

XANTUSIA JAYCOLEI (SQUAMATA: XANTUSIIDAE)

Leonardo Daniel Ponce-Rosales^{1*}, Víctor Hugo Colín-Martínez² & Oswaldo Hernández-Gallegos¹

¹Laboratorio de Herpetología, Facultad de Ciencias, Universidad Autónoma del Estado de México, Instituto Literario #100 Centro, 50000 Toluca, Estado de México, México.

²Museo de Zoología "Alfonso L. Herrera", Facultad de Ciencias, Universidad Nacional Autónoma de México, Av. Ciudad Universitaria 3000, C. P. 04510 Coyoacán, CDMX, México.

*Correspondence: lpnce.biocienciasb@gmail.com

Received: 2023-05-08. Accepted: 2023-07-27. Published: 2023-08-10.

Editor: Itzcoatl Maldonado Reséndiz, México.

Xantusia jaycolei Bezy, Bezy & Bolles, 2008 is a rare small-sized lizard, with nocturnal habits endemic to the state of Sonora, Mexico known only from the coast of Sonora in the vicinity of Outlet the Río San Ignacio, 7.5 km south and 6.4 km east of the main town of the Comca'ac (Seri) (Bezy et al., 2008). This species is currently not listed under any category by The IUCN Red List of Threatened Species (IUCN, 2022) and NOM-059-SEMARNAT-2010 (DOF, 2019), but is considered as highly vulnerable according to the Environmental Vulnerability Score

(EVS of 16) by Wilson et al. (2013). Because the EVS is composed of three scales (geographic distribution, ecological distribution and human persecution), when added together, the EVS is obtained. In this case, with the *X. jaycolei* we obtain an example of a highly vulnerable species due to its geographic and ecological distribution.

According to Bezy et al. (2008) *Xantusia jaycolei* differs from all other species of the genus except *X. henshawi*, *X. gracilis*, *X. arizonae*, and *X. bezyi* in that the females lack well-developed



Figura 1. Especimen de *Xantusia jaycolei* en la localidad Puerto Peñasco, Sonora, México. Foto: Leonardo D. Ponce-Rosales.

Figure 1. Specimen of *Xantusia jaycolei* from the locality of Puerto Peñasco, Sonora, Mexico. Photo: Leonardo D. Ponce-Rosales.



Figura 2. Madriguera de *Neotoma* sp. de aproximadamente 1 metro de alto construida debajo de un árbol de Mezquite (*Prosopis glandulosa*). Foto: Leonardo D. Ponce-Rosales.
Figure 2. Burrow of *Neotoma* sp. about 1 meter high built under a Mezquite tree (*Prosopis glandulosa*). Photo: Leonardo D. Ponce-Rosales.

femoral pores (pores absent or marked by shallow depressions versus a conspicuous glandular pore; It differs from *X. riversiana*, *X. henshawi*, *X. gracilis*, and *X. bolsonae* in having fewer longitudinal rows of ventral scales at midbody (12 vs. 14–16); from *X. arizonae*, *X. bezyi*, and *X. sierrae* in having fewer dorsal scales around midbody (36–39 vs. 40–49); from *X. sanchezi* in having more scales around the second caudal whorl (32 – 36 vs. 25 – 28); and from *X. gilberti* in having small scales bordering the labium behind the fifth infralabial.

Mexico, Sonora: Municipality of Puerto Peñasco: 31.31 km West (W) from Puerto Peñasco (31.322608° N, 113.203114° W; WGS 84, 38 m a.s.l.). On December 19, 2022, at 10:25 a.m. Vicente De Luna-Morelos collected an adult male (snout-vent length = 350 mm, Fig. 1) *X. jaycolei* inside a rodent burrow belonging to the genus *Neotoma* sp. (Cricetidae), which was built by organic matter, under a Mesquite tree (*Prosopis glandulosa*, Fig. 2) in microphyllous desert scrub ecosystem. The organism

was captured to take measurements and the photograph of the specimen (MZFC-IMG79) was deposited in the National Collection of Amphibians and Reptiles (NCAR) of the Institute of Biology, UNAM. Robert L. Bezy corroborated taxonomic identity.

To our knowledge, this record is the first for the municipality of Puerto Peñasco, Sonora and is located 216.04 km in a straight line to the North-Northwest (NNW) of the type locality: vicinity of Outlet the Río San Ignacio Sonora, México (29.504537° N, 112.393438° W, approximately elevation of 38 m a.s.l.; Bezy et al., 2008, 2017; Fig. 3). The report of *X. jaycolei* for Puerto Peñasco, Sonora could indicate that its distribution is greater than reported, reaching a large part of the Sonora coast. The scarcity of information about the Cole's Night Lizard could be due to its nocturnal habits and its small size, which complicates its visualization. Our observation also provides information for the refuge sites occupied by *X. jaycolei*, since it had been reported

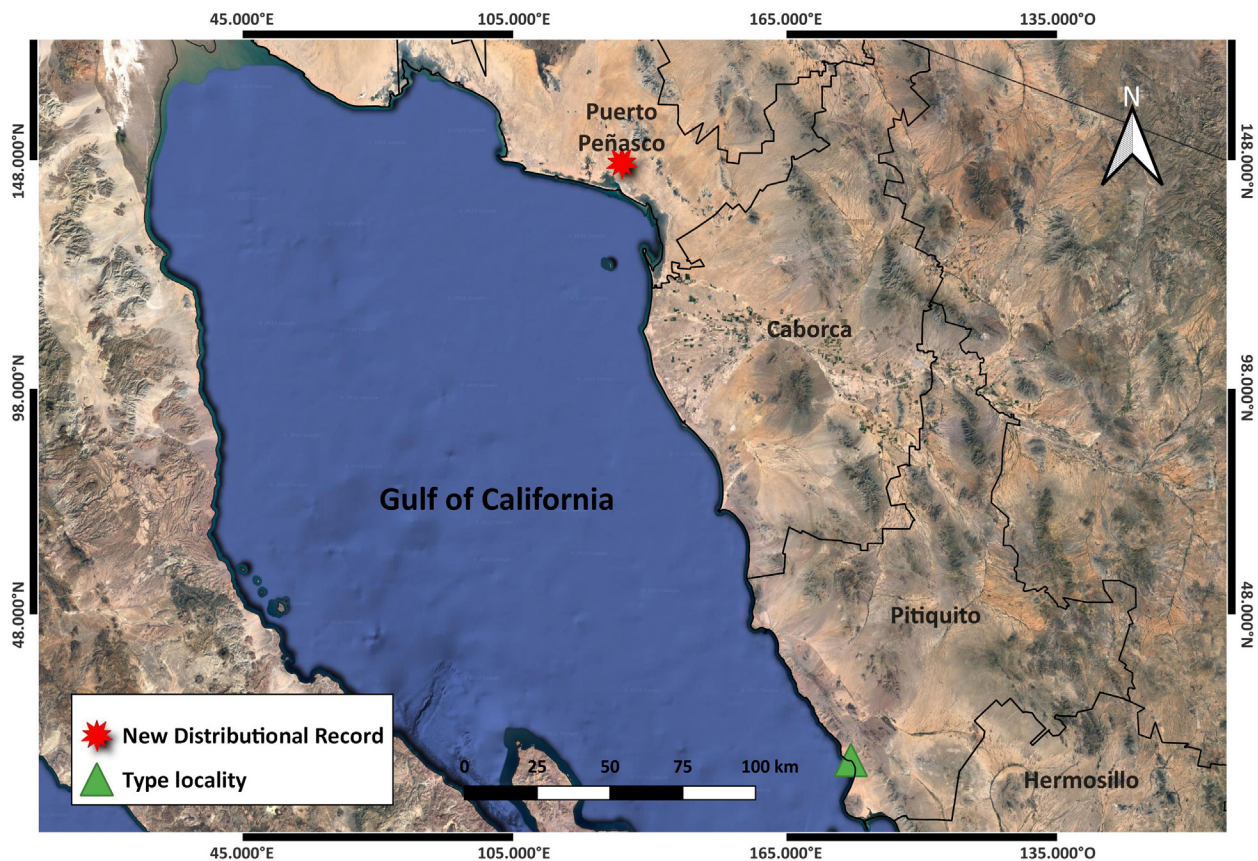


Figura 3. Mapa de distribución de *Xantusia jaycolei*. / Figure 3. Distribution map of *Xantusia jaycolei*.

that these lizards occur in dry rather than moist decaying cacti (*Pachycereus pringlei*), frequently between the bark and the central vascular cylinder (Felger, 1965; Bezy et al., 2008). Due to the low abundance of cacti in the area, *Neotoma sp.* burrows turn out to be one of the few refuge sites available.

Acknowledgments.– To Robert Bezy for his support in corroborating the identification of the organism.

CITED LITERATURE

Bezy, R.L. K.B. Bezy & K. Bolles. 2008. Two new species of Night Lizards (*Xantusia*) from Mexico. *Journal of Herpetology* 42:680-688.

DOF (Diario Oficial de la Federación). 2019. Modificación del Anexo Normativo III, Lista de especies en riesgo de la Norma Oficial Mexicana NOM-059-SEMARNAT-2010, Protección ambiental-

especies nativas de México de flora y fauna silvestres-Categorías de riesgo y especificaciones para su inclusión, exclusión o cambio-Lista de especies en riesgo, publicada el jueves 30 de diciembre de 2010, Ciudad de México, México.

Felger, R.S. 1965. *Xantusia vigilis* and its habitat in Sonora, Mexico. *Herpetologica* 21:146-147.

IUCN, 2022. The IUCN Red List of Threatened Species. Version 2022-2. <https://www.iucnredlist.org> [accessed on 25 November 2022].

Wilson, L.D., V. Mata-Silva & J.D. Johnson. 2013. A conservation reassessment of the reptiles of Mexico based on the EVS measure. *Special Mexico Issue. Amphibian & Reptile Conservation* 7:1-47.

