

TWO NEW RACES OF THE LOGGERHEAD SHRIKE FROM WESTERN NORTH AMERICA

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The examination of an assembled loan collection of approximately 1500 specimens of the Loggerhead Shrike (*Lanius ludovicianus*) from territory west of the Mississippi River has revealed the existence of two races formerly classified under the wide-ranging subspecies, *excubitorides*.

Lanius ludovicianus sonoriensis, new subspecies Sonora Loggerhead Shrike

Type.—Male adult, no. 54484, Mus. Vert. Zool.; Whitetail Cañon, elevation 5000 feet, Chiracahua Mountains, Cochise County, Arizona; April 15, 1915; collected by A. J. van Rossem; orig. no. 4204, coll. J. E. Law; presented to Mus. Vert. Zool. by J. Eugene Law.

Diagnosis.—Largest of the subspecies of *Lanius ludovicianus*, particularly as regards the length of tail. Tail length averaging 106.7 mm. (measured from the oil gland), in adult (second-year or older) males, and 105.3 mm. in adult females. White on primaries extensive. White on outer rectrices less extensive than in *excubitorides*. Upper parts, except for white of rump, between neutral gray and light neutral gray (see Ridgway, Color Standards and Color Nomenclature, 1912, pl. LIII). Under parts immaculate white in second-year birds. Tarsus and bill long.

Measurements of the type.—Wing, 103.3 mm.; tail, 110.0 mm.; tarsus 27.9 mm.; bill length measured from nostril, 12.1 mm.; extent of white on primaries, 58.0 mm.

Comparisons.—The coloration of *sonoriensis* closely resembles that of *excubitorides*, the name now restricted to birds from the plains east of the Rocky Mountains, except that the head and back are more nearly neutral gray in contrast to the carbon or gull grays of Saskatchewan birds. The size is much larger and the white areas of the rectrices, on the average, less extensive than in *excubitorides*. The light coloration above and below marks the new race as distinct from *grinnelli* and *gambeli*. The tail averages longer than that of *ludovicianus*, *mexicanus*, or *grinnelli*, which subspecies most nearly approach the new race in this respect. The wing of *sonoriensis* is longer than that of *migrans*. The head and back are distinctly lighter than the corresponding parts of *mexicanus*.

Range.—Resident throughout the year from the Colorado Desert of California and the Colorado Delta region of Lower California east through Arizona south of Mohave, Yavapai, Navajo, and Apache counties to southern Grant, Luna, and Dona Ana counties in New Mexico; southeast along the valley of the Rio Grande to Brewster County, Texas; and south through the states of Sonora, Chihuahua, northern Durango and Sinaloa, Mexico, to the vicinity of Mazatlan.

Remarks.—*Sonoriensis* intergrades with *excubitorides* in New Mexico east of the Rio Grande and in Texas in the region of the Pecos River. Intergradation with *grinnelli* takes place north of San Felipe, and probably also in the San Rafael Valley east of Ensenada, Lower California. *Gambeli* is known to intergrade with *sonoriensis* along the eastern margin of the mountains of San Diego County and again at San Geronio Pass, Riverside County, California.

Sonoriensis, in so far as known, is non-migratory. Shrikes of other races such as *gambeli* and the form next to be described may be found in winter within the range of *sonoriensis*.

The fresh fall plumage of the first-year birds of the Sonora race shows little of the brown or buff vermiculation commonly seen in comparable plumages of other races of shrikes occurring west of the continental divide. The juvenal plumage is comparatively light colored and the vermiculations are faint.

Lanius ludovicianus nevadensis, new subspecies
Nevada Loggerhead Shrike

Type.—Female adult, no. 22625, Mus. Vert. Zool.; Lone Pine Creek, elevation 4500 feet, Inyo County, California; April 11, 1912; collected by H. S. Swarth; orig. no. 9406.

Diagnosis.—Head and back near neutral gray (see Ridgway, *op. cit.*, pl. LIII), rump white. Under parts white in second-year birds, faintly shaded or vermiculated with buff and gray in many first-year birds. Size similar to that of *gambeli*, wing averaging 100.2 mm., tail, 102.4 mm., in adult (second-year or older) males; wing, 98.1 mm., tail, 100.3 mm., in adult females. White tipping on outermost rectrices not extensive, averaging 34.1 mm. in adult males and 29.6 mm. in adult females.

Measurements of the type.—Wing, 96.8 mm., tail, 101.0 mm., tarsus, 26.0 mm., bill length measured from nostril, 11.3 mm., tipping on outermost rectrix, 28.0 mm.

Comparisons.—*Nevadensis* resembles *excubitorides* in the color of the under parts but the back is neutral gray instead of gull gray. Furthermore, the white tipping of the rectrices in *nevadensis* is much less extensive than in *excubitorides*. The gray of the back, although of the same hue as that of *sonoriensis*, is of a slightly darker tone. However, the Nevada bird is decidedly smaller than *sonoriensis*. *Nevadensis* differs from *gambeli* in the pure white of the rump and under parts of adult birds, which areas are gray or vermiculated with brown in the latter. Also, the dorsal coloration is darker and browner in *gambeli* than in *nevadensis*.

Breeding range.—From southern Harney and Malheur counties in Oregon south through Nevada, and in adjacent parts of California from Mono County southward, east of the Sierra Nevada (but including the Kern River basin in the southern San Joaquin Valley) to the Tehachapi, San Gabriel, and San Bernardino mountains and the vicinity of Needles in the Mohave Desert. The eastern limits of the race probably extend into parts of Utah and northern Arizona but exact localities can not be designated by reason of the limited collections from the regions concerned.

Remarks.—Intergradation with *gambeli* is known to occur in Kings, Tulare, and northern Los Angeles counties, California, and in Lake, Harney, and Malheur counties, Oregon. Breeding birds from southeastern San Bernardino County, California, are intermediate between *sonoriensis* and *nevadensis*.

Nevadensis performs at least a partial migration in the northern part of its range. Birds of this race have been found wintering in the Coachella and Imperial valleys of California.

Juvenal and fresh fall plumages of immature Nevada birds resemble closely the comparable plumages of *gambeli* although the former average lighter on both dorsal and ventral surfaces.

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