

this species during the summer and fall of 2002.

The first observation occurred on 4 June 2002, on the Current River (Carter County, Missouri, USA). A box turtle was swimming at the surface of the river. The turtle was ca. 5 m from the east bank, in 2–3 m of water and was swimming toward the west bank. The east bank was a bluff bank ca. 10–15 m in height. It is unknown if the turtle had fallen from the bluff or had entered the river at a point upstream. The turtle was kept as a voucher specimen for a herpetofaunal inventory for the National Park Service (NPS, ASUMZ 27039) and was later measured with calipers (height = H, 70 mm; bridge width = BW, 97 mm, and carapace length = CL, 134 mm).

A second observation of aquatic behavior occurred at Wilson's Creek National Battlefield (Greene County, Missouri) on 23 June 2002. During a dip net survey of an ephemeral woodland pond (ca. 10 m diam), we found a box turtle in 23 cm of water. The turtle did not appear to be foraging, as the water was stagnant and did not contain any invertebrates or other vertebrates. The turtle was partially submerged in the water. When we approached, the turtle moved into a head-down position and began "swimming" to the bottom. Once there, it began to wedge itself into the mud and held this position on the bottom. Shortly thereafter, we began timing the duration of the submergence. After 13 min and 17 sec, the turtle extended its neck to the surface of the water to breathe. The turtle was also kept as a voucher specimen for the NPS herpetofaunal inventory (ASUMZ 27076) and later measured (H = 74 mm; BW = 93 mm; CL = 131 mm).

A third observation was on 23 July 2002 on the Current River (Shannon County, Missouri). A box turtle was retrieved from the bottom of the Current River. The turtle was "sitting" on large cobble substrate and was ca. 10 m from the bank at a depth of ca. 2 m. This turtle was retained as a NPS herpetofaunal inventory voucher specimen (ASUMZ 27169) and later measured (H = 75 mm; BW = 107 mm; CL = 144 mm).

A fourth observation was on 21 October 2002, on the North Fork of the White River (Ozark County, Missouri). The turtle was moving along the edge of the river, ca. 1–2 m from the bank. The turtle was photographed and released back into the water. Upon release the turtle sought refuge within a root wad at the edge of the shoreline. The turtle remained on the surface of the water hidden beneath the vegetation until we left the area.

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Submitted by **CHARLES R. McDOWELL, BENJAMIN A. WHEELER,** and **STANLEY E. TRAUTH,** Department of Biological Sciences, Arkansas State University, State University, Arkansas 72467, USA; e-mail: (BAW) bwheeler@astate.edu; (SET) strauth@astate.edu.

### LACERTILIA

**AMEIVA FESTIVA** (Central American Racerunner). **PREDATION.** Species of the lizard genus *Ameiva* typically are among

the most important terrestrial carnivorous lizards in Neotropical assemblages as they eat both invertebrates and vertebrates (Vitt and Zani 1996. *J. Herpetol.* 30:110–117). Orthopterans (crickets, katydids, and roaches) and arachnids (spiders) dominate *A. festiva* diet, but they also eat small amphibians and other lizards may be consumed (Savage 2002. *The Herpetofauna of Costa Rica: A land between two continents, between two seas.* The University of Chicago Press, 510 pp.; Vitt and Zani, *op. cit.*). Savage (*op. cit.*) noted that *A. festiva* feeds on small amphibians, but did not state which species are consumed. Here I augment observations of predation on anurans with the first report of an adult of *A. festiva* eating a juvenile Turbo White-lipped Frog, *Leptodactylus poecilochilus*.

I made the observation over a 15-min period ca. 0830 h on 20 June 2002, while conducting an amphibian census at the La Selva Biological Station (La Guaría Annex), Heredia, Costa Rica (10°26'N, 83°59'W) in a pasture 2 m from the edge of secondary forest. I encountered an adult *A. festiva* (ca. 105 mm SVL) swallowing a juvenile (ca. 20 mm SVL) *L. poecilochilus*, which already had its head in the lizard's mouth. Upon approach, the lizard ran toward the forest edge, where it sat for ca. 10 min on leaf litter and continued to swallow the frog up to its groin. At that point, I was able to see clearly the white stripe on the frog's posterior thigh, an unequivocal trait that distinguishes *L. poecilochilus* (Savage, *op. cit.*). The lizard then disappeared into the forest, and I was unable to find it again.

Juveniles of *L. poecilochilus* are common in the small puddles that form in the pastures as a result of livestock activity. Thus, the edge between pastures and forests in this region might be important foraging grounds for *A. festiva*, especially when recruitment of juvenile *L. poecilochilus* is at its peak.

Submitted by **EDUARDO TORAL C.**, Universidad de Costa Rica, San Pedro de Montes de Oca, San José, Costa Rica; e-mail: guashote@yahoo.com.

**DIPLOGLOSSUS LEGNOTUS** (NCN). **REPRODUCTION.** No reproductive data are available for the recently described anguid lizard, *Diploglossus legnotus* (Campbell and Camarillo 1994. *Herpetologica* 50:193–209). Here we provide the first data on reproduction for *D. legnotus*.

On 2 August 1998, LCM collected a gravid female (96.4 mm SVL, 105.4 mm tail length, 17.5 g; upper head, body and tail were brown, distinct black markings were arranged in irregular vertical bars on sides, a distinct red ventrolateral band extended from axilla to groin hence onto basal third of tail; sides of neck between posterior infralabials and insertion of forelimb were yellowish). The lizard was collected 3.5 km W Xocoyolo, Municipality of Cuetzalan del Progreso, Puebla (19°59.432'N, 97°33.325'W; elev. 1355 m). The locality is a cattle ranch bordered by cloud forest, and a stream runs along the cloud forest margin. The female was collected under a fallen tree trunk on a slope with abundant fallen trees. On 23 September 1998, the female gave birth to seven young (mean SVL 32.5 mm, SD 1.7 mm, range: 29.4–34.2 mm; mean tail length 37.8 mm, SD 2.3 mm, range 35.8–42.5 mm; mean mass 0.55 g, SD 0.07 g, range: 0.46–0.64 g). After parturition, the female weighed 12.2 g. All seven neonates were bright green with nine white dorsal stripes, a red ventrolateral band, and a blue tail.

Reproductive data on Mexican *Diploglossus* species are scarce, but available information indicates that the three recognized species are viviparous. *Diploglossus rozellae* gives birth to 3–5 young during the interval May–July (Alvarez del Toro 1982. Los Reptiles de Chiapas. 3<sup>rd</sup> ed. Instituto de Historia Natural, Tuxtla Gutiérrez, Chiapas. 248 pp.), but the clutch size we report for *D. legnotus* is at the high end of the range for *D. enneagrammus*, which has 3–7 young in June (Canseco-Márquez 1996. Estudio Preliminar de la Herpetofauna en la Cañada de Cuicatlán y Cerro Piedra Larga, Oaxaca. Unpublished Thesis. Universidad Autónoma de Puebla. 180 pp.; P. Heimes, pers. obs.).

The female *D. legnotus* (EBUAP 1655) was deposited in the herpetological collection of Benemérita Universidad Autónoma de Puebla, México. Support for field work was provided by grant from CONABIO (number FB444/L283/97) to G. Gutiérrez-Mayén, and SEMARNAT provided the necessary collecting permits.

Submitted by **LUIS CANSECO-MÁRQUEZ**, Museo de Zoología, Facultad de Ciencias, Universidad Nacional Autónoma de México, A.P. 70-399, México, D.F. 04510, México (e-mail: lcm@correo.unam.mx), **NORMA L. MANRÍQUEZ-MORÁN**, Laboratorio de Herpetología, Instituto de Biología, Universidad Nacional Autónoma de México, A.P. 70-153, México, D.F. 04510, México, and **GUADALUPE GUTIÉRREZ-MAYÉN**, Laboratorio de Herpetología, Escuela de Biología, Benemérita Universidad Autónoma de Puebla, C.P. 72570, Puebla, México.

**ELGARIA PAUCICARINATA** (San Lucan Alligator Lizard). **ENDOPARASITES.** *Elgaria paucicarinata* is restricted to the Cape Region of Baja California Sur (Grismer 2002. Amphibians and Reptiles of Baja California Including its Pacific Islands and the Islands in the Sea of Cortés. University of California Press, Berkeley. 399 pp.). To our knowledge, no reports exist of endoparasites from this species. The purpose of this note is to report the presence of four nematode species from *E. paucicarinata*.

Seven *E. paucicarinata*, 4 males and 3 females (mean SVL = 92 mm ± 9 SD, range: 82–105 mm) from the herpetology collection of the Natural History Museum of Los Angeles County (LACM 92711–12, 92714, 92718–19, 99441, 109371) were examined for helminths. The esophagus, stomach, small and large intestines were opened and separately examined for helminths under a dissecting microscope. The body cavity was also examined. Except for LACM 109371, all lizards were infected. Four species of nematodes, *Cosmocercoides variabilis* (infection site: small and large intestines); *Physaloptera retusa* (stomach); *Oswaldocruzia* sp. (small intestine); and *Rhabdias* sp. (lung) were found. Prevalence (infected lizards/lizards examined X 100), mean intensity (mean helminth number/infected lizards) and range are as follows: *Cosmocercoides variabilis* (57%, 6.0 ± 3.1 SD, range: 1–11), *Physaloptera retusa* (57%, 4.8 ± 4.1 SD, range: 1–10), *Oswaldocruzia* sp. (29%, 1.5 ± 0.71 SD, range: 1–2), and *Rhabdias* sp. (14%, 1.0). Helminths were deposited in the United States National Parasite Collection, Beltsville, Maryland as: *Cosmocercoides variabilis* (USNPC 93511); *Physaloptera retusa* (USNPC 93509); *Oswaldocruzia* sp. (USNPC 93512); *Rhabdias* sp. (USNPC 93510).

*Cosmocercoides variabilis* is known from various amphibians and reptiles of North America (Baker 1987. Mem. Univ. New-

foundland, Occas. Pap. Biol. 11:1–325; Goldberg et al. 2000. Southwest. Nat. 45:362–366; Goldberg and Bursey 2002. Bull. South. California Acad. Sci. 101:118–130) and *Physaloptera retusa* is known from amphibians and reptiles of North and South America (Goldberg et al. 2004. Comp. Parasitol. in press). *Elgaria paucicarinata* represents a new host record for *C. variabilis* and *P. retusa* and Baja California a new locality record. The numerous species of *Oswaldocruzia* and *Rhabdias* have more limited distributions (see Baker, *op. cit.*). This is the first report of *Oswaldocruzia* and *Rhabdias* in *Elgaria paucicarinata* and may represent undescribed species.

Submitted by **STEPHEN R. GOLDBERG**, Department of Biology, Whittier College, Whittier, California 90608, USA (e-mail: sgoldberg@whittier.edu), **CHARLES R. BURSEY**, Department of Biology, Pennsylvania State University, Shenango Campus, Sharon, Pennsylvania 16146, USA (e-mail: cxb@psu.edu), and **KENT R. BEAMAN**, Section of Herpetology, Natural History Museum of Los Angeles County, Los Angeles, California 90007, USA (e-mail: heloderma@adelphia.com).

**GEEKO SUBPALMATUS** (NCN). **REGIONAL INTEGUMENTARY LOSS.** An adult male *Gekko subpalmatus* (Yale Peabody Museum of Natural History, slide collection YPM.M.01007) was collected by Dustin Sigler on 27 July 2000 from a stone wall at Tai Zhu Ao, Nan Ao Island, Guandong Province, Peoples Republic of China (23°26'00"N, 117°03'00"E). When handled, the specimen's skin tore easily in a manner consistent with regional integumentary loss (RIL), an anti-predator escape strategy employed by geckos in at least 9 different lineages (Bauer et al. 1989. J. Exp. Biol. 145:79–102). The resulting wound extended over ca. 10% of the back and was associated with little or no bleeding, as is typical in defensive integumentary loss. The animal survived without special care or obvious distress at least 6 days, until euthanized. This is the first record of this anti-predator defense in the species, and in the genus *Gekko*, which includes at least some species (e.g., *G. gekko*) with mechanically strong, tough skins (Bauer et al. 1989, *op. cit.*). Similar intrageneric variation in this ability has been noted in the African geckos of the genus *Pachydactylus* (Bauer et al. 1993. S. Afr. J. Zool. 28:192–197). Although *G. subpalmatus* has a broad range within southern China, RIL has only been documented on Nan Ao, a small island (106 km<sup>2</sup>) in the South China Sea. This is consistent with the general trend among geckos for this strategy to evolve chiefly in insular contexts (Bauer and Russell. 1992. Ecol. Ethol. Evol. 4:343–358). In at least one other species of gekkonid, *Thecadactylus rapicauda*, some evidence of notable intraspecific variation in skin fragility exists, with insular populations more prone to RIL than those from continental regions (Bauer et al. 1989, *op. cit.*). Possibility of a parallel situation in *G. subpalmatus* needs investigation.

Submitted by **GREGORY J. WATKINS-COLWELL**, Yale Peabody Museum of Natural History, Department of Vertebrate Zoology, 170 Whitney Avenue, P.O. Box 208118, New Haven, Connecticut 06520, USA (e-mail: Gregory.Watkins-Colwell@yale.edu), and **AARON M. BAUER**, Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA (e-mail: aaron.bauer@villanova.edu).