

TWO NEW SUBSPECIES OF BIRDS FROM ALASKA

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In the preparation of manuscript for a forthcoming publication on the "Fauna of the Aleutian Islands and Alaska Peninsula," numerous specimens were critically examined at the United States National Museum and the American Museum of Natural History. It became apparent that at least two forms of birds were sufficiently distinct to merit names as subspecies. Because of probable delay in the publication of the entire report, the descriptions of these two new forms are presented herewith.

***Lagopus mutus gabrielsoni*, new subspecies**
Amchitka Rock Ptarmigan

Lagopus rupestris atkhensis Turner. Contr. Nat. Hist. Alaska, 1886:155-156, part (Amchitka, plentiful); Macoun, Cat. Canadian Birds, 1900:208, part (Amchitka); Macoun and Macoun, Cat. Canadian Birds, ed. 2, 1909:227, part (Amchitka).

Type.—Adult male, no. 4150 I. N. Gabrielson Collection; Amchitka Island, Aleutian Islands, Alaska, June 28, 1940; collected by I. N. Gabrielson.

Description.—The ground color of the type, representing the summer plumage, varies from ochraceous buff to buckthorn brown (of Ridgway), with local areas approaching pale olive buff. The dark bars are relatively broad and fairly evenly distributed throughout. White spots appear on the throat in moderate number.

L. m. gabrielsoni in summer plumage differs from *townsendi* (from Kiska Island) in having heavier and darker barring; on the average this heavy barring extends farther down the flanks and back. In other words, coarse barring is not restricted to the anterior part of the body as in *townsendi*. The ground color is paler, less ochraceous than in *townsendi*.

L. m. gabrielsoni differs from *sanfordi* of the islands east of Amchitka in having more uniformly dark ground color and broad bars.

In the autumn plumage of the male the general ground color both above and below is darker than in either *sanfordi* or *townsendi*, varying from buckthorn brown to ochraceous tawny, though the general effect appears darker than either of these colors. There are local spots of ochraceous buff about breast and throat and a few white bars on the throat.

The ground color of the underparts of the adult female in autumn plumage is cinnamon buff or ochraceous buff (not quite agreeing with either); this is broadly banded with black, and there are some white edgings. The upperparts are mostly black, broadly banded with buffy and whitish. The female of *gabrielsoni* is similar to the female of the other middle-Aleutian races. The immature female is similar to the adult female but is paler on the throat and has white spots on the back. The belly and lower flanks retain an earlier plumage, softer and much paler than the fresh plumage over the breast.

The winter plumage is unknown, but it would almost certainly be white.

Measurements.—Adult male, 3 specimens: wing, 182-189 (average, 186.3 mm.); tail, 100-110 (105.3); bill from anterior end of nostril, 7.9-9.8 (9.0); width of bill at gape, 11.4-12.2 (11.7); height of bill at angle of gonyes, 7.2-8.2 (7.7). Adult female, 3 specimens: wing, 171-179 (174.3 mm.); tail, 85-93 (88.3); bill from anterior end of nostril, 9.4; width of bill at gape, 9.8-11.4 (10.8); height of bill at angle of gonyes, 6.7-7.2 (7.0). Measurements were kindly furnished by Dr. Herbert Friedmann, who has measured the ptarmigans in the collections in the United States National Museum.)

Range.—*Lagopus mutus gabrielsoni* occurs on Amchitka Island, the type locality, and specimens from both Little Sitkin and Rat Island are referable to this form. We have no specimens from Semipochnoi Island, where we could also expect to find *gabrielsoni*.

Specimens examined.—Ten specimens were available for study: three adult males in summer plumage and two in autumn plumage from Amchitka; one adult male in summer plumage from Little Sitkin and one from Rat Island; two adult females and one immature female from Amchitka.

In his work on the "Birds of North and Middle America," Friedmann recently has studied the ptarmigan group and has kindly turned over to me his findings, suggesting that I use what I need for the Aleutian work, even in advance of his own publication on the subject.

Friedmann places all the rock ptarmigans in the Old World species *mutus*.

Study of the Aleutian material bears this out well. There is an easy transition from the American to the Siberian forms, especially through the darker types—*nelsoni* of the Alaska Peninsula and the eastern Aleutians, *evermanni* of Attu Island, and *ridgwayi* of the Commander Islands. Indeed, these three forms are near enough alike to require more than a casual scrutiny to distinguish them, even though *nelsoni* and *evermanni* are separated by several other forms and several hundred miles of islands.

The rock ptarmigans of the Aleutian-Alaska Peninsula district fall into two groups: a dark, more or less blackish group (in summer plumage) and a paler, yellowish group. The dark group occupies the Alaska Peninsula and the eastern Aleutians as far west as the Islands of Four Mountains at least, with a representative subspecies on the extreme western end of the chain, Attu Island, and another representative on the Commander Islands. But in the middle Aleutians, from Atka Island west to Kiska, separating the closely related *nelsoni* and *evermanni*, there is the yellowish group. This group comprises five forms, so distinct from the dark ones that intergradation between the two groups is not apparent. Ordinarily one would be tempted to set aside these middle-Aleutian ptarmigans as a distinct species. Such a course, however, would produce a distributional anomaly, and there are other considerations. There appears to be a tendency among rock ptarmigans to produce light and dark populations. Taverner (Ann. Rept. Nat. Mus. Canada for 1928, 1929:37) has gone so far as to distinguish a northern yellow group and a more southern dark group in continental North America and suggests that there are two color phases. In view of this tendency for a light phase to crop out here and there in the rock ptarmigan population, apparently revealing a genetic possibility common to this group as a whole, it seems advisable to include all forms in one basic species at least until we achieve a better understanding of this interesting condition.

The yellowish ptarmigans of the middle Aleutians themselves fall into two groups. The three eastern forms, *atkensis*, *chamberlaini*, and *sanfordi* (the hardest to distinguish from one another), comprise a group characterized by pale coloration, but more especially by finer barring in the plumage. The two more western races, *gabrielsoni* and *townsendi*, agree in possessing heavier barring.

Frankly, these races are not easily distinguished. In discussing *sanfordi*, Bent (U. S. Nat. Mus., Bull. 162, 1932:225) honestly remarked: "Although I described and named this race myself (1912) in honor of my friend, Dr. Leonard C. Sanford, who cooperated with me in organizing our expedition to the Aleutian Islands, I must confess that it is only slightly differentiated from the Adak ptarmigan." This expresses quite well the situation among these five forms. Yet, even though slight, the differences are present and it is especially worth while to make note of them in these island habitats where the factor of isolation will continue to operate.

The new form from Amchitka Island is named in honor of Dr. Ira N. Gabrielson, director of the United States Fish and Wildlife Service, who has encouraged work in the Aleutians, who in 1940 furnished additional specimens and observations that were useful in filling gaps in our information for this district, and who collected the specimen used for the type.

***Leucosticte tephrocotis umbrina*, new subspecies**
Pribilof Rosy Finch

Leucosticte griseinucha, Baird, Trans. Chicago Acad. Sci., 1, 1869:317; Dall and Bannister, Trans. Chicago Acad. Sci., 1, 1869:282; Coues, Check List, 2nd ed., 1882: No. 205; Nelson, Cruise "Corwin," 1881 (1883):67.

Leucosticte tephrocotis var. *griseinucha*, Coues, Key N. Amer. Birds, 1872:130; Check List, 1873: No. 144a; Baird, Brewer, and Ridgway, Hist. N. Amer. Birds, 1, 1874:508; Coues, in Elliott's Affairs in Alaska, 1875:174; Elliott, Mon. Seal Islands, 1882:127.

Leucosticte tephrocotis (not of Swainson) Harting, Fauna Prybilov Islands, 1875:16.
Leucosticte griseonucha, A. O. U. Check-list, 1886:258; Turner, Contr. Nat. Hist. Alaska, 1886:171; Nelson, Cruise "Corwin," 1885 (1887):100.
Leucosticte tephrocotis griseonucha, Ridgway, Birds N. M. Amer., pt. 1, 1901:72.
Leucosticte griseonucha, A. O. U. Check-list, 1910:246; A. O. U. Check-list, 1931:323; Preble, N. Amer. Fauna No. 46, 1923:88.

Type.—Adult male, no. 242705 U. S. Nat. Mus. (Biological Surveys Collection); St. Paul Island, Pribilof Islands, Alaska, June 22, 1914; collected by E. A. Preble, original number 2222.

Description.—Similar to *L. t. griseonucha* in general coloration, but breast Prout's brown, mixed with indistinct black streaks and suffusions that give it a darker appearance, graduating to black on the throat. Back almost the same basic color, though appearing paler due to more restricted black streaking and some paler feather edges. The breast color, because of admixture of black, has a more luminous, richer color effect than the mere naming of these tints would indicate. Flanks, belly, rump, and wing coverts suffused or spotted with old rose, more like geranium pink in some lights. Back of neck and cheeks gray, as in other forms of *tephrocotis*. Crown and lores black. Bill black (in breeding season). Feet black.

As contrasted with this, in *griseonucha*, as typified by U. S. Nat. Mus. no. 231449 from Kiska Island, the breast is cinnamon brown or Prout's brown, but the more limited amount of black gives it a paler appearance. The back is even more strikingly pale, having less black and a paler shade of brown.

In measurements there is no significant difference between *umbrina* and *griseonucha*.

Compared with *maxima*, of the Commander Islands, *umbrina* still appears consistently darker. In size, *umbrina* is smaller especially in the wing; this is the chief character distinguishing *maxima* from *griseonucha*. Wing measurements of four male *maxima* are 120-130 (average, 122 mm.). On the other hand, wings of fifteen male *umbrina* measured 112-121 (116.8).

Measurements.—Type: wing, 115 mm.; tail, 72.5; exposed culmen, 14.

Range.—St. Paul, St. George, St. Matthew, and Otter islands, Bering Sea.

Specimens examined.—Fifty-three specimens of *umbrina* from St. Paul, St. George, St. Matthew, and Otter islands; forty-six specimens of *griseonucha* from Aleutian Islands; six specimens of *maxima* from Commander Islands.

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