

would it not be still stranger if they did not, or if different, species, with their different habits, were still more alike? Surely this difference of pattern does not clamor for explanation.

Still another argument to show that *protection* is, somehow, the main object of the cross-bars lies in the fact that young birds in many cases are more barred than the adults of the same species just as nature keeps the young of many *ungraded* species graded for protection like their mother.

DESCRIPTIONS OF THREE NEW BIRDS FROM ALASKA.

BY LOUIS B. BISHOP, M.D.

IN STUDYING the collection of birds secured in Alaska during the summer of 1899 by the party from the Biological Survey, of which I was a member, thanks to the kind invitation of Dr. Merriam, Chief of the Survey, I have found that three Alaskan birds differ sufficiently from the same species from other parts of the country to deserve description as subspecies, and that two subspecies already described — *Parus hudsonicus evura* Coues and *Hyalocichla ustulata almæ* Oberholser — in the light of more material seem to merit recognition.

Parus hudsonicus from Alaska is certainly subspecifically distinct from *P. hudsonicus* from New Brunswick, and so far as I have been able to study them *hudsonicus* from Ungava, Labrador, and New Brunswick appear the same, but as I have not seen birds from the type locality of *hudsonicus*, or from Ungava in nestling and early fall plumage, I can only hope to throw a little light on the races of this puzzling species.

To the gentlemen in charge of the collections of the Biological Survey, the U. S. National Museum, the American Museum of Natural History, and the private collection of Mr. Brewster, I wish to express my thanks for the privilege of studying large series of these species and for much assistance received, and to Mr. Outram Bangs, Dr. Jonathan Dwight, Jr., and Mr. Homer L. Bigelow for kindly loaning me specimens for comparison.

Canachites canadensis osgoodi, subsp. nov. ALASKA GROUSE.

Type, No. 4310, Coll. of L. B. Bishop, ♀ ad., Lake Marsh, Northwest Territory, July 5, 1899; (W. H. Osgood) L. B. Bishop.

Subspecific characters.— Similar to *Canachites canadensis* but with the ochraceous buff bars replaced everywhere by cream-buff and grayish white. On the upper parts the gray tips are paler, the ochraceous buff replaced by cream-buff and whitish, and the pale bars of the cervix grayish white instead of buff; below the white tips are larger, the pale bars whitish and cream color instead of buff, becoming cream-buff only on the jugulum.

Distribution.— Northwest Territory, Northern British Columbia and Alaska north of the coast mountains.

Measurements of type.— Length, 15.50; extent, 24.25; wing, 7.20; tail, 4.54; tarsus, 1.32 inches. Average length of 4 ♀, 15.38 inches. Average of 6 ♀ and 1 ♂ in wing, 7.02; tail, 4.51; tarsus, 1.34 inches.

Description.— Above irregularly barred with grayish white and black, the pale bars becoming cream-buff on crown and interscapulars and grayish buff on wing-coverts and concealed bars of rump and upper tail-coverts; scapulars and inner tertiaries black, irregularly barred on outer web and tipped with cream-buff and gray with central wedge of white. Quills dusky, mottled on outer web and obscurely tipped with whitish; tail dusky, vermiculated, chiefly on outer web, with grayish buff and tipped with tawny ochraceous. Below barred with grayish white and black, the feathers especially on breast and abdomen broadly tipped with white; the pale bars becoming cream-color on throat and toward base of feathers on sides of breast, and distinctly cream-buff only on jugulum; flanks vermiculated with black, grayish white and pale cream-buff with broad central wedge of white. Tarsal feathering pale mars brown obscurely spotted with darker.

Remarks.— In worn breeding plumage adult females of *osgoodi* differ from *canadensis* from Maine as described above. After completing the summer moult and in early spring females from Alaska differ from females from Ontario and Quebec in the same manner but to a less degree, having the buff everywhere, especially on the cervix and abdomen, paler and the white tips below broader.

A summer male of *osgoodi* from Thirty Mile River differs from summer males of *canadensis* and *labradorius* only in having the tail tipped with paler rufous.

Two adult females of *labradorius*¹ from Mr. Bangs's collection

Mr. Bangs writes me that these are not the best examples of *labradorius*, but are the most characteristic at present available.

are far closer to *canadensis* than to *osgoodi*. *Osgoodi* in spring has the buff of the entire plumage much paler, and the gray tips of the upper parts, especially the rump and tail-coverts, paler gray, and not the bluish gray of *labradorius*. In worn breeding plumage the difference between the two forms is far more striking, *osgoodi* having the white tips below broader, the buff markings far paler throughout, and replacing the buff bars of the abdomen, cervix and rump with grayish white.

In natal plumage *osgoodi* is paler than *canadensis*, especially on wings, upper wing-coverts, scapulars and crown-patch, and has the tips of the greater coverts and central streak of tertiaries and scapulars white instead of buffy. Maxilla brownish black; mandible and tip of maxilla whitish; soles and tarsi behind maize yellow; scutellæ of tarsi and toes isabella color; nails brown.

In juvenal plumage *osgoodi* is paler throughout than *canadensis*, replacing the rusty everywhere by cream-buff, and the buff throat with whitish.

I have named this form in honor of Mr. W. H. Osgood of the Biological Survey, who secured almost all the specimens of this Grouse taken on our trip.

Sayornis saya yukonensis, subsp. nov. YUKON PHOEBE.

Type, No. 165223, U. S. Nat. Mus., Biol. Survey Coll., ♂ ad., Glacier, White Pass, Alaska, June 8, 1899; W. H. Osgood.

Distribution.—Yukon Valley in summer; Texas in winter.

Subspecific characters.—Similar to *Sayornis saya* but darker, the gray of the upper parts clearer—less scorched, with the pale edgings of the wing-coverts and secondaries narrower; the tail longer; the bill shorter and relatively broader.

Dimensions of type.—Wing, 4.30; tail, 3.58; culmen, .78; bill from nostril, .42; width of bill at base, .33 inches.

Description.—Above dark smoke-gray, darker on head. Lores, orbital ring, ear-coverts, wings and upper tail-coverts dusky, the last darkest. Tail black. Secondaries and tertiaries bordered externally and tipped with whitish; primaries faintly tipped with the same; two whitish bands on coverts across wings. Chest smoke-gray, becoming pale ash on throat and drab gray on flanks. Abdomen and under tail-coverts pale cinnamon. Under wing-coverts cream-buff, axillars darker buff.

Measurements of fifteen specimens.—Wing, 3.82–4.30 (average 3.99); tail, 3.22–3.58 (average 3.39); culmen, .73–.80 (average .76); bill from

nostril, .38-46 (average .41); width of bill at base, .28-33 (average .31) inches.

Measurements of fifteen specimens of Sayornis saya.—Wing, 3.67-4.27 (average 4.08); tail, 3.03-3.59 (average 3.27); culmen, .75-.83 (average .80); bill from nostril .42-48 (average .45); width of bill at base .27-.34 (average .30) inches.

Remarks.—*Sayornis saya* (Bonap.) is separable into two well-marked races, as described above: *saya*, a paler, rather scorched appearing bird with shorter tail and longer bill, living in California, Lower California, Nevada, Utah, Arizona, Colorado, New Mexico, Mexico and north to Fort Laramie, Wyoming, from all of which localities specimens in the above measured series have been selected; and *yukonensis*, a darker, clearer gray bird, with longer tail and shorter bill, of which besides our Yukon series of eleven specimens, only two of them adults, and winter birds from Texas, I have only seen one typical bird, which was taken at Fort Klamath, Oregon, September 20, 1882, by Captain Bendire. A specimen in Mr. Brewster's collection taken at Haywards, California, February 23, one from Laredo, Texas, January, and a young from Big Bend of the Musselshell River, Montana, August 25, in the U. S. Nat. Mus., are intermediate. Specimen of *saya* from Lower California and Arizona are the palest, those from Colorado—the type locality—the most scorched.

Yukonensis in juvenal plumage differs from *saya* in that plumage even more than do the adults; the rusty suffusion of the upper parts, particularly pronounced on the lower back and rump of the latter, being hardly perceptible in the former, and the throat and chest of *yukonensis* being much darker.

Contopus richardsonii saturatus, subsp. nov. ALASKAN
WOOD PEWEE.

Type, No. 4142, Coll. of Louis B. Bishop, ♂ ad., Haines, Alaska, June 2, 1899; L. B. Bishop.

Subspecific characters.—Similar to *Contopus richardsonii* but darker and more olivaceous above, pale margins of secondaries, tertiaries and greater coverts narrower and less white; gray of breast and sides darker and broader; bill shorter and narrower with mandible darker; tarsus longer.

Distribution.—Yukon Valley, southern Alaska and British Columbia near the coast in summer, migrating south through California.

Measurements of type.—Length, 6.69; extent, 11; wing, 3.52; tail, 2.92; exposed culmen, .49; bill from nostril, .38; width of bill at base, .30; tarsus, .62 inches.

Description.—Above clove-brown darker on head; wings and tail brownish black, the secondaries faintly margined externally, the tertiaries more broadly, with whitish; greater and middle wing-coverts tipped with brownish white forming two bars across wings; indistinct orbital ring and loreal spot of whitish. Below, including axillars and lower wing-coverts, dull grayish brown becoming darker and more olivaceous on sides of breast and flanks; throat and lower tail-coverts whitish, the feathers becoming grayish-brown centrally; central abdomen yellowish white. Mandible brown, paler toward base.

Measurements of ten specimens.—Wing, 3.19–3.50 (average 3.34); tail, 2.54–2.92 (average 2.66); exposed culmen, .43–.49 (average .46); bill from nostril, .33–.40 (average .37); width of bill at base, .30–.34 (average .32); tarsus, .52–.62 (average .56) inches.

*Measurements of twelve specimens of *Contopus richardsonii* from California, Arizona, Texas and South Dakota.*—Wing, 3.14–3.61 (average 3.40); tail, 2.41–2.88 (average 2.66); exposed culmen, .45–.52 (average .49); bill from nostril, .38–.43 (average .40); width of bill at base, .33–.38 (average .35); tarsus, .48–.55 (average .52) inches.

Remarks.—*Contopus richardsonii* (Swains.), described from a single bird taken at Cumberland House, June 27, is divisible into three well-marked geographical races,—*richardsonii*, inhabiting most of western North America; *peninsulae*, paler with larger bill, confined to Lower California; and *saturatus*, darker with smaller bill, confined to Alaska and the coast of British Columbia in the summer.

A second specimen of *saturatus* from Haines has the throat as well as the abdomen yellowish. Summer birds from the Yukon Valley and Ducks, Brit. Col.—the latter in the collection of the Am. Mus. Nat. Hist.—are browner, less olivaceous, above than the type, and the Yukon birds have shorter wings and tails, but all are darker than *richardsonii*, and have the small bill, brownish mandible, and longer tarsus of *saturatus*. Males taken at New Westminster, Brit. Col., May 31, and Fort Verde, Arizona, May 10, now in the Am. Mus. Nat. Hist., and another taken at Riverside, Cal., May 11, now in the collection of Mr. William Brewster, closely resemble the type; the latter two are doubtless migrants. Breeding birds in the collection of Mr. Brewster from Chilliwack, B. C., Fort Klamath, Ore., and Nicasio, Cal., are intermediate.

The only specimen of *richardsoni* from anywhere near the type locality that I have seen is a migrating female taken in Towner Co., N. Dak., June 4, 1895, by Mr. Homer L. Bigelow of Boston, and now in his collection. This bird has the mandible yellow, and is fully as pale as *richardsonii* from Arizona, but has a bill as small as the extreme of *saturatus*.

Measurements of this bird are:—Wing, 3.43; tail, 2.73; exposed culmen, .42; bill from nostril, .34; width of bill at base, .30; tarsus, .53 inches.

Parus hudsonicus evura Coues. YUKON CHICKADEE.

This subspecies was separated by Dr. Coues in the second edition of his 'Key' on the basis of Alaskan specimens of *hudsonicus* being larger than those from the East. This difference, though existing and most marked in the size of the bill, is very slight. But there are marked differences in the plumage of the young and of adults in late summer that require the recognition of the two forms.

In worn breeding plumage Yukon birds closely resemble those from eastern North America, varying greatly individually in the coloring of the forehead and orbital region, but average slightly deeper black on the throat.

After the summer moult *hudsonicus* from the East goes into a plumage similar to that worn in winter and spring; *evura*, on the contrary, becomes of a color between dark hair-brown and drab on the crown and nape, entirely wanting the rusty of *hudsonicus*, and has less buffy on the back.

Winter birds from the Yukon, also Fort Raé and Fort Simpson, have reached a plumage having the rusty hair-brown head and back of winter *hudsonicus* from Ungava, Labrador, but average slightly *paler* above especially on the head. I fail to see any difference in the shade of the black throat, the chestnut of the sides, gray of side-neck or white of side-head. A single specimen taken at Fort Yukon, September 10, now in the U. S. Nat. Mus. Coll., is indistinguishable from winter birds from the same region, and the type of *P. h. stoneyi* differs only in having paler flanks. A bird taken at Fort Kenai, Alaska, May 10, closely resembles spring *hudsonicus* from the East — Ungava, New Brunswick, etc.

Evura in juvenal plumage differs from *hudsonicus* in the same manner as do fall adults but to a greater degree, having the crown and nape far darker and more drab, the throat much clearer black, far less rusty on the back and breast, and the wings and tail slate-black, with little of the brownish of *hudsonicus* from New York and Quebec. *Evura* in first winter plumage — represented by a specimen taken at St. Michaels September 20, 1899, — has a somewhat paler head than an August adult in fall plumage; but a darker head, blacker throat and less rusty back than young *hudsonicus* — Ungava to New Brunswick — in similar plumage.

***Hylocichla ustulatus almæ* Oberholser. ALMA'S THRUSH.**

This subspecies, separated by Mr. Oberholser (Auk, Vol. XV, p. 304), with a type taken in the East Humboldt Mts., Nevada, June 24, proves to be the common Thrush of the Yukon Basin and distinctly separable from *swainsonii*. Yukon birds are grayer above and average paler below and grayer on the sides than the type of *almæ*, and differ greatly in these respects from *swainsonii*, but the type of *almæ* is nearer the Yukon bird than to *swainsonii*, and is grayer than one taken at Lake Marsh, July 5. Our Yukon specimens are more worn than the type of *almæ*, though taken at about the same date.

An adult in winter plumage taken at Circle City, August 20, has the dark markings of throat and breast blacker than in *swainsonii*, the buff of cheeks paler and the upper parts, including wings and tail, darker and more olive.

In juvenal plumage *almæ* differs from *swainsonii* from New Hampshire far more than do the adults. In *almæ* the upper parts, wings and tail are between olive and olive-green — almost the same shade as *alicie* in first winter plumage — becoming raw umber on outer edges of quills and wing-coverts, and the central markings of the feathers of crown and scapulars are pale cream-color; far different from the raw umber upper parts with tawny olive edgings of quills and coverts, and bright buff central streaks of feathers on head and back of *swainsonii*. The orbital ring and suffusion of auriculars are cream-color in *almæ*, only the loreal stripe approaching the buff of *swainsonii*; the chest and throat are cream-color instead of buff, the dark markings blacker, the

flanks grayer. In fact *almæ* in this plumage differs from *alicie* in same plumage taken on the same day only in possessing the loreal stripe and orbital ring, having the ground color of the throat, chest and auriculars less white, and the edgings of the quills and wing-coverts slightly paler.

In first winter plumage the same difference obtains, *almæ* being distinguishable from *alicie* only by the slightly brighter edgings of the quills and wing-coverts, and the orbital ring, loreal stripe, and auricular suffusion of cream-buff; and differs greatly from the raw umber upper parts, wings and tail, and bright buff loreal stripe, orbital ring and suffusion of breast, throat and auriculars of *swainsonii*. The dark markings of the breast and the flanks are also darker than in *swainsonii*.

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DESCRIPTION OF A NEW SUBSPECIES OF *MELEAGRIS GALLOPAVO* AND PROPOSED CHANGES
IN THE NOMENCLATURE OF CERTAIN
NORTH AMERICAN BIRDS.

BY E. W. NELSON.

WHILE working on the Mexican birds in the Biological Survey collection, the necessity of certain changes in the nomenclature of several North American species has become evident. These changes refer to *Meleagris gallopavo*, *Colaptes cafer*, *Sayornis nigricans*, *Myiozetetes texensis*, and *Agelaius phœniceus longirostris*. The most interesting development of our recent work is the demonstration of the difference between the Wild Turkeys of Arizona and those of the Sierra Madre of western Mexico as detailed below.

All measurements are given in millimeters.

***Meleagris gallopavo merriami*, subsp. nov. MERRIAM'S
TURKEY.**

Type, No. 165898, ♂ ad., U. S. Nat. Mus., Biological Survey Collection. Collected 47 miles southwest of Winslow, Arizona, Jan. 9, 1900, by E. A. Goldman.