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BIRDS OF THE BOWDOIN COLLEGE
EXPEDITION TO LABRADOR
IN 1891.

By
ARTHUR H. NORTON.

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BIRDS OF THE BOWDOIN COLLEGE EXPEDITION
TO LABRADOR IN 1891.¹

BY ARTHUR H. NORTON.

THE birds treated in the following pages, as is clearly indicated by the title of this paper, were collected by the Bowdoin College Expedition to southeast Labrador during the summer of 1891. The expedition was in charge of Prof. Leslie A. Lee, and sailed from Rockland, Maine, late in June, on board the schooner, Julia A. Decker.

The few specimens collected during the voyage are for convenience treated separately at the end of the paper.

The Labrador collection was made between July 13 and September 7, at various points on the coast, and about Hamilton Inlet, between Red Bay and Hopedale, 55° 27' N. Lat.

As the objects of the expedition were for scientific investigations of a general nature, the ornithological collection is not large. It includes, however, ninety-five specimens representing thirty-two species.² It is moreover an interesting one, furnishing two additional forms, *Zenaidura macroura* (Linn.) and *Otocoris alpestris praticola* Hensh. to the fauna of the country.

One other, *Nettion crecca* (Linn.), contained therein, has been reported but once before.

It also contains considerable material furnishing a better knowledge of the immature stages and the moults of several species.

Two species, *Fratercula arctica* (Linn.) and *Canachites cana-*

¹ This is the fourth article on the scientific results of the expedition. The preceding articles have been published elsewhere.

² The collection is conserved in the Bowdoin College Museum.

densis (Linn.), seemed to require a revisionary study. The differences detected in the former of these, it was found, could be better illustrated by a plate showing, for comparison, forms of the phases of variation treated. This was drawn from nature by Miss Mary B. Norton, under my careful supervision.

Through the courtesy of Mr. Richard Rathbun, Assistant Secretary of the United States National Museum, I have had specimens of Puffins from Europe, and of the Spruce Grouse from Labrador, and all of the Horned Larks from Labrador now contained in the study collection of that institution.

To Capt. Herbert L. Spinney, my thanks are due for material loaned.

To Mrs. Norton, I am grateful for much assistance in the studies and preparation of the report.

To these and others who have furnished me their contributions on Northern birds, my thanks are extended.

I am especially grateful to Prof. Leslie A. Lee of Bowdoin College for the courtesy of placing this collection in my hands, and to Mr. Joseph P. Thompson, President of the Portland Society of Natural History, for free access to the Library and collections of the Society, and to both of these gentlemen for their many courtesies and encouragements.

Fratercula arctica (Linn.). PUFFIN. In the collection there are twelve specimens of this species, one in natal down and eleven in nuptial plumage. All were taken at Herring Islands, August 22. No further data appear.

The young bird in the natal plumage or down differs markedly from the corresponding stage of *Alca torda*. The bill is twice as long as deep, slender, much compressed terminally and wider at the membranaceous base. The angle of the gonys is strongly pronounced and situated far forward of the feathering. (Plate II, fig. 5.) The base of the bill, covered at maturity by the "Nasal buckler,"³ or large deciduous plate above the nostril, and the corresponding part of the lower jaw are now covered by a soft membrane considerably shrivelled in the dried specimen. The furrow

³ Cf. Coues, Bull. Nutt. Orn. Cl. III. p. 89.

and first ridge are visible, the latter as a semi-hard portion between the nasal membrane and the horny continuity of the beak.

The down is exceedingly long and fluffy, entirely sooty black except the pectoral and abdominal regions, which are abruptly white. The bill is brownish black.

In Mr. Barrows' paper on the *Alcidæ*,⁴ he reports the rami in a half grown young as being "Perfectly evident, though rather short." Such is not the case with this specimen.

One of the other specimens, No. 509,⁵ is worthy of mention. Though in full nuptial plumage, probably being one year old, the bill has but one ridge, bordered posteriorly by the furrow and anteriorly by the first groove. The basal boss⁶ has many plumules conspicuous in its posterior part. The keel of the gonys is very thin and has become curled (perhaps in drying, as the specimen from France of the same age shows a similar condition). Yet the depth of the mandible at this age shows the same proportions as that of the older birds.⁷

The adults can be divided into two series, a stout-billed and a slender-billed one. Though the difference between the extremes is distinct enough, yet it is comparatively slight and the gap is filled by birds intermediate in size. Some authors assert that the sexes are similar, but Audubon states that the males slightly exceed the females in size, which undoubtedly affords the explanation of the case before us. Therefore I have assumed that the birds with the largest bills are males and those, fully adult, with the smallest, females.

The length and depth of the beak in the stout-billed series so fully overreached the dimensions ascribed to the Large-billed Puffin of the Palearctic region that it was deemed expedient to compare them carefully, not only with that form, but also with specimens from Scandinavia which must be taken as the type locality of *Fratercula arctica*.

Through the kindness of the officials of the United States National Museum, I was able to procure the use of one specimen

⁴ Pr. Bost. Soc. Nat. Hist. Vol. XIX. p. 153.

⁵ Cat. Bowdoin Coll. Museum.

⁶ Coues, Bull. Nutt. Cl. III. p. 89.

⁷ According to Latham, the immature stages have been figured by Pennant Tour in Wales, 1778, pl. 20.

of the Large-billed Puffin from Spitzbergen, three specimens of the common Puffin from Bergen, Norway, one from the Orkney Islands, and one from northern France. (The last, not having attained the characters of maturity, is not comparable with the more mature birds, owing to the fact that the beak has not attained its perfect development.)

While the Labrador birds adhere very constantly to the respective types shown in Plate II, figs. 1 and 2, they differ perceptibly from the European birds in having the outline of the culmen less convex—descending directly from the base of the culmen to its tip—and in having the eminentia symphysis in relation to the base of the tomia farther back. The bill is heavier in appearance, being relatively shorter and deeper. The mandible is in the average deeper,⁸ and the keel of the gonys much thicker.

Compared with the specimen from Spitzbergen, the abruptly tapering culmen is markedly contrasted with the strongly convex one of that bird. It may be remarked that one of the females (?) from Labrador, No. 505,⁹ has the culmen fully as convex as in the eastern birds, and that such a variation in the male, (or large-billed bird,) would easily cause it to be mistaken for Naumann's *Mormon glaciulis* which is but rarely reported from the West coast of Greenland.

Though fully aware that a previous comparison has been made between American and European Puffins, I feel that the conclusion was biased by a spirit which prevailed before geographical varieties were so generally recognized.

Though the difference is slight between American and European birds, it undoubtedly is constant, as the previous investigators found a decrease in the size of the bill in European birds in the islands adjacent to Great Britain and the coast of France, and also reported a slender billed form from the Farøe group. The appended tables of measurements readily show that the birds from Bergen have comparatively small beaks. Hence these birds

⁸ The depth of the mandible in the American bird nearly equals the distance from the anterior end of the nostril to the tip of the beak, always (?) exceeding the distance to the notch.

In *F. arctica* from Bergen, the depth of the mandible is decidedly shorter than the distance from the anterior end of the nostril to the tip of the bill, falling short of the notch.

⁹ Cat, Bowdoin Coll. Mus.

(which agree very closely with each other in the form of their beaks), being typical of the European form, represent a type from which the American form can be distinguished.

Should the American bird be recognized in nomenclature, it is very clear that Linne's name, *Alca arctica*,¹⁰ is not applicable to it, as the habitat was given "Northern oceans of Europe." It seems equally clear that Scandinavia should be recognized as the type locality of *Alca arctica*, as it was based upon the diagnosis in the *Faunae Suecæ*.

Gmelin's *Alca labradorica* cannot be absolutely indentified, as both Pennant¹¹ and Dr. Latham,¹² upon whom Gmelin based his authority, were in some doubt as to the place of its capture. (Upon examination of Latham's description, which is the more detailed, there seems to be no reason for assuming that the specimen was really *Fratercula corniculata* as Naumann¹³ did.)

It must be contended that the name *Mormon glacialis* of Temminck¹⁴ is applicable only to the American Puffin. He remarks :

"On doit observer de ne pas confondre notre *Mormon fratercula* avec une espèce propre aux côtes septentrionales d'Amérique, dont le plumage est absolument semblable, mais qui a le bec beaucoup plus haut, elle a surtout la mandibule inférieure très-arquée; cette espèce nouvelle est indiquée par le docteur Leach, sous le nom de *Mormon glacialis*."

It may seem hardly necessary to call attention to the fact that he mentioned this *new American* species only to point out that it was excluded from the consideration of being European. If his statement that its beak is higher be applied to basal height, it becomes plain that he had appreciated the same difference I have found, while the stress laid upon the form of the under mandible seems to show quite conclusively that it was the American bird that he was describing.

Stephens¹⁵ states that Leach's specimens in the British Museum

¹⁰ Syst. Nat. I. 1758, p. 130.

¹¹ Arc. Zool. II. p. 512. Sec. ed. II. p. 224.

¹² Syn. Bds. III. pt. I. p. 318.

¹³ Isis, 1821, p. 779.

¹⁴ Man d'Orn. II. p. 933.

¹⁵ Cont. Shaw's Gen. Zool. Vol. XIII. p. 40.

had been obtained by Capt. Ross. This evidence also points strongly to the American origin of the bird described by Temminck in 1820, as Capt. Ross had but two years before returned from his explorations in the Nearctic regions.

The next year, 1821, Naumann¹⁶ described and figured in an unmistakable manner under the name of *Mormon glacialis* the bird that is best known from specimens obtained in Spitzbergen and now recognized by his name, supposing that it was identical with Dr. Leach's *glacialis*. His remark leads to the conclusion that it was in his collection, though no hint as to its origin is given.

Thus it is evident that *glacialis* of Temminck is the American subspecies which if not worthy of recognition, must make his *glacialis*¹⁷ a synonym of *arctica*.

¹⁶ Isis, 1821, p. 782, Plate 7, fig. 2.

¹⁷ Naumann's *glacialis* (l. c.) is a distinct subspecies for which there is no name. It may be called *Fratercula arctica naumanni*.

TABLE OF MEASUREMENTS.¹*Fratercula arctica glacialis* (Temm.).

Catalogue Bowdoin College Museum. No.	LOCALITY.	Length of wing.		Length of culmen.		Length of gonyx.		Depth of bill at base.		Depth of mandible.		REMARKS.
500	Herring Islands, Labrador.	165	53	39	43	20	2	21				{ Bill similar in shape to European ex- amples.
501	" " "	162	52	37	42.5	19		19				
502	" " "	166	51	38	41.8	20		20				
503	" " "	169	50.8	38	41	20		20				
504	" " "	162	50	39	39.5	20		20				
505	" " "	166	50	38	38	17		20				
506	" " "	161	49	35	39.5	18		19.5				
507	" " "	163	49	34	37	17.8		19.5				
508	" " "	168	49	35	42	19		19				{ Bill has not attained characters of ma- turity.
509	" " "	162	47	34	37	16		19				
	" " "	169	52	39	43.2	21.5		20				
Catalogue of United States National Museum. No.	Matinecus, Maine.	160	45	33	37	16.2		16.6				No. 481 Coll. A. H. Nor- ton. Female, July 18, 1896. Shape and proportions of the beak perfect- ly similar to Labrador birds.
	<i>Fratercula arctica naumanni</i> nom-nov.											
86019	Spitzbergen.	179	53	38.5	42	20		22.8				
<i>Fratercula arctica</i> (Linn.).												
113174	Bergen, Norway.	164	51	35.5	36	17		22				
98072	" "	157	49.5	35	38.8	17.5		21				
98070	" "	151	45	33	35	16		19				
24294	Orkney Islands.	151	46	31	38.5	17		19				
18908	Northern France.	156		31.5	31	12						

¹ Measurements are in millimeters.

Cepphus grylle (Linn.). BLACK GUILLEMOT. There are eight specimens in full nuptial plumage. Three of these, two of which are females and one a male, are from Chateau Bay, July 14; five are from Webeck Harbor, four taken August 7 and one the 8th.

These birds have been very carefully compared with the series of undoubted *grylle* in my own collection, and with Dr. Stejneger's monographic paper on the genus *Cepphus*¹⁸. They agree with my specimens taken on the coast of Maine in June. It may be remarked that this species has lately been shown to be common as far north in the Nearctic region as Holsteinborg, Greenland.¹⁹

Uria troile (Linn.). MURRE. Eight specimens, five adults in nuptial plumage, two of which represent the phase *Uria ringvia* Brunn. and three in natal down, all taken at Herring Islands, Aug. 22.

The youngest, which is probably but two or three days old, has the entire upper parts, wings, and thighs of a dark grayish brown, purest on the rump and dorsum where it is hardly broken. Anteriorly its plumage becomes hoary being intermixed with whitish neossophtiles. The entire head, sides of neck, and throat are uniform with the back of the neck in this "pepper and salt" appearance. The pectoral and abdominal regions are abruptly white as in *Fratercula* in the corresponding stage. The beak is small but blunt and comparatively stouter than in the adults.

The plumage of the dorsal and ventral regions is rather short, closely appressed and with a glistening hairy appearance, owing to the fact that the rami of the neossophtiles become, toward their tips, destitute of radii and terminate in nude spines. These spiny tips are very variable in length, in some cases very short, in others occupying nearly half the entire length.

This condition is undoubtedly functional, in those members of the genus which go to sea at a very early age, in preventing the soft down from becoming saturated.

The other two young are apparently of the same age, and might almost as properly be said to represent the juvenal plumage

¹⁸ Pr. U. S. Nat. Mus. VII, 1884, p. 210.

¹⁹ Chapman, Bull. Am. Mus. Nat. Hist. XII, p. 220.

as the natal down. They are nearly covered with feathers which are most conspicuous and least downy on the dorsal and ventral regions and the wings, least conspicuous and most downy on the back of neck and top of head. In this stage, the white of the under plumage has extended to the chin and cheeks as in the winter plumage. The bill, though larger, bears about the same general appearance as in the last stage.²⁰

In considering the phase *Uria ringvia*, it is interesting to compare the reports of different explorers in the waters bordering on Labrador. Dr. Coues in 1861²¹ merely said that it was known to the natives of Labrador. At Anticosti, Prof. Verrill²² found it, in 1861, "very abundant. Breeding with the last [*Uria troile*], and in about equal numbers."

At Bird Rock, Mr. Bryant²³ in 1860, estimated three specimens of *U. troile* to two of *U. lomvia* and one of *U. ringvia*.

At the same place in 1881, Mr. Brewster²⁴ found just six individuals and in 1887, Mr. Wm. Palmer²⁵ found only one.

Alca torda Linn. RAZOR-BILLED AUK. Eight adults in nuptial plumage, and one young bird in natal down, several days old, all taken at Herring Islands, August 22.

Compared with the natal stage of *Uria troile*, the plumage lacks the bristly quality of that species, and the colors are different.

It is darkest and purest posteriorly, where it is of a brownish black basally and wood brown terminally, giving a mixed pattern. Anteriorly the brown replaces the black, becoming paler and the dominating color above the shoulders. The top of the head is uniformly whitish buff, the throat and sides are grayish, the pectoral and abdominal regions yellowish white.

The down is very soft and fluffy, and though the specimen is older than the young *Uria troile* with which it is compared, yet under a lens of low power the rami of the neossoptiles are found

²⁰ Compare description of young of *Uria lomvia* (Linn.) Chapman, Bull. Am. Mus. Nat. Hist. Vol. XII, p. 221.

²¹ Pr. Ac. Nat. Sci. Phila. Vol. XIII, p. 257.

²² Pr. Bost. Soc. Nat. Hist. Vol. IX, p. 143.

²³ l. c. Vol. VIII, p. 75 given on authority of Brewst. l. c. Vol. XXII, p. 411.

²⁴ l. c. Vol. XXII, p. 410.

²⁵ Pr. U. S. Nat. Mus. Vol. XIII, p. 252.

to be considerably shorter, with the spiny or hair-like tips much shorter and the radii more abundant.

The generic characters of the beak are as well marked at this age as they are in specimens in the first winter plumage.

Stercorarius pomarinus (Temm.). POMARINE JAEGER. One specimen taken near Ragged Islands, August 9. This is in the light phase. Though the moult is not visible, yet on parting the plumage new feathers are found appearing on the breast.

Fulmarus glacialis (Linn.). FULMAR. Four specimens taken near Ragged Islands, August 9. Two in light phase are marked males, and two in the dark phase are without sex marks.

Collector's No. 1. Darkest. Undergoing the postnuptial moult, which is complete except in the scapulars, primaries, rectrices, and under tail coverts. The persisting nuptial feathers are much faded and worn, showing that the moult is the postnuptial rather than the postjuvenal. The two outer primaries of each wing are of the nuptial plumage, being ragged with wear. The rest of the primaries are fresh and bright, about half-grown. The new feathers are darker than the persistent ones of the old plumage.

Collector's No. 2. A male in light phase. This bird has nearly completed the moulting, but the primaries are still in the process. The three outer old ones in each wing are persistent, and the inner ones are about half grown, as in the last specimen. The persisting nuptial feathers are far less abraded than in No. 1.

Collector's No. 3. A dark bird intermediate between 1 and 2. It has the new winter plumage nearly complete, the wings being full and freshly feathered, but most of the rectrices are of the nuptial plumage, worn, faded, and in some cases broken. They are being replaced, but rather slowly.

Collector's No. 4. A male in light phase. Postnuptial moult well advanced. Two outer primaries and all of the former rectrices persistent. New primaries about half the length of the first or outer one.

Puffinus gravis (O'Reilly). GREATER SHEARWATER.

Three specimens near Ragged Islands, August 9. Two are females and one a male.

Collector's No. 1. A female in fresh bright plumage. A few pin feathers can be found upon the under parts, and the feather envelopes are still to be found at the bases of the primaries.

Collector's No. 2. A female. Remarks on the last apply to this.

Collector's No. 3. A male. Like the last two, but fewer pin feathers occur.

Merganser serrator (Linn.). RED-BREASTED MERGANSER.

Five specimens, one male in postnuptial moult, one adult female, and three young in natal down. The male was taken at Lake Melville, July 26, the female and three young, at Hopedale, August 11.

Mr. Stone's description²⁶ of two moulting males from Point Barrow seems to apply very well to this specimen.

The adult female is in full nuptial plumage, still bright, though somewhat worn.

An accurate description of the natal plumage has been given by Mr. Ridgway in his Manual of North American birds.

It is interesting and suggestive to observe that the surface of the down in young Ducks and Murres, both of which put to sea at a very early age, is rather stiff and bristly, while in young Razorbills, Puffins and Petrels, all of which are hatched in holes or in fissures where they generally remain until quite fully feathered, the surface of the down is very fluffy, and in the case of the Puffins and Petrels it is very long and woolly in appearance.

Nettion crecca (Linn.). EUROPEAN TEAL. One specimen, a male. Professor Lee informs me that this was purchased near Eskimo Island, Hamilton Inlet, of a half-breed Esquimaux woman by whom it had been prepared. (Owing to the peculiar style of setting, there is no question as to its having been prepared in Labrador.)

The specimen from Labrador taken by Dr. Coues in July, 1860,

²⁶ Pr. Ac. Nat Sci. Phila. 1899, p. 471.

had, so far as I am aware, up to this time remained unique.²⁷

The present specimen is in nearly full nuptial plumage.

NOTE. [**Camptolaimus labradorius** (Gmel.). LABRADOR DUCK. In the Auk, volume XI., page 11, a statement was published to the effect that two members of this expedition, Messrs. D. M. Cole and Austin Carey, saw on the Grand River, August 9, a female Duck with young which they were sure was of this species. The statement was corrected by Mr. Dutcher on pages 175-6 of the same volume, as after examining this species and others in the collection of Mr. William Brewster, Mr. Cole concluded that the bird seen by him was a *Glaucionetta*.]

Tringa fuscicollis Vieill. WHITE-RUMPED SANDPIPER. One adult male from Webeck Harbor, Aug. 6. The postnuptial moult is nearly complete.

Tringa minutilla Vieill. LEAST SANDPIPER. Two specimens in worn nuptial plumage. One is a female from Chateau Bay, July 14.

Totanus melanoleucus (Gmel.). GREATER YELLOW LEGS. One female in worn and faded plumage, from Cullingham's Cove, July 31.

Actitis macularia (Linn.). SPOTTED SANDPIPER. Four specimens, two adult females and one adult male taken at Chateau Bay, July 14, and one young bird from Cullingham's Cove, Hamilton Inlet, July 31.

The adult birds are in nuptial plumage, the young with the postnatal moult nearly complete.

Numenius borealis (Forst.). ESKIMO CURLEW. Three specimens from Houlton Harbor, taken August 20. Two are males and one a female.

One of the males has the plumage much worn.

The other two specimens show, upon careful examination, only slight traces of wear.

²⁷ Coues, Pr. Phila. Ac. Nat. Sci. XIII. p. 338.

Canachites canadensis (Linn.). HUDSONIAN SPRUCE-GROUSE. Three specimens in juvenal plumage. One is from Eskimo Island, Aug. 31, one from Cul de Sac, Aug. 31, and the other is without data.

The postjuvenal moult is just taking place and the juvenal contour feathers or mesoptiles are very loose and fall easily. The feathers of the first winter plumage are appearing on the sides of the breast and outer primaries. The Cul de Sac specimen and also the one without data have them appearing along the sides and all three specimens have many in the dorsal feather tract.

The buff tints are much paler than in an adult female from Fort Chimo,²⁸ Labrador. The chin and gula region are grayish white,²⁹ each feather broadly banded with dusky, giving a very gray effect which extends well over the sides of the head and around the sides of the neck. The white of the underparts has a grayish³⁰ wash, sparsely marked with obscure dusky bars.³¹

The Spruce Grouse of the Hudsonian fauna, including Labrador, is the true *Canachites canadensis* (Linn.)³² and is apparently subspecifically distinct from *Canachites canadensis canace* (Linn.)³³ of the Canadian fauna.

The difference between these birds was first recognized by Brisson in 1760, and later observed by Audubon and referred to in his Journal³⁴ and Ornithological Biography³⁵.

In 1899 it was renamed *Canachites canadensis labradorius*.³⁶

I have at hand adult females of *canadensis* from Mr. Turner's collections at Fort Chimo, Labrador, and find that they agree accurately with Brisson's description.

Linnaeus gave the habitat of his *Tetrao canadensis*, in a broad sense, as Canada, basing his diagnosis on Edwards' plates 118 the

²⁸ No. 94343 Coll. U. S. Nat. Mus.

²⁹ Pale Buff in *canace*. Brewst. Nutt. Bull. IV, p. 44.

³⁰ Buffy white in *canace*. Brewst. l. c.

³¹ Immaculate in *canace*. Brewst. l. c.

³² *Tetrao canadensis*. Syst. Nat. 1758 I, p. 159.

³³ *Tetrao Canace*. Syst. Nat. 1776 I, p. 275.

³⁴ Audubon and his Journals, Vol. I, p. 401.

³⁵ Orn. Biog. II p. 439.

³⁶ Bangs, Pr. New Eng. Zool. Club, Vol. I, p. 47.

male, and 71 the female.³⁷ It may be pointed out that nowhere in the ornithological portions of either the tenth or twelfth editions of the *Systema Nature* does he use the special term *Freti Hudsonis*, though several of the authors he quoted had done so. For all such cases, he employed "Canada" in a general sense.

It may also be mentioned that the males of these two forms afford only very slight distinctive characters,³⁸ so slight that neither Brisson nor Audubon recognized them.

Hence the plate 118 of Edwards cannot be considered.

As early as 1750, Klein³⁹ had shown that the subject of Edwards' plate 71 was an inhabitant of the Hudson Bay region.

Brisson employed the same plate as the base for his *Bonasa Freti Hudsonis*, which he named for its habitat giving an accurate description.⁴⁰

On page 203, he characterized his *Bonasa canadensis*⁴¹ representing it on plate XX, with figures 1 the male, and 2 the female, giving as its habitat Canada, from whence the Abbey Aubury had received specimens. His descriptions leave nothing in doubt.

In 1766, Linnæus acknowledged Edwards' plate 71 (Brisson's Hudsonian bird) as the type of *Tetrao canadensis* and made Brisson's *Bonasa canadensis* the type of his *Tetrao canace*.

Therefore the name *Canachites canadensis* Linn. must be restricted to the Spruce Grouse of Labrador and Hudson's Bay, while *Canachites canadensis canace* (Linn.) must be brought forward for the form inhabiting portions of Canada, the Northern United States, and New Brunswick.

Lagopus lagopus (Linn.). WILLOW PTARMIGAN. Two specimens in full winter plumage which were purchased from natives near Eskimo Island, Hamilton Inlet.

Zenaidura macroura (Linn.). MOURNING DOVE. A badly mutilated specimen of this dove was brought back. This

³⁷ Not having access to Edwards' work I have employed the works of Klein and Brisson.

³⁸ Bangs, Pr. New Eng. Zool. Cl. Vol. I, p. 48.

³⁹ Prod. Avi., p. 117, No. VI.

⁴⁰ Orn. I, pp. 201-203.

⁴¹ l. c., pp. 203-207.

establishes the fact of its occurrence in Labrador, as there seems to be no previous record.

It was taken at Red Bay, Labrador, September 7.

Archibuteo lagopus sancti-johannis (Gmel.).

AMERICAN ROUGH-LEGGED HAWK. Two specimens of this bird are in the collection. A female is from Chateau Bay, July 14. The other specimen is labeled Red Bay, July 13.

Bubo virginianus (Gmel.). GREAT HORNED OWL. A

specimen in juvenal plumage from Cullingham's Cove, August 1. The postjuvenal moult is advancing.

The feathers of the first winter plumage are quite black in a narrowly banded pattern, though the tawny tints predominate.

Picoides americanus Brehm. AMERICAN THREE-TOED

WOODPECKER. One specimen in juvenal plumage from North West River.

The *Picoides americanus* from Okak, Labrador, has been described as subspecifically distinct from *P. americanus* from "Western Boreal America" under the name of *Picoides americanus labradorius*.⁴²

The juvenal stage is very different from that described of the adult. The color of the upper parts is decidedly brownish. It has much white above, extending from the nape to the rump. White post ocular stripe joins with that of the neck, though somewhat broken. There is a broad white malar streak. Exposed portion of the outer tail feathers entirely white, second one barred with black. Crown spotted with yellow. It may be remarked that the head and neck are of a deeper shade of black than the rest of the plumage.

Otocoris alpestris praticola Hensh. PRAIRIE

HORNED LARK. One specimen from Chateau Bay, taken July 14. It is a female in somewhat worn nuptial dress and is quite typical, though nearly reaching the maximum measurements of its

⁴² Bangs, Auk, XVII, p. 138.

sex.⁴³ The wing measures 99 mm.; bill from nostril 9.9 mm.

It should be remarked that the sheath of the upper mandible seems unusually lengthened terminally, being more pointed than in spring examples, which is unusual for either *alpestris* or *praticola*. It has the appearance of being about to be moulted.

The unexpected occurrence of this bird in Labrador raises the question whether it is a mere straggler, or a regular summer visitant to those portions bordering the Gulf of St. Lawrence and Strait of Belle Isle.

A critical examination of Audubon's description⁴⁴ makes it seem probable that he secured, at Bras d'Or (Labrador), *Otocoris alpestris praticola*. Otherwise he never would have written: "In summer the male changes its aspect considerably; the brownish-black band on the head and neck becoming deep black, the *throat* and *frontal band white*." (italics mine)

Since the recognition of *O. a. praticola* in 1884, increased activity in ornithological investigation has shown that this form breeds throughout New England, having been so detected at several points along the White Mountain System. Numbers appear in Maine during the month of March, and quickly disappear, few remaining during the summer months. This fact, in connection with Audubon's remark, makes the occurrence of this race in Southwestern Labrador seem very suggestive.

In the study of this specimen, I have had from the United States National Museum typical breeding *alpestris* from Ft. Chimo and Davis Inlet, Labrador, and a juvenile specimen from Penguin Islands, Newfoundland.⁴⁵

Though the characteristics of this specimen are so well marked that its identity is not questionable, yet on account of the interest attached to it, it was forwarded to the United States National Museum for verification. Mr. Richard Rathbun, Assistant Secretary, informed me that it had been determined by Mr. H. E. Oberholser as being of this form.

⁴³ Cf. Dwight, Auk, VII, p. 158.

⁴⁴ Orn. Biog. II, p. 575.

⁴⁵ Dr. Dwight's Labrador specimens of *alpestris* (Auk, VII, p. 142) were all from the Atlantic Coast or the Northern parts, while this and Audubon's bird were from the parts on or adjacent to the Gulf of St. Lawrence.

Perisoreus canadensis nigricapillus Ridg. LABRADOR JAY. Four specimens from North West River.

An adult male taken July 28 is in postnuptial moult. The feathers of the head, neck, tail, and the primaries are of the winter plumage. In the contour tracts indicated, pin feathers predominate. The tail is exceedingly rounded, the central feathers being 70 mm. longer than the outer, owing to the stage of moult.

Three immature birds—a female from Cullingham's Cove, Hamilton Inlet, July 31, one taken July 28 without sex, and a female taken at Lake Melville without date—are in postjuvinal moult. These have the heads variously patched with white. The juvenal feathers or mesoptiles are conspicuous on the shoulders and abdomen, while feathers of the first winter plumage occupy the dorsal region.

Pinicola enucleator canadensis (Cab.). PINE GROSBEEK. Three specimens from Cullingham's Cove, Hamilton Inlet. One is an adult male taken July 31, one an adult female, and the third a female in the juvenal plumage, the two latter taken August 1.

Compared with a good series taken at Westbrook, Maine in winter, the adults show a decided difference in the size and shape of their bills. They have the bill longer, less strongly decurved at the tip and less obtuse.

They show the following measurements: Male: culmen 60 mm, bill below nostril 46, gonys 38, wing 354. Female: culmen 60 mm, bill below nostril 43, gonys 36, wing 446.

They were sent to the United States National Museum, and the Assistant Secretary, Mr. Richard Rathbun, replied that they had been identified as being of this form by Mr. Robert Ridgway.

Ammodramus sandwichensis savanna (Wils.). SAVANNA SPARROW. Two adult specimens from Chateau Bay, July 14. One is marked male. They are in the worn nuptial plumage and agree closely with specimens taken on this coast at the same season.

Zonotrichia leucophrys (Forst.). WHITE CROWNED SPARROW. An adult male, July 13, and an adult female July 14, both from Chateau Bay.

Zonotrichia albicollis (Gmel.). WHITE THROATED SPARROW. Two mature specimens, a male and a female, from Chateau Bay, July 14.

Junco hyemalis (Linn.). SLATE-COLORED JUNCO. Two adult specimens, a male and a female. The latter is labelled North West River, July 28. They agree with summer specimens from York County, Maine.

Lanius borealis Vieill. NORTHERN SHRIKE. A young female from Lake Melville, July 29, is in faded juvenal plumage.

The upper parts are decidedly gray, but dull; (not brown as in first winter plumage.) The upper tail coverts are much lighter with a slight brownish shade and marked with dusky vermiculations. Greater and median wing coverts are edged and tipped with rusty, their tips vermiculated with dusky. Some of the interscapulars are also vermiculated as are the entire under parts including the under tail coverts.

Anthus pensilvanicus (Lath.). AMERICAN PIPIT. Two males taken at Chateau Bay, July 14.

Turdus aonalaschkae pallasii (Cab.). HERMIT THRUSH.

A male from Chateau Bay, July 14, has the bill considerably stouter than adult males from Westbrook, Maine. No other difference is noteworthy.

Merula migratoria (Linn.). AMERICAN ROBIN. Two specimens, male and female, taken at North West River, July 28.

The male is highly plumaged. The chestnut of the lower parts appears very deep. The bill inclines to dusky terminally.

BIRDS TAKEN DURING THE VOYAGE.

Sterna hirundo (Linn.). COMMON TERN. A single specimen from Bear Head, Gut of Canso.

Oceanites oceanicus (Kuhl). WILSON'S PETREL. One specimen, an adult male, taken off Cape Sable, Nova Scotia, June 30.

Evidences of moult are very marked on the wings. The secondaries of the left wing and six inner primaries are being replaced by new feathers, while the right wing has secondaries and five inner primaries replaced. Old primaries are slightly abraded. The deep shade of the bright new feathers contrasts them quite strongly with the old brownish ones.

Harelda hyemalis (Linn.). OLD SQUAW. One specimen, evidently a female, taken at New Harbor, Nova Scotia, September 14. It has not acquired the winter plumage. Moult is not apparent.

BIRDS OF DOUBTFUL LOCALITIES.

Tyrannus tyrannus (Linn.). KINGBIRD. One adult specimen in full nuptial plumage.

Unfortunately the label has been lost. The only Labrador record of this species is that given by Audubon.⁴⁶

Melospiza lincolni (Aud.). LINCOLN'S SPARROW. One specimen in nuptial plumage from which the label has been lost.

Prof. Lee thinks this may have been taken at Cape Breton Island.

⁴⁶ Orn. Biog. V. p. 420.

EXPLANATION OF PLATE II.

Fig. 1—*Fratercula arctica glacialis* (Temm.). Ad. nupt. No. 500
Cat. Bowdoin Coll. Museum. Herring Islands, Labrador. August 22,
1891.

Fig. 2—*Fratercula arctica glacialis* (Temm.). Ad. Nupt. No. 506
Cat. Bowdoin Coll. Museum. Herring Islands, Labrador. August 22,
1891.

Fig. 3—*Fratercula arctica naumanni*. Ad. nupt. No. 86019, Coll.
U. S. Nat. Mus. Near Hakluyt's Head, Spitzbergen.

Fig. 4—*Fratercula arctica* (Linn.). Ad. nupt. No. 98072. Coll. U.
S. Nat Mus. Bergen, Norway.

Fig. 5—*Fratercula arctica glacialis* (Temm.). Juv. in natal down.
No. 510. Cat. Bowdoin Coll. Mus. Herring Islands, August 22, 1891.

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