

L. ludovicianus.

South Carolina	11
Georgia	10
Florida	38
Alabama	3
Mississippi	2
Louisiana	8
Total	72
Total of both forms	176

I am under special obligations to many friends: To Mr. Ridgway for the use of the National Museum series; to Dr. T. S. Roberts, of Minneapolis, who sent me the entire Minnesota State collection; to Dr. A. K. Fisher for the use of many specimens; to Mr. Gustave Kohn, of New Orleans; Mr. Ora W. Knight, of Maine; Dr. C. K. Clarke, of Kingston, Ontario; Mr. W. R. Robinson, of Wingina, Virginia, and Mr. James Gaut, of Washington, D. C.

DESCRIPTIONS OF TWO NEW BIRDS FROM THE
SANTA BARBARA ISLANDS, SOUTHERN
CALIFORNIA.

BY EDGAR A. MEARNS.

Carpodacus clementis, new species.

SAN CLEMENTE HOUSE FINCH.

Carpodacus frontalis TOWNSEND, Proc. U. S. Nat. Mus., XIII, No. 799, 1890, pp. 139 (Santa Barbara Island, California), 140 (San Clemente and Santa Rosa Islands, California).

Carpodacus mexicanus frontalis GRINNELL, Rep. on the Birds of Santa Barbara, San Nicolas and San Clemente Islands, Publication No. I of the Pasadena Academy of Sciences, August, 1897, pp. 6 (Santa Barbara Island, California), 10 (San Nicolas Island) 16 and 17 (San Clemente Island.)

Type from San Clemente Island, California, adult male, No. 134,784, U. S. National Museum. Collected by the author, August 25, 1894.

(Original number, 11,345.) In somewhat worn and faded breeding plumage.

Diagnosis.—Similar to *Carpodacus mexicanus frontalis* (Say), but with larger legs and feet and heavier coloration. The striping of the under surface is much broader than in typical specimens of *frontalis* from the eastern base of the Rocky Mountains. The wings are shorter, the tail perhaps a trifle longer, and the bill much larger and more convex above. It is, in fact, intermediate between the form of *frontalis* inhabiting the neighboring mainland of California and *Carpodacus mcgregori* Anthony,¹ from San Benito Island, about twenty miles west of Cerros (or Cedros) Island, Lower California, which latter (*C. mcgregori*) is but another step towards *Carpodacus amplus* Ridgway of Guadalupe Island.

C. clementis requires no comparison with typical *C. mexicanus* or with the subspecies *ruberrimus* from the peninsula of Lower California. The form *rhodocolpus*, of the tableland of southwestern Mexico, is quite similar in coloration, but much larger, with a much smaller and differently shaped bill.

Measurements.—Length, 162 mm.; alar expanse, 250; wing, 80; tail, 65; chord of culmen, 13; height of bill, 9; width of maxilla, 8.8; width of mandible, 9; tarsus, 19; middle toe and claw, 20.5.

Remarks.—This House Finch was obtained by Mr. Charles H. Townsend, in 1888 and 1889, on San Clemente and Santa Barbara Islands. In August, 1894, Mr. Anthony and myself obtained a good series of them on San Clemente; and, in 1897, Mr. Joseph Grinnell collected specimens on Santa Barbara, San Nicolas, and San Clemente. There are other specimens in the Smithsonian collection, gathered by Drs. Palmer, Henshaw, Cooper, and others from Santa Catalina, Santa Rosa, San Miguel, and Santa Cruz Islands of the Santa Barbara group.

Mr. Grinnell has published (l. c. pp. 16, 17, etc.) the following important notices of this bird: "The most abundant bird of San Clemente Island. Common everywhere, but most numerous in the deep gorges, whose walls are broken by dark caverns and festooned with cactus. In such places, especially in the vicinity of the water 'tanks,' the linnets fairly swarmed, and their full, rollicking songs reverberated incessantly. Their food appeared to be mainly composed of the fleshy cactus fruits, of which there

¹ Auk, XIV, April 1897, p. 165.

was certainly an abundant supply. The nests are built either in cactus, or in niches in the roofs and walls of the caverns. In the latter places the nests vary much in bulk, being fitted to the cavities in which they are built. A large cavity is nearly filled with a mass of fine grasses, weed stems and wool, with only a narrow aperture left at the top. Nests in cactus are built in the center of a clump of spiny stems, from one to three feet above the ground. These can seldom be reached except by breaking down the cactus. They are more compact than those in the rocks, but made of the same materials. Two to five eggs form a full set. They are similar to those of the mainland bird except in size, being decidedly larger. A fresh set taken March 30, measure, $.84 \times .60$ [inch], $.80 \times .63$, $.82 \times .62$, $.80 \times .63$. A partially incubated set of five taken March 31, measure, $.80 \times .56$, $.80 \times .59$, $.82 \times .57$, $.85 \times .56$, $.86 \times .58$. The nesting season begins early, as nearly-fledged young were noted on March 28. On June 5, incubated eggs were taken. The House Finches on San Clemente Island average larger and brighter colored than those of the mainland. This case well illustrates the tendency of the insular birds to acquire larger proportions of the bill or feet. In this genus, the extremes are reached further south in *C. mcgregori* and *C. amplus*. The following are the average measurements of the bills of a series each of the San Clemente and mainland House Finches:

	Gonys.	Culmen.	Depth of bill at base.	Width of upper mandible.
San Clemente Is.....	.32	.43	.35	.30
Pasadena.....	.29	.40	.33	.28

“Forty-seven specimens of the House Finch were obtained on this island.

On Santa Barbara Island, Mr. Grinnell found it “common on the eastern part of the island among the patches of cholla cactus, the fruit of which the linnets were eating. Juveniles were plentiful. A nest was found on the side of a ravine, May 17; it was

built between the leaves [joints] of a cactus about eighteen inches above the ground, and composed entirely of fine dry grass-blades. It contained four badly-incubated eggs, three of which measure: .76 × .56, .75 × .59, .83 × .59. Fourteen House Finches were taken on this island."

On San Nicolas Island, Mr. Grinnell notes that "only about twenty were seen during our stay on the island, so this bird is by no means common. Fully fledged juveniles were noted, and a nest found May 25. It was in a hole in the sand-stone bluff above the beach, but could not be reached. The female was seen to leave it on several occasions. Four specimens of the House Finch were taken."

Lanius ludovicianus anthonyi, new subspecies.

ISLAND SHRIKE.

Lanius ludovicianus gambeli GRINNELL, Rep. on the Birds of Santa Barbara, San Nicolas, and San Clemente Islands, Publication No. I of the Pasadena Academy of Sciences, August, 1897, pp. 19, 20. (San Clemente Island.)

Type from Santa Cruz Island, California. Adult female, No. —, U. S. National Museum. Collected by Mr. R. H. Beck, May 6, 1897. (Original number, 131.)

Adult.—Upper surface of head and body, dark slate-gray, paler— but usually not whitish— on the scapulars and upper tail-coverts, and darkest on the head, which has the faintest trace of a hoary line behind the black rictus, extending above the eye. Wings and tail black and white, the former gray and white below; white areas on wings and tail much more restricted than in the other forms of the *Lanius ludovicianus* group. The white on the upper surface of the wing is confined to the extreme base of the primaries and the extreme tips of the secondaries. The scapulars are edged externally with light gray— not white. Under surface of wing mostly gray, but white along the bend of the wing and across the base of the quills. Tail-feathers all black at base, tipped with white, with white on terminal two-thirds of outer web of lateral feathers. The terminal white on middle pair of rectrices is confined to a narrow edging which soon disappears with wear. The under surface of body is gray, palest mesially, and becoming white on throat and crissum. Iris brown. Bill plumbeous black. Feet black.

Young in first plumage.— Pattern similar to that of adult, but with head and body everywhere vermiculated with dusky and pale fulvous, except on the chin, which is white. Wings and tail with the light areas

increased in size and tinged with clay color; tips of middle rectrices and greater wing-coverts distinctly ferruginous. Bill brownish instead of plumbeous black. Feet and claws grayish instead of jet black. (No. 135, female, collected by Mr. R. H. Beck, on Santa Cruz Island, California, May 6, 1897. Length, 8 inches; alar expanse, 12.)

An older female (No. 134,781, U. S. National Museum) taken by the author, on San Clemente Island, August 27, 1894, was acquiring the adult plumage at the date of capture. The new feathers indicate a very dark coloration, though the upper tail-coverts are white as in *L. l. gambeli*, and its measurements are up to the average.

Measurements.—Average of 10 adults (4 males and 6 females): length, 224 mm.; alar expanse, 313; wing, 95; tail, 102; chord of culmen, 16.1; height of bill, 8.8; tarsus, 27.8; middle toe and claw, 24.

Comparisons.—Some individuals have no trace of a hoary frontal area. The slate-gray of the upper surface varies somewhat in intensity, being plain slate-gray in some, and dark brownish slate in others. In one or two specimens the white at the base of primaries can scarcely be detected, while in others it forms a distinct patch. In a few individuals the scapulars and upper tail-coverts are bordered with pale gray, almost whitish, and in others these parts are almost uniform with the back. A few (probably youngish) adults have brown vermiculations on the breast.

This Shrike is naturally to be compared with *Lanius ludovicianus gambeli* Ridgway, the form common on the adjacent coast of California, but differs in being very much darker as well as smaller. It is, in fact, darker than the darkest eastern specimens of *L. ludovicianus*.¹ It was next compared with *Lanius robustus* Baird, supposed to have come from California; but, as Mr. Ridgway has stated (Auk, XIV, 323), the type of that species is wholly

¹ Mr. Robert Ridgway, in a letter dated May 6, 1898, writes me as follows: "The type of *L. l. anthonyi* is a much darker and less brownish gray above than that of *L. l. gambeli*; has the under parts more decidedly grayish laterally and lacks the brownish wash so conspicuous in all typical specimens of *gambeli*; also has less white on wing and tail, though the latter character is quite variable. The type of *gambeli*, furthermore, has white upper tail-coverts, as do most examples of that form, as does also the young San Clemente specimen collected by you. The latter agrees otherwise with the Santa Cruz bird.

"One specimen of a series from Pasadena agrees in every respect with the bird from Santa Cruz Island, and therefore it seems the island bird occasionally straggles to the mainland."

different from any of the American Shrikes, and is apparently closely related to *L. algeriensis*.

Remarks.—The Santa Barbara Island Shrike appears to be fairly common on San Clemente and Santa Cruz Islands of this group; but all who have seen it regard it as one of the wildest of birds. On his visits to San Clemente, in 1888 and 1889, Mr. Townsend was unable to obtain a specimen. In 1894, Mr. Anthony and myself procured a single one—with difficulty, although Shrikes were seen daily. At night, when we went out to shoot bats, Shrikes would dash about us, uttering loud, harsh screams, different from the voices of any Shrikes I have heard elsewhere. In the daytime they never permitted us to come within range of them.

Mr. Joseph Grinnell carefully explored Santa Barbara and San Nicolas islands, in the spring of 1897, without finding this species; but, on San Clemente Island, made the following observation:¹ “This bird was without question the shyest and hardest to be secured of any on the island. Indeed it was as shy as any hawk I ever saw. It was tolerably common; that is, two or three could be generally seen during an hour’s walk. There was a pair in the neighborhood of the windmill where we were camping, and nearly every morning a little after daybreak the male would perch either on the windmill or on the topmost twig of a brush pile on the opposite side of the ravine, and utter its defiant shrike notes. The rustle of the tent door or the click of a gun lock, however, was sufficient to send him up over the ridge, not to appear again for hours. On April 2, I found a nest and succeeded, after lying in ambush for a long time, in securing the female bird. The nest was in a small bush growing out from the side of a cañon, and was composed mostly of sheep wool, with an admixture of weed stems and grasses. Five slightly incubated eggs constituted the set. They are not different from eggs of true *L. l. gambeli* of the mainland, and measure: $.97 \times .72$ [inch], $.96 \times .72$, $.95 \times .71$, $.95 \times .73$, $.96 \times .72$. During our last visit, Mr. Horace Gaylord secured another adult female and a juvenile, and I took another juvenile, making four specimens in all obtained.² This Shrike is

¹ Publication I, Pasadena Academy of Sciences, August, 1897, pp. 19, 20.

² Mr. Grinnell kindly placed these specimens at my disposal.

not exactly referable to *L. l. gambeli*, but appears to be nearer that than either of the other U. S. forms."

On Santa Cruz Island, May 6 to 11, 1897, Mr. R. H. Beck collected nine adult Shrikes and one young of the year, which were generously placed in my hands for description. These birds are marked as parents, respectively, of sets of 5, 5, 4, and 2 eggs. In forwarding these Shrikes, Mr. Beck writes: "They were the wildest land birds I ever saw by far."

YOUNG PLUMAGES OF MEXICAN BIRDS.

BY RICHARD C. MCGREGOR.

***Pipilo carmani* Lawrence. SOCORRO TOWHEE.**

This Towhee was the most abundant land bird on Socorro Island and in contrast to its mainland relatives it was not shy. Its general habits and notes are quite similar to those of the Spurred Towhee.

But one young bird was taken and it is nearly adult.

No. 1289, ♀ juv., coll. R. C. McG., Socorro Island, Mexico, May 13, 1897. Plumage much as in the adult. Black throat and chin patch wanting; tawny patches on sides pale, indistinct, and small; feathers of other lower parts dirty white with long, dark, central spots; tertials and feathers of mantle edged with tawny. White spot of tail on outer feather only 9.5 mm. long.

***Ammodramus sanctorum* Coues. SAN BENITO SPARROW.**

The nest and eggs of the San Benito Sparrow have been described in the 'Osprey,' II, 42. It remains only to describe the young plumage. The youngest birds have no markings on the lower parts (*vs.* Brewster, B. N. O. C., IV, 36) but the breast streaks soon appear. The youngest bird which I have is here described.

No. 1058, ♀ juv., coll. R. C. McG., San Benito Island, Lower California, March 30, 1897. Upper parts like adult in general looks, but somewhat lighter and less olivaceous; feathers of head and neck broccoli brown