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Inhabitants of the heights: An anthropological perspective on the selection of sleeping sites of *Brachyteles arachnoides*

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Abstract

The following research was conducted in Carlos Botelho State Park, São Paulo State, Brazil, about the stop-over sites of the southern muriqui (*Brachyteles arachnoides*), an endemic primate of the Atlantic Forest. A multiple factor statistical analysis was carried out to determine the selection of the sleeping areas.

Findings indicate that the southern muriqui choose their sleeping sites based on comfort and hygiene factors, favoring body thermoregulation, deterring predators and parasites, and staying in food supply locations.

Brachyteles arachnoides is critically endangered, therefore this work aims to contribute to the ethological and social reconstruction of the southern muriqui, approaching the understanding of their behavior patterns and their possible implications in human species evolution. It also intends to consolidate an understanding from another non-human being, in order to generate a comprehensive view of the ecosystem in new and old human generations that promote biodiversity conservation, based on a harmonious existence among the human primate and the non-human animal.

Keywords: Brachyteles arachnoides, sleeping sites, Amerindian Perspectivism.

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Methods

Data collection:

Sleeping sites

description

Presence of

predators

Proximity to

food

Variables of

the sleeping

sites

Climate

conditions

Materials

- Parque Estadual Carlos Botelho, Sao Paulo, Brazil.
- Group of approximately 50 southern muriquis.



Results

• A topographical height range in which the sleeping sites are located is established, one which fluctuates between 721,707 m.s.n.m. and 743,79 m.s.n.m. Meanwhile, the presence of slopes is notable within all sites, with a preference for those oriented towards the southeast and, in addition, the proximity of the study sites to rivers is relevant at 90% of the studied sites. On the other hand, it is noted that out of all 10 sites, only one has lianas.

• In 70 % of the sites there is a distance of less than ten meters between trees and, of the remaining 30%, all have close connections to each other through proximity of their branches. It is also worth noting the presence of ferns at ground level, in 8 out of 10 sites.



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Discussion

• This selection shows us that the southern muriqui follows certain "patterns" that would imply the delivery of adaptive advantages, contributing to the opening of social development, the displacement of primates and increasing ecological efficiency in the face of present resources.

• This physical space highlights the ability of primates to socialize, since it provides well-being in the face of environmental pressures as well as responds to a certain collective memory in the selection and recurrent use of spaces both to spend the night and to develop their daily activities.

• This allows us to reflect on the way in which the muriqui creates its own identity in the logic of inclusion/exclusion of the other to generate community ties that will last over time. This exercise of creating otherness highlights how the concept of identity group or home is indivisible to the concept of territory, since both are jointly constructed in logics of inclusion, exclusion and memory to allow the harmonious development of the muriqui groups along the Atlantic Forest.

Conclusions

• There is a preference for sites that present similar characteristics, which correspond to: height of the first branch, height of the tree, density of the treetops, presence of river, distance between trees and tree species.

• A contribution to the conservation of muriqui can be made from the academic field, since it is through research that we can increase the knowledge we have of what is foreign to us, allowing us to expand horizons towards the creation of new urban realities free from a capitalist and extractivist perspective. This perspective, which we once lacked, allowed relationships between organisms from a harmonious space where both realities converge for a horizontal coexistence.

• That is why it is essential to capture this understanding from a nonhuman other in the educational field, in order to generate an integral vision of the ecosystem in new and old human generations that promote the conservation of biodiversity and a harmonious existence with the world around them.



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