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A checklist of the reptiles and amphibians of Guerrero, México

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Resumen. En la zona sur de México es alta la diversidad alta de anfibios y reptiles. El estado de Guerrero ocupa una parte considerable de esta área en la que se han registrado 231 taxa, de los cuales 48 (21%) son endémicos. La región fisiográfica de la Sierra Madre del Sur posee la mayor diversidad de anfibios y reptiles del estado. En la siguiente lista anotada se incluyen cinco nuevos registros estatales.

Palabras clave: herpetofauna, lista anotada, diversidad, riqueza regional, Sierra Madre del Sur, Guerrero, endemicidad.

Abstract. A great diversity of reptiles and amphibians exist in southern México. The state of Guerrero spans a large portion of this zone and has 231 taxa, 48 (21%) of which are endemic. Physiographically, the Sierra Madre del Sur contains the highest diversity of reptiles and amphibians. The following checklist of reptiles and amphibians of Guerrero include five new state records.

Key words: herpetofauna, checklist, diversity, regional richness, Sierra Madre del Sur, Guerrero, endemism.

The biological diversity of reptiles and amphibians in México, known and respected by the ancient American civilizations, is presently barely appreciated as a heritage to be known, handled and preserved. The herpetological fauna of México includes 1165 species and subspecies (Flores-Villela 1993a). They are mainly distributed in the inter-tropical zone to the southern zone of the country. Four states of this region (Oaxaca, Chiapas, Veracruz and Guerrero), are important because of their richness in vegetation and animal diversity. As for amphibians and reptiles, Oaxaca

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has 397 species (Casas-Andreu 1996), Chiapas 326 (Álvarez del Toro *et al.* 1993, Luna-Reyes 1997), and Veracruz 293 species (Pelcastre-Villafuerte & Flores-Villela 1992); Guerrero has been reported to have 168 forms (Smith & Taylor 1966).

Reliable faunal records for different communities are lacking, and more importantly, good checklists of the habitats in two great zoogeographical regions, the Nearctic and the Neotropical, are needed. Both regions occur in Guerrero, ranked fourth in the country in terms of herpetological diversity (Smith & Taylor 1966).

Guerrero has no elevations higher than 4000 m above sea level. It consists of broad plains and lowlands with soils types and ecosystems that include extreme environmental conditions. The environmental heterogeneity is a remarkable feature, even if cold or very wet desertic conditions are not predominant. Each area has its own particular association of fauna and vegetation that exemplify the biological diversity of México.

Studies of reptiles and amphibians in Guerrero have gone through several stages. Bonnaterre (1789) described *Bipes canaliculatus* in the first scientific investigation of the state's vertebrates, (in México, *Iguana iguana* in 1758 by Linnaeus was earlier). This important taxonomic stage ends with the work of Smith & Taylor (1966) where the total number of species and subspecies and their general geographic distribution in the state was established.

Among the early herpetological works of the state that incorporate taxonomic matters and that focus on ecological and distributional aspects are: Gadow (1905), with a general view and Davis & Dixon (1959, 1961, and 1964), which included the reptiles and amphibians from the vicinity of Chilpancingo.

Since then and to the present, there have been relevant and valuable herpetological contributions in the fields of systematics, ecology, and biogeography; for instance Adler (1965), Adler & Dennis (1972), Snyder (1972), Smith & Savitzky (1974), Myers & Campbell (1981), Papenfuss, Wake & Adler (1983), Savage (1984), Hillis, Frost & Webb (1984), Sánchez & López-Forment (1987), Pérez-Ramos & Saldaña de la Riva (1989), Saldaña de la Riva & Pérez-Ramos (1989), Campbell & Frost (1993), Mendelson & Campbell (1994), Mendelson & Toal (1996), Adler (1996), Hanken *et al.* (in press), and Pérez-Ramos, Saldaña de la Riva & Campbell (in press). Other papers emphasize collections at several localities, such as Porter (1963), Smith & Smith (1977, 1979), Flores-Villela & Hernández-García (1989), Flores-Villela & Muñoz-Alonso (1993), and Köhler (1995).

Other recent works have dealt with the comprehensive study of the herpetofauna of Guerrero, Omiltemi and Taxco areas: Saldaña de la Riva & Pérez-Ramos (1987); Muñoz-Alonso (1988) and Hernández-García (1989), respectively.

Other studies have provided information on the distribution of some species. These include Taylor (1933a, 1933b, 1936a, 1936b, and 1937); Shannon (1951); Holman (1964); Liner & Dundee (1969), and Duellman (1960).

The present study attempts to answer the following questions: Which and how many species and subspecies of reptiles and amphibians are found in Guerrero?, which of these are endemic to the state?, and which is the region with the greatest

diversity of amphibians and reptiles? We also aim to provide a thorough review of the herpetological richness of the state.

Study area

The state of Guerrero is located in southern México between 16° 19' N to 18° 52' N and 98° 02' W to 102° 12' W (Fig. 1). It is bordered by the Trans-Mexican Volcanic Belt (TMVB) to the north. It includes the northwestern part of the Sierra Madre del Sur (SMS), most of the basin of the Río Balsas (RBB), and a portion of the Pacific Coastal Plain (PCP). It has a total area of 63675 km^2 (García & Falcón 1979; Figueroa-de Contin 1980). According to Rzedowski (1978), the vegetation in the state includes the following primary associations: tropical deciduos forest, arid tropical scrub, and thorn forest, coniferous forest (part), and pine and/or oak forest; cloud forest, savannah and mangroves.

There are six soil types in the state: inceptisol, ultisol, alfisol, vertisol, mollisol, and entisol (Figueroa-de Contin 1980). Hydrographycally, the Balsas river serves as the axis for tributaries towards the Pacific ocean. Most of the rivers of the southern flank of the SMS contribute to the formation of large lagoons such as Potosí, Nuxco, del Tular, Mitla, Coyuca, Tres Palos, Tecomate, and Chautengo. Two important lakes, Tuxpan and Tixtla, are found in Guerrero (García & Falcón 1979).

The state has an heterogeneous environment, with miscellaneous climatic conditions. The common factor in the great diversity of climates in the state is the summer rainy season (June, July, August, and September). The general climate of Guerrero is warm with an annual mean high temperature of 22°C. On the mountains the lowest temperatures recorded during the colder months reach values below 18°C. Humidity varies between 600-2500 mm annual total precipitation (Dirección de Estudios del Territorio Nacional 1970; Secretaría de Programación y Presupuesto 1981; García 1981).

Methodology

During the 1974-1981 period, 86 localities in Guerrero were visited (Appendix 1). The localities were selected according to their location and environmental characteristics. An important criterium for their selection was to choose remote or barely collected sites of amphibians and reptiles from every physiographic region of the state. Climatic conditions for each locality were recorded from the literature. The distance of the sites to paved roads, towns and populated areas was also recorded (Fig. 1).

Field work consisted of 10 to 15 days trips. Three to four localities per trip were visited with a maximum stay of four days but no less than two days at each locality. The collecting period was mostly during the daytime, although nightime collecting

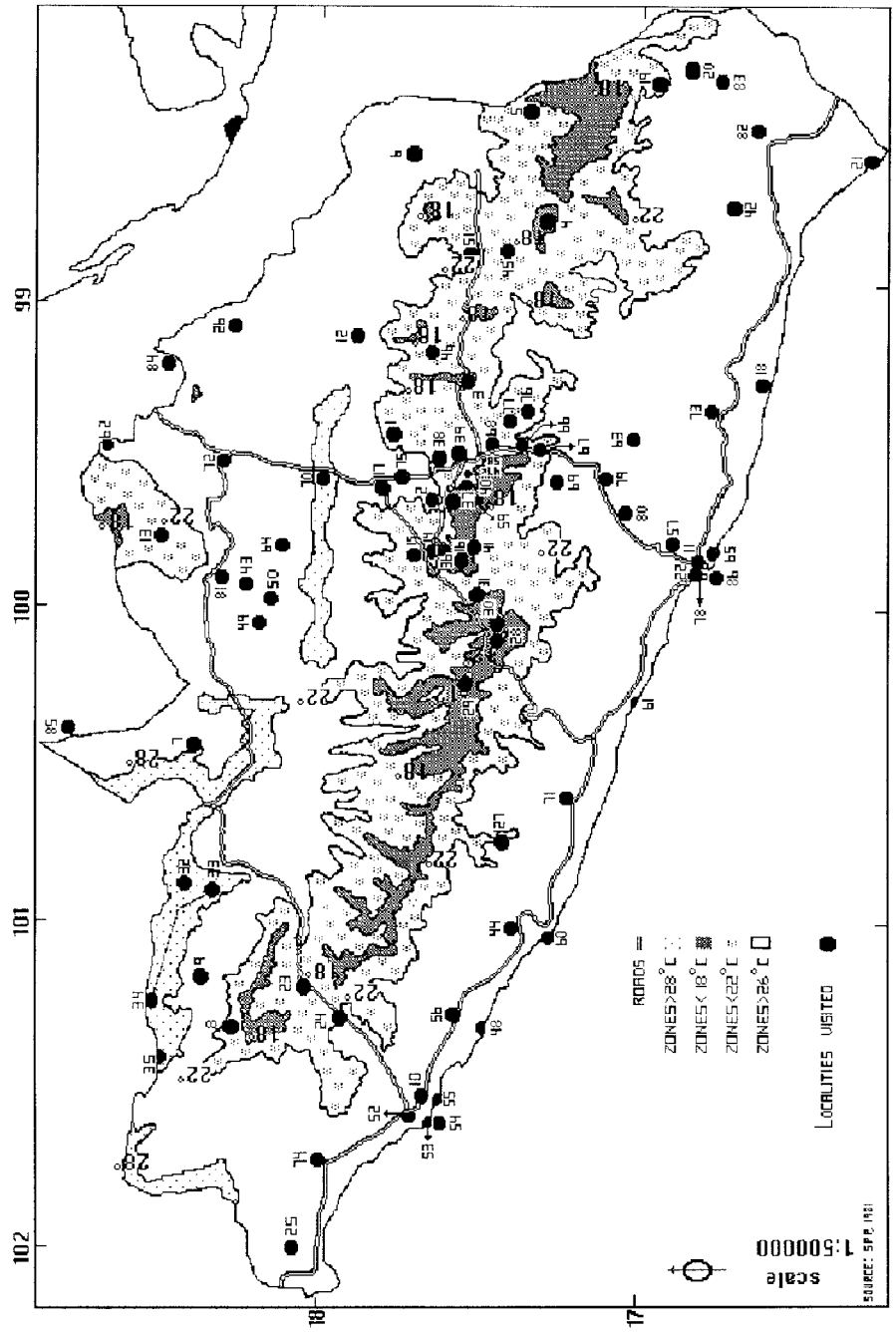

Fig. 1. Localities sampled in Guerrero (for numbers see Appendix 1).

was also carried out. The procedures of collection such as capture and preservation followed suggestions by Knudsen (1972), Pisani & Villa (1974), and Gaviño de la Torre, Juárez & Figueroa (1980). The following data were recorded for each specimen: sample number, date, locality, sex, body and tail lengths, weight, collection time, altitude, habitat and microhabitat at point of capture. The specimens were identified to species-subspecies following Davis (1954), Zweifel (1954), Duellman (1970), Duellman & Wellman (1960), Duellman & Zweifel (1962), Dixon (1964), Smith & Taylor (1966), Lynch (1968, 1970a and 1970b), Smith (1972), Smith & Smith (1977, 1979), Campbell & Lamar (1989), Williams (1994), and Rossman, Ford & Seigel (1996).

Checklist of the herpetological fauna

In addition to the specimens collected in the late 1970's, this checklist includes other specimens donated to the authors, plus a thorough search of specimens already present in national collections such as the Colección Herpetológica Nacional of the Instituto de Biología (IBH), Universidad Nacional Autónoma de México (UNAM); the collection of the Museo de Zoología "Alfonso L. Herrera" (MZFC), Facultad de Ciencias, UNAM; the collection of the Escuela Nacional de Ciencias Biológicas of the Instituto Politécnico Nacional (IPN); and the Dirección General de Fauna Silvestre of the Secretaría de Agricultura y Recursos Hidráulicos (SARH), recently integrated to the collection of the Instituto de Biología, UNAM. It is important to mention that the literature review covers to 1996, and some recent publications that add new state records are included in the list.

Due to the ambiguity of the nomenclature and related problems when dealing with *Ambystoma*, *Syrrhophus*, *Tomodactylus*, *Anolis*, *Enyaliosaurus*, *Sibon*, *Tropidodipsas*, *Ophryacus*, and *Porthidium*, identification of these amphibians and reptiles was carried out in a conservative manner. In most cases, scientific names, followed by the author's name and the year of original description were written following Smith & Smith (1993), but in some specific cases we followed Flores-Villela (1993b), and Duellman (1993). As to the synonymy of the species and subspecies treated here, we refer to Smith & Smith (1993). Likewise, the specific and subspecific names are sorted in alphabetic order, while the supraspecific taxa are arranged in phylogenetic order (Goin, Goin & Zug 1978; Flores-Villela 1993b).

Results

Richness of the herpetofauna

The herpetological fauna known from Guerrero has increased 27% since the 168 forms recorded by Smith & Taylor (1966). Because of explorations to regions poorly known, the bibliographic review has been updated to include taxonomic and systematic studies on several groups of amphibians and reptiles.

Presently, eight groups of amphibians and reptiles occur in Guerrero. There are 231 species and subspecies in the state, representing 20% of the total Mexican

herpetofauna. Seventy taxa are amphibians and 161 taxa are reptiles (Table 2). The herpetofauna of Guerrero includes 70% of the existing families of amphibians and reptiles in México. Together with the other three herpetofauna rich states of México (Chiapas, Oaxaca and Veracruz), it exceeds that of other Mexican or North American regions.

Representativeness of the herpetofauna

The amphibians and reptiles of Guerrero are not equally represented (Table 1). Of the eight groups of amphibians and reptiles, three contribute with ca. 90% of forms (frogs and toads, lizards and snakes; 24%, 29%, 36% respectively), while the five remaining groups contribute only 0.4 to 5.6% of the herpetofauna (Table 1).

Lizards and snakes (Squamata) are the most diverse groups, representing 93% of the total of Reptilia. The most conspicuous and diverse families are the snakes Leptotyphlopidae, Typhlopidae, Loxocemidae, Boidae, Colubridae, Elapidae and Viperidae, with 83 forms representing 51.5% of the reptiles. The lizard families Eublepharidae, Gekkonidae, Xantusiidae, Corytophanidae, Iguanidae, Polychrotidae, Phrynosomatidae, Anguinidae, Xenosauridae, Helodermatidae, Scincidae, and Teiidae have 67 forms, representing 41.6% of the reptiles; the rest correspond to three groups (turtles, amphisbaenians and crocodilians).

Table 1. Composition of the herpetofauna of Guerrero

Orders	Suborders	Families	Genera	Species	Subspecies	Total
Gymnophiona	-	1	1	1	-	1
Caudata	-	2	4	11	2	13
Salientia	-	8	19	49	7	56
Total of amphibians	-	11	24	61	9	70
Testudines						
Cryptodira	1	5	7	2	6	8
Squamata						
Amphisbaenia	1	1	1	2	-	2
Sauria	1	12	23	36	31	67
Serpentes	1	7	48	34	49	83
Crocodylia	-	1	1	1	-	1
Total of reptiles	4	26	80	75	86	161
Herpetofauna	4	37	104	136	95	231

Toads and frogs (Salientia), include 80% of the total of Amphibia; axolotls and salamanders (Caudata) contribute 19%, and the rest correspond to caecilians (Gymnophiona), represented only by *Dermophis oaxacae*. Here are included the families Rhinophrynidae, Microhylidae, Pelobatidae, Ranidae, Bufonidae, Centrolenidae, Hylidae, and Leptodactylidae with 56 forms representing 24% of the total.

Eight families of amphibians and reptiles stand out in the state by their diversity and relative abundance: Plethodontidae, Hylidae, Leptodactylidae, Polychrotidae, Phrynosomatidae, Teiidae, Colubridae, and Elapidae. Among them, the most important genera are *Pseudoeurycea, Hyla, Eleutherodactylus, Anolis, Sceloporus, Cnemidophorus, Leptodeira, Salvadora, Tantilla, Thamnophis*, and *Micrurus*.

Several new state records are here recorded, including: *Sceloporus m. melanorhinus, Cnemidophorus c. communis, C. lineatissimus lividus*, and *Leptotyphlops humilis*. Three specimens of a potentially new species of salamander were captured and are considered as *Pseudoeurycea sp.* (Pérez-Ramos and Saldaña de la Riva, unpublished).

Endemic herpetofauna

Forty-eight forms of amphibians and reptiles are presently known to be endemic to the state. These forms represent 21% of the herpetofauna of Guerrero. Reptiles comprise more than half of all endemics (25 forms; 52%); families Polychrotidae and Colubridae contribute six forms each. There are 23 forms of amphibians (48%). Families Plethodontidae and Leptodactylidae contribute ten and five forms, respectively (with an asterisk in the check-list). Adler (1996) and Hanken *et al.* (in press), emphasize the recent richness of plethodontid salamanders found in Guerrero.

Regional herpetological richness

Every physiographic region of Guerrero has its own herpetological fauna. The most diverse is the Sierra Madre del Sur (SMS) where 151 amphibian and reptilian taxa, representing 65% of the total herpetological forms of Guerrero occur. Most taxa are endemics; 69% (33 forms) of the endemics are found in the mountain zone, which may be indicative of speciation processes enhanced by the ecological-geographical isolation. The cause of this herpetofaunistical diversity in Guerrero has not been investigated thoroughly. Bojorquez *et al.* (1995) and Saldaña de la Riva & Pérez-Ramos (1989) had suggested, respectively, that the environmental variables and variety of habitats or climatic conditions, elevation and vegetation types probably contribute to the richness. For the moment, particularly to (SMS), we are adding that the most direct mechanism may be the unique set of physiographic features of the SMS in Guerrero, too. It is a range of mountains parallel to the Trans-Mexican Volcanic Belt that run along the coast of the Pacific ocean to influence drastically the distribution of the herpetofauna. The SMS is characterized by a rugged and sharp topography with a large number of isolated canyons ("barrancas"), where elevation changes from 1000 to 3700 m are common, producing a heterogeneous environment (temperature, precipitation and moisture variation) that allows development of different communities such as tropical deciduous, oak, pine-oak, coniferous and cloud forests, in addition to the slope-effect. However, the set of ecological conditions related to the amphibians and reptiles need to be reinterpreted with field data to produce a better understanding of the biogeography of these vertebrates in this geographically strategic area of México.

The knowledge on protection and conservation of the amphibians and reptiles of Guerrero is deficient. Immediate action is required to conduct field and experi-

mental works on the biology of this vertebrates; so far, less than 50% of the total herpetofauna of the state has some status of protection and conservation.

As stated before, the diversity of amphibians and reptiles in Guerrero is high, but new species and subspecies can still be found. Regions that remain unstudied are the eastern and western zones of the Taxco ranges, both the upper and lower basins of the Balsas; the mountain regions, both the western and eastern parts of the Sierra Madre del Sur, and the Costa Grande and the Costa Chica regions.

Checklist of amphibians and reptiles of Guerrero

CLASS AMPHIBIA

Order GYMNOPHIONA
Family CAECILIIDAE
Dermophis oaxacae (Mertens) 1930[3] UC

Order CAUDATA
Family AMBYSTOMATIDAE
Ambystoma rivulare (Taylor) 1940[3] E
Family PLETHODONTIDAE
Bolitoglossa hermosa Papenfuss, Wake& Adler 1983[3,4] UC
Pseudoeurycea ahuitzotl Adler 1996[3,4]
P. belli belli (Gray) 1850[2,3] E
P. cephalica cephalica (Cope) 1865[3] E
P. mixcoatl Adler 1996[3,4]
Pseudoeurycea sp. "P.Aguila"[1] Pérez-Ramos, Saldaña de la Riva (unpublished)
P. tenchalli Adler 1996[3,4]
P. teotepec Adler 1996[3,4]
P. tlahcuiloh Adler 1996[3,4]
Thorius grandis Hanken, Wake & Freeman (in press)
T. infernalis Hanken, Wake & Freeman (in press)
T. omiltemi Hanken, Wake & Freeman (in press)

Order SALIENTIA
Family RHINOPHRYNIDAE
Rhinophrynus dorsalis Duméril & Bibron 1841[1,2,3] UC

Family MICROHYLIDAE
Gastrophryne usta (Cope) 1866[1,2,3] UC
Hypopachus variolosus (Cope) 1866[2,3]

Family PELOBATIDAE
Spea multiplicata Cope 1863[1,2,3]

Family RANIDAE
Rana berlandieri Baird 1854[3] SC

R. forreri Boulenger 1883[1,2,3] UC
R. omiltemana Günther 1900[2,3,4] T
R. sierramadrensis Taylor 1939[1,3] UC
R. zweifeli Hillis, Frost & Webb, 1984[1,2,3]
Rana sp. form "Arcelia" Hillis, Frost & Wright 1983[3]
Rana sp. form "Papagayo" Hillis, Frost & Wright 1983[3]

Family BUFONIDAE
Bufo cycladen Lynch & Smith 1966[1,2,3]
B. gemmifer Taylor 1939[1,2,3,4] UC
B. marinus (Linnaeus) 1758[1,2,3]
B. marmoreus Wiegmann 1833[1,2,3]
B. occidentalis Camerano 1879[1,2,3]
B. perplexus Taylor 1943[1,2,3]

Family CENTROLENIDAE
Hyalinobatrachium fleischmanni (Boettger) 1893[3]

Family HYLIDAE
Agalychnis moreleti (Duméril) 1853[3]
Hyla arboricola Taylor 1941[1,2,3,4]
H. arenicolor Cope 1866[1,2,3]
H. bistincta Cope 1877[2,3] UC
H. chryses Adler 1965[1,3,4] UC
H. eximia Baird 1854[2,3]
H. juanitae Snyder 1972[3] E
H. melanomma melanomma Taylor 1940[1,3] UC
H. mykter Adler & Dennis 1972[3,4] E
H. pentheter Adler 1965[3]
H. pinorum Taylor 1937[2,3] UC
H. sartori Smith 1951[1,3] E
H. smithi Boulenger 1902[1,2,3]
H. sumichrasti (Brocchi) 1879[3]
H. trux Adler & Dennis 1972[3,4] E
Pachymedusa dacnicolor (Cope) 1864[1,2,3]
Phrynohyas venulosa Laurenti 1768[3]
Ptychohyla erythromma (Taylor) 1937[3] UC
P. leonhardschultzei (Ahl) 1934[3]
Scinax staufferi staufferi (Cope) 1865[1,2,3]
Smilisca baudini (Duméril & Bibron) 1841[1,2,3]
Triprion spatulatus reticulatus (Taylor) 1942[1,2,3]

Family LEPTODACTYLIDAE
Eleutherodactylus augusti cactorum Taylor 1938[1,3]
E. guerreroensis Lynch 1967[1,2,3,4] UC
E. hobartsmithi (Taylor) 1936[3]
E. mexicanus (Brocchi) 1879[1,3]
E. omiltemanus (Günther) 1900[1,3,4] UC

E. pygmaeus Taylor, 1936[1,2,3]
E. rugulosus (Cope) 1869[1,2,3]
E. saltator Taylor 1941[1,2,3] UC
E. uno Savage 1984[3,4] UC
Leptodactylus labialis (Cope) 1877[3]
L. melanonotus (Hallowell) 1860[1,2,3]
Syrrhophus pipilans pipilans Taylor 1940[1,2,3]
Tomodactylus albolabris Taylor 1943[1,2,3,4] UC
T. dilatus (Davis & Dixon) 1955[1,3,4]
T. nitidus nitidus (Peters) 1869[1,3]
T. nitidus petersi (Duellman) 1954[1,3]

CLASS REPTILIA

Order TESTUDINES
Suborder CRYPTODIRA
Family BATAGURIDAE
Rhinoclemmys pulcherrima pulcherrima (Gray) 1855[1,2,3] E
R. rubida perixantha (Mosimann & Rabb) 1953[1,3] UC

Family EMYDIDAE
Trachemys scripta ornata (Gray) 1831[1,3] SC

Family KINOSTERNIDAE
Kinosternon integrum (LeConte) 1854[1,2,3] SC

Family CHELONIIDAE
Chelonia mydas agassizi Bocourt 1868[1,2] T
Eretmochelys imbricata bissa (Ruppell) 1835[3] T
Lepidochelys olivacea (Eschscholtz) 1829[1,2,3] T

Family DERMOCHELYIDAE
Dermochelys coriacea angusta (Philippi) 1899[3] T

Order SQUAMATA
Suborder AMPHISBAENIA
Family AMPHISBAENIDAE
Bipes canaliculatus Bonnaterre 1789[1,2,3] UC
B. tridactylus (Dugès) 1894[1,3,4] UC

Suborder SAURIA
Family EUBLEPHARIDAE
Coleonyx elegans nemoralis Klauber 1945[2,3] E

Family GEKKONIDAE
Hemidactylus frenatus Schlegel 1836[1,2,3]
Phyllodactylus bordai Taylor 1942[1,3] UC
P. delcampoi Mosauer 1936[3,4] UC

P. lanei lanei Smith 1935[1,2,3]
P. tuberculosus magnus Taylor 1942[1,2,3]

Family XANTUSIIDAE
Lepidophyma smithi Bocourt 1876[1,2,3] UC

Family CORYTOPHANIDAE
Basiliscus vittatus Wiegmann 1828[1,2,3]

Family IGUANIDAE
Ctenosaura pectinata (Wiegmann) 1834[1,2,3] E
Enyaliosaurus clarki (Bailey) 1928[1,2,3] E
Iguana iguana (Linnaeus) 1758[2,3] SC

Family POLYCHROTIDAE
Anolis dunni Smith 1936[1,2,3] UC
A. gadovi Boulenger 1905[3,4] UC
A. liogaster Boulenger 1905[1,2,3,4] UC
A. megapholidotus Smith 1933[1,2,3,4] UC
A. microlepidotus Davis 1954[1,2,3] UC
A. nebulosus (Wiegmann) 1834[1,2,3]
A. omiltemanus Davis 1954[1,3,4] UC
A. subocularis Davis 1954[1,2,3,4] UC
A. taylori Smith & Spieler 1945[1,2,3,4] UC

Family PHRYNOSOMATIDAE
Phrynosoma asio Cope 1864[1,2,3] UC
P. taurus Dugès 1868[3] E
P. orbiculare (Linnaeus) 1789[2,3] T
Sceloporus adleri Smith & Savitzky 1974[1,2,3,4] UC
S. aeneus aeneus Wiegmann 1828[3]
S. asper Boulenger 1897[3] UC
S. formosus scitulus Smith 1942[1,2,3,4]
S. gadovae Boulenger 1905[1,2,3]
S. grammicus grammicus Wiegmann 1828[1,2,3] UC
S. horridus horridus Wiegmann 1834[1,2,3]
S. horridus oligoporus Cope 1864[1,2,3]
S. melanorhinus calligaster Smith 1942[1,2,3]
S. melanorhinus melanorhinus Bocourt 1876[1,5]
S. mucronatus omiltemanus Günther 1890[1,2,3]
S. ochoterenae Smith 1934[1,2,3]
S. palaciosi Lara-Góngora 1983[3]
S. pyrocephalus Cope 1864[1,2,3]
S. siniferus siniferus Cope 1869[1,2,3]
S. spinosus caeruleopunctatus Smith 1938[3]
S. stejnegeri Smith 1942[1,3,4] UC
S. utiformis Cope 1864[1,3]
Urosaurus bicarinatus anonymorphus (Mittleman) 1940[1,2,3]

U. bicarinatus bicarinatus (Duméril) 1856[1,2,3]
U. gadovi (Schmidt) 1921[1,2,3]

Family ANGUINIDAE
Abronia deppei (Wiegmann) 1828[3] UC
A. mixteca Bogert & Porter 1967[2,3] UC
Abronia sp. "Guerrero" Flores-Villela & Sánchez 1993[1,2,3,4]
Gerrhonotus liocephalus liocephalus Wiegmann 1828[2,3] UC
Mesaspis gadovi gadovi (Boulenger) 1913[1,2,3,4] UC

Family XENOSAURIDAE
Xenosaurus penai[1,2] Pérez-Ramos, Saldaña-de la Riva& Campbell (in press)

Family HELODERMATIDAE
Heloderma horridum horridum (Wiegmann), 1829[1,2,3] E

Family SCINCIDAE
Eumeces brevirostris brevirostris (Günther) 1860[1,2,3]
E. brevirostris indubitus Taylor 1933[1,2,3]
E. ochoterenae Taylor 1933[2,3,4] UC
Mabuya unimarginata Cope 1862[1,2,3]
Sphenomorphus assatus taylori (Oliver) 1937[1,3]

Family TEIIDAE
Ameiva undulata dextra Smith & Laufe 1946[1,2,3]
Cnemidophorus calidipes Duellman 1955[1,2,3] UC
C. communis communis Cope 1877[1,2,5] UC
C. costatus costatus Cope 1877[1,2,3]
C. costatus zweifeli Duellman 1960[1,2,3]
C. deppei deppei Wiegmann 1834[1,2,3]
C. deppei infernalis Duellman & Wellman 1960[1,2,3]
C. guttatus immutabilis Cope 1877[1,2,3]
C. lineattissimus lividus Duellman & Wellman 1960[1,5] UC
C. sacki gigas Davis & Smith 1952[1,2,3]
C. sacki sacki Wiegmann 1834[2,3]

Suborder SERPENTES
Family LEPTOTYPHLOPIDAE
Leptotyphlops goudoti bakewelli Oliver 1937[1,2,3]
L. maximus Loveridge 1932[1,3]
L. humilis (Baird & Girard) 1853[1,5]

Family TYPHLOPIDAE
Ramphotyphlops braminus (Daudin) 1803[1,2,3]

Family LOXOCEMIDAE
Loxocemus bicolor Cope 1861[1,2,3] UC

Family BOIDAE
Boa constrictor imperator (Daudin) 1803[1,2,3] E

Family COLUBRIDAE
Clelia clelia clelia (Daudin) 1803[3]
Coniophanes fissidens dispersus Smith 1941[3]
C. lateritius melanocephalus Peters 1869[3]
C. piceivittis taylori Hall 1951[1,3,4]
Conophis vittatus viduus Cope 1876[3]
C. vittatus vittatus Peters 1860[1,2,3]
Conopsis biserialis Taylor & Smith 1942[2,3] E
Dryadophis melanolomus slevini (Stuart) 1933[3]
D. melanolomus stuarti Smith 1943[3]
Drymarchon corais melanurus (Duméril, Bibron & Duméril) 1854[1]
D. corais rubidus Smith 1941[1,2,3]
Drymobius margaritiferus fistulosus Smith 1942[1,2,3]
Enulius flavitorques unicolor (Fischer) 1882[3]
Ficimia publia Cope 1866[3]
F. ruspator Smith & Taylor 1941[3,4] UC
Geophis omiltemanus Günther 1893[3,4] UC
G. sieboldi (Jan) 1862[3] UC
Hypsiglena torquata torquata (Günther) 1860[3] UC
Imantodes gemmistratus gracillimus (Günther) 1895[1,3] UC
I. gemmistratus latistratus (Cope) 1887[1,3] UC
Lampropeltis triangulum conanti Williams 1978[1,2,3] E
Leptodeira annulata cussiliris Duellman 1958[1,2,3] UC
L. maculata (Hallowell) 1860[1,3] UC
L. nigrofasciata mystacina Cope 1869[1,2,3]
L. septentrionalis polysticta Günther 1895[1,3]
L. splendida bressoni Taylor 1938[1,3]
Leptophis ahaetulla praestans (Cope) 1868[1,3] E
L. diplotropis diplotropis (Günther) 1872[1,2,3] E
Manolepis putnami (Jan) 1863[1,2,3]
Masticophis mentovarius striolatus (Mertens) 1934[1,2,3]
Oxybelis aeneus (Wagler) 1824[1,2,3]
O. fulgidus (Daudin) 1803[2,3]
Pituophis lineaticollis lineaticollis (Cope) 1861[1,2,3]
Pseudoficimia frontalis (Cope) 1864[1,3]
Pseudoleptodeira latifasciata (Günther) 1894[3] UC
Rhadinaea hesperia hesperia Bailey 1940[1,2,3]
R. omiltemana (Günther) 1894[1,2,3,4] UC
R. taeniata aemula Bailey 1940[1,2,3]
Rhadinophanes monticola Myers & Campbell 1981[3,4] UC
Salvadora bairdi Jan 1860[2,3] UC
S. intermedia Hartweg 1940[3] UC
S. lemniscata (Cope) 1890[3] UC
S. mexicana (Duméril, Bibron & Duméril) 1854[1,2,3] UC

Senticolis triaspis intermedia (Boettger) 1883[1,3]
Sibon nebulata nebulata Linnaeus 1758[3]
Sonora michoacanensis michoacanensis (Dugès) 1884[2,3]
Stenorrhina freminvillei Duméril, Bibron & Duméril 1854[1,2,3]
Storeria storerioides (Cope) 1865[1,3]
Tantilla bocourti bocourti (Günther) 1895[3]
T. calamarina Cope 1866[1,2,3]
T. coronadoi Hartweg 1944[3,4] UC
T. deppei (Bocourt) 1883[3] E
Thamnophis chrysocephalus (Cope) 1884[1,2,3] E
T. cyrtopsis collaris (Jan) 1863[3] E
T. eques eques (Reuss) 1834[1,3] E
T. godmani (Günther) 1894[1,2,3] E
T. proximus rutiloris (Cope) 1885[3] E
T. validus isabelleae (Conant) 1953[1,2,3]
Toluca conica Taylor & Smith 1942[1,2,3]
Trimorphodon biscutatus biscutatus (Duméril, Bibron & Duméril) 1854[1,2,3]
T. tau latifascia Peters 1869[1,2,3]
Tropidodipsas annulifera Boulenger 1894[3] UC
T. fasciata guerreroensis Taylor 1939[3]
T. zweifeli Liner and Wilson 1970[3] UC
Xenodon rabdocephalus mexicanus Smith 1940[3]

Family ELAPIDAE
Micrurus browni browni Schmidt & Smith 1943[1,2,3] UC
M. browni taylori Schmidt & Smith 1943[1,2,3,4] UC
M. distans michoacanensis (Dugés) 1891[3] UC
M. laticollaris laticollaris (Peters) 1869[1,3] UC
Pelamis platurus (Linnaeus) 1766[1,2,3]

Family VIPERIDAE
Agkistrodon bilineatus bilineatus (Günther) 1863[2,3] UC
Crotalus durissus culminatus Klauber 1936[1,3] SC
C. intermedius omiltemanus Günther 1895[1,3,4] E
C. triseriatus triseriatus (Wagler) 1830[3]
Ophryacus undulatus (Jan) 1859[3] SC
Porthidium barbouri (Dunn) 1919[1,3,4] UC
Sistrurus ravus exiguus Campbell & Armstrong 1979[3,4] SC

Order CROCODYLIA
Family CROCODYLIDAE
Crocodylus acutus (Cuvier) 1807[3] UC

1: collected by the authors, 2: listed in catalog of herpetological collections, 3: record found in the literature, 4: endemic taxa, and 5: new record provided by the authors

(E) endangered, (T) Threatened, (SC) special concern, and (UC) uncommon (Secretaría del Medio Ambiente, Recursos Naturales y Pesca 1995).

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Appendix 1. Collection localities in Guerrero

Northern range (NR)	Rio Balsas basin (RBB)	Sierra Madre del Sur (SMS)	Pacifico coastal plain (PCP)
13= Ixcateopan	2= Chichihualco	1=Huitziltepec	10=Pozquelite
	6=Coyahualco	3=Zoquiapan	11=Cumbres de Llano Largo
	7=Villa Madero	4= La Compuerta de Tlaciapa	18= Las Lechugas
	9=Arroyo Largo	5=Xochapa	20=Tierra Blanca
	12=Tlalcozotitlán	8=Chipícuaro	21=Punta Maldonado
	17=Xochipala	14=Filo de Caballo	22=Acapulco
	26=Chaucingo	15=La Escalera	25=El Limón
	32=Qurirícuaro	16= El Asoleadero del Balsamar	42=Jolotichán
	33=El Naranjo	19=Pico del Águila	44=Papanoa
	34=San Jerónimo	23=Puerto del Bálsamo	48= Laguna de San Valiente
	35=Las Juntas de Cujarán	24=Los Ciruelos	52= Barrio Viejo
	38=Cosausi	27=La Palma	53=Ixtapa
	43=Acatempan	28=Cerro Teotepec	54=Isla Ixtapa
	49=Tehuixtla	29=Toro Muerto	55=Zihuatanejo
	50=Zacatlán	30=Yerbasanta	56=Petatlán
	62=Grutas de Cacahuamilpa	31=Cruz de Ocote	60=Barra Potosí
	64=Los Sauces	36=Crucero del Carrizal de Bravo	61=Cayaquitos
	70=Mezcala	37=Barranca del Tío Chico Reyes	63=Las Mesas
	72=Iguala	39=Casa de Teja	65=Puerto Marqués
	75=Cañón del Zopilote	40=Jalapa	69=Los Cajeles
	81=Teloloapan	41=El Puerto	71=Tecpan de Galena
	84=Tilzapotla, Morelos	45=Ayotoxtla	73=San Marcos
	85=Bejucos, México	46=Acatlán	74=La Unión
		47=Amojileca	78=Plan de los Amates
		51=Tlatlauquitepec	79=Km 67.5, Rd. Méx 95
		58=Cacatula	80=El 40
		59=Acatatlaxco	82=Ometepec
		66=Acahuizotla	83=Tlacoachistlahuaca
		67=Agua de Obispo	86=Isla Roqueta
		68=Mazatlán	
		76=Xomilcotitlán	
		77=San Roque	