PREFACE

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The allure of Mexico first beckoned me in 1957, but only from across the border, as along with my parents and sister I was visiting family members in Mission, Texas. Mission is a bit west of McAllen, just north of the international border, with Reynosa located on the southern bank of the Río Bravo directly across from McAllen. We went to Reynosa just to say we had been in Mexico.

My first herpetological trip to Mexico occurred in 1966, when Ernest A. Liner kindly took me on one of his many journeys. We traveled as far south as Chiapas, and saw much of the country and plenty of amphibians and reptiles.

In the ensuing years, I traveled south of the border on several occasions, and ultimately visited all but one of Mexico's 31 states. Among several others, I took one of those trips with Louis Porras, the senior author of the paper on cantils in this issue. I made another extensive trip with my father, Ward Wendell Wilson, and visited many of the ancient ruins for which the country is well known.

During my career I have always been interested in Mexico, although in recent years I spent much of my time in Central America. Nevertheless, I was delighted at the opportunity to work on the book *Conservation of Mesoamerican Amphibians and Reptiles* (2010), which dealt with all of Mexico and Central America. This massive undertaking presented me with the chance to work closely with two long-time friends, Jerry Johnson, one of my co-editors, and Louis Porras, the proprietor of Eagle Mountain Publishing, LC, and both are involved in this Special Mexico Issue.

The herpetofauna of Mexico is impressive from a number of perspectives. At 1,227 species, it is almost twice the size of that of its northern neighbor (presently, the United States is known to contain 628 native species, according to the Center for North American Herpetology [naherpetology.org]; data accessed 17 March 2013); Mexico, however, is only about one-fifth the size of the United States. Mexico's herpetofauna also is larger than that of the seven Central American nations combined (1,024 native species, according to Wilson and Johnson [2010], and my updating since), although the disparity between Mexico and its southern neighbors is much smaller. Notably, Central America's land area is slightly over one-fourth that of Mexico.

The level of endemicity in Mexico also is spectacular. In this Special Mexico Issue, Wilson, Mata-Silva, and Johnson report that 482 species of reptiles (excluding the marine species) of a total of 849 (56.8%) are Mexican endemics; Wilson, Johnson, and Mata-Silva indicate that 253 species of amphibians of a total of 378 (66.9%) are not found outside of Mexico. The combined figure is 736 endemics out of 1,227 species (60.0%), a percentage substantially higher than that for Central America. In Central America, 367 endemic species have been recorded to date (Wilson and Johnson [2010], and my updating since), which equates to 35.8%. According to the accounting at the Center for North American Herpetology website (www.cnah.org), however, compared to the figures for Mexico (see the two Wilson et al. papers indicated below), Canada (www.carcnet.ca) and the West Indies (Powell and Henderson 2012), of the 628 species listed, 335 are endemic to the United States, for which the resulting percentage (53.3%) is much closer to that of Mexico than for Central America. Because the United States is about five times the size of Mexico, when one compares the degree of endemism in these two countries with their respective land areas (area/number of endemics), the resulting figures (areas from the CIA World Factbook; www.cia.gov) are as follows: Mexico (1,943,945 km^2/736 = 2,641); and the United States (9,161,966 km^2/335 = 25,808). Thus, the area/endemism ratio for the United States is almost 10 times that of Mexico, indicating that endemism in Mexico is that much greater than that of its neighbor to the north. The comparable figure for Central America is 507,966 km^2/367 = 1,384, which is even lower than that for Mexico, and this region already is regarded as a major source of herpetofaunal diversity (Wilson et al. 2010).

The Mexican herpetofauna also is of immense importance and interest from a conservation standpoint. In both of the Wilson et al. papers indicated below, the authors applied the Environmental Vulnerability Score (EVS) measure to Mexico's herpetofauna and found that 222 of 378 amphibian species (58.7%) and 470 of 841 reptile species in (55.9%) were assigned an EVS that falls into the high vulnerability category. In total, 692 species (56.8%) fall into the highest category of susceptibility to environmental deterioration. The relatively small portion

of humanity that recognizes the value and critical necessity of biodiversity is fighting an uphill battle to salvage as much biodiversity as possible before it disappears into extinction (Wilson 2006). Given the rate of human population growth and the commensurate rate of loss of natural habitats, populations of these unique components of the Mexican patrimony likely will decline steadily, as is happening over the remainder of the planet (Raven et al. 2011).

One of the most important imperatives we face, therefore, is to take appropriate steps to conserve the Mexican herpetofauna. Toward this end, five papers collectively written by 10 contributors are expected to appear in this Special Mexico Issue of *Amphibian & Reptile Conservation*. These papers are as follows:

A conservation reassessment of the reptiles of Mexico based on the EVS measure by Larry David Wilson, Vicente Mata-Silva, and Jerry D. Johnson.

A taxonomic reevaluation and conservation assessment of the common cantil, Agkistrodon bilineatus (Squamata: Viperidae): a race against time by Louis W. Porras, Larry David Wilson, Gordon W. Schuett, and Randall S. Reiserer.

Patterns of physiographic distribution and conservation status of the herpetofauna of Michoacán, Mexico by Javier Alvarado-Díaz, Ireri Suazo-Ortuño, Larry David Wilson, and Oscar Medina-Aguilar.

Taxonomic reevaluation and conservation of beaded lizards, Heloderma horridum (Squamata: Helodermatidae) by Randall S. Reiserer, Gordon W. Schuett, and Daniel D. Beck.

A conservation reassessment of the amphibians of Mexico based on the EVS measure by Larry David Wilson, Jerry D. Johnson, and Vicente Mata-Silva.

All of these papers deal with issues of herpetofaunal conservation, and range in coverage from the entire country of Mexico, through a single Mexican state, to what have been regarded as single species. Each study provides a set of recommendations.

These five papers are gathered under this Preface and an issue cover. The concept behind the cover is to draw the papers into a coherent whole that reinforces the mission of the journal, which is to "support the sustainable management of amphibian and reptile biodiversity." Thus, the photograph of Cerro Mariana, located in the Balsas-Tepalcatepec Depression between Huetamo and Morelia, in Michoacán, is intended to illustrate dry forest, the type of vegetation most heavily damaged in Mesoamerica (Janzen 1988), one of the major features of the state's environment and in which a significant portion of the herpetofauna is found. This type of environment is inhabited by two of the reptiles featured in this issue, the common cantil (*Agkistrodon bilineatus*) and the beaded lizard (*Heloderma horridum*), as well as the shovel-headed treefrog (*Diaglena spatulata*); all three of these species are relatively broadly distributed in subhumid environments along the Pacific coastal region of Mexico, as well as in the extensive valley of the Balsas and Tepalcatepec rivers, of which the western portion lies in the state of Michoacán.

Finally, our aim is to examine the conservation status of the amphibians and reptiles of Mexico, in general, and to focus more closely on a state herpetofauna (of Michoacán) and on two prominent and threatened Mexican flagship species, the common cantil and the beaded lizard. Thus, we hope to contribute to the ongoing effort to provide for a sustainable future for the world's amphibians (Stuart et al. 2010) and reptiles (Böhm et al. 2013).

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