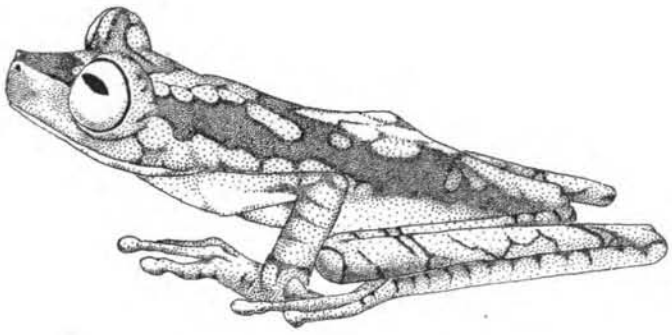
THAMNOPHIS MARCIANUS (Checkered Garter Snake). **SALVAGING PRENEONATES FROM A ROAD-KILL**. The results of salvaging unborn or preneonate young of natricine snakes from road-killed gravid females does not seem to be recorded in the literature. Pope (1952. Snakes Alive and How They Live. The Viking Press, New York. 238 pp.) suggested that the young of a gravid female live-bearing snake, cut open a few days before normal birth, would survive, and that snakes are often killed with enough force to set any well developed young free. Oliver (1955. The Natural History of North American Amphibians and Reptiles. V. Van Nostrand Co., Princeton, New Jersey. 359 pp.) agreed, commenting that if a female carrying young about to hatch, was vigorously clubbed, her swollen body might burst, releasing the young. Accounts of unborn young surviving their mother's death are exemplified by J. T. Burkhart (pers. comm.) who related an account of a *Thamnophis* sp. being run over by a vehicle, expelling numerous young that subsequently crawled away.

This is a report on salvaging preneonate young from a road-killed checkered garter snake, *Thamnophis marcianus*. The specimen was collected from Willow Road in extreme northwestern Enid, Garfield County, Oklahoma, USA at 2059 h (after dark) on 29 September 1995. Abdominal movement was observed in the snake that did not seem to be characteristic reflex action. The snake was hurriedly opened surgically at 2110 h, and 25 preneonate young were removed by 2233 h. Seven young exhibited life signs such as mouth gaping, tongue flickering, and body movements.

The total length of the parent female was 65.5 cm. (SVL 51.2 cm, tail 14.3 cm). Three of the 25 young were accidentally mutilated during hasty surgery, and were not measurable, another remained in its embryonic sac and was not measured. Total lengths of 21 remaining young varied from 15.1 to 20.4 cm, averaging 17.9 cm. Total lengths of the five surviving live young was 17.0 to 20.4 cm, averaging 10.04 cm. Three of these died by 23 December 1995. Two remaining juveniles have survived.

Specimens were deposited in the museum collections of St. Gregory's University, Shawnee, Oklahoma, SGU numbers 510 (adult female), and young 511–528, 534, 560 and 2038.

Submitted by **RICHARD L. LARDIE**, P.O. Box 9002, Vance AFB, Enid, Oklahoma 73705, USA.



Hyla picturata. Colombia: Vereda Guaima, Region del Bajo Anchicaya, Valle del Cuaca. Illustration (from a photograph) by Fernando Vargas Salinas.

GEOGRAPHIC DISTRIBUTION

Instructions for contributors to Geographic Distribution appear in Volume 34, Number 2 (June 2003). Additional note: 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.

CAUDATA

AMBYSTOMA OPACUM (Marbled Salamander). USA: VIRGINIA: Scott Co: Rikemo Lodge, ca. 1 km SW of Dungannon. 8 May 1999. Christopher S. Hobson, Steven M. Roble, Anne C. Chazal. Verified by Richard Hoffmann. Virginia Museum of Natural History (VMNH) 10337. One sub-adult was found in a small pit (ca. 0.25 m deep) covered by a piece of plywood at Rikemo Lodge, situated on a slope just above the floodplain of the Clinch River. First record for Scott Co., and first published record for southwestern Virginia (Mitchell and Reay 1999. Atlas of Amphibians and Reptiles in Virginia. Spec. Publ. No. 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.; Tobey 1985. Virginia's Amphibians and Reptiles: A Distributional Survey, Virginia Herpetological Survey, Purcellville, Virginia, 113 pp.). The nearest published records within the Ridge and Valley physiographic province are from Knox Co., Tennessee (ca. 160 km SW), and Montgomery Co., Virginia (ca. 180 km NE) (Redmond and Scott 1996. Atlas of Amphibians in Tennessee. Misc. Publ. No. 12, Center for Field Biology, Austin Peay State University, Clarksville, Tennessee, 94 pp.; Tobey 1985, *op. cit.*). This record partially fills a hiatus in the known range for this species that includes much of the southern Appalachians.

Submitted by **CHRISTOPHER S. HOBSON** (e-mail: cshobson@dcr.state.va.us) and **STEVEN M. ROBLE** (e-mail: sroble@dcr.state.va.us), Virginia Department of Conservation and Recreation, Division of Natural Heritage, 217 Governor Street, Richmond, Virginia 23219, USA.

AMBYSTOMA TIGRINUM TIGRINUM (Eastern Tiger Salamander). USA: ILLINOIS: Gallatin Co: pond NW side York Lane and 1.3 km E Pounds Hollow Road (37°36'20"N, 88°15'34"W). 7 June 2002. Kurt J. Regester and David W. Butler. Verified by Ronald A. Brandon. SIUC H–07089. Larval specimens collected in Shawnee National Forest wildlife pond. New county record (Philips et al. 1999. Field Guide to Amphibians and Reptiles of Illinois. Illinois Nat. Hist. Surv. Manual 8, Champaign, Illinois. xii + 282 pp.).

Submitted by **KURT J. REGESTER** and **DAVID W. BUTLER**, Department of Zoology, Southern Illinois University, Carbondale, Illinois 62901, USA.

CRYPTOBRANCHUS ALLEGANIENSIS ALLEGANIENSIS (Eastern Hellbender). USA: TENNESSEE: Cheatham Co.: Sycamore Creek adjacent to Harris Town Road, ca. 4.0 air miles NW of Ashland City (36°19'39"N, 87°05'40"W). 10 July 1996. Brian Canada. Austin Peay State University Museum of Zoology (APSU 5455 B series of 10 color photos). Verified by David H. Snyder. One adult (total length 727 mm) in shallow water (< 10

cm) where small spring-fed waterfall trickles over limestone ledges and enters stream. New county record (Redmond and Scott 1996. Atlas of Amphibians in Tennessee. Misc. Publ. No. 12, Center for Field Biology, Austin Peay State University, Clarksville, Tennessee) that fills gap between records from Montgomery and Davidson counties.

Submitted by **BRIAN CANADA**, 431 Van Hook Drive, Ashland City, Tennessee 37015, USA (e-mail: Brian.Canada@state.tn.us), and **A. FLOYD SCOTT**, Department of Biology and Center for Field Biology, Austin Peay State University, Clarksville, Tennessee 37044, USA.

EURYCEA LONGICAUDA (Long-tailed Salamander).USA: MISSOURI: MARIES CO: 0.7 km N–3.4 km E jct of US 63 and MO 42 in Vienna (38°11'32"N, 91°54'35"W). 25 April 1971. J. Puricelli. Verified by R. W. Axtell. SIUE 752. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

EURYCEA LUCIFUGA (Cave Salamander). USA: MISSOURI: REYNOLDS CO: Johnson Shut-Ins State Park campgrounds (37°32'20"N, 90°50'30"W). 4 May 1963. C. Glaeser. Verified by R. W. Axtell. SIUE 969. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

EURYCEA LUCIFUGA (Cave Salamander). USA: INDIANA: FRANKLIN CO: Mounds State Recreation Area, rocky seep, 1.4 km NE of top of "The Mounds." 24 April 2001. Rhys Dale, under permit to John Iverson. Verified by John Iverson. Florida Museum of Natural History, University of Florida (UF 134743). Extends range 9.0 km NNE of previous record (Brookville; Minton 2001. Amphibians and Reptiles of Indiana. Indiana Acad. Sci., Indianapolis, 404 pp.).

Submitted by **STESHA A. PASACHNIK**, Earlham College, Richmond, Indiana, 47374, USA; e-mail: pasacst@earlham.edu.

HEMIDACTYLIUM SCUTATUM (Four-toed Salamander). USA: MICHIGAN: ST. CLAIR CO: Pond in woodlot south of Marysville along Highway 29, 1 km NW of jct with Davis Road (42°53.3'N, 82°29.3'W). 24 April 2002. Richard Lehtinen, Glenn Fox, Keith Pecor, and Greg Schneider. Verified by Ronald A. Nussbaum, University of Michigan Museum of Zoology (UMMZ 229576). Extends range northwards into the "thumb" of Michigan.

Submitted by **RICHARD LEHTINEN, GLENN FOX, KEITH PECOR,** and **GREG SCHNEIDER,** University of Michigan Museum of Zoology, Ann Arbor, Michigan 48109–1079, USA.

ANURA

BATRACHYLA NIBALDOI (Nibaldo's Wood Frog). CHILE: X REGION DE LOS LAGOS: Quinchao, Isla Alao (42°35'S, 73°16'W, 114 m elev.), ca. 6 km N of Isla Chaulinec. 13 and 18 February 2001. L. Iriarte. Museo Nacional de Historia Natural, Santiago, Chile (MNHN 3422 and 3421). Verified by H. Núñez. Collected on mosses in a Chilean Valdivian rain forest. Species previously known in Chile from Puente Traihuanca (Formas 1997. Herpetologica 53:6–13). Subsequent records extended the range to Laguna San Rafael National Park (Díaz-Páez and Williams 2001. Herpetol. Rev. 32:189) and Las Guaitecas National Reserve (Díaz-Páez and Carreño 2002. Herpetol. Rev. 33:218). This specimen represents the first record from X Administrative Region of Chile; and extends the northern range of the species ca. 360 km NW from Puente Traihuanca.

Submitted by **DANIEL PINCHEIRA-DONOSO**, Sección Zoología, Museo Nacional de Historia Natural, Casilla 787, Santiago, Chile and **HELEN DÍAZ-PÁEZ**, Departamento de Zoología, Facultad de Ciencias Naturales y Oceanográficas, Universidad de Concepción, Casilla 160-C, Concepción, Chile.

BUFO CALIFORNICUS (California Arroyo Toad). MÉXICO: BAJA CALIFORNIA NORTE: Río San Rafael, Cañon San Rafael, 18 air km E Punta Colonet (31.09876°N, 116.2539°W), 200 m elev. 25 May 2002. Los Angeles County Museum of Natural History voucher photographs (LACM–PC 1390). Río de Las Palmas, Cañon el Alamo, 6.5 air km NE El Testerazo (32.33030°N, 116.51396°W), 450 m elev. 23 March 2002. (LACM–PC 1391); and Río los Encinitos, Cañon la Grulla, 1 air km NW Uruapan (31.63665°N, 116.46570°W), 175 m elev. 5 April 2002. (LACM-PC 1392). Observed by Diego Casas, Hector Cevallos, Gustavo Danneman, Brian Freiermuth, Robert Lovich, Clark Mahrdt, Mark Mendelsohn, Jeff Saurwein. All photos verified by Edward L. Ervin. This species ranges west from the Sierra Juárez and Sierra San Pedro Mártir peninsular range to the foothills and coastal plains of northwestern Baja California, and south to San Quintín (Grismer 2002. Amphibians and Reptiles of Baja California including its Pacific Islands and the Islands in the Sea of Cortés. University of California Press, Berkeley and Los Angeles, California). Both adults and larvae of *Bufo californicus* were previously reported by Welsh (1988. Proc. California Acad. Sci. 46:1–72) from the upper Río San Rafael drainage in the western foothills (1330 m elev.) and conifer forest (2210 m elev.) of the Sierra San Pedro Mártir. The Río San Rafael population reported here represents a new coastal record for this drainage, located ca. 65 km downstream from the foothill locality reported by Welsh (1988, *op. cit.*). Several paedomorphs in addition to *Hyla regilla* and *H. cadaverina* tadpoles were observed at the site along a 200 m portion of stream. An adult male (SVL 55 mm; 27g) was observed in the Río de las Palmas in association with introduced adult *Xenopus laevis* and adult *H. regilla*, and *H. cadaverina*. Although Grismer (2002, *op. cit.*) does not include *X. laevis* as occurring in Baja California, Tinsley and McCoid (1996. *In* R.C. Tinsley and H. R. Kobel [eds.], The Biology of *Xenopus*. Symposia of the Zoological Society of London, No. 68, pp. 81–94, Clarendon Press, Oxford) indicate that this species may occur in large populations in the Municipality of Tijuana, Baja California, Mexico. This record of *X. laevis* confirms the species presence in the Rio las Palmas watershed and represents the southernmost record in Baja California. In the Río los Encinitos drainage, an adult male arroyo toad (SVL 54 mm; wt.17 g) was observed with several adult H. regilla. The Río de las Palmas and Río los Encinitos records represent new river drainages for the arroyo toad (see Mahrdt et al. 2002. Herpetol. Rev. 33:123–125) and potential breeding sites of *Bufo californicus*

in Baja California.

Submitted by **CLARK R. MAHRDT**, Herpetology Department, San Diego Natural History Museum, P.O. Box 1390, San Diego, California 92112, USA, **ROBERT E. LOVICH**, AC/S Environmental Security, Box 555008, Marine Corps Base, Camp Pendleton, California 92055-5008, USA, **SALVATORE J. ZIMMITTI**, P&D Environmental, 401 West "A" Street, San Diego, California 92101, USA, and **GUSTAVO D. DANEMANN**, Pronatura Noroeste, Riveroll No. 724, Ensenada, Baja California, CP 22800 México.

BUFO MARINUS (Cane Toad): BRITISH WEST INDIES: Cayman Islands: Grand Cayman: Georgetown; Melody Lane off Crewe Road (under a pile of brush). 18 June 1999. David Arch, Jr. Verified by R. Powell. Photographic documentation (by the senior author): Milwaukee Public Museum (MPM) Herp Photo 710. First record of this genus from the Cayman Islands (Seidel and Franz 1994. *In* M. A. Brunt and J. E. Davies [eds.], The Cayman Islands: Natural History and Biogeography, pp. 407–433. Kluwer Academic Publ., Dordrecht, Netherlands). The previous summer, Mr. Geddes Hislop, a Trinidadian naturalist familiar with the species, had observed another individual on the grounds of the Catholic School on Walkers Road. The specimen reported here was the subject of an article and accompanying photograph in the *Caymanian Compass* newspaper on 23 June 1999. Subsequently, the National Trust for the Cayman Islands and the Cayman Department of Agriculture received many telephone calls from the public that suggest that the species is established from West Bay to Bodden Town. One respondent stated that he had first observed it five years earlier. These reports probably have merit because no other bufonid occurs in the Cayman Islands; the only other relatively large anuran resident in the islands is the distinctive *Osteopilus septentrionalis* (Cuban treefrog). No reports were received from East End or North Side on Grand Cayman. The source of the introduction is unknown. The species has not been reported from Cayman Brac or Little Cayman.

Submitted by **F. J. BURTON**, P.O. Box 10308 APO, Grand Cayman, Cayman Islands, British West Indies (e-mail: fjburton@candw.ky), and **A. C. ECHTERNACHT**, Department of Ecology & Evolutionary Biology, University of Tennessee, Knoxville, Tennessee 37996-1610, USA (e-mail: echterna@utk.edu).

BUFO NEBULIFER (Gulf Coast Toad). *Bufo nebulifer* was formerly part of *B. valliceps*, now restricted to Central and South America (Mulcahy and Mendelson 2000. Mol. Phylog. Evol. 17:173–189). USA: TEXAS: Anderson Co: In a small, semi-flooded pasture at the corner of Farm Road 321 and County Road 349 (31°52.205'N, 87°34.799'W). 29 May 2002. Matthew E. Gifford. This specimen will be deposited in the University of Texas at Arlington Collection of Vertebrates. (UTA A–55078) Verified by Ronald L. Gutberlet, Jr. *Bufo nebulifer* is widespread in eastern and central Texas. This species has never been recorded in Smith, Cherokee, Van Zandt, Rains, Upshur, and Rusk counties, however, it has been recorded from adjacent counties. Smith Co. has been extensively surveyed and has an extremely well documented herpetofauna with no evidence of the presence of *B. nebulifer*. The individual we collected in Anderson Co. represents a new county record (Dixon 2000. Amphibians and Reptiles of Texas,Texas A&M University Press, College Station Texas). No other *B. nebulifer* were located nearby, however, several large choruses of East Texas Toads, *B. woodhousii velatus*, were in proximity. *Bufo w. velatus* is relatively rare in the southern Texas counties where *B. nebulifer* is common, whereas dense populations of *B. w. velatus* occur in each of the counties where *B. nebulifer* has not been recorded. Further sampling is required to determine if the absence of *B. nebulifer* in these counties is a result of natural events or inadequate sampling.

Submitted by **MATTHEW E. GIFFORD*** and **BRIAN E. FONTENOT**, Department of Biology, The University of Texas at Tyler, Tyler, Texas 75799, USA. *Current address: Box 1137, Department of Biology, Washington University, St. Louis, Missouri 63130, USA; e-mail: gifford@biology2.wustl.edu.

BUFO PUNCTATUS (Red-spotted Toad). USA: COLORADO: Dolores Co.: Side canyon off Monument Canyon. July 1979. T. Paul Maslin. UCM 61297, 14 transformlings and 3 larvae. Verified by Richard L. Holland. First record for the county (Hammerson 1999. Amphibians and Reptiles of Colorado. Second Ed. University Press of Colorado, Niwot. 484 pp.).

Submitted by **DAVID CHISZAR** and **HOBART M. SMITH**, University of Colorado Museum, Boulder, Colorado 80309, USA.

CREPIDOPHRYNE EPIOTICA (NCN). COSTA RICA: HEREDIA: Cerro Dantas Wildlife Refuge (10°05'N, 84°03'W), 1800 m elev. 28 September 2002. Andrés Vaughan. Museo de Zoología de la Universidad de Costa Rica (UCR 16855). Verified by Gerardo Chaves. First record for Heredia and for the Cordillera Volcánica Central and bridges the gap between previous Atlantic versant records on Volcán Miravalles to the northwest and the Talamanca Mountains to the southeast (Savage 2002. Amphibians and Reptiles of Costa Rica. Univ. Chicago Press, Chicago. xv + 934 pp.). The juvenile specimen was caught on the ground during the day in secondary growth forest.

Submitted by **ANDRÉS VAUGHAN** (e-mail: andresvaughan@hotmail.com) and **WARREN CALVO** (e-mail: junglemonkey78@hotmail.com), Escuela de Biología, Universidad de Costa Rica, San Pedro de Montes de Oca, San José, Costa Rica.

ELEUTHERODACTYLUS DIMIDIATUS (Black Whiskered Frog). CUBA: MATANZAS: Zapata Swamp: (81°15'57.24"N, 22°19'27.48"W) ca. 5 km from Buenaventura, departing 100 m to the NE from the road to Santo Tomás. 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: ISLE OF PINES: 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. Male collected as it called from the forest litter. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 145600). Verified by L. V. Moreno. First record of this species for these two biogeographic regions from which it was considered absent (Hedges 1999. *In* W. E. Duellman [ed.], Patterns of Distribution of Amphibians, A Global Perspective, pp. 211–254. The 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: ZAPATA SWAMP: (81°15'57.24"N, 22°19'27.48"W) ca. 5 km from Buenaventura, departing 100 m to the NE from the road to Santo Tomás. May 1997. A. Rodríguez. Male collected as it called from a leaf in the understory of a deciduous forest. 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 lowlands of Zapata Swamp where it was previously considered absent (Hedges 1999. *In* W. E. Duellman [ed.], Patterns of Distribution of Amphibians, A Global Perspective, pp. 211–254. The 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 TETAJULIA. CUBA: HOLGUÍN: MUNICIPIO FRANK PAÍS: El Desayuno, Sierra de Cristal (75°26'12.84"N, 20°31'54.48"W). 15–19 December 2000. A. Rodríguez and R. Alonso. A series collected on the leaf litter in the rainforest ca. 700 m elev. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 14 11403–4 and 14 11407–11). Verified by L. V. Moreno. First record of this species outside the type locality with a range extension of ca. 76 km airline distance W of the previous record on Arroyo Sucio (Anacleto) Arriba, on the western slope of Monte Iberia, Municipio Baracoa, Guantánamo (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.

ELEUTHERODACTYLUS RONALDI. CUBA: HOLGUÍN: MUNICIPIO FRANK PAÍS: Baconal, Sierra de Cristal (75°25'25.32"N, 20°34'35.04"W). 24 December 2000. A. Rodríguez and R. Alonso. A male collected as it called on a leaf of a tree in a rather open situation, ca. 600 m elev. Instituto de Ecología y Sistemática, Colección Zoológica de la Academia de Ciencias de Cuba (CZACC 14 11402). Verified by L. V. Moreno. First record of the species in Sierra de Cristal, 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[2]: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.

HYLA ARENICOLOR (Canyon Treefrog). USA: NEW MEXICO: UNION CO.: Brown's Ranch, Long Canyon (36°44'31"N, 103°44'45"W). 30 May 1958. T. Paul Maslin. UCM 61366, 19 tadpoles, associated with ghost shrimp, *Thamnocephalus*. Tadpoles verified by Richard L. Holland, shrimp by D. Christopher Rogers. First record for the county (Degenhardt et al. 1996. Amphibians and Reptiles of New Mexico. Albuquerque, Univ. New Mexico Press. 431 pp.).

Submitted by **DAVID CHISZAR, HOBART M. SMITH,** and **LAUREN GOLTEN**, University of Colorado Museum, Boulder, Colorado 80309-0334, USA.

HYLA BOANS. PANAMÁ: COCLÉ: Distrito de La Pintada: Palmarazo, margin of the stream Quebrada La Varona, a tributary of the Río San Juan (8°43'57.0"N, 80°39'11.4"W), 85 m elev. 18 December 2001. C. A. Jaramillo A. and R. Ibáñez D. Verified by A. S. Rand. Museo de Vertebrados de la Universidad de Panamá (MVUP 1767). New record for Coclé and extends the range ca. 112 airline km SW of the nearest locality in the former Canal Zone (Duellman 2001. Hylid Frogs of Middle America. SSAR Contrib. Herpetol. 18:1–1180).

This record was obtained during a project funded by the Autoridad del Canal de Panamá to The Louis Berger Group Inc., The Universidad de Panamá, and Smithsonian Tropical Research Institute Consortium.

Submitted by **ROBERTO IBÁÑEZ D.**, Smithsonian Tropical Research Institute, Apartado 2072, Balboa / Ancón, Panamá, Panamá (e–mail: ibanezr@tivoli.si.edu), **CÉSAR A. JARAMILLO A.**, Círculo Herpetológico de Panamá, Apartado 10762, Estafeta Universitaria, Panamá, Panamá (e–mail: jaramilc@tivoli.si.edu), and **FRANK A. SOLÍS**, Universidad de Panamá, Escuela de Biología, Departamento de Zoología, Panamá, Panamá (e–mail: solisf@tivoli.si.edu).

HYLA CHRYSOSCELIS / HYLA VERSICOLOR **COMPLEX** (Gray Treefrogs). USA: MISSOURI: IRON CO: 8.1 km N–5.8 km E Johnson Shut-Ins State Park campground on Hwy H (37°36'30"N, 90°46'30"W). 3 May 1963. L. Leitner. Verified by R. W. Axtell. SIUE 816. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

HYLA IBITIPOCA BRAZIL: MINAS GERAIS: Municipality of Araponga: Fazenda Brigadeiro, Parque Estadual da Serra do Brigadeiro (21°42'S, 43°53'W). December 2001. R. N. Feio, P. L. Ferreira, and D. Pantoja. Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa, Viçosa, Minas Gerais (MZUFV 4419). Verified by U. Caramaschi and M. F. Napoli. First record outside the type locality, Ibitipoca State Park, Municipality of Lima Duarte, Minas Gerais (Caramaschi and Feio 1990. Copeia 1990:542–546), extends northeastern range ca. 200 km airline.

Submitted by **RENATO NEVES FEIO, PAULA LEAO FERREIRA,** and **DAVI LIMA PANTOJA,** Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa, 36571-000, Viçosa, MG, Brazil; e–mail: rfeio@ufv.br.

LEPTODACTYLUS POECILOCHILUS (Turbo White-lipped Frog). COSTA RICA: HEREDIA: Cantón Sarapiquí: La Selva Biological Station (10°25.847'N, 84°00.201'W), 75 m elev. 26 April 2002. Andrew J. Crawford. Universidad de Costa Rica, Museo de

Zoología (UCR 16417). 20 June 2002. Eduardo Toral. La Guaria annex of La Selva reserve (UCR 16762). Both verified by Gerardo "Cachí" Chaves. First records (with vouchers) for Heredia and westernmost localities for the Atlantic versant of Costa Rica (Savage 2002. Amphibians and Reptiles of Costa Rica. Univ. of Chicago Press, Chicago. 934 pp.). Because La Selva is herpetologically the most thoroughly studied site in the country, we suspect that this species might be a recent arrival rather than a rare or overlooked species. *Leptodactylus poecilochilus* might be expanding its range because of local deforestation as the species is thought to prefer open and disturbed habitats (Savage, *op. cit.*).

Submitted by **ANDREW J. CRAWFORD**, Smithsonian Tropical Research Institute, Apto. 2072, Balboa, Ancón, Panama (e-mail: crawfordaj@naos.si.edu), **EDUARDO TORAL** (e-mail: guashote@yahoo.com), and **FEDERICO BOLAÑOS**, Escuela de Biología, Universidad de Costa Rica, San Pedro, Costa Rica.

MYERSIELLA MICROPS (NCN). BRAZIL: MINAS GERAIS: Municipality of Caratinga: Estação Biológica de Caratinga, (19°44'S, 41°49'W). November 2000. J. Cassimiro. Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa, Viçosa, Minas Gerais, (MZUFV 4744–45). Verified by J. P. Pombal, Jr. Published distribution for the species is Atlantic forests in the states of Rio de Janeiro and São Paulo, in southeastern Brazil (Frost 2000. Amphibian Species of the World. An Online Reference. http://research.amnh.org/herpetology/amphibia/). First state record, also represents the most inland and northermost record for the species and extends known distribution ca. 350 km airline.

Submitted by **RENATO NEVES FEIO**, Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa, 36571–000, Viçosa, MG, Brazil; **JOSE CASSIMIRO**, Departamento de Zoologia, Instituto de Ciencias Biológicas, Universidade Federal de Minas Gerais, 30123–970, Belo Horizonte, MG, Brazil and **CARLOS ALBERTO GONÇALVES DA CRUZ**, Departamento de Vertebrados, Museu Nacional, Quinta da Boa Vista, 20940-040, Rio de Janeiro, RJ, Brazil.

PLETHODONTOHYLA COUDREAUI (Coudreau's Frog). MADAGASCAR: Ambolokopatrika Forest, Campsite 3 (Antsinjorano), Andapa Fivondronana, Antsiranana Faritany (14°32.6'S, 49°25.8'E, ca. 950 m elev.), and Masoala Peninsula, Campsite 3 (Andasin'i Governera), Antalaha Fivondronana, Antsiranana Faritany (15°18'S, 50°01'E, ca. 650 m elev.). Collected 13 December 1997 by F. Andreone, G. Aprea, and J. E. Randrianirina (Museo Regionale di Scienze Naturali di Torino [MRSN] A2066: Fig. 1), and 2 December 1998 by F. Andreone and J. E. Randrianirina (MRSN A2115), respectively. Verified by M. Vences. *Plethodontohyla coudreaui* was described by Angel (1938. Bull. Mus. natn. Hist. nat. Sér. 2 10:260–261) from Betampona, eastern Madagascar (Toamasina Fivondronana, Toamasina Faritany: 17°52'–17°56'S, 49°11'–9°15'E). After its initial discovery (holotype MNHN 1937–19), the species was not found again until recently, when it was reported from campsites 2 and 3 in Marojejy (NE Madagascar) (Raselimanana et al. 2000. Fieldiana:Zoology, n.s. 97:157–174). During a series of surveys in this area the species was found in two additional localities as above, of which Ambolokopatrika is a mid-altitude rainforest between Marojejy and Anjanaharibe-Sud massifs (Andreone et al. 2000. Biodivers. Conserv. 9:1587–1622). The Masoala site is a low altitude rainforest corridor between two larger forest parcels. The specimens were captured using pitfalls. MRSN A2066 and A2115 measure 21.8 and 25.5 mm SVL, respectively, versus 26.1 mm in the holotype.

FIG. 1. *Plethodontohyla coudreaui* from Ambolokopatrika, NE Madagascar (MRSN A2066).

Submitted by **FRANCO ANDREONE,** Museo Regionale di Scienze Naturali di Torino, Via G. Giolitti, 36, I-10123 Torino, Italy; e-mail: f.andreone@libero.it.

PLEURODEMA GUAYAPAE (NCN). ARGENTINA. SAN LUIS: Sierra de las Quijadas National Park (32°20'–32°47'S, 67°10'–66°58'W). February and March 1999. J. C. Baldoni and A. C. Guerreiro. Herpetological Collection of the Universidad Nacional de San Luis, San Luis (UNSL–CH 0250 and 0252). Verified by Ismael di Tada. First province record. Previously reported from southeastern La Rioja; southern Catamarca, southwestern Santiago del Estero, and northwestern Córdoba (Barrio 1964. Physis XXIV[68]:471–489); the present record extends the known distribution 260 km S of Patquía, La Rioja, the type locality.

Submitted by **ANALIA GUERREIRO, JUAN CRUZ BALDONI,** and **ANA M. BRIGADA,** Universidad Nacional de San Luis. Facultad de Química, Bioquímica y Farmacia, Area de Zoología. Chacabuco y Pedernera, San Luis, (C.P. 5700), Argentina (e-mail: analiag@unsl.edu.ar).

PSEUDACRIS CRUCIFER (Spring Peeper). USA: ILLINOIS: MASON CO: 0.5 mi. N of 1370 N on 1900 E. 15 May 2002. J. A. Crawford and M. J. Meyer. Verified by C. A. Phillips. Illinois Natural History Survey (INHS 18098). New county record. One male collected from a roadside ditch.

Submitted by **JOHN A. CRAWFORD**, Division of Biological Sciences, University of Missouri, Columbia, Missouri 65211, USA (e-mail: jac7vc@mizzou.edu), and **MATHYS J. MEYER,** Department of Biological Sciences, Illinois State University, Normal, Illinois 61790, USA (e-mail: altboer@hotmail.com).

PSEUDACRIS NIGRITA NIGRITA (Southern Chorus Frog). USA: VIRGINIA: YORK CO.: powerline right-of-way ca. 0.7 km

SE junction of Virginia Route 105 and Richneck Road (N 37.17791 W 76.50072). 3–5 April 2003. Emily C. Moriarty, Christopher S. Hobson, and Erikka Conrad. Verified by David Cannatella. Texas Memorial Museum (TMM 62399–62401). Adults were heard calling on three consecutive nights along a powerline that straddles Richneck Road, and lies along the southern edge of the Grafton Ponds Natural Area Preserve. Three specimens were collected during the period of 3–5 April. First record for Virginia (Mitchell and Reay 1999. Atlas of Amphibians and Reptiles in Virginia. Spec. Publ. No. 1, Virginia Department of Game and Inland Fisheries, Richmond, Virginia. 122 pp.; Tobey 1985. Virginia's Amphibians and Reptiles: A Distributional Survey, Virginia Herpetological Survey, Purcellville, Virginia, 113 pp.), and northernmost known locality. The North Carolina State Museum of Natural Sciences collection contains specimens from the nearest known *P. nigrita* populations in Beaufort Co., North Carolina (A. Braswell, pers. comm.), which is ca. 200 km S of the Virginia locality. Published range maps show the northern limits of distribution in east-central North Carolina (Conant and Collins. 1998. Reptiles and Amphibians of Eastern/Central North America. Houghton Mifflin Co., Boston, Massachusetts, 616 pp.; Martof et al. 1980. Amphibians and Reptiles of the Carolinas and Virginia. The University of North Carolina Press, Chapel Hill, 264 pp.). Other species calling at this site included *Pseudacris feriarum*, *P. crucifer*, *Hyla chrysoscelis*, *Rana sphenocephala*, and *Bufo fowleri*. Surveys conducted on 12 and 14 April 2003 along County Route 625 in Prince George County, Virginia revealed the presence of two choruses of *P. nigrita nigrita*, along with *P. brimleyi*, *P. crucifer*, *Bufo americanus*, *Acris gryllus*, and *Rana sphenocephala*. The Prince George County site is ca. 55 km W of the York County site.

Submitted by **CHRISTOPHER S. HOBSON,** Virginia Department of Conservation and Recreation, Division of Natural Heritage, 217 Governor Street, Richmond, Virginia 23219, USA (e–mail: cshobson@dcr.state.va.us), and **EMILY C. MORIARTY,** Patterson Laboratory 141, 24th and Speedway, University of Texas, Austin, Texas 78712, USA (e–mail: chorusfrog@mail.utexas.edu).

PTYCHADENA TRINODIS (NCN). MAURITANIA: Guelta Oumm Lebare (Wilaya Assaba), 16°29.472'N, 10°49.822'W. 31 May 2002. Museo Nacional de Ciencias Naturales, MNCN 41783. Verified by Ignacio de la Riva. Adult male was found active during the night near a pond. The area is a gorge with permanent water, belonging to the Sahel Savannah. Other amphibians noted were *Bufo xeros*, *Hoplobatrachus occipitalis*, and *Tomoptera cryptotis*. First record of this genus for Mauritania.

Submitted by **JOSÉ M. PADIAL**, Museo de Historia Natural Noel Kempff Mercado, Área de Zoología, Sección Herpetología, PO Box 2489, Santa Cruz de la Sierra, Bolivia; e-mail: jmpadial@yahoo.com.

SYNAPTURANUS SALSERI (Sapito apuntado de Salser). VENEZUELA: AMAZONAS: Tobogán de La Selva, 34 km S of Puerto Ayacucho (5°23'50"N – 67°37'04"W), 120 m elev. December 2002. Osvaldo Villareal. Museo de Historia Natural La Salle, Caracas, (MHNLS 15910–11). An adult and a juvenile found inside a decaying log. Verified by José Ayarzagüena. This species has been reported from Vaupés in Colombia (Pyburn 1975. Herpetologica 31:439–443; Ruiz Carranza et al. 1996. Rev. Acad. Colomb. Cienc. 20[77]:365–415) and near Neblina Base Camp on Baria River, Amazonas State, in Venezuela (Zweifel 1986. Amer. Mus. Novitates 2863:1–24; McDiarmid and Paolillo 1988. *In* Brewer Carias [ed.], Cerro Neblina. Resultados de la Expedición 1983–1987, pp. 667–670. Fudeci). Second record from Venezuela, and extends known range more than 350 km N from the previous records.

Submitted by **J. CELSA SEÑARIS, CESAR MOLINA**, and **OSVALDO VILLAREAL,** Museo de Historia Natural La Salle, Apartado 1930, Caracas 1010–A, Venezuela; e–mail: celsa35@hotmail.com.

TESTUDINES

APALONE SPINIFERA (Spiny Softshell). USA: MISSOURI: Crawford Co: Keysville, 4.0 km S–0.4 km E Crooked Creek crossing on county road (37°50'20"N, 91°23'05"W. 16 May 1965. M. P. McKelvey. Verified by R. W. Axtell. SIUE 454. New county record.

Submitted by **CAROL A. BRYANT**, 7841 S. Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

APALONE SPINIFERA (Spiny Softshell). USA: ILLINOIS: McLean Co: Bray Creek, a headwater of the Mackinaw River (40°32.35'N, 88°37.34'W). A juvenile was found on 8 August 2002. Mary H. Lee. Verified by John Petzing. Illinois Natural History Survey (INHS 18523). New county record (Phillips et al. 1999. Field Guide to Amphibians and Reptiles of Illinois. Illinois Nat. Hist. Surv. Manual 8. Champaign, Illinois. 300 pp.).

Submitted by **MARY H. LEE**, Department of Biological Sciences, Illinois State University, Normal, Illinois 61790-4120, USA; e-mail: mhlee@ilstu.edu.

CLEMMYS (=GLYPTEMYS) MUHLENBERGII (Bog Turtle). USA: NORTH CAROLINA: Burke Co.: Recently dead specimen from natural senescence or predator related causes, 8.2 km airline NNE Morganton in an alder/shrub wetland. 6 October 2002. Eric Chapell and David Campbell. North Carolina Museum of Natural Sciences (NCSM 64264). Verified by Alvin L. Braswell. First county record. Fills a gap in the distribution and extends the range 38.2 km airline NE nearest Piedmont Province record in McDowell Co. (Herman et al. 1993. Herpetol. Rev. 24:154; Project Bog Turtle database) and 30.7 km airline SSE nearest Blue Ridge Mountain Province record in Avery Co. (Palmer and Braswell 1995. Reptiles of North Carolina. Univ. North Carolina Press, Chapel Hill; Project Bog Turtle database).

Submitted by **DENNIS W. HERMAN**, Project Bog Turtle, North Carolina Museum of Natural Sciences, 11 West Jones Street, Raleigh, North Carolina 27601–1029, USA, **DAVID CAMPBELL**, 430 9th Street NW, Hickory, North Carolina 28601, USA, and **ERIC CHAPELL**, Freedom High School, 511 Independence Boulevard, Morganton, North Carolina 28655, USA.

EMYDOIDEA BLANDINGII (Blanding's Turtle). USA: ILLINOIS: Mason Co: 0.5 mi. N of 1370 N on 1900 E. 24 May 2002. M. J. Meyer and J. A. Crawford. Verified by C. A. Phillips. Photographic voucher deposited at the Illinois Natural History

Survey (INHS 2002.04). Updates the last known specimen (INHS 7384) seen in 1954. One adult female was found in a roadside ditch.

Submitted by **JOHN A. CRAWFORD,** Division of Biological Sciences, University of Missouri, Columbia, Missouri 65211, USA (e-mail: jac7vc@mizzou.edu), and **MATHYS J. MEYER,** Department of Biological Sciences, Illinois State University, Normal, Illinois 61790, USA (e-mail: altboer@hotmail.com).

GRAPTEMYS PSEUDOGEOGRAPHICA KOHNII (Mississippi Map Turtle). USA: TEXAS: Bell Co: Fort Hood Military Reservation, arroyo near Belton Lake, 390 m NE of Taylor Valley Rd. (NAD 83 UTM Zone 14: N3450204m E636878m). 4 June 2002. Steven J. Taylor, Christopher A. Phillips, Jen Mui, and Jean K. Krejca. Verified by John E. Petzing. Illinois Natural History Survey (INHS 18234). New county record, extends range one county to southwest (Dixon 2000. Amphibians and Reptiles of Texas. Texas A&M Univ. Press, College Station. 421 pp.). Shell of dead female with decomposing eggs and bones.

Submitted by **STEVEN J. TAYLOR, CHRISTOPHER A. PHILLIPS**, Illinois Natural History Survey, Champaign, Illinois 61820, USA, and **MICHAEL L. DENIGHT**, U.S. Army Engineer Research and Development Center, Champaign, Illinois 61826, USA.

PSEUDEMYS CONCINNA CONCINNA (Eastern River Cooter). USA: NORTH CAROLINA: Burke Co.: 8.2 km airline NNE Morganton, DOR. 13 October 2002. Eric Chapell and Patrick Heavner. North Carolina Museum of Natural Sciences (NCSM 64047). Verified by Alvin L. Braswell. First county record. First Catawba River system record. Extends the range 71.7 km airline NE nearest Broad River system record in Polk Co. and 111.5 km airline WSW nearest Yadkin River system record in Davie Co. (Palmer and Braswell 1995. Reptiles of North Carolina. Univ. North Carolina Press, Chapel Hill).

Submitted by **DENNIS W. HERMAN**, North Carolina Museum of Natural Sciences, 11 West Jones Street, Raleigh, North Carolina 27601–1029, USA, **DAVID CAMPBELL**, 430 9th Street NW, Hickory, North Carolina 28601, USA, and **ERIC CHAPELL** and **PATRICK HEAVNER**, Freedom High School, 511 Independence Boulevard, Morganton, North Carolina 28655, USA.

PSEUDEMYS CONCINNA CONCINNA (Eastern River Cooter). USA: ALABAMA: Conecuh Co: Murder Creek, 6.4 km SW of Evergreen (31°22.066'N, 87°00.437'W). Adult male basking. 20 October 2002. Matthew J. Aresco. Color Slide UF 135493. Verified by D. R. Jackson. First county record (Mount 1975. The Reptiles and Amphibians of Alabama. Auburn Univ. Agric. Expt. Stat. Auburn, Alabama. 347 pp.).

Submitted by **MATTHEW J. ARESCO, JEFF BIRDSLEY, REBECCA C. FULLER, MARGARET S. GUNZBURGER**, and **JOSEPH TRAVIS**, Department of Biological Science, Florida State University, Tallahassee, Florida 32306-1100, USA; e–mail: aresco@bio.fsu.edu.

TERRAPENE CAROLINA (Eastern Box Turtle). USA: ILLINOIS: Massac Co: CR1775N,16 S 0334738E 4133283N (WGS 84). 28 April 2002. M. J. Ingrasci and C. Mock. Illinois Natural History Survey (2002.22). Verified by C. A. Phillips. This locality constitutes a new county record (Phillips et al. 1999. Illinois Nat. Hist. Surv. Man. 8:1–282).

Submitted by **MATTHEW J. INGRASCI**, Department of Biological Sciences, University of Notre Dame, Notre Dame, Indiana 46556–0369, USA; e-mail: mingrasc@nd.edu.

LACERTILIA

ANOLIS PUNCTATUS. VENEZUELA: ESTADO BOLÍVAR: Gallery forest at Purumai River, SW Auyán-tepui, ca. 200 m from expedition base camp (05°54'33"N, 62°44'41"W), 420 m elev. 6 May 2002. C. Molina. Museo de Historia Natural La Salle, Caracas (MHNLS 15585). Quebrada Ataperé, headwaters of the Cucurital river, slopes of the Auyán–tepui (05°43'17.7"N, 62°34'21.1"W), 970 m elev. 5 November 2002. V. Romero and C. Molina. (MHNLS 16032). All verified by G. Rivas. The presence of this lizard in Venezuela was questionable. Previously it was believed to inhabit Amazona state (Donoso-Barros 1968. Carib. J. Sci. 8[3–4]:105–122), based on Boulenger (1885. Catalogue of the Lizards in the British Museum of Natural History. 2:xiii + 497 pp.) and other authors (Peters and Donoso-Barros 1970. Catalogue of the Neotropical Squamata: Part II. Lizards and Amphisbaenians. U.S. Natl. Bull., 297:64; La Marca 1997. Vertebrados Actuales y Fósiles de Venezuela. Serie Catálogo Zoológico de Venezuela. Vol. 1. Museo de Ciencia y Tecnología de Mérida, Venezuela). However, Avila-Pires (1995. Lizards of Brasilian Amazonia [Reptilia:Squamata], Zool. Verh. Leiden 299:1–706) had already indicated that the Donoso-Barros (1968, *op. cit.*) record for Territorio Amazonas was questionable because Boulenger (*op. cit.*) did not cite any specimen from Venezuela. Given the evidence, MHNLS specimens constitute the first museum vouchers for this species in the country. The single specimen extends the range for the species more than 450 km W of the nearest reported locality, close to the confluence of the Cuyuní and Essequibo rivers, in Guyana and more than 300 km NE of a doubtful record in Serra Parima, Roraima, Brazil (Avila-Pires, *op. cit.*: 97, map 26).

Submitted by **CÉSAR MOLINA, CELSA SEÑARIS**, Museo de Historia Natural La Salle, Sección de Herpetología, Apartado Postal 1930, Caracas 1010-A, Venezuela (e-mail: washaema@hotmail.con and celsa35@hotmail.com, respectively), and **ENRIQUE LA MARCA** Laboratorio de Biogeografía, Universidad de Los Andes, Mérida, Venezuela (e-mail: lamarca1@telcel.net.ve).

ANOLIS SAGREI (Brown Anole). USA: ARKANSAS: Pike Co: 3.7 km SW Langley off AR 84, Little Missouri River watershed. 20 October 2002. C. S. Harris. Arkansas State University Museum of Zoology, Herpetological Collection (ASUMZ 27317). Verified by Malcolm L. McCallum. First specimen reported from Arkansas (Trauth et al., Amphibians and Reptiles of Arkansas. Univ. of Arkansas Press, Fayetteville, *in press*), a non-gravid adult female (SVL = 46 mm). This common invader is known to use hitchhiking (primarily in nursery plants from Florida), and has been reported in neighboring Texas (Dixon 2000. Amphibians and Reptiles of Texas. Texas A&M Univ. Press, College Station. 421 pp.) and Louisiana (T. S. Campbell, pers. comm.).

Submitted by **CHRIS T. McALLISTER**, Department of

Biology, Texas A&M University-Texarkana, Texarkana, Texas 75505, USA (e-mail: chris.mcallister@tamut.edu), **STANLEY E. TRAUTH**, Department of Biological Sciences, Arkansas State University, State University, Arkansas 72467, and **CHRIS S. HARRIS**, Department of Biology, Texas A&M University-Texarkana, Texarkana, Texas 75505, USA.

CALOTES VERSICOLOR (NCN). BRITISH INDIAN OCEAN TERRITORY: Diego Garcia. May 2002. Nestor Guzman. Verified by A. Allison. Bernice P. Bishop Museum (BPBM 14777–78). First record of this South Asian native in the Chagos Archipelago (Dutton 1981. Brit. J. Herpetol. 6:133–134; Barnett and Emms 1997. Brit. Herpetol. Soc. Bull. 59:6–12), where it was first observed in March 2001 and where it has presumably arrived as a cargo stowaway.

Submitted by **FRED KRAUS**, Department of Natural Sciences, Bishop Museum, Honolulu, Hawaii 96817, USA.

CYRTODACTYLUS DARMANDVILLEI (NCN). INDONESIA: NUSA TENGGARA: Lombok, Tanjung Ringgit cave (8°30'S, 116°40'E). 12 February 2002. Arthur Anker. Raffles Museum of Biodiversity Research: Zoological Reference Collection (ZRC.2.5402, adult female, SVL 84.0 mm, tail length 121.0 mm). Verified by Kelvin K. P. Lim. New island record and westerly range extension. Otherwise known from Flores, Pulau Kalao, Sumbawa, and Komodo (De Rooij 1915. The Reptiles of the Indo-Australian Archipelago. I – Lacertilia, Chelonia, Emydosauria. E. J. Brill Ltd., Leiden. xiv + 382 pp.; Welch et al. 1990. Lizards of the Orient: a Checklist. Robert E. Krieger Publishing Company, Malabar, Florida. 162 pp.).

Submitted by **TZI MING LEONG**, Department of Biological Sciences, National University of Singapore, Singapore 119260; e-mail: scip0132@nus.edu.sg.

EUMECES LATICEPS (Broad-headed Skink). USA: ILLINOIS: Macoupin Co: 3.4 km ENE of Benld and N of Mount Olive Lake (39°06'23"N, 89°45'35"W). 1 August 2001. C. A. Bryant. Verified by R. W. Axtell. SIUE 2829. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail:cabryant@ctnet.net.

HEMIDACTYLUS GARNOTII (Indo-Pacific Gecko). USA: FLORIDA: DeSoto Co: Arcadia, 1173 SW Highway 17, was Don Olson Tires now Tires Plus (27.2350°N, 81.8526°W). 8 July 2001. Florida Museum of Natural History (UF131763). Collected by Gregg S. Klowden. Verified by Kenneth L. Krysko. New county record. This species has been reported from neighboring counties and many others throughout peninsular Florida (Conant and Collins 1991. A Field Guide to Reptiles and Amphibians of Eastern and Central North America. Houghton Mifflin Co., Boston, Massachusetts, 450 pp.; Meshaka 1997, Florida Scientist 60:1–7).

Submitted by **GREGG S. KLOWDEN**, University of Florida, Department of Wildlife Ecology and Conservation, Gainesville, Florida 32611–0430, USA; e-mail: snakeman@ufl.edu.

LIOLAEMUS ALTISSIMUS ARAUCANIENSIS (NCN). CHILE: IX REGION DE LOS LAGOS: Provincia de Malleco, Malalcahuello (38°26'29"S, 71°31'25"W), 30 km E of Curacautín. 22 November 2000. D. Pincheira–Donoso. Herpetological Collection Museo Nacional de Historia Natural de Chile (MNHN 3474). Verified by H. Núñez. *Liolaemus altissimus araucaniensis* has been known from Villarrica Volcano, Cautín Province (Veloso and Navarro 1988. Boll. Mus. Reg. Sci. Nat. Torino 6:481–539). This specimen was found associated with the *Araucaria araucana* forest, and represents the first record from Malleco Province. This report extends the known distribution of the species ca. 115 km N from previously known localities.

Submitted by **DANIEL PINCHEIRA-DONOSO**, Sección Zoología, Museo Nacional de Historia Natural, Casilla 787, Santiago, Chile; e-mail: dpinchei@udec.cl.

LIOLAEMUS JAMESI (James' Jararanco). CHILE: I REGION DE TARAPACÁ: Quebrada Copaquiri (20°55'S, 68°52'W). 24 February 1994. Herman Núñez. Herpetological Collection Museo Nacional de Historia Natural, Santiago, Chile (MNHN–2612–14). Verified by Herman Núñez. *Liolaemus jamesi* has been known from Tarapacá Andean regions (Donoso-Barros 1966. Reptiles de Chile, Eds. Universidad de Chile) and Chungará (Núñez 1992. Smithson. Herpetol. Info. Serv. 91:1–29 ; Veloso et al. 1982. Sínt. Proy. MAB–6–UNEP-UNESCO–1105–77–01. La vegetación y los vertebrados inferiores de los pisos altitudinales entre Arica y el Lago Chungará, vol. I:135–268). All specimens found at 3850 m elev. Extends the known distribution of this species ca. 290 km S from previously known localities.

Submitted by **DANIEL PINCHEIRA-DONOSO** and **CARLOS GARÍN,** Sección Zoología, Museo Nacional de Historia Natural, Casilla 787, Santiago, Chile.

LIOLAEMUS YANALCU (NCN). ARGENTINA: SALTA-JUJUY. National Road N°40, on the boundary between provinces of Salta and Jujuy, at 36 km S of intersection of national roads n°52 and n°40. 18 January 2003. Museo de Ciencias Naturales, Universidad Nacional de Salta, Salta (MCN 939). F. Lobo and S. Lobo. Verified by J. M. Díaz Gómez. This species, recently described (Martínez Oliver and Lobo 2002. Cuad. Herpetol. 16:47–64) was known only from the Nevado del Acay area 50–60 km S of this location.

Submitted by **FERNANDO LOBO** and **SANTIAGO LOBO**, Cátedra de Anatomía Comparada, Fac. de Cs. Naturales, Universidad Nacional de Salta. Avda. Bolivia 5150, 4400-Salta, Argentina; e–mail: flobo@unsa.edu.ar.

NACTUS PELAGICUS (Rock Gecko). USA: COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS: ANATAHAN: 16°21'18"N, 14°54'30.8"E. 27 April 2002. Nathaniel Hawley. Verified by Steve W. Gotte. National Museum of Natural History (USNM 550136, 550137). New island record. Collected in rotten *Neisosperma oppositifolia.*

Submitted by **NATHANIEL HAWLEY,** Commonwealth of the Northern Mariana Islands, Department of Lands and Natural Resources, Division of Fish and Wildlife, PO Box 10007, Lower Base, Saipan, MP 96950, USA; e–mail: boigaman@itecnmi.com.

SCELOPORUS UNDULATUS (Eastern Fence Lizard). USA: FLORIDA: Manatee Co: 17 km E of Parrish, at Florida Park Service Parcel - Beker A (South Fork), N of State Road 62; T33S;

R21E; Sec. 18. 30 May 2002. C. R. Becker. Verified by Kenneth L. Krysko. Florida Museum of Natural History (UF 135175). New county record and extends the range south and west of known distribution in Florida.

Submitted by **CHRISTOPHER R. BECKER,** Florida Park Service, District 4 Administration, Osprey, Florida 34229, USA; e-mail:chris.becker@dep.state.fl.us.

SCINCELLA LATERALIS (Ground Skink). USA: MISSOURI: MADISON CO: 3.2 km W of Bollinger Co. line on Missouri 72 at the Castor River crossing (37°31'45"N, 90°10'20"W). 1 May 1971. J. Puricelli. Verified by R. W. Axtell. SIUE 2538. New county record.

Submitted by **CAROL A. BRYANT,** 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

SERPENTES

BOTHRIOPSIS TAENIATA or ***BOTHROPS TAENIATUS*** (Speckled Forest-pitviper). ECUADOR: PROVINCIA DE ZAMORA-CHINCHIPE: Zamora (ca. 4°05'S, 78°55'W; 900–1200 m elev.). Two specimens; 26 May 1999, Colón Reyes; July 1999, Hector Apolo. Instituto Nacional de Higiene y Medicina Tropical (INHMT 4018 and 4062, respectively). Verified by Luis A. Coloma. This species has a wide distribution in South America E of the Andes (Campbell and Lamar 1989. The Venomous Reptiles of Latin America. Comstock/Cornell University Press, Ithaca, New York. 425 pp.) and has previously been recorded from the Ecuadorian provinces of Napo, Pastaza, and Morona–Santiago (Pérez-Santos and Moreno 1991. Mus. Reg. Sci. Nat. Monogr. 11:1–538). This is the first record for the adjacent province of Zamora-Chinchipe and documents the occurrence of this species in the upper Río Zamora valley, which is separated from Amazonian lowlands by the mountain ranges of the Cordillera de Tzunantza and the Cordillera del Condor. On the Amazonian (Peruvian) versant of the Cordillera del Condor, this species has been collected at the upper Río Comainas (Reynolds and Icochea 1997. RAP Working Papers 7:82–90+204–206). As the generic assignment of this pitviper species is controversial, we offer the two most widely recognized combinations to facilitate information retrieval.

Submitted by **ANTONIO FREIRE L.** and **FERNANDO GARCIA**, Departamento Ofídios, Instituto Nacional de Higiene y Medicina Tropical "Leopoldo Izquiéta Pérez," Casilla 3961, Guayaquil, Ecuador, **WOLFGANG WÜSTER**, School of Biological Sciences, University of Wales Bangor, Bangor, Gwynedd LL57 2UW, United Kingdom, and **ULRICH KUCH**, Sektion Herpetologie, Forschungsinstitut und Naturmuseum Senckenberg, Senckenberganlage 25, 60325 Frankfurt am Main, Germany; e-mail: U.Kuch@em.uni-frankfurt.de.

CARPHOPHIS AMOENUS (Worm Snake). USA: ILLINOIS: MASSAC CO: CR1775N, 16 S 0334738E 4133283N (WGS 84). 28 April 2002. M. J. Ingrasci and C. Mock. Illinois Natural History Survey (2002.25). Verified by C. A. Phillips. This locality constitutes a new county record (Phillips et al. 1999. Illinois Nat. Hist. Surv. Man. 8:1–282).

Submitted by **MATTHEW J. INGRASCI**, Department of Biological Sciences, University of Notre Dame, Notre Dame, Indiana 46556-0369, USA; e-mail: mingrasc@nd.edu.

CEMOPHORA COCCINEA (Scarletsnake). USA. TENNESSEE: RUTHERFORD CO.: Hwy 70S at Cripple Creek Rd. crossing. DOR 5 Aug 1994. B. T. Miller, J. L. Miller. Verified by V. Cobb. Middle Tennessee State University (MTSU 88S). County record.

Submitted by **BRIAN T. MILLER** and **JOYCE L. MILLER**, Department of Biology, Middle Tennessee State University, Murfreesboro, Tennessee 37132, USA; e-mail: bmiller@mtsu.edu.

CROTALUS MITCHELLII PYRRHUS (Southwestern Speckled Rattlesnake). USA: ARIZONA: COCONINO CO: Colorado River: Havasu Canyon, river mile (RM) 156.8 L: 1.6 km from the Colorado River, 36.30°N, 122.75°W. June 1999. Nikolle L. Brown. KU–CT 11898. Verified by Eric M. Rundquist. First verified record in the Grand Canyon region. There are also additional records from Havasu Canyon: June 1999, KU–CT 11899–11900; and GRCA 32949 from S of Mooney Falls, 2.2 km from the confluence of the Colorado River (initially misidentified, John Weinschenk, 1969).

Crotalus mitchellii was never mentioned by Miller et al. (1982. Amphibians and Reptiles of the Grand Canyon. Grand Canyon Nat. Hist. Assoc., Grand Canyon, 143 pp.). Lowe et al. (1986. The Venomous Reptiles of Arizona. Arizona Game and Fish Dept, Phoenix, 115 pp.) state "its distribution within the Grand Canyon remains poorly known." Stevens (1993. The Colorado River in Grand Canyon: a Guide, 5th edition, Red Lake Books, Flagstaff, Arizona, 115 pp.) mentions this species is rare in lower end of the canyon. However, there have been no records published of this species inhabiting the Grand Canyon. Based on my experience with visitors in the canyon, *C. mitchellii* has been frequently misidentified as *C. abyssus*, the Grand Canyon rattlesnake.

These are the upstream-most voucher specimens of *Crotalus mitchellii* in the Grand Canyon. As of April 2003, the furthest downstream record of *C. abyssus* in the canyon is from Fern Glen, RM 168 (KU-CT 11901), indicating an overlap of ca. 11.2 river miles (17.92 km) for these two species in the Grand Canyon.

Submitted by **NIKOLLE L. BROWN**, 7779 North Leonard, Clovis, California 93611, USA; e-mail: black-catnik@att.net.

CROTALUS SCUTULATUS (Mojave Rattlesnake). USA: ARIZONA: MOHAVE CO: Hualapai Indian Reservation, Quartermaster Point, 0.8 km from the Colorado River: river mile (RM) 260.5 L: 35°58'N, 113°47'W. Summer 1999. Ralph Jones. KU CT 11885. Verified by Cecil R. Schwalbe. First verified record in the Grand Canyon Region. Miller et al. (1982. Amphibians and Reptiles of the Grand Canyon. Publ. Grand Canyon Natural History Association. 114 pp.) suggested that it was probable that *C. scutulatus* might inhabit the lower end of the canyon, however there were no confirmed records. Grater (1981. Snakes, Lizards, and Turtles of the Lake Mead Region. Publ. Southwest Parks and Monuments Association. 47 pp.) mentioned that *C. scutulatus* did not appear common in the Lake Mead Region. Lowe et al. (1986. The Venomous Reptiles of Arizona. Publ. Arizona Game and Fish Department, Phoenix. 115 pp.) show the northern distribution of *C. scutulatus* extending north close to the Colorado River near Peach Springs Canyon (RM 225.7 L) and reaching the Colorado River at Pierce Ferry (RM 280 L), but not found near the Colorado River in the region in between.

Submitted by **NIKOLLE L. BROWN**, 7779 North Leonard, Clovis, California 93611, USA; e-mail: black-catnik@att.net.

CROTALUS TIGRIS (Tiger Rattlesnake). USA: ARIZONA, MARICOPA CO: Buckeye Hills, Hassayampa SE 1/4 sec. UTM 3683.40N, 338.75E, ca. 1.6 km E Gila River, 2.8 km S Powers Butte. 4 September 1999. R. D. Babb. Verified by C. R. Schwalbe. UAZ 52169. Represents W extension of distribution ca. 32 km in N reaches of U.S. distribution (Lowe et. al. 1986. Venomous Reptiles of Arizona. Arizona Game and Fish Department, Phoenix. 115 pp.). At this latitude *Crotalus trigris* is strongly associated with Arizona Upland communities. The vegetation of the Buckeye Hills is Lower Colorado subdivision, typical of the more xeric habitat that dominates western Arizona lowlands.

Submitted by **RANDALL D. BABB**, Arizona Game and Fish Department, 7200 East University, Mesa, Arizona 85207, USA.

DENDRELAPHIS STRIATUS (Cohn's Bronzeback). WEST MALAYSIA: PAHANG: Pulau Tioman: Kampung Juara (2°47.73'N; 104°12.26'E). 18 July 2002. Perry L. Wood, Danny Morgan, and Jesse L. Grismer. Female, 504 mm SVL, 764 mm TL. Zoological Reference Collection, The National University of Singapore, Singapore (ZRC) 2.5539. Verified by L. Lee Grismer. New island record. Previously known from southern Thailand, west Malaysia, Borneo, and south to Sumatra and Pulau Nias (Manthey and Grossman 1997. Amphibien und Südostasiens. Natur und Tier-Verlag, Münster. 339 pp.). The specimen was collected on a medium-sized coconut palm (ca. 0.5 m diam), ca. 1 m above the ground at 1200 h in the coastal vegetation. This individual was sighted while basking on the side of the tree.

Submitted by **PERRY L. WOOD**, **NURUL'AIN ELIAS**, and **DANNY MORGAN**, Department of Biology, La Sierra University, Riverside, California 92515-8247, USA; e-mail: perrwood@lasierra.edu.

DRYOCALAMUS GRACILIS (Scarce Bridal Snake). SRI LANKA: NORTHERN CENTRAL PROVINCE: Kurunegala District, Ambanpola (07°55'N, 80°13'E). 18 March 2002. Colombo National Museum (CMS2003–2–1). Male hit by a motor vehicle on the road. Verified by K. Manamendra-Arachchi. *Dryocalamus gracilis* is a very rare species, distinguishable from its relative *D. nympha* by the presence of 15 scale rows at midbody (13 in *D. nympha*) and anal plate usually entire (divided in *D. nympha*) (de Silva 1980. Spolia Zeylanica 34:263–266). Mahendra (1984. Ann. Zool. 22:211) considered *D. gracilis* conspecific with *D. nympha*, despite the differences noted above, an opinion not accepted by all subsequent authors (de Silva 1990. Colour Guide to the Snakes of Sri Lanka. R & A Publishing; Das 1996. Biogeography of the Reptiles of South Asia. Krieger Publ., Malabar, Florida). *Dryocalamus gracilis* is reported from Peninsular India (as far north as Orissa) and from False Island, off the Rakhine (Arakan) coast of Myanmar. For Sri Lanka it is known from only two specimens collected from the Jaffna Peninsula, in the extreme north, and recorded as *Odontomus fergusoni* (Haly 1888. Taprobanian III p. 51). The present report represents only the third specimen of *D. gracilis* for Sri Lanka, the first for 114 years, and the southernmost record of the species with a range extension of at least 196 km from Jaffna. We thank YAP Films and Animal Planet for funding and support of the project "O'Shea's Big Adventure Series 3: Venom" in Sri Lanka.

Submitted by **MARK O'SHEA**, School of Applied Sciences, University of Wolverhampton, Wolverhampton, WV1 1SB, England (e-mail: oshea@snakemos.demon.co.uk), and **ANSLEM DE SILVA**, Faculty of Medicine, University of Peradeniya, Peradeniya, Sri Lanka (e-mail: kalds@sltnet.lk).

ELAPHE GUTTATA GUTTATA (Corn Snake). USA: US VIRGIN ISLANDS: St. Thomas: Crown Bay Cargo Port Area (18°20.29'N, 64°56.84'W). 3 October 1999 and two undated specimens from the 1990s. Judy Pierce and Donna Griffin. Both specimens verified by Jose Rosado. The dated specimen, an adult female, 66 cm SVL, 80 cm TL, was found at the industrial park near Victor's Hideout restaurant, ca. 600 m W of the Crown Bay cargo port area. It is preserved in the collection of the US Virgin Islands Division of Fish and Wildlife (address below). The two undated specimens are at the Museum of Comparative Zoology. MCZ 183544 is an adult male, SVL 83 cm, TL 103 cm; MCZ 183545 is a juvenile, SVL 31 cm, TL 37 cm.

Circumstantial evidence suggests these specimens might have arrived in cargo containers originating in Florida, a pattern which is consistent with other reports of introduced reptiles and amphibians in the Caribbean (e.g., Powell 2002. Herpetol. Rev. 33:321). Repeated sightings, as well as the capture of juveniles at the site, suggest a nascent population might be in the process of emerging. This is a first documented record for this part of the Caribbean. Previous published records include Antigua (Powell and Henderson 2003. Herpetol. Rev., *in press*), Anguilla (Hodge et al. 2003. The Reptiles and Amphibians of Anguilla, British West Indies. Anguilla National Trust, The Valley), and St. Barts (Breuil 2002. Patrimones Naturels 54:1–339). In addition, although no specimens are available, corn snakes have also been reported from Curaçao and Bonaire. These too might have arrived from Florida, and juveniles have been reported on Curaçao as well (Gerard van Buurt, unpubl. obs.). If the presence of juveniles indicates local reproduction, this is a source of conservation concern because, similar to the invasive brown treesnake (*Boiga irregularis*; Rodda et al. 1999. Problem Snake Management: the Habu and the Brown Treesnake. Cornell University Press, Ithaca, New York. 534 pp.), *E. g. guttata* has a generalized vertebrate diet. What effect the presence of introduced Indian mongooses in St. Thomas (Horst et al. 2001. *In* Woods and Sergile [eds.], Biogeography of the West Indies: Patterns and Perspectives, pp. 409–424. CRC Press, Boca Raton, Florida) might have on the future and impact of the species remains to be seen.

We thank Kate LeVering and Robert Henderson for critically reading the manuscript. Financial support was provided by The Conservation Agency through a grant from the Falconwood Foundation. This is manuscript T–9–973 of the College of Agricultural Sciences and Natural Resources, Texas Tech University.

Submitted by **GAD PERRY**, Department of Range, Wildlife, & Fisheries Management, Texas Tech University, Box 42125, Lubbock, Texas 79409-2125, USA; e-mail: Gad.Perry@ttu.edu, **JUDY PIERCE** and **DONNA GRIFFIN**, Division of Fish and Wildlife, 6291 Estate Nazareth, 101, St. Thomas, Virgin Islands 00802-1104, USA, **GERARD VAN BUURT**, Department of Agriculture, Animal Husbandry and Fisheries, Klein Kwartier 33, Curaçao, Dutch Antilles, and **JAMES LAZELL**, The Conserva-

tion Agency, 6 Swinburne St., Jamestown, Rhode Island 02835, USA.

ENULIUS FLAVITORQUES (Pacific Long-tailed Snake). HONDURAS: ISLAS DE LA BAHIA: Isla de Utila, north coast on Iron Bound Beach (16° 07'22"N, 86°54'16"W). 30 March 2001. Alexander Gutsche. UF 134752 (photograph by Christian Wild). Verified by James R. McCranie. First record for Isla de Utila (Köhler 1998. Senck. Biol. 77:139–145; McCranie and Köhler 1999. Caribbean J. Sci. 35:14–22). The snake was found buried 35 cm deep in the sand about 30 m from the ocean.

Submitted by **ALEXANDER GUTSCHE**, Humboldt-Universität zu Berlin, Inst. für Biologie, Abt. Sinnesbiologie, Invalidenstr. 43, D-10115 Berlin, Germany; e-mail: alexander-gutsche@web.de.

LAMPROPELTIS TRIANGULUM (Milk Snake). USA: ILLINOIS: Massac Co: CR1775N, 16 S 0334738E 4133283N (WGS 84). 28 April 2002. M. J. Ingrasci and C. Mock. Illinois Natural History Survey (2003.1). Verified by C. A. Phillips. This locality constitutes a new county record (Phillips et al. 1999. Illinois Nat. Hist. Surv. Man. 8:1–282).

Submitted by **MATTHEW J. INGRASCI**, Department of Biological Sciences, University of Notre Dame, Notre Dame, Indiana 46556–0369, USA; e–mail: mingrasc@nd.edu.

LAMPROPELTIS TRIANGULUM SYSPILA (Red Milksnake). USA: MISSOURI: Reynolds Co: Near Johnson Shut-Ins State Park, 3.2 km N on Hwy MM from junction with Hwy N (37°35'30"N, 90°51'06"W). 4 May 1963. L. Fencel. Verified by R. W. Axtell. SIUE 1703. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

LEPTOPHIS NEBULOSUS. PANAMÁ: PANAMÁ: Distrito de Panamá: Parque Nacional Chagres, on the margins of the forest stream Quebrada Las Pavas, a tributary of the Río Chagres (9°17'10.65"N, 79°27'10.67"W), 130 m elev. 8 March 1997. C. A. Jaramillo A. Verified by J. M. Savage. Museo de Vertebrados de la Universidad de Panamá (MVUP 1798). New record for Panamá and extends the range ca. 420 km (airline) ENE of the nearest locality in Costa Rica (Savage 2002. The Amphibians and Reptiles of Costa Rica, University of Chicago Press, Chicago, Illinois. xv + 934 pp.).

This record was obtained during a project funded by the U.S. Agency for International Development - Panama.

Submitted by **CÉSAR A. JARAMILLO A.,** Círculo Herpetológico de Panamá, Apartado 10762, Estafeta Universitaria, Panamá, Panamá (e–mail: jaramilc@tivoli.si.edu), and **ROBERTO IBÁÑEZ D.**, Smithsonian Tropical Research Institute, Apartado 2072, Balboa / Ancón, Panamá, Panamá (e–mail: ibanezr@tivoli.si.edu).

LIOPHIS MILIARIS MILIARIS: VENEZUELA: ESTADO AMAZONAS: Cerro Yapacana, Caño Cotua (3°47'N, 66°39'W). 4 July 1978. Julio Cerda. Museo de la Estación Biológica de Rancho Grande, Aragua (EBRG 1156). Verified by Ramón Rivero. *Liophis miliaris* was mentioned for the first time in Bolívar state Venezuela by Fuentes et al. 1999. (Publ. Extra Mus. Nac. Hist. Nat. Montevideo, Uruguay 50:63); subsequently, Kornacker et al. (2002. Herpetofauna 24[138]:29–34) assigned the Venezuelan population to the nominal subspecies *L. m. miliaris* without mentioning the report by Fuentes et al. (*op. cit.*). First state record, enlarges known distribution in Venezuela about 600 km SW of Bolívar state and demonstrates a much wider distribution in Venezuelan Amazon Basin.

Submitted by **OSWALDO FUENTES R.,** Colección de Herpetología, Museo de Biología, Universidad Central de Venezuela, Eugenio Gross #7, 11-B Málaga 29010, Spain; e-mail: osfuentes2@hotmail.com.

NERODIA RHOMBIFER RHOMBIFER (Northern Diamond-backed Watersnake). USA: ARKANSAS: Logan Co.: 2.5 km NE Delaware off St. Hwy 393, vic. Riverside. 2 June 2002. C. T. McAllister. Arkansas State University Museum of Zoology, Herpetological Collection (ASUMZ 27110). Verified by Stanley E. Trauth. New county record (Trauth et al., Amphibians and Reptiles of Arkansas. Univ. of Arkansas Press, Fayetteville, *in press*). Salvaged specimen found dead, washed-up on south shore of Lake Dardanelle, a 1964 Corps of Engineer impoundment of the Arkansas River, Arkansas Valley physiographic province.

Submitted by **CHRIS T. McALLISTER**, Department of Biology, Texas A&M University-Texarkana, Texarkana, Texas 75505, USA (e-mail: chris.mcallister@tamut.edu); and **JENNIFER L. HOLLIS**, Department of Biology, University of Northern Iowa, Cedar Falls, Iowa 50613, USA.

NERODIA SIPEDON SIPEDON (Common Watersnake). USA: NEBRASKA: Garden Co: Blue Creek, ca. 3.0 km E and 11.5 km N of Oshkosh. 27 May 2002. 2 specimens. Stesha A. Pasachnik, John Iverson, and Steve Dinkelacker. Florida Museum of Natural History, University of Florida (UF 134731 and UF 134732). One additional specimen, ca. 8.0 km E and 13.2 km N of Oshkosh. 2 June 2000. Steve Dinkelacker and John Iverson. Florida Museum of Natural History, University of Florida (UF 120934). All verified by John Iverson. New county record. Extends range ca. 31.0 km upstream from nearest locality in Keith Co. (Lynch 1985. Trans. Nebraska Acad. Sci. 13:33–37).

Submitted by **STESHA A. PASACHNIK**, Earlham College, Richmond, Indiana 47374, USA; e-mail: pasacst@earlham.edu.

RAMPHOTYPHLOPS BRAMINUS (Brahminy Blindsnake): BRITISH WEST INDIES: Grand Cayman Island: Bodden Town District, Newlands (under a plank half-buried in leaf litter under a Tamarind tree next to a house). 16 June 2002. F. J. Burton. Verified by R. Powell. Bobby Witcher Memorial Collection (BWMC), Avila University, 07035–6. First record of this genus and species from the Cayman Islands (Schwartz and Henderson 1991. Amphibians and Reptiles of the West Indies: Descriptions, Distributions, and Natural History. Univ. Florida Press, Gainesville). It is likely that the species arrived on Grand Cayman from south Florida in soil accompanying ornamental foliage plants. In addition to the locality cited, Joanne W. Ross provided a photograph of an individual found following heavy rains in a garden in George Town at the west end of the island and the senior author found a specimen on the ground

under a potted plant at Queen Elizabeth II Botanic Park near the center of the island. Newlands is approximately midway between these two localities.

Submitted by **A. C. ECHTERNACHT**, Department of Ecology & Evolutionary Biology, University of Tennessee, Knoxville, Tennessee 37996-1610, USA (e-mail: echterna@utk.edu) and **F. J. BURTON**, P.O. Box 10308 APO, Grand Cayman, Cayman Islands, British West Indies.

SIBYNOMORPHUS MIKANII (Dormideira). BRAZIL: PARÁ: Municipality of São Domingos do Araguaia (05°30'27"S, 48°43'04"W). 10 January 2003. F. França. Coleção Herpetológica da Universidade de Brasília (Distrito Federal) (CHUNB 29405). Verified by G. R. Colli. The specimen was collected in a deforested area of Amazonia forest. First record for Pará state, and extends range ca. 600 km SW of nearest locality, São Raimundo, Maranhão, in border of Amazonia/Cerrado region (Cunha et al. 1980. Bol. Mus. Par. Emílio Goeldi 103:1–15).

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

SIBYNOPHIS MELANOCEPHALUS (Black-headed Collared Snake). WEST MALAYSIA: PAHANG: Pulau Tioman: Kampung Juara (2°47.73'N; 104°12.26'E). 18 July 2002. A female captured and released by Jesse L. Grismer, Jim McGuire, and Chris Rassmusen. La Sierra University Photographic Collection S-53579-88. Verified by Wolfgang Grossmann. New island record. Previously known from southern Thailand, West Malaysia, and Singapore (Manthey and Grossman 1997. Amphibien und Reptilien Südostasiens. Natur und Tier-verlag, Münster. p. 392). This individual was captured on the cement walkway that dissects the village. When approached the individual quickly escaped to the leaf litter alongside of the trail. Upon capture, the snake voluntarily broke off its tail into many pieces.

Submitted by **JESSE L. GRISMER** (e-mail: jessgris@lasierra.edu) and **CHRIS RASSMUSEN**, Department of Biology, La Sierra University, Riverside, California 92515-8247, USA, and **JIMMY A. McGUIRE***, Museum of Natural Science, 119 Foster Hall, Louisiana State University, Baton Rouge, Louisiana 70803, USA. *Present address: Museum of Vertebrate Zoology, University of California, Berkeley, California 94720, USA.

TANTILLA GRACILIS (Flat-headed Snake). USA: MISSOURI: Crawford Co: Keysville, 0.6 km N – 3.1 km W Crooked Creek crossing on Hwy M (37°52'50"N, 91°25'30"W). 15 May 1965. R. Martini. Verified by R. W. Axtell. SIUE 1827. New county record. Reynolds Co: Johnson Shut-Ins State Park campgrounds (37°32'20"N, 90°50'30"W). 4 May 1963. J. Hassard. Verified by R. W. Axtell. SIUE 1826. New county record. Washington Co: Near Washington State Park, 0.6 km N – 0.8 km E junction Missouri 21 and Missouri 104 on Missouri 21 (38°05'12"N, 90°40'W). 16 May 1965. D. Keutzer. Verified by R. W. Axtell. SIUE 1835. New county record.

Submitted by **CAROL A. BRYANT**, 7841 South Panther Creek Road, Mount Olive, Illinois 62069, USA; e-mail: cabryant@ctnet.net.

THAMNOPHIS SIRTALIS SIRTALIS (Eastern Gartersnake). USA: ARKANSAS: Scott Co: 3.7 km SW "Y City" off US 71/270. 5 April 2003. C. T. McAllister and Z. D. Ramsey. Arkansas State University Museum of Zoology, Herpetological Collection (ASUMZ 27631). Verified by Stanley E. Trauth. New county record (Trauth et al., Amphibians and Reptiles of Arkansas. Univ. of Arkansas Press, Fayetteville, *in press*). Juvenile specimen found under trash pile near water-filled ditch at abandoned homestead in Ouachita National Forest along with sympatric *Lampropeltis getula holbrooki*, *Virginia valeriae elegans*, and *Diadophis punctatus arnyi*.

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

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New Herpetofaunal Records for Psara and Neighboring Islands, Aegean Sea, Greece

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Psara and its neighboring islands are a poorly studied cluster of Greek islands in the northeastern part of the Aegean Sea. Few herpetofaunal surveys have been conducted for these islands. Psara lies 150 km east of Athens and about 25 km west of Turkey's eastern coast (Fig. 1), in an area known as the Anatolian-European transition zone (Legakis et al. 1999) because it represents a convergence zone for species representative of Europe and Asia Minor. This report is the first intensive herpetological survey for the Psara archipelago. Previous surveys (e.g., Tsunis and Dimitropoulos 1994) of the surrounding Aegean islands made only passing reference to Psara. One early survey of the herpetofauna from many Aegean islands (Werner 1930) has no mention of Psara. In a checklist of Greek lizards, Chondropoulos (1986) does not list *Cyrtopodion kotschyi*, *Hemidactylus turcicus*, or *Ablepharus kitaibelii* for Psara but has a subspecies of *Ophisops elegans* as present.

The neighboring islands of Chios and Lesvos receive 600–800 mm of rainfall annually (Tsunis and Dimitropoulos 1994) with Psara getting less and often no rainfall during the summer months. The temperatures on Psara range from 5°C during the winter to 40°C in the summer. Psara has an area of ca. 43 km^2 and sustains a small population of about 500 people that is doubled during the summer months. There is a small village (labeled in Fig. 1) and a military base in the southern peninsula. Cultivation is rare and localized to the southern region while the northern part of the island is mostly uninhabited. Few roads exist, with one main road connecting the village, monastery, and a radio tower that lies in the northern area of the island. The terrain consists of garrigue to low maquis vegetation with *Sarcopoterium spinosum* as the domi-

nant species in undisturbed areas and *Genista acanthoclada* as the dominant species in abandoned fields. A floristic analysis (Greuter 1976) indicates that Psara was probably isolated from the neighboring islands and did not share a land connection during the lowered sea level of the last ice age. Psara's flora apparently shares a relationship to the western Aegean islands rather than to those to its east.

The island is fairly mountainous with the highest peak reaching 531 m. Damage from overgrazing, occasional fire, and human activity is widespread on Psara. There are four major uninhabited islets near Psara: Agios Nikolaos, Daskalio, Mastroghiorghi, and Prasonisi. Prasonisi lies about 62 m off the north coast of Psara and Mastroghiorghi is 65 m off the NW coast. These two islets are nesting sites for *Falco eleonorae* (Eleonora's falcon). Agios Nikolaos lies 300 m off the western coast of Psara. A small church is located on Agios Nikoloaos, but visits to the island are rare. Daskalio is uninhabited and is ca. 110 m W of Psara.

Antipsara, located 2 km W of Psara, is uninhabited. There is a small sheepfold by the southeastern shore that is occasionally used as a temporary shelter by the local fishermen throughout the year. There are two islets south of Antipsara: Kato Nisi and Meso Nisi. Antipsara and Kato Nisi have a garrigue to low maquis vegetation similar to that of Psara but Meso Nisi has a strikingly different vegetation, several succulents and leafy plants being ungrazed. Antipsara receives little human disturbance throughout the year.

Of the larger Aegean islands, the closest to Psara is Chios, ca. 18 km eastward. The other islands are farther away: Skyros is over 76 km to the west, Lesvos lies 38 km to the northeast, and finally Samos is 55 km to the southeast of Psara.

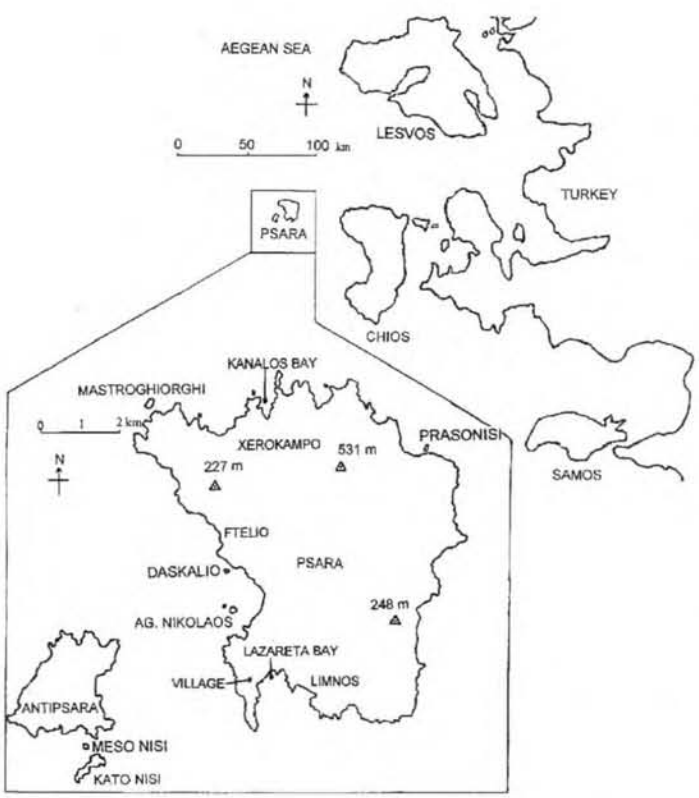

FIG. 1. Composite map showing region in Psara vicinity (modified from a map in a tourist publication), and detail map of Psara redrawn after Greuter (1976).

Our fieldwork was conducted during three seasonal visits from mid-June to July, 2000–2002. The goal was to survey the island's herpetofauna and see what future studies should be conducted. Specimens were captured by hand, pitfall, and glue traps. All collected specimens were deposited at the Long Island University (Brooklyn Campus) Vertebrate Collection (LIUZOO). There are new records of *Ablepharus kitaibelii* and *Bufo viridis* for Psara. A comparison with the herpetofauna of Chios, Lesvos, and Samos is presented.

Anura

Bufo viridis (Green Toad). Limnos, Psara. 19 June 2002. G. Sideris. LIUZOO 19–21. This toad is known to tolerate harsh environments—surviving in xeric conditions (Bringsøe 1985; Clark 1989). No amphibians were seen during the 2000 and 2001 surveys and this was not surprising as the island is so arid. There were no indications of amphibian presence even at seasonal pools during the 2000 and 2001 survey and no published record for Psara. However, the islands had received unusually heavy rain during the winter and spring of 2002 as noted during fieldwork. As an explosive breeder *B. viridis* was able to populate the island with its offspring in spring 2002. Toads were so numerous around the island that some were crushed by pedestrians on a road. Tadpoles were found in almost every standing body of water throughout the island including one brackish pool. Similar observations regarding plentiful *B. viridis* populations—often after a heavy rain—have been made on other Aegean islands (Buttle 1989) although this species is still prone to human interference in water systems. The green toad population on Samos is quite widespread (Ioannides et al. 1994). Other records of *B. viridis* exist for Lesvos and Chios (Axiotis 1998; Ioannides et al. 1994). Tsunis and Dimitropoulos (1994) found *B. viridis* only on Lesvos and not on Chios. A brief visit to Psara in August 2002 failed to yield any specimens in spite of the continued presence of some water pools.

Testudines

Mauremys caspica (Striped-neck Terrapin). Xerokampo, Psara. 12 July 2000. G. Sideris. LIUZOO 016–018. The population is located along a 30 m stretch of a seasonal stream bed which flows to Kanalos Bay in the north, over a bed of conglomerate rock. No other localities on Psara, even those with seasonal pools, sustained individuals of *M. caspica*. These terrapins were found in three temporary pools of stagnant water and in a man-made cistern. These pools and the cistern are often too deep for *M. caspica* to climb out of and should the water dry up, which is very likely during late summer, death occurs due to overheating and dehydration. Three live turtles were found in such a desiccated pool. In the 2000 season, two dead turtles were collected from a dried-out cistern in the vicinity. All of the live turtles found were marked and released. Although this population of *M. caspica* seems marginal, juveniles were found in the 2002 field season. A thorough census of this small population is planned for 2003. Records of this terrapin have been noted for Chios and Lesvos (Tsunis and Dimitropoulos 1994) as well as for Samos (Ioannides et al. 1994).

Lacertilia

Cyrtopodion kotschyi (Kotschy's Gecko). Lazareta Bay (500 m E of the village), Psara. 18 June 2002. A. Duperault and G. Sideris.

Caught by glue trap on a sandy habitat, ca 50 m from beach area. LIUZOO 004. Agios Nikolaos. 28 June 2002. G. Sideris. Found under a piece of wood near the church. LIUZOO 13. *Cyrtopodion kotschyi* was found in most parts of Psara including the Agios Nikoloaos islet. This is the most widespread lizard in the Aegean (Tsunis and Dimitropoulos 1994; Valakos 1989), although there are few records for the larger northeastern islands (Tsunis and Dimitropoulos 1994). Although records exist on both Lesvos and Chios (Ioannides et al. 1994; Tsunis and Dimitropoulos 1994) it should be noted that the Chios record from the Tsunis and Dimitropoulos (1994) survey was found at Karfas beach under rotting wood—quite close to shore. This finding is interesting as we found this gecko to be quite common on Psara which is only 18 km W of Chios. An older survey (Werner 1930) cites this gecko as common in Skyros which lies 70 km WNW of Psara. Success of *C. kotschyi* on small islets has been noted previously, sometimes being the only reptile recorded (Clark 1989). This gecko was usually seen on buildings and stone walls and sometimes hidden in *Sarcopoterium spinosum* shrubs. It was easily found in the village but also in remote areas. During our visits, *C. kotschyi* was not observed at elevations above 300 m, and it was not found on Antipsara. Activity was primarily nocturnal but occasionally it was seen during the day, usually in the shade of stone walls.

Hemidactylus turcicus (Mediterranean Gecko). Psara. 27 June 2002. A. Duperault and G. Sideris. Caught by glue traps in an abandoned sheepfold, ca. 6.2 km N of the village (ca. 300 m elev.). LIUZOO 005–008. Antipsara. 22 June 2002. C. Matyi and A. Duperault. Found under a piece of wood near the sheepfold, ca 15 m from the southeastern coast. LIUZOO 015. This species was observed in all areas of Psara and Antipsara, and was most commonly found at an elevation of 300 m on Psara. We concur with previous observations that this gecko is nocturnal (Clark 1989). During the day we found *H. turcicus* hidden under rocks but one specimen was caught in a pitfall trap near a *S. spinosum* shrub. This gecko is common on Chios, both near human settlements and in fields (Tsunis and Dimitropoulos 1994). However, *H. turcicus* was not found to be as common in the village, and it was usually found in areas that received little human disturbance. Although *C. kotschyi* and *H. turcicus* occurred in the same area, *H. turcicus* was found in greater numbers in places where *C. kotschyi* was absent.

Ophisops elegans (Snake-eyed Lizard). Lazareta Bay, Psara. 19 June 2002. A. Duperault and G. Sideris. Collected at a sandy beach habitat, ca. 500 m from the village. LIUZOO 001–002. In village, Psara. 24 June 2002. G. Sideris. LIUZOO 010. Ftelio, Psara. 26 June 2002. George Sideris. Collected at a sandy habitat. LIUZOO 012. This lizard was found in most parts of Psara. Although *O. elegans* was found to be quite common on Psara by Tsunis and Dimitropoulos (1994), even at high altitudes, we observed a noticeable decrease at higher elevations. During the course of the study, *O. elegans* was found abundantly in lowland fields but also in mid-grade hills though less common. Only one lizard was seen and caught at an elevation of ca. 250 m, and none at higher elevations. There was a complete absence of *O. elegans* on Antipsara and its neighboring islets throughout the study periods.

Ablepharus kitaibelii (Snake-eyed Skink). Lazareta Bay, ca. 500 from the village, Psara. 18 June 2002. Anne Duperault. Collected at a sandy beach habitat. LIUZOO 003–014. Ca. 6.2 km N of the village (ca. 300 m elev.). 27 June 2002. Anne Duperault. Caught by a glue trap in an abandoned sheepfold. LIUZOO 009. Antipsara, ca. 40 m from seashore. 28 June 2002. Anne Duperault. Caught by hand. LIUZOO 011. This skink was ubiquitous throughout Psara and Antipsara. There was no indication that the population was restricted to the lowlands (Arnold and Burton 1978), as it was found at elevations of 300 m and higher. *Ablepharus kitaibelii* was most often found hidden in *S. spinosum* bushes. Adults were often secretive but juveniles were the only specimens observed on Psara that occasionally ventured into open patches only to run from one *S. spinosum* bush to another. In contrast, adults and juveniles on Antipsara were more evident in open spaces.

Discussion.—Chios, being much larger than Psara, supports a variety of habitats and populations of reptiles and amphibians (Chondropoulos 1986, 1989; Dimitropoulos 1990a; Ioannides et al. 1994; Tsunis and Dimitropoulos 1994). However, there is a limited record of *Cyrtopodion kotschyi* while this species is commonly found on Psara. There are no records of *Ablepharus kitaibelii* from Chios.

Unexpectedly, we found no snakes on Psara, despite its proximity to Chios, which supports eight species of snakes (Chondropoulos 1989; Dimitropoulos 1986, 1990a, 1990b; Ioannides et al. 1994; Tsunis and Dimitropoulos 1994). In fact, Chios is commonly referred to as "Snake Island." The absence of snakes on Psara (Tsunis and Dimitropoulos 1994) has created village legends such as one that tells of a priest's curse that lead to the disappearance of all the snakes from the island. Another bit of folklore is from those who believe that the island's soil is toxic to snakes. There is no geographical and/or toxicological explanation to suggest that snake populations could not have existed on the island.

Because of the presence of snakes in all of the surrounding islands, it would be expected that snakes must have existed on the island in the past. However, other small islands, such as Anafi and Astypalea, carry equal reputations of no snake populations and it might be the island's size and not the soil composition that results in their absence (Gruber 1979). However, some eastern Aegean snake species, notably *Eryx jaculus* and *Telescopus fallax*, have adapted to hot, dry conditions—typical of the islands in the Aegean (Gruber 1979). Thera, located in the Kyklades archipelago, is a much larger Aegean island that lacks amphibians and tortoises but has two snake species (Frör and Beutler 1978). This is of interest in terms of dispersal, as most likely the fauna on Thera was extirpated in a volcanic eruption over 3600 years ago (Gruber 1979).

Thus, further study is needed to explain the absence of snakes from Psara and Antipsara. One hypothesis is that the native snakes have been extirpated by humans as the island has been heavily populated for over 4000 years (Mycenaeans were living on the island in 2400 B.C.). Although tedious, a plan of sifting through some thick sedimentary deposits for reptile bones would be a useful test to this hypothesis.

Furthermore, there were village rumors of the existence of a legless lizard, most likely *Pseudopus apodus*. Despite our efforts we were unable to verify its presence but we cannot dismiss its existence on Psara as it is common on Lesvos (Axiotis 1998; Tsunis and Dimitropoulos 1994). We doubt that the village people are able to differentiate between a legless lizard and a snake. Thus,

although *P. apodus* might exist on Psara, it is conceivable that the rumor instead derives from the mistaken observation of a snake, as yet unrecorded by us, as the local people are proud of the island's reputation of being snakeless.

We recorded only *A. kitaibelii* and *H. turcicus* on Antipsara. The apparent absence of *O. elegans* and *C. kotschyi* from Antipsara is enigmatic, as Antipsara and Psara largely consist of the same habitat types, and *O. elegans, C. kotschyi, H. turcicus,* and *A. kitaibelii* have been found in the same habitat on Psara.

In light of the above there are some enigmas relating to ideas of species dispersal between the islands. Although the herpetofauna of the Psara archipelago is similar to that observed on smaller North Aegean islands, such as Aghios Efstratos (Schneider 1994), the new record of *A. kitaibelii* is significant not only in terms of its absence from Chios but also of its success on Psara and Antipsara. One factor contributing to the limited number of species recorded in our surveys is the lack of fresh water on Psara. This observation is consistent with a survey on Agios Efstratios, another small North Aegean island (Schneider 1994). A planned molecular study should elucidate population relationships between Psara and Chios. The survey described here has laid the groundwork for a long-term investigation of the Psara archipelago.

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New Distributional Records for Amphibians and Reptiles from Campeche, México

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During the course of fieldwork, from March 1997 to April 2000, in the Calakmul Biosphere Reserve (17°45' and 19°15'N, 89°15' and 90°10'W) and surrounding areas of Campeche, México, we documented several new records for amphibian and reptile species that either represent significant range extensions on the Yucatán Peninsula or new records for the state of Campeche. Records are from the Municipality of Calakmul, mainly from the archaeological site of Calakmul (AS) (18°06'26"N, 89°48'34"W), unless indicated otherwise. The specimens were collected by the authors and deposited in the Herpetological Collection, Museo de Zoología, El Colegio de la Frontera Sur, Chetumal, Quintana Roo (ECO-CH-H). Oscar Flores-Villela verified all species, except *Ctenosaura alfredschmidti* and *C. defensor,* which were verified by Gunther Köhler. All new distributional records are based on Lee (1996), except the one for *Ctenosaura alfredschmidtii*, which is based on Köhler (2000). Common names follow Liner (1994).

Included herein is one new state record for amphibians and eight for reptiles. Additionally, three amphibians and 24 reptiles represent significant range extensions on the Yucatán Peninsula.

New State Records for Campeche

Anura

Hyla ebraccata (Hourglass Treefrog). 30 km S Xpujil, Ejido Narciso Mendoza, 18°15'35"N, 89°27'07"W (ECO-CH-H 1030); 700 m S Plan de Ayala, 18°03'30"N, 89°17'34"W (ECO-CH-H 1051); and Bella Union de Veracruz, 18°02'00"N, 89°17'23"W (ECO-CH-H 1070). The closest previosly known localities for this species is an isolated population about 200 km northeast in central Quintana Roo and about 100 km to the south in Guatemala.

Lacertilia

Thecadactylus rapicaudus (Turniptail Gecko). 11 km NE AS, 18°11'35"N, 89°44'51"W (ECO-CH-H 0716) and AS (ECO-CH-H 0834). These records close the gap between the known ranges of this species on the northern (Yucatán, Quintana Roo) and southern portions (Guatemala, Belize, and Chiapas) of the Yucatán Peninsula.

Corytophanes hernandezi (Hernandez's Helmeted Basilisk). 11 km NE AS, 18°11'35"N, 89°44'51"W (ECO-CH-H 0612, 0642, 0777) and AS (ECO-CH-H 1440). This species has been previously reported from the base of the Yucatán Peninsula and from isolated records in the state of Quintana Roo. These records extend the range of the species ca. 120 km NW of the closest record in northwestern Belize.

Anolis pentaprion (Lichen Anole). 24 km N Xpujil, 18°43'10"N, 89°23'43"W (ECO-CH-H 0559); AS (ECO-CH-H 0835); and 64 km N Xpujil, 2.5 km E from Highway 269, 19°00'06"N, 89°16'48"W (ECO-CH-H 0964). These records extend the known species range ca. 210 km N of the nearest record in northern Guatemala.

Eumeces sumichrasti (Sumichrast's Skink). AS (ECO-CH-H 1632). This record extends the range of the species ca. 150 km from the nearest record in northwestern Guatemala and closes the gap between the northeastern and southern Yucatán Peninsula populations.

Serpentes

Symphimus mayae (Yucatán White-Lipped Snake). 15 km SE Nueva Vida, Brecha a Ricardo Flores Magon, 18°45'00"N, 89°17'54"W (ECO-CH-H 0591); 10 km N AS, 18°11'35"N, 89°44'51"W (ECO-CH-H 0776). This species was previously known only from the northern section of the Yucatán Peninsula and from an isolated population in northwestern Belize. These records extend the range ca. 150 km NW of the nearest record in Belize and close the gap between northern and southern Peninsula populations.

Tantillita lintoni (Linton's Dwarf Short-tailed Snake). 15 km SE Nueva Vida, Brecha a Ricardo Flores Magon, 18°45'00"N, 89°17'54"W (ECO-CH-H 0820). This record extends the range of the species on the Yucatán Peninsula ca. 200 km N of the closest known locality in northern Guatemala.

Thamnophis marcianus (Checkered Garter Snake). 17 km N Xpujil, 18°39'55"N, 89°24'06"W (ECO-CH-H 0630) and 15 km SE Nueva Vida, Brecha a Ricardo Flores Magon, 18°45'00"N, 89°17'54"W (ECO-CH-H 1334). These records add another apparently isolated population to the known range of the species on the Yucatán Peninsula; the closest known locality being ca. 150 km northeastward in southern Yucatán.

Xenodon rabdocephalus (False Fer-de-Lance). AS (ECO-CH-H 0874) and 30 km S Xpujil, 18°15'35"N, 89°27'07"W (ECO-CH-H 1081). These records extend the range of the species more than 100 km NW of the closest locality in northern Belize.

Range Extensions

Caudata

Bolitoglossa yucatana (Yucatán Mushroom-tongued Salamander). 20 km NE Xpujil, 18°42'33"N, 89°21'50"W (color slide photo voucher [ECO-CH-H A-0001]) and 20 km S Conhuas, 18°22'38"N, 89°53'46"W (ECO-CH-H 1629). These records fill a gap between populations on the northern section of the Yucatán Peninsula and an isolated population ca. 150 km SW of the nearest record in central Campeche. ECO-CH-H A-0001 was found inside a large tank bromeliad (*Achmea bracteata*) located 4 m above ground.

Anura

Hyla loquax (Mahogany Treefrog). Municipality of Hopelchen, 64 km S Dzibalchen, 19°01'51"N, 90°00'53"W (ECO-CH-H 1222) and 23 km SW Xkan-Ha, 19°06'47"N, 89 30'13"W (ECO-CH-H 1234). These records extend the range in Campeche ca. 66 km N of the closest known localities along Mexican Hwy 186.

Gastrophryne elegans (Elegant Narrowmouth Toad). Municipality of Hopelchén: 64 km S Dzibalchén, 19°01'51"N, 90°00'53"W (ECO-CH-H 1216, 1217, 1221, 1224) and 23 km SW Xkan-Ha, 19°06'47"N, 89°30'13"W (ECO-CH-H 1235). These records extend the range ca. 50 km northward from the closest known localities in east-central Campeche.

Testudines

Staurotypus triporcatus (Mexican Giant Musk Turtle). 7 km E Nuevo Becal, El Chorro, 18°35'28"N, 89°15'28"W (ECO-CH-H 1189). This species is known primarily from the southern base of the Yucatán Peninsula. This record expands the known range ca. 106 km E from the closest known locality in central Campeche.

Terrapene carolina yucatana (Yucatán Box Turtle). 8.5 km S Conhuas, 18°27'13"N, 89°53'21W (ECO-CH-H 0792); and AS (CHO-CH-H 1187). This box turtle is known from the northern and western parts of the Yucatán Peninsula. These records represent a range extension of ca. 140 km E from the closest record.

Lacertilia

Ctenosaura alfredschmidti (Schmidt's Spiny-tailed Iguana). AS (ECO-CH-H 0622) and 25 km SSE Conhuas, 18°26'54"N, 89°53'21"W (ECO-CH-H 1293). Previous records for this species were from the type locality at Pablo Garcia village and surroundings (Köhler 1995), ca. 70 km NW of AS.

Ctenosaura defensor (Yucatán Spiny-tailed Iguana). Municipality of Hopelchen, 55 km SW from Dzibalchén, 19°00'51"N, 89°54'35"W (ECO-CH-H 1255). This species is known from northwestern Yucatán as well as from two records in Campeche. This is a range extension for the species ca. 95 km SW and ca. 180 km NE from the two previously known Campeche records.

Iguana iguana (Green Iguana). Municipality of Escárcega, 71 km

SW Escárcega, between El Machetazo and El Naranjo, 18°00'03"N, 90°55'58"W (ECO–CH-H 1642). This is the southeasternmost record for the species in Campeche and extends the range ca. 70 km NE of the closest record in Tabasco.

Sceloporus lundelli (Lundell's Spiny Lizard). AS (ECO-CH-H 0621, 0922, 1146). This species is recognized from the northern and western portions of the Yucatán Peninsula and from an isolated population in central Belize and adjacent northeastern Guatemala. These records represent range extensions of ca. 100 km from the nearest record to the north and close the gap between the northern and isolated southern populations.

Anolis biporcatus (Neotropical Green Anole). 30 km S Xpujil, Ejido Narciso Mendoza, 18°15'35"N, 89°27'07"W (ECO-CH-H 0829). This species has been reported only from the southern end of the Yucatán Peninsula and from an isolated locality in western Campeche. This record extends the range ca. 76 km NW from the closest record in Belize.

Anolis sagrei (Brown Anole). Xpujil, 18°30'30"N, 89°23'51"W (ECO-CH-H 1299). This is the first record of the species from the center of the Yucatán Peninsula and closes the gap between known populations on the eastern and western sections of the Peninsula. Its present distributional pattern is surely the result of human activity, because the species is a human commensal rarely found far from areas of human activity (Lee 1996).

Sphenomorphus cherriei (Brown Forest Skink). 15 km SE Nueva Vida, Brecha a Ricardo Flores Magón, 18°45'00"N, 89°17'54"W (ECO-CH-H 0576, 1324); AS (ECO-CH-H 0843); and10 km NE AS, 18°11'35"N, 89°44'51"W (ECO-CH-H 0880). This species is primarily known from the base of the Yucatán Peninsula and also from an isolated population to the north in Yucatán and adjacent Quintana Roo. These records confirm its presence in the central part of the Peninsula and extend its range ca. 100 km NW from the nearest locality in northern Belize.

Aspidoscelis angusticeps (Yucatan Whiptail). 2 km NW Conhuas, Balam-Ku ruins, 18°33'18"N, 89°56'38"W (ECO-CH-H 1486) and 64 km N Xpujil, 19°00'27"N, 89°17'24"W (ECO-CH-H 0984). This species is known from the northern portion of the Yucatán Peninsula and from two isolated populations in central Belize and adjacent Guatemala. These records extend the range ca. 40 km E and 55 km SE from the nearest known localities in central and northern Campeche, respectively.

Aspidoscelis deppei (Black-bellied Racerunner). 35 km S Xpujil, near Cristobal Colon village, 18°12'44"N, 89°27'04"W (ECO-CH-H 1091, 1096, 1099, 1519, 1520, 1521, 1522). This species has been previously recorded on the Yucatán Peninsula only from extreme southwestern Campeche. These records extend the range southeastward ca. 300 km into the southcentral portion of the state.

Serpentes

Dipsas brevifacies (Snail-eating Thirst Snake). 34 km S Xpujil, Cristobal Colon village, 18°12'44"N, 89°27'04"W (ECO-CH-H 0555, 1083) and AS (ECO-CH-H 0646, 0841, 1160). This species is endemic to the Yucatán Peninsula and known primarily from the northern and eastern portions, although there is one other isolated record close to the city of Belize. These records extend the distribution ca. 50 km SE of the closest locality.

Dryadophis melanolomus (Lizard Eater). 30 km S Xpujil, Ejido Narciso Mendoza, 18°13'49"N, 89°26'20"W (ECO-CH-H 0655) and AS (ECO-CH-H 0767). This species is known to occur on the northern and southeastern sections of the Yucatán Peninsula. These records extend its range ca. 135 km S from the only other records from Campeche.

Imantodes gemmistratus (Central American Tree Snake). 64 km N Xpujil, 2.5 km E from Mexican Highway 269, 19°00'06"N, 89°16'48"W (ECO-CH-H 0960). This species is known to occur in the northern and western parts of the Yucatán Peninsula and from an isolated population in north-central Guatemala. This record extends the range ca. 180 km NE from the closest locality in Campeche and bridges the gap between the northeastern and western Peninsula populations.

Imantodes tenuissimus (Yucatan Blunt-headed Tree Snake). AS (ECOCH-H 0640). This species is endemic to the Yucatán Peninsula and is primarily known from the northern portion, although a record from western Campeche is also documented. This record is the southernmost for the Peninsula and extends the range ca. 200 km S from the closest record in Yucatán.

Lampropeltis triangulum (Milk Snake). 64 km N Xpujil, 2.5 km E from Mexican Highway 269, 19°00'06"N, 89°16'48"W (ECO-CH-H 0959). This record closes the 200 km gap between other populations on the northern and southern portions of the Yucatán Peninsula.

Oxybelis aeneus (Mexican Vine Snake). 24 km N Xpujil, 18°44'10"N, 89°23'40"W (ECO-CH-H 0822); 1 km S Plan de Ayala, 18°03'30"N, 89°17'34"W (ECO-CH-H 1088); and AS (ECO-CH-H 1284, 1439). This species is well documented from the northern, eastern, and southern parts of the Yucatán Peninsula. These records extend the range by ca. 163 km SE from the nearest record in northern Campeche and close the gap within the central section of the Peninsula.

Oxybelis fulgidus (Green Vine Snake). Nuevo Becal, 18°36'29"N, 89°18'01"W (ECO-CH-H 0816) and 1.5 km S Plan de Ayala, 18°03'30"N, 89°17'34"W (ECO-CH-H 1076). This species has been previously recorded from the northern and southeastern portions of the Peninsula. These new records confirm the presence of this species in the central Peninsula, and extend the range ca. 90 km NW from the closest known locality in Belize.

Sibon nebulata (Cloudy Snail Sucker). 30 km S Xpujil, Ejido Narciso Mendoza, 18°15'35"N, 89°27'07"W (ECO-CH-H 0790); 24 km N Xpujil, 18°44'10"N, 89°23'40"W (ECO-CH-H 1007); and AS (ECO-CH-H 1170). These records confirm the presence of this species in central Campeche as proposed by Lee (1996). There is only one previous record for the state, from a locality ca. 230 km W of these records.

Sibon sanniola (Pigmy Snail Sucker). 30 km S Xpujil, Ejido Narciso Mendoza, 18°15'35"N, 89°27'07"W (ECO-CH-H 1098); and AS (ECO-CH-H 1285). This species is endemic to the Yucatán Peninsula and its previously known range included the northern and southeastern sections. These records extend its range ca. 135 km S into the center of the Peninsula.

Urotheca elapoides (False Coral Snake). 10 km NE AS, 18°11'35"N, 89°44'51"W (ECO-CH-0772). This is a well-known

species on the southern end of the Yucatán Peninsula and there is also an isolated population in eastern Yucatán and adjacent Quintana Roo. This record extends the known distribution ca. 130 km SE from the nearest record in western Campeche.

Agkistrodon bilineatus (Cantil). AS (ECO-CH-H 1261) and 2 km NW Conhuas, Balam-Ku ruins, 18°33'18"N, 89°56'38"W (photographic collection, ECO-CH-H R-0037). This species is uncommon, but known from several localities on the northern end of the Yucatán Peninsula and from an isolated population in northern Belize. These records extend the range ca. 170 km SE from the only other state record in northwestern Campeche.

Crotalus durissus (Neotropical Rattlesnake). AS (ECO-CH-H 861, 1147,1441); 24 km N Xpujil, 18°44'10"N, 89°23'40"W (ECO-CH-H 884); 31 km S Xpujil, 18°15'07"N, 89°26'30"W (ECO-CH-H 1549); and 7 km E Nuevo Becal, El Chorro, 18°35'28"N, 89°15'28"W (ECO-CH-H 1419). This species is recorded from most of the Mexican part of the Yucatán Peninsula, except south-central Campeche, and from isolated populations in northern Guatemala and central Belize. These records confirm the presence of the species in southern Campeche, extending the range ca. 60 km S.

Porthidium yucatanicum (Yucatan Hog-nosed Pitviper). Municipality of Hopelchén, Dzibalchén, 19°27'49"N, 89°43'30"N (ECO-CH-H 1204). This species is endemic to the Yucatán Peninsula and previously known only from the northern sections. This is the southernmost record for the Peninsula, the second record for Campeche, and extends the range by more than 80 km S from the closest recognized locality in the northern section of the state.

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BOOK REVIEWS

Herpetological Review, 2003, 34(3), 272–274.

Les Serpents d'Afrique Occidentale et Centrale, 2nd ed., by Jean-Philippe Chippaux. 2001. Editions de l'Institut de Recherche pour le Développement, Collection Faune et Flore Tropicales, Paris (diffusion@bondy.ird.fr). 292 pp., softcover. 25.91 € (approx. US $27.70). ISBN 2-7099-1439-5.

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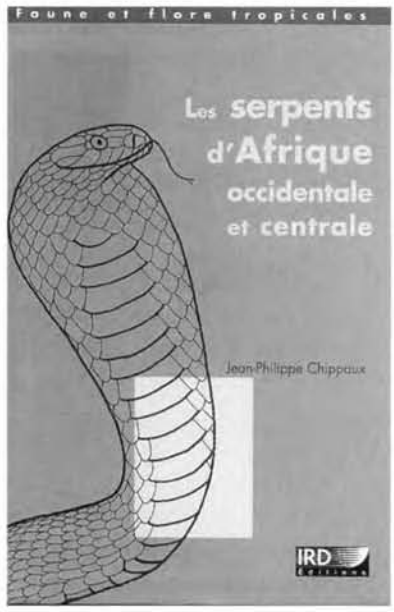

The West African herpetofauna is poorly documented, despite having one of the richest snake faunas in Africa (e.g., Böhme 2000; Lawson 1993). Moreover, in many regions snakebite is of exceptional medical significance (see reviews by Spawls and Branch 1995 and Chippaux 1998). This new volume, therefore, fills a much needed gap.

"Chippaux 2001" is a re-edition, revised and updated, of "Chippaux 1999," the chronological successor of Villiers' (1975) famous *Les Serpents de l'Ouest Africain* (also in French and long out of print). The new volume has an agreeable format and a clear and practical organization. It begins with a general section (pp. 11–33) including a presentation of the classification and the evolution of snakes, an introduction to the main morphological characters useful to their identification (with good scale drawings), and a long chapter on venoms, envenomation and its treatment (the author's speciality). The systematics section (pp. 35–249) includes a detailed account for each of the species occurring in the covered area (from Senegal east to the Central African Republic and from Mauritania south to Congo-Brazzaville). It also includes distribution maps, preceded by identification keys to the families, genera, and species. An impressive bibliographical section of 33 pages terminates the book. The text is accompanied by eight color plates, showing in total 55 photographs (illustrating four clinical envenomation cases and 47 snake species).

Several book reviews of the first edition have appeared, mentioning some important corrections. We concur with Hughes (2000) and Akani (2002) that the "*Dasypeltis fasciata*" shown in photograph 18 is in fact *D. scabra*, and that the "*Thelotornis kirtlandii*" (photograph 30) is *T. capensis*. Hughes (2000) also suggested that the "*Psammophis phillipsii*" in photograph 36 (from near Cotonou airport, Bénin; pers. comm. J.-P. Chippaux) is *P. sibilans*, that "*P. rukwae*" (photograph 38) is probably *P. sudanensis*, and that the viper "*Echis leucogaster*" (photograph 52) is *E. ocellatus*. The numbering of the pictures and their specific identification (except for the *Echis*, which has been corrected) remain unchanged in the second edition. We add that "*Grayia tholloni*" (photograph 15) is a (starving ?) *G. smithii* (the specimen probably originating from Togo; J.-P. Chippaux, pers. comm.). It would have been preferrable for each photograph to be accompanied by the locality of the specimen. It should be noted also that "*Grayia smythii*" should be spelled *G. smithii* (see Pauwels et al. 2000), and "*Elapsoidea güentheri*" should have a double i and lack an umlaut. Other misspelled scientific names include "*Bothrophtalmus*" (p. 54, map; = *Bothrophthalmus*) and "*Lycophidion multimaculata*" (p. 76, right column; = *multimaculatum* as the gender of *Lycophidion* is neutral).

It is a great pity that scolecophidians, although represented by some 30 species in the area covered by the present opus (i.e., 15 % of the 195 local species recognized by Chippaux) are treated in only two pages, without any key to the genera or species. However, a volume wholly dedicated to the African Typhlopidae (Roux-Estève 1974) is available and, moreover, the Leptotyphlopidae and Typhlopidae of Africa have been dealt with in identification keys by Meirte (1992).

An excellent feature of Chippaux's book is that head scalation drawings have been provided for many species, which is very useful for identification. In general, at least one species per genus has so been illustrated, but unfortunately not for the genera *Rhinoleptus* (Leptotyphlopidae), *Ramphotyphlops*, *Rhinotyphlops* (Typhlopidae), *Hemirhagerrhis* (Colubridae), *Poecilopholis*, *Xenocalamus* (Atractaspididae), and *Cerastes* (Viperidae). A few drawings should be corrected, including the lateral view of the head of *Malpolon moilensis* which shows one preocular, whereas the species account (p. 158) notes "la préoculaire inférieure est au moins trois fois plus petite que la supérieure" ["the lower preocular is at least three times smaller than the upper one"]. The scalation drawing for *Dromophis lineatus* (p. 162) shows two preoculars, while the species and genus accounts specify only one. The lateral view of the head of *Atractaspis reticulata* (p. 187) shows fused internasals and prefrontals (perhaps a particularity of the illustrated specimen, but at least a very atypical configuration for the species); the upper view of the head of *Polemon gracilis* (p. 204) indicates a broad supralabial/prefrontal contact although the lateral view shows an absence of contact (same remark as above). For this latter species, Chippaux wrote (and this is also visible in his drawing) "aucune labiale supérieure n'est en contact avec la pariétale" ["none of the supralabials contacts the parietal"], *contra* de Witte and Laurent (1947). Those uncertainties concerning the drawings could be removed if the illustrated specimens could be traced and examined, i.e. if the drawings had been accompanied by the museum collection numbers of the specimens on which they were based (the same comment also applies to the hemipenis and maxillary drawings).

The generic allocation of some species remains debatable, e.g., *Charina* for *Calabaria* (sensu Kluge 1993) has not received common acceptance; African *Geodipsas* have been transferred to the new genus *Buhoma* (Ziegler et al. 1997); and the use of *Haemorrhois* for all African *Coluber* is premature—although *algirus* has been transferred to *Haemorrhois*, *Coluber dorri* remains anomalous among African racers and should remain in *Coluber* sensu lato (Schätti and Utiger 2001). It should be noted as well that the Dispholidini has recently been revised (Broadley and Wallach 2002) with resurrection of *Rhamnophis* for *aethiopissa* and *batesi*. Molecular studies have also shown that the two races of Gaboon adder show sufficient divergence to be treated as separate species (Lenk et al. 1999). Both species therefore occur in the region, and *Bitis rhinoceros* is endemic to the Upper Guinea forest.

Inclusion of the summarized classification of African colubrids (p. 50) by Bogert (1940), while of historical value, does not reflect current understanding of relationships among African snakes and could be easily deleted. Similarly the groupings of atractaspids by features of dentition and hemipenes (p. 177) is of little value and is, moreover, inaccurate as *Aparallactus modestus* lacks back fangs.

The identification keys and generic and specific accounts are very useful, but some mistakes are present. The general key to the Colubridae (pp. 51–53) presents two couplets numbered 31 but no couplet 33, which makes the use of the key between couplets 31 and 45 questionable. The second part of couplet 37: "de 15 à 21 rangées dorsales" ["15 to 21 dorsal scale rows"], is erroneous, because it refers to various genera, of which *Philothamnus* includes species with only 13 dorsal rows. On pages 70–71, it is stated that *Lycophidion*, whose "frontale est plus large ou aussi large que longue" ["frontal is wider than or as wide as long"], can be distinguished from *Chamaelycus* because the latter possesses "une frontale plus large que longue" ["a frontal wider than long"]. There is also a contradiction within the account of *Lycophidion nigromaculatum* (p. 74) regarding the number of preoculars (1 vs. 2). Chippaux (p. 94) indicated that *Hydraethiops laevis* shows a single internasal, while it is in fact either single or divided (Pauwels et al. 2002) as indicated in the original description. The key for the genus *Thrasops* (p. 103) begins with a first couplet leading to a single vs. divided anal plate, but the introduction to the genus incorrectly characterizes all species as having a divided anal. In the presentation of the genus *Hapsidophrys*, Chippaux (p. 119) wrote that both species show a single preocular, while two are visible on the lateral head scale drawing of *H. lineatus*, in agreement with the species account which states "1 préoculaire, parfois 2" ["1 preocular, sometimes 2"]. Chippaux indicates a maximal number of 143 subcaudals for *Dispholidus typus*, which corresponds to that shown by the only known Gabonese specimen, plotted on the map on p. 153. This specimen, however, is probably a *Thrasops* (Hughes 1983). In the introduction to the Elapidae (p. 207), the author states that the loreal scale is always absent in the group, but on p. 220, in the presentation of the cobras of the genus *Pseudohaje*, one finds "loréale généralement absente" ["loreal generally absent"] (as previously noted by Hughes 2000). The generic account for *Paranaja* (p. 227) indicates that the dorsal scale rows are oblique, contrary to the species account where they are said to be straight.

Although the nomenclature of scales has been very well explained and illustrated in the general section, these definitions are not always taken into account in the species accounts. For instance, the drawing of *Scaphiophis albopunctatus* (p. 116) shows two preoculars, no subocular and two postoculars, but the species account states that there is one preocular, two or three suboculars and two or three postoculars. For *Thrasops batesii* too (p. 107), what should be called a subocular following the earlier definitions on p. 16, is called a postocular.

The maps, each dotted and tinted, most often dealing with a single taxon, give a good idea of the general distribution of the species. Point localities are based on literature records (white dots) and personal observations of the author (black dots). It is important to draw the attention of non French-speaking readers to the fact that the map tinting is based on the probability of the presence of the species "en fonction de critères écologiques (climat, végétation, degré d'anthropisation)" ["according to ecological criteria (climate, vegetation, degree of anthropisation)"]. As Hughes (2000) and Akani (2002) have noted, the point localities for most species are drawn mainly from the French literature, and many localities from English language publications have been omitted (even if the articles are listed in the bibliography). In addition to this deficiency we also noted important discrepancies between the text and the distribution maps, notably for *Dipsadoboa underwoodi*, *Gonionotophis grantii*, *Lamprophis virgatus*, *Lycophidion irroratum*, *L. multimaculatum*, *Psammophis phillipsii*, *Telescopus variegatus*, *Atractaspis dahomeyensis*, *Polemon gabonensis*, *P. gracilis*, and *Causus resimus*. The distribution of *Python sebae* (p. 47) is still given as extending to South Africa, although southern and eastern populations have since 1984 been referred to *P. natalensis* (Broadley 1984). Chippaux (p. 238) included in the map for *Atheris broadleyi* dots intended to depict the distribution of *A. squamigera* in the map provided in the original description of the former species, and thus erroneously shows *A. broadleyi* from Gabon and Congo-Brazzaville. *Echis jogeri* Cherlin, 1990 (ignored in Chippaux 1999) is dotted on a map but not discussed in a detailed species account. This was attributed to the "nombre de spécimens trop faible (4 exemplaires au total) pour permettre une plus ample description" ["too low number of specimens (4 in total) to allow for a more complete description"], even if this species is considered as "probablement valide" (p. 244). However, other species known from less than four specimens, including some taxa that are probably invalid, such as *Mehelya riggenbachi* and *Atractaspis coalescens* (each known from a single specimen), are discussed in dedicated accounts. The genus *Eryx*, included in the first edition on the basis of the presence of *E. somalicus* in the Central African Republic, has disappeared without comment from the second edition. The map for *Mehelya capensis* shows a strong overlap of the distribution of the subspecies *capensis* and *savorgnani*, indicating they should be better treated as distinct species, and similar comments could be made for the sympatric subspecies *lineatus* and *brunneus* of *Bothrophthalmus lineatus*. Type localities are indicated in French, but should be given in the language of the original description in order to avoid possible misinterpretations due to translation.

Despite these relatively few errors and problems this book is a remarkable reference work and will serve as a useful starting point for herpetologists in the field and in the laboratory. It is an excellent synthesis that all naturalists interested in the rich African fauna will want to consult. We strongly recommend its acquisition by all natural science libraries.

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Amphibians and Reptiles of Delmarva, by J. F. White, Jr., and A. W. White. 2002. Tidewater Publishers, P.O. Box 456, Centreville, Maryland 21617, USA. xvi + 288 pp. Softcover. US $14.95. ISBN 0-87033-543-X.

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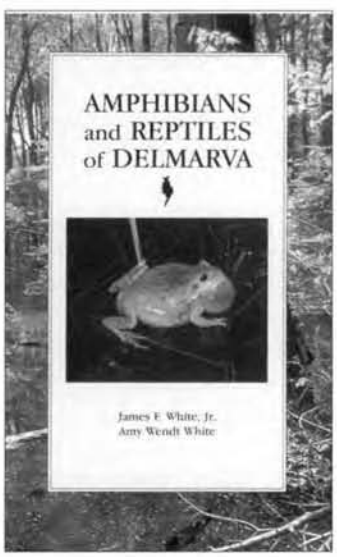

Local and regional field guides are important outlets of public education, working to dispel the myths surrounding reptiles and amphibians by presenting valid information in a readable manner. Because of the directed focus of these efforts, these guides also work to include extensive detail of both habitats and species that occur in these generally small areas. *Amphibians and Reptiles of Delmarva* is no exception, combining detailed species accounts with simple habitat descriptions that will assist nature enthusiasts and experienced herpetologists alike in identifying species and learning about the natural history of this diverse coastal herpetofauna. This book focuses on the herps of the Delmarva Peninsula, which sits on the mid-Atlantic Coast, encompassing all of Delaware and extending south into part of Maryland and Virginia east of the Chesapeake Bay. The Delmarva represents an interesting zoological and botanical transition zone because many species reach either the northernmost or southernmost range of their distributions in this area.

Amphibians and Reptiles of Delmarva is a pocket-sized (18.8 cm x 11.5 cm) book ideal for field identification of specimens. It begins with an introductory explanation of the nomenclature adopted, how to use the field guide, and a brief history of herpetology in the Delmarva region. Although the history section presents only a short summary of the herpetologists who have worked in this region, it is filled with references from the primary literature, most of which are difficult to locate. Next is an explanation of the physiography of the region, which provides an excellent overview of some of the geographical features that make up the Delmarva. Additionally, it provides a short summary of the habitat types in the area, as well as a list of the most common groups of reptiles and amphibians found in each habitat. The third section is aimed towards the casual nature observer or amateur naturalist, and provides detailed information on observing, identifying, and handling amphibians and reptiles. Also presented are the names and addresses of individuals and organizations interested in range extensions, sightings of rare species, or simply in assisting with identifications of observed animals.

The real treasure of this book lies in the species accounts, describing in detail the 73 species recorded from or suspected as occurring on the Delmarva. A brief overview of each species is presented, including a description, a list of morphologically similar species, overall range, range and status (very common to extremely rare) on the Delmarva, habitats where the species can be found, and life history. Distribution maps are also presented, with the entire county shaded to denote species presence. Nestled in the center of the species accounts are color photographs of each species presented in the text as well as some of the previously described habitat types. The photographs are arranged by taxonomic group, allowing easy preliminary identification of observed species using only the photographs, which is helpful for those unfamiliar with identifying species from written descriptions. The final section overviews conservation issues as they relate to the Delmarva, including a table of rare species with their State, Federal, and National Heritage rankings, as well as a description of the significance of each category. Presenting even a brief overview of conservation issues in a field guide aimed at a broad audience is an excellent way of educating herpetology enthusiasts about the effects of humans on the species they are interested in. Finally, an appendix presents a species list with room to write in short field notes for each species.

Although the authors follow the nomenclature of Crother (2000) for both common and scientific names, several of the common names used differ from those used in other regional field guides (e.g., little brown skink for ground skink, *Scincella lateralis*, northern diamond-backed terrapin for northern diamondback terrapin, *Malaclemys terrapin terrapin*), possibly causing some confusion for those unfamiliar with scientific nomenclature. However, the designation of consistent common names must begin somewhere and I applaud the authors for using a previously published nomenclature throughout their work. The distribution maps are quite small (3.4 cm x 1.2 cm) and lack detailed species ranges, as one species record is presented as equivalent to a true county-wide distribution. I feel more detailed distribution maps are useful to those searching for specific species, with each museum specimen locality designated (e.g., Palmer and Braswell 1995) or at least more precise ranges presented (e.g., Bartlett and Bartlett 1998) so that the reader can get a true idea of the distribution of a species with regard to habitat and geographical features, rather than political boundaries. Additionally, a smaller-scale map depicting the entire states of Delaware, Maryland, and Virginia, including the Delmarva's location within this area at the beginning of the book would help those unfamiliar with the region to visualize the relationship between the peninsula and the mainland.

This book is exceptionally thorough and well organized for being focused on such a small geographic region and I recommend this book to anyone interested in coastal herpetofaunas, especially those interested in biogeography. The cost is a bargain considering the wealth of information presented and the beautiful color photographs. It makes an excellent field companion and will serve as a general guide to those unfamiliar with the herpetofauna of the mid-Atlantic region, both on and near the Delmarva.

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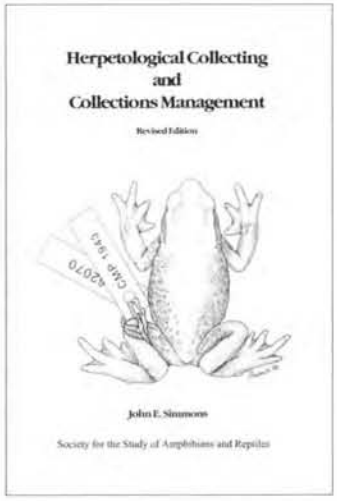

This book is a revision of John Simmons' 1987 SSAR Herp Circular Number 16, which is now out of print. Since the publication of the first edition of this volume, much has changed in terms of both collecting herpetological material and managing these collections. An indication of this change is the length of the circular. The new edition has increased from 56 pages of text to 108, references have increased from 14 pages to 25 pages, and three appendices have been added to provide additional sources of information.

The publication is divided into four parts covering the following topics: I. A Brief History of Systematic Collections, II. Field Collecting, III. Preservation of Specimens, and IV. Museum Collections. To the extent that the stated goal of the author is to provide "an even better, but equally flexible framework for collection care in line with recognized professional standards and practices," I have to say that he has gone beyond his own expectations.

Part I is an addition to the first edition. It presents a historic overview of collecting as a human endeavor, the development of museum collections, and the evolution of preservation technology and record keeping. Collecting has long been a part of our natural learning process. The documentation of natural diversity and the collection of curiosities have long histories. Preservation techniques predate the development of collections and museums, but the advent of new and more effective preservation methods facilitated the rise of modern natural history museums and transformed systematic collections from 'cabinets of curiosity' for the select few, to a worldwide resource documenting natural diversity. Following Whitehead's (1970) historical periods, Simmons discusses the changing nature of systematic collections as an interaction of our search for knowledge and the development of the technologies to preserve and conserve natural history specimens through time. In his section on the future of systematic collections, the author points to the growing value of systematic collections as new ways of obtaining data from specimens (e.g., DNA extraction from preserved specimens) are discovered and new uses for collections (e.g., biodiversity informatics) are developed. As fieldwork and collecting become more difficult and expensive, the value of present holdings will only increase.

The bulk of the book is devoted to the topics of collecting and preservation, and to a discussion of the framework for a properly managed systematic collection. From the onset, it is clear that these go hand in hand. Given the expense, time, and effort that go into the preparation for and execution of any given field trip, there is a corresponding need for the proper care and curation of the collections realized. If not, all would be wasted.

In Part II, the many field collecting strategies, methodologies, and techniques that the herpetological community has developed are reviewed, providing both an introduction to beginners as well as a benchmark for experienced workers. In this section John also thoroughly covers preparing for a collecting trip, providing a discussion of what needs to be considered and accomplished before departure. Much of the material covered might seem obvious, but I have found checklists much more reliable than my memory. Appendix II serves as a guide to how to prepare and what to pack and can be adjusted to fit the type and duration of any field trip. One of the more important elements of preparation involves obtaining the appropriate permits. It is imperative that any collecting is done legally, with all the proper permits and documentation constituting an integral part of the collection itself. Without these, the legal ramifications can be extensive and severe, affecting not only the individual collector, but also the institution that accessions the collection. One must also be prepared to anticipate problems; it is not unheard of to have all the appropriate documentation and still run into difficulties.

Part III of the book addresses the actual preparation and fixing of specimens and proceeds step by step from the field to the collection shelf. This section has tripled in size from the previous edition and its completeness attests to the importance of proper preparation and documentation procedures to maximizing the value of each specimen collected. The author has provided an excellent resource for collectors, curators, and collection managers. He supplements the discussion with alternatives and associated references. This is where Simmons' experience really shows. For example, he discusses preferred methods for preservation of specimens, laying out alternatives depending on the ultimate use of the specimen. His discussion on fixation and preservation clearly explains the actual fixation process and reviews specific methods for preserving amphibians and reptiles, pointing out things easily forgotten, for example, tying off an everted hemipenis so that it remains fully extended.

The author's coverage of techniques is extensive and more than I can mention in this review. Although I may disagree with a procedure here or there or maybe just do things differently, I found the discussion complete and helpful, with ample references to sources providing detailed information about the recommendations and techniques mentioned. Inherent in the discussion is the need to continue to develop these techniques and to document

current procedures to assist future workers to understand better what has happened to specimens. Such documentation, at a procedural level, gives another layer of added value to specimens.

In Part IV, Museum Collections, dealing with collection management, Simmons puts everything together. It accounts for almost half of the text as a whole. What should happen to the specimen and its associated data once collected, processed, and placed on the shelf? Simmons defines the most important functions of collection management as (1) maintaining the integrity of specimens and their associated data; (2) maintaining specimens and data in optimum usable condition; and (3) making specimens and data available for appropriate use. His discussion outlines professional standards and procedures and defines what museum collections should strive for operationally. He considers the physical conservation of specimens and related data, as well as factors that affect the longevity and usefulness of specimens. Preservation techniques, storage conditions, environmental parameters, and laboratory facilities are thoroughly reviewed as are personnel and their respective roles and responsibilities and both the physical and administrative management of the collection. All in all, it is a concise discussion of how to manage a collection and a museum, providing specific recommendations based, in part, on personal experience.

This publication is an excellent summation of the progress that has been made in the field of conservation of herpetological collections and is a tribute to the author's continued efforts to expand our knowledge. Simmons provides the reader with a detailed guide to herpetological collecting and the management of museum collections. This is a publication that should be on the desks of all museum professionals, worn from use. The museum community owes John a debt of gratitude for providing such a tool to assist us in the execution of our trust. I only hope that enough copies have been printed for all who should read it.

LITERATURE CITED

WHITEHEAD, P. J. P. 1970. Museums in the history of zoology. Museums Journal 70(2):50–57.

PUBLICATIONS RECEIVED

The Herpetofauna of Shek Kwu Chau, South China Sea, with Descriptions of Two New Colubrid Snakes, by James Lazell. 2002. Memoirs of the Hong Kong Natural History Society 25. 82 pp.

This memoir documents the herpetofauna of Shek Kwu Chau, a small island in the South China Sea near Hong Kong. Following an introduction to the geological and historical background of the island, accounts are provided for 24 species of amphibians and reptiles, including the new taxa *Ahaetulla prasina medioxima* and *Dendrelaphis hollonrakei*. Most accounts provide detailed systematic and/or natural history notes and some contribute significantly to the knowledge of poorly known forms. The work concludes with general considerations of life histories and biogeography. It is illustrated by numerous graphs, maps, line drawings and photographs. This contribution should be of special interest to herpetologists studying the tropical Asian fauna, island biologists, snake systematists, and ecologists.

Anakondas, by Lutz Dirksen. 2002. Natur und Tier-Verlag GmbH, An der Kleimannbrücke 39/41, D-48157 Münster, Germany (www.ms-verlag.de). 190 pp. Hardcover. 48.00 €(approx. US $52.00). ISBN 3-931587-43-6.

This book, written in German, is a monographic revision of the genus *Eunectes*, based on the doctoral dissertation of the author. It begins with short overviews of the systematic relationships of anacondas, current taxonomy (including synonymies), paleontology, and conservation status, as well as a brief summary of South American geography, geology, climatology, vegetation, and fauna. More than 750 specimens were examined in the course of the work and morphological and color data were subjected to multivariate analysis, while RAPD data were used to generate a phylogeny for the genus. Four living species of anacondas, including a new species, *E. beniensis*, are recognized. For each taxon a diagnosis is provided and color, pattern, morphometry, scalation, skeletal and dental anatomy, sexual dimorphism, hemipenial structure, reproduction, feeding, behavior, captive care, and commercial trade are discussed. The text is complemented by many color photographs, tables, and graphs dealing with all aspects of anacondas, their anatomy, biology, and habitats. Point locality maps and country-by-country discussions of distribution clarify the ranges of each taxon and reveal previously unrecognized patterns. The book concludes with summaries in German, English, French, and Spanish and a bibliography with approximately 250 entries. "Anakondas" summarizes a wealth of information about these giant snakes and will be a valuable addition to the libraries of snake systematists, morphologists, and those interested in the fauna of South America.

Die Äskulapnatter – *Elaphe longissima*, Verbreitung und Lebensweise in Mitteleuropa, by Axel Gomille. 2002. Edition Chimaira, Friedberger Anlage 14, D-60316, Germany (frogbook@aol.com). 158 pp. Hardcover. 27.80 €(approx. US $30.00). ISBN 3-930612-29-1.

This book presents a detailed picture of the distribution and natural history of the Aesculapian snake, *Elaphe longissima*, the largest snake (to 1.8 m or more) of central Europe. The author dispels earlier views that the species, which has been important in mythology and symbolism since ancient times, was translocated by the Romans. Rather, its patchy distribution in several river valleys in central Europe is relictual and reflects the species' need for warm, humid forest conditions. A large section of the book is devoted to a study of the snake in the Neckar-Odenwald region of Germany, one of the isolated northern localities where the snake occurs. Ecological and population data are presented and fine scale correlates of local distribution are discussed. The book also hypothesizes historical processes and ecological constraints that have contributed to current reptile distributions in central Europe and reviews aspects relevant to the conservation of the aesculapian snake in Germany and elsewhere. The volume is illustrated by

five maps, nine graphs, and more than 80 photos and illustrations, mostly in color. All figure and table legends are provided in both German and English and there is a five-page English summary. A bibliography of almost 200 references rounds out the book. In addition to those studying the European herpetofauna, "Die Äskulapnatter" should be of special value to anyone interested in questions of herpetofaunal distribution and their relationships to Pleistocene and Holocene events.

Lizards, A Natural History of Some Uncommon Creatures – Extraordinary Chameleons, Iguanas, Geckos, & More, by David Badger, photography by John Netherton. 2002. Voyageur Press, P.O. Box 338, Stillwater, Minnesota 55082, USA (books@voyageurpress.com). 160 pp. Hardcover. US $29.95 + $4.95 shipping and handling. ISBN 0-89658-520-4.

This is the latest popular book from the same author/publisher combination that has produced the recent titles "Frogs" and "Snakes." The book is aimed at a general audience and endeavors to introduce the basic biology and diversity of lizards through a combination of clear, simple narrative and excellent photography. Most of the information is drawn from secondary works in herpetology, but is accurate and engagingly written. The book is divided into four chapters, shorter treatments of "Lizards and Humans" and "Lizard Conservation" and longer ones on "Physical Characteristics and Behavior" and "Families and Species." The first of these sections points out the role of lizards in human societies around the world and their significance to modern popular culture. Twenty-nine species are featured with two page entries including a color photograph and a general text, highlighting interesting aspects of the species' biology. Many additional species are illustrated in the "Physical Characteristics and Behavior" chapter under such headings as "limbs and locomotion," teeth and venom," "thermoregulation," and "predation." Scientific names are provided in the species profiles, but not in the rest of the book. In addition to a bibliography of more than 120 references, the book is fully indexed. This volume would be appropriate for younger readers or other novice herpetologists. Very good to excellent photography and clear explanations should help engender a real appreciation for lizards.

A Field Guide to Amphibian Larvae and Eggs of Minnesota, Wisconsin, and Iowa, by Jeffrey R. Parmelee, Melinda G. Knutson, and James E. Lyon. 2002. U.S. Geological Survey Information and Technology Report USGS/BRD/ITR-2002-0004 (available from National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, USA). 38 pp. Softcover.

This slim volume provides species accounts for the eight salamanders and 21 frogs occurring in the three upper Midwest states covered. Each account includes a black and white illustration of the larval form (a female guarding eggs is shown for the direct developing *Plethodon cinereus*), a shaded distribution map with county boundaries shown, and a short text section describing the eggs and larvae as well as comments about distribution and/or adult habitat. Some similar species are combined into single accounts. Circular field keys to eggs, salamander larvae, and tadpoles are a highlight of the guide and are supplemented by simple line drawings that illustrate terms used in the keys. The book also provides short sections on preserving eggs and larvae and raising larvae, and concludes with a short bibliography. It should prove especially valuable to those involved in amphibian monitoring. Because many of the species dealt with are broadly distributed in the Midwest and the eastern United States, the guide will have utility outside of the three states noted in its title.

Exploring Animal Behavior in Laboratory and Field, edited by Bonnie J. Ploger and Ken Yasukawa. 2002. Academic Press, 525 B Street, Suite 1900, San Diego, California 92101-4495, USA. 472 pp. Softcover. US $44.95. ISBN 0-12-558330-3.

This lab/field manual is subtitled "An Hypothesis-Testing Approach to the Development, Causation, Function, and Evolution of Animal Behavior" and is divided into major sections dealing with "Describing Behavior," "Causation," "Development," and "Adaptation and Evolution." The 35 chapters by 50 contributors use a diversity of animals to illustrate principles in the context of experimentation and hypothesis testing. The book is written for the student in an introductory animal behavior class and each chapter includes an introduction to the topic and subject organism(s), materials, experimental procedure, hypotheses and predictions, data recording and analysis (with sample data sheets in some cases), questions for discussion and a literature cited section. Important terms are highlighted in bold and are defined in an extensive glossary at the end of the book. Herpetological exercises are: Chemoreception in Lizards (C.O. Krekorian), Behavioral Thermoregulation in Field Populations of Amphibian Larvae (H.H. Whiteman and N.L. Buschhaus), Aggregation and Kin Recognition in African Clawed Frogs (K.L. Anderson and B.J. Ploger), and Vocal Behavior and Mating Tactics of the Spring Peeper (*Pseudacris crucifer*): A Field Exercise in Animal Behavior (D.C. Forester). Other experiments use birds, insects, fish, and mammals, including humans. Appendices dealing with the treatment of animal subjects, the ethics of human subject use, and an introduction to statistics round out the volume. Instructors of laboratory courses in animal behavior should consider this text for adoption.

The Lizards of Italy and Adjacent Areas, by Claudia Corti and Pietro Lo Cascio. 2002. Edition Chimaira, Friedberger Anlage 14, D-60316 Frankfurt am Main, Germany. 165 pp. Hardcover. US $39.95. ISBN 3-930612-68-2.

This book treats the 27 species of lizards (in five families) occurring in Italy and the neighboring areas of Corsica, Istria, and Malta. It commences with an overview of the region and a discussion of zoogeography, highlighting the relatively high level of endemism among the region's lizards. Each species account provides Latin, English, and Italian names and a relatively detailed description, including information on sexual dimorphism. This is followed by sections on "Distribution, zoogeography and taxonomy" and "Biology and ecology." These sections are typically several pages long and cite original sources extensively. Each ac-

count is illustrated by a shaded distribution map and by several color photos, each captioned with the corresponding locality. Representative habitat photos supplement the text. The volume concludes with a short section on conservation and an extensive bibliography of more than 500 references, although there is no index. The book is the first major treatment of the Italian saurofauna in English, and should appeal to herpetologists interested in the lizards of Europe, and particularly to those interested in lacertids, as these are represented by seven genera and make up more than half of the species covered.

Herpetology in Montana, by Bryce A. Maxell, J. Kirwin Werner, Paul Hendricks, and Dennis L. Flath. 2003. Society for Northwestern Vertebrate Biology, Olympia, Washington (www.snwvb.org). Northwest Fauna Number 5. Peabody. viii + 138 pp. Softcover. US $12.00 + $1.50 postage and handling ($2.50 foreign). ISBN 0-912532-57-2.

This is not a field guide, and there are no photographs of amphibians or reptiles, but this book provides a wealth of information about the 12 amphibians and 17 reptiles of America's fourth largest state. It begins with a thorough review of the history of herpetology in Montana and then reviews the status of information on the fauna based on published papers, voucher specimens (more than 4600), and well documented observations (more than 7000); checklists and keys (to amphibian eggs and larvae, as well as adults of both classes) follow. The bulk of the book is occupied by species accounts. These include the sections: Comments (general comments on species status in Montana), Earliest Literature Record, Earliest Voucher Record, Maximum Elevation Record, Maximum Elevation Voucher Record, Voucher Record Summary (listing all museum specimens by county), and Bibliographic Index (with references sorted by topic). The distribution of each species is plotted on a large point locality map of the state that shows county boundaries as well as rivers and montane regions; voucher and sight records are distinguished by different symbols. Short accounts are provided for seven species or subspecies of possible occurrence and for 12 exotics reported from the state. *Herpetology in Montana* concludes with a bibliography of more than 600 references and brief sections on reporting observations of amphibians and reptiles and preventing the spread of viral and fungal pathogens. Herpetologists with interests in the fauna of the Pacific Northwest, the Rocky Mountains, Great Basin, or Great Plains, as well as those interested in the history of American herpetology, will find this book a welcome addition to their shelves.

Frogs of the Great Lakes Region, by Jim McGrath. 2002. Nature Discovery, 5900 N. Williamston Road, Williamston, Michigan 48895, USA. Compact Disc. US $14.00 + $2.00 postage and handling.

This CD features the calls of 13 species of anurans of the Great Lakes region, presented in chronological order of emergence and breeding. The calls are presented with narrated commentary in an instructional format geared towards those participating in amphibian surveys. An additional 13 tracks, with titles such as "Marsh

Mellow Peepers" and "April Showers Bring May Fowler's" provide more than 45 minutes of uncommented chorusing. A small booklet accompanying the CD features 12 color photos of frogs (*Hyla versicolor* and *H. chrysoscelis* are treated together), and briefly lists identifying physical characteristics and describes the breeding period, breeding call, and breeding habitat. As most of the species have broad distributions in eastern North America, the CD may be of interest to frog enthusiasts across the Midwest and adjacent areas.

Erratum

Two geographic distribution notes authored by M. J. McCoid (2002, 33:321, 322) require corrections for species identifications. In the first instance, the specimen reported as *Ctenosaura pectinata* (TCWC 84723) is actually *C. similis*. In the second case, the specimen reported as *Hemidactylus turcicus* (TCWC 84910) is actually *H. garnottii*. Identifications of both were confirmed by James R. Dixon and R. Kathryn Vaughan.

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