

DESCRIPTIONS OF FIVE NEW BIRDS FROM MEXICO.

BY E. W. NELSON.

THE birds described below form a part of the Biological Survey collection.¹

I wish to express my obligations for courtesies extended to me by Mr. Wm. Brewster of Cambridge, Mass., and by Mr. Robert Ridgway and Dr. Chas. W. Richmond of the U. S. National Museum, during the preparation of this paper.

***Glaucidium palmarum*, new species. TEPIC PIGMY OWL.**

Type No. 155,955, ♀ ad., U. S. National Museum, Biological Survey Collection. From Arroyo de Juan Sanchez, Territory of Tepic, Mexico. Collected April 5, 1897, by E. W. Nelson and E. A. Goldman.

Distribution. — Known only from type locality.

Description of type. — Top of head and nape brownish isabella thickly marked with transversely oval whitish spots — largest and clearest white on nape; middle of back plain bistre brown; upper surface of wings and tail and upper tail-coverts nearly Prout's brown of Ridgway; tertials and wing-coverts spotted with white or rusty white; outer edges of primaries and secondaries spotted with same; tail feathers marked with five transverse series of large rounded white spots; ear-coverts buffy whitish barred with brown; chin, malar area and under tail-coverts white; sides of breast and feathers of tarsus rusty brownish; rest of underparts white heavily streaked with rusty brownish.

Dimensions of type. — Wing, 87; tail, 56; culmen, 9; tarsus, 21.

Notes. — This bird is smaller and more rusty brown with a more heavily spotted crown than *G. gnoma* or its northern subspecies. Through the courtesy of Mr. Wm. Brewster I have compared the type of the present species with his series of *G. gnoma* from Chihuahua and *G. gnoma hoskinsii* of Lower California. It agrees closely in size with *Glaucidium fisheri* but differs widely in color, also in tail and crown markings. The type of *G. palmarum* was shot in the midst of a palm forest on a low ridge near the sea coast south of San Blas, Tepic.

¹ All measurements are in millimeters.

Colinus minor, new species. LEAST BOB-WHITE.

Type No. 166,362, ♂ ad., U. S. National Museum, Biological Survey. Collection, from Palenque, Chiapas, Mexico, collected June 1, 1900, by E. W. Nelson and E. A. Goldman.

Distribution.—Grassy plains of Chiapas near Palenque, the adjacent parts of Tabasco, and probably thence into adjoining border of Guatemala.

Description of type.—Broad superciliary stripe from base of bill to sides of nape, chin and throat white; rest of head and broad collar around lower border of white throat patch, black; top of shoulders, sides of breast and underparts of body chestnut rufous, with broad maculated edgings of black and gray on shoulders and narrower edgings of black on underparts, changing to black and white spots on under tail-coverts; feathers of back and rump with blackish centres and maculated borders of dark gray and brown; scapulars and upper tail-coverts blotched with black and finely maculated with black, brown and gray; upper side of tail slaty gray finely marked near tips with whitish.

Dimensions of type.—Wing, 93; tail, 53; culmen, 13; tarsus, 28.

Notes.—This species is most like *Colinus godmani* but is decidedly smaller and differs considerably in the distribution of the black and rufous; however, material from intermediate parts of their ranges may prove these differences to be of only subspecific value. The females are paler and more distinctly barred on underparts than in *C. godmani*.

Empidonax trepidus, new species. CHANCOL FLYCATCHER.

Type No. 154,593, ♂ ad., U. S. National Museum, Biological Survey Collection. From Hacienda Chancol, Guatemala, collected January 5, 1896, by E. W. Nelson and E. A. Goldman.

Distribution.—Highlands of Chiapas and Guatemala.

Description of type.—Top of head and nape olive with a dark grayish shade; back paler more greenish olive; ring around eye yellowish white; sides of head and neck, pectoral band and sides of breast olive gray with wash of yellowish; chin and throat grayish white with pale yellowish suffusion; abdomen and under tail-coverts dull yellow; wings brownish gray; wing-coverts broadly tipped with pale brownish gray, sometimes shaded with yellowish, forming two well-marked wing bands; outer web of outer tail feather much paler than inner web.

Dimensions of type.—Wing, 73; tail, 66; culmen, 11; tarsus, 17.

Notes.—This species is closely related to *Empidonax affinis*

Swains. and *E. pulverius* Brewst. From the former it may be distinguished by its duller, grayer color, especially on underparts. From *E. pulverius* it differs mainly in its much smaller size and rather darker, grayer color. We secured seven specimens of this bird on the highlands of Chiapas, Mexico, and Guatemala, where it is probably resident. The distribution of the three fly-catchers named above is as follows:

Empidonax pulverius Brewster.—Pine forests of the Sierra Madre of western Mexico from Chihuahua to Jalisco, Zacatecas, and across to Tamaulipas.

Empidonax affinis Swain.—Pine-forested slopes of mountains on southern border of the Mexican tableland from the Valley of Mexico to Mt. Orizaba and the Sierra Madre of Guerrero.

Empidonax trepidus.—Pine-forested slopes of the highlands in Chiapas and Guatemala.

Phœnicothraupis littoralis, new species. TABASCO ANT
TANAGER.

Type No. 166,208, ♂ ad., U. S. National Museum, Biological Survey Collection. From Frontera, Tabasco, Mexico, collected March 4, 1900, by E. W. Nelson and E. A. Goldman.

Distribution.—From heavy coastal forests of Tabasco north to southern Tamaulipas.

Subspecific characters.—The adult male differs from *P. salvini* mainly in its much more vivid poppy red underparts, especially on throat and breast; upperparts clearer, more vinaceous red; crest deeper richer scarlet. The females differ still more, having a strong reddish suffusion on underparts with distinct traces of red crest on crown. Size about as in *P. salvini* but bill larger.

Dimensions of type.—Wing, 105; tail, 92; culmen, 19; tarus, 28.

Notes.—True *P. salvini* appears to be a bird of the forested foothills being replaced in the lower coast lowlands by the species described above. At first I proposed to treat this bird as a subspecies of *P. salvini*, but in view of the absence of any specimens showing intergradation between the widely different females of the two it is probably safest to consider them as full species until the contrary is proved.

Heleodytes zonatus restrictus, new subspecies. TABASCO
WREN.

No. 166,601, ♂ ad., U. S. National Museum, Biological Survey Collection. From Frontera, Tabasco, Mexico, collected April 26, 1900, by E. W. Nelson and E. A. Goldman.

Distribution.—Wooded coast plains of Tabasco.

Subspecific characters.—Differs from typical *H. zonatus* (from mountain slopes of Vera Cruz) mainly in much heavier and transversely broader black spotting on under side of neck and breast; rest of lower parts much more dingy buff, heavily barred and spotted on sides and flanks with black; back more like that of *zonatus* but with little or no traces of rusty buff suffusion.

Dimensions of type.—Wing, 92; tail, 95; culmen, 24; tarsus, 29.

Notes.—The very heavy black spotting and barring on the underparts with the dull dingy shade of buff on the crissum renders this form very readily distinguishable from typical *H. zonatus*. Its range appears to be restricted to the wooded coast lowlands while we found *H. zonatus* only on the wooded slopes of the cordillera in Vera Cruz and Tabasco. We obtained ten specimens of this new form at Frontera.

THE SEQUENCE OF MOULTS AND PLUMAGES OF
THE LARIDÆ (GULLS AND TERNS).

BY JONATHAN DWIGHT, JR., M. D.

THE importance of the moulting of birds from the standpoint of the systematist becomes apparent if we stop to consider that each moult marks a point of transition from one plumage to another and is therefore a key to their relationship. It is, however, not far from the truth to say that the natural sequence of plumages and moults is but imperfectly understood in many species, while the times of year at which moults occur and the areas of feathers involved in partial moults, especially of young birds, are matters still offering a wide field for investigation.