

Bifurcation in the tail of the Black-tailed Brush Lizard (*Urosaurus nigricaudus*) in northern Baja California, Mexico

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The Black-tailed Brush Lizard (*Urosaurus nigricaudus*) is a common lizard within its range, which extends from extreme southern California to the southern tip of Baja California Sur (Stebbins 2003). The species frequently basks during daylight hours and is often detected in prominent locations on brush, which allows easy observation.

On 24 July 2018 we observed an adult *U. nigricaudus* basking on the lower end of a barkless tree in the lower elevations (650 m) of the San Pedro Mártir range in northern Baja California, Mexico. We were able to approach the lizard closely and noted that the distal end of the tail was bifurcated (Fig. 1). The main branch of the tip looked relatively normal but developed an offshoot branch of similar length that was dorso-laterally compressed. The tail portion, anterior to the bifurcation, appeared to have been regenerated, which is consistent with reported bifurcations in the tails of other lizard species (Ananjeva and Danov 1991, Silva et al. 2013, Koleska et al. 2017). This condition, also reported as “supernumerary tail malformation,” is frequently attributed to tail autonomy, i.e., injury and regeneration (Silva et al. 2010, Martins et al. 2013, Koleska et al. 2017). The phenomenon appears to be relatively common across Sauria spp. but the condition has never before been reported in *U. nigricaudus*.

Urosaurus nigricaudus's long tail helps it blend into the brush on which it commonly basks and is also deployed as a mechanism to help the lizard escape predators (a longer tail is likely to be grasped by a predator; Stebbins 2003. *op cit.*). Our observation suggests that this *U. nigricaudus* first survived the initial loss of the tail. Presumably, thereafter, the tail began to regenerate, and the bifurcation began, similar to that reported by Martins et al. (2013). Based on figures included in Gogliath et al. (2012) and Koleska et al. (2017), and others, a similar situation appears to have occurred on

their study specimens. A tail bifurcation appears not to limit movement or survival in many lizards, which appear to be able to sustain themselves ecologically, prior to observation and report of this anomaly.

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Fig. 1. A black-tailed Brush Lizard (*U. nigricaudus*) with bifurcated tail, basking on the base of a barkless tree, Meling Ranch, Baja California Sur, 2018. Photo by J. Álvarez.