Peripheral and elevational distribution, and a novel prey item for *Drymarchon melanurus* in Sonora, Mexico

The northernmost distribution of many tropical and subtropical amphibian and reptile species occurs in the Mexican state of Sonora (Enderson et al., 2010). There, *Drymarchon melanurus*, a species with a broad distribution (see Wallach, 2014) reaches its northwestern distributional limit. Herein we present peripheral and elevation distributional records, a novel prey item for the species, and a distinctive habitat for *D. melanurus* in Sonora.

MVZ = Museum of Vertebrate Zoology, University of California, Berkeley; UAZ-PSV = University of Arizona Photo Specimen Voucher, Museum of Natural History, University of Arizona, Tucson. All specimens/observations, including images and voucher information, are available online in the Madrean Archipelago Biodiversity (MABA) database (www.madrean.org).

Westernmost Record

MVZ 76497. MEXICO: SONORA: Municipio de Hermosillo, 35 mi (= 56.3 km) W of Hermosillo (by road), 28.839684°N, 111.423568°W; 17 April 1963; Ted Papenfuss. This specimen represents the westernmost record along the Pacific versant of the distribution of this species. In Sonora, *D. melanurus* is known mostly from riparian areas in foothills thornscrub and tropical deciduous forest (Schwalbe and Lowe, 2000). This locality, however, lies in an ecotone between the Plains of Sonora and Central Gulf Coast subdivisions of the Sonoran Desert. The Río Sonora drainage as far southwest as Hermosillo and westward onto the coastal plain of the Gulf of California was a dense, natural riparian corridor for tropical animals and plants in otherwise too xeric environments. The locality is near the present town of Miguel Alemán, in an extensive agricultural area known as La Costa de Hermosillo, suggesting that prior to the construction of reservoirs on the Río Sonora and associated agricultural and rural development, other species with tropical affinities also might have occurred west onto the coastal plain.

Peripheral Record and Prey Item

UAZ 57394-PSV. MEXICO: SONORA: Municipio de Hermosillo, 23 km (by air) NE of Hermosillo, 0.25 km (by air) W of Presa el Molinito, 29.21156°N, 110.72813°W; elev. 268 m; 7 September 2010 at 0700 h; Carlos Manuel Valdéz-Coronel. A large adult *D. melanurus* was observed eating a moderate-sized adult *Incilius alvarius* in the Río Sonora riparian vegetation corridor (Fig. 1). The vegetation along the adjacent slopes is foothills thornscrub. *Drymarchon melanurus* is known to feed on a wide variety of prey items, including fishes, frogs, toads, small turtles, lizards, snakes (including venomous forms), reptile eggs, birds, bird eggs, and mammals (Lemos-Espinal and Dixon, 2013); in neighboring Sinaloa, (Hardy and McDiarmid 1969) reported the prey items *Aspidoscelis costata*, *Ctenosaura pectinata*, *Masticophis mentovarius*, and *M. bilineatus*, *Sigmodon* sp. (rodent), and fish. To our knowledge, this is the first report of *I. alvarius* in the diet of this species.

Elevational Record for the Region

UAZ 57614-PSV. MEXICO: SONORA: Municipio de Ures, Sierra de Mazatán Arroyo el Yuguito (Cañada El Bachán), 29.10194°N, 110.19667°W; elev. 1,380 m; 1 July 2014; mesic oak woodland; S. Minter, T. Van Devender, R. Villa. This record (Fig. 2) is 30 m higher for this region of Mexico (Lemos-Espinal and Smith, 2007), although the elevational record for the species is 1,555 m (McCranie, 2011).

Most Northern and Eastern Record for the Region

UAZ 57634-PSV. MEXICO: SONORA: Municipio de Nácori Chico, El Carrizoso on Río Áros near its confluence with the Río Bavispe, 51.8 km (by air) NNE of Sahuaripa, 29.51583°N/109.15028°W; elev. 687 m; 31 July 2005; S. Jacobs, M. T. Bogan, and S. E. Carrillo-Percástegui. This voucher (Fig. 3) represents the most northern and eastern record along the Pacific versant of Mexico, ca. 30 km NNE of the nearest locality on the Río Aros at Vinatera. This species likely occurs farther north along the Río Bavispe, along with *Trachemys yaquia* (S. Jacobs, pers. comm.) and in relatively close proximity to the United States-Mexico border (< ca. 200 km/124 mi).

Habitat

UAZ 57399-PSV. MEXICO: SONORA: Municipio de La Colorada, 4 km W of Tecoripa on MX 16; 28º37'44"N, 109º59'43"W; elev. 428 m; 28 August 2008; T. Burkhardt. This voucher was found in a flat area in arid foothills thornscrub, with no apparent riparian corridor, a distinctive habitat for this species in Sonora.

Fig. 1. An adult *Drymarchon melanurus* feeding on an *Inciluis alvarius* in the Río Sonora riparian vegetation corridor. © Carlos Manuel Váldez Coronel

Fig. 2. An individual of *Drymarchon melanurus* from Sonora found at an elevation of 1,380 m, the highest reported elevation for this species in this area of Mexico. © Robert A. Villa

Fig. 3. An adult *Drymarchon melanurus* raising the anterior part of its body in a threatening posture. This individual represents the most northeastern record in the Pacific fork of the distribution of the species. © Sky Jacobs

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Robert A. Villa[1], Thomas R. Van Devender[2], Carlos Manuel Valdéz-Coronel[3], and Timothy R. Burkhardt[4]

[1]*Tucson Herpetological Society, P.O. Box 709, Tucson, Arizona 85705, United States. E-mail*: cascabel1985@gmail.com

[2]*Sky Island Alliance, P.O. Box 41165, Tucson, Arizona 85717, United States. E-mail*: vandevender@skyislandalliance.org

[3]*Universidad de Sonora, Departamento de Investigaciones Científicas y Tecnológicas, Luis Donaldo Colosio (no number), between Sahuaripa and Reforma Colonia Centro, Hermosillo, Sonora, 83000, Mexico.*
E-mail: jim.jim.furia@hotmail.com

[4]*3555 N. 1st Ave., Tucson, AZ 85706. E-mail*: triprionco@aol.com