

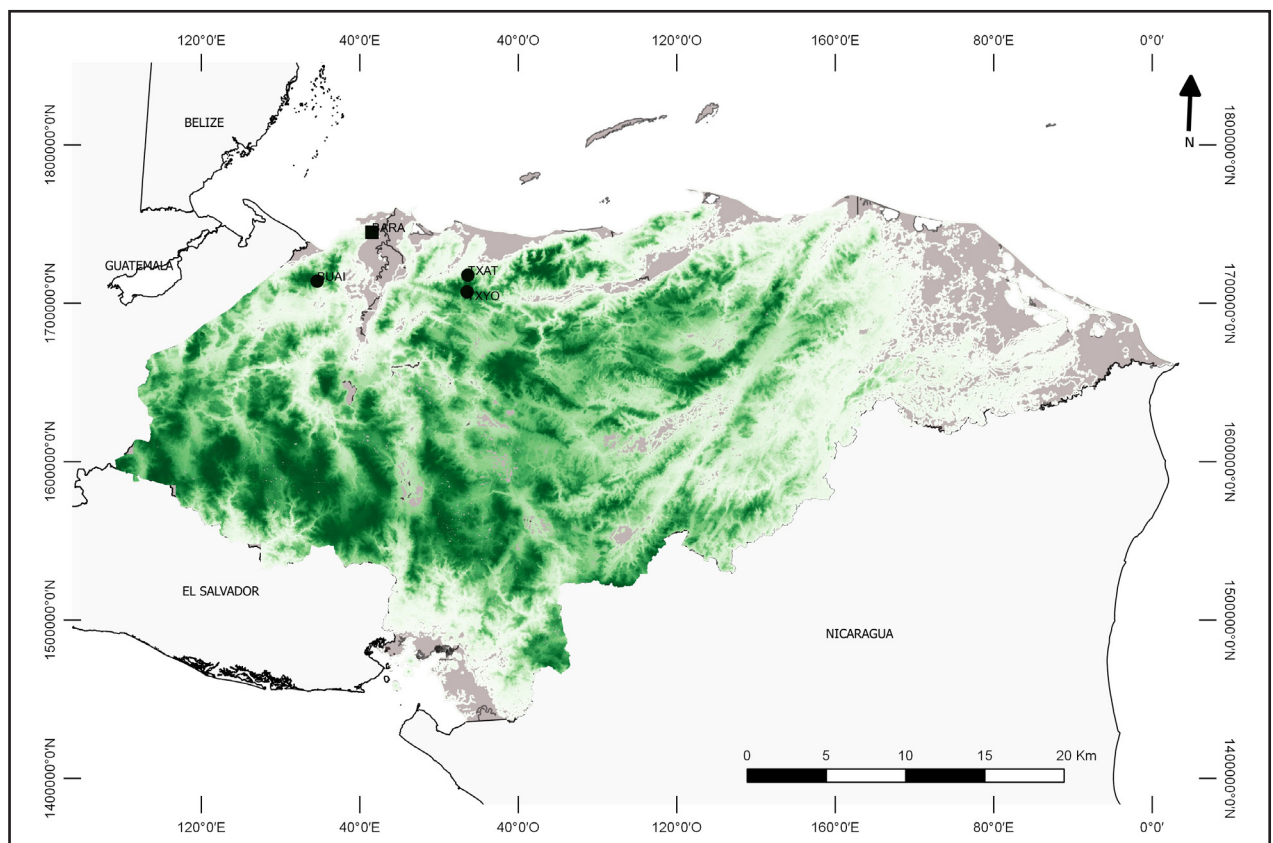
## Lowest altitudinal and fourth known record for *Ninia pavimentata* (Serpentes: Colubridae) in Honduras

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*Locality*— Honduras, Sierra de Omoa, Departamento de Cortés, Comunidad de Baracoa, (15°46'49.2"N; 87°51'44.2" W, WGS84, 310 m elevation), (Fig. 1). 13 July 2018 at 21:34 h. Collected by Cristopher Antúnez and Selvin Serrano. We found a subadult female of *N. pavimentata* (UVS-V 01181, Fig. 2) in a rocky layer of a dry streambed bordered by Tropical Moist Forest (Holdridge, 1967), at a temperature of 24° C. The specimen was found in habitat not known to be associated with this species, namely Evergreen Tropical Broad-leaved Lowland Forest. The habitat was well drained forming dense and closed forest, with a canopy between 30 m and 40 m tall, with

herbaceous vegetation such as ferns, bromeliads, and epiphytic orchids and lianas of the family Araceae, mostly Araceae and Piperaceae shrubs, and trees of the species *Vochysia hondurensis*, *Brosimum ali-castrum*, *Bursera simarouba*, *Calophyllum brasilian var. rekoii*, *Cedrela odorata*, *Coccoloba anisophylla*, *Cordia alliodora*, *Ficus colubrinae*, *Ficus insipidae*, and *Ficus tonduzii* (Mejia and House, 2002). From approximately 50 m outwards on either side of the dry streambed, the habitat was heavily deforested and replaced with small-scale subsistence agriculture, cattle ranching, and industrial developments. The specimen was deposited in the herpetological



**Figure 1.** Map of Honduras presenting the localities of *Ninia pavimentata* in the country. The black circles show the three oldest records, (higher elevation sites); BUIA=Buenos Aires, TXAT=Texiguat in Atlántida, TXYO=Texiguat in Yoro and the black square shows the new locality with lower elevation, BARA=Baracoa.



**Figure 2.** Subadult female *Ninia pavimentata* (UVS-V 01181), from the Baracoa, Sierra de Omoa, department's Cortés, Honduras.

collection of the Museo de Historia Natural of the Universidad Nacional Autónoma de Honduras in the Valle de Sula (UVS-V).

The following scale counts were recorded using the terminology of McCranie (2011): snout-cloacal length 122 mm; tail length 42 mm; ventrals 149; subcaudals 72; segmental count 221; supralabials 7/7, the third and fourth in contact with eye; loreal scale square; infralabials 7/7; temporals 1 + 2; and postoculars 2/2. The following coloration in life was noted: 55 dark bands on the right dorsal surface, 3 and 26 divided on the left side into two bands. The coloration in alcohol: dorsal part of the light gray body with dark gray transverse bands that disappear in the posterior portion of the tail, upper surface of the head peeled between brownish gray and dark gray, lower part of the supralabials creamy yellow, and the belly forms a grid with dark fillings in a scattered way. The characteristics are in accordance with those described in previous specimens (Smith and Campbell, 1996, Townsend *et al.*, 2005; 2008).

*Comments*— This record clarifies the altitudinal range of *N. pavimentata* and its preference for another type of low-altitude ecosystem, 770 m a.s.l. fewer than previously described, close to an area with high levels of human disturbance. The species is considered rare in the country, having been seen only in the Atlantic slope and the Omoa Mountain range. The present specimen was recorded in Baracoa in the Sierra de Omoa, approximately 46 kms northeast of the specimen from Buenos Aires, also in the Sierra de Omoa, approximately 66 kms and 71 kms

north west of the specimens from La Liberación in Atlántida and La Fortuna in Yoro (both in the RVS Texiguat), respectively. The new elevation recorded here increases the possibility that there may exist some connectivity between the populations of Sierra de Omoa and Nombre de Dios (RVS Texiguat) via the lowlands and isolated highlands that separate the two highland regions. Greater sampling efforts in protected areas such as the Jardín Botánico Lancetilla, the Refugio de Vida Silvestre Mico Quemado; the Parque Nacional Pico Bonito and other sites in Sierra de Omoa perhaps would serve to determine whether the Honduran population exists as two disjunct populations or not. The *Ninia pavimentata* apparently extends through Caribbean premontane wet and lowland moist forest, not unlike colubrids such as *Dendrophidion rufiterminorum*, *Leptophis ahaetulla*, and *Tantilla schistosa* and dipsadids such as *Hydromorphus concolor*, *Tropidodipsas sartorii*, and *Xenodon rabdocephalus* (McCranie, 2011; Townsend *et al.*, 2012).

The report of this species at an elevation of 310 m a.s.l. supports Smith and Campbell (1996) tentative identification of a specimen found in Guatemala near the border with Honduras, below 300 m, as *N. pavimentata*. The new distribution for *N. pavimentata* leaves *Ninia espinali* as the only species in the genus in Honduras that can be considered exclusive to middle and high lands, with a distribution from 1040 to 2242 m a.s.l.; *Ninia diademata* has a distribution from 0 to 1370 m a.s.l.; *N. maculata* from 540 to 1230 m a.s.l.; and finally, *Ninia sebae* with the widest altitudinal range in Honduras from 0 to

1740 m a.s.l. (McCranie, 2011). Sympatry between *N. sebae* and *N. pavimentata* has been registered (as well as of *N. sebae* with the other species within this genus). However, it would not be unexpected to find that the two are sympatric also to *N. diademata*.

### Acknowledgments

The author would like to thank: Daniel Germer for his support in field work and logistics; Selvin Serrano for his support with field work; Josue Ramos, Mario Solís, Jonathan Miller, Larry Wilson, Luis Herrera, Josiah Townsend and Omar Jiménez for their comments on the manuscript; Claudia Lardizabal for her help in the writing of the manuscript; Manfredo Turcios of Instituto Nacional de Conservación y Desarrollo Forestal, Areas Protegidas y Vida Silvestre (ICF) and Alex Vallejo of UNAH-VS for their work and support in processing the research permit, Resolución DE-MP-067-2018 and Dictamen DVS-008-2018.

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Recibida: 22 Enero 2019

Revisada: 06 Mayo 2019

Aceptada: 06 Mayo 2019

Editor Asociado: J. Goldberg

doi: 10.31017/CdH.2019.(2019-003)

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