

ON THE STATUS OF BISCHOFF'S SONG SPARROW
(*MELOSPIZA INSIGNIS* BAIRD).

BY CHARLES W. RICHMOND.

SOME time ago Major Chas. E. Bendire, Honorary Curator Department of Oölogy in the United States National Museum, received some eggs of the Aleutian Song Sparrow from Mr. C. Littlejohn of Redwood City, Calif., collected at Sannak Island, Alaska, in the summer of 1894. These eggs proved, upon comparison, to be so much larger than others in the National Museum collection that Mr. Littlejohn was requested to send specimens of the bird for identification, which he very kindly did. At about the same time Mr. B. J. Bretherton of Lincoln, Oregon, sent on two specimens of *Melospiza*, with a small lot of other birds, all from Kadiak Island, which he very generously presented to the National Museum. Upon learning that the Kadiak specimens were not *Melospiza cinerea*, Mr. Bretherton sent a third example for examination, for which I have to thank him. Mr. Littlejohn, at my request, forwarded a series of twenty-seven specimens of *M. cinerea*, all from Sannak Island, for comparison with the large series in the National Museum collection, for which courtesy my thanks are due him. A series of over eighty specimens is now at hand, and amply sufficient, I think, to illustrate the validity of *Melospiza insignis* Baird. Of these specimens, eleven are *insignis*, from Kadiak, and the remainder are *cinerea*, mainly from Unalaska and Sannak Islands. A glance at the Kadiak birds without recourse to measurements will suffice to distinguish them from true *cinerea* from Unalaska, in fact they may readily be identified without direct comparison with the latter, which points strongly in favor of the recognition of *insignis* as a valid race. Its position, as may be inferred from its habitat, is between *rufina* and *cinerea*.

Melospiza insignis, or Bischoff's Song Sparrow, was described by Professor Baird in 1869, from six specimens collected by Ferd. Bischoff at Kadiak Island during that and the preceding year. At that time the *Fringilla cinerea* of Gmelin from Unalaska

was known only from the very vague description of that author, who followed Latham and Pennant. In 1870 the National Museum received two specimens from Dr. J. F. Brandt, who collected them many years before. These specimens, Nos. 60,161 and 60,162, are labeled "Ins. St. Paul, Aug. 5, 1843," and "Ins. Kodiak, 1844," respectively. The specimen collected at "Ins. St. Paul" (doubtless the small village of St. Paul on Kadiak, as the bird is not known to occur on the Pribilof Islands) is *insignis*, but the other, labeled "Ins. Kodiak," is *cinerea*. This latter specimen has no doubt been a stumbling block to those who have worked over these birds in the past, the very few genuine Kadiak examples then in the collection being neutralized by this specimen of *cinerea*. I suspect it to be from Unalaska, or some island on which *M. cinerea* occurs, but erroneously labeled "Kodiak." At the present time I have been able to examine only eleven specimens from Kadiak, but these are all typical of Bischoff's Song Sparrow.

Since 1870 many specimens of *Melospiza cinerea* have been received by the National Museum, collected chiefly by the naturalists attached to the various government vessels sent to Alaska. These specimens are principally from Unalaska, with a few specimens from Adak, Atka and the Shumagins, as above stated, and Mr. Littlejohn has recently obtained a large series from Sannak. This additional material from Unalaska led to the adoption of the name *Melospiza cinerea* (Gmel.) for the Aleutian Song Sparrow, and Baird's *Melospiza insignis* was relegated to the synonymy of that species. This change was made in 1881 by Mr. Ridgway,¹ but Dr. Finsch² had previously recognized both forms in his paper on the ornithology of Northwest America. In 1882 Dr. Bean³ gave a valuable table of measurements of these Song Sparrows, and more recently Turner⁴ and Nelson have written on the species; the latter author, after describing the fall

¹ Proc. U. S. N. M., III, 1880, p. 3.

² Abhandl. Nat. Ver. Brem., III, 1872, p. 41.

³ Proc. U. S. N. M., V, 1882, p. 154.

⁴ Contr. Nat. Hist. Alaska, 1886, p. 174.

plumage of the adult, observes that "Kadiak birds average slightly darker than those from Unalaska and the Aleutian chain."¹

Having given this brief history of the case, it now remains to describe *Melospiza insignis*, and point out the features in which it differs from *M. cinerea*.

Melospiza insignis Baird.

Description.—(U. S. Nat. Mus. No. 135,093, ♂ ad., Kadiak Island, Alaska, June 6, 1894, B. J. Bretherton.) Upper parts, including upper tail-coverts, slaty gray, the feathers of the interscapular region and scapulars with darker, brownish centres and blackish shaft marks; cervix and rump uniform in color, without markings; top of head darker on sides, with a faint brownish tinge, the feathers with blackish shaft marks. Tail above grayish brown, lighter on outer webs, with a chestnut wash at the base of the outer feathers. Throat, lores, malar stripe, and along median under parts grayish white, passing into dusky slate gray on the sides, cheeks, and sides of neck, with a brownish wash on flanks; sub-malar streak brownish gray, the feathers with darker centres, a faint, narrow rictal patch of the same color, and a faint postocular streak of brown. Throat faintly flecked with small dusky spots. Breast with a distinct band of dusky feathers, each feather edged laterally with dull white, with ill-defined brownish centres; sides streaked with dusky, the streaked feathers with brown along shafts. Under tail-coverts grayish brown, as on flanks, with darker median streaks, each feather edged with dull white. Wing grayish brown, like tail; tertials with lighter, umber edgings on outer webs; greater wing-coverts cinnamon on outer webs, with light gray terminal edgings; edge of wing at carpal joint, white. Wing, 3.18; tail, 3.12; bill from nostril, .44; depth of bill at base, .29; culmen, .55; tarsus, 1.03 inches.

Melospiza insignis differs from *cinerea* in its somewhat smaller size, shorter and more slender bill, in having less strongly marked spots on the interscapular region and breast, and in the gray, rather than brown, color of these spots. It is also without the distinct russet spots on the sides of the neck, at the termination of the sub-malar streak. In the spring specimens of *insignis* there is no lateral crown stripe of russet, but the great majority of specimens of *cinerea* before me show it very plainly. In fresh fall plumage the specimens of *insignis* have a dull lateral head

¹ Rep. Nat. Hist. Alaska, 1887, p. 194.

stripe of Prout's brown, with narrow black shaft streaks; *cinerea* in corresponding plumage has these stripes more distinct, and of a burnt umber color. Kadiak birds have less white below than most specimens of *cinerea*, and the whole plumage is a shade darker. The specimens of *cinerea* from the various localities represented are quite uniform in coloration, but the size varies slightly, those from Sannak leaning somewhat toward *insignis* in the slender shape of the bill, although the measurements slightly exceed those of the Unalaska individuals. In this connection it may be mentioned that two examples from Cook's Inlet on the mainland (Nos. 81,380 and 131,730) approach *insignis* much closer, both in color and size, than individuals of *rufina* from Sitka, and it may be found necessary, upon the examination of more material from this region, to either merge these birds into *insignis*, or separate them from *rufina* under a new title. Finsch's Alexandrovsk specimen is probably similar to these mainland birds. Measurements of the two specimens mentioned will be found following those of *M. insignis* in the following summary.

Measurements of Melospiza cinerea (Gmel.).

Average of twelve adult males from Unalaska: wing, 3.29; tail, 3.27; tarsus, 1.11; bill from nostril, .47 inches.

Average of ten adult females from Unalaska: wing, 3.20; tail, 3.17; tarsus, 1.09; bill from nostril, .46 inches.

Average of twelve adult males from Sannak: wing, 3.33; tail, 3.25; tarsus, 1.13; bill from nostril, .48 inches.

Average of ten adult females from Sannak: wing, 3.11; tail, 3.03; tarsus, 1.09; bill from nostril, .47 inches.

Measurements of Melospiza insignis Baird.

Average of four adult males from Kadiak: wing, 3.23; tail, 3.19; tarsus, 1.04; bill from nostril, .47 inches.

Average of three adult females from Kadiak: wing, 3.04; tail, 2.94; tarsus, 1.05; bill from nostril, .46 inches.

Average of four adults (sex unknown) from Kadiak: wing, 3.13; tail, 3.12; tarsus, 1.05; bill from nostril, .43 inches.

Smallest Unalaska example of *M. cinerea*, adult ♂: wing, 3.21; tail, 3.16; tarsus, 1.11; bill from nostril, .45; depth of bill at base, .31 inches.

Smallest Kadiak example of *M. insignis*, adult ♂: wing 3.18; tail, 3.12; tarsus, 1.03; bill from nostril, .44; depth of bill at base, .29 inches.

Measurements of Melospiza f. "rufina" from Cook's Inlet, Alaska.

No. 81,380, ♀ adult: wing, 2.97; tail, 2.80; tarsus, .97; bill from nostril, .43 inches.

No. 131,730, ♂ adult: wing, 3.12; tail, 2.90; tarsus, 1.05; bill from nostril, .43 inches.

Turning now to the eggs of these birds, it appears that previous to the receipt of the Sannak Island specimens, the eggs in the National Museum collection were those of *insignis*, and so, when the Littlejohn specimens were compared with them the difference in size at once became apparent. Major Bendire has very kindly placed at my disposal the following measurements and descriptions of the eggs of both species.

Eggs of Melospiza cinerea.

"No. 27,124. Four eggs taken May 26, 1894, measure 1.02 × .70; 1.01 × .71; .97 × .71; .96 × .71 inches. From Chase Littlejohn, Sannak Island.

"No. 27,416. Four eggs taken May 20, 1894, measure 1.00 × .69; .98 × .70; .97 × .69; .97 × .69 inches. Same collector and locality. Ralph Collection.

"No. 27,417. Four eggs taken May 26, 1894, measure .95 × .67; .96 × .66; .90 × .66; .91 × .65 inches. Same collector and locality. Ralph Collection.

"Average about .96 × .68 inches.

"*Description.*—Eggs elliptical ovate in shape, the shell compact and smooth, without lustre. Ground color from a bright light green to a pale grayish-green, mostly heavily blotched and spotted, especially about the larger end, with ferruginous and lavender, in some specimens heavy enough to almost hide the ground color."

Eggs of Melospiza insignis.

"No. 19,076. A set of three eggs taken June 10, 1880, by Dr. T. H. Bean at St. Paul, Kadiak, Alaska, measure .89 × .65; .87 × .65; .88 × .66 inches.

"No. 19,070. An incomplete set of two eggs taken by Mr. W. J. Fisher, in July, 1883, on Kadiak Island, Alaska, measure .87 × .65; .89 × .67 inches.

"No. 19,074. A set of three eggs from the same collector and place. measure .91 × .68; .94 × .68; .94 × .66 inches.

"No. 26,214. A set of five eggs from Kadiak Island, taken by Mr. B. J. Bretherton (from the collection of the Dept. Agriculture), measure .90 × .67; .90 × .67; .87 × .67; .86 × .66; .84 × .66 inches.

"Average about .89 × .66 inches.

"*Description.*—These eggs vary from ovate to short ovate in shape. They are considerably smaller than those of *M. cinerea*, but are similarly marked, and resemble them otherwise except in size."

In the synonymy which follows, I have placed three references to *Emberiza unalascensis* under *M. cinerea*, for the following reasons: our specimens collected by Brandt are both labeled "*Emberiza unalascensis*," presumably by Brandt himself. Dr. Finsch,¹ in an explanation of the unpublished plates of Brandt's 'Descriptiones et Icones Animalium Rossicorum Novorum,' writes "Tab. II, f. 4, *Emberiza unalascensis* ist *Melospiza cinerea*, Gmel. — Unalaska." It appears that Brandt referred to *Melospiza cinerea* under this name, instead of to *Passerella iliaca unalascensis* (Gmel.). The reference to Brandt's posthumous paper, edited by Schalow² doubtless also belongs here.

Melospiza insignis Baird.

Melospiza insignis BAIRD, Trans. Chicago Acad. I, 1869, p. 319, pl. 29, fig. 2. [Kadiak.] — DALL & BANN., Trans. Chicago Acad. I, 1869, p. 285. — ? FINSCH, Abhandl. Nat. Ver. Brem. III, 1872, p. 44. [Alexandrovsk.] — HENSH. Bull. N. O. C. IV, 1879, p. 159 (part).

Zonotrichia (Melospiza) insignis GRAY, Hand-List Bds. II, 1870, p. 94, no. 7392.

Melospiza melodia var. *insignis* COUES, Key N. A. Bds. 1872, p. 140. — BAIRD, BREW. & RIDGW. Hist. N. A. Bds. II, 1874, p. 30, pl. 27, fig. 8 (part).

Melospiza melodia h. *insignis* COUES, Bds. N. W. 1874, p. 139 (part).

Melospiza cinerea RIDGW. Proc. U. S. N. M. III, 1880, pp. 3, 180 (part). — COUES, Check-List, 1882, p. 54 (part). — BEAN, Proc. U. S. N. M. V. 1882, pp. 154, 172 (part). — NELSON, Cruise 'Corwin,' 1883, p. 72 (part). — COUES, Key N. A. Bds. 2nd ed. 1884, p. 372 (part). — A. O. U. Check-List, 1886, p. 281 (part). — TURNER, Contr. N. H. Alaska, 1886, pp. 174, 194 (part). — NELSON, Rept. N. H. Alaska, 1887, p. 193 (part). — RIDGW. Man. N. A. Bds. 1887, p. 432 (part). — SHARPE, Cat. Bds. B. M. XII, 1888, p. 707 (part). — RIDGW. Proc. U. S. N. M. XVI, 1893, p. 664.

Melospiza cinerea (Gmelin).

Cinereous Finch LATH. Syn. Bds. II, pt. 1, 1783, p. 274. [Unalaska.] — PENN. Arct. Zool. II, 1785, p. 378.

Fringilla cinerea GMEL. Syst. Nat. I, 1788, p. 922. — LATH. Ind. Ord. I, 1790, p. 445.

¹ Abhandl. Nat. Ver. Bremen, III, 1872, p. 20.

² Journ. f. Orn., 1891, p. 256.

Zonotrichia cinerea GRAY, Gen. Bds. II, 1849, p. 373. — BONAP. Consp. Gen. Av. I, 1850, p. 478.

Melospiza insignis DALL, Proc. Cal. Acad. Sci. V, 1873, p. 27. [Unalaska; Shumagins.] *Ibid.*, 1874, p. 274. [Kyska.] — HENSH. Bull. N. O. C. IV, 1879, p. 159 (part).

Melospiza melodia var. *insignis* BAIRD, BREW. & RIDGW. Hist. N. A. Bds. II, 1874, p. 30 (part).

Melospiza melodia h. *insignis* COUES, Bds. N. W. 1874, p. 139 (part).

Melospiza cinerea FINSCH, Abhandl. Nat. Ver. Brem. III, 1872, pp. 20, 41. [Unalaska.] — RIDGW. Proc. U. S. N. M. III, 1880, pp. 3, 180 (part). — COUES, Check-List, 1882, p. 54 (part). — BEAN, Proc. U. S. N. M. V, 1882, pp. 154, 172 (part). — NELSON, Cruise 'Corwin,' 1883, p. 72 (part). — COUES, Key N. A. Bds. 2nd ed., 1884, p. 372 (part). — TURNER, Auk, II, 1885, p. 157. [Nearer Islands.] — A. O. U. Check-List, 1886, p. 281 (part). — TURNER, Contr. N. H. Alaska, 1886, pp. 174, 194 (part). — NELSON, Rept. N. H. Alaska, 1887, p. 193 (part). — RIDGW., Man. N. A. Bds., 1887, p. 432 (part). — SHARPE, Cat. Bds. B. M. XII, 1888, p. 707 (part).

Emberiza unalaschcensis BRANDT, Descr. Anim. Ross. pl. II, fig. 4. — FINSCH, Abhandl. Nat. Ver. Brem. III, 1872, p. 20. — SCHALOW, J. f. O. 1891, p. 256. [Unalaska.]

THE SUMMER RANGE OF COLORADO BIRDS.

BY W. W. COOKE.

NO OTHER State in the Union has so great a variety of birds as Colorado. This arises from its location at the meeting place of eastern and western forms. The continental divide passes through the middle of the State, and while the plains of the southeast offer a fit habitation for most of the Mississippi Valley birds, the western slopes are visited by most of the Pacific coast species. Many southern birds reach Colorado during the heat of summer and most of the northern birds can be found on her mountains in winter. Such a combination of location and topography results in a widely varied bird fauna. There has not been much study made of Colorado ornithology, but up to date the State list includes 347 species. The general character of the fauna is western as shown by the fact that