

holds good in all the specimens. The outline is straight both in *linaria typica* and in *holboellii*.

Table of measurements of *A. l. rostrata*.

Collection.	Cat. No.	Locality.	When collected.	Sex and age.	Wing.	Tail-feathers.	Bill from nostrils.	Depth of bill.
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A. Specimens from Massachusetts.

(a) Males with red on the breast.

W. Brewster	Cat. No.	Locality.	When collected.	Sex and age.	mm. inch		mm. inch		mm. inch			
					Wing.	Tail-feathers.	Bill from nostrils.	Depth of bill.				
	7892	Near Boston.	Feb. 1883.	♂ ad.	78	3.07	62	2.44	8	0.32	7.7	0.30
	..	Nantasket.	Feb. 22, '83	♂ ad.	77	3.03	60	2.36	8	0.32	7.0	0.28
	..	"	"	♂ ad.	81	3.19	61	2.40	8	0.32	7.0	0.28
	..	"	"	♂ ad.	80	3.15	62	2.44	7.7	0.30	7.0	0.28
					79	3.11	61.2	2.41	7.9	0.31	7.2	0.28

(b) Males without red on the breast.

W. Brewster	Cat. No.	Locality.	When collected.	Sex and age.	mm. inch		mm. inch		mm. inch			
					Wing.	Tail-feathers.	Bill from nostrils.	Depth of bill.				
	7898	Near Boston.	Feb. 1883.	♂	75	2.95	59	2.32	7.7	0.30	7.0	0.28
	7913	"	"	♂	82	3.23	64	2.52	8.0	0.32	7.0	0.28
	7894	"	"	♂	77	3.03	58	2.28	8.0	0.32	7.0	0.28
	7897	"	"	♂	81	3.19	64	2.52	8.0	0.32	7.5	0.29
					79	3.11	61.2	2.41	7.9	0.31	7.1	0.28

(c) Females.

W. Brewster	Cat. No.	Locality.	When collected.	Sex and age.	mm. inch		mm. inch		mm. inch			
					Wing.	Tail-feathers.	Bill from nostrils.	Depth of bill.				
	2922	Cambridge, Mass.	Feb. 19, '73	♀	75	2.95	61	2.40	7.7	0.30	6.8	0.27
	2928	W. Newton, Mass.	Jan. 23, '75	♀	74	2.91	61	2.40	7.5	0.29	7.0	0.28
	7896	Near Boston.	Feb. 1883.	♀	77	3.03	61	2.40	8.0	0.32	6.5	0.25
					75.2	2.96	61	2.40	7.7	0.30	6.8	0.27

B. Specimens from New York.

Males with red on the breast.

Dr. A.K. Fisher	Cat. No.	Locality.	When collected.	Sex and age.	mm. inch		mm. inch		mm. inch			
					Wing.	Tail-feathers.	Bill from nostrils.	Depth of bill.				
	1444	Sing Sing, N.Y.	Winter.	♂ ad.	83	3.27	64	2.52	8.2	0.32	7.2	0.28
	1445	"	"	♂ ad.	79	3.11	65	2.56	8.0	0.32	7.0	0.28

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THE WINTER PASSERES AND PICARIÆ OF OTTAWA.

BY W. L. SCOTT.

It has been the delight of poets, from time immemorial, to chant of spring and summer as the exclusive seasons of birds and sunshine; but even in our 'bleak northern clime,' our cold winter days are by no means destitute of either the one or the

other. Of the Canadian winter sunshine, any one can speak who has spent a winter in Canada, and experienced the clear, dry, sunny weather, which makes our season of snow so thoroughly enjoyable; and of the Canadian winter birds, or, at least, of some of those which visit Ottawa, I propose to say a few words.

During the winter, it is true, we look in vain for the myriads of feathered songsters which make the spring and summer woods resound with their joyous carols; but we are visited by numbers of little travellers from the far North who, at least to the naturalist, are no less curious and interesting.

First among the latter, both on account of its place in the Check-list and of its extreme abundance, stands the Black-capped Chickadee (*Parus atricapillus*). It remains with us throughout the whole year—that is, at least, some individuals do, for they are so abundant during the winter, and so few, in comparison, are to be seen in the summer, that numbers, in the former season, must come from the north.

Its cousin, the Hudson's Bay Tit (*Parus hudsonicus*) can, I think, be put down as a rare winter visitant. Very few have been seen here at all, and, as far as I know, none in the summer. The earliest autumn record which I have is October 31 of this year, on which date I observed one hopping about among the branches of a poplar tree, quite near the city.

The White-bellied and Red-bellied Nuthatches (*Sitta carolinensis* and *S. canadensis*) are quite common with us during the whole year; but while the proportion one sees in the summer is about six of the Red-bellied species to one of the White-bellied, in the winter it is exactly the reverse. The White-bellied are commoner during the months of October and November than at any other season. A Red-bellied Nuthatch was taken here on December 8, the contents of whose gizzard were examined by James Fletcher, Esq., under a powerful microscope, and he says of it: "I found two skins possibly of the seeds of a conifer; the whole of the remainder of the contents was made up of coarse sand."

On December 8 I shot a Brown Creeper (*Certhia familiaris rufa*), which is the first instance of the occurrence here of this species, during the winter months that I can learn of. Mr. Fletcher also kindly examined the contents of the stomach of this bird and reports: "There were parts of 35 wings of Pysllidæ; judging from

the shape, they were probably of three species. These are small Homopterous insects which hibernate under the moss on trees, or in the crevices of bark. In almost equal numbers were portions of the wings of a small *Erythroneura*, probably found in similar places as the above. I could not detect a single wing belonging to any species of Coleoptera, which somewhat surprised me. I found a few scales of some species of Lepidoptera, but no remnants of the wing. There was one pair of rather large wings of some species of Diptera, and one very peculiar under-wing which I could not determine. The rest of the contents of the gizzard consisted of the legs and chitinous portions of the bodies of the above-named insects. There was not a single grain of sand."

One of our winter visitants, the Northern Waxwing (*Ampelis garrulus*), put in an unusually early appearance this season. Flocks of from fifteen to twenty usually visit us during January and the first part of February, venturing into the city and feeding on the berries of the European mountain ash trees (*Pyrus aucuparia*) which grow on the streets in many places. This year, however, five specimens were observed feeding on the seeds of a black birch (*Betula nigra*) as early as November 11, and two others were seen a few days later.

Unfortunately for the Sparrows and other small birds, the Great Northern Shrikes (*Lanius borealis*) are pretty common here throughout the winter. They do not, however, seem to breed in this locality, for I have never heard of any being seen later than the end of April, or earlier than the beginning of September. A friend of mine shot one the other day, in the act of chasing a full-sized Chipmunk (*Tamias striatus*), but I think it questionable whether the bird would have been strong enough to kill and devour such large game.

The Pine Grosbeak (*Pinicola enucleator*) is always common here during the winter, but last season (1882-83) was particularly abundant. These birds are very tame, going boldly about our streets in great numbers, and they will often permit an observer to approach to within a few feet of them without manifesting the least alarm. On one occasion a gentleman went so far as to stroke one with his stick, whilst it was busily engaged in devouring some berries. Nothing daunted, however, the bird hopped upon the stick, and continued its meal from that novel perch. They usually stay with us from the end of November until the

latter part of March ; but last spring they were here as late as April 21, and this season they had arrived by the first of November.

The White-winged and Red Crossbills (*Loxia leucoptera* and *L. curvirostra americana*) remain with us from December to March ; but while the latter are abundant, the former are quite rare. Last season a flock of five Red Crossbills was observed by Professor Macoun and Mr. Geo. R. White, as late as May 10 ; and in 1882 a flock of the White-winged species visited us towards the latter part of June.

Both the Lesser and the American Mealy Redpolls (*Ægithus linaria* and *A. exilipes*) abound usually from December to March. Last spring, however, flocks were seen as late as May 10, and this year they arrived on October 30. Specimens of the latter species were kindly identified for me by Dr. Cones. While with us they feed on the seeds of the white cedar (*Thuja occidentalis*), hemlock (*Abies canadensis*) and mullien (*Verbascum thapsus*). Mr. White tells me that he noticed a flock a short time ago, feeding on pine cones. They were sending down such a shower of pieces of the cones that he at first took them for Crossbills ; but, on shooting some of them, he discovered them to be Redpolls.

The Snow Bunting (*Plectrophanes nivalis*) is, with us, essentially a snow bird. It comes with the first fall, remains as long as the snow covers the ground, and when the snow melts, it goes also. It lives principally on the refuse of the streets, and on the seeds of weeds, which, like the mullein, project above the snow ; but it is never seen to frequent trees of any kind. Our first fall of snow is generally about the first of November, and the ground is usually clear by the beginning of April.

The English Sparrows (*Passer domesticus*) are, unfortunately, but too common with us, during both winter and summer. They are very hardy, and stand our climate remarkably well. In order to protect themselves from the cold, they occupy their nests throughout the whole year ; and this habit is fraught with very unpleasant consequences for the unfortunate inmates of the houses beneath whose protecting eaves the nests are built. For the nests get so infested with vermin, that the insect pests frequently descend into the houses, and make their presence felt in a manner much more forcible than pleasant. During the cold weather the Sparrows subsist mainly on the street refuse, and on food thrown to them from the windows ; but I have also frequently

seen them devouring the buds of the maple (*Acer saccharinum*) and other shade trees along the streets.

The Pine Finches (*Chrysomitris pinus*), although abundant here last winter, were not noticed in former seasons. They came towards the beginning of December, and seemed very loth to leave in the Spring, for one individual was observed as late as May 10. Their food is much the same as that of the Redpolls, in company with which species they are generally found. Like most of our other winter birds, they invade the city limits, and I have seen them feeding on the seeds of lamb's quarters (*Chenopodium album*), growing in a vacant lot on one of the public streets.

The Raven (*Corvus corax carnivorus*) is rare with us at any time, but is about as common in the winter as in the summer. None have been observed in the immediate vicinity of the city, but they are to be found within twenty miles of it, on the Ottawa, Gatineau, and Rideau Rivers.

The Common Crow (*Corvus frugivorus*) is usually represented by a few individuals each season, but is rarely seen near the city except during the thaws or 'mild spells.' One of the exceptions occurred this winter, when two were observed picking at the carcass of a dog, in an open field, while the thermometer registered -14° F.

Blue Jays (*Cyanocitta cristata*) are common about Ottawa at all seasons. From the end of the breeding season until the beginning of December they go about in flocks, but after that usually separate into twos and threes.

The Canada Jay (*Perisoreus canadensis*) is rare both in summer and winter. It is usually found singly or in pairs, but occasionally also in small flocks of about five or six.

The Shore Lark (*Eremophila alpestris*), though not properly a winter bird, nevertheless claims a few words in the present connection, on account of the very early date at which it arrives here from the south. It usually puts in an appearance as early as the 15th or 20th of February, long before there is any sign of a break in the winter weather. Professor Macoun tells me that it appears at Belleville about the 9th or 10th of February, and I believe at Toronto it is found though the entire winter. It generally leaves here in the fall about the beginning of December. While the snow is on the ground it feeds on the seeds of mulleins and other tall weeds.

Another species which claims mention solely on account of occasional early and late occurrences is the Robin (*Merula migratoria*). As a rule these birds are not seen here in any numbers until the beginning of April, and they are away before the beginning of October, but a few stragglers stretch those limits considerably, individuals having been observed in December and February.

Of the order Picariæ, only four species, all of the family Picidæ, can be properly called winter birds in this locality. These are the Downy Woodpecker (*Picus pubescens*), the Hairy Woodpecker (*Picus villosus*), the Black-backed Three-toed Woodpecker (*Picoides arcticus*), and the Banded-backed Three-toed Woodpecker (*Picoides tridactylus americanus*). Of these, the Downy and Hairy are common, both summer and winter, but are much less so during the latter season. The Black-backed Three-toed is not very uncommon in the summer, but is rarely met with during the cold weather. The Banded Three-toed has only been taken two or three times, and never in the summer. The only specimen I have known taken here is a female, which was shot on the 5th of last November, and is at present in the collection of Mr. White.

While on accidental stragglers, I should have recorded the occurrence of a Chimney Swift (*Chætura pelagica*) which came under the notice of Mr. J. F. Whiteaves, Palæontologist and Zoölogist to the Geological survey of Canada. During the first week in February, 1883, a Swift came down the chimney and into a room in which that gentleman was sitting. The bird appeared somewhat dazed as it flew about the room, knocking over several articles in its career. It was caught and examined by Mr. Whiteaves, and remained alive for several days. Does this incident suggest hibernation to any of my readers?

NOTES ON *ARDEA WARDI* RIDGW.*

BY CHAS. W. WARD.

THESE birds were first noticed in 1883, on Kissimmee Lake, Florida, where three specimens were procured. With one excep-

* Cf. Bull. Nutt. Orn. Club, Vol. VII, Jan. 1882, p. 5.