were club members or associated in any way with its former work. Since that time of course many new people have joined in the work and the notes are yearly growing more valuable.

A SYNOPSIS OF THE GENUS THRYOMANES

BY HARRY C. OBERHOLSER

Since the publication of the writer's revision of the genus *Thryomanes*,¹ additional data concerning the geographic distribution, status, and relationships of several of the forms have been accumulating. Some of these have already been published by Mr. H. S. Swarth, in his excellent article on the Pacific Coast races of *Thryomanes bewickii*,² and by Mr. Robert Ridgway in his treatment of the genus in the "Birds of North and Middle America." The remainder we purpose to present here, together with, for convenience, a brief synopsis of all the forms of the genus, including a revision of their geographic distribution. For detailed descriptions and comparisons the three contributions above mentioned should be consulted. We are much indebted to Dr. J. Grinnell and Mr. H. S. Swarth for the loan of material from the Pacific coast region.

The genus *Thryomanes* at present consists of four species, one of these, *Thryomanes bewickii*, comprising 16 geographic races, one of which we are here describing as new.

Genus Thryomanes Sclater.

Thryomanes Sclater, Cat. Coll. Amer. Birds, May, 1862, p. 22 (subgenus of Thryothorus).

Type.— $Troglodytes\ bewickii$ Audubon, by original designation.

¹ Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 421-450.

 $^{^2\,\}mathrm{Proc.}$ Calif. Acad. Sci., ser. 4., VI, No. 4, May 8, 1916, pp. 53–85, pl. 2.

³ Bull. U. S. Nat. Mus., No. 50, pt. 3, 1904, pp. 548-569.

Geographic distribution.—Southern British Columbia, the United States, and Mexico.

THRYOMANES ALBINUCHUS (Cabot).

Troglodytes albinucha Cabot, Proc. Bost. Soc. Nat. Hist., II, 1847, p. 258.

Thryothorus petenicus Salvin, Proc. Zoöl. Soc. Lond. 1863, p. 187 (Sakluk, near Peten, Guatemala).

Type locality.—Yalahao, Yucatan.

Geographic distribution.—Yucatan and northern Guatemala.

Remarks.—This species is without doubt a member of the genus *Thryomanes*, as sometime ago claimed by Mr. Ridgway.¹

THRYOMANES BEWICKII BEWICKII (Audubon).

Troglodytes bewickii Audubon, Ornith. Biog., 1, 1831, p. 96.

Type locality.—St. Francisville, Louisiana.

Geographic distribution.—Southeastern United States. Breeds locally north to central Pennsylvania, northern Ohio, southern Michigan, northern Illinois, central Iowa, and southeastern Nebraska; west to eastern Kansas and eastern Oklahoma; south to northeastern Texas, central Arkansas, northern Mississippi, central Alabama, and central South Carolina; east to central South Carolina, central Virginia, and the District of Columbia. Winters south to coast of the Gulf of Mexico, from Florida to eastern Texas. Casual east to southern New Jersey and north to south central New Hampshire and southern Ontario.

THRYOMANES BEWICKII CRYPTUS Oberholser.

Thryothorus bewickii leucogaster Baird, Rev. Amer. Birds, I, 1864, p. 127 (nec Troglodytes leucogastra, Gould, quae Hemiura leucogastris).

Thryomanes bewickii cryptus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 422, 425.

¹ Bull. U. S. Nat. Mus., No. 50, pt. 3, 1904, p. 551.

Type locality.—San Antonio, Texas.

Geographic distribution.—Resident from central Kansas, south through central Oklahoma and central Texas to the Mexican States of Tamaulipas and Nuevo Leon.

THRYOMANES BEWICKII EREMOPHILUS Oberholser.

Thryomanes bewickii eremophilus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 422, 427.

Type locality.—Big Hatchet Mountains, Grant County, New Mexico.

Geographic distribution.—Breeds in the western United States north to southern Wyoming (Superior), southern Utah, and southern Nevada; west to southwestern Nevada, southeastern California, central Sonora, and western Durango; south to Durango and central Zacatecas; east to central Zacatecas, Coahuila, western Texas, and eastern Colorado. Casual in winter east to central Texas.

Remarks.—The name Thryomanes bewickii bairdi¹ is commonly used for this form, but this name belongs to the race from the State of Oaxaca in southern Mexico, from which the present subspecies varies in its narrower superciliary stripe, somewhat paler and more grayish upper parts, and lighter flanks. The range of Thryomanes bewickii eremophilus is, moreover, widely separated from that of Thryomanes bewickii bairdi by two other darker races, Thryomanes bewickii percnus and Thryomanes bewickii murinus. The proper name for the race inhabiting southwestern United States is, therefore, not Thryomanes bewickii bairdi, but Thryomanes bewickii eremophilus.

THRYOMANES BEWICKII MURINUS (Hartlaub).

Thryothorus murinus Hartlaub, Rev. et Mag. de Zool, ser. 2, IV, 1852, p. 4.

Type locality.—Rio Frio, Mexico, Mexico.

Geographic distribution.—East central Mexico, resi-

'Thryothorus bairdi Salvin and Godman, Biol. Centr.-Amer., Aves, I, 1880, p. 95.

dent north to San Luis Potosi; west to State of Mexico; south to Morelos; and east to Tlaxcala and Hidalgo.

THRYOMANES BEWICKII BAIRDI (Salvin and Godman).

Thryothorus bairdi Salvin and Godman, Biol. Centr.-Amer., Aves, I, 1880, p. 95.

Type locality.—Oaxaca, Oaxaca, Mexico.

Geographic distribution.—Resident in southeastern Mexico, from the State of Oaxaca and southwestern Vera Cruz to southern Puebla.

THRYOMANES BEWICKII PERCNUS Oberholser.

Thryomanes bewickii percnus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 422, 429.

Type locality.—Etzatlan, Jalisco.

Geographic distribution.—Mexican State of Jalisco.

THRYOMANES BEWICKII CERROENSIS (Anthony).

Thryothorus cerroensis Anthony, Auk, XIV, No. 2, April, 1897, p. 166.

Type locality.—Cerros Island, Lower California.

Geographic distribution.—Cerros Island, Lower California, and the adjacent mainland in the north central portion of the peninsula of Lower California, north to about 30 degrees north latitude.

Remarks.—This race has commonly been united with Thryomanes bewickii charienturus, although Messrs. Thayer and Bangs have shown 1 that it is a readily recognizable form. It differs from Thryomanes bewickii charienturus in its smaller size, particularly of the bill, and in its less heavily barred lower tail-coverts. It was originally described from Cerros Island, Lower California, but occurs also on the mainland.

THRYOMANES BEWICKII CHARIENTURUS Oberholser.

Thryomanes bewickii charienturus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 423, 435.

¹ Condor, IX, 1907, p. 79.

 $\begin{tabular}{ll} Type & locality. {\bf -Nachoguero} & Valley, & northern & {\bf Lower} \\ {\bf California}. \end{tabular}$

Geographic distribution. — Southwestern California and northern Lower California; north to central Tulare County, San Benito County, and northern Monterey County; west to the Pacific coast; south to northern Lower California at about 30 degrees north latitude; and east to the San Jacinto Mountains and eastern Kern County.

Remarks.—Birds from northern Lower California represent the extreme of the grayish differentiation of this race. Those from Los Angeles County are somewhat more rufescent and incline thus toward Thryomanes bewickii drumoecus. This is still more the case with birds from San Luis Obispo County, which we have previously referred to the latter form, but which now, with much additional material, Mr. Swarth has placed with the present subspecies. The breeding birds from the vicinity of Monterev. Pacific Grove, and Seaside on the southern side of Monterey Bay in northern Monterey County, which on a previous occasion we referred to Thryomanes bewickii spilurus, are decidedly more grayish than that race, and are indeed very much like Thryomanes bewickii charienturus from Lower California, although somewhat darker and with a slightly shorter tail. Mr. Swarth records and maps specimens from Monterev and Pacific Grove, California, as Thryomanes bewickii spilurus, but the specimens which passed through his hands bear the identification Thruomanes bewickii charienturus, in which identification This is further substantiated by a considerable additional series from both Pacific Grove and Seaside. It is interesting to note that with this addition, the northwestern limit of the range of Thryomanes bewickii charienturus along the coast becomes substantially the same as that of Toxostoma rediviva rediviva.2

¹ Proc. Calif. Acad. Sci., ser. 4, VI, No. 4, p. 67, pl. 2.

² Auk, XXXV, June, 1918, p. 53.

THRYOMANES BEWICKII CATALINAE Grinnell.

Thryomanes bewicki catalinae Grinnell, Univ. Calif. Publ. Zool., V, No. 8, Feb. 21, 1910, p. 308.

Type locality.—Avalon, Santa Catalina Island, Santa Barbara Islands, California.

Geographic distribution.—Santa Catalina Island, California.

THRYOMANES BEWICKII LEUCOPHRYS (Anthony).

Thryothorus leucophrys Anthony, Auk, XII, No. 1, January, 1895, p. 52.

Type locality.—San Clemente Island, Santa Barbara Islands, California.

Geographic distribution.—San Clemente Island, California.

Remarks.—This form is often treated as a distinct species, but individual variation so clearly shows its intergradation with the mainland races that a trinomial best represents its relationship.

THRYOMANES BEWICKII NESOPHILUS Oberholser.

Thryomanes bewickii nesophilus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 423, 442.

Type locality.—Santa Cruz Island, Santa Barbara Islands, California.

Geographic distribution.—Santa Cruz and Santa Rosa islands in the Santa Barbara group, California.

THRYOMANES BEWICKII DRYMOECUS Oberholser.

Thryomanes bewickii drymoecus Oberholser, Proc. Ü. S. Nat. Mus., XXI, Nov. 19, 1898, pp. 423, 437.

Type locality.—Baird, Shasta County, California.

Geographic distribution.—Central and northeastern California, north to the interior of southern Oregon; west to Trinity County and central Contra Costa County; south to Fresno County; and east to western Inyo County and the Warner Mountains.

THRYOMANES BEWICKII SPILURUS (Vigors).

Troglodytes spilurus Vigors, Zool. Voyage Blossom, 1839, p. 18, pl. IV, fig. 1.

Type locality.—San Francisco, California.1

Geographic distribution.—Coast region of central California, south to the northern side of Monterey Bay; north to the southern and eastern sides of San Francisco Bay; and east to Santa Clara and Contra Costa counties, California. Casual in winter to the Cosumnes River, California.

Remarks.—As previously shown,² the type of this race must have come from the vicinity of either Monterey Bay or San Francisco, probably from the latter. In order definitely to settle this point as far as it is now possible to do, we here definitely designate San Francisco, California, as the type locality of Troglodytes spilurus Vigors.

THRYOMANES BEWICKII MARINENSIS Grinnell.

Thryomanes bewickii marinensis Grinnell, Univ. Calif. Publ. Zool., V, No. 8, Feb. 21, 1910, p. 307.

Type locality.—Nicasio, Marin County, California.

Geographic distribution.—Coast region of California, from the northern side of San Francisco Bay north to about the boundary of the State of Oregon.

THRYOMANES BEWICKII CALOPHONUS Oberholser.

Tryomanes bewickii calophonus Oberholser, Proc. U. S. Nat. Mus., XXI, Nov. 21, 1898, pp. 422, 440.

Type locality.—South Park, King County, Washington.

Geographic distribution.—The coast region of southwestern Oregon, north through western Washington to Puget Sound, and to Vancouver Island, British Columbia; and east to the Cascade Mountains except in southwestern Oregon.

Remarks.—Representatives of this race from Van-

¹ Here for the first time definitely fixed.

² Oberholser, Proc. U. S. Nat. Mus. XXI, Nov. 19, 1898, p. 439.

couver Island, kindly loaned from the collection of the Museum of Vertebrate Zoölogy, by Dr. Joseph Grinnell, average a very little lighter, particularly on the upper parts, than birds from the Puget Sound region, which latter represent the most extreme development of dark color in this subspecies; and to this variation Mr. H. S. Swarth has already called attention. There seems, however, to be no difference between birds from Vancouver Island and those from southwestern Washington and the coast of Oregon, which, therefore, would have to be referred to the same subspecies were any separation made of the birds from Vancouver Island. The differences exhibited by the latter, however, are in our opinion, too slight and too much affected by individual variation to warrant subspecific recognition, and we therefore think Mr. Swarth quite right in refraining from giving the bird from Vancouver Island a name.

THRYOMANES BEWICKII ARIBORIUS, subsp. nov.

Chars. subsp.—Similar to Thryomanes bewickii calophonus, but upper parts decidedly lighter and of a more rufescent brown, and the flanks also more rufescent.

Description.—Type, adult female, No. 136701, U. S. National Museum, Biological Survey Collection; Agassiz, British Columbia, December 5, 1895; C. P. Streator. Upper parts between Prout's brown and cinnamon brown, but the rump with concealed roundish silver white spots; central tail-feathers dark hair brown, more rufescent and about the color of the back basally, and regularly though narrowly barred with brownish black; remainder of the tail fuscous black, the outer webs of the rectrices with narrow bars of brownish black and wide bars of rufescent hair brown, these bars confined on the outer feathers to the basal portion but continuing throughout on the inner feathers; and the two pairs of feathers next to the middle pair with broad tips of light hair brown, the remaining

¹ Proc. Calif. Acad. Sci., ser. 4, VI, No. 4, May 8, 1916, p. 60.

pairs with terminal portions of lighter gray, between light hair brown and smoke gray, all of these tips barred narrowly and obscurely with hair brown, and the terminal portion of the outer web of the two external pairs of rectrices with two dull white spots; wings light fuscous, but the tertials and outer webs of secondaries and of all but the outer primaries with broad bars of the color of the back; all the lesser and median coverts, and the exposed portions of the greater coverts, like the back though rather duller; superciliary stripe white; lores grayish white mixed with dark brown; cheeks and auriculars grayish white with narrow streaks and flecks of clove brown; broad postocular stripe dark olive brown; sides of neck like the back, but inferiorly somewhat mixed with gray; chin and throat white; breast, jugulum, and middle of abdomen brownish white; sides of breast and of body between light grayish olive and drab; flanks buffy brown; crissum white, rather irregularly barred with brownish black, and basally tinged with wood brown; lining of wing grayish white with flecks of hair brown on the outer portion.

Measurements.—Male: wing, 52-54.5 (average, 53.4) mm.; tail, 50-55 (52.6); exposed culmen, 15-16.5 (15.5); tarsus, 19-22 (19.8); middle toe without claw, 16-19 (17.3).

Female: wing, 50.5 - 52.5 (average, 51.3) mm.; tail 49.5 - 52.5 (50.5); exposed culmen, 14-15 (14.4); tarsus, 19; middle toe without claw, 16-17.5 (16.6).

Type locality.—Agassiz, British Columbia.

Geographic distribution. — Southwestern corner of British Columbia, south to adjacent corner of northwestern Washington.

Remarks.—When Thryomanes bewickii calophonus was first described, these specimens from extreme north-western Washington and southwestern British Columbia were included in that race as their color discrepancies were at that time supposed to be individual. More material

¹ Eight specimens, from British Columbia and Washington.

² Four specimens, from British Columbia and Washington.

and later study have shown the geographic significance of these differences. Although Thryomanes bewickii ariborius has a comparatively limited distribution, it is a wellmarked form and certainly deserves subspecific separation. Birds from southwestern British Columbia show the most extreme manifestation of characters, but birds from Mt. Vernon, northwestern Washington, are undoubtedly referable to the same subspecies although they verge somewhat toward Thryomanes bewickii calophonus. The difference between Thryomanes bewickii ariborius and Thryomanes bewickii calophonus is fairly comparable to that existing between Thryomanes bewickii marinensis and Thryomanes bewickii spilurus, the characters in each case being wholly those of coloration; and the former two races are but large editions of the latter two. As already noted under Thryomanes bewickii calophonus, birds from Vancouver Island are to be referred to true Thryomanes bewickii calophonus, rather than to the present race.

There is apparently no difference in size between Thryomanes bewickii ariborius and Thryomanes bewickii calophonus, as the following detailed measurements of the former will show:

MEASUREMENTS OF SPECIMENS OF Thryomanes bewickii ariborius.								
U.S. Nat.Mu. No.	Sex	Locality	Date	Wing		Ex- posed culmen	Tarsus	M. toe witho't claw
136700	ð	Agassiz, B. C.	Dec. 5, 1895	53.5	53.5	16	19	17.5
136699	ď	Agassiz, B. C.	Nov. 30, 1895	54.5	53	15	19.5	17
113651	8	New Westminster, B.C.		54	55	16.5	22	19
113652	8	New Westminster, B.C.	Mar. 27, 1888	52.5	51	16	20	1
45952	ð	British Columbia	Oct. 23, 1865		51	15	19.5	
136697	8	Mt. Vernon, Wash.	Dec. 12, 1895	53.5	53	15	19.5	16
136696	3	Mt. Vernon, Wash.	Dec. 12, 1895		50	15		17.5
136698	ð	Mt. Vernon, Wash.	Dec. 12, 1895	54	54.5		19.5	17
136701	9	Agassiz, B. C.	Dec. 5, 1895	51.5	50	14	19	17.5
136695	Ϋ́	Mt. Vernon, Wash.	Dec. 12, 1895			15	19	16
136694	ð	Mt. Vernon, Wash.	Dec. 12, 1895			14.5		16
156389	ያ	Mt. Vernon, Wash.	June 25, 1897	50.5	49.5	14	19	17

THRYOMANES BREVICAUDUS Ridgway.

Thryomanes brevicauda Ridgway, Bull. U. S. Geol. & Georg. Surv. Terr., II, No. 2, 1876, p. 186.

Type locality.—Guadalupe Island, Lower California.

 $\label{lem:Geographic distribution.} \textbf{--} \textbf{Guadalupe Island, Lower California.}$

THRYOMANES INSULARIS (Lawrence).

Troglodytes insularis Lawrence, Ann. Lyc. Nat. Hist. N. Y., X, 1871, p. 3. (ex Baird, MS.).

Type locality.—Socorro Island, Revillagigedo Islands, Colima, Mexico.

Geographic distribution.—Socorro Island, Revillagigedo Islands, Colima, Mexico.