

# **The Saki and its Neighbours: A View into the Behavioural Ecology of an Elusive Amazonian Primate**

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The tropics harbour an immense diversity of life, including many species that are yet to be found. Even species of large, well-known animals, such as primates, are still being discovered. For example, five new species of saki monkeys (genus *Pithecia*) were described in 2014. Saki monkeys are small-to-medium sized primates, characterised by their long, bushy fur, found throughout the Amazon rainforest. They constitute what is widely regarded as one of the most poorly studied primate genera in the world, due partly to a high variation in fur colour which complicates the identification of different saki species. Recent research at a reserve in the northeastern Peruvian Amazon, the Area de Conservación Regional Comunal Tamshiyacu Tahuayo (ACRCTT), has confirmed the presence of two saki species occurring within the same area. Previously, only one species, the burnished saki (*Pithecia inusta*), was thought to inhabit the reserve. The second species resembles the monk saki (*Pithecia monachus*), although the presence of some atypically coloured individuals suggests that these monkeys may constitute a previously undescribed morph of monk saki. As such, this study aimed to describe the behavioural patterns of the monk sakis present at the reserve. A primate inventory was conducted simultaneously to investigate how primates coexist at the ACRCTT. This data was collected through field surveys conducted in the reserve between February and April 2016. This time falls during the early wet season in the Amazon, when water levels are rising, and many forest areas are submerged.

Nine primate species were encountered throughout the survey period. Monk sakis were encountered 23 times, and constituted the third-most encountered species during the surveys. The monk sakis were often found in multi-adult groups, spent more time high in the forest than lower down, and fed primarily on fruits and/or seeds. These patterns have also been observed in other saki species. The young monk sakis spent more time moving than adults did, and more time high in the forest canopy, rather than lower down, than adults did. Male monk sakis were found to switch between behaviours significantly more frequently over a ten-minute period than females did, suggesting that males exhibit more high-energy behavioural patterns than females do. This pattern may have arisen as a way for males to invest into parental care, as they can perform duties such as foraging and defending their territory while females birth and feed their offspring. This is also supported by the fact that the males displayed vigilance towards the observers more frequently than females did.

The monk sakis were only encountered in flooded forests, and burnished sakis were not encountered at all – despite previous research showing that burnished and monk sakis can be found in the same areas in the ACRCTT in the dry season. As this study was conducted in the wet season, it is possible that the two species inhabit different forest types during the wet season. This might be a form of differentiation between the saki species, allowing them to coexist in the ACRCTT despite requiring similar resources. The primate inventory also showed evidence of differentiation between other primates by their use of different forest heights: specifically, that collared titi monkeys (*Callicebus cupreus*) were found lower in the forest more often than monk sakis, squirrel monkeys (*Saimiri boliviensis*) and brown capuchins (*Cebus apella*) were. This research provides important insights into how primate communities coexist in the Amazon, and into the behavioural ecology of saki monkeys.