

pus novemcinctus) is known to consume *V. striatula* (Breece and Dusi 1995. In Montgomery [ed.], *The Evolution and Ecology of Armadillos, Sloths, and Vermilinguas*. Smithsonian Inst. Press, Washington. 451 pp.). The only record concerning avian predation on *V. striatula* that I am aware of involves the Eastern Screech Owl (*Otus asio*; Gehlbach and Baldrige 1987, *Oecologia* 71:560–563).

On 2 December 2002 at 1130 h, air temperature 13°C, I observed a Northern Mockingbird (*Mimus polyglottos*) holding a *V. striatula* in its beak. The event took place in the yard of a rural farmhouse 4.6 km (air) N of Waverly, in Chambers Co., Alabama, USA. The bird was grasping the snake by the tail, immediately posterior to the vent. Upon my approach, the bird flew from the stone terrace where it was perched and sought refuge behind dense shrubbery. When I saw the bird again, it had dropped the snake at its feet and took flight when I came within 4 m of it. At this point I collected the snake, which was entirely limp with the exception of an occasional twitch of its head. The subcaudal portion of the snake was bloody, and there was a single wound at mid-body. These injuries were presumably inflicted by the bird's beak. Additionally, I noted a slight abrasion on the snake's head and assume that the bird had subdued its prey by thrashing it against the stone-work.

The snake (AUM 35662) is female, 197 mm SVL, 225 mm TL, and 3.4 g. The Northern Mockingbird is characterized as omnivorous, and is known to take *Anolis* lizards (Derrickson and Breitwisch 1992 In Poole et al. [eds.], *The Birds of North America*, No. 7, Northern Mockingbird (*Mimus polyglottos*), pp. 1–26. American Ornithological Union, Washington, D.C. and the Academy of Natural Sciences, Philadelphia, Pennsylvania). I believe this to be the first record of ophiophagy by *M. polyglottos*.

Thanks to S. M. Boback, and C. Guyer for constructive comments.

Submitted by **GEOFFREY G. SORRELL**, Department of Biological Sciences, 331 Funchess Hall, Auburn University, Alabama 36849-5414, USA; e-mail: sorregg@auburn.edu.

GEOGRAPHIC DISTRIBUTION

Herpetological Review publishes brief notices of new geographic distribution records in order to make them available to the herpetological community in published form. Geographic distribution records are important to biologists in that they allow for a more precise determination of a species' range, and thereby permit a more significant interpretation of its biology.

These geographic distribution records will be accepted in a **standard format** only, and all authors *must* adhere to that format, as follows: **SCIENTIFIC NAME**, **COMMON NAME** (for the United States and Canada as it appears in Crother 2000. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding*. SSAR Herpetol. Circ. 29:1–82, available online at <<http://herplut.com/SSAR/circulars/HC29/Crother.html>>; for Mexico as it appears in Liner 1994, *Scientific and Common Names for the Amphibians and Reptiles of Mexico in English and Spanish*. Herpetol. Circ. 23:1–113), **LOCALITY** (use metric for distances and give precise locality data), **DATE** (day-month-year), **COLLECTOR**, **VERIFIED BY** (*cannot* be verified by an author—curator at an institutional collection is preferred), **PLACE OF DEPOSITION** (where applicable, use standardized collection designations as they appear in Leviton et al. 1985, *Standard Symbolic Codes for Institutional Resource Collections in Herpetology and Ichthyology*. Copeia 1985[3]:802–832) and **CATALOG NUMBER** (required), **COMMENTS** (brief), **CITATIONS** (brief), **SUBMITTED BY** (give name and address in full—spell out state or province names—no abbreviations).

Some further comments. This geographic distribution section does not publish "observation" records. Records submitted should be based on preserved specimens which have been placed in a university or museum collection (private collection depository records are discouraged; institutional collection records will receive precedence in case of conflict). A good quality color slide or photograph may substitute for a preserved specimen *only* when the live specimen could not be collected for the following reasons: it was a protected species, it was found in a protected area, or the logistics of preservation were prohibitive (such as large turtles or crocodylians). Color slides and photographs *must* be deposited in a university or museum collection along with complete locality data, and the color slide catalog number(s) must be included in the same manner as a preserved record. Before you submit a manuscript to us, check Censky (1988, *Index to Geographic Distribution Records in Herpetological Review: 1967–1986*; available from the SSAR Publications Secretary) to make sure you are not duplicating a previously published record. The responsibility for checking literature for previously documented range extensions lies with authors. Do not submit range extensions unless a thorough literature review has been completed.

Please submit any geographic distribution records in the **standard format only** to one of the Section Co-editors: **Alan M. Richmond** (USA & Canadian records only); **Jerry D. Johnson** (Mexico and Central America, including the Caribbean islands); **Hidetoshi Ota** (all Old World records); or **Gustavo J. Scrocchi** (South American records). Short manuscripts are discouraged, and are only acceptable when data cannot be presented adequately in the standard format. **Electronic submission of manuscripts is required** (as Microsoft Word or Rich Text format [rtf] files, as e-mail attachments). Refer to inside front cover for e-mail addresses of section editors.

Recommended citation for new distribution records appearing in this section is: Schmitz, A., and T. Ziegler. 2003. Geographic distribution. *Sphenomorphus rufocaudatus*. Herpetol. Rev. 34:385.

CAUDATA

AMBYSTOMA TIGRINUM MELANOSTICTUM (Blotched Tiger Salamander). USA: SOUTH DAKOTA: ROBERTS CO.: wetland adjacent to South Dakota Hwy 25, ca. 1.6 km W Hammer (45°50' 55.6"N; 97°02' 21.3"W). 8 September 2003. Laurs Bryan Williams. Verified by Stanlee Miller. Campbell Museum, Clemson University (CUSC 2167). County record. Previously reported in adjacent Marshall, Day, and Grant counties (Fischer et al. 1999. A Field Guide to South Dakota Amphibians. South Dakota Agric. Exp. Sta. Bull. 733. South Dakota State University, Brookings. 52 pp.).

Submitted by **LAURS BRYAN WILLIAMS** and **STEVEN G. PLATT**, Department of Math and Science, Oglala Lakota College, P.O. Box 490, Kyle, South Dakota, 57752-0490, USA.

GYRINOPHILUS PORPHYRITICUS (Spring Salamander). USA: TENNESSEE: COFFEE CO: seep flowing into Davidson Branch, ca. 1.1 km SW of Ward Chapel, ca. 250 m N of Riley Creek Rd (35°28'02.5"N, 86°11'17.6"W). 19 April 2003. Matthew L. Niemiller. Verified by Addison Wynn. Smithsonian National Museum of Natural History, USNM-FS 186610. Larva found under rock within seep. Tissue sample collected; salamander was photographed and released. First record from Coffee County and southernmost record on the Eastern Highland Rim (Redmond and Scott 1996. Atlas of Amphibians in Tennessee. Misc. Publ. No. 12. The Center for Field Biology, Austin Peay State University, Clarksville, Tennessee. 94 pp.). Tissue sample collected under authorization of the Tennessee Wildlife Resources Agency (permit no. 1724-03B).

Submitted by **MATTHEW L. NIEMILLER**, Middle Tennessee State University, Murfreesboro, Tennessee, 37130, USA; e-mail: mln2a@mtsu.edu.

ANURA

APARASPHENODON VENEZOLANUS (Venezuela Casque-headed Frog). BRAZIL: AMAZONAS STATE: Campina from Jaú National Park (01°54'45"S 61°35'20"W). 19 March 2000. S. Neckel-Oliveira and M. Gordo. Herpetological collection from Instituto Nacional de Pesquisas da Amazônia, Manaus (INPA - H 10939). Verified by J. Lynch. One male found at 2200 h at edges of ponds in campina habitat—characterized by sandy soil that is seasonally flooded by rainfall. First country record. Species previously known from southwestern Amazonian Venezuela and adjacent Colombia; present record extends known distribution ca. 900 km airline from Guáinia, Colombia (Frost 2003. *Amphibian Species of the World*. Version 2.21/2003).

Submitted by **SELVINO NECKEL-OLIVEIRA**, Instituto Nacional de Pesquisas da Amazônia, CP478, 69011-970, Manaus, Am, Brazil (e-mail: neckel@inpa.gov.br), and **MARCELO GORDO**, Universidade Federal do Amazonas, Manaus, Am, Brazil; e-mail: mgordo@ufam.edu.br.

BUFO AMERICANUS (American Toad). USA: GEORGIA: FLOYD CO.: Dozier Creek. 21 July 2003. Bradley L. Johnston. GMNH 49220. Verified by John Jensen. New county record (Williamson and Moulis. 1994. *Distribution of Amphibians and Reptiles in Georgia*. Savannah Sci. Mus. Spec. Publ. No. 3, 712 pp.).

Submitted by **BRADLEY L. JOHNSTON**, 341 Bells Ferry Road, Rome, Georgia 30161, USA.

BUFO SPECIOSUS (Texas Toad). USA TEXAS: STERLING CO.: AOR ca. 10 road km E of Sterling City, Hwy 87. 16 April 2001. James A. Holm and Kathryn E. Perez. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC 13581). First county record (Dixon 2000. *Amphibians and Reptiles of Texas*. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

ELEUTHERODACTYLUS BIPORCATUS (Puerto Cabello Robber Frog). VENEZUELA: ESTADO FALCON: Municipio Unión, Estación de Guardaparques, Parque Nacional Cueva Quebrada del Toro. August 2002. R. A. Rivero. Museo de la Estación Biológica de Rancho Grande (EBRG 4826), Ministerio del Ambiente y de los Recursos Naturales, Maracay. Verified by A. Arends. First state record (Mijares-Urrutia and Arends 2000. *Smithson. Herpetol. Infor. Serv.* 123:1–30). This record represents an extension of ca. 135 km NW from its nearest known locality in Coastal Range, northern Venezuela (Frost, 2002. *Amphibian Species of the World* [online]. Ver. 2.21. American Museum of Natural History, New York; Manzanilla et al. 1995. *Acta Cient. Venez.* 46:1–15).

Submitted by **RAMÓN RIVERO**, Museo de la Estación Biológica de Rancho Grande, Ministerio del Ambiente y de los Recursos Naturales, Apartado 184, Maracay 2101-A, Venezuela, and **ABRAHAM MIJARES-URRUTIA**, Colección Herpetológica Regional, CIEZA-UNEFM, Apartado 7559, Santa Ana de Coro 4101-A, Venezuela; e-mail: amijares@unefm.edu.ve.

ELEUTHERODACTYLUS DIMIDIATUS (Ranita de Antifaz). CUBA: MATANZAS: CIÉNAGA DE ZAPATA: ca. 5 km from Buenaventura, 100 m NE of the road to Santo Tomás (81°15'57.24"N, 22°19'27.48"W). May 1997. A. Rodríguez. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 14 3776). Verified by L. V. Moreno. CUBA: Isla de la Juventud: Los Indios River, ca. 800 m to the NE of the "Los Indios" Ecological Station (82°59'30.48"N, 21°4.68"W). 11 August 1999. A. Rodríguez and R. Alonso. CZACC 145600. Verified by L. V. Moreno. First record of this species from "Llanura de Zapata" and "Isla de la Juventud-Archipiélago de los Canarreos," two biogeographic regions from which it was considered absent (Hedges 1999, *In* Duellman [ed.], *Patterns of Distribution of Amphibians, A Global Perspective*, pp. 211–254. Johns Hopkins University Press, Baltimore and London).

Submitted by **ARIEL RODRÍGUEZ** and **ROBERTO ALONSO**, Instituto de Ecología y Sistemática, Carr. de Varona, Km 3, Capdevila, Boyeros. AP 8029, CP 10800, Ciudad de la Habana, Cuba; e-mail: zoologia.ies@ama.cu.

ELEUTHERODACTYLUS EILEENAE (Colín). CUBA: MATANZAS: CIÉNAGA DE ZAPATA: ca. 5 km from Buenaventura, 100 m NE from the road to Santo Tomás (81°15'57.24"N, 22°19'27.48"W). May 1997. A. Rodríguez. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 14 3415). Verified by L. V. Moreno. First record of this species in the "Llanura de Zapata," a biogeographic region where it was previously considered absent (Hedges 1999, *In* Duellman [ed.], *Patterns of Distribution of Amphibians, A Global Perspective*, pp. 211–254. Johns Hopkins University Press, Baltimore and London).

Submitted by **ARIEL RODRÍGUEZ** and **ROBERTO ALONSO**, Instituto de Ecología y Sistemática, Carr. de Varona, Km 3, Capdevila, Boyeros. AP 8029, CP 10800, Ciudad de la Habana, Cuba; e-mail: zoologia.ies@ama.cu.

ELEUTHERODACTYLUS LIBRARIUS (NCN). ECUADOR: PROVINCIA NAPO: CANTÓN TENA: Serena village, S side upper Napo River (01°05'43"S, 77°55'28"W), 560 m elev., 1 May 2003. K. R. Elmer and T. Sugahara. Museo de Zoología de la Pontificia Universidad Católica del Ecuador, Quito (QCAZ 25851: adult female, SVL 24.1 mm; QCAZ 25852: adult female, SVL 23.8 mm; SVL 22.9 mm; in an agricultural area surrounded by secondary forest, perched on vegetation < 1 m above ground). PROVINCIA ORELLANA: Yasuní River, south side, ca. 220 m elev., November 1993. F. Campos. (QCAZ 7356: juvenile, SVL 14.7 mm; QCAZ 7357: juvenile female, SVL 19.9 mm). CANTÓN COCA: ca. 5 km S of Dayuma village (00°41'44"S, 76°43'50"W), 267 m elev., 19 March 2003. K. R. Elmer, S. Padilla, and P. Menéndez-Guerrero. (QCAZ 25589: adult female, SVL 24.6 mm; in a coffee plantation with primary forest behind and a road on one side, perched on vegetation < 1 m above ground). PROVINCIA MORONA SANTIAGO: 600–1200 m elev., September 1997. J. Izquierdo. (QCAZ 12209: adult male, SVL 19.2 mm; QCAZ 12210: SVL 22.2 mm). All verified by Luis A. Coloma and Gregory O. Vigle. This species was previously known only from its type locality, the Jatun Sacha Biological Reserve, Napo, Ecuador (01°04'S, 77°36'W) (Flores and Vigle 1994. *J. Herpetol.* 28:416–424). These

new records represent a substantial range extension for the species: Serena is 34 km W, Dayuma is 107 km ENE, Morona Santiago is a minimum of 90 km, maximum of ca. 210 km S, and Yasuni River is 120–150 km E (all kms are straight-line) from the Jatun Sacha Reserve.

Submitted by **KATHRYN R. ELMER**, Department of Biology, Queen's University, Kingston, Ontario, K7L 3N6, Canada; e-mail: ElmerK@biology.queensu.ca.

ELEUTHERODACTYLUS PLANIROSTRIS (Greenhouse Frog). USA: FLORIDA: LEVY CO: Seahorse Key, upland hammock and beaches. 2 June 2001. Harvey B. Lillywhite and Coleman M. Sheehy III. Verified by Kenneth L. Krysko. Florida Museum of Natural History, University of Florida, Gainesville (UF 123955). This is a new record for Seahorse Key as well as the adjacent collective islands of the Cedar Keys. Several specimens were found active in leaf litter and in pitfall traps. Moreover, these frogs have been observed or heard calling on at least six occasions since the original discovery, all in connection with recent rainfall. Seahorse Key has no permanent source of fresh water, so this record affirms the success of this species in colonizing offshore islands that might be hostile environments for other amphibians. The presence of *E. planirostris* is possible because of its terrestrial mode of direct reproduction. It appears the frogs are quite common in leaf litter within the insular hammock and probably occur on other islands within the Cedar Keys as well. Elsewhere, in the Florida Keys and Caribbean, this species has been reported beneath stones and other objects on beaches at the very edge of the sea (Neill 1958. Bull. Mar. Sci. Gulf Caribbean 8[1]:1–97). *Eleutherodactylus planirostris* was not known from Seahorse Key or adjacent islands during the studies of Charles Wharton (1958. The Ecology of the Cottonmouths *Agkistrodon piscivorus piscivorus* Lacepede of Sea Horse Key, Florida. PhD dissertation, University of Florida, Gainesville). As at other sites (Johnson et al. 2003. Herpetol. Rev. 34:161–162), this species appears to have colonized parts of north Florida during the relatively recent past.

Submitted by **HARVEY B. LILLYWHITE** and **COLEMAN M. SHEEHY III**, Department of Zoology and Seahorse Key Marine Laboratory, University of Florida, Gainesville, Florida 32611-8525, USA; e-mail: hbl@zoo.ufl.edu.

ELEUTHERODACTYLUS RONALDI (NCN). CUBA: HOLGUÍN: FRANK PAÍS: Baconal, Sierra de Cristal (75°25'25.32"N, 20°34'35.04"W), ca. 600 m elev. 24 December 2000. A. Rodríguez and R. Alonso. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 1411402). Verified by L. V. Moreno. First record of the species in Sierra de Cristal and a range extension of ca. 45 km from the closest previous record in Cupeyal del Norte, Cuchillas del Toa (Garrido and Jaume 1984. Doñana, Acta Vertebrata 11:5–128).

Submitted by **ARIEL RODRÍGUEZ** and **ROBERTO ALONSO**, Instituto de Ecología y Sistemática Carr. de Varona, Km 3, Capdevila, Boyeros, AP 8029, CP 10800, Ciudad de la Habana, Cuba; e-mail: zoologia.ies@ama.cu.

ELEUTHERODACTYLUS TETAJULIA (NCN). CUBA: HOLGUÍN: FRANK PAÍS: El Desayuno, Sierra de Cristal

(75°26'12.84"N, 20°31'54.48"W), ca. 700 m elev. 15–19 December 2000. A. Rodríguez and R. Alonso. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 1411403–4, 1411407–11). Verified by L. V. Moreno. This record is a range extension of ca. 76 km W of the only previously known record at the type locality (Estrada and Hedges 1996. Herpetologica 52:435–439).

Submitted by **ARIEL RODRÍGUEZ** and **ROBERTO ALONSO**, Instituto de Ecología y Sistemática Carr. de Varona, Km 3, Capdevila, Boyeros, AP 8029, CP 10800, Ciudad de la Habana, Cuba; e-mail: zoologia.ies@ama.cu.

HYLA ALBOMARGINATA (White-edged Treefrog). BRAZIL: SANTA CATARINA: Municipality of Florianópolis: Ilha de Santa Catarina, Praia dos Naufragados (27°49'S, 48°34'W). 19 October 2002. A. Kwet and T. Miranda. Museu de Ciências e Tecnologia da PUCRS (MCP 6380–81), Porto Alegre, Brazil. Verified by M. Di-Bernardo. This first record for the island of Santa Catarina represents the southernmost locality for this species, which is widely distributed in the lower Amazon Basin and the Atlantic forests of eastern Brazil from Pernambuco to Santa Catarina (Frost 2002. Amphibian Species of the World: an online reference. V2.21 [15 July 2002] <http://research.amnh.org/herpetology/amphibia/index.html>). The new record extends the distribution ca. 150 km S from the previously cited southernmost locality near Guaramirim, northern Santa Catarina (<http://www.ra-bugio.org.br/index.html>). Four males were observed calling in a forest swamp with shallow water, ca. 300 m from the beach and perched on shrubs at heights of 1–2 m. One male took refuge in a large bromeliad (*Vriesea* sp.).

Submitted by **AXEL KWET**, Zoologie, Staatliches Museum für Naturkunde Stuttgart, Rosenstein 1, D-70191 Stuttgart, Germany (e-mail: axel.kwet@uni-tuebingen.de), **TATIANA MIRANDA**, Laboratório de Pesquisas Biológicas, PUCRS, Av. Ipiranga, 6681, CEP 90619-900 Porto Alegre, Brazil (e-mail: tatimiran@hotmail.com), and **ANNE ZILLIKENS**, Zoologisches Institut der Universität Tübingen, Auf der Morgenstelle 28, D-72076 Tübingen, Germany (e-mail: anne.zillikens@uni-tuebingen.de).

HYLA CINEREA (Green Treefrog). USA: VIRGINIA: GOOCHLAND CO., 2.65 km ESE Centerville (37°39'50.33"N, 77°39'33.29"W, NAD83). 1 August 2003. J. C. Mitchell. USNM 559750–51. Verified by S. W. Gotte. Extension of known range in Virginia ca. 40 km W of nearest published location in eastern Hanover County in the Coastal Plain (Mitchell and Reay 1999. Atlas of Amphibians & Reptiles in Virginia. Spec. Publ. No. 1, Virginia Dept. Game & Inland Fisheries, Richmond, Virginia). County record and first record for Piedmont Physiographic Province in Virginia.

Submitted by **JOSEPH C. MITCHELL**, Department of Biology, University of Richmond, Richmond, Virginia 23173, USA.

HYLA PUGNAX (Rana Platanera; Banana-tree Frog). VENEZUELA: ESTADO FALCON: Municipio Mauroa, 22 km (by road) SW from Goajiro, ca. 500 m elev. 5 May 2003. A. Mijares and P. Palencia. Colección Herpetológica Regional del Centro de Investigaciones en Ecología y Zonas Áridas (CIEZAH 1147),

Universidad Francisco de Miranda, Santa Ana de Coro. Verified by A. Arends. Third known locality and highest elevation reported in Venezuela (La Marca 1996. Bull. Maryland Herpetol. Soc. 32:35–42; Mijares-Urrutia and Arends 1999. Herpetol. Rev. 30:115), second state record, and first report from the Municipio Mauroa (Mijares-Urrutia and Arends 1999, *op. cit.*; Mijares-Urrutia and Arends 2000. *Smithson. Herpetol. Infor. Serv.* 123:1–30). This record extends the known range of the species ca. 116 km (airline) SW from La Florida, State of Falcón and partially fills the large gap between the two previously known localities in Venezuela.

Submitted by **ABRAHAM MIJARES-URRUTIA**, Colección Herpetológica Regional, CIEZA-UNEFM, Apartado 7559, Santa Ana de Coro 4101-A, Venezuela; e-mail: amijares@unefm.edu.ve.

LEPTODACTYLUS POECILOCHILUS (Sapito Silbador). VENEZUELA: ESTADO FALCON: Municipio Petit, ca. 1.0 km SW Acarite, through the Spanish road, Sierra de San Luis, ca. 800 m elev. 3 July 2003. A. Mijares and P. Palencia. Colección Herpetológica Regional del Centro de Investigaciones en Ecología y Zonas Áridas (CIEZAH 1148, 1150–1153), Universidad Francisco de Miranda, Santa Ana de Coro. Verified by A. Arends. First record for the Municipio Petit, extending the range ca. 135 km west (Heyer 1978. *Nat. Hist. Mus. Los Angeles Co. Sci. Bull.*, 29:1–85; Mijares-Urrutia and Arends 2000. *Smithson. Herpetol. Infor. Serv.* 123:1–30).

Submitted by **ABRAHAM MIJARES-URRUTIA**, Colección Herpetológica Regional, CIEZA-UNEFM, Apartado 7559, Santa Ana de Coro 4101-A, Venezuela; e-mail: amijares@unefm.edu.ve.

OSTEOCEPHALUS PLANICEPS (NCN). BRAZIL: AMAZONAS STATE: Campina from Jaú National Park (01°54'45"S, 61°35'20"W). 19 March 2000. S. Neckel-Oliveira and M. Gordo. Herpetological collection, Instituto Nacional de Pesquisas da Amazônia, Manaus, (INPA -H 10940–44). Verified by J. Lynch. Three males and two females were found at edges of ponds in campina habitat, 2000–2400 h. First country record. Species previously known from northeastern Amazonian Peru and adjacent Ecuador; likely present in Amazonian Colombia as well. Present record extends the known distribution ca. 1400 km air lane E from Nauta, Perú, the type locality (Frost 2002. *Amphibian Species of the World*. Version 2.21/2003).

Submitted by **MARCELO GORDO**, Universidade Federal do Amazonas, Manaus, Am, Brazil (e-mail: mgordo@ufam.edu.br), and **SELVINO NECKEL-OLIVEIRA**, Instituto Nacional de Pesquisas da Amazônia, CP 478, 69011-970, Manaus, Am, Brazil; e-mail: neckel@inpa.gov.br.

PACHYMEDUSA DACNICOLOR (Mexican Leaf Frog). MEXICO: CHIHUAHUA: Ejido la Junta, 2–3 km NW Batopilas (29°12'34.1"N, 107°45'44.5"W), 435 m elev. 8–12 July 2002. Julio A. Lemos-Espinal. Herpetological Collection of Unidad de Biología, Tecnología y Prototipos (UBIPRO) 9068. Verified by Richard L. Holland. First record for the state of Chihuahua, extending its known range ca. 75 km E from 13 km ESE Alamos, Sonora (Duellman 2001. *Hylid Frogs of Middle America*. SSAR Contrib. Herpetol. 18, xvi + 1158 pp.).

Submitted by **JULIO A. LEMOS-ESPINAL**, under CONABIO Projects U003, X004 and AE003, Laboratorio de Ecología,

UBIPRO, Facultad de Estudios Superiores Iztacala, UNAM, Apartado Postal 314, Avenida de los Barrios No. 1, Los Reyes Iztacala, Tlalnepantla, Estado de México, 54090 México (e-mail: lemos@servidor.unam.mx); **DAVID CHISZAR** and **HOBART M. SMITH**, University of Colorado Museum, Boulder, Colorado 80309-0334, USA; e-mail: hsmith@colorado.edu.

RANA AURORA (Red-legged Frog). USA: ALASKA: Chichagof Island: SE of Hoonah: muskeg ponds with silty, organic bottoms surrounded by grasses and sedges. NMFS, Auke Bay Laboratory, Juneau, Alaska AB 02-21, 57°50'90.0"N, 135°03'8.3"W, 13 July 2002, Schroder, 2 subadults. Additional specimens include AB 02-82–87. Verified by Kelly McAllister and Bruce L. Wing.

This is the first recorded *Rana aurora* from Alaska (Hodge 1976. *Amphibians and Reptiles in Alaska, the Yukon and Northwest Territories*, Alaska Northwest Publ. Co., Anchorage). Rumors among former Hoonah school students regarding the origin of the frogs surfaced. A former Hoonah school teacher allegedly released frogs, purchased from a biological supply company, into a pond near Hoonah. I located the former teacher in another city and the teacher confirmed he purchased one or two egg masses of *R. aurora* from Powell Laboratories (Carolina Biological Supply), Gladstone, Oregon, ca. 1982 and released a couple dozen froglets in a pond SE of Hoonah ca. 1982. Carolina Biological Supply staff confirmed that egg masses of *R. aurora* were collected in the Columbia River Gorge, Oregon and shipped from Powell Laboratories in Oregon to schools throughout the west during this time period.

The introduced *Rana aurora* are successfully reproducing and dispersing into adjacent wetlands. The effect this exotic introduction will have on native amphibians and other aquatic life remains to be determined. The genetic relationships of the Chichagof Island populations with Oregon populations merits investigation.

Ovaska et al. (2002. *Herpetol. Rev.* 33:318) recently documented *Rana aurora* from Graham Island in the Queen Charlotte Islands, British Columbia, Canada, speculating that these frogs might be introduced (although no record of such an event exists).

Rana aurora is the second exotic amphibian species introduced/established in Alaska. *Pseudacris* (= *Hyla*) *regilla* (Pacific Treefrog) was human introduced on Revillagigedo Island in 1960 and is reproducing but apparently not dispersing into nearby wetlands (Norman and Hassler 1995. Unpubl. report, National Biological Service, Humboldt State University, Arcata, California). *Pseudacris regilla* also exists in the Queen Charlotte Islands as the result of human introduction.

Special thanks to Chuck Parsley, John Sargent, and staff of Hoonah USFS.

Submitted by **ROBERT PARKER HODGE**, ME2, POB 1521, Gig Harbor, Washington 98335, USA.

SCAPHIOPUS COUCHII (Couch's Spadefoot). USA TEXAS: STERLING CO: AOR, ca. 6.4 road km E of Sterling City on Hwy 87. 17 April 2001. James A. Holm and Kathryn E. Perez. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 13582. First county record (Dixon 2000. *Amphibians and Reptiles of Texas*. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows

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STEFANIA SCALAE (Rana de la Escalera). VENEZUELA: BOLÍVAR: Warepita River, tributary of the Cucurital River, Canaima National Park (06°00'31"N, 62°47'01"W), 370 m elev. 25–28 September 2000. R. Rivero, E. La Marca, C. Molina, D. Lew, and H. Rojas. Museo de Historia Natural La Salle, Caracas, (MHNLS 14995, 15001, 15022, 15041–42). Verified by J. Ayarzagüena. Until now, this species has been considered endemic to the La Escalera region in Venezuela between 860 and 1360 m elev. (Señaris et al. 1996. Publ. Asoc. Amigos Doñana 7:1–57; Gorzula and Señaris 1999. Scientia Guianae No. 8, xviii + 268 pp., 32 pls.), although Barrio (1998. Act. Biol. Venez. 18[2]:1–93) tentatively assigned an unvouchered specimen from Cerro Santa Rosa, South Serranía del Supamo, Bolívar State to this taxon. These specimens were collected at night, above and under rocks or in the marginal vegetation, along a small rocky tributary of the Cucurital River. These new specimens are the first documented records outside the type locality and are from the lowest elevation recorded for this species. They extend the range at least 140 km to the east of the previously known locality.

Submitted by **J. CELSA SEÑARIS, CESAR MOLINA**, Museo de Historia Natural La Salle, Apartado 1930, Caracas 1010-A, Venezuela (e-mail: josefa.senaris@fundacionlasalle.org.ve), and **ENRIQUE LA MARCA**, Laboratorio de Biogeografía, Escuela de Geografía, Facultad de Ciencias Forestales y Ambientales, Universidad de Los Andes, Mérida 5101, Venezuela; e-mail: lamarca@telcel.net.ve.

TESTUDINES

APALONE SPINIFERA (Spiny Softshell). USA: GEORGIA: FLOYD CO: Dozier Creek. 1 June 2000. Bradley L. Johnston. GMNH 49223. Verified by John Jensen. New county record (Williamson and Moulis. 1994. Distribution of Amphibians and Reptiles in Georgia. Savannah Sci. Mus. Spec. Publ. No. 3, 712 pp.).

Submitted by **BRADLEY L. JOHNSTON**, 341 Bells Ferry Road, Rome, Georgia 30161, USA.

CHELYDRA SERPENTINA SERPENTINA (Eastern Snapping Turtle). USA: TEXAS: BROWN CO: Camp Bowie, Texas Army National Guard Training Site, Area 5 (UTM: 0506986 E, 3497907 N). 23 March 2003. James A. Holm. Verified by Robert C. Dowler. Angelo State University Natural History Collection (ASNHC) 14117. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

KINOSTERNON BAURII (Striped Mud Turtle). USA: FLORIDA: FRANKLIN CO: On land near East River, a distributary of the Apalachicola River (29.8632°N 85.0223°W). 16 August 1991. M. A. Ewert. Florida Museum of Natural History (UF 139566) adult female. FRANKLIN CO: On land on Forbes Island across the Apalachicola River from Fort Gadsden Historical Site (29.9401°N 85.0158°W). 17 May 1993. M. A. Ewert. UF 139567,

adult female, on its nest. GULF CO: On land ca. 300 m N of Forbes Island and Brickyard Cutoff of the Apalachicola River (29.9528°N 85.0223°W), 18 August 1991. M. A. Ewert. UF 139568, adult female, nesting. LIBERTY CO: On land next to stream 4.8 km N of S.R. 20, Bristol (30.5016°N 84.9869°W), 5 June 1999. D.R. Jackson. UF 139569, adult female. JACKSON CO: In Spring Creek, 2 km SE Marianna (30.7501°N 85.1983°W), 12 June 2002. G. Guyot. UF 139570, photographic voucher of adult female and UF 139571 preserved hatchling from an egg from this female. Data that support our identifications include 1) "plastral formula" scores that favor *K. baurii* or *K. subrubrum hippocrepis* rather than *K. s. subrubrum* (Lamb and Lovich 1990. Copeia 1990:613–618; Lovich and Lamb 1995. J. Herpetol. 29:621–624), 2) at least a partial mid-dorsal stripe on the carapace of two of the six specimens, 3) production of eggs and nesting during late summer and fall (no evidence of this for *K. s. hippocrepis* (e.g., Dundee and Rossman 1989. The Amphibians and Reptiles of Louisiana. Louisiana State University Press, Baton Rouge. 300 pp.), and 4) eggs with embryonic diapause (Ewert and Wilson 1996. Chelon. Conserv. Biol. 2:43–54), not present in *K. s. hippocrepis* (Ewert, pers. obs.). All five records extend the range of *K. baurii* westward in Florida from the St. Marks River drainage (Wakulla Co., Etchberger and Iverson 1989. Florida Sci. 52:119–144) into the Apalachicola River drainage, including the Chipola River. *Kinosternon baurii* is recorded for the Apalachicola (Flint River) drainage of Georgia (Jensen and Moulis 1999. Herpetol. Rev. 40:240–247). Our new records extend the total known range further west by 19' to 32' of longitude (from Calhoun Co., Georgia; Williamson and Moulis 1994. Savannah Sci. Mus. Spec. Publ. 3:1–712). All specimens were verified by M. J. Aresco.

Submitted by **MICHAELA. EWERT**, Department of Biology, Indiana University, Bloomington, Indiana 47405, USA (e-mail: mewert@bio.indiana.edu), **DALE R. JACKSON**, Florida Natural Areas Inventory, 1018 Thomasville Road, Suite 200-C, Tallahassee, Florida 32303 (e-mail: djackson@fnai.org), and **GHISLAINE GUYOT**, 6416 Dancer's Image Trail, Tallahassee, Florida 32309 USA (e-mail: gguyot13@aol.com).

KINOSTERNON SUBRUBRUM (Eastern Mud Turtle). USA: ILLINOIS: UNION CO: Cypress Road, 0.15 km W of Cypress Creek (SW 1/4 of SE 1/4 of SEC 23, T13S, R1E). 4 April 2003. John G. Palis. SIUC-R4322. Verified by J. G. Stewart. Fresh DOR juvenile collected after rain at 2200 h. First record for county (Phillips et al. 1999. Field Guide to Amphibians and Reptiles of Illinois. Illinois Nat. Hist. Surv. Manual 8:1–282).

Submitted by **JOHN G. PALIS**, P.O. Box 387, Jonesboro, Illinois 62952, USA

PSEUDEMYIS CONCINNA (River Cooter). USA: ILLINOIS: JOHNSON CO: Grassy Slough Preserve (The Nature Conservancy) near Belknap (E 1/2 of NE 1/4 of SW 1/4 of Sec 6, T14S, R3E). 23 May 2003. John G. Palis. SIUC R-4324 color slide. Verified by J. G. Stewart. Adult male found between constructed wetland and Cache River at 1730 h. First record for county (Phillips et al. 1999. Field Guide to Amphibians and Reptiles of Illinois. Illinois Nat. Hist. Surv. Manual 8: 1–282).

Submitted by **JOHN G. PALIS**, P.O. Box 387, Jonesboro, Illinois 62952, USA

TRACHEMYS VENUSTA CATASPILA (Huastecan Slider). MÉXICO: HIDALGO: Municipality of Huejutla de Reyes, Chalahuiyapa, ca. 5.5 km NE Huejutla (21°09'N, 93°22'W), 120 m elev. 1 March 1999. Cristóbal Bautista Bautista. Colección Herpetológica, Instituto Tecnológico Agropecuario de Hidalgo (ITAH 063, complete shell only). Two additional specimens (ITAH 387, 470) are known from Hidalgo. All three specimens verified by Luis Canseco-Márquez. First specimens for Hidalgo, extending the range ca. 112 km WNW of the closest record at Río Tuxpan, Veracruz. This subspecies is known from numerous localities on the Gulf versant in the states of Tamaulipas, San Luis Potosí, and Veracruz (Seidel 2002. *J. Herpetol.* 36:285–292; Smith and Smith 1979. Synopsis of the Herpetofauna of Mexico, Vol. VI, Guide to Mexican Turtles, Bibliographic Addendum III. John Johnson, North Bennington. i–viii + 1044 pp.).

Submitted by **FERNANDO MENDOZA QUIJANO** (e-mail: mendozaq2000@yahoo.com.mx), and **SOL DE MAYO MEJENES LÓPEZ**, Instituto Tecnológico Agropecuario de Hidalgo, Km 5.5 Carr. Huejutla-Chalahuiyapa, Apdo. Post. 94, C.P. 43000, Huejutla de Reyes Hidalgo, Mexico, and **HOBART M. SMITH**, Department of EPO Biology and Museum, University of Colorado, Boulder, Colorado 80309-0334, USA (e-mail: hsmith@spot.colorado.edu).

LACERTILIA

COLEONYX VARIEGATUS (Western Banded Gecko). USA: ARIZONA: COCONINO CO: Wupatki National Monument: Deadman Wash, UTM (NAD27) 12S, 468940 E, 3932197 N, ca. 1390 m elev. 23 April 2002. Trevor B. Persons. Flagstaff Area National Monuments Vertebrate Collection, WUPA 24715. Kana-a Wash, ca. 0.25 mile E of Wukoki Ruin, UTM (NAD27) 12S, 470658 E, 3931404 N, ca. 1402 m. elev. 10 September 2002. Trevor B. Persons. WUPA 24722. Both verified by Charles A. Drost. Both specimens found under flat sandstone rocks in Great Basin Desertscrub habitat of Wupatki Basin. First records for the Little Colorado River basin, and first records from the Colorado Plateau away from the Colorado River (Dixon 1970. *Cat. Am. Amph. Rept.* 96.1–96.4; Stebbins 2003. *A Field Guide to Western Reptiles and Amphibians*, Third Edition. Houghton Mifflin Co., Boston, Massachusetts, 533 pp.). Brennan et al. (2002. *Herpetol. Rev.* 33:320) reported a specimen from Glen Canyon National Recreation Area NE of Page, Coconino Co., suggesting the species occurs throughout the Colorado River corridor in Arizona. These Wupatki specimens extend the range ca. 75 air km SE of the next furthest downstream Colorado River corridor record, Tanner Trail in Grand Canyon National Park (Miller et al. 1982. *Amphibians and Reptiles of the Grand Canyon*. Grand Canyon Nat. Hist. Assoc., Grand Canyon, Arizona). These records suggest the species occurs throughout the Little Colorado River valley between Grand Canyon and Wupatki, and may occur more widely in similar lower elevation habitats on the northern portion of the Navajo Indian Reservation. Because of the barrier imposed by the Mogollon Rim and Coconino Plateau to the south and west, respectively, the Little Colorado River valley probably represents the historical dispersal route from Grand Canyon of this and other desert species that reach their local terminus in the Wupatki area (e.g., *Sceloporus magister*, *Cnemidophorus tigris*, *Salvadora hexalepis*).

Submitted by **TREVOR B. PERSONS** (e-mail: Trevor.Persons@nau.edu) and **ERIKA M. NOWAK** (e-mail: Erika.Nowak@nau.edu), USGS Southwest Biological Science Center, Colorado Plateau Field Station, Box 5614, Northern Arizona University, Flagstaff, Arizona 86011-5614, USA.

DAREVSKIA VALENTINI (Caucasian Rock Lizard, introduced species). USA: OHIO: VAN WERT CO: west Delphos at Killbros Equipment Company on Ohio Rt. 697, collected Aug. 1986, specimen KU 206727 (Natural History Museum and Biodiversity Research Center, University of Kansas). Specimen had been misidentified as *Podarcis muralis* (Common Wall Lizard) and mapped by Conant and Collins (1998. *Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America*. Third edition expanded. Houghton Mifflin Company, Boston, Massachusetts, 616 pp., and in the precursor edition of 1991) as originating from a population in NW Ohio. I visited the site of collection on 21–22 May 2002 and found no lizards there. Both a local naturalist, George Bilbrey, and a regional herpetologist, Eric Juterbock, confirmed that *Eumeces fasciatus* is the only lizard species recorded from Delphos. Killbros Equipment Company staff kindly identified the person who collected the specimen as James Brokamp, a former employee. In an interview he stated that in 1986 he was in charge of unwrapping arriving agricultural machines shipped to Kilbros. When he slit open the tight fitting plastic wrap covering a machine he found the lizard “between the wheels,” seized it and kept it for a week. He then forwarded it to his sister-in-law in Lima, Ohio who was working for the Ohio State Park System, and she sent it to Cincinnati, from where it was further sent to Lawrence, Kansas. Brokamp stated there was a newspaper article in the Delphos Herald about him and his lizard which he unfortunately discarded two years ago. Despite kind help from the *Delphos Herald* editor, Susan Gerker, I was unable to retrieve the article from the newspaper archive. The Kilbros staff helped me track down the machine’s itinerary starting from an Italian agricultural machine manufacturer (Bondioli & Pavesi S.p.A, Via 23 Aprile, 35, Suzzara, Mantova) via Virginia (Bondioli & Pavesi Inc., 104 Sycamore Drive, Ashland, Virginia) to Delphos. A reasonable explanation is that someone put the lizard in the wrapping of the machine on purpose, perhaps as a joke. An internet search revealed that there is a long history of commercial traffic of agricultural machines to Italy from the former Soviet Union, one of the home countries of *Darevskia*. However I was unable to track down the itinerary of the machine beyond Italy. I conclude that the *Darevskia* record in Ohio is based on a single specimen only and that no population ever was established there. For specimen descriptions see Deichsel and Bischoff (2002. *Herpetol. Rev.* 33:65) and Bischoff and Deichsel (2002. *Salamandra* 38[2]:113–117).

Submitted by **GUNTRAM DEICHSSEL**, Friedr.-Ebert-Str. 62, Biberach an der Riss, Germany D-88400; e-mail: guntram.deichsel@bc.boehringer-ingenelheim.com.

EUMECES MULTIVIRGATUS (Many-lined Skink). USA: TEXAS: CROCKETT CO: along dirt road ca. 6.4 road km E of Highway 63, ca. 8 road km N of intersection of Highways 63 and 190. 8 April 2001. Collected by James A. Holm. Verified by J. Kelly McCoy. Angelo State University Natural History Collection

(ASNHC) 13552–53. First county records (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

HEMIDACTYLUS MABOUIA (Amerfrican House Gecko). USA: FLORIDA: INDIAN RIVER Co.: Stickmarsh boat ramp, at the end of Fellsmere Grade Road 9.6 km W of State Road 507, 5 m S of Canal 54 (27°49'24"N, 80°42'32"W). 12 August 2003. James U. Van Dyke. Verified by Kenneth L. Krysko. Florida Museum of Natural History (UF 137507–509). New county record. One adult and two juvenile geckos were collected on the eastern wall of the boat ramp bath house at night. Many *H. garnotti* were also observed in the same habitat. This record fills a void in the known range of this species in central Florida (Criscione et al. 1998. Herpetol. Rev. 29:248).

Submitted by **JAMES U. VANDYKE** Department of Biological Sciences, Florida Institute of Technology, Melbourne, Florida 32901, USA; e-mail: jvandyke@fit.edu.

LEIOCEPHALUS CARINATUS ARMOURI (Little Bahama Curly-tailed Lizard). USA: FLORIDA: ST. LUCIE Co., NW side of intersection of U.S. Hwy 1 and Prima Vista Boulevard in the "St. Lucie Shopping Center" parking lot (27°19.601'N, 80°19.369'W), between the "Mobil" gas station and the "Prima Vista Professional Building." 4 October 2003. One individual (7.5 cm SVL male) observed 1456 h and collected 1507 h. C. L. Dean. Verified by Walter E. Meshaka, Jr. State Museum of Pennsylvania, Harrisburg (SMP-H2130). First record of this exotic species for St. Lucie County. Extends the range 23 km N of an allopatric population in Port Salerno, Martin County, discovered 31 August (SMP-H2108) (Dean et al. unpubl. rept.). Both of these sites are N of the previously known range that extends ca. 90 km along the Atlantic coastline extending from northern Broward County through Palm Beach County into southern Martin County (Smith et al. *In press*. Int. Biodet. Biodegrad.; Smith and Engeman, unpubl.). The U.S. Hwy 1 and Prima Vista Boulevard site likewise is ca. 113 km S of the most northern east coast of Florida population located in Cocoa Beach (Krysko and King 2002. Herpetol. Rev. 33:148); with no allopatric populations yet reported between these two locations.

Submitted by **CHRISTOPHER L. DEAN** and **HENRY T. SMITH**, Florida Department of Environmental Protection, Florida Park Service, 13798 S.E. Federal Highway, Hobe Sound, Florida 33455, USA, and **RICHARD M. ENGEMAN**, National Wildlife Research Center, 4101 LaPorte Ave., Fort Collins, Colorado 80521-2154, USA; e-mail: Richard.M.Engeman@aphis.usda.gov.

PANASPIS (LACERTASPIS) CHRISWILDI (Chris-Wild's Snake-eyed Skink). CAMEROON: TCHABAL MBABO-MASSIF: Summit. January 2000. Andreas Schmitz and Hans-Werner Herrmann. Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany (ZFMK 75735). Verified by Wolfgang Böhme. *Panaspis (Lacertaspis) chriswildi* was previously only known from its type locality, Mt. Kupe, South Cameroon (Böhme and Schmitz 1996. Rev. Suisse Zool. 103:767–774) and from the Takamanda Forest in southwestern Cameroon

(ZFMK 68892). The new finding from the Tchabal Mbabo-massif in northern Cameroon represents the third known specimen of the species from this country, and the northernmost record of the species (it extends the known distribution ca. 350 km airline distance to the north). It was caught in gallery forest at 2000 m elev. Besides coloration and pattern, its 26 scales around the midbody, two pairs of nuchal scales, and 18–19 lamellae under the fourth toe are characteristic of *Panaspis (Lacertaspis) chriswildi*. The specimen is a male and has the largest snout–vent length (59.5 mm) so far recorded in this species. The specimen had fallen from a high branch (ca. 15 m above the ground) of a tree, situated at the edge of a small gallery forest.

Submitted by **ANDREAS SCHMITZ**, Zoologisches Forschungsinstitut und Museum Alexander Koenig, Adenaueralle 160, D-53113 Bonn, Germany (e-mail: A.Schmitz.ZFMK@uni-bonn.de).

SCELOPORUS UNDULATUS CONSOBRINUS (Southern Fence Lizard). MEXICO: CHIHUAHUA: Rancho Bros. Brown (= Rancho Los Nogales), Sierra de En Medio (31°10'32.6"N, 108°35'9.7"W), 1461 m elev. 19 September 2002. Julio A. Lemos-Espinal. Herpetological Collection of Unidad de Biología, Tecnología y Prototipos (UBIPRO) 10427–29. Verified by Richard L. Holland. First record for Chihuahua, extending its known range ca. 20 km S from its closest known locality in southwestern New Mexico (Lemos-Espinal et al. 2000. Bull. Maryland Herpetol. Soc. 36:133–138; Lemos-Espinal et al. 2001. Bull. Chicago Herpetol. Soc. 37:29–31). At this time, we do not follow Leaché and Reeder's (2002. Syst. Biol. 51:44–68) assessment that the name of this taxon should be *S. cowlesi*.

Submitted by **JULIO A. LEMOS-ESPINAL** (under CONABIO projects U003, X004, AE003), Laboratorio de Ecología, UBIPRO, Facultad de Estudios Superiores Iztacala, UNAM, Apdo. Postal 314, Avenida de los Barrios, No. 1, Los Reyes Iztacala, Tlalnepantla, Estado de México, 54090 México (e-mail: lemos@servidor.unam.mx); **DAVID CHISZAR** and **HOBART M. SMITH**, University of Colorado Museum, Boulder, Colorado 80309-0334, USA; e-mail: hsmith@colorado.edu.

SERPENTES

AGKISTRODON CONTORTRIX (Copperhead). USA: GEORGIA: FLOYD Co: Dozier Creek. 10 May 2002. Bradley L. Johnston. GMNH 49221. Verified by John Jensen. New county record (Williamson and Moulis. 1994. Distribution of Amphibians and Reptiles in Georgia. Savannah Sci. Mus. Spec. Publ. No. 3, 712 pp.).

Submitted by **BRADLEY L. JOHNSTON**, 341 Bells Ferry Road, Rome, Georgia 30161, USA.

CONOPHIS LINEATUS (Road Guarder). MÉXICO, TABASCO: Boca del Cerro, 7 km NW Tenosique (17°24'54.5"N, 91°29'13.2"W), ca. 200 m elev. 26 January 2002. Imelda Madai Castillo Sánchez. Colección de Anfibios y Reptiles de Tabasco, Universidad Juárez Autónoma de Tabasco (CART 00243). Verified by Luis Canseco Márquez. First record for Tabasco and extends the known range of the species ca. 130 km S of the closest known locality near Ciudad del Carmen, Campeche (Lee 1996. The

Amphibians and Reptiles of the Yucatán Peninsula. Cornell Univ. Press, Ithaca, New York. 500 pp.).

Submitted by **ROSARIO BARRAGAN-VÁZQUEZ** (e-mail: barragan@cicea.ujat.mx), **IMELDA MADAI CASTILLO-SÁNCHEZ**, and **JOSE ROBERTO FRIAS-AGUILAR**, División Académica de Ciencias Biológicas, Universidad Juárez Autónoma de Tabasco, Km. 0.5 Carretera Villahermosa-Cárdenas, C.P. 86990, Tabasco, Mexico.

CROTALUS BASILISCUS (Mexican West Coast Rattlesnake). MEXICO: CHIHUAHUA: Agua Salada (27°22'54.1"N, 108°28'8.6"W), 527 m elev. 2 October 2002. Julio A. Lemos-Espinal. Herpetological collection of Unidad de Biología, Tecnología y Prototipos (UBIPRO 10614-15, skins). Verified by Alan de Queiroz. First record for Chihuahua, extending known range ca. 58 km E from Alamos, Sonora (Bogert and Martín del Campo 1956. Bull. Am. Mus. Nat. Hist. 109:1-238; McCranie 1981. Cat. Am. Amph. Rept. 283:1-2; Campbell and Lamar 1989. The Venomous Reptiles of Latin America. Comstock Publ. Assoc., Ithaca, New York. 423 pp.).

Submitted by **JULIO A. LEMOS-ESPINAL**, under Conabio Projects U003, X004 and AE003, Laboratorio de Ecología, UBIPRO, Facultad de Estudios Superiores Iztacala, UNAM, Apartado Postal 314, Avenida de los Barrios s/n, Los Reyes Iztacala, Tlalnepantla, Estado de México, 54090 México (e-mail: lemos@servidor.unam.mx); **DAVID CHISZAR** and **HOBART M. SMITH**, University of Colorado Museum, Boulder, Colorado 80309-0334, USA; e-mail: hsmith@colorado.edu.

DIADOPHIS PUNCTATUS ARNYI (Prairie Ring-necked Snake). USA: OKLAHOMA: PUSHMATAHA Co: 0.8 km N Albion off US 271. 16 September 2003. Z. D. Ramsey. Arkansas State University Museum, Herpetological Collection (ASUMZ 28003). Verified by S. E. Trauth. New county record (Webb 1970. Reptiles of Oklahoma. Univ. Oklahoma Press, Norman, Oklahoma, 370 pp; Secor and Carpenter 1984. Oklahoma Herpetol. Soc. Spec. Publ. 3:1-57; Oklahoma Biological Survey's Distribution of Oklahoma Amphibians and Reptiles by Recorded Sightings, DOKARRS [<http://www.biosurvey.ou.edu/dokasdesc.html>]). Fills distributional gap between previous records from adjoining Atoka, Choctaw, Latimer, LeFlore, McCurtain, and Pittsburg counties.

Submitted by **ZACHARY D. RAMSEY** and **CHRIS T. McALLISTER**, Department of Biology, Texas A&M University-Texarkana, Texarkana, Texas 75505, USA; e-mail: chris.mcallister@tamut.edu.

DIADOPHIS PUNCTATUS ARNYI (Prairie Ring-necked Snake). USA: TEXAS: BROWN Co: Camp Bowie, Texas Army National Guard Training Site, Area 7 (UTM: 0508914 E, 3498486 N). 14 August 2002. James A. Holm and Kristina N. Smyth. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 14035. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

DRYMARCHON COUPERI (Eastern Indigo Snake). USA: Georgia: CLINCH Co: Hwy 84, 0.15 km E of Lanier Co. (30°57'02"N, 82°58'09"W). 13 November 2002. John G. Palis. GMNH 49218. Verified by Elizabeth McGhee. Fresh DOR adult collected at 1715 h. First record for county (Williamson and Moulis 1994. Distribution of Amphibians and Reptiles in Georgia. Savannah Sci. Mus. Spec. Publ. 3:1-712).

Submitted by **JOHN G. PALIS**, P.O. Box 387, Jonesboro, Illinois 62952, USA.

ECHINANTHERA OCCIPITALIS (Spot's Snake): BRAZIL: PARÁ: Município de Santarém (54°42'W and 22°6'S), Cucurunã. September 1996. Museu de Ciência e Tecnologia da Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre (MCP 7643); Curuatinga, 27 October 1996 (MCP 7904), 9 October 1996 (MCP 7912). R. B. Oliveira. All verified by M. Di-Bernardo. The species is known from northeastern Peru, southeast through Bolivia and Paraguay to northern Argentina, Uruguay, and southern Brazil, then northward along the coast to northeastern Brazil (Di-Bernardo 1992. Comun. Mus. Cienc. PUCRS, 5[13]:225-256). It also occurs in the Amazonian region of Rondônia State, and the eastern and southern Pará State (Silva Jr. 1993. Herpetol. Nat. Hist. 1:37-86; Cunha and Nascimento 1993. Bol. Mus. Para. Emílio Goeldi, sér. Zool. 9:1-191; Cunha et al. 1985. Publ. Avul. Mus. Para. Emílio Goeldi 40:9-85). First record from the region of lower Tapajós River, extends the known range ca. 513 km from the area of Carajás, also in Pará (Cunha et al., *op. cit.*).

Submitted by **ALFREDO PEDROSO DOS SANTOS-JR.** (e-mail: alphredojr@hotmail.com) and **THALES DE LEMA** (e-mail: crothales@pucrs.br), Laboratório de Herpetologia, Faculdade de Biociências, Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Av. Ipiranga, 6681 - C.P. 1429, CEP 90619-900, Porto Alegre, Rio Grande do Sul, Brazil.

ELAPHE GUTTATA MEAHLMORUM (Southwestern Ratsnake). USA: TEXAS: BRAZORIA Co: ca. 2.1 road km W of road 2004 on Hwy 36. 14 May 2000. Clay White. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 13617. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

LEPTOTYPHLOPS DULCIS (Plains Threadsnake). USA: TEXAS: WARD Co: Monahans Sandhills State Park, ca. 8 road km E of Monahans, Texas (UTM 0705842 E, 3502508 N). 27 June 2002. James A. Holm. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 14033. Collected in pitfall during 2001-2002 herpetological survey of the park. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

LIOPHIS MARYELLENAE (Cobra d'água). BRAZIL: TOCANTINS: Mateiros municipality: Parque Estadual do Jalapão (10°16'S, 46°50'W). 24 June 2003. Frederico G. R. França. Coleção Herpetológica da Universidade de Brasília (CHUNB 32639). Verified by M. Zats. Northernmost record for the species, previously known from central and southeastern Brazil (Dixon 1985. Proc. Biol. Soc. Washington 98[2]:295–302; Dixon 1987. Ann. Carnegie Mus. 56:173–191; Valdujo and Nogueira 2001. Herpetol. Rev. 32:128–130). First state record, extends range 690 km NW of nearest known locality, Ibicoara, Bahia, NE Brazil (Argôlo 1999. Herpetol. Rev. 30:54).

Submitted by **FREDERICO G. R. FRANÇA**, Departamento de Ecologia, Universidade de Brasília, 70910-900, Brasília, Brazil; e-mail: fredgrf@terra.com.br.

OXYBELIS AENEUS (Narrow-headed Vine Snake, Bejuquilla). COSTA RICA: PUNTARENAS PROVINCE: Cabo Blanco: Refugio Nacional de Vida Silvestre: La Cueva del Murcielago (9°34'08.3"N; 85°06'48.2"W). 27 March 2003. R. A. Hernandez. Department of Herpetology, California Academy of Sciences (CAS-HPV 1, photographic voucher). Verified by Jay M. Savage. First record from the Nicoya Peninsula, Puntarenas Province. Extends the known range (Savage 2002. The Amphibians and Reptiles of Costa Rica, Univ. Chicago Press, Chicago, Illinois. 676 pp.) 60 km W across the Gulf of Nicoya from a record at Playa Jaco (9.616667°N; 84.63333°W), Puntarenas Province and 100 km S from the record at Parque Nacional Palo Verde, Guanacaste Province.

Submitted by **RAYMOND A. HERNANDEZ**, Department of Biology, California State University, Northridge, Northridge, California 91330-8303, USA; e-mail: rah56284@csun.edu.

REGINA SEPTEMVITTATA (Queen Snake). USA: GEORGIA: FLOYD Co: Dozier Creek. 13 April 2003. Bradley L. Johnston. GMNH 49222. Verified by John Jensen. New county record (Williamson and Moulis. 1994. Distribution of Amphibians and Reptiles in Georgia. Savannah Sci. Mus. Spec. Publ. No. 3, 712 pp.).

Submitted by **BRADLEY L. JOHNSTON**, 341 Bells Ferry Road, Rome, Georgia 30161, USA.

RHINOCHILUS LECONTEI TESSELLATUS (Texas Long-nosed Snake). USA: TEXAS: STERLING Co: DOR, ca. 4.8 road km E of Sterling City, Hwy 87. 3 May 2001. James A. Holm, John D. Hanson, and Neal Jetton. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 13585. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

SEMINATRIX PYGAEA (Black Swampsnake). USA: FLORIDA: OKEECHOBEE Co: Northwest 144 Avenue, 4.96 km N of SR 274 (27°30'38.4"N, 80°58'24.3"W). 6 September 2003. James U. Van Dyke. Verified by Kenneth L. Krysko. Florida Museum of Natural History (UF 137766). Adult female captured on the road at 2138 h. New county record (Dowling 1950. Misc. Publ. Mus. Zool.,

Univ. Michigan No. 76. 38 pp.).

Submitted by **JAMES U. VAN DYKE**, Department of Biological Sciences, Florida Institute of Technology, Melbourne, Florida 32901, USA; e-mail: jvandyke@fit.edu.

SIPHLOPHIS COMPRESSUS (Tropical Flat Snake). ECUADOR: CHISPERO: Provincia de Esmeraldas, Cantón Eloy Alfaro (0°47'N, 78°55'W), 190 m elev. 13 March 1998. E. Toral, M. Morales, and A. Ortiz. Universidad San Francisco de Quito (FHGO 1996). Verified by J. Touzet. This is the first record of *Siphlophis compressus* from the western side of the tropical Andes. This species was previously known only from specimens collected at Santa Cecilia in the Amazonian Tropical Forest of Ecuador (Duellman 1978. Univ. Kansas Nat. Hist. Mus. 65:1–135). This specimen extends the known distribution of *S. compressus* 223 km to the west.

Submitted by **EDUARDO TORAL C.** (e-mail: guashote@yahoo.com), **MANUEL MORALES M.** (e-mail: brontotitanotherium@excite.com), and **AIDA ORTIZ P.** (e-mail: vickyortiz19@yahoo.com) Fundación EcoCiencia. Casilla 17–12–257, Quito, Ecuador.

SISTRURUS MILIARIUS MILIARIUS (Carolina Pigmy Rattlesnake). USA: GEORGIA: WILKES Co.: AOR, 16.0 km NE Washington, Georgia Hwy 44. 16 September 1997. Doug Stacks. North Carolina Museum of Natural Sciences (NCSM 58021). Verified by Jeffrey C. Beane. First county record and additional Piedmont record. Partially fills gap between Columbia County record and Fulton County record (Williamson and Moulis 1994. Savannah Sci. Mus. Spec. Publ. 3:1–712).

Submitted by **DENNIS W. HERMAN**, North Carolina Museum of Natural Sciences, 11 West Jones Street, Raleigh, North Carolina 27601-1029, USA.

STORERIA OCCIPITOMACULATA OCCIPITOMACULATA (Northern Red-bellied Snake). USA: KENTUCKY: NELSON Co: Bernheim Experimental Forest, along driveway SE off Pickett's Rd. bordering intermittent tributary of Wilson's Creek, 170 m elev. (37°51.715'N, 85°36.269'W). 4 April 2003. Paul J. Krusling. Thomas More College Herpetology Collection (TMC R261). Verified by Jeffrey G. Davis. New county record based on Meade (1993, Ph.D. Dissertation, University of Southern Mississippi).

Submitted by **PAUL J. KRUSLING**, **ERIC CHAPMAN**, **CARRIE JOHNSON**, **BRIAN KING**, **CHASE RUNYAN**, **SARAH SCHERDER**, **CHRISTOPHER LORENTZ**, **JOHN W. FERNER** (e-mail: john.ferner@thomasmore.edu), Department of Biology, Thomas More College, Crestview Hills, Kentucky 41017, USA, and **JODI P. FERNER**, Honors Program, Northern Kentucky University, Highland Heights, Kentucky 41009, USA.

TANTILLA NIGRICEPS (Plains Black-headed Snake). USA: TEXAS: WARD Co: Monahans Sandhills State Park, ca. 8 road km E of Monahans, Texas. 15 July 2001. James A. Holm. Verified by J. Kelly McCoy. Angelo State University Natural History Collection (ASNHC) 14043. First county record (Dixon 2000. Amphibians and Reptiles of Texas. Second Ed. Univ. of Texas A&M Press, viii + 421 pp.).

Submitted by **JAMES A. HOLM**, 18719 Woodglen Shadows

Drive, Humble, Texas 77346, USA; e-mail: jaz_holm@hotmail.com.

UROMACERINA RICARDINII (Liana Snake). BRAZIL: MINAS GERAIS: Rio Preto Municipality (22°05'21"S, 43°49'40"W). 1991, L. R. de Freitas. Museu Nacional do Rio de Janeiro, Brazil (MNRJ 7078). Verified by Marcos Di-Bernardo. First verified record of this species in the state of Minas Gerais, Brazil (Argôlo 2001. *Herpetol. Rev.* 32:196–197).

Submitted by **SÍRIA LISANDRA DE BARCELOS RIBEIRO**, **FERNANDA MAURER D'AGOSTINI**, and **THALES DE LEMA**, Pontifícia Universidade Católica do Grande do Sul, Laboratório de Herpetologia, Museu de Ciências de Tecnologia e Faculdade de Biociências, Cx. Postal 1429, Av. Ipiranga 6681, Porto Alegre, RS, Brazil, 90619-900; e-mail: siherp@hotmail.com.

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Herpetofauna of Isla de La Plata, Ecuador

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La Plata is a 14.2-km² island situated 27 km from the Ecuadorian coast (01°16'S, 81°06'W). This small island is part of Machalilla National Park, located in Provincia Manabí, and is formed by a volcanic rock base similar to basalt (Tickell 1990). The highest point on the island is 167 m. From December to May, La Plata is characterized by high temperatures and heavy rains, whereas the rest of the year it is dry and cooler. The island vegetation is composed of species typical of Tropical Desertic Thicket (Cuéllar 1991), such as *Cordia lutea*, *Lantana peduncularis*, *Bursera graveolens*, *Capparis flexuosa*, and *Prosopis juliflora*.

The terrestrial herpetofauna of Isla de La Plata comprises three species of lizards and two species of snakes including a new record for Ecuador. These species have been reported for the Ecuadorian western lowlands except for the new snake record (Coloma et al. 2000; Pérez-Santos and Moreno 1990; Torres-Carvajal 2001). Although several species of birds and plants of Isla de La Plata also occur in the Galápagos Islands (Ortiz-Crespo and Agnew 1992; Tickell 1990), none of the species mentioned herein is present in the Galápagos. Fieldwork at Isla de La Plata was conducted in March 1995. In addition, I examined specimens deposited in the Museo de Zoología, Pontificia Universidad Católica del Ecuador, Quito (QCAZ). Luis A. Coloma and Chris Sheil verified the identification of specimens.

Ameiva edracantha. August 1990. A. Carrera, A. Lansdale, and G. Romero. QCAZ 941, 1157; March 1995. M. C. Terán and O. Torres-Carvajal. QCAZ 2847–48; May 1998. X. Cisneros and O. Bastidas. QCAZ 3967. Erroneously reported as *Amevia* sp. by Tickell (1990).

Microlophus occipitalis. August 1990. J. Ashworth. QCAZ 943, 944; August 1990. A. Carrera, A. Lansdale, and G. Romero. QCAZ

1158–60; March 1995. M. C. Terán and O. Torres-Carvajal. QCAZ 2875–77.

Phyllodactylus reissii. August 1990. A. Carrera, A. Lansdale, and G. Romero. QCAZ 942; March 1995. M. C. Terán and O. Torres-Carvajal. QCAZ 2849–51, 2874. Reported as *Phyllodactylus* sp. by Tickell (1990).

Mastigodryas melanolomus. August 1990. A. Carrera, A. Lansdale, and G. Romero. QCAZ 945–46. Erroneously reported as *Liophis albicara* by Tickell (1990) and Núñez et al. (1994). First record for Ecuador; extends range ca. 970 km SW of nearest recorded locality, Ibagué, Departamento Colima, Colombia (Pérez-Santos and Moreno 1988). This new record increases the number of Ecuadorian colubrid snakes to 159 and the number of species of Ecuadorian snakes to 224 (Coloma et al. 2000).

Oxybelis aeneus. August 1990. A. Carrera, A. Lansdale, and G. Romero. QCAZ 947. Reported as *Oxybelis (brevirostris or seneus [lapsus for aeneus])* by Tickell (1990).

Acknowledgments.—I thank INEFAN for permission to collect in Machalilla National Park in 1995. Fieldwork was partially funded by Fundación Natura, Asociación de Escuela de Ciencias Biológicas (PUCE), Asociación de Escuela de Ciencias Exactas y Naturales (PUCE), and INEFAN. I am grateful to Laura Arcos, Luis Coloma, Gerardo Corrales, María Cecilia Terán, Jean-Marc Touzet, Linda Trueb, Carlos Zambrano, and Machalilla National Park personnel and fishermen for their comments and help.

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BOOK REVIEWS

Herpetological Review, 2004, 35(1), 86–87.
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Snakes of Zambia: An Atlas and Field Guide, by Donald G. Broadley, Craig T. Doria, and Jürgen Wigge. 2003. Edition Chimaira, Frankfurt am Main, Germany (distributed in the U.S. by Zoo Book Sales, P.O. Box 405, Lanesboro, Minnesota 55949-0405). Hardcover. 280 pp. ₤ 39.80 (US \$ 49.95). ISBN 3-930612-42-9.

STEPHEN SPAWLS

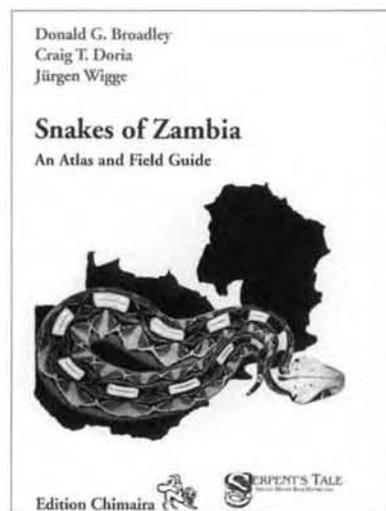
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Zambia was once described to me by a cynical traveller as “a thousand miles of featureless bush, sandwiched between two waterfalls,” although those falls are Africa’s most spectacular, Victoria Falls, on the Zambian/Zimbabwe border, and Africa’s highest, Kalambo Falls, on the Zambian-Tanzanian border. Certainly Zambia is a fairly flat country; most of it lies between 1000 and 1600 m elevation on the south central African plateau, although there is a small area of land over 2000 m in the northeast, in the western foothills of Malawi’s Nyika Plateau. Much of the country is covered by woodland, dominated by *Brachystegia* trees (Miombo woodland) and Mopane (*Colophospermum mopane*), and rainfall is more or less uniform (800–1600 mm annually) throughout the country. However, the country contains some notable conservation areas and important wetlands. Zambia (formerly Northern Rhodesia) is the bridge between the east African and southern African herpetofauna, and an element of the central African forest fauna also occurs there, extending southwards out of the forest into the thick woodland on the Copperbelt and westwards from there along the border with the Democratic Republic of the Congo. The Zambian snake fauna seems somewhat impoverished—89 species or 0.118 species per 1000 km². In comparison, snake species densities for other African countries for which snake faunas are well known include: Uganda (0.402 species/1000 km²), Kenya (0.206 species/1000 km²), Zimbabwe (0.202 species/1000 km²), Tanzania (0.154 species/1000 km²), and Ethiopia (0.083 species/1000 km²).

This handsome book fills an important niche in the documentation of the African herpetofauna; a task that is only just getting underway. Previously, little was available dealing directly with Zambian reptiles, save Pitman’s speculative checklist (1934), Desmond Vesey-Fitzgerald’s enjoyable anecdotal paper on his



experiences while based at Abercorn, now Mbala, in northern Zambia (1958), and Wilson’s 1965 paper on a big snake collection from eastern Zambia. In 1971 Don Broadley authored what remains the only comprehensive checklist of the reptiles and amphibians of Zambia (Broadley 1971), listing 74 species of snake, and in 1990 Don made a definitive collecting trip to the Mwinilunga area, a small projection extending up into the southern Democratic Republic of the Congo (Broadley 1991), this trip added several new species to the Zambian total. The relevant literature is rounded out by two small locally produced books, one dealing chiefly with common fishes, amphibians, and reptiles (Simbotwe and Mubamba 1993), and another on the snakes of Luangwa Valley (Doria and Nyirenda 1995). Doria, a game ranger in the Luangwa Valley Reserve in Zambia and Wigge, a medical doctor working in Zambia at the time, had the original idea for the volume under review here. They recruited Don Broadley for his systematic expertise and the book is largely the result of his efforts and is stamped with his customary thoroughness and scholarly professionalism.

The book opens with a table of contents (listing all species), a preface, and six pages on “The Zambian Environment,” four pages of which are occupied by eight half-page color plates showing Zambian habitats. The text of this last section includes some brief zoogeographical data, mentioning the central African influence and the montane species found on the Nyika Plateau. Interestingly, none of the habitat plates shows a single hill, indicating the flatness of the Zambian landscape. There follows a map of Zambia showing provinces and important localities, ten pages of snake biology, a systematic list (which more or less duplicates the table of contents) and ten pages of keys. The description of the 89 known Zambian snake species occupies the bulk of the book (195 pages). This section includes 162 pictures, all half-page and nearly all color, illustrating 77 species. Each species description opens with a short summary paragraph followed by information presented under the headings: Description, Size, Colour, Distribution and Preferred Habitat, Field Notes, and Comments. For a number of species, especially the dangerous ones, this final section contains some remarkable and enjoyable anecdotes about the snakes, many contributed by Craig Doria, who as a wildlife professional in the Luangwa (one of Africa’s most spectacular national parks), had regular close encounters with snakes. I particularly enjoyed the story on page 123 of how a Zambian game scout spat back at a Mozambique spitting cobra and was delighted to find out that the supposed “call” of the black mamba is actually that of the Pigmy Rail. There are some elegant turns of phrase, for example “The large elapids are the kings of African snakes, and ... have an intelligent presence when encountered...” (p. 98). Accompanying most of the descriptions (53 of 89) is a set of three line drawings showing the head scales of the species from above, below, and in profile, in the style popularized by V.F.M. FitzSimons.

The book concludes with a 21-page section on snakebite (venoms, antivenoms, notes on individual venomous Zambian snakes and case history details, avoiding snakebite, first aid, medical treatment and use of antivenom), a seven-page bibliography, a two-page glossary, and two somewhat repetitive indices, one of scientific and vernacular names in that order and the other in the reverse order. The back cover is graced by photographs of the three authors. I was greatly pleased to see the one of Don Broadley, one of Africa’s most prolific herpetologists but also one its most mod-

est; a published photograph of him is as rare as some of the snakes described in this book.

The book itself is well-written and very nicely produced. It is strongly bound, with good firm covers, and printed on glossy paper. As is usual with Chimaira publications, the photographic coverage is generous, with over 170 half-page color plates. Taken by a variety of photographers, the plates are astonishing. There are snakes here never before illustrated in color, or indeed in any form—animals like *Prosymna angolensis*, *Duberria shirana*, *Grayia ornata*, and *Natriciteres bipostocularis*. There are also color phases that I have never seen before, such as a vivid rufous *Dasypeltis scabra*, a green *Thrasops jacksoni*, a blue-and-orange barred *Philothamnus semivariegatus*, a startling color phase of *Boulengerina annulata* from Stanley Pool, and a curiously dark *Rhamphiophis rostratus*. The last of these is a species I have collected at opposite ends of its range, in Kenya and Botswana, and neither looked anything like the specimen shown here.

The book has a few shortcomings. I am a great believer in the adage "Something is better than nothing," and would rather see a poor picture of a previously unknown animal than nothing at all. In general, too, the quality of illustrations in this book is high, but there are a number which are rather poor. This is acceptable where there is no alternative, but, for example, in the illustration of the *Amblyodipsas ventrimaculatus* (p. 85), the head is out of focus and Don himself has a better picture in his "Snakes of Zimbabwe" (Broadley and Cock 1982). There are also better pictures available of the Bark Snake, *Hemirhagerrhis nototaenia*, than the soft-focus one on page 153. Many of the snakes illustrated are obviously dead, particularly those photographed by Woody Cotterill. These photos were taken on Broadley's expedition to Mwinilunga and the explanation behind them is a story typical of Africa. Don and Woody were crossing the Zambezi Valley and most of these snakes were alive when their Landrover broke down. The snakes died in the intense heat forcing Woody to hurriedly photograph them before Don preserved them by the side of the road.

The picture choice seems overindulgent in places, there are four pictures of *Bitis nasicornis*, a snake of doubtful occurrence in Zambia, and four Puff Adder pictures, none of which were taken in Zambia; a photograph of a Zambian specimen of this common species should have been available. In fact, of the 162 snake pictures, only 61 were actually taken in Zambia, with many of the rest from surrounding countries. The color in some of the pictures is startlingly different to the color of the same pictures as used in "Snakes of Zimbabwe." For example, the Snouted Night Adder (p. 64) is lying on a piece of blue cloth; in the same photograph in the Zimbabwe book the cloth is gray!

There are a few typos and minor errors in the text and some room for additional information. The descriptions of all the species run on without any generic introductions. I felt that a few of the pictures could have been dropped in favor of such accounts, which could give an overview of the genus. A gazetteer would also have been useful to find important localities like Mpulungu, Isombu Stream, and Isoka. Figure 56 is a *Dasypeltis scabra*, not a *Thelotornis*, and I laughed to find *Hemirhagerrhis* (admittedly a difficult name) spelled three different ways on pages 152 and 153, as Don Broadley and Barry Hughes have chided me in print for misspelling this same name (Broadley and Hughes 2000)! There are some odd common names in this book. For example, the au-

thors call *Rhamnophis aethiopiassa* the "Splendid Dagger-tooth Tree Snake," a magnificent name but myself and colleagues (Spawls et al. 2001) and Pitman (1974) have called it Large-eyed Green Tree-snake, I don't see any benefit in changing it; the epithet "Splendid" doesn't convey anything specific and a lay observer doesn't see the dagger-like teeth. I like common names, they make the subjects accessible to the layperson. I have coined a few myself, but I feel that they should convey something about the animal, and if a well-used common name exists, it is worth sticking to it (Spawls et al. 2002:27). The pictures in this book (which is what a layperson looks at first) are labelled with scientific names only, making cross referencing with the relevant text more difficult for non-specialists than it need be.

But these are minor criticisms and do not detract from the importance of this sound and professional work. This is a book that all Zambian naturalists will want, as well as all herpetologists interested in Africa. It will raise the profile of the Zambian herpetofauna and, as I never tire of saying, if anything will help save and protect Africa's wonderful and yet severely threatened flora, fauna, and wild places, it is the emergence of enthusiastic local naturalists who feel that the preservation of such things is worthwhile; books like this will help nurture their enthusiasm. The authors and the publisher deserve credit for making this information available in a popular form. I only hope the book will be available in Zambia.

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Erratum

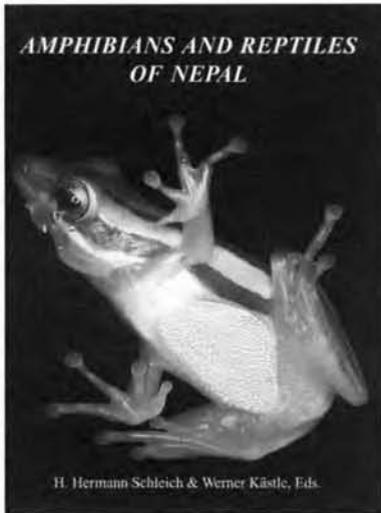
The captions accompanying photolithographs of *Corallus caninus* by Will Brown in the last issue of HR (34:331) were reversed. Thus, the uppermost figure depicts an Amazonian Basin snake, while the lower figure is that of a snake from Guyana.

Amphibians and Reptiles of Nepal: Biology, Systematics, Field Guide, edited by H. Hermann Schleich and Werner Kästle. 2002. A.R.G. Gantner Verlag, Ruggell (distributed by Koeltz Scientific Books: koeltz@t-online.de). [2], x + 1201 pp. Hardcover. € 149.00 (US \$174.00). ISBN 3-904144-79-0.

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Amphibians and Reptiles of Nepal (A&R of N) joins the growing list of field guides, photographic atlases, and natural histories of the Asian herpetofauna. It is a totally different book from any of the other recent volumes on Asian herps, matching—actually exceeding—Zhao and Adler's *Herpetology of China* (1993) in total pagination. Weighing in at 2+ kg, it is a field guide for the laboratory or reading desk, certainly not for the backpack



in Nepal's mostly vertical countryside. But Schleich and Kästle were not attempting to provide a guide for the hip pocket or backpack. Their goal was "to compile a summary of today's knowledge on Nepalese amphibians and reptiles." They have succeeded.

Of course, no book of this size and with multiple authors is without some shortcomings. In this case one problem is that the weight of the pages breaks the binding with minimal use. Others will be identified as I examine the different features of *A&R of N*, and I will also offer a few reviewer's laments expressing my desire for some things to have been done differently.

The herpetofauna of Nepal is modest, totaling 52 amphibian and 125 reptilian species (data from *A&R of N*): one salamander, one caecilian, 50 frogs, two crocodylians, 15 turtles, 39 lizards, and 69 snakes. The low diversity of the herpetofauna is not unexpected owing to Nepal's small size (140,400 km²) and its mountainous landscape with a significant portion climatically unsuitable for herps. The editors note that only 3.17% of Nepal is habitable for amphibians and reptiles. While this precision of habitable area seems overstated and an underestimate (perhaps 31.7%?), the herpetofaunal Lebensraum is small. Nepal consists of a series of east-west stepwise bands of habitat, each of increasing elevation. The terai grasslands are shared with India. Next is a series of low hills that create multiple narrow valleys with a mixture of grasslands and dry evergreen forests. This is followed by a mountain range extending upward to about 2000 m; these mountains form the southern edge of the broad fertile midlands, formerly mainly forested and now largely farmed, with the mountains of the Fore

Himalaya (2500–4000 m elevation) on their northern edge. Northward and upward of the Fore Himalaya is the Great Himalaya with landscapes largely inhospitable to herps. The habitable area for herps is also habitable for people and much of it has experienced human usage for hundreds of years. The impact has been increasing steadily since the end of World War II, with expanding human populations in the terai to midland areas because of malarial control and the immigration of Indian farmers. Trekkers arrived in the 1970s and as their numbers increased so did the demand for wildlife and forest resources. The Nepalese government and local conservation organizations recognized the situation and initiated programs to preserve habitats that accommodated the needs of residents and visitors. Even though the programs are not totally successful, they have preserved "wilderness" habitats for much of the wildlife. Preserves, such as the Royal Chitwan National Park, provide habitats for tigers, rhinoceros, and the recently described endemic *Rana chitwanensis*.

More species certainly will be discovered and the diversity of the Nepalese herpetofauna increased further. Two new agamid lizards are described in *A&R of N* and a few frogs and lizards are labeled as unknowns in the photographic plates. It was in Nepal that Alain Dubois recognized the complexities of the *Fejervarya limnocharis* complex; he found three species (*F. pierrei*, *F. syhadrenis*, *F. teraiensis*), two of them new, sympatric in the terai of central Nepal. Multiple Nepalese species likely hide today under a single name in other groups of amphibians and reptiles. In their advice to critics (= reviewers) paragraph, the editors identified four genera, e.g., *Calotes* and *Orioliaris*, that contain more species than currently recognized. This phenomenon is probably common for most of the widespread South Asian species, because few systematists have examined local and regional variation in Asian species, and those that have quickly recognize a high level of regional speciation. A good example is Wüster's recognition of multiple species of *Naja* in South and Southeast Asia. It is our growing knowledge of the Asian herpetofauna and the expanding literature on this fauna that makes *A&R of N* useful. In addition to summarizing our current knowledge, it serves as a benchmark to assist our decisions on conservation and research priorities.

A&R of N follows the organization of the earlier compendium on the herpetofauna of North Africa by Schleich, Kabisch and Kästle (1995). With that volume, it shares many organizational features, the page layout, color plate quality and formatting, and publisher. The Nepalese volume, however, offers more topics, although similar treatment of the subject matter within the shared topical chapters. This volume also has a broader authorship; 12 authors are identified although I could match only eleven authors with chapters. Authorship is listed only at the beginning of each chapter and not all chapters have their authors identified. The chapters or sections and their authors are: 1) Introduction (authorship unidentified, presumably H. H. Schleich and W. Kästle); 2) The Environment (presumably Schleich and Kästle); 3) Amphibians and reptiles in Nepalese culture and economy (Karan B. Shah); 4) Snakebite avoidance and medical treatment (Klaus Kabisch); 5) Nepal's herpetofauna on a razor's edge between threat and conservation (Tirtha Maskey, Schleich and Kästle); 6) Species list with annotations (Schleich, Christiane Anders and Kästle); 7) Zoogeography of Nepalese amphibians and reptiles (Kästle, Schleich, Indraneil Das and Anders); 8) Special part - Detailed information

on Nepalese amphibians and reptiles (multiple sections devoted to accounts of the families, genera, and species of the herpetofauna). This section is multi-authored: Amphibia (C. Anders); Crocodylia (Maskey and Schleich); Testudines (Schleich and Kästle); lizards (Kästle, except *Draco* [Kalu Ram Rai], *Oriotaridasi* n. sp. [Shah and Kästle], *Sitana schleichi* n. sp. [Anders and Kästle], Scincidae [Valery Eremchenkoe]; Serpentes (multiple authors: Boidae including *Python* [Kabisch], Colubridae [Ulrich Gruber], *Coelognathus* and *Elaphe* [Notker Helfenberger], *Elachistodon westermanni* [Das], *Oligodon kheriensis* [Schleich and Kästle], Elapidae, Typhlopidae & Viperidae [Kabisch]); 9) Supplements (= Appendices); 10) Abbreviations and scientific terminology; 11) Literature references; 12) References for text figures; 13) Species index (with nine subsections). Andreas Diener is the listed author without chapter identification. Clearly, the contributions of Kästle and Schleich to this volume are substantial.

The substance of *A&R of N* begins with the second chapter "The Environment" (Note: the numbering of the chapters/sections is mine, not the editors'). This gives a concise introduction to landforms, climate, and life zones; it is not overly detailed but definitely adequate for those unfamiliar with Nepal. The third chapter offers a fascinating and brief introduction to herps in Nepalese religions and legends. It also provides an explanation of the various uses of amphibians and reptiles for medicine and food. The fourth chapter provides an overview of snakebite in South Asia with a focus on Nepal. It contains much information in a compressed presentation. I was surprised to discover that Russell's vipers were not implicated in any Nepal bite incidents, and that cobra and krait bites predominate; in contrast, Russell's vipers are responsible for the greatest number of bites and fatalities in the neighboring Indian state of Uttar Pradesh. This chapter also provides detailed first aid treatments for snakebite; this information is both unnecessary and dated (e.g., including cut and suction). The Nepalese audience requiring this information will not have access to this book and would potentially be harmed by some of the advice. The fifth chapter examines the conservation of Nepalese herps; while a broad brush review of the current situation, it contains a good history of conservation in Nepal and addresses both local use and trade in amphibians and reptiles.

The sixth chapter is "Species list with annotations." The annotations largely address distributional data and species misidentifications. These observations could have easily been incorporated in chapter eight, the taxonomic accounts. Zoogeography is the topic of Chapter 7. The presentation is mainly tabular, e.g., number of species in Nepal and adjacent countries, by elevation, by longitude, and so forth. This manner of presentation affords the reader a variety of distributional tidbits on each species or groups of species, although these factoids are more ecological than biogeographical. The authors begin their "biogeographic" discussion with an examination of centers of radiation for genera, each of which is implicitly accepted as a clade. The centers are subregions of biogeographic regions or realms that are explained in a subsequent section on distributional patterns. It is not clear in the centers or distributional sections how or why a species or genus is assigned to a zoogeographic subregion. The biogeographical analysis is descriptive and based on the *a priori* assignment of species to subregions, resulting in a chapter informative at a most general level.

Chapter 8 is the field guide portion of *A&R of N*. It is also the most extensive section of the book, totaling 915 pages. These pages are packed with information derived from the literature and recent fieldwork, and it is a section to be mined for natural history information on Asian species. It is also a chapter that frustrates me greatly because of data truncation. However, before outlining my frustrations, I must summarize the general organization of this section for readers unfamiliar with the earlier compendium on North African herpetology. Each group (class, order, family, etc.) contains a key if the group is not monotypic for Nepal. Each species account consists of up to 10 major sections (etymology, synonymy and vernacular names, identification, ecology and general behavior, reproduction, geographic range, systematics, subspecies, notes, references); the identification, ecology, and reproduction sections are further subdivided. Each of the higher categories has fewer sections and is notably brief. Page layout is double column; the right column is double the size of the left and is reserved mainly for text, the left column for figures. This page layout works well for the field guide portion where figures occupy most of the right column but is much less effective elsewhere where one third of each page is blank for many consecutive pages.

Text figures are black and white line drawings, functionally and, in most cases, attractively rendered. An idiosyncrasy of the Schleich and Kästle compendia is that each page begins with a new Figure 1, thus there are hundreds of Figure 1s, tens of Figure 2s, and declining numbers of Figure 3 and beyond (15 figures on a single page appears to be the high). Legends are succinct and sufficient; they do, however, lack source information. That information is available in the "References for text figures" in the rear of the book. Schleich and Kästle have borrowed broadly from the herpetological literature and created many new illustrations. Each species commendably has its own spot distribution map, and each map is covered with a grid overlay. An additional and useful feature of the maps is that a smaller South Asian map lies below the Nepal map and displays the total Asian distribution of the species. Equally commendable, each spot can be identified by its position on the grid and reference to the alphabetical list of localities in the "Supplement" chapter. Additionally, the first section of the "Supplement" has a list of localities for each species. I applaud the editors on this much attention to mapping and providing the details on species occurrences and the localities. In spite of this massive effort, however, there is a problem that makes the distributional data less reliable or verifiable than it might be. The locality information, aside from that derived from the literature, may or may not be based on voucher specimens. Further, the editors provide no evidence that they checked the holdings of the world's major museums for locality data.

The textual sections of each account are overall data dense but with peculiar lapses. More attention is directed at the etymology of the scientific name and at vernacular names than at the synonymies. Each of the few synonymies checked (I used frogs because of the convenience and currency of Frost's *Amphibian Species of the World* website: <http://research.amnh.org/herpetology/amphibia/index.html>) lacked one or more primary synonyms. I did not locate an editorial statement that the synonymies were intentionally incomplete. The Identification (= Description) sections contain a broad range of characteristics and these are conveniently arranged in subsections. The presentation is also consistent within genera

and generally within major groups, thereby permitting a ready comparison between congeners. I find fault with two aspects of the Identification. First, it appears that much of the data therein is a composite from throughout the range of the entire species; this fault is particularly unfortunate because widespread Asian species are likely complexes and a summary of the traits in Nepal populations would have been most valuable. Second, the measurement section most commonly presents a maximum length of a male and of a female. Means and ranges are much preferable and should be derived from adult animals only. I also protest the use of only total lengths for snakes. I suspect that if I had a stronger ecological or behavioral interest that I would find similar faults with those sections; however, in my defense and as a commendation to Schleich and Kästle, the amount of information and its methodical organization for these topical areas far exceed that available in similar books.

I did not test the identification keys. They are laudably based solely on external morphology and, in most instances, on traits that can be counted, measured, or differentiated by naked eye and hand lens. Taxonomy and nomenclatural usage are variable in recency and explanation. Part of this variation results, I believe, from the asynchronous completion of the various taxonomic groups as well as the taxonomic inclinations of different authors. Based on the literature cited, some parts may have been completed in late 2000, others in late 1998 or early 1999. For example, the *limnocharis* complex of frogs is now widely placed in the genus *Fejervarya* not *Limnonectes*; the placement of some snake-eyed skinks in *Asymblepharus* has not yet gained wide acceptance (outside the former Soviet Union); and the elevation of the small bodied *Kachuga* subgenus *Pangshura* had not yet been published when *A&R of N* appeared; *Python* is considered a boid with no indication that the author is aware of literature addressing the differences of pythonids and boids.

A set of 127 tripartite photographic color plates separate the amphibian and reptilian taxonomic accounts. Many species are depicted with two or more images. The images at 5.5 x 10 cm are sufficiently large to reveal identification characteristics. Multiple images display variation in color and different aspects of the animals. The quality of the images is generally good, and a significant portion derive from Nepal specimens. As for the Identification section, use of Nepal individuals and samples increases the book's usefulness to those of us who study herps in other parts of Asia. Similarly, I find the habitat and the local consumption-trade images instructive.

The final sections of *A&R of N* include appendices, a bibliography, and indices. I noted earlier the presence of distributional and geographic data in the appendices. The final appendix is a glossary of scientific terms used in the text. The bibliography is extensive, reflecting the broad search of the herpetological literature for information on Nepal amphibians and reptiles. The species or taxonomic index consists of two parts, one arranged as a classification and the second alphabetically. These two include pagination references. The final three indices give Nepali, English, and German vernacular names for the Nepal herpetofauna. Although I am not a strong advocate of vernacular/common names, these indices will be a useful resource for many readers.

An ultimate question must be asked of a book of this size: Is it too large, or rather, did the editors/authors attempt too much? For

me, the answer is yes! Multiple, smaller, topically more detailed and focused books would have better served the herpetological and other biological communities. The size of *A&R of N* will prevent most users from taking it into the field. Its cost, while reasonable at 12.5¢ per page, places it out of reach of many biologists and certainly for most Asian ones. Most academic libraries similarly cannot afford to purchase *A&R of N*, so despite its usefulness, its information will be unavailable to the majority of its intended audience. Another fault of attempting to cover all topics in a single volume is that the individual coverage of each topic becomes more superficial, as noted above.

When initially requested to review *A&R of N*, I thought that a comparison with Tej Kumar Shrestha's (2001) recent *Herpetology of Nepal: A Study of Amphibians and Reptiles of Trans-Himalayan Region of Nepal, India, Pakistan and Bhutan* would be useful. Alas, my attempts to find a bookseller who has a copy of the latter have shown that such sellers are as elusive as the yeti. *A&R of N*, in contrast, is readily available. If you have serious interest in the Asian herpetofauna, you should have a copy nearby on your bookshelf.

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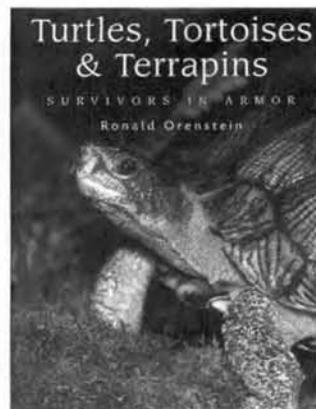
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Turtles, Tortoises & Terrapins: Survivors in Armor, by Ronald Orenstein. 2001. Firefly Books Ltd., 4 Daybreak Lane, Westport, Connecticut 06880-2157, USA (e-mail: service@fireflybooks.com). xi + 304 pp. Hardcover. US \$45.00. ISBN 1-55209-605-X.

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Chelonians have been treated in many field guides, faunal works, taxonomic monographs, and pet care manuals, but relatively few books in English have considered "turtles for turtle's sake." Some notable exceptions include the popular works by Obst (1986) and Lehrer (1990). Orenstein's comment: "I have written this book because turtles amaze me" is evidence that this is another such book. Indeed, it was written to help



the reader to see chelonians as exceptional and unique animals with specific conservation needs. Although the author is primarily a wildlife conservationist and lobbyist, and not a herpetologist, the combination of his passion for turtles ("I have become not just an admirer of turtles but one of their advocates") and his use of knowledgeable consulting editors (Jeanne Mortimer, George Zug, and Peter Pritchard) has resulted in a well-written and accurate text.

The book begins with "The Essential Turtle," an account of the morphology and physiology of turtles, with a particular focus on the shell and its relationship biological functions, such as respiration. Terms potentially unfamiliar to the novice, such as carapace and endochondral bone, are highlighted in italics and many of the terms and concepts are illustrated by photos. Chapter 2, "Turtles In Time," is a review of both the current thoughts on the evolutionary origins of chelonians as well as the history of these thoughts and how we have come to our current understanding. This chapter is illustrated chiefly by color reconstructions of early chelonians. Charts depicting the temporal relationships of various chelonian ancestors and relatives complement the text. This is followed by two chapters ("Turtles Around the World I & II") presenting an overview of family-level diversity of modern turtles. Familial characteristics are described and illustrated and most genera are mentioned and represented by at least one photo.

Chapters 5-7 cover a diversity of issues in chelonian biology, with an emphasis on terrestrial and freshwater species. "Under the Hood" reviews physiology, with an emphasis on topics such as freeze tolerance, hydration requirements, diving abilities, skin surface gas exchange, and circulatory physiology. "Life as a Turtle" outlines major topics in life history and ecology including life span, intelligence, daily and seasonal activity cycles, orientation, food and feeding specializations, habitat specialization, predators, and ecological roles of turtles. Development, egg output, courtship, sex determination mechanisms, nesting area selection, hatching and hatchlings, and the first season of activity are discussed in "Twixt Plated Decks" (a title derived from Ogden Nashe's poem "The Turtle"). A separate chapter, "The Endless Journey," deals specifically with the biology of sea turtles. The last two chapters of the book, "Peril on Land" and "Peril at Sea" document human-related causes of chelonian declines for freshwater and terrestrial forms and marine species, respectively.

I noted few errors in the text and these were limited chiefly to misplaced words. For example, on page 155: "Since animals cannot digest the cellulose in plants, many *plants* enlist the help of cellulose digesting bacteria." In addition there are a few layout inconsistencies. As a result the second page of the preface ("Why Turtles Matter") bears the header for Chapter 1, "The Essential Turtle." Likewise, the header for the chapter "Peril at Sea" runs into the Bibliography, Index, and Photo Credits sections, where it is either printed above those section's headers or replaces them.

It is clear that the author intended the book to be authoritative and, consequently, the research of many individuals is noted in the text. However, because the book was not intended for a technical audience, there are many cases in which there is no formal citation of the particular publications being referenced. For example, there is no bibliographic entry for a paper by Spotila et al. published in *Nature* in 2000, which is cited on page 277. In some cases it is not possible to determine if the author or one of the

consulting editors is relating a personal observation, referring to unpublished work, or to uncited published works. However, all individuals whose work is cited in the text but not listed in the bibliography appear as entries in the index, along with scientific and common names, place names, other animal and plant names, and key anatomical and biological terms.

Illustrations are essential to the author's goal of generating an appreciation for turtles and their diversity. In all there are 303 color photographs (with an additional five on the dust jacket), 12 color illustrations, five black and white photographs, and three black and white illustrations. Seven range maps present distributions at the family level. All of the photos are of high quality and are well reproduced but many seemingly intended to show the whole animal have a foot, tail, or part of the carapace cropped off. Although no photos are duplicated within the book some Australian turtles can be recognized as the same subject animals figured in John Cann's (1998) *Australian Freshwater Turtles*.

With few exceptions, the animals are correctly identified. However, there are some corrections that should be noted: It appears that on page 19 the photos or text have been reversed, the animal on the left is the common snapping turtle, the animal on the right is the helmeted terrapin. The close-up head photo on page 58 is of a *Phrynops* sp., not the giant arrau, *Podocnemis expansa*. The softshell turtle on page 70 clearly shows septal ridges in the nostrils which would indicate this individual as a spiny softshell, *Apalone spinifera*, not a smooth softshell, *Apalone mutica*. The single basking turtle to the mid left on page 115 is a Florida cooter, *Chrysemys floridana*. The Japanese turtle depicted on page 139 more closely resembles *Geoemyda japonica* than *Mauremys japonica*. The upper right photo in the group of four illustrations on page 179 is a *Trachemys concinna*, not *T. scripta*.

While virtually all the photos show typical "wild type" specimens, those of a Chaco tortoise (p. 107) and a Central Asian tortoise (p. 239) exhibit the uneven shell growth associated with captive care. Although most of the photos clearly illustrate key features of the turtles they depict, two different photos of the pancake tortoise (Chapters 2 and 4) show an animal awkwardly posed in someone's hands and, despite their captions, do not show this species' adaptation to rock crevice occupation.

While *Turtles, Tortoises & Terrapins: Survivors in Armor* is not a technical or reference work by any stretch of the imagination, it would serve as an excellent tool for the basic education of many people for whom an understanding and appreciation of turtles would be beneficial. Among this potential audience are conservation policy makers, state and federal wildlife personnel, and public relations personnel with conservation organizations. Hobbyists seeking more than pet care information will find this book a great addition to their library as will non turtle-oriented herpetologists or animal health care professionals.

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The Turtles of Russia and Other Ex-Soviet Republics (Former Soviet Union), by Sergius L. Kuzmin. 2002. Edition Chimaira, Frankfurt am Main (www.chimaira.de; or available from Zoo Book Sales, P.O. Box 405, Lanesboro, Minnesota 55949, USA; www.zoobooksales.com). 159 pp. Hardcover. 34.80 € (US \$39.95). ISBN 3-930612-58-5.

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To characterize the chelonians of the former Soviet Union (FSU) as underrepresented in English language literature would be a gross understatement. A major reason for this is that the massive Eurasian landmass is largely unsuited for this order, yielding low chelonian species richness (Iverson 1992). General works (e.g., Pritchard 1979) have provided some coverage of turtles in the FSU, but these have been largely cursory. In light of the conservation concerns surrounding Asian chelonians, this information-packed octavo volume is particularly welcome and should be considered essential reading for those working with the chelonian species of this area, as well as those with even a passing interest in the subject.

The last significant work in English on the chelonians of the FSU appeared more than 40 years ago and was itself a translation of a much earlier work (Nikol'skii 1915). Although a number of minor works in Russian have been published in the interim, this volume is the first complete modern analysis of turtles of the FSU. Kuzmin is primarily known for his work on amphibians and here he has followed the template of his successful *The Amphibians of the Former Soviet Union* (Kuzmin 1999), bringing a unique perspective to the turtles of this politically and culturally diverse region and integrating his own research with past and present Russian research data previously unavailable in English.

Individual accounts for seven widely distributed species comprise two thirds of the book (105 pages). These provide a wealth of information on morphology, differentiation of subspecies, distribution, habitats, habits, parasites, natural enemies, abundance, activity, reproduction, diet, parasites, physiology, and fossil occurrences. For a book of this size to devote such a considerable amount of space to just seven species is astounding. Nikol'skii (1963) used only 30 pages for the ten chelonians he discussed in a similar area. Most other regional works also offer only a few pages per species (e.g., Das 1991 with 84 pages covering 33 species of the Indian Subcontinent; Lim and Das 1999 with 100 pages covering 25 species in Malaysia). Excluding the marine turtles, which

lack wide distribution in this region and account for only nine pages with a combined range map, the individual accounts are generous and comprehensive with page counts ranging from eight (*Mauremys caspica*) to 29 (*Emys orbicularis*).

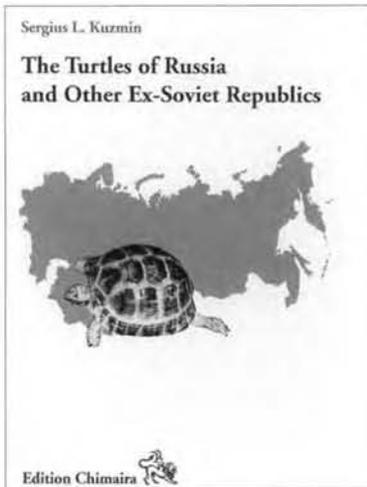
Sections on morphology, adaptation, and classification are very general in nature, differing little from those found in other, similar works. The balance of the book, however, is quite distinctive. One section deals with the history of chelonian herpetology in the FSU beginning with the work of Peter Simon Pallas in the 18th century. This information complements the author's recent review of the amphibians described by Pallas (Kuzmin 1997). Also of note are introductory sections on ethnozoology and zooarchaeology and the extensive data presented on captive care, anthropogenic pressures, commercial exploitation, and conservation topics.

The simple, but effectively designed pictorial boards appear to be quite sound and durable. The photos of the Russian tortoise on the front and habitat on the reverse are a prelude to the diverse and useful contents. The text layout is clear and organized in a convenient format on glossy paper. It is printed in a small, but readable font with well-reproduced photos, tables, maps, and figures. The 159 pages include three tables and 85 figures, including 76 photographs (67 of which are in color) that illustrate the morphology, coloration, and habitat of the seven species included in the book. Six range maps and several line drawings make up the remaining figures. Two of the three tables deal with egg data while the last identifies chelonian localities in nature reserves of the FSU. The book concludes with a comprehensive bibliography of 161 references, the majority in Russian.

The book could have been improved considerably by a capable English translator or editor. Scarcely a page can be read without encountering English irregularities, beginning with the acknowledgments (p. 6; "I thank...for their informations") and continuing throughout the text (e.g., p. 63; "the animals enter the land and spend many hours basking"). The inclusion of an index would also have greatly increased the serviceability of this work. Despite these relatively minor faults, this is a useful volume for both conservationists and hobbyists. The color photos alone justify the purchase price and shelf space for any chelonian bibliophile or researcher. The clear and concise format and wealth of previously inaccessible data reinforces this opinion. I highly recommend this work as an indispensable treatise for all those interested in turtles and tortoises of the FSU and congratulate Dr. Kuzmin and Chimaira for a timely and well-executed production.

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Non-Erycine Booidea from the Oligocene and Miocene of Europe, by Zbigniew Szyndlar and Jean-Claude Rage. 2003. Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Kraków, Poland (www.isez.pan.krakow.pl). 109 pp. Softcover. ISBN 83-919407-0-5.

This monograph reviews the fossil booid snakes (with the exception of members of the Erycinae) known from 38 middle Oligocene to middle Miocene (25–7 MY) sites in eight European countries from Portugal to Austria and the Czech Republic. The majority of the material is derived from France and Germany, however, and includes representatives of the Boinae, Tropidophiidae, and Pythoninae. The bulk of the work is devoted to descriptions and systematic accounts, including the descriptions of many new species and a new genus, each illustrated by vertebrae and other skeletal structures. This is followed by an overview of the history of the European Booidea during the period and a consideration of factors leading to the extinction of the non-erycine booids in Europe in the middle Miocene. A literature cited section of more than 150 references completes this thorough treatment of fossil European snakes. This contribution should be of interest to paleoherpetologists as well as snake systematists and those interested in historical biogeography.

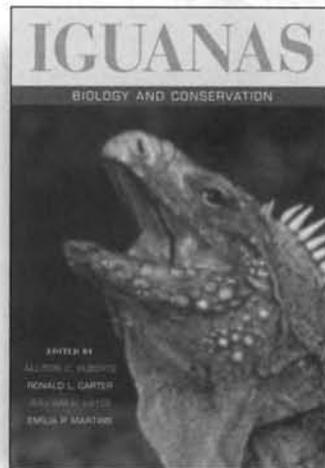
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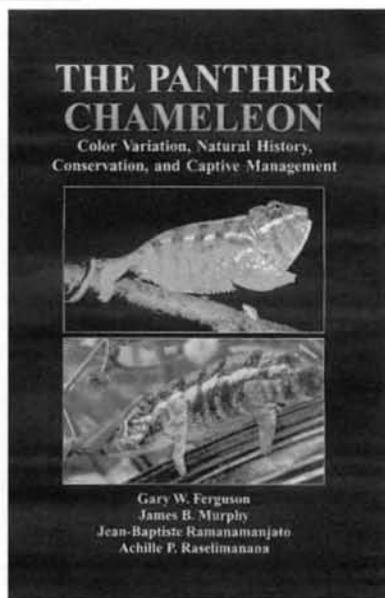


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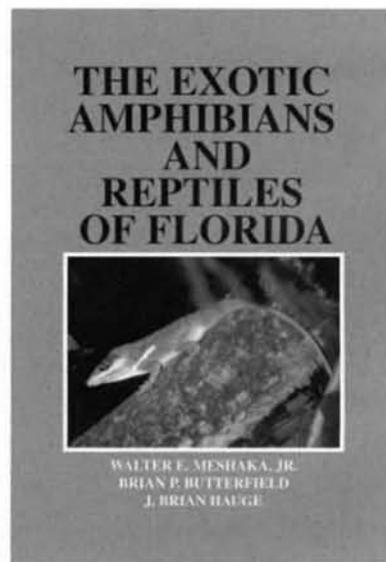
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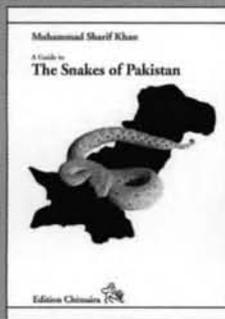
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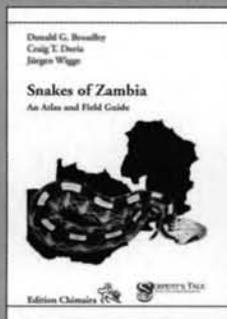
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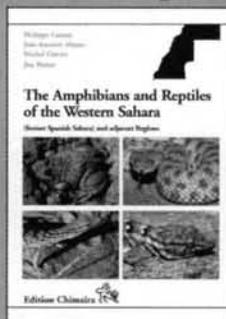
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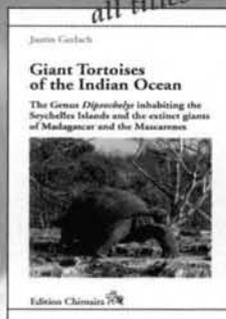
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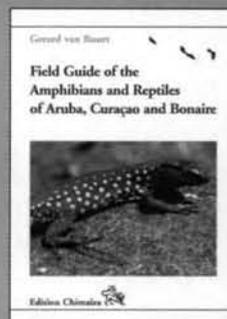
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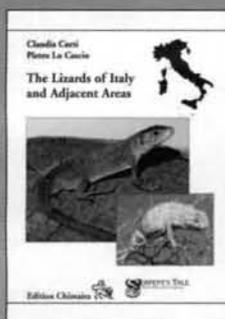
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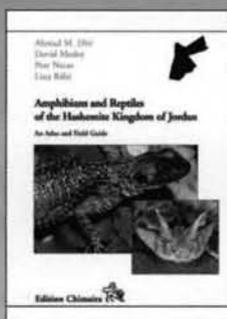
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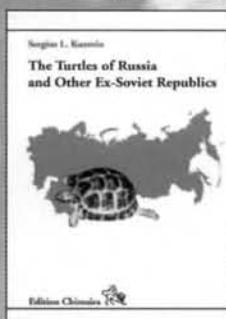
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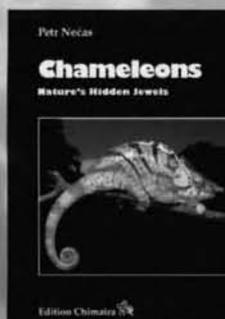
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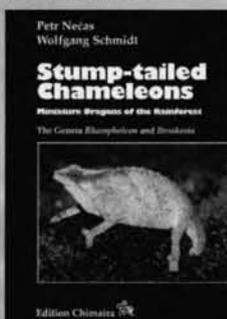
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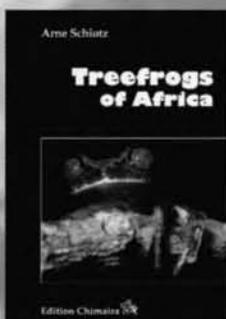
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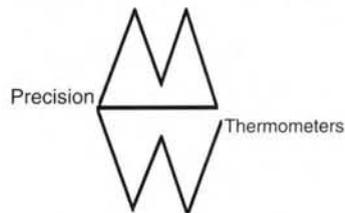
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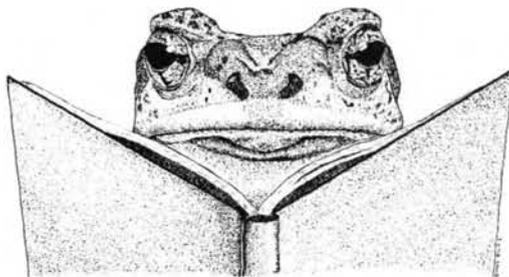
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