lauriat. 1882. 1 vol. roy. 8vo. pp. 165.