

FIRST RECORD OF NECROPHILIA IN THE BAJA CALIFORNIA SPINY LIZARD, *SCELOPORUS ZOSTEROMUS* (PHRYNOSOMATIDAE)

PRIMER REGISTRO DE NECROFILIA EN LA LAGARTIJA ESPINOSA DE BAJA CALIFORNIA, *SCELOPORUS ZOSTEROMUS* (PHRYNOSOMATIDAE)

JORGE H. VALDEZ-VILLAVICENCIO* AND ANNY PERALTA-GARCÍA

Conservación de Fauna del Noroeste, A.C., Calle Granada 2100, Colonia Granados, 22785, Ensenada, Baja California, México.

*Correspondence: j_h_valdez@yahoo.com.mx

Resumen.— La necrofilia es un comportamiento reproductivo en el que un animal vivo intenta copular con un animal muerto. Este comportamiento se ha reportado en varias especies de lagartijas. Aquí presentamos el primer caso de necrofilia en *Sceloporus zosteromus*, observado en un macho adulto con una hembra de su misma especie en el noroeste de Baja California, México.

Palabras clave.— Comportamiento reproductivo, especie endémica, lagartija.

Abstract.— Necrophilia is a reproductive behavior in which a live animal attempts to mate with a dead conspecific. This behavior has been reported in several lizard species. Here, we report the first case of necrophilia in *Sceloporus zosteromus*, observed in an adult male with a dead conspecific female in northwestern Baja California, Mexico.

Keywords.— Reproductive behavior, endemic species, lizard.

Necrophilia, necrogamy, or Davian behavior, is the attempted copulation with dead conspecifics (Groffen et al., 2019). This behavior has been reported in some lizard species, but within the family Phrynosomatidae, has been documented only in *Holbrookia maculata* (Brinker & Bucklin, 2006), *Phrynosoma cornutum* (Lane & Van Buren, 2013), *P. mcallii* (Park et al., 2016), *Sceloporus occidentalis* (Shedd & Eisenberg, 2012), and *Urosaurus ornatus* (Garza et al., 2017). Here, we report the first observation of necrophiliac behavior of an adult male *Sceloporus zosteromus* (Cope, 1863) with a dead conspecific female in northwestern Baja California, Mexico.

The Baja California Spiny Lizard (*S. zosteromus*) is a moderate sized lizard, with adults reaching 131 mm SVL (Grismer, 2002). Is endemic to Baja California Peninsula, and ranges from Ensenada in the state of Baja California, southward to Cabo San Lucas, in Baja California Sur, Mexico. It also occurs in several islands in the Pacific Ocean and the Gulf of California. This lizard is a habitat generalist ranging through coastal sand dunes in the northern distribution to tropical dry forest in the Cape Region, and have a spring breeding and a summer egg-laying season (Grismer, 2002).

On 9 April 2019, driving through the road to Sierra San Pedro Mártir, Municipality of Ensenada, Baja California, Mexico,

we encountered a pair of *S. zosteromus* at 16:45 h on the road (30.96617°N, 116.06328°W, WGS84, 109 masl). After we stop, we noticed that an adult male was indented to mate with a dead conspecific female, even though we could not see a full copulation, the male had a bite-hold on the female in the nuchal region (Fig. 1), a common behavior employed during copulation in most lizards. The female was recently killed by being run over



Figura 1. Macho adulto de *Sceloporus zosteromus* intentando copular con una hembra de la misma especie en Baja California, México. Foto: Jorge H. Valdez-Villavicencio.

Figure 1. An adult male *Sceloporus zosteromus* attempting to copulate with dead conspecific female in Baja California, Mexico. Photo: Jorge H. Valdez-Villavicencio.

and still warm without *rigor mortis* when we collected it, and we presume the lizards were trying to mate when a car passes over and kill the female, and probably the pheromones still detectable to the male and he continued trying to mate when we found them, due the date coincides with the spring reproductive season. The dead female was then moved and collected to prevent the living male from being potentially attracted to the road and be killed too. To our knowledge, this is the first report of necrophilia in *S. zosteromus*. The dead female specimen was collected under the permit SEMARNAT SGPA/DGVS/013217/18 issued to the first author, and deposited in the Herpetological collection of Facultad de Ciencias, Universidad Autónoma de Baja California in Ensenada (CH-UABC 2427).

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