

SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES



Publisher of Journal of Herpetology, Facsimile Reprints in Herpetology, Herpetological Review, Catalogue of American Amphibians and Reptiles, Herpetological Circulars, Contributions to Herpetology, and Herpetological Conservation

Officers and Editors for 2011

President

JOSEPH R. MENDELSON III
Zoo Atlanta
Atlanta, GA 30315, USA

President-Elect

ROBERT D. ALDRIDGE
Department of Biology
Saint Louis University
St Louis, MO 63103, USA

Secretary

MARION PREEST
Joint Science Department
The Claremont Colleges
Claremont, CA 91711, USA

Treasurer

KIRSTEN NICHOLSON
Department of Biology
Central Michigan University
Mt Pleasant, MI 48859, USA

Publications Secretary

BRECK BARTHOLOMEW
P.O. Box 58517
Salt Lake City, UT 84158, USA

Immediate Past-President

BRIAN CROTHER
Department of Biological Sciences
Southeastern Louisiana University
Hammond, LA 70402, USA

Directors (Class and Category)

DAVID CUNDALL (2012 R)
Lehigh University, USA
KEVIN de QUEIROZ (2012 R)
Smithsonian Institution, USA
TIFFANY DOAN (2014 R)
Central Connecticut State Univ., USA
PATRICK GREGORY (2012 Non-US)
University of Victoria, CANADA
TRAVIS LADUC (2014 Reg Soc)
University of Texas, USA
ANN PATERSON (2012 R)
Williams Baptist College, USA
JENNIFER PRAMUK (2014 Cons)
Woodland Park Zoo, USA
CAROL SPENCER (2014 R)
University of California, USA

Trustee

GEORGE PISANI
University of Kansas, USA

Journal of Herpetology

ERIN MUTHS, Co-Editor
U.S. Geological Survey
Fort Collins, CO 80526, USA
GAD PERRY, Co-Editor
Texas Tech University
Lubbock, TX 79409, USA

Herpetological Review

ROBERT W. HANSEN, Editor
16333 Deer Path Lane
Clovis, CA 93619, USA

Contributions to Herpetology

KRAIG ADLER, Editor
Cornell University
Ithaca, NY 14853-2702, USA

Facsimile Reprints in Herpetology

AARON BAUER, Editor
Villanova University
Villanova, PA 19085, USA

Catalogue of American Amphibians & Reptiles

ANDREW H. PRICE, Editor
Texas Natural Science Center
Austin, TX 78758, USA

Herpetological Circulars

JOHN J. MORIARTY, Editor
3261 Victoria Street
Shoreview, MN 55126, USA

Herpetological Conservation

JOSEPH C. MITCHELL, Editor
Mitchell Ecol. Res. Service
P.O. Box 5638
Gainesville, FL 32627-5638, USA

Dear Author,

Attached please find a gratis pdf file of your article/note published in *Herpetological Review*. You are receiving this pdf at no charge as a benefit of SSAR membership, and it is for your personal use only (see copyright notice below).

Sincerely,

SSAR Publications Office

Notice warning concerning copyright restrictions: The copyright law of the United States (title 17, United States Code) governs the making of copies or other reproductions of copyrighted material such as PDFs. One of these specific conditions is that the copy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes, or later uses, a PDF, copy, or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement. The Society for the Study of Amphibians and Reptiles (SSAR) holds the copyright to this PDF. SSAR authorizes the author to use this PDF to fill reprint requests for private study, scholarship and research purposes. It is a violation of SSAR's copyright to distribute this PDF via mass emails, or by posting this pdf on any website for download — Except the author's own personal (not business) website / webpage.

carapace height 18.25 (\pm 1.20, 16.91–20.71), plastron length 34.74 (\pm 2.29, 31.72–37.61), and plastron width 24.88 (\pm 1.23, 22.94–26.54). After measurement, the hatchlings were released at the marsh shore. This clutch size for *T. ornata* was similar to that reported for *T. venusta* (N = 12, 5–22 eggs); however, average hatching carapace length was larger in *T. ornata* than reported for *T. venusta* (mean = 31.8, 25.0–37.8 mm) (Vogt 1990. *In* Gibbons, *op. cit.*, pp. 162–168).

RODRIGO MACIP-RÍOS (e-mail: rmacip@ciencias.unam.mx), **GABRIEL BARRIOS-QUIROZ**, **GUSTAVO CASAS-ANDREU**, Laboratorio de Herpetología, Instituto de Biología, Universidad Nacional Autónoma de México, A.P. 70-153, 04510, México, D.F. México; **XÓCHITL AGUILAR MIGUEL**, Centro de Investigación en Recursos Bióticos, Facultad de Ciencias, Universidad Autónoma del Estado de México, Instituto Literario #100, 50000, Toluca, Estado de México, México.

SQUAMATA — LIZARDS

AMEIVA AMEIVA (Giant Ameiva). BIFURCATION. *Ameiva ameiva* is one of the most widely distributed Neotropical lizards, occurring from the Caribbean Islands and Costa Rica to southern Brazil, northern Argentina and the eastern Andes in South America (Vitt and Colli 1994. *Can. J. Zool.* 72:1986–2008). All teiid lizards are capable of caudal autotomy as a means of predation evasion. Occasionally an additional lateral tail can be produced if the original is broken, but not entirely lost.

On 26 March 2009 during the rescue activities of wildlife from the Project of Integration of São Francisco River (PISF) within the basins of Northeastern Setentrional, we collected an adult *A. ameiva* in the municipality of Sertânia, state of Pernambuco, Brazil (8.086°S, 37.384°W, datum: WGS84; elev. 558 m). The tail of the lizard was bifurcated in the medial region (ca. 35 mm posterior from the cloaca), and one of the regenerated tails was much shorter than the other (Fig. 1). Records of bifurcated tail regeneration have been published for many lizard species (see Kumbar and Ghadage 2011. *Herpetol. Rev.* 42:94; Mata-Silva 2010. *Herpetol. Rev.* 41:352–353, and citations therein), and some of these cases show that the bifid or multiple regeneration of tails involve damage to a vertebra. This is presumably what the *A. ameiva* incurred in this report.

The *A. ameiva* (LC 0969) was deposited in the scientific collection of the Centro de Conservação e Manejo de Fauna da Caatinga (CEMAFAUNA-Caatinga/UNIVASF), Petrolina, Pernambuco,



FIG 1. *Ameiva ameiva* (135 mm SVL) with bifurcated tail in the medial region (inset); length of broken tail: 35 mm; length of regenerated tails: 120 mm and 15 mm.

Brazil. We thank the Ministério da Integração Nacional for financial support, and the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (Capes) for the research scholarship granted to ML; IBAMA provided the collecting permits (# 042/2007 and 125.r/2010 Process n° 02001.003112/2007-12).

MELISSA GOGLIATH, Programa de Pós-graduação em Psicobiologia, Centro de Biociências, Universidade Federal do Rio Grande do Norte, CEP 59078-970, Natal - RN, Brazil (e-mail: melbiologa@gmail.com); **LUIZ CEZAR M. PEREIRA** (e-mail: luiz.pereira@univasf.edu.br), **PATRICIA A. NICOLA** (e-mail: patricia.nicola@univasf.edu.br), and **LEONARDO B. RIBEIRO**, Universidade Federal do Vale do São Francisco, Campus Ciências Agrárias, Colegiado de Ciências Biológicas, CEP 56300-990, Petrolina - PE, Brazil (e-mail: leonardo.ribeiro@univasf.edu.br).

ANOLIS CAPITO (Pug-nosed Anole). DIET. Although some lizards are dietary specialists, most species consume a wide variety of arthropods (Magnusson and Da Silva 1996. *J. Herpetol.* 27:380–385). Some detailed dietary studies on small lizards in neotropical areas showed relatively few vertebrate prey (e.g., Garnier et al. 1994. *J. Herpetol.* 28:187–192; Vitt 1991. *Can. J. Zool.* 69:504–511; Vitt and de Carvalho 1992. *Can. J. Zool.* 70:1995–2006; Vitt et al. 1993. *Can. J. Zool.* 71:2391–2400; Vitt et al. 1998. *Can. J. Zool.* 76:1681–1688; Vitt et al. 1997. *Can. J. Zool.* 75:1876–1882; Vitt et al. 2001. *Copeia* 2001:401–412). However, *Neusticurus ecleopos* (Gymnophthalmidae) includes frog larvae in its diet at an Amazon locality (Vitt et al. 1998. *Can. J. Zool.* 76:1671–1680) and *Kentropyx striatus* (Teiidae) has been found to have a high proportion of vertebrates, especially frogs, in its diet (Magnusson and Da Silva 1996, *op. cit.*; Vitt and de Carvalho 1992, *op. cit.*). Some other teiids such as *Tupinambis* also are known to consume frogs (Pianka and Vitt 2003. *Lizards: Windows to the Evolution of Diversity*. Univ. California Press, Los Angeles, California. 333 pp.), but these are large bodied animals. Frogs are consumed by *Anolis* lizards, especially relatively large-bodied species such as *Anolis punctatus* in Brazil (Vitt et al. 2003. *J. Herpetol.* 37:276–285). Here we provide the first report of frog predation by *Anolis capito*, a small species (SVL = 83–96 mm, females; 78–90 mm, males) (Savage 2002. *Amphibians and Reptiles of Costa Rica: A Herpetofauna Between Two Continents, Between Two Seas*. University of Chicago Press, Chicago, Illinois. 1056 pp.).

In Costa Rica, *Anolis capito* is found along the Caribbean slope and in the southwestern lowlands, in deeply shaded forest interiors (Leenders 2001. *A Guide to Amphibians and Reptiles of Costa Rica*. Zona Tropical, Miami, Florida. 305 pp.). It is most frequently observed on the ground or perched low on a trunk 0.25–2 m above the ground (Savage 2002, *op. cit.*). It feeds mainly on spiders, orthopterans, and caterpillars, and often also takes slugs (Savage 2002, *op. cit.*). It also takes small vertebrates such as other anoles (Leenders 2001, *op. cit.*). At 0950 h on 20 October 2001 in Gofito National Wildlife Refuge, Puntarenas Province, SW Costa Rica (8.638611°N, 83.167778°W), we found an adult male (85 mm SVL) *A. capito* eating a Pigmy Rain Frog (*Pristimantis ridens*) (18 mm long). Neither animal was collected. *Pristimantis ridens* is a very common nocturnal forager in low vegetation that often hides in the leaf litter during the day (Savage 2002, *op. cit.*). The two species have overlapping distributions along the Pacific and Atlantic slopes of Costa Rica. We do not know the frequency of predation or the importance of *P. ridens* in the diet of *A. capito*. This is one of relatively few observations of *Anolis* consuming a frog and is the first report of lizard predation on *Pristimantis ridens*.

Observations were made during a field trip of the “Reptiles” course of the School of Biology, University of Costa Rica (UCR).

We acknowledge UCR for support in Golfito and thank W. Eberhardt for his suggestions on the manuscript.

JOSE MANUEL MORA, DSEA (Carrera de Desarrollo Socioeconómico y Ambiente) and CZB (Centro Zamorano de Biodiversidad), Escuela Agrícola Panamericana, El Zamorano, Honduras (e-mail: jmora@zamorano.edu); **EDUARDO TORAL**, Wildlife Conservation Society, Ecuador Program, Apartado, postal 17-21-168, Quito, Ecuador; **JOSE CARLOS CALDERON** (e-mail: monchocu@hotmail.com).

BRACHYMELES BOULENGERI (Philippine Slender Skink).

DIET. *Brachymeles boulengeri* is a pentadactyl, semi-fossorial lizard known from Luzon, Polillo, and Marinduque islands in the northern Philippines. Considered a model system for studying the evolution of limb reduction and loss in squamate reptiles, the genus *Brachymeles* possesses species with a full spectrum of body forms, including pentadactyl, non-pentadactyl, and limbless species (Siler and Brown 2011. Evolution doi:10.1111/j.1558-5646.2011.01315.x; Siler et al. 2011. Mol. Phylogen. Evol. 59:53–65). All species are known to burrow in loose soil and rotting logs, making it difficult to observe dietary preferences (Siler and Brown 2010. Herpetol. Monogr. 24:1–54). As a result of their secretive nature, no studies have reported on observed dietary preferences for any species within this unique genus, and it has long been presumed that the diet consists of small invertebrate species. This is the first record of saurophagy for the genus *Brachymeles*.

While conducting fieldwork in the Philippines, we observed a male *Brachymeles boulengeri* (total length = 178 mm; 17.9 g) consume an adult *B. bonitae* head-first. Adult specimens of both species were collected on 7 May 2011, and placed in the same specimen bag during the return trip to base camp Malaboo, Mt. Makiling Forest Reserve, Barangay Bagong Silang, Municipality of Los Baños, Laguna Province, Luzon Island, Philippines (14.13356°N, 121.20447°E, datum: WGS84; elev. 665 m). Between the time of collection and arrival in camp, the individual of *B. boulengeri* consumed the individual of *B. bonitae*. An autotomized tail fragment of the *B. bonitae* specimen was not consumed, and was preserved in 95% EtOH as a tissue voucher. Examination of the stomach contents of the *B. boulengeri* specimen confirmed the ingestion of the smaller species *B. bonitae* (Fig. 1). The *B. boulengeri* specimen, with intact stomach content, and the tail sample of the consumed individual of *B. bonitae*, were preserved and deposited at the Biodiversity Institute, University of Kansas (CDS 5626: *Brachymeles boulengeri*; CDS 5612 [Genetic Sample]: *Brachymeles bonitae*).



FIG. 1. An adult *Brachymeles boulengeri* (above) with dissected stomach contents showing an ingested adult *Brachymeles bonitae* (below) on Mt. Makiling, Luzon Island, Philippines.

CAMERON D. SILER, Department of Ecology and Evolutionary Biology, Natural History Museum and Biodiversity Institute, University of Kansas, Dyche Hall, 1345 Jayhawk Blvd, Lawrence, Kansas 66045-7561, USA (e-mail: camsiler@ku.edu); **PHILLIP ALVIOLA** and **RUSSELL D. BANIQUED**, Department of Biology, University of the Philippines-Los Baños, Laguna Province, Luzon Island, Philippines; **MARIANO ROY DUJA**, Institute of Biology, University of the Philippines-Diliman, Quezon City, 1101, Philippines.

CERCOSAURA SCHREIBERSII. DIET. *Cercosaura schreibersii* is a gymnophthalmid lizard with wide geographical distribution in South America that occurs in southeastern Peru, Bolivia, Paraguay, Argentina, Uruguay and southern Brazil (Lema 1994. Comun. Mus. Ciênc. PUCRS, Sér. Zool. 7:41–150). Information concerning the biology of the species is scarce and here we present basic information on diet of this lizard. Data were obtained from analysis of 28 adult individuals of *C. schreibersii* (10 males and 18 females; mean SVL 358 mm \pm 32 mm) collected in coastal sand dune environments in Rio Grande, Rio Grande do Sul (32.1654°S, 52.1523°W, sea level), southern Brazil. The contents from stomachs and intestines were analyzed and each prey item was identified to order under a stereomicroscope. The results are presented in Table 1. Araneae were a predominant item in the diet, present in 67.9% of lizard contents and representing 46.3% of total items consumed. The second most important prey were Isopoda, present in 17.9% of lizards and representing 12.2% of the items consumed. Only 10.7% of lizards had no contents in the digestive tract. Our data support preliminary assessments concerning dietary specialization in *C. schreibersii* (Achaval 1984. Bol. Soc. Zool. Uruguay Seg. Epoc. 2:59–62). The consumption of spiders is known for some species of lizards but not as a predominant dietary item (e.g., *Anolis*, *Tropidurus*, and *Ophiodon*; Ávila-Pires 1995. Zool. Verh. Leiden. 1995:3–706; Vitt

TABLE 1. Prey items present in the digestive tracts of 28 adult individuals of *Cercosaura schreibersii* captured in sand dune habitats of southern Brazil.

Items	Frequency of occurrence (%)	% of total registered items
Arachnida		
Acari	3.6	2.4
Araneae	67.9	46.3
Scorpiones	3.6	2.4
Crustacea		
Isopoda	17.9	12.2
Unidentified	3.6	2.4
Insecta		
Coleoptera	10.7	7.3
Diptera	7.1	4.9
Hemiptera	3.6	2.4
Heteroptera	3.6	2.4
Hymenoptera	3.6	2.4
Homoptera	3.6	2.4
Larvae	7.1	4.9
Orthoptera	3.6	2.4
Trichoptera	3.6	2.4
Unidentified	3.6	2.4
Empty	10.7	—
Unidentified	14.3	—