

The abrupt occurrence in the depth of winter of a species that subsequently appears in greater numbers in the height of northward migration is imputed to migratory movement of an isolated community, the birds coming from the north if cold and from the south if warm.

(To be concluded.)

DESCRIPTIONS OF FIVE NEW BIRDS FROM MEXICO.

BY E. W. NELSON AND T. S. PALMER.

Megascops pinosus, sp. nov.

Type No. 131517, ♂ juv., U. S. National Museum, Department of Agriculture Collection, from Las Vigas, Vera Cruz, Mexico, June 9, 1893. Collected by E. W. Nelson. (Original No. 1235.)

Measurements: Wing, 132 mm. (5.20 in.); tail 61.5 mm. (2.38 in.); tarsus, 28 mm. (1.18 in.).

Color.—Crown including ear tufts, neck and back, with upper tail coverts, dark clove brown obscurely mottled and faintly barred with dull cinnamon with faint traces of dull grayish. About the neck behind is a narrow collar in which the feathers are distinctly barred with grayish and dull cinnamon. Feathers of chin, cheeks, ear coverts, lores and sides of forehead grayish white irregularly and finely barred and mottled with blackish brown. Entire lower surface except chin barred with grayish white and clove brown, the white bars being shaded or washed in part, particularly along the flanks, with pale cinnamon. In many instances the brown bars are connected by fine shaft-lines of brown which do not affect the general pattern. The barring on the throat and upper breast is finer or narrower than elsewhere. The rest of under surface has the alternate light and dark bars, three of each on each feather, of equal width and strongly contrasted. This produces a strong pattern of coarse light and dark barring which is quite unlike that of any other member of this group known to us. The feathering of feet and tarsus is dull grayish mottled with dark brown. Toes scantily feathered. Quills clove brown with a series of light, semi-circular and subquadrate spots along margin of

outer web. Near the base of outer quills these spots are nearly pure white on some feathers becoming cinnamon toward the tips. On inner quills they are all dull cinnamon. Secondaries and tertiaries clove brown with dull cinnamon bars on outer webs, most of these bars being mottled with the ground color of the feathers. On inner vanes of quills and secondaries the pale spots on outer vanes are matched by indistinct light bars. This mottling mixed with gray extends over most of the surface of innermost tertiaries. Large quill of alula bordered with a fine white edging connecting three pure white spots on outer web. Both webs of second quill of alula and inner web of larger quill with three spots of dull cinnamon. Lesser and middle coverts smoke brown with faint mottling of cinnamon. Greater coverts clove brown bordered along outer vane by mottling and spots of grayish and dull cinnamon. Tail, color of quills, narrowly barred with broken lines and mottling of pale cinnamon.

Unfortunately the only specimen of this bird in the collection is immature. It is very different in the character of its markings from the young of any other known *Megascops*. The specimen was killed in the pines at the northeast base of the Cofre de Perote near Las Vigas, in Vera Cruz, at an altitude of over 8,000 feet.

Megascops ridgwayi,¹ sp. nov.

Type No. 131518, U. S. National Museum, Department of Agriculture Collection, from Patzcuaro, Michoacan, Mexico, July 23, 1892. Collected by E. W. Nelson. (Original No. 218, sex unknown.)

Measurements (taken from dry skin): Wing, 146 mm. (5.75 in.); tail, 65 mm. (2.55 in.); tarsus, 30.5 mm. (1.20 in.).

Color.—Entire top and sides of head and neck, back and rump, dull cinnamon-rufous. Feathers of crown and back streaked with narrow shaft-lines of blackish with faint indications of transverse mottling or bars. The quills, secondaries and tertiaries are hair-brown with rows of subquadrate spots along the outer webs not quite reaching to the shaft. These spots are a little longer than broad and are about the same color as the back except on the quills and about the bend of the wing where they become paler and are almost white in a few places. The inner webs of the quill feathers are crossed by faintly marked bars of lighter shade, matching the spots on outer web. On the inner webs of secondaries and

¹ We take pleasure in dedicating this species to Mr. Robert Ridgway, Curator of Birds in the U. S. National Museum, to whom we are indebted for many courtesies.

terials these inner web bars are paler, becoming ochraceous-buffy along the inner border of the vane. Scapulars, color of back with a large ovate whitish spot extending obliquely back across outer web of feather near tip and encroaching on the inner web as a point. Lesser and middle coverts very dark cinnamon-rufous with broad heavy shaft streaks of blackish. Lores grayish with hairs black-tipped. Extending back from lores on sides of forehead over each eye is a series of feathers having large median white spots narrowly bordered with darker. Cheeks cinnamon rufous. Ear coverts grayish, edged with cinnamon rufous and tipped with blackish. Feathers of chin whitish; throat feathers with broad blackish shaft-lines along entire length bordered on each side by dull pale cinnamon. Breast dull, dark cinnamon-rufous faintly mottled with darker. Feathers of the adult plumage coming in here are heavily marked with a broad shaft-streak occupying one-third of the feathers. Remainder of lower surface very pale cinnamon with faint hoary gray and dark mottling. Feathering of legs and feet dull pale buffy. Tail feathers hair-brown broadly washed along outer web and about tips with cinnamon-rufous. A mottling of the same color crosses the feathers forming irregular broken bars.

This species is smaller than *Megascops asio floridanus* and agrees very closely in size with *M. cassini* from the vicinity of Jalapa and Mirador in Vera Cruz, eastern Mexico, but is readily distinguishable from it by the scantily feathered toes. The type is a full grown young in the red phase. It was killed in the pines at an altitude of 8500 feet. Two adults of this species, in the gray phase, were seen at Patzcuaro, where they were kept as pets in a store, but the owner refused to part with them.

Glaucidium fisheri,¹ sp. nov.

Type No. 131519 ♀, U. S. National Museum, Department of Agriculture Collection. From Tochimilco, Puebla, Mexico. Collected by E. W. Nelson August 7, 1893. (Original No. 1454.)

Measurements: Length of wing, 87.6 mm. (3.45 in.); tail, 59.6 mm. (2.35 in.); tarsus, 19.3 mm. (.76 in.); chord of culmen, 8.9 mm. (.35 in.).

Color.—Back bistre brown with a warm tinge of vandyke. Top of head and occiput hair-brown with a faint tinge of bistre. The forehead and fore part of crown including most of the interorbital area is marked with shaft streaks of white. Along the sides of the crown extending

¹ Named in honor of Dr. A. K. Fisher, in recognition of his valuable work on the Hawks and Owls of the United States.

back to the nape are numerous concealed white spots. The feathers of median part of crown and occiput are plain to the base or with extremely fine concealed shaft-lines of white. There is a narrow nuchal collar of feathers having concealed white spots with brown and blackish edgings. Scapulars bistre-brown like the back but with a few small concealed spots of dull cinnamon. Primary coverts sepia-brown with cinnamon spots and edgings at tips. Quills dark clove-brown with a few marginal spots of dull cinnamon and crossed by faint narrow bars of lighter ending in subquadrate whitish spots on their inner webs. Tail uniform in color with the wings and marked by a series of seven white spots along each border of the middle tail feathers; all of these spots are shaded about their border by a tinge of dull cinnamon. On the two or three outer pairs of tail feathers these spots become very small, giving the appearance of broken bands or bars across the tail. Upper tail coverts like back with mottling of dull cinnamon. Feathers of lores white at base but black on the hair-like distal two thirds. A very narrow whitish border on eyelids. The feathers on sides of the face, including ear-coverts are hair-brown below the eyes, and mottled with blackish-brown, dull cinnamon and whitish over the ears. A very narrow series of white feathers on the chin are continuous with the well marked white malar stripe which reaches back on each side to beneath the ear. The hair-brown color of the crown extends forward to the sides of the throat below this white bar. On each side of the breast is an area of brown slightly paler than the back and continuous with a narrow collar of the same color which margins the brown area of the back in front. Across the chin and back along sides of the throat there is a narrow line of feathers hair-brown at base and pale cinnamon at tip forming a thin band uniting the brown areas on the sides of the breast. Throat and middle line of breast white. Rest of lower parts white heavily streaked with brown; these streaks being similar in shade to the back, along the fore part of the flanks, but elsewhere, much darker sepia-brown. Feathers on front of thighs are dull cinnamon; elsewhere on legs they are white except for a fine mottling of dingy hair-brown on front of tarsus. Under wing-coverts yellowish white. Border of shoulder on under side pale cinnamon sparsely streaked with dark brown. Bill greenish-yellow at tip, horn color at base. Claws black at tip, horn color at base.

General characters.—Size small; somewhat similar to *Glaucidium cobanense* but differing from it in the bistre-brown instead of rufous plumage; color of the head distinct from that of the back; forehead marked with shaft-streaks of dull white extending back to nuchal collar as concealed spots instead of the obscure bars of brighter rufous of *G. cobanense*. The latter species is described as being almost uniform rufous while in *G. fisheri* the back is bistre-brown tinged with vandyke in marked contrast with the hair-brown of the top of the head.

Glaucidium cobanense was described by Sharpe¹ from an examination of six specimens from Vera Paz, Guatemala, no one of which seems to have been designated as the type. The measurements of the type of *G. fisheri* and four of the specimens of *G. cobanense* are given below:—

	Wing.	Tail.	Tarsus.
<i>Glaucidium fisheri</i>			
♀ Tochimilco, Puebla, Mexico	3.45	2.35	.76
<i>Glaucidium cobanense</i>			
Ad., Laguna, Vera Paz, Guatemala	3.90	2.70	.85
Ad., El Paraiso, Vera Paz, Guatemala	4.10	2.70	.80
“ “ “ “ “ “	3.90	2.75	.80
Juv., Volcan de Fuego, Vera Paz, Guatemala	3.55	2.75	.75

On page 199 of the ‘Catalogue of the Striges in the British Museum,’ are given the following additional measurements for this species: Wing, 3.45; tail, 2.55; tarsus, .75. These are evidently taken from a specimen from Coban, Vera Paz, obtained from M. A. Bouvier—one of those referred to in the original description. From these measurements it will be seen that the specimen of *G. fisheri*, although a female, is only as large as the smallest specimen of *G. cobanense* and appreciably smaller than the average measurements of five specimens of the latter species.

The type and only known specimen of this handsome little Owl was shot from a ledge of rocks where it had taken refuge from a passing shower. It was found among the oaks and pines on the southeast slope of Mount Popocatepetl at an altitude of about 6500 feet, near the town of Tochimilco in the state of Puebla.

Aimophila rufescens pallida, subsp. nov.

Type No. 131516 ♀, U. S. National Museum, Department of Agriculture Collection, from Etzatlan, Jalisco, Mexico, June 16, 1892. Collected by E. W. Nelson. (Original No. 180.)

Measurements (of dried skin): Wing, 75 mm. (2.95 in.); tail, 71 mm. (2.80 in.); tarsus, 25 mm. (1.00 in.); culmen, 17.5 mm. (.69 in.).

¹ Ibis, 3d ser., V, 1875, pp. 47-49, 260.

This new subspecies may be recognized by its generally paler colors in comparison with typical *rufescens* from near the type locality, Temiscaltepec in the state of Mexico. Numerous other specimens of this bird from Jalapa to the City of Orizaba, in Vera Cruz, are also typical in coloration. The following detailed comparison shows the most marked characters separating the two forms. It may be noted here that the plate of *Hæmophila rufescens* in the 'Biologia Centrali-Americana' is an excellent representation of the typical *rufescens*.

A. rufescens.

Crown dark rufous or chestnut with a distinct but irregular ashy median stripe, and with a blackish border on each side.

Lores dark gray.

Superciliary stripe white, washed with fulvous from nostril back to eye; over and back of eye along side of crown clear dark ashy.

Post-ocular streak blackish with very dark rufous edgings to feathers.

Back dark chestnut with distinct although small, black shaft-streaks near ends of feathers.

Chin, throat and malar stripe white, washed with fulvous.

Sides of neck and body olive gray washed with fulvous, becoming warm bistre brown on the flanks.

Under mandible pale yellowish horn color.

A. rufescens pallida.

Crown pale rusty rufous, the median ashy streak obsolete and the dark border on each side of crown merely indicated by a darkening of the rufous of the center.

Lores ashy.

Superciliary stripe white from nostril to eye, thence back along crown dingy ashy.

Post-ocular streak much lighter and more rufous than in typical birds.

Back paler with the dark shaft-streaks nearly obsolete.

Chin, throat and malar stripe white.

Sides of neck and body pale olive gray, much ashier than in typical birds, becoming somewhat warmer and browner on the flanks.

Under mandible dark bluish horn color.

Typical *A. rufescens* is a bird of the damper parts of eastern and southern Mexico; the present form comes from Etzatlán,

Jalisco, on the more arid southwestern border of the tableland region.

Sitta carolinensis mexicana, subsp. nov.

Type No. 131515 ♂, U. S. National Museum, Department of Agriculture Collection, from Mt. Orizaba, Puebla, Mexico, April 26, 1893. Collected by E. W. Nelson. (Original No. 1104.)

Measurements (taken from dry skin): Wing, 89 mm. (3.50 in.); tarsus, 19 mm. (.75 in.); culmen, 19.3 mm. (.76 in.); bill from nostril, 13 mm. (.52 in.).

Color.—Above similar to *Sitta carolinensis aculeata* including the dark markings on the tertials. Under surface decidedly ashy. Flanks dull bluish gray nearly concolor with the middle of the back.

The White-bellied Nuthatches from the mountains of south-central Mexico present certain characteristics by which they may be distinguished from either of the two recognized forms of the United States. The Mexican bird has a beak averaging rather smaller than that of *Sitta carolinensis* from the eastern United States. With this character it combines the color of the dorsal surface and dark markings on tertials of *S. aculeata*, and differs from both northern forms in having only the chin and throat pure white—the rest of the lower parts in the present form being washed with a distinct ashy shade, heaviest on the flanks and posteriorly.

This new race is a common breeding resident on Mt. Orizaba in Puebla and also in the high mountains about the Valley of Mexico, and is found thence westerly along the Sierra Madre at least to the Volcano of Colima. It was also seen in the mountains of Hidalgo. Beyond this the work has not extended far enough to determine the limits between it and the other forms.