

## *Teira dugesii* (Sauria: Lacertidae) – high aggregation

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The Madeiran wall lizard *Teira dugesii* (Milne-Edwards, 1829) is endemic to the Madeiran archipelago (Kwet, 2009), where it occurs in a wide range of habitats from sea level up to mountain tops (Sadek, 1981). However, several populations (probably introduced by human activity) have been also reported from the city of Lisbon, Portugal (Sá-Sousa, 1995), Selvagens islands (Bischoff et al., 1989) and several islands of the Azore archipelago (Malkmus, 1984). *T. dugesii* is omnivorous with a diet consisting mainly of insects, plant leaves, flowers, pollens, fruits and seeds. Plant residues (nectar, blooms, leaves) may even represent up to 60 % of the diet (Sadek, 1981). This species is also considered to be the first lizard reported to consume plant nectar (Elvers, 1977) and occasional predation on seabird's nestlings (*Calonectris diomedea*) has been reported (Matias et al., 2009). This paper reports on a high aggregation of individuals on a single site.

The observation was made on April 8th 2016 around 14:00h of local time on a rocky plate by a route leading from Pico Arieiro on Pico Ruivo, Madeira, Portugal (32°44'17"N, 16°55'57"W; 1600 m a. s. l.). One of us

(VV) noticed a very high aggregation of *T. dugesii* (>30, males and females) on a single spot (Fig. 1). Many more individuals (>100) were observed on cracked sun-exposed rocks in the surroundings. A steep rocky slope represented the general site with numerous loopholes providing potential shelters. Weather conditions at the time were rather cloudy with occasional sunshine and temperature between 15 - 18 °C. The aggregation possibly involved thermoregulation as the location was in a sunny locality and that also provided many potential retreat sites.

Aggregation behaviour is known in many lizard species; e.g. large numbers of marine iguanas *Amblyrhynchus cristatus* on small areas of Galapagos reefs (Eibl-Eibesfeldt, 1984). Explanation for such gatherings is complicated. Previous studies have reported benefits of reptile aggregations – for example increased chance for survival during wintering in *Xantusia* (Rabosky et al., 2012). Hofmann (2008) describes aggregations in the lacertid *Zootoca (Lacerta) vivipara* for thermoregulation and also predator avoidance. This behaviour is generally considered to present insight into lizard social interactions



Figure 1. High aggregation of *T. dugesii* individuals (Photo: VV)

(e.g. Duffield & Bull, 2002) but reports of specific observations are often missing. According to Gardner et al. (2015), such high aggregations have not been previously reported in *T. dugesii*. Therefore we believe that our report may provide value for future studies on social interactions within this species.

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