

TYPE SPECIMENS OF AVIAN SUBSPECIES COLLECTED IN THE CANADIAN PRAIRIE PROVINCES, 1910-1965

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While preparing the account of the parasitic Brown-headed Cowbird (*Molothrus ater*) for inclusion in *Birds of Saskatchewan*,¹ I examined the description of a new subspecies that was based on specimens taken in Saskatchewan around the turn of the 20th century.² This prompted me to compile information pertaining to type specimens of other avian taxa collected at and subsequent to that time in the Canadian Prairie Provinces (Alberta, Saskatchewan, Manitoba), and to confirm the collecting localities and note their current taxonomic status — information important for studies of taxonomy and nomenclature.³⁻⁵ I obtained this information through examination of the published description of each subspecies and photographs of type specimens, and critical scrutiny of the literature relevant to the collection or description of the specimens, including archived letters, where applicable.

This is not the first interest shown in the type specimens of birds collected in this region.^{6,7} C. Stuart Houston clarified the localities at which 19 new bird species and nine forms now recognized as subspecies were collected in the vast territory known as “Hudson Bay.” Changes were recommended in the designation of the type locality for the type specimens of three species and one subspecies, which include several specimens taken in northeastern Manitoba during the second half of

the 18th century.⁷ I do not consider these taxa further nor new species and subspecies listed in *The Birds of the Saskatchewan River* that date from collections made during the Franklin Expedition and by Thomas Drummond nearly 200 years ago.⁸

The annotated list of type specimens presented below is composed of eight subspecies described from specimens collected in Alberta and three subspecies collected in Saskatchewan, for a total of 11 subspecies. No new taxon has been described from Manitoba since the early descriptions referred to above. Each account begins with the name of the subspecies as originally proposed, followed by the author and the citation in the journal in which the description was published, the locality of collection and name of the collector (sometimes the same as the author), and date. The current status of each subspecies is indicated and whether it was accepted by the American Ornithologists’ Union’s *Check-list of North American birds*⁹, or by other authorities.

In 1930, ornithologist Outram Bangs, who worked at the Museum of Comparative Zoology at Harvard University, provided the following description of a type specimen (p. 149)¹⁰: “When an author specifies a certain individual as his type or has one specimen from which he describes, then there is a holotype, or as it is called here, following the usual custom of ornithologists, a type. On the other hand, when an author describes from several specimens, and does not himself designate any one as his type, all of the original specimens from the type locality are of equal importance, and all are

cotypes. No one of such specimens can afterwards be selected by someone else, and called *the* [italics Bangs’s] type.” (Bangs wrote at a time when most ornithologists were men). More recently, including the present paper, workers have followed the concept of type as used by Deignan³: a type may refer to a primary type (holotype, lectotype or neotype) or to a syntype (often called a cotype). I did not attempt to designate primary types in most instances; when only one specimen was listed, it may be assumed to be the holotype unless otherwise stated. The collectors, describers and in some cases persons after whom the subspecies were named, represent a who’s who of early naturalists, collectors and ornithologists who worked in the Canadian prairie region.

The designation of type specimens in association with descriptions of new species and subspecies of birds continues today^{11,12}; in fact, the history surrounding early collecting and descriptions of new species has been celebrated in recent works^{13,14}. Nevertheless, not all recently described taxa have been anchored by type specimens.¹⁵

The concept of the subspecies, in the context of the process of speciation, however, has come under fire in recent decades^{16,17}, although subspecies continue to provide focal points for studies of geographic variation and speciation.^{18,19} Foremost among the problems is that most subspecies were described before the advent of statistical methods in ornithology and were named on the basis of mean differences only, rather than on the extent of overlap.

In many cases too few specimens of similar freshness of plumage, or wear, made comparisons difficult^{20,21}, and subsequent studies of geographic variation, particularly combined with the use of modern genetic markers, sometimes have failed to uphold their genetic distinctiveness. For this reason, subspecies often are given less importance.

Holotypes and other specimens referred to in the text are catalogued in the following museums: Canadian Museum of Nature (CMMAV), formerly National Museums of Canada, Ottawa, ON; The Field Museum of Natural History (FMNH), Chicago, IL (H.B. Conover and Louis B. Bishop collections); Museum of Comparative Zoology (MCZ), Harvard University, Cambridge, MA; and United States National Museum (USNM), Washington, DC.

ALBERTA Sandhill Crane

Grus canadensis rowani Walkinshaw

Canadian Field-Naturalist
79(3):181, June 1965.

FMNH 16013 (H.B. Conover Collection); male, 10 miles west of Fawcett, Alberta (54.544561° N, 114.10354° W), June 1, 1943; collector, William Rowan.

The describer, Lawrence H. Walkinshaw, a dentist by profession, devoted many years to the study of the cranes of the World.²² His analyses of measurements of Sandhill Cranes throughout the range in North America and Cuba identified four populations, each recognizable as a subspecies of *Antigone* (*Grus*) *Canadensis*.²³ Measurements of Sandhill Cranes breeding in Alberta, Saskatchewan, west-central Manitoba, and southern Mackenzie, however, were intermediate in size compared with measurements of individuals sampled in the other breeding populations. This population was described as a new subspecies and

was named for the collector of the type specimen, William Rowan, professor of zoology at the University of Alberta and internationally known for his ground-breaking experiments on the physiology of timing of migration in birds.²⁴ The propriety of separating the intermediate-sized *rowani* from the smaller *canadensis* and larger *tabida*, however, eventually was questioned as collectively they demonstrate a continuum in morphology and random pairing among the proposed subspecies.²⁵

This specimen was registered as a gift from Rowan to the Field Museum of Natural History in Chicago (B. Marks, *in litt.*, September 23, 2015), originally as part of the collection of Henry Boardman Conover. The specimen might have been expected to have been deposited in the Canadian Museum of Nature, as were Rowan's specimens of dowitchers (see below), but it was later that Walkinshaw recognized this population of Sandhill Crane as a new subspecies. The specimen became part of the Conover collection because Rowan frequently bartered or sold specimens taken in Alberta to build up the University's collection, and by that time, Rowan had had a long association with Conover, which included sharing an eleven-day collecting trip to Beaverhill Lake east of Edmonton in the early 1920s.^{24,26}

Short-billed Dowitcher

Limnodromus griseus hendersoni

Rowan

Auk 49(2):22, January 1932.
CMNAV 24832; adult male, Devil's Lake, Alberta (53.709687° N, 114.098749° W), June 19, 1924; collector, William Rowan.

The type specimen of this subspecies was among 34 males measured and which Rowan referred to as the "Inland Dowitcher".²⁷ It was noted in a footnote of Table C that the specimen was "donated to the National Museum of Canada," where it still resides (Figure 1).

Acceptance of the interior subspecies by field naturalists was swift^{28,29}, as identification of the dowitchers had been problematic.

This subspecies is recognized by the AOU⁹ but its breeding distribution in the muskegs of central Canada remains only generally described as central and northern Alberta, Saskatchewan, Manitoba (best known in the Churchill region³⁰, and northern Ontario, and on Akimiski Island, Nunavut)³¹. In an analysis of geographic variation in the dowitchers, Pitelka verified (p. 74) the localities listed in Rowan's table, with the exception of the type locality, Devil's Lake, but the subspecies stood up to scrutiny.³²

This subspecies was named in



FIGURE 1. Type specimen of *Limnodromus griseus hendersoni* (CMN 24832), collected by William Rowan at Devil's Lake, Alberta, 19 June 1924. Photo credit: Michel Gosselin, Canadian Museum of Nature.

honour of oologist Archibald D. Henderson of Belvedere, Alberta, in recognition of the discovery of the Short-billed Dowitcher's breeding grounds in the muskeg region of central Alberta and of the collection of the first breeding specimens, including eggs.^{27,33} In fact, Rowan was effusive in his praise of Henderson's contributions, acknowledging him (p. 28) as the "discoverer of the Alberta breeding grounds [of Short-billed Dowitcher], who took endless trouble to procure me the first certain breeding skins obtained and to whose own activities and ever ready hospitality to visiting ornithologists[,] western Canada owes much of its recent advances in ornithological knowledge."²⁷

Rowan possibly would not have known about dowitchers nesting in central Alberta, or that Sandhill Cranes also nested there^{34,35}, if it had not been for Henderson's pioneering field work.^{27,36} The following excerpts (p. 214) tell some of the story behind the collections of the first breeding specimens and, importantly, reveal the caution the scientist expressed before he described the new subspecies³⁷:

"For the last three years it has been evident that the Red-breasted Snipe [Short-billed Dowitcher] breeds in Alberta even further south than Edmonton. I need not detail the evidence except to say that finally, in June, 1925, Mr. A.D. Henderson of Belvedere, Alberta (about sixty miles N.W. of Edmonton), took a set of eggs and kindly got me a couple of skins from a spot to the west of Belvedere. This is heavily wooded country and the home of the Solitary Sandpiper and both Yellowshanks [Greater and Lesser yellowlegs]. The photograph ... is of a lake of the same type on this side of Belvedere on which I took a Red-breasted Snipe in the middle of June, 1924, that was almost certainly a breeding bird, although eggs were not obtained. This skin, and those taken by Henderson, and those taken by others on the Point are all of the same

type, rather like griseus but larger and differing in some points that appear to be constant."

Rowan was not yet ready to describe the new subspecies. He stated further (pp. 214-215):

"But till we have a working series, as there is considerable variation, we can decide nothing definite. But all the facts together suggest that we are either on the verge of the breeding range of griseus, hitherto unknown, and our birds belong to that race but are not typical, or our Red-breasted Snipe represent a third and good sub-species. Both the races at present recognized show considerable variation, but typical birds of either are well defined and characteristic. It was not until two years ago that I was convinced of this, but even now, with a series of sixty skins, there are points that require further elucidation."

Enough comparative material was eventually assembled and the new subspecies was described²⁷, with the specimen mentioned above, collected "in the middle of June, 1924", designated as the holotype. Henderson was impressed with the newly acquired specimens and stated: "I do not know if this sub-species has been accepted by the A.O.U. committee but even one so unskilled in the art of feather splitting as myself could readily see the points of difference when a series of skins was displayed."³⁵

Canada Jay

Perisoreus canadensis albescens Peters
Proceedings of the New England Zoölogical Club 7:51, May 4, 1920. MCZ 247,526; adult male, Red Deer, Alberta (52.2681° N, 113.8112° W), March 18, 1897; collector, George F. Dippie.

In his paper on the birds of the Red Deer River, Alberta³⁸, Taverner stated (p. 252) that Gray Jays from the region "should probably be referred to as *P. c. canadensis*". This prompted James L.

Peters to examine five adult specimens taken there by George F. Dippie, taxidermist formerly of Toronto, later of Calgary, between March 4 and 18, 1897. These were registered in the Museum of Comparative Zoology at Harvard University. Peters noted (p. 51) "These [specimens] hardly need comparison to show that they belong to an undescribed race ... This form is strikingly paler than any of the known races of *Perisoreus canadensis*."³⁹ *P. c. albescens* was recognized by the AOU⁹ and "... considered intermediate in colouration between *canadensis* and *capitalis* – pale in overall colouration like the latter but with areas of dark colouration just as extensive as in *canadensis*".⁴⁰ In a recent account of the historic use of the earlier name of this species, Canada Jay, the subspecies *albescens* remains valid.⁴¹

Boreal Chickadee

Parus hudsonicus farleyi Godfrey
Canadian Field-Naturalist 26(1):
26, January-February, 1951.
CMNAV 21879; adult male,
Lac la Nonne, Alberta (53.93803° N,
114.32028° W), August 23, 1926;
collector, Hamilton M. Laing.

Parus hudsonicus farleyi (Figure 2) is one of five subspecies of Boreal Chickadee recognized in Canada.^{42,43} "The extreme paleness of the grey on the sides of the neck separates this subspecies from all other described races."⁴⁴ Godfrey's study of geographic variation was beset with the problems inherent in such a study, despite having some 600 specimens at hand that represented all populations of this species in Canada.⁴⁴ By the time faded and worn specimens were removed, only fresh fall and early winter specimens were available for study. Added to this was the possibility that a certain amount of migration and mixing occurred during the non-breeding season. Then there was the problem that specimens collected several decades earlier "may be faded



FIGURE 2. Type specimen of *Parus hudsonicus farleyi* (CMN 21879), collected by Hamilton M. Laing at Lac la Nonne, Alberta, 23 August 1926. Photo credit: Michel Gosselin.

and foxed so drastically that in colour, particularly that of the pileum and other upper parts, they little resemble recently-taken specimens from the same locality."⁴⁴

This subspecies was neither recognized by the AOU⁹ nor by Phillips²¹ who, despite the latter's support of the subspecies concept, implicitly dismissed the validity of this and other subspecies of Boreal Chickadee (p. 81), "Until and unless reasonably fresh, properly prepared material from most parts of the range becomes available, no definitive treatment of the subspecies is possible."

This subspecies was named for Francis (Frank) La Grange Farley in recognition of his work on birds, initially in Ontario, but later for studies in the Red Deer and Camrose regions of central Alberta⁴⁵; in fact, Farley was dubbed a pioneer of Alberta ornithology.⁴⁶ The collector of the type specimen, Hamilton Mack Laing, was an important naturalist in his own right and much has been written about his extensive collections and writings on ornithology and natural history, particularly in western Canada.^{47,48}

Marsh Wren

Telmatodytes palustris laingi Harper

Occasional Papers of the Boston Society of Natural History 5:221, December 10, 1926.

MCZ 231790; adult male, Athabaska

Delta, Main Branch (14 km above mouth), Alberta (59.4242° N; 109.3404° W); June 3, 1920; collectors, Francis Harper and J. Alden Loring, orig. no. 122.

This subspecies was named for Hamilton Mack Laing, "in appreciation of his writings on the bird life of western Canada"⁴⁹, and other accomplishments acknowledged above. Among 14 subspecies listed for Marsh Wren, *laingi* was not recognized by some authorities^{9,50}, although it was listed in *The Birds of Canada*⁴² and BNA account for this species.⁵¹ This species' "tangled taxonomic and nomenclatural history"⁴⁹ has been somewhat elucidated by evidence, based primarily on different songs, that point to two cryptic species that meet on either side of the Great Plains.⁵²

Savannah Sparrow

Passerculus sandwichensis campestris

Taverner

Proceedings of the Biological Society of Washington 45:204, November 10, 1932.

CMNAV 10414; male, near Red Deer, Alberta (52.268112° N, 113.811239° W), June 29, 1917; collector, Percy A. Taverner.

The holotype of "prairie Savannah sparrow" was collected by Percy Algernon Taverner, ornithologist with

the National Museum of Canada. This specimen was among 13 individuals of this species taken during the expedition on the Red Deer River in 1917.⁵³ Two types of colouration were exhibited among these specimens, some with yellow eye stripes, others with yellow and white eye stripes. Taverner was nevertheless reticent about referring them to subspecies. He stated (p. 203) "Until a detailed study is made of Canadian Savannah Sparrows I do not care to make subspecific determination. *P. s. alaudinus* is the generally accepted form in Canada west of Ontario."⁵³

With additional specimens collected in ensuing years, Taverner compared a larger series of Savannah Sparrows from British Columbia and the southern Canadian Prairie Provinces and found them to separate into two populations: "the ruddy, slightly olivaceous bird of the British Columbia interior [*alaudinus*] and ... the paler one of the prairies [proposed as *campestris*]."⁵³ The new subspecies was not recognized^{9,42} because specimens of *savanna* and *alaudinus* were compared only qualitatively. For example, comparing specimens from Mackenzie, the following statement was telling: "These birds are difficult of allocation as between *savanna* and *campestris* but by bill characters seem to agree more closely with the latter."⁵³

Purple Finch

Carpodacus purpureus taverneri Rand

Canadian Field-Naturalist 60(5):95, September-October, 1947.

CMNAV 25387; adult male, Government Hay Camp (Park Headquarters), Wood Buffalo Park, Alberta (58.2717° N, 112.2517° W), May 26, 1933; collector, J. Dewey Soper.

Although this subspecies, described in 1947 and named for Percy A. Taverner⁵⁴, was not recognized by the A.O.U.⁹, it was listed in *The Birds*

of Canada.⁴² This subspecies is most similar to nominate *purpureus*, but of paler colouration in the adult male in spring. The holotype was collected by J. Dewey Soper, one of Canada's foremost naturalists and travellers whose specimens were taken in widely scattered regions of the country in the early decades of the last century.⁵⁵ The breeding grounds of the Blue Goose, now known to be a colour phase of the Snow Goose (*Chen caerulescens*), were among Soper's many important discoveries.⁵⁶

Fox Sparrow

Passerella iliaca altivagans Riley

Proceedings of the Biological Society of Washington 24:234, November 20, 1911.

USNM 222832; subadult male, Moose Pass Branch, a headwater of the Smoky River (~ 7000 feet [2133 m] in the northern reaches of Jasper National Park, Alberta (53.933271° N, 116.576504° W), July 31, 1911; collector, J. Harvey Riley, orig. no. 2175.

The "Alberta Fox Sparrow" was founded upon four immature birds taken at the type locality, three on the British Columbia-Alberta border, the other just inside British Columbia.^{57,58} Augmented by 90 specimens available for study, the subspecies was later upheld.⁵⁸ Differences in colouration among subspecies of Fox Sparrow are slight. *P. i. altivagans* was noted as similar to *P. i. schistacea* Baird of extreme southeastern British Columbia and southwestern Alberta, "... but middle of back more brown instead of mouse gray; wings and tail with more red in the brown (near burnt umber)."⁵⁹ Compared with *P. i. zaboria* Oberholser of interior central and southeastern British Columbia, "... browns [are] less rufescent and upper parts more vaguely streaked."⁴²

The A.O.U. eventually recognized 18 subspecies of Fox Sparrow, *P. i. altivagans* among them.⁹ Taxonomy of this species has been confusing and

later work has suggested the existence of three or possibly four species.⁵⁹

Collectors had been sent by the Smithsonian Institution in Washington, D.C. to join the Alpine Club of Canada's Expedition to Jasper Park in 1911, with activities focused on the Yellowhead Pass and Mount Robson region.⁵⁸ The Alpine Club, founded in 1906 as Canada's national mountaineering club, organized tours for naturalists and wealthy tourists to the Canadian Mountain Parks. This trip, however, was primarily scientific and was accompanied by William Spreadborough, an associate of John Macoun, Canada's all-round naturalist of the day. A comprehensive account of the birds observed and collected during this expedition was later published.⁶⁰

SASKATCHEWAN

Long-billed Curlew

Numenius americanus parvus Bishop

Auk 27(1):59, January 1910. FMNH 15743; adult male, Crane Lake, Saskatchewan (50.086597° N, 109.09049° W), June 23, 1906; collection of Louis B. Bishop.

The collecting locality of the holotype was given on the label (Figure 3) as Maple Creek, Saskatchewan¹, which is about 45 km southwest of the type locality, Crane Lake, designated in the original description. In 1906, a field party consisting of Arthur Cleveland Bent,

the Rev. Herbert K. Job, and Chester S. Day reached Maple Creek on June 5, but Bent had to return home on 17 June⁶¹, leaving Day and Job as co-collectors of this specimen and also of the type of the cowbird subspecies discussed below. Both specimens became part of the comprehensive Louis B. Bishop collection, now mostly absorbed in Chicago's Field Museum of Natural History. In 1907, Bishop accompanied Bent on a return trip to Maple Creek where they were joined later by Dr. Jonathon Dwight Jr., for whom the new cowbird subspecies was named.

A smaller race of Long-billed Curlew, *N. a. occidentalis* Woodhouse, added to the A.O.U. *Check-list* in 1931 on the basis of an immature male collected in New Mexico in 1853⁶², is actually referable to *parvus*. In fact, Bishop later stated "Therefore *occidentalis* becomes a synonym of *americanus*, and for the small northern bird must be replaced by *parvus*. Of this fact I was aware when I described the Canadian subspecies [in 1906]."⁶³ Godfrey treated *parvus* as the breeding subspecies of Long-billed Curlew in Canada, although the characters distinguishing *americanus* and *parvus* are minor.⁴² Notable was that "There is some uncertainty in assigning early records to *N. a. americanus* or *N. a. parvus*. While there is an average size difference between the two, there is

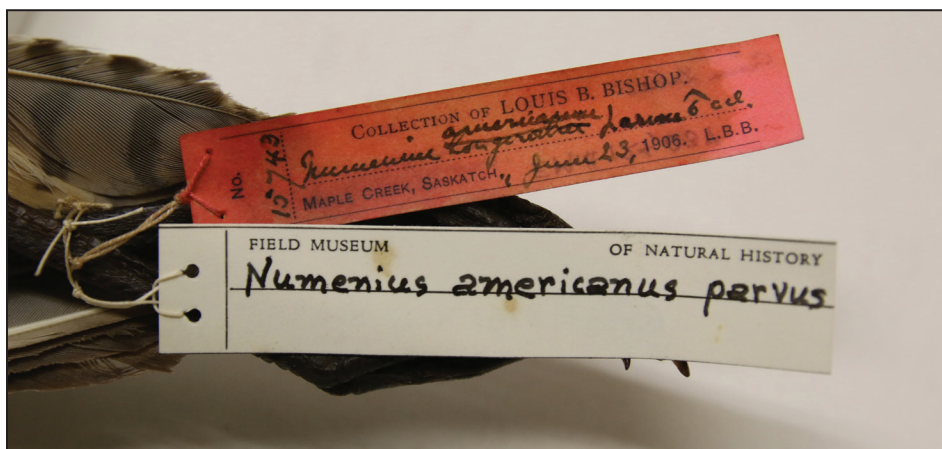


FIGURE 3. Labels attached to the type specimen of *Numenius americanus parvus* (FMNH 15743), collected at Crane Lake, Saskatchewan, 23 June 1906. Photo credit: Josh Engel and Ben Marks, Chicago Field Museum.



FIGURE 4. Type specimen of *Molothrus ater dwighti* (FMNH 15759), collected at Crane Lake, Saskatchewan, 24 June 1906. Photo credit: Josh Engel and Ben Marks.

overlap, making racial identification of specimens of unknown age and sex difficult".⁹ Similar difficulties of separation of races had been noted for several subspecies discussed above.

Brown-headed Cowbird

Molothrus ater dwighti Bishop
Auk 27(1):61, January 1910.
FMNH 15759; adult male, Crane Lake, Saskatchewan (50.086597° N, 109.09049° W), June 24, 1906; collection of Louis B. Bishop.

The collecting locality is given on the original label as Maple Creek, Saskatchewan (Figure 4), which is about 45 km southwest of the designated collecting locality, Crane Lake. This is another example of a subspecies described on the basis of incomplete information, albeit measurements were compared with individuals from other regions that showed that those of *dwrighti* were larger, and its bill was more slender; however, sample sizes were too small for confirmatory statistical analysis. Bishop noted the "Cowbird breeding in Saskatchewan is considerably larger than in our Eastern States, as is shown by the subjoined measurements of breeding birds. The bird inhabiting Alberta, Manitoba, and northern Montana is doubtless the northern race, but I have not seen specimens from these localities."² *Dwrighti* was not accepted by the AOU because it was "Too close to *M. ater*".⁶⁴

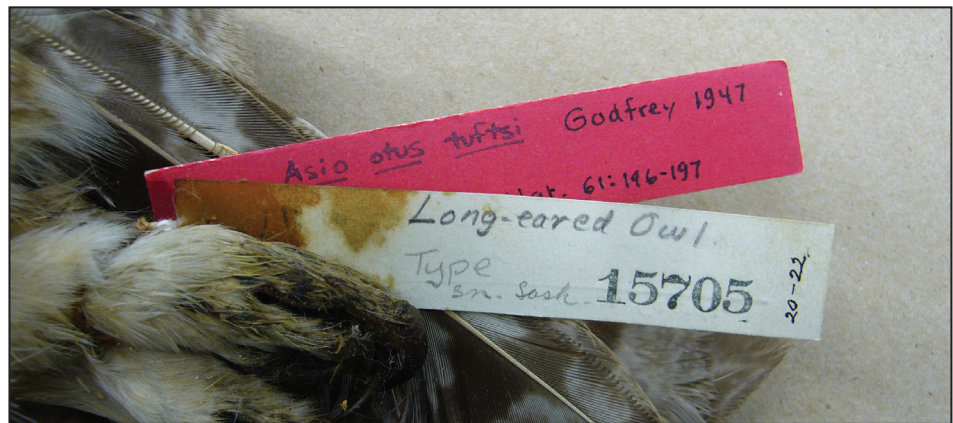


FIGURE 5. Labels attached to the type specimen of *Asio otus tuftsi* (CMNAV 15705), collected by Charles H. Young at Last Mountain Lake, Saskatchewan, 14 July 1920. Photo credit: M. Gosselein.

Long-eared Owl

Asio otus tuftsi Godfrey
Canadian Field-Naturalist 61(6):196,
November-December, 1947.
CMNAV 15705; adult male, South Arm, Last Mountain Lake, Saskatchewan (51.333051° N, 105.238799° W), July 14, 1920; collector, Charles H. Young, orig. no. 293.

Based on the study of 56 specimens of Long-eared Owl, Godfrey described a new subspecies (Figure 5) that differed in both sexes from "Eastern" *Asio otus wilsonianus* (Lesson, 1830) in being of paler colouration, and from Old World *A. o. otus* (Linnaeus, 1758), in possessing broader and more prominent barring on the underparts and in being, on the average, of less ochraceous colouration.⁶⁵ *A. o. tuftsi* is recognized by the AOU⁹ and by other authorities^{66,67}, but because other workers questioned its validity^{68,69},

Dickerman examined 178 additional specimens of Long-eared Owl and concurred that *tuftsi* is invalid, because the variation originally observed is explained by dimorphism.⁷⁰ Complicating this issue is the degree of foxing that occurs as museum specimens age.^{70,71}

This subspecies was named after Robie W. Tufts, former Dominion Wildlife officer for the Maritime Provinces, in recognition of extensive contributions to Canadian ornithology. The collector, Charles Henry Young, was an entomologist associated early on with the Old Division of Entomology attached to the Experimental Farms Service in Ottawa. Among many contributions, Young was recognized for preparing "thousands" of specimens, including birds, for the Canadian Museum of Nature and the National Collection of Insects, Department of Agriculture.⁷²

Summary

Of the 11 subspecies of birds considered here (Table 1), five were recognized in the fifth edition of the American Ornithologists' Union *Check-list of North American Birds*⁹, the last edition to include subspecies.

Acknowledgements

C. Cicero provided copies of William Rowan's correspondence archived in the Joseph Grinnell files at the Museum of Vertebrate Zoology, University of California, Berkeley. J. Engel and B. Marks, Field Museum of Natural History, Chicago, provided information and photographs of specimens under their care. M. Gosselin searched archives at the Canadian Museum of Nature, Ottawa, and provided photographs of several type specimens. J. Trimble confirmed the presence of specimens of Gray Jays in the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts. J. Hudon (Royal Alberta Museum) commented on an early draft of the manuscript, and comments were received from an anonymous reviewer of later drafts of the manuscript.

1. Sealy SG (2019) Brown-headed Cowbird. Pages 636-638 in Smith AR, Houston CS, Roy JF (editors). *Birds of Saskatchewan*. Nature Saskatchewan, Regina, SK.
2. Bishop LB (1910) Two new subspecies of North American birds. *Auk* 27:59-63.
3. Cowan IMcT (1936) Notes on some mammals in the British Columbia Provincial Museum with a list of the type specimens of North American recent mammals in the Museum. *Canadian Field-Naturalist* 50:145-148.
4. Deignan HG (1961) Type specimens of birds in the United States National Museum. U.S. National Museum Bulletin, No. 221. Washington, D.C.
5. Browning MR (1979) Type specimens of birds collected in Oregon. *Northwest Science* 53:132-140.
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TABLE 1. Current status of subspecies of birds that were described based on type specimens collected in Alberta and Saskatchewan, 1910-1965.

SUBSPECIES RECOGNIZED BY THE 5 TH EDITION OF THE AOU CHECK-LIST ¹
Long-billed Curlew (<i>Numenius americanus parvus</i>), 1910: Saskatchewan
Short-billed Dowitcher (<i>Limnodromus griseus hendersonii</i>), 1932: Alberta
Long-eared Owl (<i>Asio otus tuftsi</i>), 1947: Saskatchewan
Gray Jay (<i>Perisoreus canadensis albescens</i>), 1920: Alberta
Fox Sparrow (<i>Passerella iliaca altivagans</i>), 1911: Alberta
SUBSPECIES NOT RECOGNIZED BY THE AOU
Boreal Chickadee (<i>Parus² hudsonicus farleyi</i>), 1951: Alberta
Marsh Wren (<i>Telmatodytes³ palustris laingi</i>), 1925: Alberta
Savannah Sparrow (<i>Passerculus sandwichensis campestris</i>), 1932: Alberta
Purple Finch (<i>Carpodacus⁴ purpureus taverneri</i>), 1947: Alberta
Brown-headed Cowbird (<i>Molothrus ater dwighti</i>), 1910: Saskatchewan
Subspecies described after the 5 th edition of the AOU Check-list
Sandhill Crane (<i>Grus⁵ canadensis rowani⁶</i>), 1965: Alberta

¹ The Check-list is now published and updated by the American Ornithological Society (formerly American Ornithologists' Union).

² Now *Poecile*.

³ Now *Cistothorus*.

⁴ Now *Haemorhous*.

⁵ Now *Antigone*.

⁶ This subspecies is considered part of a cline in size from small to large in mid-continental North America.²⁵

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