

Área de vida e ecologia termal de *Tropidurus torquatus* (Wied, 1820) (Squamata, Tropiduridae) em um afloramento quartizítico no sudeste do Brasil

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Abstract. Home range and thermal ecology of the saxicolous lizard *Tropidurus torquatus* (Wied, 1820) (Squamata, Tropiduridae) on a rocky outcrop in Minas Gerais, Brazil. This study focuses the use of space and thermal ecology of the saxicolous lizard *Tropidurus torquatus* on a rocky outcrop approximately 60 x 90m in the Toledos district, Juiz de Fora municipality, Minas Gerais State, Brazil (21°48'27.5"S; 43°35'31.7"W; 697m, datum: WGS84). During portions of the reproductive (November 2004 to February 2005) and non-reproductive (from March to June 2005) seasons were studied the home range size, microhabitats use and activity pattern of the lizards. Also during portions of the rainy (from January to April 2005) and dry (May, June, August and September 2005) seasons were investigated the influence of seasonal variation and the importance of microhabitat temperatures (substrate and air temperatures) for *T. torquatus* body temperature regulation. Using the minimum convex polygon estimator was found that the males' average home range size during both the reproductive ($50.8 \pm 20.7\text{m}^2$; $N = 14$) and non-reproductive ($72.6 \pm 32.9\text{m}^2$; $N = 13$) seasons was superior to that of females during the same seasons ($37.0 \pm 13.7\text{m}^2$; $N = 21$ / $58.9 \pm 21.8\text{m}^2$; $N = 23$). The average number of females whose home ranges overlapped that of males tended to be higher in the reproductive season (3.5 ± 1.8) than in the non-reproductive season (2.0 ± 1.0). Intrasexually, the number of females whose home ranges were associated to that of other females was higher in the reproductive season (5.4 ± 1.6) than in the non-reproductive season (2.5 ± 1.2); whereas for the males, this number remained low in both seasons (reproductive: 1.5 ± 0.7 ; non-reproductive: 2.0 ± 1.0). In general, the home range size of *T. torquatus* followed a pattern in which males use larger areas than females. There was an increase in the frequency of microhabitat use related to the vegetation in the non-reproductive season, and a change in the lizards' activity pattern from bimodal in the reproductive season (rainy period) to unimodal in the non-reproductive season (dry period). The mean body temperature of active *T. torquatus* was $31.2 \pm 3.1^\circ\text{C}$ (Range = 21.0–37.0°C; $N = 156$) and presented seasonal variation according to environmental temperatures. In the wet season the body temperature ($32.4 \pm 2.7^\circ\text{C}$; $N = 65$) was significantly higher than in the dry season ($30.4 \pm 3.0^\circ\text{C}$; $N = 91$). Microhabitat temperatures are variables that influenced lizards' body temperature. In the wet season the substrate temperature accounted for the variation in lizards' temperature, whereas in the dry season the air temperature better represented this variation. The results obtained in the studied area showed that the body temperature of active *T. torquatus* is similar to those recorded for other species of the genus in inland areas belonging to the Atlantic Forest domain.

Keywords: Spatial distribution, microhabitat use, activity pattern, body temperature, lizards.