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### Geographic Variation in the Juvenal Plumage of the Lesser Nighthawk (*Chordeiles acutipennis*)

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In attempting to identify a series of Lesser Nighthawks (*Chordeiles acutipennis*) collected on the Pacific lowlands of Guatemala, and to ascertain the applicable trinomial to use, I encountered a striking degree of variation among juveniles in the collection of the American Museum of Natural History (AMNH). To evaluate the taxonomic usefulness of the juvenal plumage in the species, additional juveniles were borrowed from the University of Michigan Museum of Zoology (UMMZ), the U.S. National Museum of Natural History (USNM), the Carnegie Museum of Natural History (CM), the Field Museum of Natural History (FMNH), and the Moore Laboratory of Zoology (MLZ). A total of 32 juveniles was available for study. Seven plumage groupings arranged north to south can be recognized among these juveniles (Fig. 1).

*C. a. texensis* (including *inferior*).—The juvenal plumage of *texensis* is the palest gray with pale, more cinnamon, less ochraceous tippings on the feathers of the crown, interscapulars, and wing coverts. Dorsal feathers have extremely fine vermiculations, i.e. they are much less “blotchy” than in other races. Two juveniles from Lower California (“*inferior*”) are inseparable from 10 of comparable age from Texas, New Mexico, and Arizona. Color phases are not evident in this series of juveniles. *Specimens examined* (13): Baja California, AMNH 87446, 43850; Arizona, AMNH 51993, USNM 268828, 235064, 130577; New Mexico, USNM 365443, 204515; Texas, AMNH 81618–81620, USNM 14013, 18491.

*C. a. micromeris*.—The dorsal dark markings of the single juvenile specimen seen from the Yucatán Peninsula are coarser than those of the juvenal plumage of *texensis*, contrast more with the paler feather edges than in *littoralis*, and thus differ from both. Dorsally, including the tail, it is grayer, less buffy than *littoralis* but darker than *texensis*. The feather edgings are slightly more buffy, less cinnamon than in *texensis* but less deeply colored than in *littoralis*. *Specimen examined* (1): Yucatán, USNM 130206.

*C. a. littoralis*.—The four specimens available are uniform and differ from *texensis* in being a darker gray with a generally browner overall cast. The darker barring of dorsal feathers is heavier, more “blotchy,” and edgings of dorsal feathers and coverts are darker, more ochraceous. *Specimens examined* (4): Michoacan, La Placita, UMMZ 130530; Guerrero, Ajuchitlan, MLZ 43446; Oaxaca, Tehuantepec, UMMZ 137450; Chiapas, Arriaga, UMMZ 102227.

*C. a. acutipennis*.—The nine juveniles from within the range currently assigned to *C. a. acutipennis*, but also including Panamá, include two distinctively different forms:

A. These young are most similar to the young of *littoralis* but are yet darker, having a near sooty appearance, with more extensive and darker, richer, ochraceous-cinnamon feather edgings and tippings, thus giving the appearance of having a deep ochraceous-cinnamon wash over the dorsum. The black blotching is more pronounced, especially on the crown. The crown, mantle, and lesser coverts contrast rather sharply with the paler terials (Fig. 1). *Specimens examined* (4): Panamá, San Carlos, USNM 448729; Colombia, Turbaco, Choco (north coast near Cartegena), AMNH 123261; Venezuela, San Antonio del Golfo, Sucre, AMNH 706096, San Felix, Bolivar, CM 34356.

B. Five juveniles from Colombia, Guyana, and Brazil are much grayer. The ochraceous tipping of dorsal feathers and coverts is reduced, being restricted to the feather tips; it is most pronounced on the crown. The tail barring is dark and light, clear gray lacking a warm cast. The ventral coloration is paler. These specimens differ from juvenile *littoralis* in being darker gray dorsally with far less brown overcast. *Specimens examined* (5): Colombia, Riohacha (base of Guajira Peninsula), CM 78710, 78711; Guyana (British Guiana), La Penetiance (near Georgetown), FMNH 97795; Brazil, Santarém, CM 78612, 78644.

It is not unexpected for specimens from Choco and Panamá to be similar, but the similarity of those

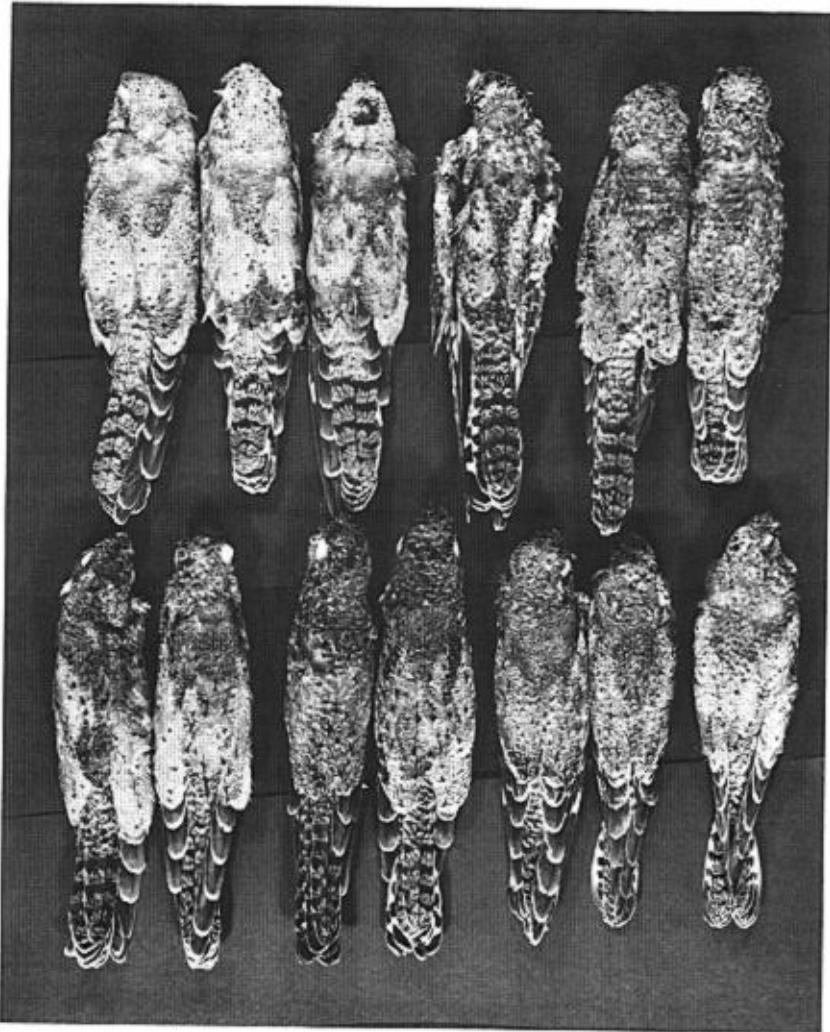


Fig. 1. Seven plumage groups of juvenile *Chordeiles acutipennis*. Top row, left to right: *C. a. texensis*: Arizona, AMNH 51993, USNM 268828, Baja California, AMNH 438; *C. a. micromeris*: Yucatán, USNM 130206; *C. a. littoralis*: Michoacan, UMMZ 130532, Chiapas, UMMZ 102227; Bottom row, left to right: *C. a. acutipennis*, Group A: Panamá, USMN 448729, Venezuela, AMNH 706096; Group B: Colombia, CM 78711, Brazil, CM 78612; *C. a. exilis*: Peru, AMNH 151343, 151344; *C. a. aequatorialis*: Peru, AMNH 151353. See text for collecting localities.

to Venezuelan birds is odd, because Riohacha on the Caribbean coast of Colombia is geographically in between.

*C. a. exilis*.—The three juveniles from the central Pacific lowlands of Peru (one very faded) are essentially pale gray dorsally. The pale buff tipping is reduced or absent on the back, as is the pale buff to cream-colored barring on the crown. The dorsal feathers, as in the juvenal plumage of *aequatorialis*, are finely vermiculated (but less so than in *texensis*) and thus differ from the more "splotchily" plumaged juveniles of the other Central and South American populations. Two juveniles are available from Menocho, at 500–1,000 m elevation, only 25 km inland from Trujillo on the coast, where typical *aequatorialis* occur (one juvenile, see below, and several adult specimens). One of the Menocho juveniles matches the unfaded juvenile *exilis* well. The other is a darker gray, with a slightly more buffy cast, but is closer to

*exilis*. Specimens examined (5): Peru, Pisco, Ica Province, AMNH 17043, Huaral, Lima Province, AMNH 151343, 151344, Menocho, La Libertad Province, FMNH 44659, 44661.

*C. a. aequatorialis*.—The single juvenile of this subspecies is finely vermiculated as in *exilis*, but, whereas that form is gray, this one is buffy, with extensive, rich buff edges and barring on the dorsal feathers, coverts, and tail. Specimen examined (1): Peru, Trujillo, La Libertad Province, AMNH 151353.

The juvenal plumage of the Lesser Nighthawk, as that of the Common Nighthawk (*C. minor*; *vide* A. R. Phillips pers. comm.), appears to be useful taxonomically, possibly more so than the definitive plumage. The juvenal plumage groups described above support the nomenclatural conclusions I had reached for the populations of the United States and northern Central America based on the adults (Dickerman MS). That is, in brief, that *C. a. inferior* of Baja California is inseparable from *C. a. texensis*, that *C. a. micromeris* is a distinctive subspecies restricted to the arid regions of the Yucatán Peninsula, and that the populations of southern México and probably Central America south to Costa Rica should be called *C. a. littoralis*. In South America the presence of two distinctive juvenal plumage groups within the range of the currently recognized nominate subspecies indicates that a revision of those populations may be needed. The incongruous occurrence of juveniles at Riohacha, Colombia that are inseparable from the Guyana specimen, which is assumed to represent true *acutipennis* of Cayenne, in the center of the geographical range of a distinctly different juvenal plumage group, is especially worthy of further analysis.

In view of the small series of juveniles now available, the possibility of color phases should be investigated, particularly in South America. The total of only 19 juveniles examined from the region of México south to Peru and Brazil is obviously inadequate. More collecting is needed.

Received 17 October 1980, accepted 7 January 1981.

#### A Blue Bunting [*Passerina (Cyanocompsa) parellina*] Record for the United States from Louisiana

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On 16 December 1979 the authors (with Linda Hale and David Hunter) saw what they thought was an abnormally rusty female Indigo Bunting (*Passerina cyanea*) in acacia thickets on Hackberry Ridge, 3 km west-southwest of Johnson's Bayou School, Cameron Parish, Louisiana. Cardiff collected the bird the next day (Louisiana State University Museum of Zoology No. 94288; prepared by D. Wiedenfeld; ovary 4 × 3 mm; skull ossified; 16.2 g). After the bird was prepared as a skin, it was recognized by John P. O'Neill as a Blue Bunting [*Passerina (Cyanocompsa) parellina*], a species found from northern México to Nicaragua but heretofore not recorded for the United States. The identification was confirmed by Allan R. Phillips, who also noted that the very fresh and bright plumage, plus the pointed tips of the rectrices, indicated that it was a first-year bird.

Subsequent comparison with series of museum specimens of all three currently recognized subspecies confirmed Phillips' initial impression that the Louisiana bird could be assigned to the northeasternmost subspecies, *P. p. beneplacita*, known from central Tamaulipas to eastern San Luís Potosí, México (Paynter 1970, Subfamily Cardinalinae. Pp. 216–245, in Check-list of birds of the world, vol. 13, Cambridge, Massachusetts, Mus. Comp. Zool.). The bill measurements (from base of culmen, length 9.8 mm, width 6.4 mm, depth 6.9 mm) are below the range of normal variation of *P. p. parellina* (Veracruz, México, to Nicaragua) and *P. p. indigotica* (western México from central Sinaloa southward) and close to the means measured for a sample of 14 female *P. p. beneplacita* (mean length 10.1 mm, width 6.7 mm, depth 7.4 mm). Our specimen also is smaller than and lacks the belly-chest contrast characteristic of the distinct but undescribed Yucatán population (R. W. Dickerman and A. R. Phillips unpubl. data).

Our initial assessment of this record was that the bird was very probably an escaped cage bird. Points in favor of this were: (1) no pattern of extralimital vagrancy was known for the Blue Bunting; (2) both hind toes are slightly swollen in our specimen, possibly a result of time spent in a cage; (3) Blue Buntings are occasionally kept in captivity. Further information, however, invalidated the first two points. First, John Arvin's (in prep., photos) recent observations from Texas indicate that this species does wander extraliminally, at least that it did during the winter of 1979–1980. Second, the toe swelling appears to be