# Is urban avian biodiversity representative of the regional avifauna in Brasília, Brazil?

Paola F. de Oliveira, Roberto Cavalcanti et al

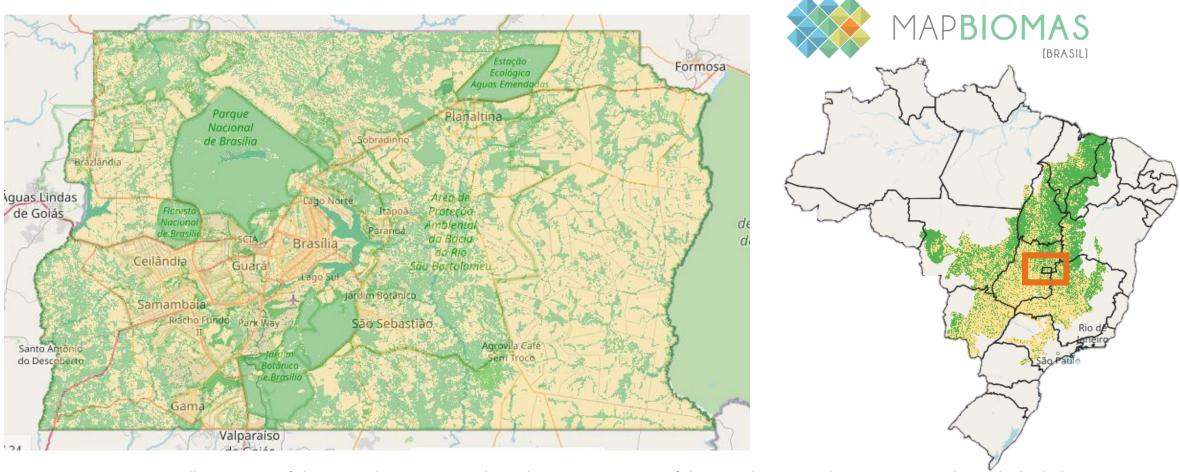




Biodiversity Conservation Planning Laboratory, Department of Zoology, University of Brasilia, 70910-900, Brasília, DF

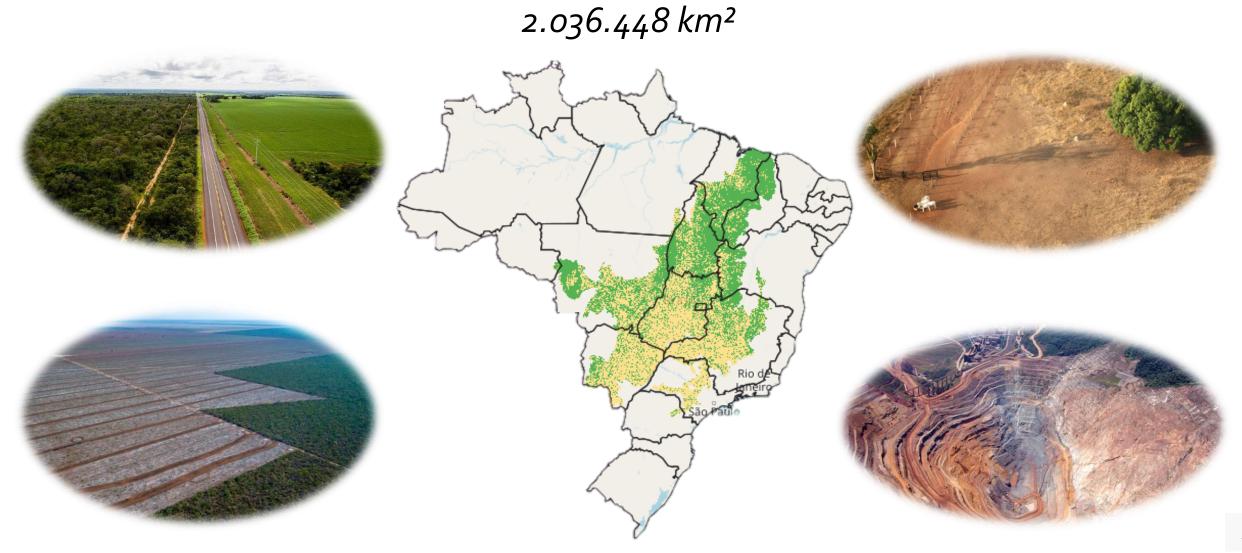


# The city of Brasília and surrounding Federal District

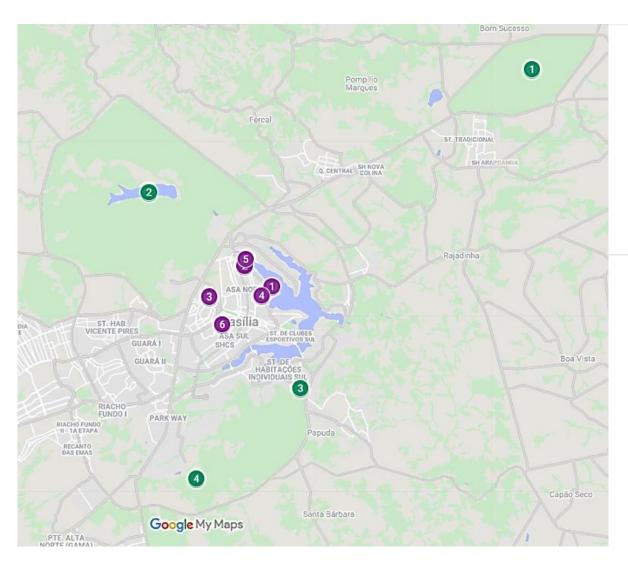


MapBiomas Project - Collection 5.0 of the Annual Coverage and Land Use Maps Series of the Brazil, accessed on 03/07/2021 through the link: https://plataforma.brasil.mapbiomas.org/

# Biome: Cerrado



# The city of Brasília and surrounding Federal District



- Protected Areas
  - P Sequência de números
  - 🕦 Estação Ecológica de Águas ...
  - Parque Nacional de Brasilia
  - Jardim Botânico de Brasília
  - 🗿 Fazenda Água Limpa UNB
- Urban Fragments
  - P Sequência de números
  - 1 Centro Olímpico (CO) UnB
  - Parque Olhos D'Água
  - 8 Praça dos Cristais
  - 4 CRAD Centro de Referência e...
  - Estação Biológica Da UNB.
  - 6 Parque da Cidade Sarah Kub...

### Mackinnon Lists + iNEXT

#### **Example:**

Date	Cnadia
	Specie
9-apr.	Pitangus sulphuratus
9-apr.	Furnarius rufus
9-apr.	Turdus amaurochalinus
9-apr.	Turdus rufiventris
9-apr.	Eupetomena macroura
	Camptostoma obsoletum
	Sicalis flaveola
-	Tyrannus melancholicus
	Vanellus chilensis
	Columba livia
	9-apr.

- We sampled 4 natural and 7 urban sites using 10species mackinnon lists, compiling 23 surveys in natural areas and 44 in urban areas between may 2016 and february 2021.
- We recorded 153 species, and the rarefactionbased estimate is 175 species for the natural areas and 150 for the urban area.
- The relative abundance of species can be calculated from the number of lists on which each species occurred.







# 153 species total and 5 endemics

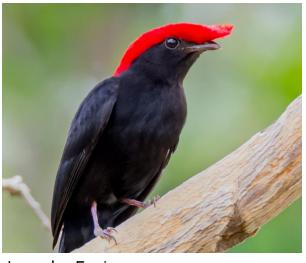


Rodrigo Conte Neothraupis fasciata



Vinícius Pontello

Cyanocorax cristatellus



Leandro Espino

Antilophia galeata



Silene Andrade

Alipiopsitta xanthops



Nick Athanas

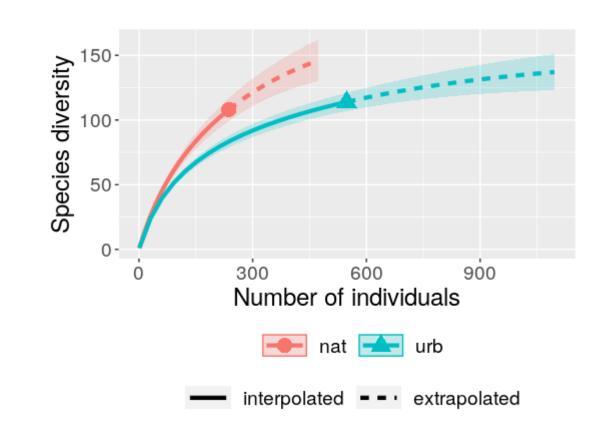
Cypsnagra hirundinacea

#### Results

#### **Analysis:**

- » Simpson Diversity:
  - Natural sites: 62,7
  - Urban sites: 48,9
- » Species richness is similar between urban and natural point sites.
- » Jaccard similarity index: 0,17
  - Only 9 species in both types of site





The sum of the bird species registered, list after list, is presented in the form of a collector curve or a species accumulation curve.

## Mackinnon Lists x Transect for CO site

#### Mackinnon

- Coragyps atratus
- Tyrannus savana
- Tyrannus melancholicus
- Mimus saturninus
- Patagioenas picazuro
- Furnarius rufus
- Caracara plancus
- Pitangus sulphuratus
- Vanellus chilensis
- Turdus rufiventris
- Brotogeris chiriri
- Sicalis flaveola

#### **Transect**

- Furnarius rufus
- Eupetomena macroura
- Elaenia flavogaster
- Patagioenas picazuro
- Sporophila nigricollis
- Turdus rufiventris
- Tyrannus melancholicus
- Pitangus sulphuratus
- Cypsnagra hirundinacea
- Mimus saturninus
- Volatinia jacarina
- Vanellus chilensis



# Obrigada! Thank you!



Paola Freitas



pp.freitasdeoliveira@gmail.com



#### **Authors**

- Arthur Antunes
- Isadora Oliveira
- José Marcos Abreu
- Beatriz Vasconcelos
- Débora Tonelli
- Isadora Turella
- Gabriela Mourão
- Ilza Fujiyama
- Fernanda Martins
- Rosa Cartagenes
- Victoria Rafaela Santos
- Thaís Damasceno
- Lívia Vieira
- Susan Suelly da Silva
- Roberto Cavalcanti

#### Acknowledgments

- » Dr. Ricardo Bomfim Machado
- » Brasilia National Park
- » UnB Environmental Secratariat







