

New records of *Leiosaurus jaguaris*
LASPIUR, ACOSTA & ABDALA, 2007,
extend the known distribution
in the Argentine Precordillera

The iguanian lizard genus *Leiosaurus* DUMÉRIL & BIBRON, 1837 is distributed in Argentina, Brazil and Paraguay and currently includes four recognized species that occupy a variety of environments across the phytogeographic regions of Monte, Chaco and Patagonian steppe (CEI, 1993). Three species, *L. belli* DUMÉRIL & BIBRON, 1837, *L. catamarcensis* KOSLOWSKY, 1898 and *L. paronae* (PERACCA, 1897), are widely distributed, covering a continuous range (GALLARDO 1961), whereas *L. jaguaris* LASPIUR, ACOSTA & ABDALA, 2007, has a more restricted distribution. *Leiosaurus jaguaris* was described based upon individuals collected in middle-altitude areas (1,500-2,500

m a.s.l.) in semiarid shrublands of the Precordillera of the Provinces of San Juan and La Rioja. This medium to large-sized lizard (male and female mean snout-vent-length [SVL] about 90 mm) lacks sexual dichromatism and exhibits a particular coloration pattern resembling the jaguar (*Panthera onca*), from which it takes its specific name. The known distribution comprised four localities: the type locality (Gualcamayo, Jáchal Department, San Juan Province, Argentina), another one in an adjacent area in the Province of San Juan, plus two northern records in the Province of La Rioja (LASPIUR et al. 2007). Here, the authors report four new localities for *L. jaguaris*, which extend the known distribution range, and provide an updated map of geographical distribution.

The new records were obtained during field surveys in mountain areas in the Provinces of San Juan and La Rioja between 2006 and 2011. Lizards were collected by hand or noose and coordinates of each locality were recorded using the GPS device Garmin GPSMap 2 Series (WGS84 datum). After capture, the lizards were killed by intraperitoneal injection of 0.5 ml 30 % sodium pentobarbital (Euthanyle®, Argentina) and deposited at the herpetological collection of Universidad Nacional de San Juan (UNSJ). In addition, specimens deposited at the herpetological collections of Museo de Ciencias Naturales, Universidad Nacional de Salta (MCN) and Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN) were examined.

A juvenile individual (SVL: ~60 mm; UNSJ-F 16 [photo voucher]; Fig. 1) was observed at Quebrada Agua de Las Burras, Sierra de la Deheza, Ullum department, Province of San Juan (31°22'22.07"S, 68°49'44.26"W, 1,590 m a.s.l.) at 16:30 h, on 4 January, 2006. The lizard sighted sheltered beneath a shrub (*Bulnesia retama*); it was photographed and, despite the proximity of the photographer, did not behave timid (ROQUE TROZZO pers. obs.). Unfortunately it was not collected. This constitutes the southernmost record for this species in San Juan, extends the distribution of *L. jaguaris* 171 km south (straight line) from the type locality (Fig. 2), and is the first juvenile reported for the species.



Fig. 1: Juvenile of *Leiosaurus jaguaris*
LASPIUR, ACOSTA & ABDALA, 2007
(UNSJ-F 16 [Photo voucher])
from Sierra de la Deheza (Ullum Department,
Province of San Juan, Argentina).

Another individual was recorded on National Route 76, 13 km east of Alto Jagüe, between Las Chacritas and west of Alto Jagüe, General Lamadrid Department, Province of La Rioja (28°40'22.3"S, 68°35'28.4"W, 2,371 m a.s.l.). The specimen is an adult male (SVL: 98 mm; UNSJ 31) that was found on bare dry soils and collected from the crevices of large fragmented rocks near dwarf shrubs (*Prosopis alpataco*). The locality herein reported is 130 km north of the type locality and this site is adjacent to the locations where 12 paratypes were collected (LASPIUR et al. 2007) (Fig. 2).

Two additional specimens in the MCN herpetological collection extend the known range 12.5 km to the north and 1.4 km south of the type locality, respectively (Fig. 2). One is an adult female (SVL = 111 mm; MCN 4067), collected from Estancia Abra Grande, Sierra de El Overito, 5.8 km south of the Provincia de Entre Ríos School, Gualcamayo, Jáchal Department, Province of San Juan (29°50'32.31"S, 68°45'40.50"W, 2,494 m a.s.l.). The other is an adult female (SVL: 103 mm; MCN 4068), collected from Estancia de Abra Grande, Sierra de El Overito, 32.5 km south of Jáchal Depart-

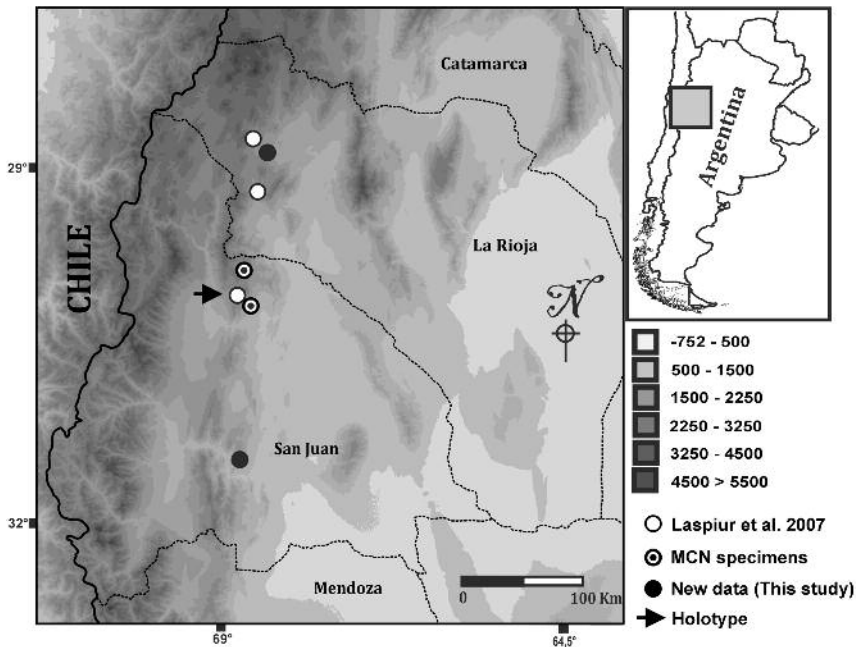


Fig. 2: Distribution of *Leiosaurus jaguaris* LASPIUR, ACOSTA & ABDALA, 2007, with known (data from LASPIUR et al. 2007) and new (this study, MCN) Argentine records.

ment, Province of San Juan (29°43'26.11"S, 68°48'6.04"W, 2,285 m a.s.l.). Both lizards were found near the road in the afternoon between 19:00-21:30 h.

A distribution map of *Leiosaurus* was provided by LASPIUR et al. (2007), and a recent publication on the conservation status of the lizard species from Argentina (ABDALA et al. 2012) mention vaguely the distribution of *L. jaguaris* in the Provinces of La Rioja and San Juan. With the new data reported here, the known distribution range of *L. jaguaris* covers a zone 306 km long from north to south between 29°36'S and 31°22'S, along the Precordillera in the Provinces of La Rioja and San Juan.

Current evidence suggests that the range of *L. jaguaris* could be restricted to the Precordillera mountain system. This extra-Andean orogenic system is located between the Cordillera Frontal and the Sierras Pampeanas, and is limited to the east and west by two extensive longitudinal valleys (FURQUE & CUERDA 1979). Biogeo-

graphically, the Precordillera is composed of three phytogeographic provinces (Puna, Prepuna and Monte), differentiated by altitude (ROIG et al. 2003). Overall, the Precordillera is surrounded by Monte; although on the eastern slope, from 1,500 m to about 2,500 m a.s.l, the Monte elements are mixed with those of Prepuna (MARTÍNEZ CARRETERO 1995). Accordingly, all the observations of *L. jaguaris* stem from the eastern slope of the Precordillera within the Monte-Prepuna elevation range, suggesting that the species prefers these transitional areas.

The southernmost record reported here (La Deheza, Ullum department, San Juan) suggests that the species may occur even farther south, corresponding to the southern limit of the Precordillera, close to the Province of Mendoza. FURQUE & CUERDA (1979) indicated that the northern boundary of the Precordillera is poorly defined which asks for a more detailed study of the specimens collected from "Finca

Ascha”, Province of La Rioja (MACN 10814-16). Of this sample, two juveniles were assigned to *L. catamarcensis*, whereas the allocation of an adult specimen is unclear (S. NENDA, pers. comm.). “Finca Ascha” may refer to a location near the lowlands of the Sierra de Velasco, located to the east of the northern Precordillera, Province of La Rioja, where *L. catamarcensis* was collected (see Appendix 1 in LASPIUR et al. 2007).

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