terial of *Calamagrostis rubescens* in the United States National Herbarium, Washington, D.C., was given by Jason A. Swallen. Dr. H. J. Hermann supplied similar data from the National Arboretum Herbarium Beltsville, Maryland.

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DISTRIBUTIONAL NOTES ON CANADIAN BIRDS [1]

A. L. RAND

National Museum of Canada, Ottawa.

IN THE COURSE of working over the collection of the National Museum of Canada, and through correspondence with various bird students, a considerable number of data on the distribution of Canadian birds have been brought together. It seems advisable to publish this sort of material periodically so that it will be available to other students.

Fulmarus glacialis glacialis (Linnaeus).
ATLANTIC FULMAR. — A specimen in the National Museum, collected July 27, 1916, by G. Bernard at Cape Kellet, Banks Island, Northwest Territories, seems to be a western record for this subspecies. This specimen, (sex?) in pale phase of plumage, compares well with many eastern birds *glacialis* in color, and in the greater extent of black in the bill. In this latter character it differs sharply from a series of western *rodgersii*.

Though Armstrong recorded the "Fulmar Petrel" near Nelson's Head, Baring Land (= Banks Island) on September 7, 1850, (A Personal Narrative of the Discovery of the North-west Passage, 1857, p. 213) and Preble noted this, (No. Amer. Fauna, No. 27, p. 274), the range usually given is west to melville Island only.

Branta leucopsis (Bechstein).
BARNACLE GOOSE. — On April 5, 1944, Thomas Mark handled a barnacle goose that had been killed at Factory River, about 30 miles north of East Main, James Bay, Quebec. The information sent to the National Museum by James Mark of East Main included the following description, "About the size of a blue goose or slightly larger, breast and neck entirely black, also top part of the head was black, white cheeks and white forehead, a little black stripe from the eye to the bill. White belly, bill same color as brant; feet are of greyish color. Goose was flying with two Canada Geese — coming from the south. Its wing beats were faster than those of Canada's, — its call was altogether different." Mr. Mark, using Taverner's "Birds of Canada", identified it as a barnacle goose. From the above description the bird must have been one.

The possibility that it was an aberrant Canada goose is remote, as the following year James Mark did take an aberrant Canada goose with markings resembling those of barnacle goose, and submitted the head and photographs of the bird for identification as he was unable to recognize it.

The barnacle goose is only a casual visitor to the North American continent and it is interesting to note that there is another record for James Bay, of a specimen taken near Rupert House by Ross that is said to be the first record for the American continent, (Baird, Brewer and Ridgway, 1884, Water Birds of North America, 1, p. 475).

Phalaenoptilus nuttallii nuttallii (Audubon).
NUTTALL POOR-WILL. — Hitherto the records of this species in Canada east of British Columbia, have not been supported by specimens. The taking of a specimen in

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the Cypress Hills, Alberta, on June 29, 1945, by A. L. Rand and H. Clemens adds this species to the list of birds known from Alberta. Another of this species was heard calling from the edge of the forest and shrubby grassland on top of the Cypress Hills south of Elkwater. It is possibly of more than casual occurrence.

Megaceryle alcyon alcyon (Linnaeus).

EASTERN BELTED KINGFISHER. — Specimens recently received from Teslin and Sheldon Lakes, Lapie River, Yukon, (wing, (chord), male adult, 158; female adult, 160; male immature, 161, female immature, 162) northeast British Columbia (Liard River, female immature, 160 mm.) indicate that northeast British Columbia and Yukon should be considered in the range of this subspecies.

The southern summering localities represented in our collection from Alberta are Banff, and the Red Deer River (wing, male adult, 157; male immature, 155; female immature 155 mm.).

Megaceryle alcyon caurina (Grinnell).

WESTERN BELTED KINGFISHER. — Two specimens from extreme southwest Alberta, (Waterton Lakes, female immature, wing 166, and near Macleod, female adult, wing 169) indicate the summer range of this subspecies must be extended to include this area. Though *M. a. alcyon* summers on the Red Deer River (see measurements above) a single fall specimen from there (September 19) is an immature female with a wing of 165 mm., suggesting that this form may wander that far north in the fall.

Dryobates villosus septentrionalis (Nuttall).

NORTHERN HAIRY WOODPECKER. — The two subspecies *D. v. septentrionalis* and *D. v. villosus* are separable chiefly on size; Ridgway (1914, Bull. 50, U. S. Nat. Mus., pt. 6, p. 201) gives the wing measurements of *septentrionalis* as ♂ 128-138; ♀ 128-136.5; and *villosus* as ♂ 114.5-124; ♀ 115-128. A survey of the material in the National Museum supports the view that about 126 mm. wing length is the best line of division between the two forms. However this necessitates some adjustments in the limits of the accepted range of *D. v. villosus* as extending to Manitoba. However our material indicates that all Manitoba is best considered as occupied by *septentrionalis* and that *villosus* does not extend continuously westward in Canada beyond southeast Ontario, with an intrusion from the south into extreme southwestern Ontario, in the Rainy River area as the measurements in Table 1 show.

Table 1. — *D. v. septentrionalis*

	♂ *ad.*	♀ *ad.*
Manitoba (south)		
Turtle Mt.	128	—
Oak Lake	—	128, 129
Riding Mt.	128, 128	127, 130
Shoal Lake	126, 127, 128, 131, 131	126, 128
Duck Mt. and Garland	128	130
Swan River	126	—
Lake Winnipegosus	133	—
Manitoba (north)		
The Pas and north	132	126, 127, 130
Ontario (west)		
Lac Seul	130, 131	—

For comparison the measurements of our Alberta series, undoubtedly referable to this form, is as follows, ♂ ad. (11) 126-138, (av. 130.5); ♀ ad. (10), 127-132, (av. 129.2).

Dryobates villosus villosus (Linnaeus).

EASTERN HAIRY WOODPECKER. — The 1931 A.O.U. Check-list gives the range of this subspecies as extending to Manitoba. Above I have shown all Manitoba to be occupied by *D. v. septentrionalis*. The present subspecies, *villosus*, reaches its northwest limit in Canada in southeastern Ontario, near Ottawa, and Georgian Bay, intergrading with the next form in central Ontario, and with an intrusion from the south into extreme southwest Ontario (Rainy River), as the measurements in Table 2 show.

Table 2. — *D. v. villosus*	♂ *ad.*	♀ *ad.*
Ontario		
south of Ottawa and Georgian Bay	124, 127	118, 119, 119, 121
Ottawa	124, 125, 125, 125	122, 125, 125, 125
Georgian Bay	124, 127	121, 126
Rainy River[2]	—	122.5[2]
D. v. villosus — septentrionalis		
Central Ontario		
Algonquin Park	127	—
Algoma District	130	124
Kapuskasing	126, 130	118, 124, 128, 128

Dryobates villosus monticola Anthony.
ROCKY MOUNTAIN HAIRY WOODPECKER. — The range of this subspecies, usually given as central British Columbia southward must be extended to include extreme southwestern Alberta.

In the National Museum we have four specimens as follows: Waterton Lakes, May 22, 1922, May 12, Aug. 20, 1923, (C. H. Young) and Canmore, May 29, 1891 (W. Spreadborough). These compare well with southern British Columbia specimens in the reduction of white in the upper wing coverts, and show no approach to *septentrionalis*.

The area occupied by *monticola* in Alberta must be small, as we have well marked *septentrionalis* from the Cypress Hills, Milk River, Red Deer River, and Jasper.

Dryobates pubescens leucurus (Hartlaub).
BATCHELDER DOWNY WOODPECKER. — British Columbia, but not Alberta is included in the range of this subspecies. Three specimens in the National Museum, an adult male, May 22, 1922, and an immature male and female July 28, 1945, from Waterton Lakes Park in extreme southwest Alberta are referable to this subspecies on the basis of the reduction of white in the upper wing coverts. In this they compare much better with south British Columbia specimens than they do with other Alberta specimens, or with those from farther east in Canada.

This extends the range to extreme southwest Alberta, but it must be of very limited extent there, as summer specimens from Banff, Red Deer River, Medicine Hat, and Cypress Hills have much white in the upper wing coverts and are referable to *medianus*.

[2]) Measurements from Synder, L.L., 1938, Trans. Roy. Can. Inst., 22, p. 193.

Empidonax minimus (Baird and Baird).
LEAST FLYCATCHER. — The least flycatcher's range has been extended to northeastern British Columbia in the Peace River area by Cowan (1939, Occ. Papers British Columbia Prov. Mus., No. 1, p. 38) and Clarke has provided sight records of the species north along the Alaska Highway to Watson Lake in southern Yukon (1945, Can. Field-Nat. 59, p. 65). An additional farther west British Columbia station is represented by a specimen from Telkwa, British Columbia, a female taken Aug. 22, 1919, by W. Spreadborough. The specimen is in fresh fall plumage and measures, wing, 65; tail, 49.5; exposed culmen 8.5; tarsus, 15; middle toe, 8.2 mm. This seems to be the most western record of the species.

Myiochanes virens (Linnaeus).
EASTERN WOOD PEWEE. — The normal range of this species does not extend beyond southern Quebec. Austin in his monograph "The Birds of Newfoundland and Labrador" (1932, Mem. Nuttall Ornith. Club, No. 7) does not mention the species.

It is interesting to record a stray individual off the Labrador coast collected by Mr. P. A. Taverner. He writes in his notes that on Aug. 31, 1929, in latitude 57, longitude 57, about 200 miles off the Labrador coast from Hopedale a wood pewee flew aboard and alighted on one of the derrick booms. It was obviously "all in" and crouched down as if exhausted. It was collected and on skinning it was found very dry, and Taverner presumed it was suffering from lack of water as well as fatigue.

The specimen, a male, is in very worn adult plumage.

Pica pica hudsonia (Sabine).
AMERICAN MAGPIE. — In the Canadian Field-Naturalist, 59, p. 45, I gave data on the northern and eastern spread of the magpie, showing that it was uncommon but of regular occurrence as far northeast as the Herb Lake area of central west Manitoba, and giving North-west Territory records.

Additional data on the northeastern spread of the magpie in 1944-45 have come to hand. Through Mr. T. H. Manning I got in touch with Sgt. Stafford of the Royal Canadian Mounted Police, at Churchill, and asked him about the occurrence of magpies there. He writes on May 1, 1945, "It seems that magpies have made their appearance in this district for the first time during the past eighteen months or so. I was in the Nejaniline Lake district during the winter and the body of a magpie was brought to me by an old Indian who wanted to know what it was. The man had spent all his life in the country and had never seen one before, he reported that there were quite a number in the country and that they had arrived during the past year.

"One was also brought to me by a half breed trapper who had killed it about fifty miles West of Churchill, he stated that it was the only one he had seen and that he had never seen one before in his life.

"I am also advised by a trapper in the Cape Churchill district that there are quite a number of the birds there this year and that he had never seen any there before.

"Both these birds were brought to me during the winter by men who have spent all their lives hunting and trapping in this district, they know that I am interested in birds and brought them to me to find out what they were. It would therefore seem safe to assume that magpies have never been in this country until recently."

That this northwestern influx of magpies extended farther eastward and reached western Quebec is indicated by data from Mr. James Mark, Eastmain, James Bay, Quebec, who sent a fragmentary magpie specimen to the National Museum with the information that it was caught in a fox trap in November, 1944, by Albert Gilpin, an Indian trapper. Indians, even old men, told Mr. Mark that they had never seen one before.

Though there are a few records of magpies in southwestern Quebec, in settled areas, some are definitely known to be escapees from captivity, while the same can be suspected of the others. The present Quebec record, however, seems to be the result of the recent northeastern expansion of the bird, and is an undoubted natural occurrence in the province.

Mr. Sam Waller of The Pas, Manitoba, has sent to the National Museum data on the breeding of the magpie in northern Manitoba in 1946. A correspondent of his, Mr. Henry Hall, of Pikwitonie, mile 213, Hudson Bay Railway, under date of June 7, 1946, wrote that a pair of magpies were raising a family of six young in a clump of spruce in his yard. Mr. Hall writes that he has lived in this part of the country for twenty years and has never seen the species previously. The birds were first seen on February 14, 1946. The nest was built in late March and early April, and the eggs laid in April; later, after the young hatched and Mr. Hall climbed to the nest to examine them, the nest fell and the young were taken by a fox. The nest was collected and sent to Mr. Waller.

Corvus brachyrhynchos Brehm.
CROW. — In northeastern British Columbia crows occur commonly about Dawson Creek and Fort St. John. In 1943 when on the Alaska Highway, I saw none farther north.

In 1944, on May 31, when at the garbage dumps near Trutch on the Minaker River, (mile 157, north of Fort St. John), there were at least 3 crows, identified by size and call, faster wing beat, and less wedge-shaped tail compared with the ravens that were also present.

The previous year I had spent the period July 12-17 at Trutch and though ravens were common, no crows were seen. Possibly this 1944 record actually represents a northward spread of the crow along the Alaska Highway where the construction camps with the plentiful supply of food provided by their garbage dumps have made the area more attractive to them.

Turdus migratorius nigrideus Aldrich and Nutt.
BLACK-BACKED ROBIN. — Dr. O. H. Hewitt, on his return from his summer's work on the north shore of the Gulf of St. Lawrence for the National Parks Bureau donated to the National Museum two adult male robins taken at La Tabatiere, near Cape Mecatina, north shore of the Gulf of St. Lawrence, Canada, on June 21, 1946. Through

the kindness of Dr. H. C. Oberholser I have been able to compare them with Newfoundland specimens. One is very similar to a Newfoundland male available; the other is slightly paler but is darker than the average of *T. m. migratorius* and the two are best referred to *T. m. nigrideus*.

This subspecies, described in 1939 and accepted by the A.O.U. Check-list Committee in 1944 (Auk. 61, p. 457), has been recorded as the breeding form in Newfoundland, Labrador and west to Chimo (Aldrich, 1945, Auk. 62, pp. 310, 311), but its westward extension into Canada has not been worked out. The present record is thus a slight westward extension of the known breeding range. The next station westward from which we have specimens is the vicinity of Moisie Bay, and these specimens, summer males, apparently breeding, are definitely referable to *T. m. migratorius* being about as pale as the average of this form.

T. m. nigrideus undoubtedly occurs in the maritime provinces of Canada in migration, but records made on individual specimens must be accepted with reservation. In the large series of robins in the National Museum collection are specimens from Ontario (Lac Seul, ♂ adult, fall plumage, Sept. 25, 1919, and Kapuskasing, ♂ adult, June 25, 1919). Manitoba, (Clear Lake, ♂ adult, June 30, 1938), and Mackenzie District, (♂ adult, Mackenzie Delta, May 17, 1932), which in darkness of upperparts, with the black of crown extending down over back, in depth of colour of underparts, and in the restriction of white in the throat, compare well with a Newfoundland male available for comparison. Other specimens agree with, or even surpass the Newfoundland bird in intensity of one or another of these characters, but the four listed above compare much better with the Newfoundland bird on the combination of these characters than they do with the average of the populations from which they come.

So long as we are dealing with populations at or near their breeding grounds such specimens present no difficulties. The Newfoundland robin, *T. m. nigrideus* is a good race, separated on average characters. That occasional specimens of *T. m. migratorius* from populations as far away from the range of *nigrideus* as the Mackenzie Delta are inseparable does not upset the fact there are good average differences.

But once the emphasis shifts from breeding populations to sorting out the identity of individuals on migration when two subspecies can be mixed, the difficulty becomes apparent. The Ontario, Manitoba, and Mackenzie specimens listed above are identified as dark examples of *T. m. migratorius*. If they were taken by themselves, out of the populations they represent, they could be identified as *nigrideus*. Taken in migration, on their wintering grounds, it is quite possible that they would be identified as *nigrideus*. As the identification is a quantitative factor, as well as a qualificative one, it may be well to list the size of the samples examined, with the number of *nigrideus*-like examples in each. However, it must be kept in mind that I have but a single Newfoundland male, and consequently do not know the range of variation in that population, and more of the western birds might fall within the range of variation of *nigrideus*.

Table 3. — Specimens of *T. migratorius* examined.

	Adult males similar to Newfoundland male	*Adult males paler than Newfoundland male*
Ontario	2	15
Manitoba	1	15
Mackenzie	1	1

The above specimens are assumed to be breeding; the following is a case of known breeding. Mr. R. W. Tufts has sent for my examination a male robin taken June 13, 1943, at Wolfville, Nova Scotia. It was one of a breeding pair. In coloration it is as dark as any *nigrideus* I have seen. If it were taken in the spring or fall it would have been unhesitatingly referred to *nigrideus* that migrates through Nova Scotia. But because

it was part of the breeding population of Nova Scotia robins that average *T. m. migratorius,* it must be called *migratorius.* To recognize such facts in faunal lists, it is well to add a line to the effect that occasional examples that are individual variants are inseparable from *nigrideus.*

Sturnella magna magna (Linnaeus).
EASTERN MEADOWLARK. — This is a common species in southern Ontario and southwestern Quebec. Hitherto the occasional James Bay and Hudson Bay records of meadowlarks have been of the western species, *Sturnella neglecta.* But fragments of a specimen secured at East Main, James Bay, Quebec, November 17, 1946, and sent to the National Museum by Mr. James Mark represent an eastern meadowlark, *Sturnella magna magna* (Linnaeus). The feathers of the back are darker and richer brown, and the barring of wing and tail feathers tends to be confluent along the shaft, comparing much better with specimens of *magna* than of *neglecta.* Mr. Mark writes that this is the first time he has seen the species in the East Main area.

Pheucticus ludovicianus (Linnaeus).
ROSE-BREASTED GROSBEAK. — On June 2, 1944, when motoring up the Alaska Highway on the way to Yukon Territory, I stopped at the "Tropical Valley" in the Liard Valley, near the Lower Liard crossing, to visit the Hot Springs.

An adult male rose-breasted grosbeak was seen, and watched through 6 x binoculars, as it sat up singing on the top of a dead stub in the tall poplar forest. This seems to be a northwestern record for the species.

For other British Columbia records see Munro and Cowan, 1947. A Review of the Bird Fauna of British Columbia, p. 206.

Carpodacus cassinii Baird.
CASSIN PURPLE FINCH. — Extreme southwest Alberta must be added to the range of this species as C. H. Young, collecting in Waterton Lakes Park for the National Museum, found the species there in May 1922, collected two specimens on June 6, 1923, and A. L. Rand and H. Clemens collected two there on July 30, 1945.

Calcarius pictus (Swainson).
SMITH LONGSPUR. — Brooks and Swarth (1925, Pacific Coast Avifauna, No. 17, p. 90), had but two records of this species for British Columbia, specimens taken at Boundary Pass in the extreme southeast; and Kispiox Valley, near Hazelton. (Cowan, 1939, Occ. Papers British Columbia Provincial Museum, No. 1, p. 62), has recorded the species in the Peace River Country, British Columbia.

In the National Museum is a specimen taken by Dr. C. H. D. Clarke on July 17, 1944, at mile 85, Haines Road, British Columbia. It is a female and on the back of the label is the information "one of a pair" and "large brood patch". This indicates that the species was breeding at this locality, the first breeding station in British Columbia.

In view of the paucity of British Columbia records, and the normal breeding range of the species on the tundra east of the Mackenzie River, one wonders if this breeding (probable) in northwest British Columbia is a normal one.