

Partners in saving the mountain marmosets

Surveying the world's rarest marmoset



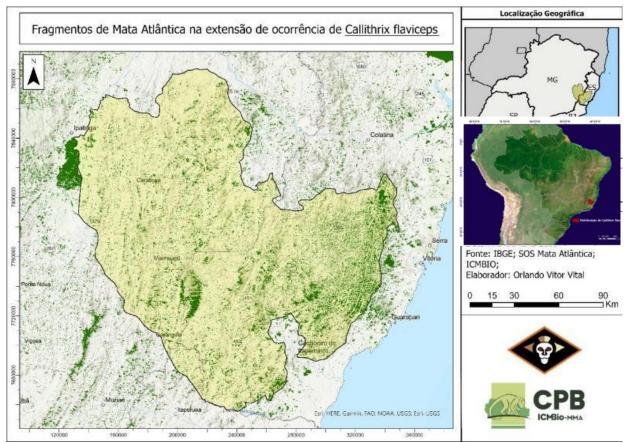
Rodrigo Salles de Carvalho

Programa de Educação Ambiental - PREA

Problem

The loss and fragmentation of natural habitats is one of the main causes of the extinction of species. In Brazil, one of the most diverse countries on the planet, the Atlantic Forest biome stands out as a global biodiversity hotspot, harboring unique species. The buffy-headed marmoset (*Callithrix flaviceps*), a small primate endemic to this biome, deserves special attention as it has the smallest range in the genus *Callithrix*. Its habitat has been highly degraded by human activity, but it also suffers from the presence of invasive species of marmosets, leading to interspecific competition and hybridization.

The buffy-headed marmoset is now classified as Critically Endangered (CR) by the IUCN Red List and in 2022, the species joined the list of the 25 most endangered primate species on the planet (Primates in Peril). There has been no comprehensive survey of this marmoset's distribution for many years, and so work to rapidly locate both pure groups of *C. flaviceps*, and invasive marmosets in its range, is urgently needed to establish key areas for protection.



Fragments of remaining Atlantic forest in the range of the buffy-headed marmoset.

The buffy-headed marmoset is one of two endangered species included in the Mountain Marmoset Conservation Program – MMCP, which integrates the work of researchers and institutions for the conservation of the species. The MMCP is part of the Brazilian National Action Plan for the Conservation of the Atlantic Forest Primates (PAN-PPMA/ICMBio).

Goal

To carry out a rapid survey to obtain a clear and up-to-date view of where the remaining groups of *C. flaviceps* are, and how invasive marmosets are distributed across their range.

Methods

Duration

This project will take approximately six months to complete. During that time, 50 days of surveys will be carried across five areas, along with 20 days of community surveys and meetings.

Geographic area

The target areas are the mountainous regions of the southwest of Espírito Santo state and a small part of eastern Minas Gerais, in scattered localities in the highly fragmented forests of the Rio Manhuaçu basin (see map).

We will survey a predefined sample of about 40 individual forest fragments across the range of *C*. *flaviceps*, mapping its presence and absence as well as that of invasive marmoset species.

Rapid survey methods

At each fragment, we will walk from dawn to dusk along transects and along the borders of the fragments. We will play recordings of the marmosets' vocalization every 500 m, waiting for any response, and note presence or absence of native and/or invasive marmosets. We expect to cover one trail per fragment, measuring around 12 km each, resulting in a total of approximately 1000 georeferenced survey points.

Community conservation approaches

We will talk to local people about the marmosets, finding out if they are provisioned and their memories of the historical occurrence of the species in the area. We will also establish a network of local monitors who can report back information about their local population of marmosets. This will be key to any future rescue and translocations that may need to be carried out. Making contact with local authorities to highlight the issues facing the species' survival in the area will also be important.

Outcomes

- Up to date map of locations of remaining populations of *C. flaviceps* and of the presence of invasive marmosets over its range.
- Community monitoring network established.
- New information to feed into the conservation action plan for this species.

Item	Resources needed	Total (US\$)	Total (£, exchange rate \$1 = £0.77)
Surveys			
Biologists' salaries x 2	Senior biologist, 50 days @ \$32 per day Junior biologist, 50 days @ \$16 per day	2,400.00	1,848.00
Rental car and fuel	50 days @ \$50 per day	2,500.00	1,925.00
Accommodation	2 x 50 days @ \$50 per person per day	5,000.00	3,850.00
Food and subsistence	2 x 50 days @ \$7.50 per person per day	750.00	577.50
Field equipment	Camera, sound recorder and microphone, playback speakers, two way radio	2,000.00	1,540.00
Sub-total			9740.50
Community networking			
Rental car and fuel	20 days @ \$50 per day	1,000.00	770.00
Accommodation for 4 people	4 x 20 days @ \$50 per person per day	4,000.00	3080.00
Food and subsistence	4 x 20 days @ \$7.50 per person per day	600	462.00
Sub-total			4312.00
Miscellaneous	Office supplies, bank fees	270.00	207.90
TOTAL REQUESTED			14,260.40

Budget