

New records and natural history notes of lizards of the genus *Liolaemus* in northern Patagonia

In southern South America, the genus *Liolaemus* WIEGMANN, 1834 is the most species-rich group of lizards, and they are an important element of the vertebrate fauna in arid and semiarid lands of western and southern Argentina (CEI 1986, 1993). More than 90 species of *Liolaemus* occur in Argentina, the majority of them restricted to the mountainous, intermountain, and steppe areas of western and southern regions (AVILA et al. 2000; CEI 1986, 1993). Large areas of Patagonia, a dry and cold desert in southern Argentina, are still poorly surveyed, and several new species limited to specific regions or to single mountaintops have been discovered in the last decade (ABDALA 2002; AVILA et al. 2003, 2004; ETHERIDGE & CHRISTIE 2003; VIDELA & CEI 1996; AVILA & MORANDO unpublished data). The available alpha taxonomy is poor, and the geographic distribution of the majority of the species is inadequately known. Several field trips carried out by the authors in the last years to west La Pampa, southern Mendoza, Neuquén, and Rio Negro Provinces resulted in the collection of a number of samples of *Liolaemus* lizards that represent new distributional records for several species (AVILA 1996a, 1996b; AVILA & MORANDO 1998; AVILA et al. 2001, 2002). In this note, we present new localities with information about habitat and accompanying herpetofauna for *Liolaemus cuyanus* CEI & SCOLARO, 1980, *L. gracilis* (BELL, 1843), *L. grosseorum* ETHERIDGE, 2001, *L. kriegi* MÜLLER & HELLMICH, 1939, and *L. wiegmannii* (DUMÉRIL & BIBRON, 1837).

All lizards were collected by hand, euthanased by pericardic injection of Tio-pental Sódico (Abbot®), fixed with formalin 20% and later transferred to 70% ethanol. Latitude, longitude, and elevation were determined with a Garmin™ Global Position Device. All specimens are deposited in the Museo de La Plata herpetological collection (MLP.S., La Plata, Buenos Aires, Argentina) and the private collection of Luciano Javier AVILA and Mariana MORANDO (LJAMM, now deposited in Centro Nacional Pata-

gónico-CONICET, Puerto Madryn, Argentina). The number before locality corresponds to locality numbers in figure 1.

Liolaemus cuyanus CEI, 1979. Mendoza Province: Malargüe Department: (6) Ruta Provincial 180, 61 km E Pata Mora, 59 km W Gobernador Ayala (37°17' S, 68°33' W, 896 m a.s.l.). 16 January 2003. L. AVILA, M. MORANDO, C. PEREZ, J. SITES, K. DITTMAR. MLP.S. 2453. This is the first record for *L. cuyanus* for southern Mendoza Province; all known previous records in Mendoza are more than 200 km north (airline). Closest records for the species are a few disjunct localities in La Pampa Province, at least 120 km east (CRUZ et al. 1999; AVILA et al., 2001). Taxonomic status of southern populations of *L. cuyanus* are in revision and preliminary results of molecular studies show that these populations could be considered a distinct species separated from northern populations (AVILA, MORANDO, and SITES, unpublished data). This specimen was collected in the sandy shore of a dry creek in the slopes of a small rocky hill; vegetation in the entire area is characteristic of the Monte phytogeographic Province and is dominated by tall shrubs of *Larrea divaricata* and *L. cuneifolia*, intermixed with some species of *Acantholippia*, *Atriplex*, *Chusqueira*, *Hyalis*, *Monthea*, *Prosopis*, and *Prosopidastrum*. Other lizards observed in the area were *Liolaemus darwini* (BELL, 1843), *L. gracilis*, *L. grosseorum*, and, in the rocky escarpment of the hill, *L. austromendocinus* CEI, 1974.

Liolaemus gracilis (BELL, 1843). Chubut Province: Telsen Department: (8) Ruta Provincial 4, 3.5 km W Telsen (42°26' S, 66°58' W, 432 m a.s.l.). 2 February 2003. L. AVILA, M. MORANDO, C. PEREZ, K. DITTMAR. LJAMM 5486. Collecting site was in the south edge of a consolidate road. All the area was covered with small to medium-sized basaltic stones and vegetation was typical of the shrubby-grass typical of ecotonal areas between Patagonian steppe and austral Monte with plants as *Prosopis flexuosa* var. *depressa*, *P. denudans*, *Larrea nitida*, *L. divaricata*, *Mulinum spinosum*, *Schinus* sp., and *Grindelia chilensis*. Several specimens of *Liolaemus darwini* were collected in sympatry. This locality is almost 200 km W of the localities in CEI's map (CEI 1986).

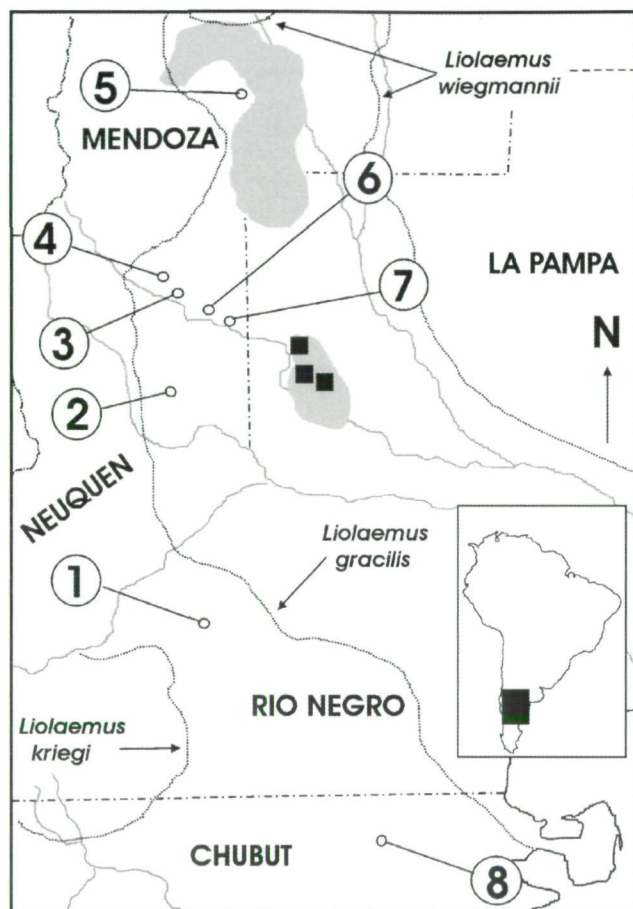


Fig. 1: Map of new localities for several *Liolaemus* species in Patagonia, Argentina.

Locality numbers correspond with those cited in the text. Line-dots are provincial limits.

Gray lines are main rivers in the area. Dotted lines mark the western (*Liolaemus wiegmanni* and *L. gracilis*) and eastern (*L. kriegi*) limits of known distribution for several species. Gray areas: known distribution of *L. grosseorum*. Black squares: southernmost localities known for *L. cuyanus*, other localities are farther north.

Liolaemus grosseorum ETHERIDGE, 2001. This species was collected in four localities in Mendoza Province and one locality in Neuquén Province. All these localities are the south-westernmost records for the species. Vegetation of all areas was characteristic of the Monte phytogeographic Province. Mendoza Province: Malargüe Department: (6) Ruta Provincial 180, 61 km E Pata Mora, 59 km W Gobernador Ayala (37°17' S, 68°33' W, 896 m a.s.l.). 16 January 2003. L. AVILA, M. MORANDO, C. PEREZ, J. SITES, K. DITTMAR. MLP.S. 2446. (4) Ruta Provincial 180, 21 km S junction

road to El Clavado post, near Cañada de los Cruceros (37°00' S, 69°05' W, 1115 m a.s.l.). 16 January 2003. L. AVILA, M. MORANDO, C. PEREZ, J. SITES, K. DITTMAR. MLP.S. 2447. (7) Ruta Provincial 180, 80 km E Pata Mora, 40 km W Gobernador Ayala (37°25' S, 68°27' W, 645 m a.s.l.). 16 January 2003. L. AVILA, M. MORANDO, C. PEREZ, J. SITES, K. DITTMAR. MLP.S. 2448. (3) Ruta Provincial 180, 20 km E Pata Mora, 100 km W Gobernador Ayala (38°11' S, 69°01' W, 782 m a.s.l.). 16 January 2003. L. AVILA, M. MORANDO, J. SITES, C. PEREZ, K. DITTMAR. MLP.S. 2449. Neuquén Province: Añelo

Department: (2) Ruta Provincial 7, 28.7 km NW Añelo. 6 February 2003. L. AVILA, M. MORANDO, C. PEREZ, K. DITTMAR. MLP.S. 2450. First record for Neuquén Province. Collected in a red dune habitat in syntopy with two undescribed species related to *Liolaemus multimaculatus* (DUMÉRIL & BIBRON, 1837) and *L. gracilis*, *L. mapuche* ABDALA, 2002, and *Cnemidophorus longicauda* (BELL, 1843). In the Neuquén population, the lizard's background coloration matches the substrate color (red sand dunes) as is observed in other species of *Liolaemus* inhabiting the same color substrate (e.g. *L. laurenti* ETHERIDGE, 1992; *L. darwini*).

Liolaemus kriegi MÜLLER & HELLMICH, 1939. Río Negro Province: El Cuy Department. (1) Ruta Provincial 67, 20 km S Mengué, 2 km S Pilahué post (40°34' S, 69°44' W, 1247 m a.s.l.). 4 February 2003. L. AVILA, M. MORANDO, C. PEREZ, K. DITTMAR. MLP.S. 2451. Northernmost record in Río Negro Province and first record for El Cuy department, almost 70 km N of the previously cited locality by CEI (1986). Previous confirmed records were from Norquínco, Pilcaniyeu, Bariloche, and 25 de Mayo departments, in the south-west corner of Río Negro Province. Found in a basaltic escarpment in sympatry with *Phymaturus patagonicus* KOSLOWSKY, 1898; *Liolaemus elongatus* KOSLOWSKY, 1896; *L. rothi* KOSLOWSKY, 1898; *L. bibronii* (BELL, 1843), and *Homonota darwini* BOULENGER, 1885.

Liolaemus wiegmanni (DUMÉRIL & BIBRON, 1837). Mendoza Province: (5) Ruta Provincial 179, 9.2 km N junction Ruta Provincial 190, between Las Vegas and Punta del Agua creeks (35°26' S, 68°04' W, 687 m a.s.l.). 14 January 2003. L. AVILA, M. MORANDO, C. PEREZ, J. SITES, K. DITTMAR. MLP.S. 2452. Southernmost record for this species in Mendoza Province, previous records are from north of Atuel River, at least 70 km N. The specimen was collected in a small dry ravine with a scrubland habitat, typical of Monte desert, in sympatry with *Teius teyou* (DAUDIN, 1802). Previous published records for this species in Mendoza Province had shown an "island" distribution around urban areas of Mendoza city and San Rafael (CEI, 1986), but this could be more a situation derived from the absence of sampling in some areas. Recently,

we collected several samples of *L. wiegmanni* in eastern Mendoza, 100 km NE San Rafael that could be the connection between the apparently isolated western populations of Mendoza and San Juan Provinces and the populations of Córdoba, San Luis, La Pampa, and Buenos Aires Provinces.

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Agama planiceps PETERS, 1862 as prey item for Black Mongoose *Galerella (sanguinea) nigrata*

On three occasions during July and August 2003 (9/07, 20/07, 19/08) adult Namibian Rock Agamas (*Agama planiceps planiceps* PETERS, 1862) were observed being caught and eaten by adult male Black Mongooses *Galerella (sanguinea) nigrata* in the Erongo Mountains west of Omaruru in western Namibia.

Whilst conducting fieldwork on the habitat use and home range of *G. nigrata* it was noticed that they often attempted to prey on *A. p. planiceps* individuals although mostly unsuccessfully. The three occasions when *A. p. planiceps* individuals were caught occurred during the early morning between 08:30 and 09:30 on cool days when the agamas were less mobile. Once caught, they were quickly subdued by being vigorously shaken for a few seconds and then totally consumed. On one occasion cooperative hunting by two *G. nigrata* individuals on *A. p. planiceps* was even observed albeit also unsuccessful.

According to SKINNER & SMITHERS (1990), Sauria rank second behind Insecta in the diet of *Galerella sanguinea* as identified from 60 stomach contents from southern Africa. The only *Agama* identified from the stomach contents however, was *A.*

cyanogaster (RÜPPELL, 1835) (Tree Agama). Predators of *A. p. planiceps* include hornbills and rock kestrels and up to 30% of adults have been documented with broken tails (BRANCH 1998). Although it is expected that small predators other than raptors prey on *A. p. planiceps*, this is most likely the first record of *A. p. planiceps* being preyed upon by *Galerella nigrata*

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KEY WORDS: Reptilia: Squamata: Sauria: Agamidae; *Agama planiceps*, predation, Namibia

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Python natalensis SMITH, 1833 preys on South African Porcupine *Hystrix africaeaustralis*

On 12 December 2003 a dead adult Southern African Python, *Python natalensis* SMITH, 1833, of 3 m in length was found approximately 60 km north-west of Okahandja on the farm Okarumetero in central Namibia with the carcass of an adult South African Porcupine *Hystrix africaeaustralis* individual inside it. The quills of the porcupine were protruding through the skin of the python possibly indicating that the python had caught and consumed the porcupine after which the quills resulted in the death of the individual. It would seem from the carcass remains that the python was disturbed after ingesting the porcupine and tried to regurgitate its prey consequently resulting in the death of the snake.

The diet of *P. natalensis* consists mainly of warm-blooded prey and includes rock hyrax, hares, cane rats, monkeys, small antelope, fish, monitor lizards, small crocodiles

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