

Article XI.—A NEW GROUSE FROM CALIFORNIA.

By FRANK M. CHAPMAN.

Dendragapus obscurus sierræ, subsp. nov.

SIERRA GROUSE.

Chars. Subsp. — Most nearly related to *Dendragapus obscurus*, but the nuchal region often browner and usually vermiculated with black, the whole dorsal region less black and more heavily vermiculated with brown and gray; terminal tail band narrower and more speckled with blackish; the median tail-feathers more heavily marked with gray or brownish; the scapulars and tertials with the terminal white wedge less developed or entirely wanting; the basally white neck-tufts practically absent; the throat averaging duskier and the feathers of the sides, flanks, and under tail-coverts with much less white.

Differs from *Dendragapus obscurus fuliginosus* in much paler coloration above, in the heavier vermiculation of the entire upper surface, practical absence of neck-tufts, whiter throat, and paler underparts.

Type, No. 79079, Am. Mus. Nat. Hist., Echo, El Dorado Co., California, July 18, 1896; P. O. Simons.

Range. — California in the forested portions of the Transition and Boreal zones, "east of the humid coast belt, and south through the Sierras to Mount Pinos" (Grinnell); north to Fort Klamath, Oregon.

Females of all three forms, in breeding plumage, are not certainly distinguishable from one another. The tail band in *obscurus*, however, averages wider, and in *sierræ* the central tail-feathers are less definitely barred.

A female from Sitka in fresh fall plumage (Sept. 10) is strikingly different from a female in similar plumage taken at Echo, El Dorado Co., October 7. The prevailing color of the former is rich, deep rusty and the bird suggests *Bonasa umbellus sabinei* in tone of coloration. The dominant color of the California bird, on the other hand, is gray, the feathers of the entire dorsal surface being widely margined with this color. The underparts in this example are much paler and whiter than in the Alaska bird.

The young of *sierræ* in juvenal plumage, of which the

collection contains twelve specimens, are all appreciably paler than two examples of *fuliginosus* in corresponding plumage.

The range of *Dendragapus obscurus* is given in Baird, Brewer, and Ridgway (III, p. 423) as "Rocky Mountain region of the United States, principally south of South Pass, and Sierra Nevada, north to Oregon and south to San Francisco Mountains, New Mexico." In the same work (p. 425) *D. o. fuliginosus* is said to inhabit the "Northwest coast region, from Oregon to Sitka."

In Ridgway's 'Manual' (first, 1887, and second, 1896, editions) the Sierras are not included in the range of any form of this species. The A. O. U. Check-List (second edition, 1895) gives the western limit of the range of *obscurus* as the "East Humboldt Mountains," while *fuliginosus* is said to inhabit the "northwest coast mountains, from California to Sitka, east to Nevada, western Idaho, and portions of British Columbia." Bendire (Life Histories of North American Birds, 1892, p. 44) as well as Grinnell (Check-List of California Birds, 1902, p. 30) also refer the Sierra grouse to *fuliginosus*.

It appears, however, on comparison of specimens of Sierra grouse, lately received by the Museum from W. W. Price, with series of *Dendragapus obscurus* and *D. o. fuliginosus*, very kindly loaned me by the U. S. National Museum through Mr. Robert Ridgway, and by Mr. William Brewster, that the form of *Dendragapus* inhabiting the Sierras is much more nearly related to *obscurus* than to *fuliginosus*. Curiously enough it follows, therefore, that the ranges accorded the birds of this group by Baird, Brewer, and Ridgway in 1875 are more nearly correct than those which have appeared in subsequent works.

In spite of the fact that the Sierra Grouse more nearly resembles *obscurus* than it does *fuliginosus* it apparently has been derived from the latter rather than from the former. That is, it represents a southern extension of the northwest coast form and not a westward extension of the Rocky Mountain form.

This theory is supported by the apparent continuity of range of *sierræ* and *fuliginosus* and by their evident intergradation in the vicinity of Klamath, Oregon. Several of the

specimens, in an admirable series collected by Major Bendire, at Fort Klamath, are referable to *sierræ* rather than to *fuliginosus*, though not typical of the former. Other examples in this series, however, are much nearer to *fuliginosus*. On the other hand, I have no material proving continuity of range in *sierræ* and *obscurus*, and the character of the country intervening between the nearest known portions of their respective ranges would lead one to suppose that they do not intergrade geographically.

Acknowledgments for the loan of material are due Mr. Robert Ridgway (39 specimens) and Mr. William Brewster (5 specimens).

Material Examined.

D. o. richardsoni. British Columbia: Fort Halkett, 1 ♂, 1 ♀; Ashcroft, 4 ♀ ♀, 3 juv.; Ducks, 1 ♀. Alberta: 60 miles west of Calgary, 2 ♂ ♂. Montana: 2 ♂ ♂.

D. o. fuliginosus. Alaska: Sitka, 2 ♂ ♂, 1 ♀; Gustavus Point, 1 ♂. British Columbia: Chilliwack, 1 ♂, 1 juv.; New Westminster, 2 ♂ ♂; Victoria, 1 ♂. Washington: 49th parallel, Mt. Baker Range, 1 juv.; Puget Sound, 1 ♂; Fort Steilacoom, 1 ♂; Clickatat River, 1 ♀. Oregon: Douglas Co., 1 ♂; foot of Mt. Hood, 1 ♂ (type); Canyonville, 1 ♀.

Intermediate between *fuliginosus* and *sierræ*. Oregon: Fort Klamath, 6 ♂ ♂ (2 nearer *fuliginosus*, 2 nearer *sierræ*), 4 ♀ ♀, 2 juv. California: near Oregon line, 1 ♀; Castle Lake, 1 ♀.

D. o. sierræ. California: Mt. Tallac (El Dorado Co.), 1 ♂, 1 juv.; Echo (El Dorado Co.), 2 ♂ ♂, 13 ♀ ♀, 11 juv.; near Lake Tahoe, 1 ♀; Big Trees, 1 ♂; Bloods, 1 ♂; Fort Crook, 1 ♂.

D. o. obscurus. Montana: Deer Creek, 2 ♂ ♂. Utah: Brown's Park, 1 ♀, 2 juv.; Fort George, 1 ♂, 1 ♀; Uintah Mts., 1 ♀. Arizona: White Mts., 2 ♂ ♂. Colorado: 1 ♂; Twin Lakes, 1 ♂, 1 ♀; Rio Grande, 1 ♂; Jimtown, 1 ♂; Huerfano Co., 1 ♂.

MEASUREMENTS OF NINETEEN MALES OF *Dendragapus obscurus*, *D. o. fuliginosus*,
AND *D. o. sierræ*.

Name.	No.	Locality.	Date.	Wing.	Tail.	Gonys.	Tarsus.	Tail Band on mid. feathers.	Greatest Width Tail Band on In- ner Web of Outer Rectrix.
<i>Fuliginosus</i> ..	N. M. 170281	Gustavus Point, Alaska.	June 10	218	158	10.3	45.5	16.	7.5
" ..	A. M. 47278	New Westminster, B. C.	Apr. 27	231	190	10.2	43.2	19.5	9.5
" ..	" 47277	New Westminster, B. C.	May 5	221	150	10.5	46.	13.	5.
" ..	W. B. 45642	Chilliwack, B. C.	May 13	217	169	11.8	47.	17.2	8.5
" ..	N. M. 153198	Victoria, B. C.	Mar. 27	214	152	10.5	43.5	17.	8.5
" ..	" 45051	Foot of Mt. Hood, Oregon.	—	232	157	11.	43.8	17.5	9.5
<i>Sierræ</i>	A. M. 79081	Mt. Tallac, El Do- rado Co., Cal.	Average:	222	163	10.7	44.8	16.7	8.1
"	" 79080	Echo, El Dorado Co., Cal.	July 6	220	—	9.9	45.	—	10.5
"	" 79079 ¹	Echo, El Dorado Co., Cal.	Aug. 8	223	162	—	44.	15.	9.5
"	N. M. 85627	Bloods, Cal.	July 18	235	—	10.4	43.	—	10.
"	" 18053	Fort Crook, Cal.	June 20	230	172	11.	45.4	21.5	9.5
			Mar. 19	238	183	11.	44.	21.	8.
<i>Obscurus</i>	N. M. 62652	Ft. George, Utah	Average:	229	172	10.6	44.3	19.2	9.5
"	" 19164	Deer Creek, Mont.	June 10	223	180	10.3	47.	30.	15.
"	" 112681	Jimtown, Colo.	Feb. 13	227	156	10.8	40.	32.	14.
"	" 112680	Colorado.	Oct. 25	234	156	10.2	44.5	27.5	14.
"	" 163863	Huerfano Co., Colo.	Nov. 10	241	157	10.1	40.	33.	12.5
"	A. M. 45187	Twin Lakes, Colo.	Oct. 25	222	157	10.	44.	22.5	12.5
"	N. M. 69771	Rio Grande, Colo.	July 28	232	179	10.3	46.	38.5	25.
"	" 101427	White Mts., Ariz.	June 10	238	179	10.6	48.5	30.	18.5
			—	218	145	10.5	43.	23.	12.5
			Average:	229	164	10.4	45.6	29.6	15.5

¹ Type.

NOTE. — N. M. = U. S. National Museum; A. M. = American Museum Natural History; W. B. = Collection of William Brewster.

Greatest width of tail-band on inner web of outer rectrix in females.

	Min.	Average.	Max.
<i>D. o. fuliginosus</i> (3 specimens).....	6.	7.7	9
<i>D. o. sierræ</i> (10 ").....	8.	10.2	15.
<i>D. o. obscurus</i> (4 ").....	10.	14.6	20.