



**Herpetological records**

**from**

**Reserva de la Biosfera Sierra Gorda**

**(Querétaro, Mexico)**

**November 2000.**

**Scott Gillingwater and Michael Patrikeev**

2004

### **Study Area:**

Reserva de la Biosfera Sierra Gorda is a large protected area (c. 383,000 ha) covering the entire eastern third of the State of Querétaro, central-eastern Mexico (Figure 1). The reserve lies at altitudes of 300–3,191 m above sea level spanning across two mountain ranges (the Sierra Gorda proper and the western slope of Sierra Madre Oriental) and the adjacent valleys, and encompassing several climatic zones (humid tropical, dry tropical, moderate and dry). Vegetation of Reserva de la Biosfera Sierra Gorda is extremely diverse and 14 major habitat types are recognized: dry tropical thorn forest, oak forest, pine forest, mixed oak-pine forest, tropical semi-evergreen forest, cloud forest, juniper forest, cypress forest, alpine forest, cactus scrub, sub-montane scrub, creosote bush desert, cactus desert and oak scrub. Annual precipitation ranges from 300 mm in deserts to 1,500 mm in cloud forests near the mountain tops (Carabias-Lillo et al. 1999).

Reserva de la Biosfera Sierra Gorda consists of 11 legally protected core areas (c. 8% of the land), low intensity use zones (e.g., cattle range, selective logging) and high intensity development zones (i.e., towns, villages and agriculture). There are c. 100,000 people living within this biosphere reserve (Carabias-Lillo et al. 1999).

A study of reptiles and amphibians of Querétaro was summarized in Dixon et al. (1972) and additional records shown in Carabias-Lillo et al. (1999). To date, 71 species of reptiles and 23 species of amphibians have been reported from the Reserva de la Biosfera Sierra Gorda (Carabias-Lillo et al., 1999). One of the largest (perhaps the largest) collections of reptiles and amphibians from this Mexican state is maintained at Texas A&M University (College Station, Texas, USA).

### **Methods:**

Six sites in the central and eastern part of the reserve (Figure 1) were visited by a team of six between October 31<sup>st</sup> and November 19<sup>th</sup>, 2000. Search for amphibians and reptiles was focused on salamanders, and litter search for the latter was conducted on twelve 10x10 m plots

(see Appendix 1 for plot description and search results). One night search and opportunistic debris searches were also conducted. No other night searches were undertaken due to the very rough terrain. Other amphibians and reptiles were found during routine debris search or observed along the route.

No collecting permit was issued to the team and hence no specimens were collected or preserved. However, we photographed and measured the majority of found amphibians and reptiles which were later released unharmed into the wild at the exact site of their capture. Photographs of all species recorded during this study may be found in Appendix 2. Upon return from Mexico, we sought expert advice (Drs. James R. Dixon and Gabriella Parra-Olea) to identify the photographed species. One of us (MP) visited Texas A&M Collection in February 2002 to confirm species identification. To date, all species but three or four have been identified, although some tentatively (see where physical specimens were needed to confirm photo identification, appropriate notices were made in the text). The freshwater turtle that was seen, but not caught could not be identified beyond genus. The remaining two-three species (all salamanders) may represent species new to science. We provide informal description of these salamanders in this report.

### **Study sites:**

#### ***Joya del Cedro***

*Altitude c. 1,700 m (4.5 days)*

*N21°13'41" and W099°09'27"*

Selectively logged oak-pine-cypress forest with dense shrub layer and some epiphytes. Large cypresses were mostly removed, but large oaks and pines were left standing.

There was some cattle grazing.

Light drizzle and fog on some days.

Temperature: +10°C to +20°C.

#### ***Joya del Hielo Core Area.***

*Altitude 1,800-2,200 m (4.5 days)*

*N21°13'47" and W099°09'45"*

Cloud forest with abundant epiphytes and scarce understorey. No logging signs were seen, but some cattle was present at this site.

Fog and light drizzle almost daily.  
Temperature: +10°C to +20°C.

**La Joya de San Juan de los Duran**

Altitude 1,300 m (6.5 days)  
N21°28'21" and W099°09'35"

A valley with cornfields and pasture surrounded by mountains covered with secondary mixed oak-pine forests with palmetto and thorny shrub understorey. Selective logging is ongoing activity in the adjacent forests.

This site was drier than La Joya del Hielo/Joya del Cedro area. Weather ranged from sunny and very warm (up to +28°C) to fog and drizzle (+5 to +15 C°).

**Cañada de las Avispas Core Area**

(1,600-2,200 m, 0.3 days)  
N21°27'15" and W099°07'58"

A remarkable example of old-growth temperate forest with giant Guatemala Firs (*Abies guatemalensis*), large oaks, pines and cypresses, and abundant coarse woody debris. Some cattle grazing occurs.

This site was visited briefly after a tiresome 3.5-hour trek on a hardly visible trail. This site harbours a great potential for salamander surveys.

Cañada de las Avispas was visited on a warm and sunny day (c. +20°C), but it is likely wrapped in fog on many days.

**Rancho El Sauz, Malila**

(c. 600-700 m, 3 days)  
N21°13'19" and W099°25'05"

A large cattle ranch (c. 1,050 ha) near Jalpan de Serra. Large tracts of grazed tropical dry thorn forest (logged in the past) with several species of large cacti and agave, sorghum fields and cattle ponds. Large rock outcrops are scattered across the ranch and adjacent lands.

**Río Ayutla**

(c. 650-700 m, 2 days +)  
N21°23'47" and W099°34'54"

Patches of tropical dry thorn forest within agricultural area alongside Río Ayutla upstream from the bridge (Puerto Ayutla). Both banks are utilized for orchards, banana plantations, grazing, housing and other anthropogenous activities. Large and small boulders, irrigation ditches, makeshift dams, cobble beds and gravel bars sporadically line the shores of the river.

**Jalpan de Serra**

(c. 650 m, 1.5 days)  
N21°12'59.99" and W099°28'21.02"

Jalpan is a town of c. 5,000 lying in the tropical dry thorn forest zone in the middle of the reserve. This town was our base during this study and some species of amphibians and reptiles were observed on a casual basis in the town and along the shore of Presa Jalpan, the town's water basin (N21°12'12" and W099°28'28").

**Figure 1. Location of Reserva de la Biosfera Sierra Gorda**



**Figure 2. Areas within Reserva de la Biosfera Sierra Gorda visited in November 2000**



## **Results:**

In total, 8-10 species of amphibians and 13 species of reptiles were recorded on this trip (Appendices 3 and 4 respectively). Timing of the surveys was very good for salamanders, but not for reptiles.

Three species (a salamander and two snakes) likely represent new records for the State of Querétaro. Two-three species of salamanders may represent species new to science.

### Ornate Salamander (*Pseudoeurycea bellii*)

The most common salamander recorded during this study. An adult was found during litter search in the cloud forest of Joya del Hielo at 1,940 m, and a juvenile under a piece of wood in Joya del Cedro at c. 1,700 m. This species appeared relatively common in La Joya de San Juan de los Duran where six specimens were found in secondary forest, at forest edges and under logs in grazed areas. Usually occurs in the ample leaf litter and under moss covered rocks, but waste timber and brush piles left from logging, as well as degraded wooden fencerows also seem to provide cover. Classified as Threatened in Norma Oficial Mexicana (1994) and Vulnerable by Young et al. (2004). Mexican Endemic (Norma Oficial Mexicana 1994). Photo on page 10.

### Salamander (*Pseudoeurycea rubrimembris*)

A member of *Pseudoeurycea cephalica* complex. Classified as Near-threatened (Young et al. 2004) or Threatened Endemic (Norma Oficial Mexicana 1994). Two found: adult female (SL 112 mm, tail 50 mm, 11 costal grooves) and adult male (SL 92 mm, tail 37 mm, 10 costal grooves). Both were recorded from Joya del Hielo at 1,900-1,950 m. One was found under a log and another beneath five cm of soil and vegetative debris, during a litter search. This species may exhibit great variation of colours and body shapes and perhaps all grayish-blackish *Pseudoeurycea* with reddish limbs and tail tips found during this study belong to this species. Mexican Endemic (Norma Oficial Mexicana 1994). Photo on page 10.

Three other *Pseudoeurycea* salamanders

found on this trip that may belong to others or even new species.

### Salamander (*Pseudoeurycea* sp.) No. 1

One individual (adult male with prominent cirri) found sitting in a low forb leaf 15-20 cm above the ground during a night search at c. 1,700 m in Joya del Cedro. Measurements: SL 90 mm, tail 43 mm, 10 costal grooves. Body is dark grey with dirty-white irregular blotches (mostly in caudal area) and bluish iridophores. The last 2/5 of the tail is fleshy-red and thighs and forearms of the same colour, extremities below joints grey with numerous bluish iridophores. Feet webbed. This might be a new species or a very bright male of *P. rubrimembris*. Photo on page 10.

### Salamander (*Pseudoeurycea* sp.) No. 2

One individual was found at 1,940 m in cloud forest in Joya del Hielo, beneath five cm of rotted wood, during a litter search. Presumably adult female (or perhaps immature of *P. rubrimembris*). Measurements: SL 67 mm, tail 26 mm; 9 costal grooves. Body is pale grey dorsally with grey-whitish irregular blotches. When exposed to the light, a reddish grainy pattern (iridophores) appeared throughout the head and back, and to a lesser extent laterally. Bluish iridophores also present on the sides of the head, laterally and extremities, and to a lesser extent on the back. Limbs fleshy-red before the joint, but the red only slightly spread onto the lower part of the extremity. Tail is relatively short, slightly flattened on sides, with irregular dirty-white large blotches on ventral and lateral parts of the tail. The terminal 30% of the tail has the same fleshy-red tint as the base of the limbs. Eye rim golden. This salamander differs from adult female *P. rubrimembris* by having slightly wider head, pointier snout, smaller feet, and fewer costal grooves. Possibly a member of *P. cephalica* complex. Photo on page 11

### Salamander *Pseudoeurycea* sp. No. 3

This salamander was found under a small rock in a cave at La Joya de San Juan de los Duran. Snout to vent (SL) length 61 mm, tail 24 mm, 11 costal grooves. This was uniformly dark brown salamander with only

faint blue iridophores on lateral sides. Only thighs and the very tip of the tail are reddish; there was very little red (hardly visible) around shoulders. Tail round and not flattened laterally as in the former species. One asymmetric creamy dorsal spot. This salamander superficially resembles *P. rubrimembris* and also has 11 costal grooves. It might very well be a juvenile of this species, although both J.R. Dixon and G. Parra-Olea expressed opinion that this might be a new species. Possibly a member of *P. cephalica* complex. Photo on page 11.

Salamander (*Chiropterotriton terrestris*)  
Tentative identification. This small salamander (SL 43 mm, tail 23 mm, 10 costal grooves), was recorded in Joya del Cedro under a piece of bark alongside a trail. This is likely the first record of this species from Querétaro. *Chiropterotriton terrestris* is currently classified as Data Deficient (Young et al. 2004). Another *Chiropterotriton* was found hiding within a fallen bromeliad at Joya del Hielo, but it escaped before it could be photographed. Mexican endemic (NatureServe Explorer. 2004). Photo on page 11.

Toad (*Bufo valliceps*)  
At least 10 were found on the Cathedral Square in Jalpan de Serra and along the shore of Presa Jalpan. Three additional Gulf Coast Toads were recorded in the Rio Ayutla Valley 4km upstream from the town of Ayutla. Least concern (Young et al. 2004). Photo on page 12.

Chirping Frog, Rana-Chirriónera Orejona (*Eleutherodactylus verrucipes*)  
(formerly *Syrhophus verrucipes*)  
One record (likely overlooked due to its small size). It was found under a piece of wood in a grazed area of La Joya de San Juan de los Duran. Species with restricted distribution and treated as Vulnerable by Young et al. (2004) and as Rare by Norma Oficial Mexicana (1994). Mexican endemic. Photo on page 12.

Tree Frog, Calates (*Hyla miotypanum*)  
Tentative identification.  
Up to 15 calling males at a gravel bar in Rio Ayutla valley, c. 4 km upstream from the

town of Ayutla. The frogs were calling from the water's edge on November 18, 2000 from dusk to c. 2300 hrs (not continuously, but at 15-20 minute intervals). This species is currently classified as Near Threatened (Young et al. 2004). Photo on page 12.

Rio Grande Leopard Frog, Rana Leopardo (*Rana berlandieri*)  
Common in cattle ponds at El Sauz at c. 650 m. Three more individuals were recorded in Rio Ayutla valley, c. 4km upstream of the town of Ayutla. One dead was found at the mouth of a small cave in La Joya de San Juan de los Duran. Classified as Least Concern by Young et al. (2004), but as in need of protection by Norma Oficial Mexicana (1994). Photo on page 12.

Common House Gecko (*Hemidactylus frenatus*)  
Common in buildings in Jalpan de Serra. Exotic. Native to tropical Asia and islands of Pacific and Indian oceans (NatureServe Explorer 2004).

Mesquite Lizard (*Sceloporus grammicus*)  
Highly arboreal. Three observed in pine and pine-oak forest in Joya del Cedro up to 1,700 m. One examined individual measured 120 mm snout to vent, tail 65 mm. Rare (Norma Oficial Mexicana 1994). Photo on page 13.

Spiny Lizard (*Sceloporus minor*)  
= *Sceloporus jarrovii immucronatus*.  
A member of *Sceloporus jarrovii* complex. Common on rock outcrops in La Joya de San Juan de Los Duran and very common in similar habitats below the village of San Juan de los Duran. Measurements of two examined individuals were as following: male (SL 164 mm, tail 100 mm) and female (SL 193 mm, tail 119 mm). Tentative identification. Photo on page 13.

Rosebelly Lizard (*Sceloporus variabilis*)  
This species (mostly females and immature) was common in boulder beds at Puento Ayutla, and at fences and in tropical dry thorn forest in El Sauz. One adult male was found in rocky outcropping in La Joya de San Juan de los Duran (SL 174 mm, tail 105 mm) at c. 1,300 m. Photo on page 13.

Alligator Lizard (*Gerrhonotus liocephalus*)

Two found in tropical dry thorn forest in El Sauz (600-650 m). A large adult (SL 447 mm, tail 309 mm) and a small juvenile (not measured). Rare (Norma Oficial Mexicana 1994). Photo on page 14.

Streaked Gutezpalia (*Abronia taeniata*)

One recorded in secondary oak-pine forest above La Joya de San Juan de los Duran (SL 121 mm, tail 72 mm). Mexican endemic. Rare (Norma Oficial Mexicana 1994). Photo on page 14.

Lynxe's Skink (*Eumeces lynxe belli*)

Two encountered in grazed openings in old-growth temperate oak-pine-fir forest in Cañada de las Avispas at c. 2,200 m, and another in a rock outcrop in Joya del Cedro (SL 136mm, tail 70mm). Tentative identification. Mexican endemic. Rare (Norma Oficial Mexicana 1994). Photo on page 14.

Four-lined Skink (*Eumeces tetragrammus*)

One found beneath a brush pile in a logged area within secondary oak-pine forest above La Joya de San Juan de los Duran. Measurements: SL 116mm, tail 57mm. Tentative identification. Photo on page 14.

Night Lizard (*Lepidophyma sylvaticum*)

One immature was discovered in a pile of woody debris in Joya del Cedro at 1,700 m. Mexican endemic. Rare (Norma Oficial Mexicana 1994). Photo on page 15.

Spotted Whiptail (*Cnemidophorus gularis colossus*)

One male found under a rock in a pasture in El Sauz (SL 279mm, tail 194mm). Also 1-2 on a cobble bar along Rio Ayutla (both sites at 600-650 m). Photo on page 15.

Ring-necked Coffee Snake

(*Ninia diademata*)

Probably new species for Querétaro. Two individuals found in La Joya de San Juan de los Duran: one under a board beside a corn crib (SL 220 mm, tail 70 mm) and another in a forest clearing, beneath vegetative debris remaining from logging activity (SL 165 mm, tail 70 mm). The first individual had a dark yellow collar, and the second a yellow-orange collar. Photo on page 16.

Salmon-bellied Racer

(*Masticodryas melanolomus*)

(formerly *Dryadophis melanolomus*)

Probably new species for Querétaro. Found alongside an irrigation ditch next to a banana plantation in Rio Ayutla valley c. 2km upstream of the town of Ayutla. Measurements: SL 910mm, tail 160 mm (note: a portion of the tail was missing). Photo on page 16.

Slider (turtle)

*Trachemys* sp.

A juvenile slider (c. SCL 10cm) was observed basking on a rock at Presa Jalpan. No additional sightings occurred, despite three hours of searching.

### **References:**

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**Young, B. E., S. N. Stuart, J. S. Chanson, N. A. Cox, and T. M. Boucher. 2004.** Disappearing Jewels: The Status of New World Amphibians. NatureServe, Arlington, Virginia.

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## APPENDIX 1

### 10m X 10m Sample Plots:

- 1) Night Search near camp at Joya del Cedro. November 1, 2000.
  - *Pseudoeurycea* sp. No. 1 (1)Mainly open canopy cover. Sporadically placed trees and shrubs. Various rotting logs and leaf litter present.
- 2) Litter search at Joya del Hielo. November 2, 2000 .
  - No salamanders foundMainly closed canopy. Very moist, dark soil. Medium to large trees, rotting logs and leaf litter.
- 3) Litter search at Joya del Hielo. November 2, 2000.
  - *Pseudoeurycea rubrimembris* (1)
  - *Pseudoeurycea belli* (1)Mainly closed canopy cover. Moist, dark soil. Medium to large trees, rotting logs, fallen bromeliads and leaf litter.
- 4) Litter search at Joya del Hielo. November 3, 2000.
  - *Pseudoeurycea* sp. No. 2 (1)Mainly closed canopy cover. Moist, dark soil. Medium to large trees, rotting logs, fallen bromeliads and leaf litter.
- 5) Litter search at Joya del Hielo. November 3, 2000.
  - No salamanders foundPartially open canopy cover. Moist dark soil interspersed with large rocks and rotting logs. Very little leaf litter present. Various medium sized trees and small shrubs present.
- 6) Litter search at Joya del Cedro. November 4, 2000.
  - No salamanders foundRoadside site with steep slope, no canopy cover, large rocks and dry, dark soil.
- 7) Litter search at Joya del Cedro. November 5, 2000.
  - No salamanders found.Mainly closed canopy. Dark, moist soil. Many medium to large trees and a large amount of leaf litter.
- 8) Litter search at La Joya de San Juan de los Duran. November 8, 2000.
  - No salamanders found.Mainly closed canopy cover. Dark, moist soil. 45 degree slope. Many medium to large trees, shrubs and ground cover. Large amount of leaf litter.
- 9) Litter search at La Joya de San Juan de los Duran. November 8, 2000.
  - No salamanders found.Medium canopy cover. Dark, moist soil. Recently logged site with various brush piles and rotting logs. A large pile of 25 rotting logs was included in the sample.
- 10) Litter search at La Joya de San Juan de los Duran. November 9, 2000.
  - No salamanders found.Mainly closed canopy cover. Dark dry soil. 45 degree slope. Many medium to large trees,

shrubs and groundcover interspersed with exposed rock.

11) Rock and litter search at La Joya de San Juan de los Duran. November 10, 2000.

- *Pseudoeurycea* sp. No. 3

Search conducted within a small cave located within the valley. Very little vegetation present, but leaf litter was available amongst the mainly rocky substrate.

12) Litter search at La Joya de San Juan de los Duran. November 11, 2000.

- *Pseudoeurycea belli* (1)

Medium canopy cover. Dark, moist soil. Recently logged site with various brush piles and rotting logs.

## APPENDIX 2

### Amphibians and Reptiles photographed during this study



**Ornate Salamander**  
**(*Pseudoeurycea belli*)**

Joya del Hielo  
Photo by Michael Patrikeev



**Salamander**  
**(*Pseudoeurycea rubrimembris*)**

Female (above) and male (below)  
Both salamanders are from Joya del Hielo  
Photo by Michael Patrikeev



**Salamander**  
**(*Pseudoeurycea sp.*) No. 1**

Hoya del Cedro  
Photo by Michael Patrikeev



**Salamander**  
**(*Pseudoeurycea* sp.) No. 2**  
Hoya del Hielo  
Photo by Michael Patrikeev)



**Salamander**  
**(*Pseudoeurycea* sp.) No. 3**  
La Joya de San Juan de los Duran.  
Photo by Michael Patrikeev



**Salamander**  
**(*Chiropterotriton terrestris*)**  
Joya del Cedro  
Photo by Michael Patrikeev





**Toads**  
**(*Bufo valliceps*)**

Presa Jalpan  
Photo by Scott Gillingwater



**Chirping Frog**  
**(*Eleutherodactylus verrucipes*)**

La Joya de San Juan de los Duran  
Photo by Michael Patrikeev



**Tree Frog**  
**(*Hyla miotympanum*)**

Rio Ayutla Valley  
Photo by Scott Gillingwater



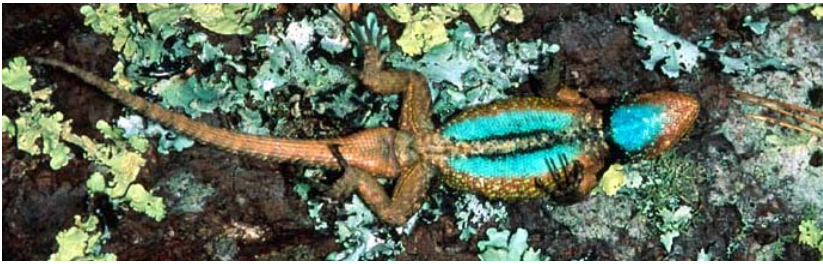
**Rio Grande Leopard Frog**  
**(*Rana berlandieri*)**

Rancho El Sauz, Malilla  
Photo by Scott Gillingwater



**Mesquite Lizard  
(*Sceloporus grammicus*)**

Male  
Dorsal and ventral views  
Joya del Cedro  
Photo by Michael Patrikeev



**Spiny Lizard  
(*Sceloporus minor*), Male**

Joya de San Juan de los Duran  
Photo by Michael Patrikeev



**Rosebelly Lizard  
(*Sceloporus variabilis*)**

Male. Dorsal and ventral view  
Joya de San Juan de los Duran  
Photo by Michael Patrikeev





**Alligator Lizard  
(*Gerrhonotus liocephalus*)**

Rancho El Sauz, Malilla  
Photo by Michael Patrikeev



**Streaked Gutezpalia  
(*Abronia taeniata*)**

Joya de San Juan de los Duran  
Photo by Scott Gillingwater



**Lynxe's Skink  
(*Eumeces lynxe belli*)**

Cañada de las Avispas  
Photo by Michael Patrikeev



**Four-lined Skink  
(*Eumeces tetragrammus*)**

Joya de San Juan de los Duran  
Photo by Michael Patrikeev



**Night Lizard  
(*Lepidophyma sylvaticum*)**

Joya del Cedro  
Photo by Scott Gillingwater



**Spotted Whiptail  
(*Cnemidophorus gularis  
colossus*)**

Rancho El Sauz, Malilla  
Photo by Michael Patrikeev





**Ring-necked Coffee Snake  
(*Ninia diademata*)**

La Joya de San Juan de los Duran  
Photo by Michael Patrikeev



**Salmon-bellied Racer  
(*Mastigodryas melanolomus*)**

Rio Ayutla Valley  
Photo by Scott Gillingwater

### **Appendix 3**

#### **Amphibians recorded in Reserva de la Biosfera Sierra Gorda in November 2000**

	Joya del Cedro	Joya del Hielo	La Joya de San Juan de los Duran		El Sauz	Rio Ayutla	Jalpan/ Presas Jalpan
	Selectively logged oak-pine-cypress forest	Cloud Forest	Forest edge-agricultural habitats	Secondary oak-pine forest	Cattle ponds	Gravel bar	City streets, reservoir
<i>Pseudoeurycea rubrimembris</i>		2					
<i>Pseudoeurycea bellii</i>	1	1	3	3			
<i>Pseudoeurycea sp. 1</i>	1						
<i>Pseudoeurycea sp. 2</i>		1					
<i>Pseudoeurycea sp. 3</i>				1			
<i>Chirotrotriton terrestris</i>	1						
<i>Eleutherodactylus verrucipes</i>			1				
<i>Hyla miotympanum</i>						<15	
<i>Rana berlandieri</i>				1(dead)	>5	3	
<i>Bufo valliceps</i>						3	>10

**Appendix 4**

**Reptiles recorded in Reserva de la Biosfera Sierra Gorda in November 2000**

	Joya del Cedro	Joya del Hielo	La Joya de San Juan de los Duran		Canada de las Avispas	El Sauz	Rio Ayutla	Jalpan/ Presa Jalpan
	Selectively logged oak-pine-cypress forest	Cloud Forest	Forest edge-agricultural habitats, logged sites	Secondary oak-pine forest	Temperate oak-pine-fir forest	Tropical dry thorn forest	Tropical dry thorn forest	City streets, reservoir
<i>Sceloporus grammicus</i>	3							
<i>Sceloporus minor</i>			> 10					
<i>Sceloporus variabilis</i>			1			common	common	
<i>Gerrhonotus liocephalus</i>						2		
<i>Abronia taeniata</i>				1				
<i>Eumeces lynxe belli</i>	1				2			
<i>Eumeces tetragrammus</i>			1					
<i>Lepidophyma sylvaticum</i>	1							
<i>Cnemidophorus gularis colossus</i>						1	2	
<i>Ninia diademata</i>			2					
<i>Mastigodryas melanomus</i>							1	
<i>Trachemys</i> sp.								1
<i>Hemidactylus frenatus</i> *								>15

\* - exotic.