

Bothriechis aurifer (Salvin, 1860). The Yellow-blotched Palm-pitviper is an MXCA species (see the following article) distributed at "moderate and intermediate elevations of extreme west-central Chiapas, Mexico (vicinity of Lagunas de Montebello, higher tributaries of the Río Lacantum); and the Atlantic drainages of the Sierra de los Cuchumatanes, Sierra de Chuacús, and Sierra de las Minas in Guatemala" (Campbell and Muñoz-Alonso, 2014). These authors indicated the elevation of this species as generally between 1,200 and 2,300 m, but noted that a few specimens have been reported from lower elevations on the north face of Sierra de las Minas. Pictured here is an individual from Purulhá, in the department of Baja Verapaz, Guatemala. Wilson et al. (2013b) determined the EVS of this species as 14, placing it at the lower limit of the high vulnerability category, and the IUCN has evaluated its conservation status as Vulnerable.

Andrés Novales







A system for categorizing the distribution of the Mesoamerican herpetofauna

LARRY DAVID WILSON¹, JERRY D. JOHNSON², LOUIS W. PORRAS³, VICENTE MATA-SILVA², AND ELÍ GARCÍA-PADILLA⁴

¹Centro Zamorano de Biodiversidad, Escuela Agrícola Panamericana Zamorano, Departamento de Francisco Morazán, Honduras; 16010 SW 207th Avenue, Miami, Florida 33187-1056, United States. E-mail: bufodoc@aol.com

Abstract: In order to increase the utility of the Taxonomic List on the *Mesoamerican Herpetology* website, we devised a simple system that consists of the following nine categories: (1) MXEN (species endemic to Mexico); (2) CAEN (species endemic to Central America; (3) MXUS (species distributed only in Mexico and the United States); (4) MXCA (species distributed only in Mexico and Central America); (5) CASA (species distributed only in Central America and South America; (6) MXSA (species ranging from Mexico to South America); (7) USCA (species ranging from the United States to Central America; (8) USSA (species ranging from the United States to South America); and (9) OCEA (species with oceanic distribution). After applying each of the categories in this system to the species in the Taxonomic List, the rank order for each of the categories (from highest to lowest) is as follows: MXEN; CAEN; MXCA; MXUS; CASA; MXSA; USCA; OCEA; and USSA. Our results show that the largest number of species consists of Mexican endemics, followed by the Central American endemics, and that a greater proportion of endemic anuran and salamander species occur in Central America than in Mexico, with the reverse the case for reptiles. Our study also demonstrates that the Mesoamerican herpetofauna is characterized by both high diversity and endemicity. In terms of diversity, the relative preponderance of lizards and snakes to anurans and salamanders in Mexico, with the reverse the case in Central America, likely results from the relatively higher amount of subhumid environments versus humid ones in Mexico, as opposed to Central America.

Key Words: Anurans, caecilians, caudates, Central America, crocodylians, distributional categories, diversity, endemicity, Mexico, squamates, turtles

RESUMEN: Con el fin de incrementar la utilidad de la Lista Taxonómica en el sitio web de *Mesoamerican Herpetology*, diseñamos un sistema simple que consiste de las siguientes nueve categorías: (1) MXEN (especies endémicas de México); (2) CAEN (especies endémicas de América Central) (3) MXUS (especies distribuidas solamente en México y Estados Unidos), (4) MXCA (especies distribuidas sólo en México y Centroamérica), (5) CASA (especies distribuidas solamente en Centroamérica y Suramérica; (6) MXSA (especies que van de México a Suramérica), (7) USCA (especies que van de los Estados Unidos

²Department of Biological Sciences, The University of Texas at El Paso, El Paso, Texas 79968-0500, United States. E-mail: jjohnson@utep.edu and vmata@utep.edu

³7705 Wyatt Earp Avenue, Eagle Mountain, Utah, 84005, United States. E-mail: empub@msn.com

⁴Oaxaca de Juárez, Oaxaca 68023, Mexico. E-mail: eligarciapadilla86@gmail.com

a Centroamérica, (8) USSA (especies que van desde Estados Unidos a Suramérica), y (9) OCEA (especie de distribución oceánica). Después de aplicar cada una de las categorias en este sistema a las species en la Lista Taxonómica, el rango de orden para cada una de las categorías (de la más alta a la más baja) es el siguiente: MXEN; CAEN; MXCA; MXUS; CASA; MXSA; USCA; OCEA y USSA. Nuestros resultados demuestran que el mayor número de especies consiste de especies endémicas de México, seguido por las especies endémicas de Centroamérica, y una mayor proporción de especies de anuros y salamandras ocurre en Centroamérica que en México, mientras que lo contrario se observa para los reptiles. Nuestro estudio también demuestra que la herpetofauna mesoamericana está caracterizada por su elevada diversidad y endemicidad. En términos de diversidad, la preponderancia relativa de lagartijas y serpientes en comparación con anuros y salamandras en México, y lo opuesto en Centroamérica, se debe probablemente a la cantidad relativamente más alta de ambientes subhúmedos versus húmedos en México, en comparación con Centroamérica.

Palabras Claves: Anuros, categorías de distribución, caudados, cecilios, Centroamérica, crocodilios, diversidad, endemismo, escamosos, México, tortugas

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INTRODUCTION

One of the services provided at the *Mesoamerican Herpetology* (MH) website (www.mesoamericanherpetology.com) is a Taxonomic List that is updated as new information becomes available. In an effort to make this list more helpful to users, we designed a simple system for categorizing the distribution of the taxa on the list. In this paper we characterize the Taxonomic List and introduce the system of distributional categories, and discuss the results of its application.

Taxonomic List on the Mesoamerican Herpetology Website

The Taxonomic List on the MH website has been a feature of the journal since its inception, and is accessible on the home page. Its purpose is to provide users with a document that lists the current (and ever-changing) taxonomy for the native members of the herpetofauna of Mexico and Central America (see "Our Definition of Mesoamerica" on the website). The list has been organized to indicate the individual species and their corresponding numbers in each of the hierarchical categories (i.e., from species level to that of the entire herpetofauna) through the family, order, and class levels. The co-chairs of the Taxonomic Board (JDJ and LDW) maintain the currency of this list through the assistance of members of the herpetological community. Currently, the list contains 69 families arranged under six orders, and two classes. The number of species in each of the higher-level categories changes frequently (2,096 as of 23 December 2017).

METHODS

System for Distributional Categories

Obviously, the species in the Taxonomic List occur somewhere in Mesoamerica, but in some cases also outside of Mesoamerica (in the United States and even Canada, in South America, and various places in the Antilles). Some species also are endemic to Mexico or Central America. Consequently, we found it useful to investigate the distribution of the species and determine the areas they occupy, and thus developed a system for broadly categorizing the geographic distribution of the taxa on the list. Our system consists of the following nine categories:

- (1) MXEN = species endemic to Mexico
- (2) CAEN = species endemic to Central America
- (3) MXUS = species distributed only in Mexico and the United States (except for a few also found in Canada)
- (4) MXCA = species found only in Mexico and Central America
- (5) CASA = species distributed only in Central America and South America
- (6) MXSA = species ranging from Mexico to South America
- (7) USCA = species ranging from the United States to Central America (except for a few also found in the Antilles)
- (8) USSA = species ranging from the United States to South America
- (9) OCEA = Oceanic (pelagic species, including sea snakes and sea turtles [both come on shore for various reasons])

This system broadly categorizes the geographic distribution of the included species, inasmuch as their distributions can range from a single locality to significant portions of continents.



Dendropsophus phlebodes (Stejneger, 1906). The San Carlos Treefrog is a CASA species occurring along the Caribbean lowlands from southern Nicaragua to Panama, as well as along the Pacific lowlands of eastern Panama and northwestern Colombia, at elevations from 20 to 700 m (Frost, 2017). The individuals shown here were found in amplexus at Dos Bocas del Río Indio, in the department of San Juan, Nicaragua. Johnson et al. (2015b) determined the EVS of this species as 11, placing it in the upper portion of the middle vulnerability category, and the IUCN has assessed its conservation status as Least Concern.



Isthmura gigantea (Taylor, 1939). The Giant False Brook Salamander is an MXEN species distributed along the pine-oak/cloud-forest interface in the La Joya-Jalapa region of Veracruz and into northeastern Hidalgo, Mexico, at elevations from 1,000 to 2,000 m (Frost, 2017). Pictured here is an individual from Cruz Verde, La Joya, in the municipality of Acajate, Veracruz, Mexico. Wilson et al. (2013a) calculated the EVS of this species as 16, placing it in the middle of the high vulnerability category, and the IUCN has determined its conservation status as Critically Endangered.



Gonatodes albogularis (Duméril and Bibron, 1836). The Yellow-headed Gecko is an MXSA species with a broad distribution in Centraland South America and numerous islands in the West Indies, and also has been introduced into Florida, in the United States (Schwartz and Henderson, 1991). Pictured here is an individual from Isla de Ometepe, in the department of Rivas, Nicaragua. Wilson et al. (2013b) determined the EVS of this species as 11, placing it in the upper portion of the medium vulnerability category, and the IUCN has evaluated its conservation status as Least Concern.

RESULTS

Application of the System

We applied the above-described system of distributional categories to the species in the MH Taxonomic List and included our determinations on the MH website, and also present a summary of our results in Table 1. We gleaned the information for placing species in the distributional categories from a variety of sources, but especially from Wilson et al. (2013a, b) and Johnson et al. (2015b). Importantly, however, we also used in-house data from lists we maintain for Mexico and Central America.

Table 1. Summary of distributional categories for the Mesoamerican herpetofaunal species, by families. The abbreviations are as follows: MXEN = species endemic to Mexico; CAEN = species endemic to Central America; MXUS = species distributed only in Mexico and the United States; MXCA = species distributed only in Mexico and Central America; CASA = species distributed only in Central America and South America; MXSA = species ranging from Mexico to South America; USCA = species ranging from the United States to Central America; USSA = species ranging from the United States to South America; and OCEA = Oceanic. Category 3 contains a few species that also range into Canada; and categories 4, 5, 6, and 7 include a few species that also range into the Antilles.

| Family | No. of Species | (1) MXEN | (2) CAEN | (3) MXUS | (4) MXCA | (5) CASA | (6) MXSA | (7) USCA | (8) USSA | (9) OCEA |
|---------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Aromobatidae | 1 | _ | _ | _ | _ | 1 | _ | _ | _ | _ |
| Bufonidae | 64 | 14 | 24 | 10 | 10 | 5 | _ | _ | 1 | _ |
| Centrolenidae | 15 | _ | 4 | _ | _ | 10 | 1 | _ | _ | _ |
| Craugastoridae | 129 | 26 | 77 | 1 | 13 | 12 | _ | _ | _ | _ |
| Dendrobatidae | 21 | _ | 14 | _ | _ | 7 | _ | _ | _ | _ |
| Eleutherodactylidae | 37 | 20 | 10 | 2 | 3 | 2 | _ | _ | _ | _ |
| Hemiphractidae | 3 | _ | _ | _ | _ | 3 | _ | _ | _ | _ |
| Hylidae | 165 | 66 | 52 | 7 | 19 | 17 | 3 | 1 | _ | _ |
| Leptodactylidae | 9 | _ | 1 | _ | _ | 5 | 2 | _ | 1 | _ |
| Microhylidae | 11 | _ | 1 | 2 | 3 | 4 | _ | 1 | _ | _ |
| Phyllomedusidae | 8 | 1 | 2 | _ | 1 | 3 | 1 | _ | _ | _ |
| Pipidae | 1 | _ | 1 | _ | _ | _ | _ | _ | _ | _ |
| Ranidae | 33 | 16 | 5 | 7 | 4 | _ | 1 | _ | _ | _ |
| Rhinophrynidae | 1 | _ | _ | _ | _ | _ | _ | 1 | _ | _ |
| Scaphiopodidae | 4 | _ | _ | 4 | _ | _ | _ | _ | _ | _ |
| Subtotals | 502 | 143 | 191 | 33 | 53 | 69 | 8 | 3 | 2 | _ |
| Ambystomatidae | 18 | 17 | _ | 1 | _ | _ | _ | _ | _ | _ |
| Plethodontidae | 277 | 108 | 143 | 3 | 18 | 5 | _ | _ | _ | _ |
| Salamandridae | 1 | _ | _ | 1 | _ | _ | _ | _ | _ | _ |
| Sirenidae | 2 | _ | _ | 2 | _ | _ | _ | _ | _ | _ |
| Subtotals | 298 | 125 | 143 | 7 | 18 | 5 | _ | _ | _ | _ |

| Caeciliidae | 7 | _ | 3 | _ | _ | 4 | _ | _ | _ | _ |
|-------------------|-----|-----|-----|----|----|----|---|---|---|---|
| Dermophiidae | 9 | 1 | 4 | _ | 2 | 2 | _ | _ | _ | _ |
| Subtotals | 16 | 1 | 7 | _ | 2 | 6 | _ | _ | _ | _ |
| Totals | 816 | 269 | 341 | 40 | 73 | 80 | 8 | 3 | 2 | _ |
| Alligatoridae | 1 | _ | _ | _ | _ | _ | 1 | _ | _ | _ |
| Crocodylidae | 2 | _ | _ | _ | 1 | _ | _ | _ | 1 | _ |
| Subtotals | 3 | _ | _ | _ | 1 | _ | 1 | _ | 1 | _ |
| Amphisbaenidae | 2 | _ | _ | _ | _ | 2 | _ | _ | _ | _ |
| Anguidae | 73 | 39 | 24 | 4 | 5 | 1 | | | | _ |
| Anniellidae | 2 | 1 | _ | 1 | _ | _ | _ | _ | _ | _ |
| Bipedidae | 3 | 3 | _ | _ | _ | _ | _ | _ | _ | _ |
| Corytophanidae | 9 | _ | 1 | _ | 5 | 2 | 1 | _ | _ | _ |
| Crotaphytidae | 10 | 4 | _ | 6 | _ | _ | _ | _ | _ | _ |
| Dactyloidae | 139 | 36 | 73 | _ | 18 | 11 | 1 | _ | _ | _ |
| Dibamidae | 1 | 1 | _ | _ | _ | _ | _ | _ | _ | _ |
| Eublepharidae | 8 | 2 | 1 | 4 | 1 | _ | _ | _ | _ | _ |
| Gymnophthalmidae | 14 | _ | 3 | _ | _ | 10 | 1 | _ | _ | _ |
| Helodermatidae | 5 | 2 | 1 | 1 | 1 | _ | _ | _ | _ | _ |
| Hoplocercidae | 2 | _ | _ | _ | _ | 2 | _ | _ | _ | _ |
| Iguanidae | 26 | 13 | 7 | 2 | 3 | _ | 1 | _ | _ | _ |
| Mabuyidae | 5 | _ | 4 | _ | 1 | _ | _ | _ | _ | _ |
| Phrynosomatidae | 143 | 91 | 2 | 35 | 15 | _ | _ | _ | _ | _ |
| Phyllodactylidae | 19 | 13 | 3 | 1 | 1 | _ | 1 | _ | _ | _ |
| Polychrotidae | 1 | _ | _ | _ | _ | 1 | _ | _ | _ | _ |
| Scincidae | 24 | 15 | 1 | 6 | 2 | _ | _ | _ | _ | _ |
| Sphaerodactylidae | 22 | _ | 13 | _ | 2 | 4 | 1 | 2 | _ | _ |
| Sphenomorphidae | 8 | 3 | 1 | 1 | 3 | _ | _ | _ | _ | _ |
| Teiidae | 60 | 28 | 5 | 16 | 8 | 2 | 1 | _ | _ | _ |
| Xantusiidae | 27 | 21 | 2 | 2 | 2 | _ | _ | _ | _ | _ |
| Xenosauridae | 12 | 11 | _ | _ | 1 | _ | _ | _ | _ | _ |
| Subtotals | 615 | 283 | 141 | 79 | 68 | 35 | 7 | 2 | _ | _ |
| Anomalepididae | 3 | _ | 1 | _ | _ | 2 | _ | _ | _ | _ |
| Boidae | 5 | 1 | _ | _ | _ | 3 | 1 | _ | _ | _ |
| Charinidae | 4 | 1 | _ | 1 | 1 | 1 | _ | _ | _ | _ |
| Colubridae | 185 | 61 | 31 | 45 | 20 | 17 | 7 | 2 | 2 | _ |

| Dipsadidae | 230 | 80 | 80 | 5 | 33 | 22 | 8 | 1 | 1 | _ |
|------------------|-------|-----|-----|-----|-----|-----|----|----|---|---|
| Elapidae | 31 | 10 | 6 | 2 | 4 | 6 | 1 | _ | _ | 2 |
| Leptotyphlopidae | 20 | 10 | 3 | 4 | 1 | 1 | 1 | _ | _ | _ |
| Loxocemidae | 1 | _ | _ | _ | 1 | _ | _ | _ | _ | _ |
| Natricidae | 33 | 22 | _ | 6 | 1 | | | 4 | | _ |
| Sibynophiidae | 2 | _ | _ | _ | 1 | 1 | _ | _ | _ | _ |
| Tropidophiidae | 1 | _ | _ | _ | _ | 1 | _ | _ | _ | _ |
| Typhlopidae | 5 | _ | 3 | _ | 2 | _ | _ | _ | _ | _ |
| Viperidae | 86 | 37 | 16 | 16 | 11 | 3 | 3 | _ | _ | _ |
| Subtotals | 606 | 222 | 141 | 79 | 74 | 57 | 21 | 7 | 3 | 2 |
| Cheloniidae | 5 | _ | _ | _ | _ | _ | _ | _ | _ | 5 |
| Chelydridae | 2 | _ | _ | _ | 1 | 1 | _ | _ | _ | _ |
| Dermatemydidae | 1 | _ | _ | _ | 1 | _ | _ | _ | _ | _ |
| Dermochelyidae | 1 | _ | _ | _ | _ | _ | _ | _ | _ | 1 |
| Emydidae | 16 | 8 | _ | 6 | 1 | _ | 1 | _ | _ | _ |
| Geoemydidae | 6 | 1 | 1 | _ | 2 | 2 | _ | _ | _ | _ |
| Kinosternidae | 15 | 7 | 1 | 4 | 1 | _ | 2 | _ | _ | _ |
| Staurotypidae | 3 | _ | _ | _ | 3 | _ | _ | _ | _ | _ |
| Testudinidae | 5 | 2 | _ | 2 | _ | 1 | _ | _ | _ | _ |
| Trionychidae | 2 | 1 | _ | 1 | _ | _ | _ | _ | _ | _ |
| Subtotals | 56 | 19 | 2 | 13 | 9 | 4 | 3 | _ | _ | 6 |
| Totals | 1,280 | 524 | 284 | 171 | 152 | 96 | 32 | 9 | 4 | 8 |
| Sum Totals | 2,096 | 793 | 625 | 211 | 225 | 176 | 40 | 12 | 6 | 8 |

The data in Table 1 indicate the following:

- 1. The largest number of the 2,096 species currently known to comprise the Mesoamerican herpetofauna consists of the 793 species endemic to Mexico (37.8%). This number represents 61.3% of the 1,294 species native to Mexico (Johnson et al., 2017; J. Johnson, unpublished). Johnson et al. (2017) recently discussed the conservation status of most of these species.
- 2. The next largest number of species (625) comprises those endemic to Central America (29.8%). This number of endemic species represents 57.6% of the 1,085 species native to Central America (Table 1; Johnson et al., 2015b).
- 3. The combined number of species endemic to Mexico and Central America is 1,418, which represents 67.7% of the 2,096 species native to these two regions (i.e., Mesoamerica).
- 4. The remaining 678 species are placed in seven additional categories, including one for the eight oceanic species (two sea snakes, six marine turtles).

- 5. The largest number of species in these seven categories is 225, i.e., the species distributed only in Mexico and Central America (10.7%). Species common to Mexico and Central America also are found outside the limits of these two regions, including those in the MXSA, USCA, USSA, and OCEA categories. Johnson et al. (2015a) noted the occurrence of 256 species both in Chiapas, Mexico, and Guatemala, which as expected makes up the majority of the species occupying both Mexico and Guatemala.
- 6. The next largest number of non-endemic Mesoamerican species is 211, which includes the species distributed only in Mexico and in the United States (except for a few species that also range into Canada), and comprise 10.1% of the total. As expected, most of these species occur in the American side of the US–Mexico border. Lemos-Espinal (2015) documented these species in his recent book on the herpetofauna of the US–Mexico border states.
- 7. The number of species occurring only in Central America and South America is 176 (8.4%). Presumably, most of these species are shared between Panama and Colombia.
- 8. The remaining 66 species include those that are most widespread (in the MXSA, USCA, USSA, and OCEA categories) and collectively make up 3.1% of the total.
- 9. At the ordinal level, a slightly different pattern is seen when comparing amphibians to reptiles. The most obvious and important distinction is that anurans and salamanders constitute a greater number of the endemic species in Central America than in Mexico (191 and 143, respectively, for a total of 334 in Central America; and 143 and 125, respectively, for a total of 268 in Mexico). The reverse is the case with lizards and snakes (283 and 222, respectively, for a total of 505 in Mexico; and 141 and 141, respectively, for a total of 282 in Central America. In Mexico, for every anuran and salamander species, there are 1.9 lizard and snake species. In Central America, the comparison is one anuran or salamander species for every 0.8 lizard and snake species.



Mesaspis moreletii (Bocourt, 1871). Morelet's Alligator Lizard is an MXCA species with a distribution extending from Chiapas, Mexico, to northern Nicaragua, at elevations from 1,305 to above 3,000 m (Sunyer and Köhler, 2007; Johnson et al., 2010). Pictured here is an individual from El Triunfo, in the municipality of Ángel Albino Corzo, Chiapas, Mexico. Wilson et al. (2013b) calculated the EVS of this species as 9, placing it at the upper limit of the low vulnerability category, and the IUCN has calculated its conservation status as Least Concern.

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Masticophis flagellum (Shaw, 1802). The Coachwhip is an MXUS species with a distribution that "extends across the southern half of the United States, and in Mexico southward through Baja California, west of the Sierra Madre Occidental to southern Sinaloa, and east of the Sierra Madre Occidental to northern Jalisco and Querétaro" (Lemos-Espinal and Dixon, 2013: 199). This individual was photographed near the railroad crossing on Green River Road, Hudspeth County, Texas, United States. Wilson et al. (2013b) estimated the EVS of this species as 8, placing it in the upper portion of the low vulnerability category, and the IUCN has evaluated its conservation status as Least Concern.





Terrapene coahuila Schmidt and Owens, 1944. The Coahuilan Box Turtle is an MXEN species limited in distribution to the Cuatro Ciénegas Basin in eastern Coahuila. This individual is from Cuatro Ciénegas, in the municipality of Cuatro Ciénegas, Coahuila, Mexico. Wilson et al. (2013b) evaluated the EVS of this species as 19, placing it in the upper portion of the high vulnerability category, and the IUCN has determined its conservation status as Endangered.

CONCLUSIONS

Mesoamerica is an important center of herpetodiversity and herpetoendemicity, especially in terms of the proportion of endemic species compared to the total native herpetofauna (67.8%), which underscores the importance of the contributions of the publications appearing in the online journal *Mesoamerican Herpetology*. This conclusion has been mirrored by publications in the literature cited in the section below, as well as in several other summary papers that have appeared in this journal since its inception.

The relative preponderance of lizards and snakes to anurans and salamanders in Mexico, with the reverse the case in Central America, undoubtedly results from the relative availability of subhumid to humid environments in Mexico versus the situation in Central America, since the former environments are more inhabitable by the two reptile groups than the two amphibian groups, due to the distinctions in their respective physiological profiles.

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Larry David Wilson is a herpetologist with lengthy experience in Mesoamerica. He has authored or co-authored over 390 peer-reviewed papers and books on herpetology, including two papers published in 2013 entitled "A conservation reassessment of the amphibians of Mexico based on the EVS measure" and "A conservation reassessment of the reptiles of Mexico based on the EVS measure," one in 2014 entitled "Snakes of the genus Tantilla (Squamata: Colubridae) in Mexico: taxonomy, distribution, and conservation," four in 2015 entitled "A conservation reassessment of the Central American herpetofauna based on the EVS measure," "The herpetofauna of Oaxaca, Mexico: composition, physiographic distribution, and conservation status," "The herpetofauna of Chiapas, Mexico: composition, distribution, and conservation," and "A checklist and key to the snakes of the Tantilla clade (Squamata: Colubridae), with comments on taxonomy, distribution, and conservation," and three in 2016 entitled "The herpetofauna of Tamaulipas: composition, distribution, and conservation," "The herpetofauna of Nayarit: composition, distribution, and conservation status," and "The herpetofauna of Nuevo León: composition, distribution, and conservation." He is also a coauthor of three 2017 papers entitled "The herpetofauna of Jalisco, Mexico: composition, distribution, and conservation status," "The herpetofauna of the Mexican Yucatan Peninsula: composition, distribution, and conservation status," and "The endemic herpetofauna of Mexico: organisms of global significance in severe peril." Larry is the senior editor of Conservation of Mesoamerican Amphibians and Reptiles and the co-author of seven of its chapters. His other books include *The Snakes of Honduras*, Middle American Herpetology, The Amphibians of Honduras, Amphibians & Reptiles of the Bay Islands and Cayos Cochinos, Honduras, The Amphibians and Reptiles of the Honduran Mosquitia, and Guide to the Amphibians & Reptiles of Cusuco National Park, Honduras. To date, he has authored or co-authored the descriptions of 71 currently recognized herpetofaunal species, and seven species have been named in his honor, including the anuran Craugastor lauraster, the lizard Norops wilsoni, and the snakes Oxybelis wilsoni, Myriopholis wilsoni, and Cerrophidion wilsoni. Currently, Larry is an Associate Editor and Co-chair of the Taxonomic Board for the journal Mesoamerican Herpetology.



Jerry D. Johnson is Professor of Biological Sciences at The University of Texas at El Paso, and has extensive experience studying the herpetofauna of Mesoamerica, especially that of southern Mexico. Jerry is the Director of the 40,000-acre "Indio Mountains Research Station," was a co-editor on *Conservation of Mesoamerican Amphibians and Reptiles* and co-author of four of its chapters. He is also the senior author of the recent paper "A conservation reassessment of the Central American herpetofauna based on the EVS measure" and is Mesoamerica/Caribbean editor for Geographic Distribution section of *Herpetological Review*. Johnson has authored or co-authored over 120 peer-reviewed papers, including two 2010 articles, "Geographic distribution and conservation of the herpetofauna of southeastern Mexico" and "Distributional patterns of the herpetofauna of Mesoamerica, a Biodiversity Hotspot." One species, *Tantilla johnsoni*, has been named in his honor. Presently, he is an Associate Editor and Co-chair of the Taxonomic Board for the journal *Mesoamerican Herpetology*.



Louis W. Porras received an Associate's degree in Biology in 1971 from what today is called Miami-Dade College, where he studied under the late Albert Schwartz. Over the years he has authored or co-authored over 60 academic publications, including the descriptions of two new species, and two taxa have been named in his honor. Louis developed an interest in amphibians and reptiles at an early age in his native Costa Rica, and in 1955 his family relocated to the United States. Throughout his career a passion for the field has led him to travel to many remote areas, including throughout the Bahamas, the United States, Mexico, and Central America, as well as to parts of South America and Asia. As a teenager Louis regularly attended meetings of the South Florida Herpetological

Society, and eventually served as President of the group. In 1968 he worked at the Houston Zoological Gardens, under the tutelage of the late John E. Werler, and from 1982 to 1984 he was employed at Utah's Hogle Zoo, in close association with the late James L. Glenn and the VA Venom Research Laboratory. In 1976 he attended the inaugural meeting of the International Herpetological Symposium (IHS), and for many years served the group in various capacities, including as Vice-President and President. In 1993, along with Gordon W. Schuett, he conceptualized and helped launch the journal Herpetological Natural History, and for IHS' 20th anniversary three former Presidents of the organization dedicated a special publication, Advances in Herpetoculture, in recognition of his contributions. More recently, in honor of his lifelong achievements, IHS initiated the "Louie Porras Award," which is presented to the speaker at the annual meeting whose work represents exceptional accomplishments that benefit herpetological conservation. Louis' career in publishing started in 1995, when as a member of Canyonlands Publishing Group he served as Managing Director and Editorial Director of Fauna magazine. In 2002 he founded Eagle Mountain Publishing, LC, which has published such herpetological titles as Biology of the Vipers (2002), Biology of the Boas and Pythons (2007), Amphibians, Reptiles, and Turtles in Kansas (2010), Conservation of Mesoamerican Amphibians and Reptiles (2010), and Amphibians and Reptiles of San Luis Potosí (2013); since 2013, Louis has been the Publisher/Managing Editor of the journal *Mesoamerican Herpetology*.



Vicente Mata-Silva is a herpetologist from Río Grande, Oaxaca, Mexico. His interests include ecology, conservation, natural history, and geographic distribution of the herpetofaunas of Mexico (particularly Oaxaca) and the southwestern United States. His bachelor's thesis at the Universidad Nacional Autónoma de México (UNAM) compared herpetofaunal richness in Puebla, Mexico, in habitats with different degrees of human-related disturbance. Vicente's master's thesis at the University of Texas at El Paso (UTEP) focused primarily on the diet of two syntopic whiptail lizard species, one unisexual and the other bisexual, in the Trans-Pecos region of the Chihuahuan Desert. His dissertation, also at UTEP, was on the ecology of the rock rattlesnake, *Crotalus lepidus*, in the northern Chihuahuan Desert. To date, Vicente has authored or co-authored over 100 peer-reviewed scientific publications. Currently, he is a researcher and lecturer at the University of Texas at El Paso. He also is the Distribution Notes Section Editor for the journal *Mesoamerican Herpetology*.



Elí García-Padilla is a herpetologist primarily focused on the study of the ecology and natural history of the Mexican herpetofauna. His research efforts have centered on the Mexican states of Baja California, Tamaulipas, Chiapas, and Oaxaca. His first experience in the field was researching the ecology of the insular endemic populations of the rattlesnakes Crotalus catalinensis, C. muertensis (C. pyrrhus) and C. tortugensis (C. atrox) in the Gulf of California. For his Bachelor's degree he presented a thesis on the ecology of C. muertensis (C. pyrrhus) on Isla El Muerto, Baja California, Mexico. To date, he has authored or co-authored over 75 peer-reviewed scientific publications. Currently, he is employed as a formal Curator of Amphibians and Reptiles from Mexico in the electronic platform "Naturalista" of the Comisión Nacional para el Uso y Conocimiento de la Biodiversidad (CONABIO; www.naturalista.mx). One of his main passions is environmental education, and for several years he has been working on a variety of projects that include the use of audiovisual media as a powerful tool to reach large audiences and to promote the importance of the knowledge, protection, and conservation of the Mexican biodiversity. Elí's interests include wildlife and conservation photography, and his art has been published in several recognized scientific, artistic, and educational books, magazines, and websites. Presently he is collaborating in a research project about an evaluation of the jaguar (Panthera onca) as an umbrella species for the conservation of the herpetofauna of Nuclear Central America.