

## LITERATURE CITED

- CASPER, G. S. 1996. Geographic Distributions of the Amphibians and Reptiles of Wisconsin. Publ. Milwaukee Public Mus., Milwaukee, Wisconsin. 87 pp.
- MOSSMAN, M. J., L. M. HARTMAN, R. HAY, J. R. SAUER, AND B. J. DHUEY. 1998. Monitoring long-term trends in Wisconsin frog and toad populations. In M. J. Lannoo (ed.), Status and Conservation of Midwestern Amphibians, pp. 169–198. University of Iowa Press, Iowa City.
- SMITH, P. W. 1961. The Amphibians and Reptiles of Illinois. Illinois Nat. Hist. Surv. Bull. 28(1):1–298.
- VOGT, R. C. 1981. Natural History of Amphibians and Reptiles of Wisconsin. Publ. Milwaukee Public Mus., Milwaukee, Wisconsin. 205 pp.

69°22'W). 1 February 1999. P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. CRILaR FBC 106–111. This species was considered endemic to the Meseta Somuncura (Ceí 1986); however, the present record is at least 100 km west of the Somuncura foothills, and the first for Department 25 de Mayo. *Liolaemus elongatus*, *Diplolaemus* var. *altopatagonica*, and *Homonota darwini* were also found in this type of habitat.

*Liolaemus xanthoviridis*. CHUBUT: Dpt. Biedma, Peninsula de Valdéz, Bahía Fracaso Beach (42°25'S, 64°07'W). 29 January 1999. A. Marcus, P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. CRILaR PT 4773. First record for Peninsula de Valdéz and northernmost locality. Ceí (1986) cites this species from Chubut River (in the south) to Punta Clara. Halloy et al. (1998) mention Laguna de los Indios as the northern limit of this species. This record extends the range 70 km north of the preceding citations and is a new department record.

*Liolaemus cuyanus*. LA PAMPA: Dpt. Limay Mahuida, 88 km W La Reforma on the roadside of Road 20, (37°39'S, 67°11'W). 3 February 1999. P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. CRILaR FBC 0067–69. First record for the province. Tiranti and Avila (1997) do not mention this species occurring in the province and one of the authors (S. Tiranti, pers. comm.) mentions that no observations were made of species not on their checklist in his most recent field trips. Habitat of this species was scrub vegetation in Monte desert found in sympatry with *Liolaemus darwini*, *Liolaemus gracilis*, and *Cnemidophorus longicaudus*.

*Liolaemus kriegi*. CHUBUT: Dpt. Cushamen, 25 km S of Moligüe, on rock boulders on the roadside of Provincial Rt. 13 (42°04'S, 69°31'W). 1 February 1999. P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. CRILaR PT 4848–50. This record confirms the eastern distribution for the species (Ceí 1986), but is more than 100 km to the south of Ing. Jacobaci (the easternmost locality) and 20 km south of the northern border of Chubut Province. Ceí (1986) mentions the geographic range of this lizard as the occidental region of Rio Negro Province to the border of Chubut, but the presence of this species in the province of Rio Negro remains unclear.

## COLUBRIDAE

*Pseudotomodon trigonatus*. CHUBUT: Dpt. Florentino Ameghino, Cantera las Lajas 20 km S Punta Tombo, 1 km E Provincial Route 1 (44°07'57"S, 65°26'W). 27 January 1999. P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. UNMDP 524. Ceí (1986) mentions Puerto Madryn as the southern limit for the species. This record is the southernmost locality and extends the range of this species 120 km farther south than any previously known locality. The type of habitat was a meteorized rocky hill (lajas), where *Homonota darwini* was also captured.

*Acknowledgments*.—The authors thank Alicia Marcus and Roberto Lech for assistance in the field and their generous hospitality while in Chubut. We are grateful to Laura Vega for identification of specimens. This work was partially supported by a grant from the National Science Foundation (BSR-9318642 to J. B. Losos, K. de Queiroz, and A. Larson). This note was prepared while the second author was supported by a National Science Foundation Fellowship.

## LITERATURE CITED

- CEI, J. M. 1986. Reptiles del Centro. Centro-oeste y Sur de la Argentina. Monogr. Mus. Reg. Sci. Nat. Torino 4:1–557.

## New Distributional Records and Natural History Notes for Reptiles from Southern Argentina

FELIX B. CRUZ

CRILaR - CONICET, Entre Ríos y Mendoza  
5301 Anillaco, La Rioja, Argentina  
e-mail: fcruz@crilar.com.ar

JAMES A. SCHULTE II

Department of Biology, Washington University  
Campus Box 1137, St. Louis, Missouri 63130-4899 USA  
e-mail: schulte@biology.wustl.edu

and

PATRICIO BELLAGAMBA

Bélgica 858, 7600 - Mar del Plata, Argentina  
e-mail: patricio@copetel.com.ar

The present note provides six new records for the Patagonian herpetofauna and La Pampa Province in Argentina. Distributional records are two new localities of the genus *Liolaemus*, one confirmation for the eastern distribution of a species of *Liolaemus*, a new provincial record for a species of *Pristidactylus*, new southernmost records for a species of *Phymaturus* (considered endemic to the Somuncura Plateau) and a colubrid snake (*Pseudotomodon trigonatus*). All species were verified by Laura Vega. Voucher specimens are deposited at the Universidad Nacional de Mar del Plata collection (UNMDP) and the Centro Regional de Investigaciones y Transferencia Tecnológica La Rioja collection (CRILaR).

## IGUANIDAE

*Pristidactylus scapulatus*. RIO NEGRO: Dpt. 25 de Mayo, 77 km NW Sierra Colorada (2 km S Esperanza) on the roadside of Provincial Rt. 68 (40°26'S, 68°22'W). 2 February 1999. P. J. Bellagamba, J. A. Schulte II, and F. B. Cruz. CRILaR PT 4810. First record for the province. Ceí (1986) cites this species as occurring in Neuquén and Chubut provinces, but not from Rio Negro. The specimen was collected on small rock boulders (less than a meter high) in sympatry with *Diplolaemus* var. *altopatagonica*, *Liolaemus melanops*, *L. bibróni*, and *Homonota darwini*. A second specimen (UNMDP 525) was found on rock boulders on the roadside of provincial road 13 (42°26'S, 69°41'W) in Chubut Province, being sympatric with *Liolaemus petrophilus*, *L. rothi*, and *Homonota darwini*.

*Phymaturus somuncurensis*. RIO NEGRO: Dpt. 25 de Mayo, 43 km N Moligüe on rock boulders near Provincial Rt. 76 (41°35'S,

- HALLOY, M., R. ETHERIDGE, AND G. M. BURGHARDT. 1998. To bury in sand: Phylogenetic relationships among lizard species of the *boulengeri* group, *Liolaemus* (Reptilia: Squamata: Tropiduridae), based on behavioral characters. *Herpetol. Monogr.* 12:1-37.
- TIRANTI, S. I., AND L. J. AVILA. 1997. Reptiles of La Pampa province, Argentina: an annotated checklist. *Bull. Maryland Herpetol. Soc.* 33(3):97-116.

## BOOK REVIEWS

**Reptiles. In Fauna Ibérica, vol. 10**, by Alfredo Salvador (Coord.). 1998. Departamento de Publicaciones del CSIC, Museo Nacional de Ciencias Naturales, c/José Gutiérrez Abascal, 2, Madrid, E 28006, Spain. 705 pp. Hardcover. 7200 PTE (approx. US \$52.00). ISBN 84-00-07713-X.

CLAUDE-PIERRE GUILLAUME

Laboratoire de Biogéographie et Écologie des Vertébrés.

Ecole pratique des Hautes Études, case courrier 094

UM II, Place Eugène Bataillon, F - 34095 Montpellier Cedex 5, France

e-mail: ephebev@crit.univ-montp2.fr

This monograph, devoted to the reptilian orders Chelonii and Squamata of the Iberian Peninsula and Balearic islands, is the tenth in the series *Fauna Ibérica*, the proceedings of a project aimed at acquiring basic zoological, and especially systematic, information about the Ibero-Balearic area.

The book begins with an introduction to the biology of reptiles, including classification, morphology, natural history, and study methods. The body of the book consists of systematic accounts of 26 genera and 47 species of reptiles (in alphabetical order within families). This is followed by a very important list of 2303 bibliographic references, and finally a partially annotated list of synonyms and combinations, and a short glossary.

The same format is used for each species, with each account consisting of sections devoted to (1) scientific name, senior synonym and common name, (2) external morphology, (3) skeleton, (4) sexual dimorphism, (5) genetic data, (6) variation, (7) distribution, (8) fossil record, (9) habitat, (10) activity, (11) food habits, (12) predators, (13) parasites, (14) reproduction and growth, (15) population structure and dynamics, and (16) conservation. For each species, one or more judiciously selected black and white drawings by Pedro Salgado and a distribution map (and often a comparative table of food habits in different countries) complete the account.

Including the coordinator, eight authors shared editing duties: A. C. Andreu and L. F. López-Jurado for the nine species of Chelonii, A. Salvador for the seven species of Iguania, Amphisbaenia, and Scleroglossa (except the Lacertidae), V. Pérez-Mellado for the 18 species of Lacertidae, A. Bea, Fl. Braña, P. Galán, and J. M. Pleguezuelos for the 13 species of Serpentes.

The goal of the editors was to publish a work "intermediate between a technical book and a popular field guide" (MNCN-CSIC 1998). I think that they have attained their objective, however, I do have some critical observations of this otherwise enjoyable book. These comments concern both major and minor points of detail, distribution maps, taxonomy, and systematics.

The first error, undoubtedly due to the delay of printing, appears at the top of p. 4, where the suggested citation format of the book is given as "Salvador, A. (Coordinador), 1997..." instead of 1998, the date of publication which figures at the bottom of the same page. The same date is erroneously mentioned on page 152 in connection with *Chalcides bedriagai cobosi* nom. nov., authorship of which should correctly be cited as Valverde, 1998.

At a time when molecular studies have proven their utility in systematics, it is unfortunate that the "collection, preservation and methods of study" chapter completely omits aspects of tissue collection. Further, the only recommended preservatives are those containing formaldehyde, which causes disastrous effects on both the quantity and quality of the DNA that can be extracted from samples. Alternative methods include both cryopreservation and ethanol or fluid buffer preservation (e.g., Dessauer et al. 1996; Sibley and Ahlquist 1981).

As presented in the book, bibliographic citations always appear to refer to the original literature rather than to secondary sources or other authors' interpretation of subsequent citations. This, however, was clearly not the case, for example, in the chapter devoted to *Lacerta vivipara*, where V. Pérez-Mellado writes on p. 233: "A notable enzymatic variability exists within the European populations (Grenot and Heulin, 1990)." The original sentence of Grenot and Heulin (1990)—whose article has nothing to do with enzymes—is (p. 17): "Although an important enzymatic variability was recognized between populations (Salvidio et al. 1990; Bea et al. 1990), this species..." This article of Grenot and Heulin (1990) is again misquoted two times on p. 240, once with respect to the distribution of oviparous populations of *Lacerta vivipara*, referring to Fig. 1b from Heulin and Guillaume (1989), and the other about the different forms of egg membranes, a subject that is not mentioned in Grenot and Heulin (1990)! It would have been better to quote Heulin (1988), Heulin (1990, not in the bibliographic list) and Heulin et al. (1992). In the same section, on p. 242, an article of Spitz (1971), devoted to *Lacerta viridis* and *Lacerta agilis*, erroneously serves as reference for the area of the home range of *Lacerta vivipara*! Finally, neither Nettmann and Rykena (1984) nor Goose and Castanet (1989) (cf. p. 229) assign the subspecies *Lacerta viridis prasina* to the Iberian peninsula (but rather *L. v. bilineata*). On the same page, a correctly referenced, but truncated quotation produces a misleading sentence. It is not: "*Lacerta viridis* possess characteristic bands for the GOT [nowadays called ATA] and the LDH-1 isoenzymes" but "*Lacerta viridis* possess bands (...) diagnostic for the differentiation between *L. viridis* and *L. trilineata*."

Other misprints include 19 families instead of 18 as on Fig. 4 (p. 16); *Vipera latastei* instead of *V. latasti* (p. 269); and the number of erythrocytes must be 1,442,000/mm<sup>3</sup>, not 442,000 (p. 411).

From my point of view, the distribution maps are the most problematic part of the book. The maps are without any names of Universal Transverse Mercator (UTM) squares (although the limits of provinces are drawn) and the only symbol used is a black dot (a separate symbol should at least have been provided for introduced populations).

We learn in the introduction that the maps were derived "from the atlas published by the Spanish Herpetological Association (1989), completed and in some cases corrected with subsequently published (Pleguezuelos, 1997) or original data, using UTM squares of 50 x 50 km." It is unclear why the former work is attributed to the "Asociación Herpetológica Española" instead of Martínez-Rica (1989) who is the volume's coordinator. On this basis, one might think that except for the difference of scale (the atlas of Pleguezuelos [1997] uses UTM squares of 20 x 20 km), the distribution maps of this book should be similar to those of Pleguezuelos (1997). This is true, however, for only ten species (turtles and terrestrial tortoises, *Lacerta perspicillata*, *Podarcis lilfordi*, and *P. sicula*). More often (26 species) one or a few dots have been added and/or removed. For nine species (*Chalcides bedriagai*, *C. striatus*, *Acanthodactylus erythrurus*, *Lacerta agilis*, *Blanus cinereus*, *Natrix maura*, *N. natrix*, and *Vipera latasti*) the differences are rather significant, and they are very important for *Emys orbicularis*, *Podarcis hispanica*, and