

the midday hours. Widely fluctuating egg temperatures, which undoubtedly resulted from inadequate coverage of the clutch, were probably the reason why none of the eggs hatched.

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FIRST RECORDS OF BLACK-LEGGED SERIEMA (*CHUNGA BURMEISTERI*) IN BOLIVIA

C. GREGORY SCHMITT

AND

DONNA C. COLE

The Black-legged Seriema (*Chunga burmeisteri*) is a monotypic cariamid previously recorded only from southwestern Paraguay (Chaco) and from northern Argentina as far south as Chaco, Santiago del Estero and San Luis (Meyer de Schauensee, The species of birds of South America and their distribution, Livingston Publ. Co., Narbeth, PA, 1966; Meyer de Schauensee, A guide to the birds of South America, Livingston Publ. Co., Wynnewood, PA, 1970; Short, A zoogeographical analysis of the South American Chaco avifauna, *Bull. Am. Mus. Nat. Hist.* 154: Art. 3, 1975; Blake, Manual of Neotropical birds, Vol. 1, Univ. Chicago Press, Chicago, 1977). This note presents data taken from a specimen of *C. burmeisteri* that we collected in Bolivia and lists our sight records of this species in that country.

On 12 May 1979, Dpto. Chuquisaca, ca. 27.3 km (by road) SW Carandayti (20°46'S, 63°10'W), at 610 m Schmitt collected a Black-legged Seriema (Delaware

Museum of Natural History No. 66951; left testis 4 × 5 mm, right testis 4 × 4 mm, cream colored; no fat; wt. 1.224.4 g; bill, tarsi and feet—black; iris—carmine; and total length—768 mm).

We also saw this species as follows: Dpto. Santa Cruz, 10 km (by road) E Gutierrez, Laguna Caucaya (19°26'S, 63°27'W), two on 1 January 1979; Gutierrez (19°25'S, 63°34'W), one on 26 April 1979; Dpto. Chuquisaca, ca. 28 km (by road) N Camatindi (21°46'S, 63°21'W), one on 11 May 1979; ca. 18 km (by road) SW Carandayti (20°45'S, 63°09'W), one on 12 May 1979; ca. 27 km (by road) SW Carandayti (20°46'S, 63°10'W), two on 12 May 1979; ca. 34 km (by road) SW Carandayti (20°48'S, 63°12'W), five on 12 May 1979; Dpto. Tarija, YPFB refinery near Villa Montes (20°16'S, 63°32'W), one on 27 April 1979; 8 km S, 10 km E Villa Montes (21°20'S, 63°29'W), one on 27 April 1979 (at this same locality, we heard this species daily 27 April–10 May 1979); 2 km S, 10 km E Tiguipa, Laguna Palmar (21°01'S, 63°19'W), three on 19 May 1979 (at this locality we heard vocalizations of this seriema daily between 13–24 May 1979).

These records extend the known range of this species about 350 km N into southern Bolivia (Santa Cruz, Chuquisaca, Tarija) to the foothills of the eastern Cordillera and in the western Chaco.

We saw seriemas mostly within or adjacent to areas of forest (tree heights up to 18 m) characterized by a moderate to dense understory of smaller trees, shrubs, forbs, and ground bromeliads. Observations made near Laguna Caucaya, Gutierrez and Camatindi were in

areas of forest edge and generally characterized by a more open vegetative cover.

This species is locally sympatric with the Red-legged Seriema (*Cariama cristata*) in the vicinity of Camatindi and Tiguipa. Our observations of the latter species are as follows: Camatindi (20°59'S, 63°26'W), three on 11 May 1979; 10 km SE Tiguipa (20°54'S, 63°27'W), four on 28 May 1979. The three of 11 May were seen in open areas of dense shrubby vegetation and the four of 28 May were in a rather mesic area characterized by dense understory of shrubs, ground cover of forbs, ground bromeliads and smaller shrubs adjacent to forested areas.

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DESCRIPTION OF THE NEST AND EGGS OF THE PERUVIAN THICK-KNEE (*BURHINUS SUPERCILIARIS*)

MORRIS D. WILLIAMS

The Peruvian Thick-knee (*Burhinus superciliaris*) occurs only in the arid Pacific littoral zone of Peru, north to extreme southwestern Ecuador (Blake 1977). Its nest and eggs seem not to have been described. I made the following observations on the nesting and behavior of this species in the Department of Lambayeque, northwestern Peru, in 1978.

On 31 May, I found a pair of these birds in arid shrubland about 2 km north of Ñaupe. I relocated perhaps the same pair in this area every day for the next week, and during several nights while camped nearby, I heard thick-knees calling. The birds' behavior suggested that they had a nest, but perhaps egg-laying had not yet commenced. One day I chased both birds out of their favored area; I then hid in a shrub and awaited their return. After about 10 min, both birds returned on foot. During the next 20 min, one of them stood under a small bush while the other sat on the ground for short periods in several places near the first bird. I did not devote any further time to watching this pair.

On 5 June, I ascended the Cerros de Ñaupe, the nearest small mountain range to the northeast of Ñaupe and a few kilometers east of the site described above. This is the westernmost extension of the Andean foothills at this latitude. Shortly after I had started up the slope, I noticed a thick-knee quietly walking away from me. Suspecting a nest, I moved up the slope about 150 m and hid. During the next 15 min, the bird stood motionless. I left the area for about an hour. Upon returning, I surveyed the area with binoculars from a point 200 m up the slope. Presently, I spied a thick-knee crouched on the ground in direct sunlight. The air temperature must have been in the range of 38–40°C. Another thick-knee was standing in the shade about 10 m from the sitting bird. As I approached the sitting bird, it lowered its head to the ground with its neck outstretched. When I was about 8 m away, the bird ran from its nest containing two eggs. There was no distraction display. Both birds ran to a point about 30 m from the nest and waited silently while I photo-

graphed the nest. Afterwards I approached the birds and they flew onto the plains 200 m away.

The nest site was on a plateau about 15 m above the plains lying to the west. Isolated clumps of low shrubs and cacti (Fig. 1A) were scattered over the rocky slope. The ground between the shrubs was sparsely covered with grasses whose stems were mostly dead and lying on the ground. A slight depression about 15 cm in diameter around the eggs had been almost completely cleaned of debris (Fig. 1B, C). The eggs had a cream-colored background and were evenly blotched with shades ranging from tan to dark brown. They measured 54.4 × 39.2 mm and 52.5 × 39.5 mm, and weighed 43 and 42 g respectively. The measurements fall within the range, but are smaller than the average, given for the Double-striped Thick-knee (*B. bistriatus*; Schönwetter 1963). This is to be expected since *superciliaris* is decidedly smaller than the continental subspecies of *bistriatus*. The eggs, which proved to be fresh, are now in the collection of the Louisiana State University Museum of Zoology (MDW #1517).

On 29 June, I revisited this nest site. The nest scrape was empty, and I found no thick-knees in the vicinity, but I did find a flock of five birds on the adjacent plains. The only other time I saw a flock of thick-knees was in late September when I saw a group of about 10 birds from a bus window in the desert along the highway between Puerto Eten and the Pan American Highway.

Thick-knees or "Huerequeques" are very popular with the people of northwestern Peru. This is probably due in part to the mystique associated with a rather secretive bird whose nocturnal calls and distinctive footprints are encountered more frequently than the birds themselves. Koepcke and Koepcke (1970) stated that thick-knees are easily tamed and that the inhabitants of Peru's northern coast keep them about their houses to control pests. In northern South America *B. bistriatus* is kept in the patios and corrals of country houses (Wetmore and Borrero 1964). Verrill and Verrill (1909) reported that the Hispaniolan subspecies, *B. b. dominicensis*, bred readily in captivity; they also described an ingenious method used by the natives to capture these birds. I never saw Peruvian Thick-knees kept as pets, but I occasionally saw live birds offered for sale in the market in Chiclayo.

The comments of Koepcke and Koepcke (1970) on the nesting of this species seem to be generalizations drawn from the literature on other burhinids. They might, however, have relied on the accounts of Peruvians who were familiar with thick-knees. The only