

LOPES; Gabriel<sup>1</sup>, CASSANO; Camila<sup>2</sup>, GINÉ; Gastón<sup>3</sup>, MIRANDA; Flávia<sup>4</sup>, RUIZ-MIRANDA; Carlos Ramón<sup>5</sup>

RESUMO

Sloths from genus *Bradypus* are examples of mammals with low control of body temperature, responding to environmental variations in temperature with behavioral changes. The imperfect homeothermia is a result of adaptations to folivory and arboreal living, such as the low metabolism and low body mass. The maned sloth (*Bradypus torquatus*) is considered threatened and endemic to the Atlantic Forest (Brazil), where it has a disjunct distribution, with populations to the north (between Sergipe and Bahia) and south (between Espírito Santo and Rio de Janeiro) of the biome. Variations in environmental temperature may increase in the next few decades due to climate changes, with potential to affect the fitness of several species. Ecological and physiological studies that clarify the organisms' responses to these variations may provide insights about species vulnerability in face of climate changes, besides assisting animals in captivity. In this study we aim to evaluate the variability and changes in behavior of maned sloths, associated to variations in environmental temperature. The research is being carried out in partnership with the Instituto Tamanduá and Universidade Estadual do Norte Fluminense. It is based on remote monitoring and direct observations of 8 individuals of two populations: one in north Rio de Janeiro and one in north Bahia. The remote monitoring using radio-backpacks registers, in intervals of 10 min along 24 hour cycles, if the individual is active or inactive, allowing us to evaluate activity budget, rhythm and pattern. Simultaneously, dataloggers record the temperature and luminosity in the study sites. Additionally, by direct visualizations, we record the behavioral classes, posture and position in relation to the tree crown, sun exposure and current weather conditions. So far, we have recorded 365 h of direct observations in north Bahia, in which animals were resting in 73% of time, feeding in 17%, autogrooming in 4,3% and traveling in 3,2%. Data from the radio-backpacks (62532 records) reveal a cathemeral pattern, with predominance of activity during late morning and early afternoon, average peak of activity around 1 p.m. followed by a gradual reduction after sunset until sunrise. Interindividual differences in activity were observed, which could possibly be explained by sex, parental care, time since last evacuation and human presence at different intensities nearby. Further data collection and analysis are in progress.

**PALAVRAS-CHAVE:** Ciclo circadiano, Comportamento, Orçamento, Preguiça-de-coleira, Ritmo.

<sup>1</sup> Universidade Estadual de Santa Cruz, gabrielfrenner@gmail.com  
<sup>2</sup> Universidade Estadual de Santa Cruz, cassanocami@hotmail.com  
<sup>3</sup> Universidade Estadual de Santa Cruz, gastongine10@gmail.com  
<sup>4</sup> Instituto Tamanduá / Universidade Estadual de Santa Cruz, flavia@tamandua.org  
<sup>5</sup> Universidade Estadual do Norte Fluminense,