



## Savanna Science Network Meeting 2025

Date: 02 March 2025 – 07 March 2025

Location: Nombolo Mdhluli Conference Centre,  
Skukuza, Kruger National Park



# Drivers of Vertebrate Diversity in the Cerrado and Directions for Conservation

Ana Paula Carmignotto ([apcarmig@ufscar.br](mailto:apcarmig@ufscar.br)), João Paulo S. Vieira-Aler  
Cristiano C. Nogueira



Funding: grants #2020/01378-0 and /12658-4 São Paulo Research Foundation (FAPEX)

# Objectives

Update knowledge on  
Cerrado species  
diversity

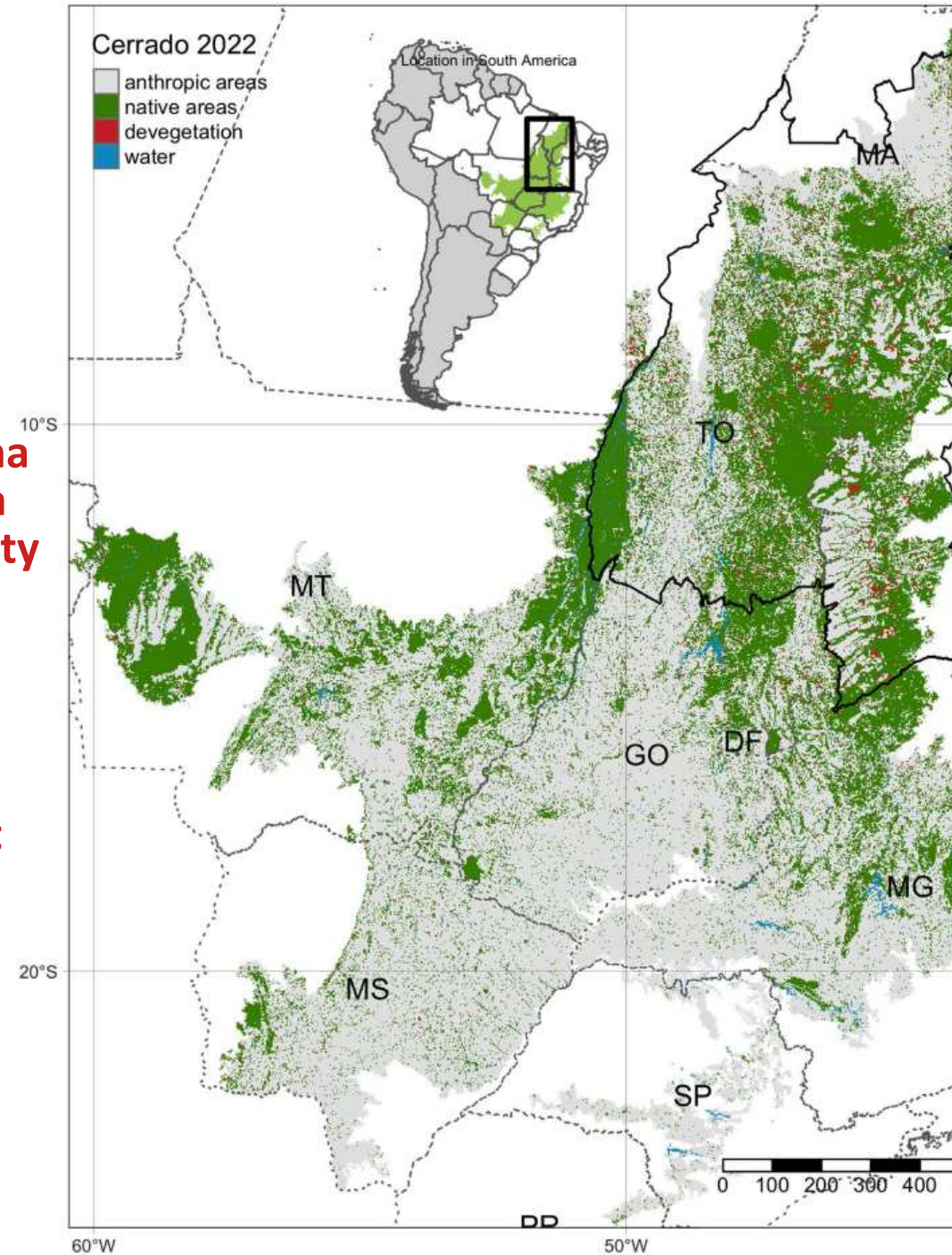
Detect patterns of  
species richness,  
abundance,  
composition

Comprehend the  
factors related with  
species occurrence

Aid in Cerrado  
Conservation

The only Savanna  
recognized as a  
World Biodiversity  
Hotspot

High levels of  
Diversity,  
Endemism and  
Human Impact

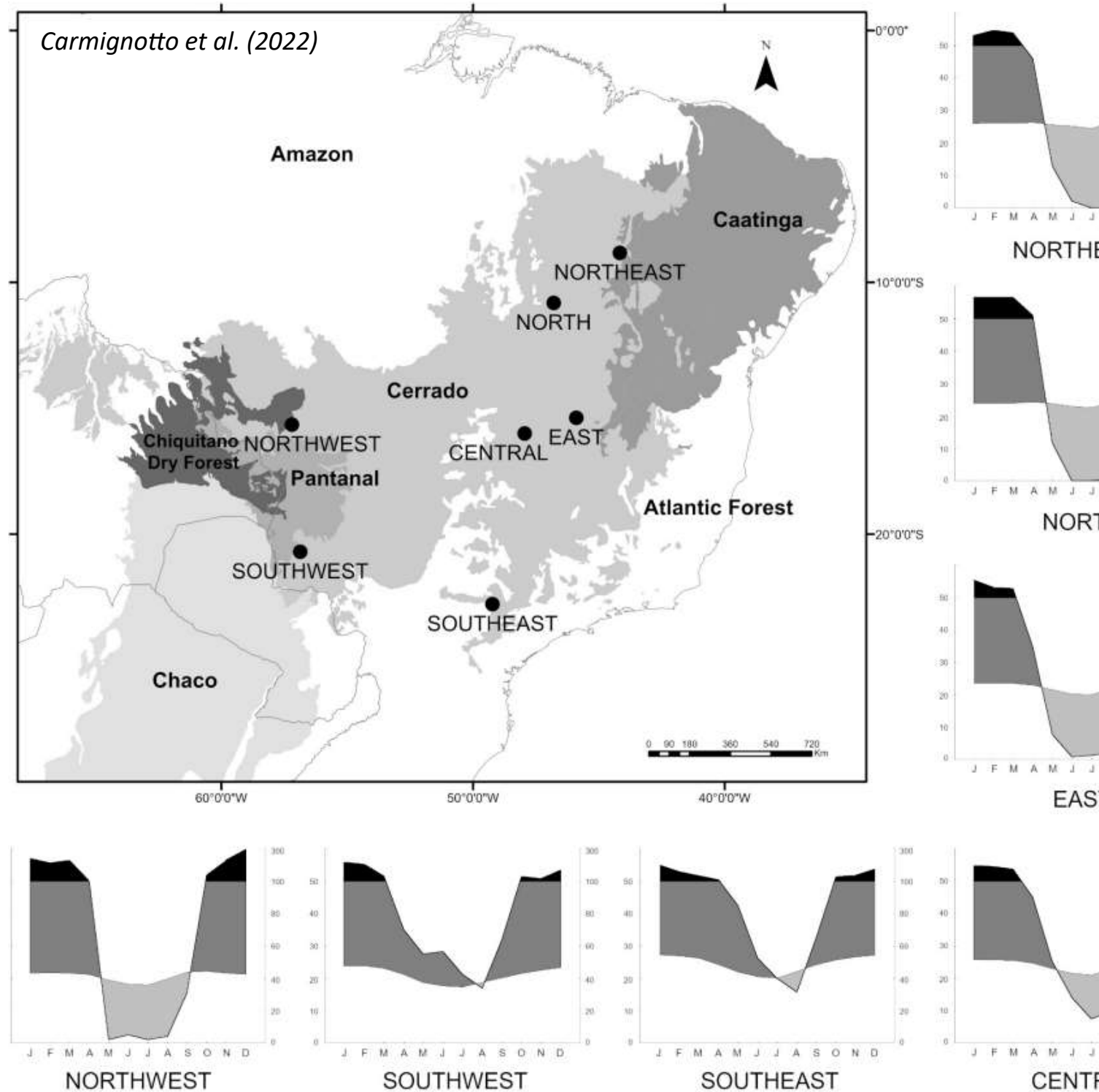


**High capture effort  
and use of  
complementary  
survey methodology**

**200 live traps  
200 pitfall traps  
10 trap nights  
5-7 habitat types  
7 localities**

**Capture Success:  
1,8% pitfall traps  
3,2% live traps**

**Richness: 13 - 21  
species**



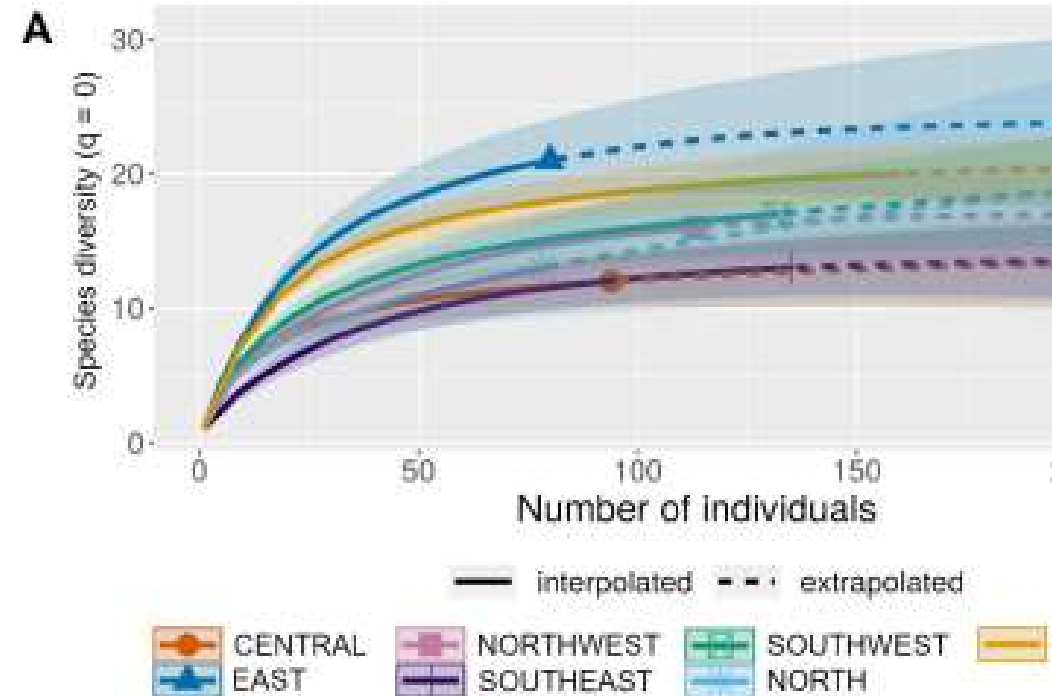
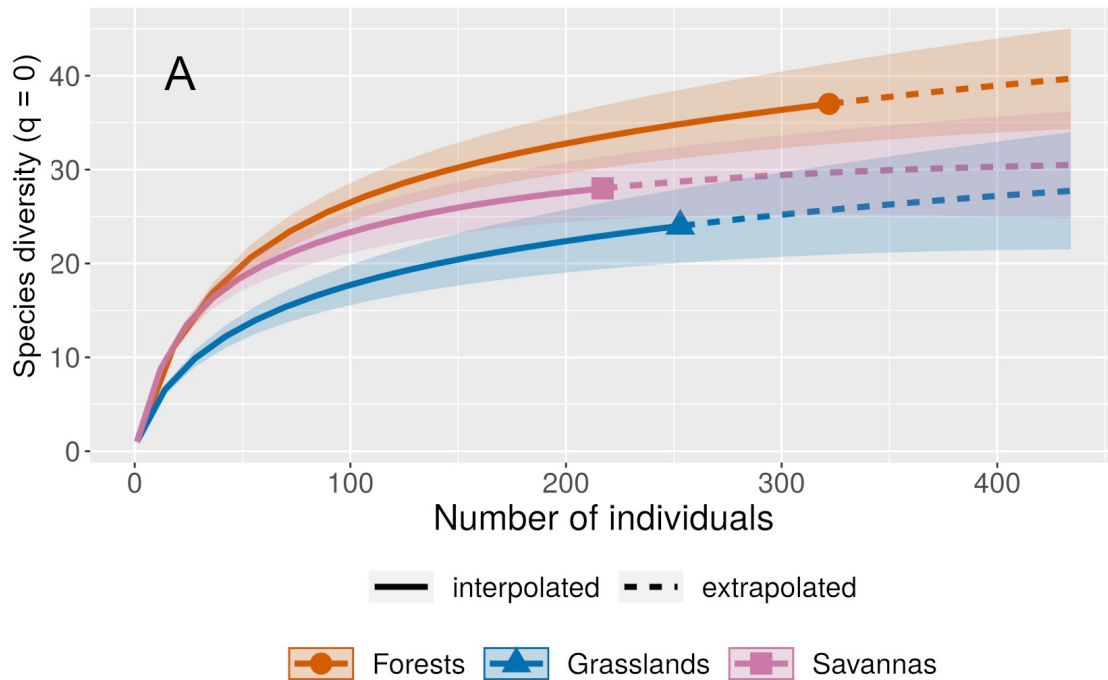
# Comparative survey across habitats: Grasslands, Savannas, and Forests



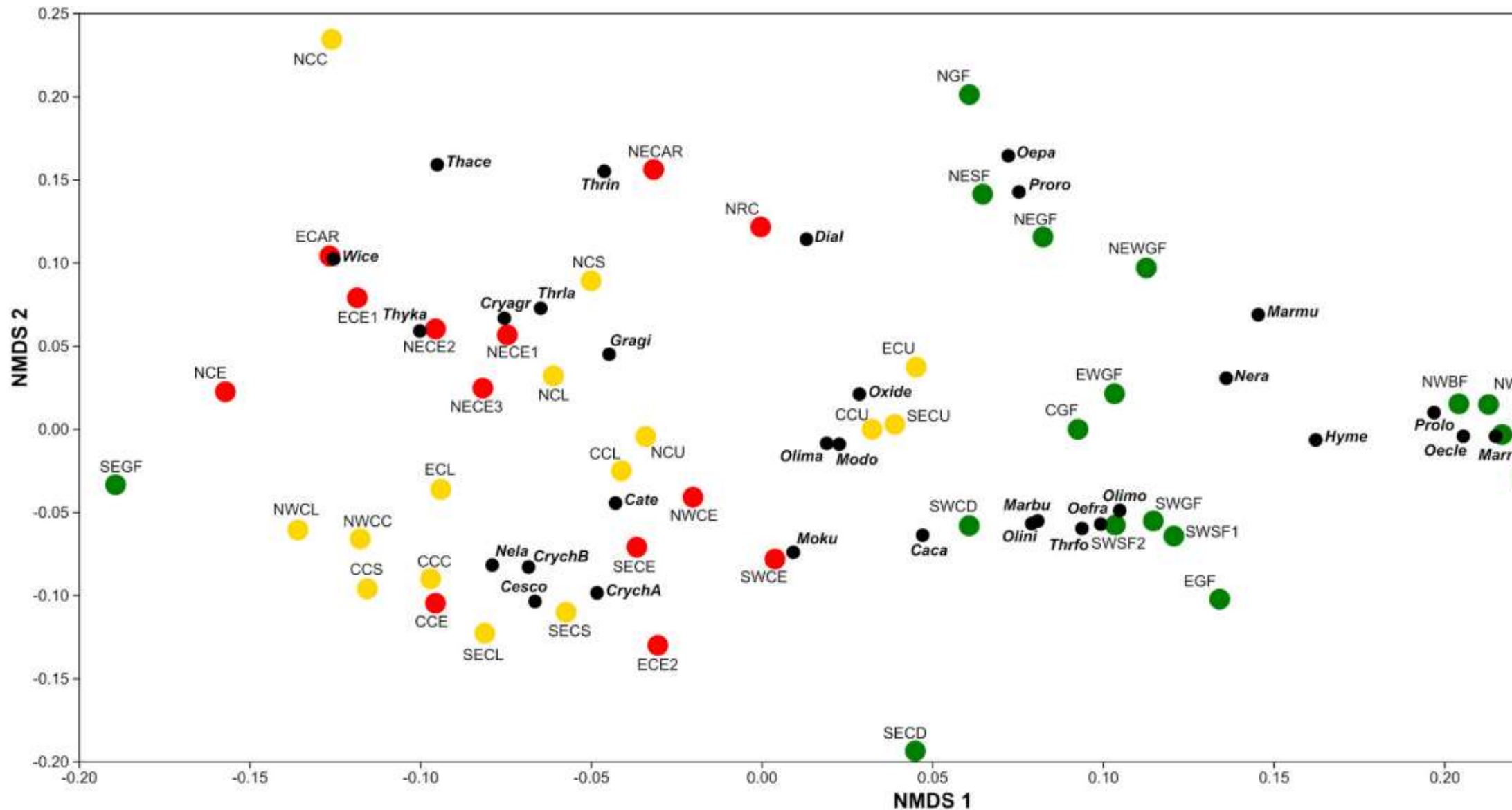
# Comparative survey across habitats and localities: Live and Pitfall



# Similar Species Richness across Habitats and Localities



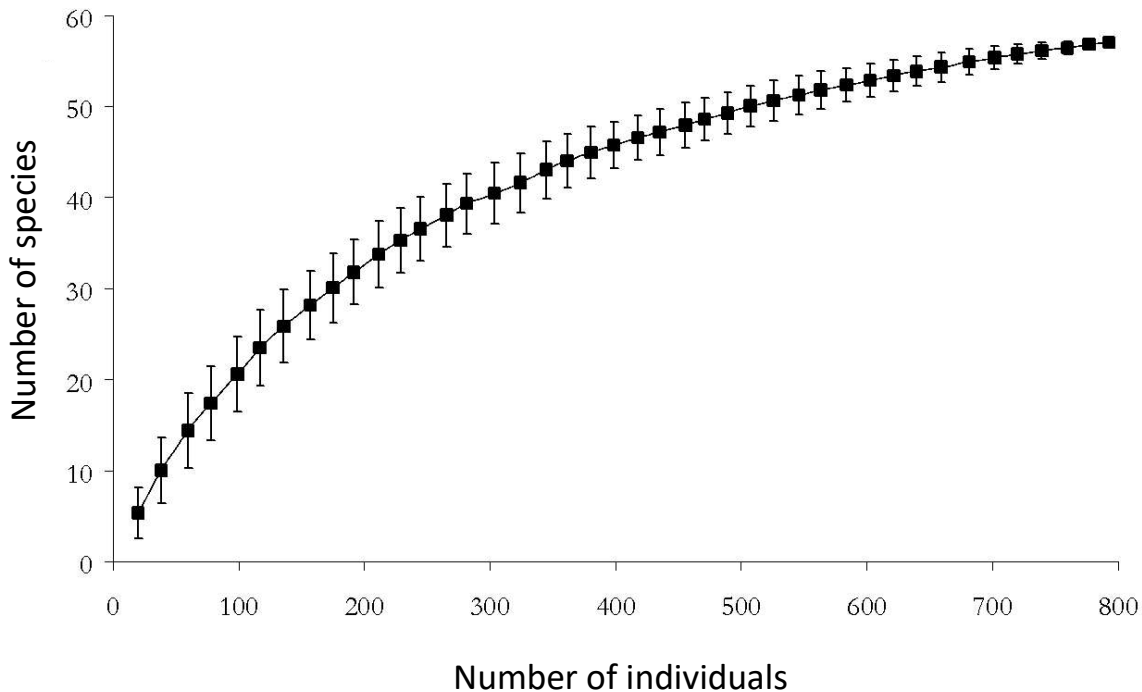
# High Species Turnover across Habitats and Localities



# Habitat Heterogeneity and Geographic Location as Major Drivers of Cerrado Small Mammal Diversity Across Multiple Spatial Scales

Ana Paula Carmignotto<sup>1\*</sup>, Renata Pardini<sup>2</sup> and Mario de Vivo<sup>3</sup>

~60% of Cerrado small mammals



# Restricted Range and Co-Occurring species: Elevation as a driver of species Endemism

Received: 11 February 2023 | Revised: 24 November 2023 | Accepted: 27 November 2023  
 DOI: 10.1111/jbi.14773

RESEARCH ARTICLE

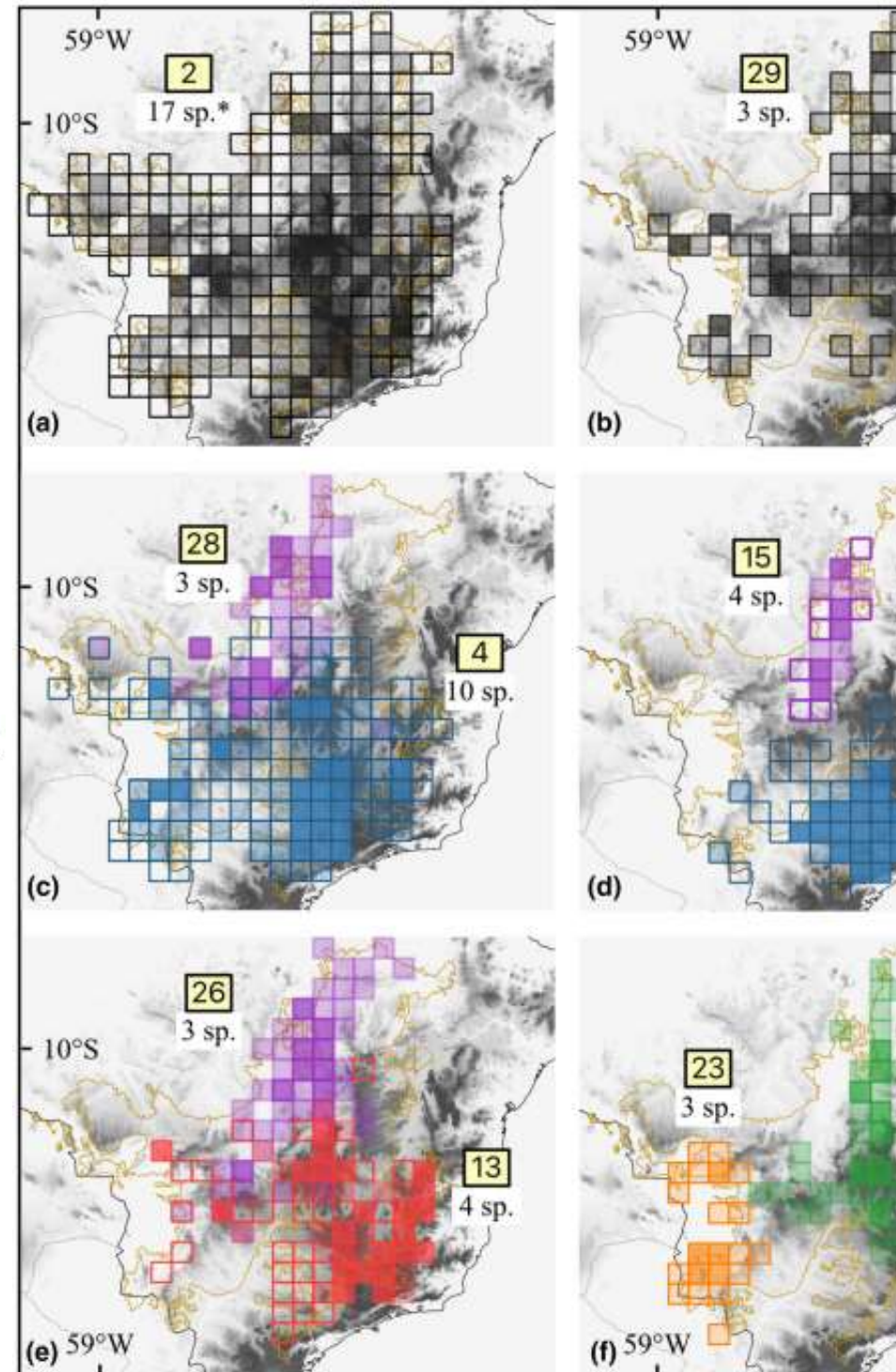
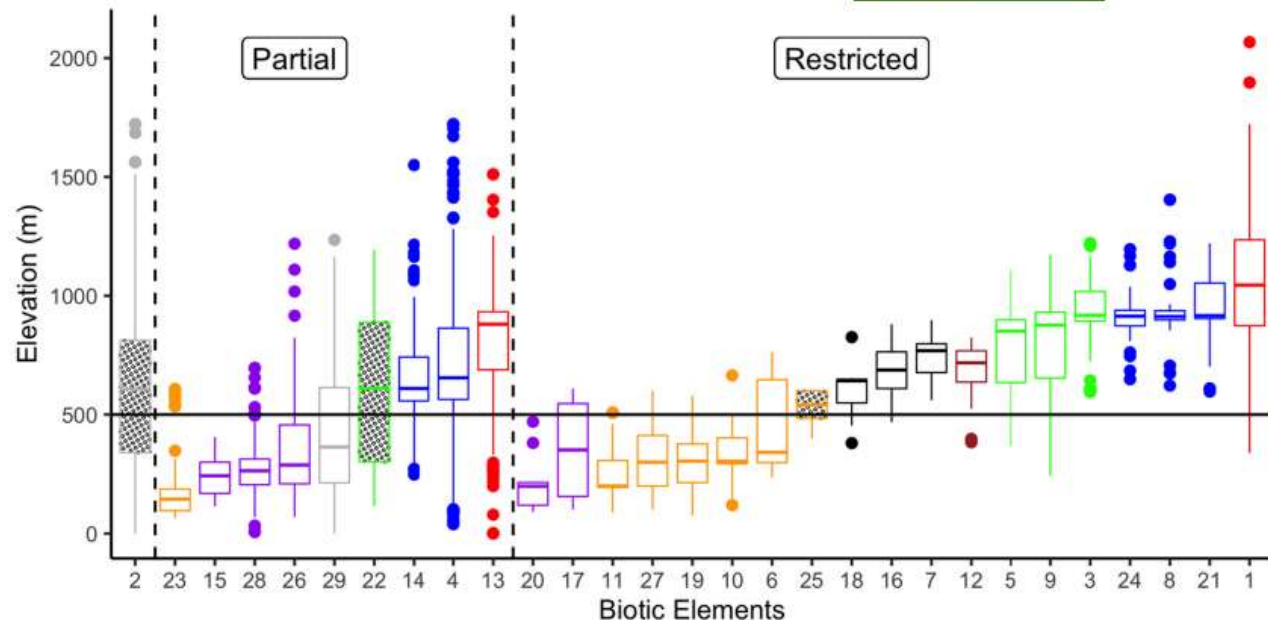
Journal of Biogeography WILEY

## In search of generality: Revised distribution data and regionalization of Cerrado endemic tetrapods

João Paulo Santos Vieira-Alencar<sup>1,2</sup> | Ana Paula Carmignotto<sup>3</sup> |  
 Ricardo Jannini Sawaya<sup>2</sup> | Luís Fábio Silveira<sup>4</sup> | Paula Hanna Valdujo<sup>5</sup> |  
 Cristiano Campos de Nogueira<sup>6</sup>

VIEIRA-ALENCAR ET AL.

Journal of Biogeography WILEY 9



# Conservation Priorities in the Cerrado: Protect larger northern PAs and Restore Native Habitats in smaller southern PAs to promote connectivity

Perspectives in Ecology and Conservation 21 (2023) 121–127



Perspectives in ecology and conservation

Supported by Instituto Tecnológico Vale

www.perspectacolconserv.com



Research Letters

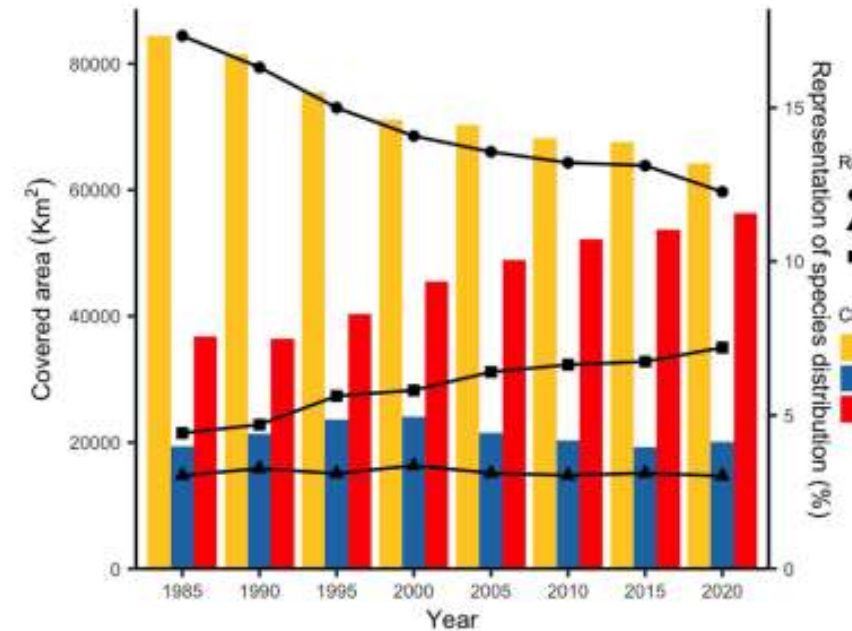
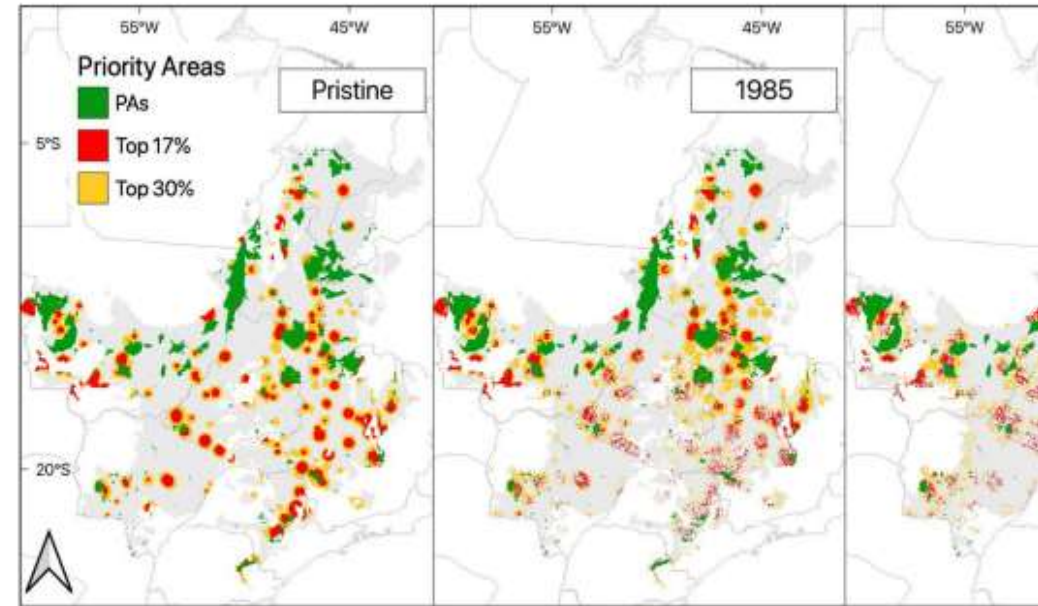
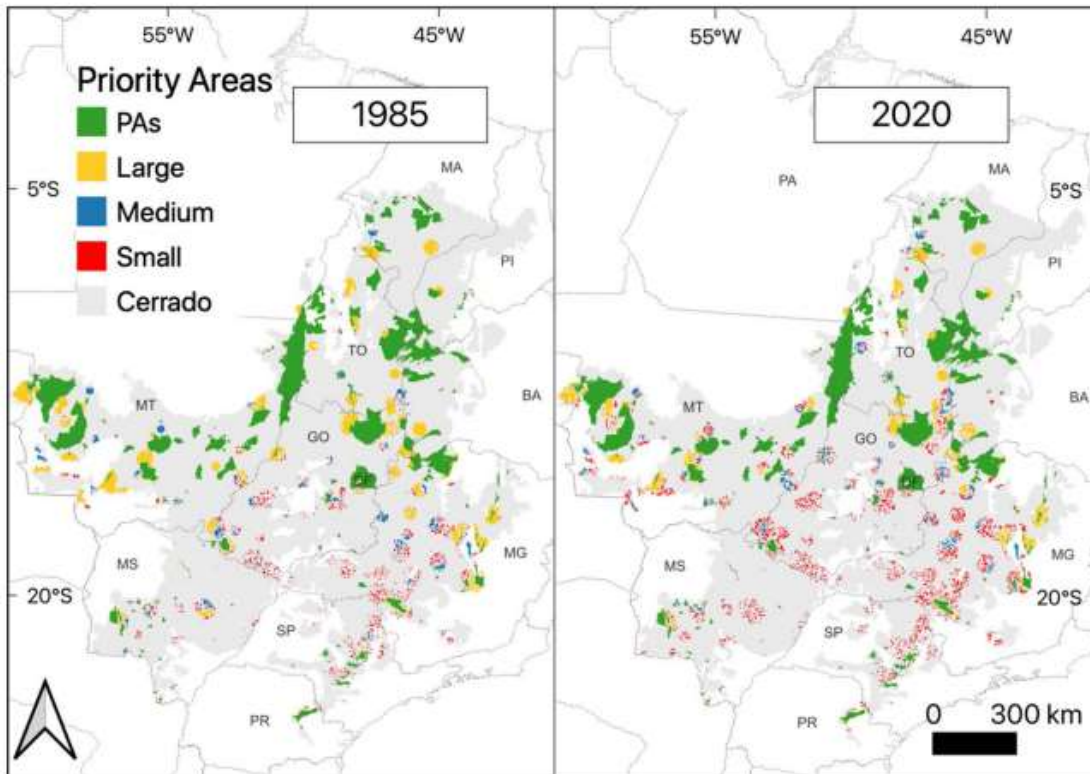
How habitat loss and fragmentation are reducing conservation opportunities for vertebrates in the most threatened savanna of the World

João Paulo S. Vieira-Alencar<sup>a,b,\*</sup>, Bruna E. Bolochio<sup>c</sup>, Ana Paula Carmignotto<sup>d</sup>, Ricardo J. Sawaya<sup>c</sup>, Luís Fábio Silveira<sup>f</sup>, Paula Hanna Valdujo<sup>g</sup>, Cristiano de Campos Nogueira<sup>b,1</sup>, Javier Nori<sup>h,s,1</sup>



J.P. Vieira-Alencar, B.E. Bolochio, A.P. Carmignotto et al.

Perspectives in Ecology and Conservation 21 (2023) 121–127



# Thank you

