

FIELD NOTES ON SOME REPTILES FROM SOUTHWEST CHIAPAS, MEXICO

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INTRODUCTION

A brief account is given of the crocodiles, lizards and snakes observed during an expedition to the state of Chiapas, southern Mexico. The purpose of the visit was to collect plant specimens, and has been one of a series of trips to Central America by staff of the Department of Botany at the Natural History Museum, London, to survey and document the flora of the region. This particular trip was made at the time of the dry season, between January 18th and March 22nd, 1990. The Natural History expedition team also comprised a tropical botanist working on the Flora Mesoamericana Project, Rachel Hampshire, and from the University of Mexico (UNAM), Alberto Reyes Garcia. For part of the time we were also joined by two ornithologists, Adrian Long and Melanie Heath, based at the Institute of Natural History, Tuxtla Gutierrez.

Our work in the field took us to a wide range of vegetation types and it was possible to observe a number of reptile species in their natural habitat. A total of 17 different kinds were identified. Much of our time was spent in areas of montane, deciduous/semi-evergreen forest at relatively high altitudes (1300 - 2000 metres), and this is reflected in the inventory, though some species associated more with tropical lowland areas were recorded as well. Some animals found dead are also included. The following notes are offered as a contribution to their natural history and ecology, with particular emphasis placed on those found in the Sierra Madre region of southwest Chiapas. The species, subspecific name and author are given first, followed by the common names in English and local Latin America/Spanish (where known), general locality, habitat type and altitude reading.



Plate 1. Juvenile *Porthidium godamnii*

Crocodylians

Crocodylus acutus acutus Cuvier. *American crocodile, Cocodrilo de Rio*. Loc: El Sumidero; Habitat: wide slow-moving river; Alt: 500 m. One large adult (approx. 3.5m) was observed basking on a rock at the side of the river, and another (smaller) in the water amongst floating water hyacinth (*Eichhornia*). We approached them quietly by boat and it was possible to observe them at very close quarters. We were informed that there were approximately 50 crocodiles inhabiting that stretch of the river down to the coast, though this may have included numbers of the Caiman (*Caiman crocodilus chiapasius*), which also occurs there. The rare Morelet's crocodile (*Crocodylus moreletii*) is said to be found in more northerly parts of Chiapas (Alvarez del Toro, 1982).

Lizards

Anolis crassulus Cope. *Anolis Ornado*. Loc: Sierra Madre; Habitat: Cupressus woodland, deciduous and semi-evergreen montane forest, cloud forest; Alt: 1400 - 2000 m. A considerable number of *Anolis* were seen, most of which complied with the descriptions given for this species. They were mostly observed basking on sunny banks, amongst small shrubs and in low vegetation.



Plate 2. Pacific rock iguana (*Ctenosaura pectinata*)

Barisia moreletii rafaelli (Hartweg & Tihen). *Barisia*. Loc. Sierra Madre (El Triunfo); Habitat: cloud forest, Alt: 1900 m. A number of specimens were seen although they were largely secretive and easily disturbed. One was found under a sheet of old corrugated iron in the camp clearing, and several basking amongst leaves on the forest floor.

Basiliscus vittatus Wiegmann. *Brown basilisk, Turipache, Toloque, Pasarríos*. Loc. Montozintla; Habitat: Dry hillside above river; Alt: 1000m. A large male (approx 20cm s-v) was disturbed basking on a rocky ledge above a shallow, fast-flowing river. The surrounding vegetation consisted of dry forest trees, mostly *Bursera* sp. and various Leguminosae, with *Agave* and *Candelabra cactus*.

Cnemidophorus deppii Wiegmann. *Lagartija Verdiazul*. Loc: widespread in central Chiapas; Habitat: Dry rocky hillsides and scrub. A common, agile ground dwelling lizard often seen active in the hottest part of the day with temperatures ranging into the high 30's celsius.

Ctenosaura pectinata (Wiegmann). *Pacific rock iguana, Iguana de Roca*. Loc. widespread inland and on the coast; Habitat: cliffs, rock faces, dry hillsides, escarpments and rocky outcrops,

often in close proximity to human habitation; Alt: common below 1000m. This was an abundant lizard and was seen in a variety of different habitats, both natural and artificial. A group of about half a dozen comprising a dominant male, an adult female and several juveniles were found to be in residence amongst a pile of building rubble in a turkey pen next to our accommodation, and it was possible to observe their daily movements and social behaviour literally through the window of our room. Another colony of about 10 individuals of varying ages was found living on a large rock outcrop in the middle of a popular sandy beach.

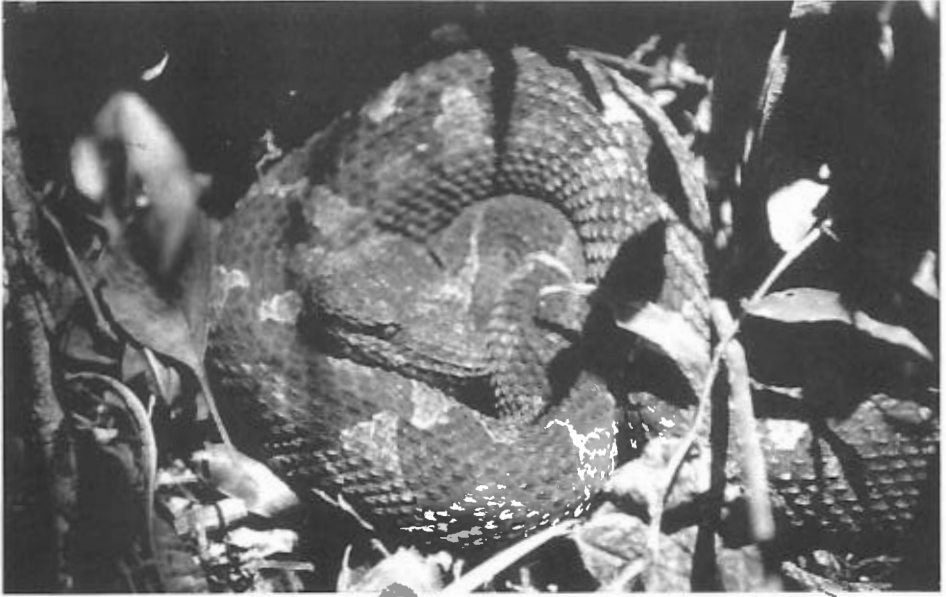


Plate 3. Jumping viper (*Porthidium nummifer occiduum*)

Iguana iguana rhinolopha Wiegmann. *Green iguana, Iguana de Ribera, Guele*. Habitat: Dry, rocky cactus scrub. A large (1m +) brightly coloured adult with orange foreparts (suspected male) ran across the road in front of our vehicle, and a juvenile was seen at the side of the road. They were presumed to be feeding on the flowers of various cacti in bloom.

Sceloporus sp. *Fence lizard, Spiny lizard, Escamoso*. A large number of Sceloporids were seen, and in drier areas especially they seemed to be the most abundant form of lizard. There is considerable variation amongst this group in Central America, and it was only possible to identify two forms with any certainty. In upland areas of the Sierra Madre (above approx. alt. 1500m) we found the species *Sceloporus melanorhinus stuarti* Smith, where it occurred in *Cupressus* woodland and clearings in cloud forest (1900m). It was mostly seen basking on rock faces or the trunks of trees. At lower altitudes in areas of rocky scrub the species *S. variabilis variabilis* Wiegmann was common.

Sphaerodactylus continentalis Werner. *Gequillo Cabeciamarillo*. Loc: suburbs of Tuxtla Gutierrez. A large number were seen on the exterior walls of hotels and houses. The Mediterranean species *Hemidactylus turcicus* is also a well established introduction in this area.

Snakes

Conophis vittatus Cope. *Listada*. Habitat: Dry rocky hillside. One adult approximately 0.5 m in length was found actively hunting among rocks and dry scrub in the early afternoon.

Masticophis mentovarius mentovarius (Dumeril, Bibron & Dumeril). *Coachwhip, Lagartijera*. Habitat: open agricultural land and dry lowland scrub. Two large (1.5 m) freshly killed specimens were found dead on a main road.

Oxybelis fulgidus (Daudin). *Green vine snake, Bejuquillo Verde*. Loc: Tuxtla Gutierrez. Habitat: One was seen heading away through a bamboo thicket.

Pituophis lineaticollis gibsoni Stuart. *Cinquate*. Loc: Sierra Madre (El Triunfo); Habitat: montane cloud forest; Alt: 1900 m. A sub-adult (approx. 0.5 m) was found during the late afternoon, coiled in a rodent nest under a sheet of old corrugated iron, at the edge of the camp clearing by the rubbish dump. The surrounding vegetation consisted mostly of tall grasses, small shrubs and sapling trees. The temperature at this altitude frequently dropped to 13 degrees celsius and frosts were not uncommon. Moreover the cloud at times remained low, shrouding the vegetation in cool mist for much of the day.

Spilotes pullatus mexicanus (Laurenti). *Chicken snake, Rat snake, Thunder and Lightning snake, Volandora*. Habitat: semi-deciduous dry forest; Alt: approx. 600 m. Two freshly killed adults (one estimated at measuring well in excess of 2 m) were found dead on the road at different locations, both with what appeared to be machete wounds to the neck. The snakes were in close proximity to settlement houses and outbuildings, around which numerous hens and turkeys and their broods wandered freely. No doubt this snake is a major predator of domestic fowl in these situations and persecuted indiscriminantly, which would account for the apparent cause of death.

Micrurus browni browni Schmidt and Smith. *Brown's coral snake, Coral de Canutos*. Loc: Sierra Madre (Pacific slope); Habitat: deciduous-montane rainforest, Alt: approx. 1350 m. A large adult (approx. 50cm) was found at the side of a mule trail in an area of loose rocks with grasses and sprawling aroids (*Philodendron sp.*), and was observed for several minutes as it foraged for food. The time of day was early afternoon and the weather conditions were overcast and humid.

Porthidium (Bothrops) godmani (Gunther). *Godman's Pit Viper, Nauyaca del Frio*. Loc: Sierra Madre; Habitat: semi-evergreen and deciduous montane rainforest, *Cupressus* woodland and cloud forest; Alt: 1400- 2000 m. A total of eleven were seen, all at relatively high altitudes. They ranged from small, presumably new-born/juvenile specimens, to adults of approximately 40cm, and occurred in a diversity of habitats, including cloud forest, cypress forest, stands of *Heliconia*, *Ficus* dominated woodland, and rocky banks with grasses and small shrubs. Most were found basking at the side of mule trails or in sunny clearings amongst leaves on the forest floor, and at times presented something of a hazard during our work. Their ground colouration varied considerably, from dark red brown to pale grey. Some of those seen were more boldly marked than others; on one occasion such a snake was found basking entwined with a paler, more drably coloured specimen, which we construed to be indicative of sexual dimorphism, but it was not possible to identify their individual sex. When provoked one juvenile struck fiercely and vibrated its tail, but generally these snakes were of a placid disposition.



Plate 4. American crocodile (*Crocodylus acutus acutus*)

Porthidium (Bothrops) nummifer occiduus (Hoge). *Jumping viper*, *Mano de Piedra*, *Nauyaca Saltadora*. Loc: Sierra Madre (Pacific slope); Habitat: deciduous montane rainforest; Alt: approx 1300 m. An adult specimen approx. 0.50 m in length, was found basking amongst dry leaves on a bank above the trail. The snake was not disturbed and despite our close proximity remained coiled in front of us for some considerable time, occasionally inflating its body and flattening its head. The occurrence of this snake in southwest Chiapas was first suspected by Hoge (1965); it is known mostly from the Pacific slopes (low - intermediate altitudes) of the Sierra Madre in western Guatemala, and also ranges into El Salvador. The subspecies *B. n. mexicanus* in Mexico is found at lower altitudes on the eastern (Caribbean) side of the mountains, and the nominate form occurs in Oaxaca north to San Luis Potosi.

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