

Project Update: January 2023

From 8th August to 25th October 2022, 47 camera traps were deployed at *terra firme* (unflooded forests) in two different conservation units in central Amazon; Anavilhanas (25 camera traps) and Jaú National Park (22 camera traps), with a total covered area of approximately 1,870 km². Two different camera trap models had a total sampling effort of 3,666 trap days in one campaign.

We identified at least 26 terrestrial and scansorial species (two other arboreal species and other small rodents were considered as eventual), with different functional groups. Body weights ranged from 200 g to 250 kg. Various feeding guilds were found including omnivorous, herbivorous, insectivorous, and carnivorous mammals. Different locomotion types were terrestrial, scansorial, and arboreal mammals. In addition, four species from the Artiodactyla, seven species from the Carnivora, two species from Cingulata, three species from Didelphimorphia, one species from Perissodactyla, two species from Pilosa, and seven species from Rodentia were classified.



Gilson de Souza Ferreira Neto and other members of the project at a camera trap site at the Jaú National Park.

The following species were captured by camera trap photos: *Cuniculus paca* (lowland paca), *Dasyprocta fuliginosa* (black agouti), *Dasyprocta leporina* (red-rumped agouti), *Dasypus* spp. (long-nosed armadillo), *Didelphis marsupialis* (common opossum), *Eira barbara* (tayra), *Herpailurus yagouaroundi* (jaguarondi), *Leopardus pardalis* (ocelot), *Leopardus wiedii* (margay), *Makalata* sp. (spiny rat), *Mazama americana* (red brocket deer), *Mazama nemorivaga* (Amazonian brown brocket), *Metachirus nudicaudatus* (brown four-eyed opossum), *Myrmecophaga tridactyla* (giant anteater), *Nasua* (South American coati), *Panthera onca* (jaguar), *Pecari tajacu* (collared peccary), *Philander opossum* (gray four-eyed opossum), *Priodontes maximus* (giant armadillo), *Proechimys* sp. (spiny rat), *Puma concolor*

(puma), *Sciurillus pusillus* (Neotropical pygmy squirrel), *Sciurus spadiceus* (Amazon red squirrel), *Tamandua tetradactyla* (lesser anteater), *Tapirus terrestris* (South American tapir) and *Tayassu pecari* (white-lipped peccary).



Camera trap registers of A) *Leopardus pardalis*; B) *Mazama americana*; C) *Eira barbara*; D) *Myrmecophaga tridactyla*; E) *Herpailurus yagouaroundi*; F) *Panthera onca*.

21 of the 26 species were categorised as Least Concern according to IUCN, red brocket deer as Data Deficient; jaguar and margay as Near Threatened; while giant anteater, giant armadillo, South American Tapir and white-lipped peccary as Vulnerable.

The number of terrestrial species varied from 1 to 10 per camera trap site. Red-rumped agouti was the most common species present in 36 of the 47 camera traps, followed by spiny rats (27/47), armadillos (24/47), and the gray four-eyed opossum (24/47). On the other hand, the Neotropical pygmy squirrel and South American Tapir were registered only once.

At least 42 human settlements occur in our study area. It has been reported that the hunting of mammals is common in this area. With this, we will test the prediction that sampling sites closer to human settlements will have less mammalian occupancy and richness than sites further away. In addition to the distance of the sampling sites to human settlements as a measure of hunting, litter height and canopy coverage were also collected as a measure of local attributes.

We are currently working on data analysing and writing the manuscript, which we expect to submit this year.



