

8TH INTERNATIONAL WILDLAND FIRE CONFERENCE

GOVERNANCE PRINCIPLES:

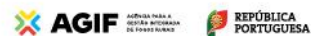
Towards an International
Framework

Porto - Portugal | **May 16-19th**, 2023

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INTERNATIONAL LIAISON COMMITTEE FOR THE IWFC



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The effects of prescribed fires on lizard diversity in grasslands of central Brazil

Authors: Bruna F. Gomes, Marcio R. C. Martins

The effects of prescribed fires on lizard diversity in grasslands of central Brazil



Bruna F. Gomes



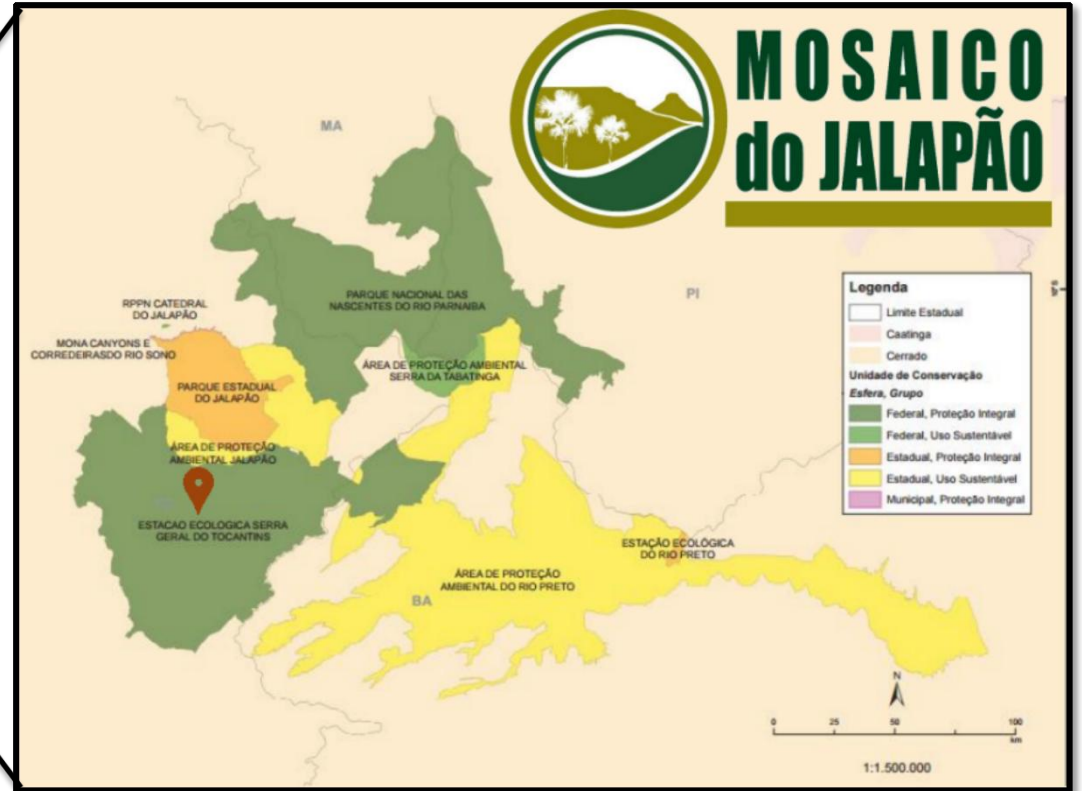
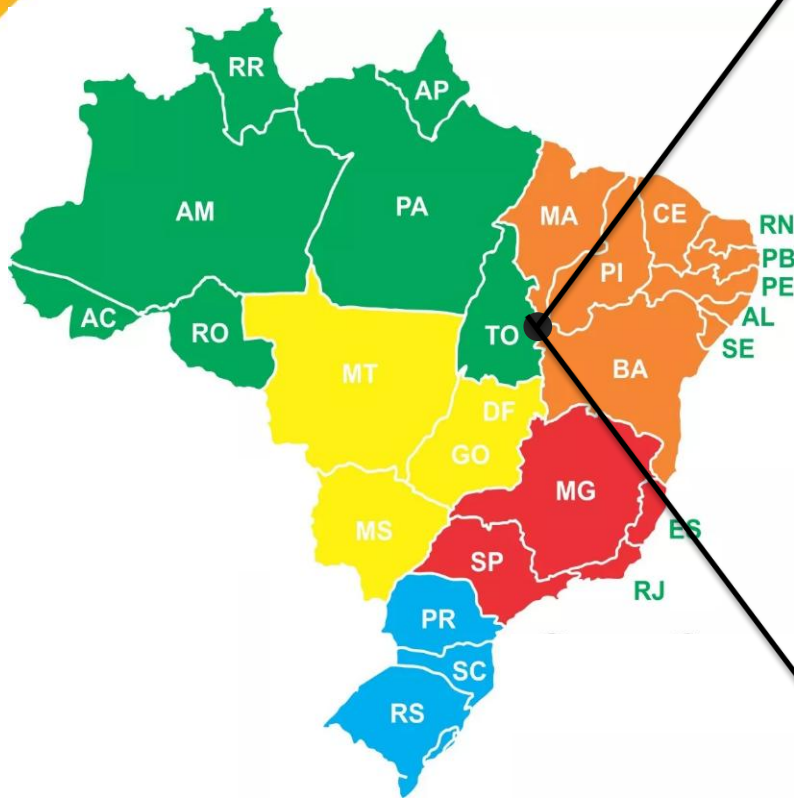
Marcio R. C. Martins



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Serra Geral do Tocantins Ecological Station (SGTES)



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Mostly grasslands

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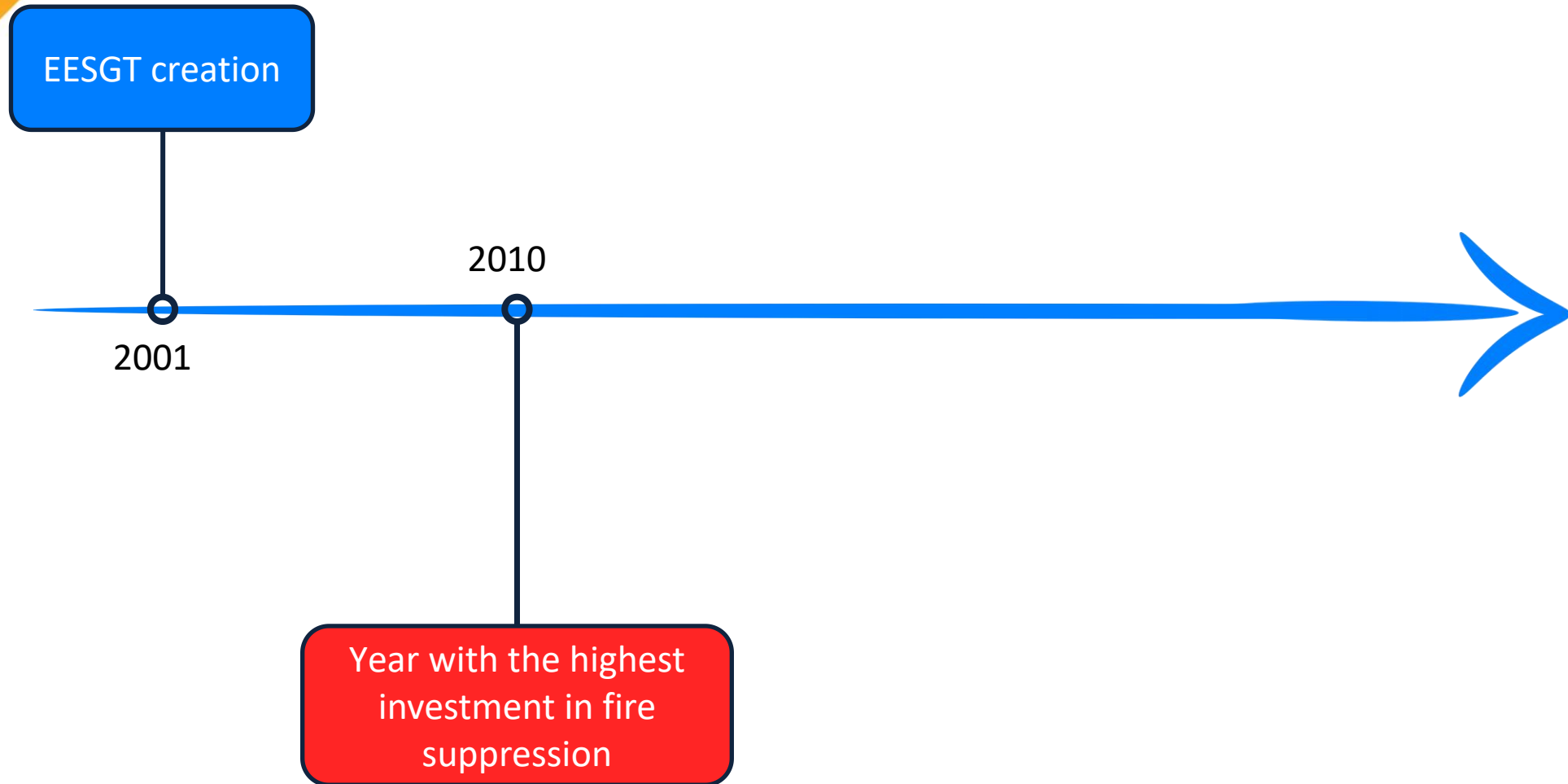
EESGT creation

2001



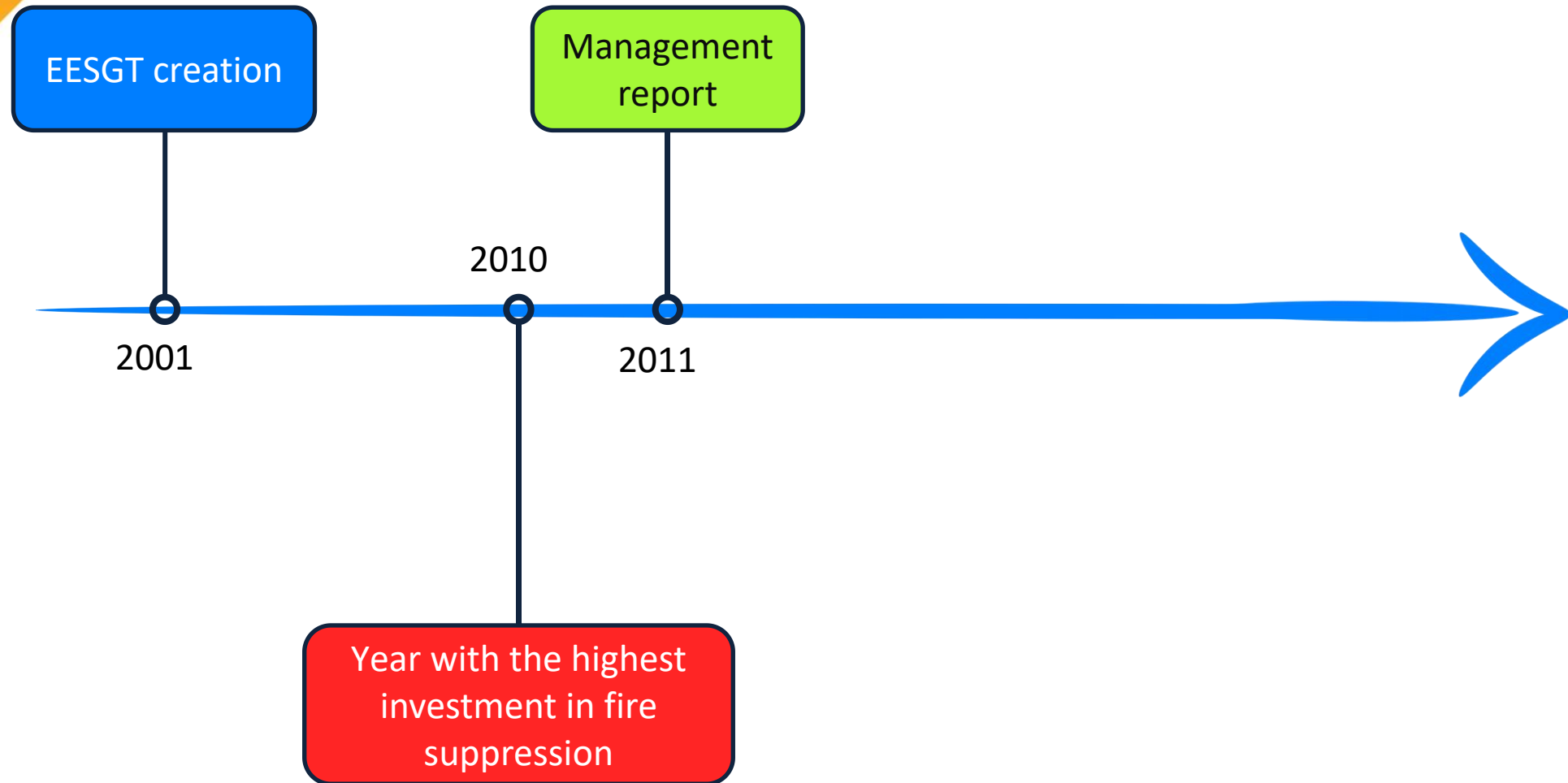
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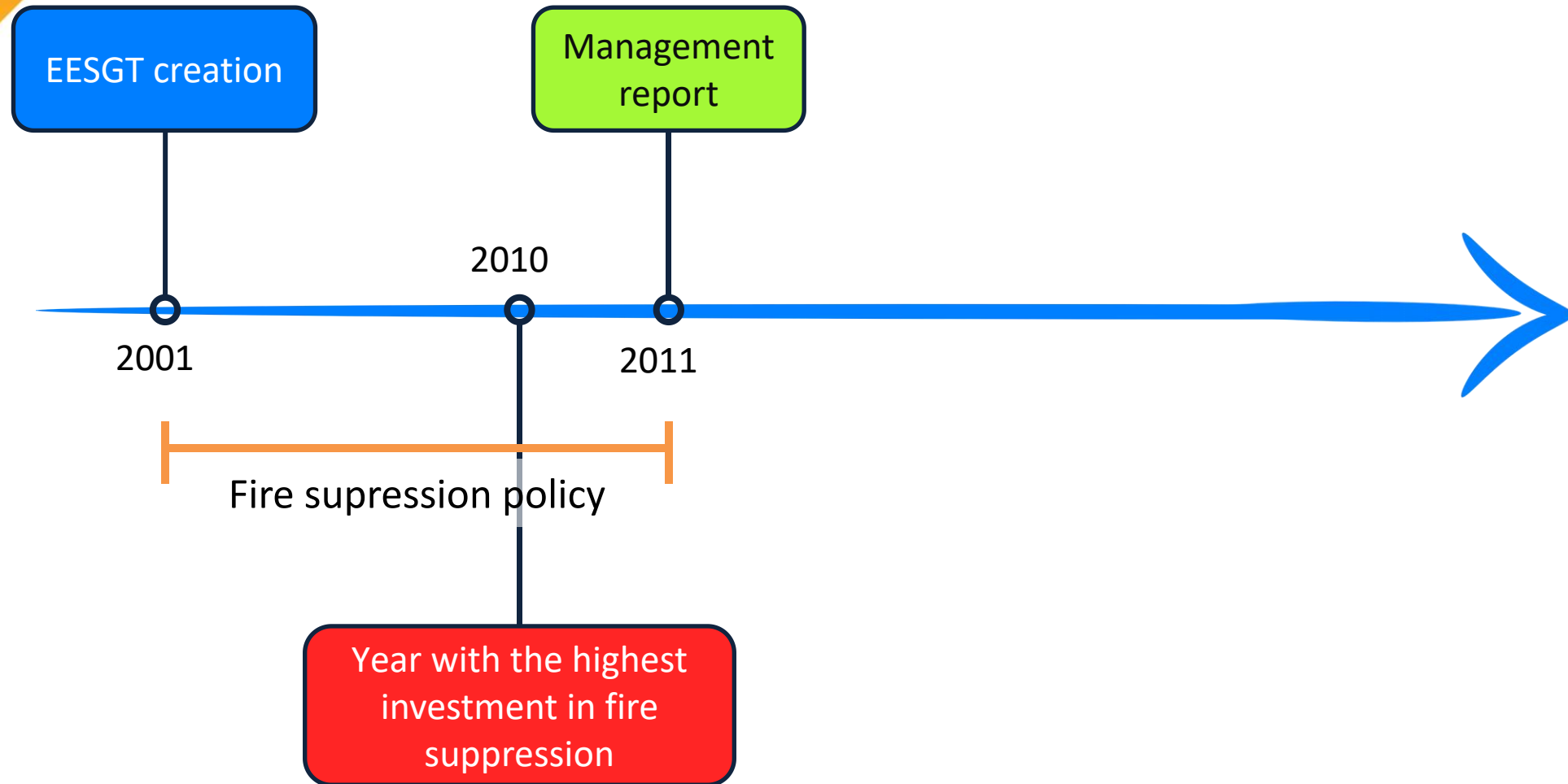
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SGTES fire history



Fire suppression consequences

2001 - 2011

Fuel accumulation

Recurrence of large
(and late) fires

High expenses for fire
suppression

Increase in socio-
environmental conflict

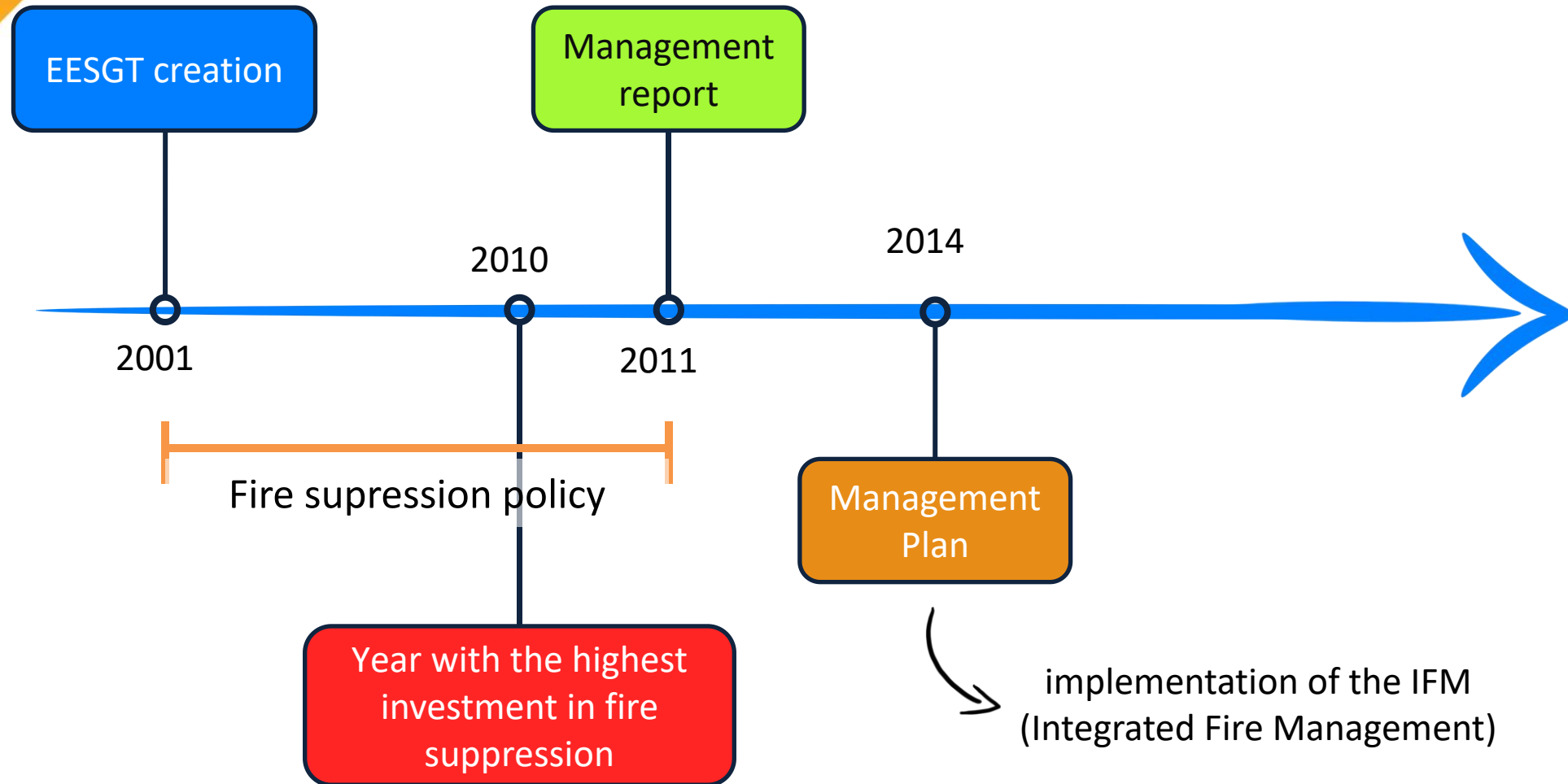
Logistical inability to
suppress large fires

Managers' frustration



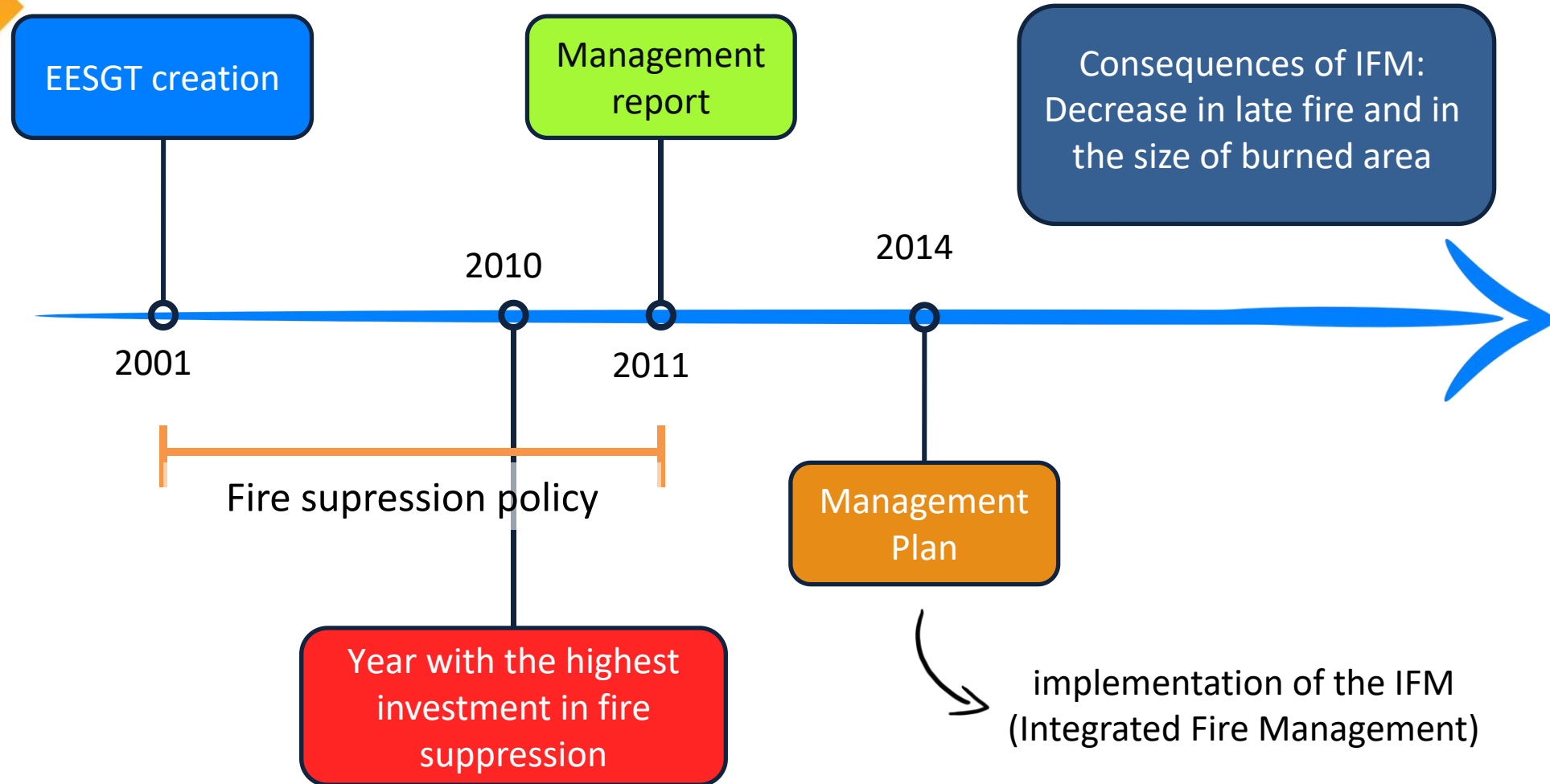
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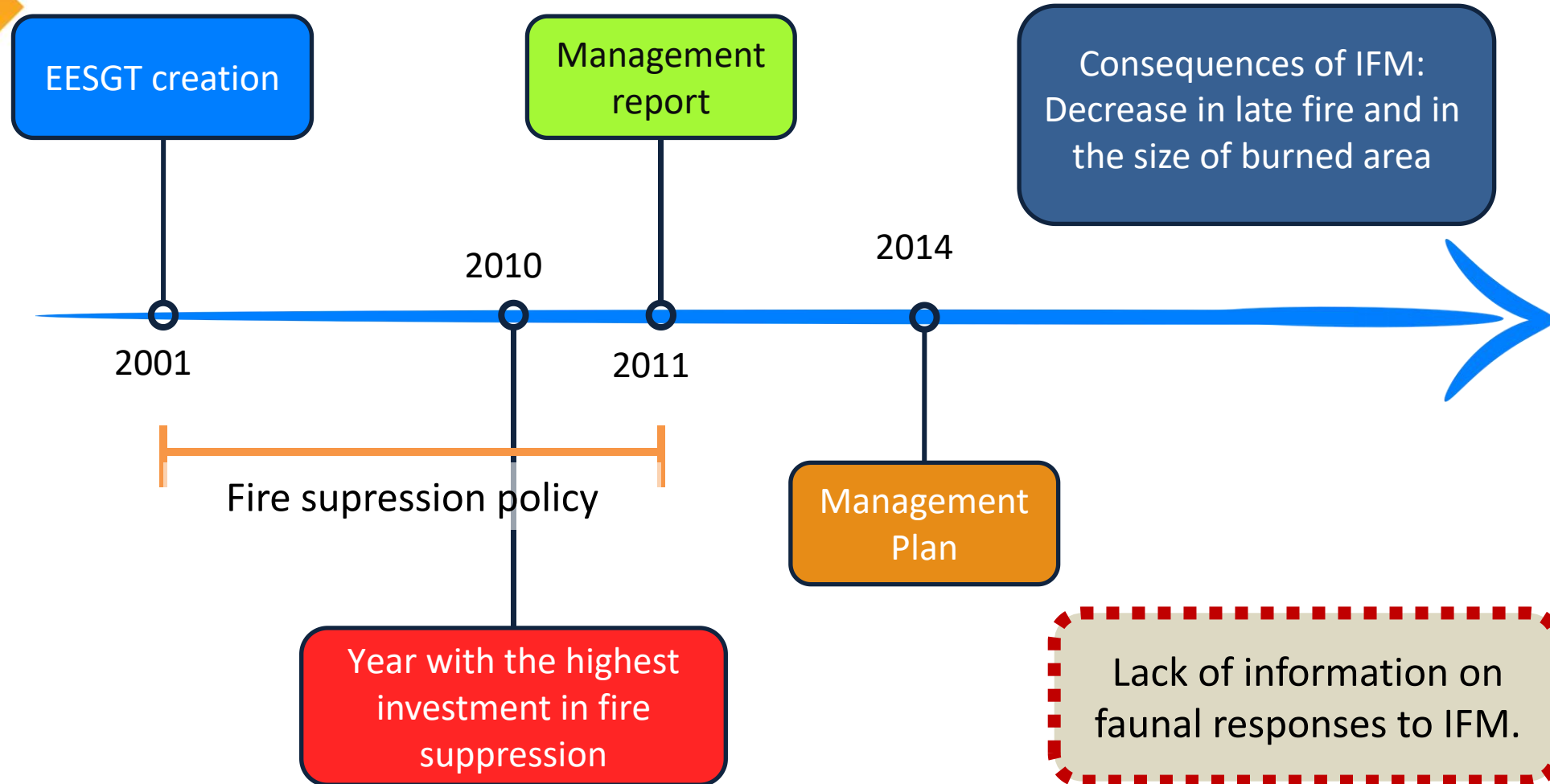
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Objective: to evaluate the effects of prescribed burnings on the diversity of lizards and help the managers of the SGTES in decision-making in the activities of the IFM.

What is the impact of prescribed fires on the diversity of lizards in the SGTES?

Does the time since the last fire influence the diversity of lizards in the SGTES?

Does prescribed fires cause direct mortality of small vertebrates?

How can the results obtained in this project contribute to the IFM at SGTES?

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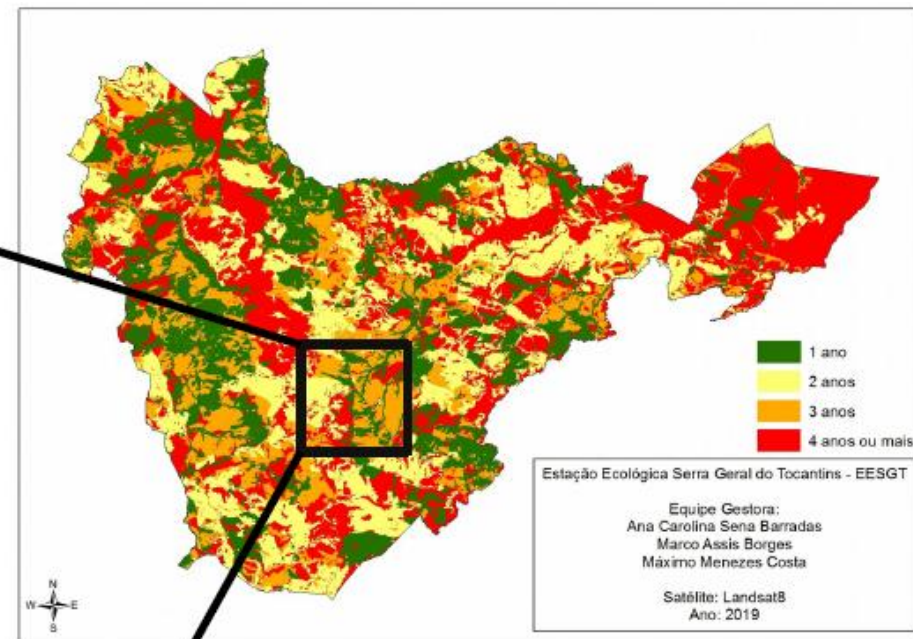
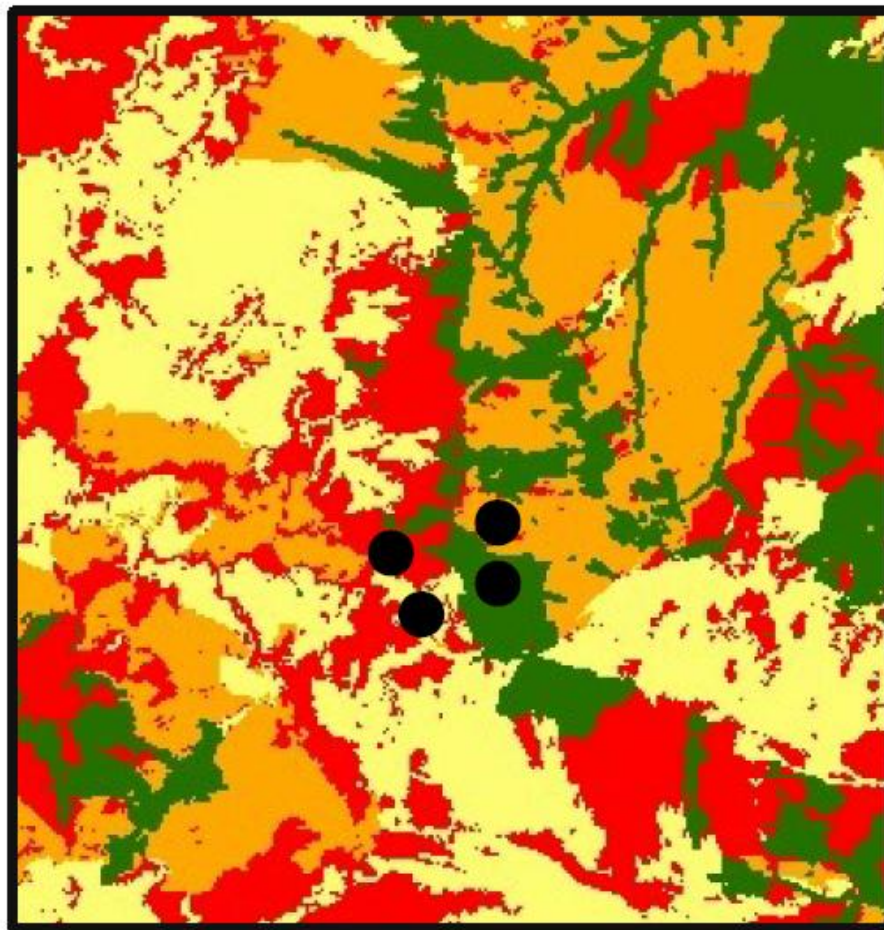
Does the time since the last fire influence the diversity of lizards in the SGTES?

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E-Poster
presentation
(PP125)

Methods

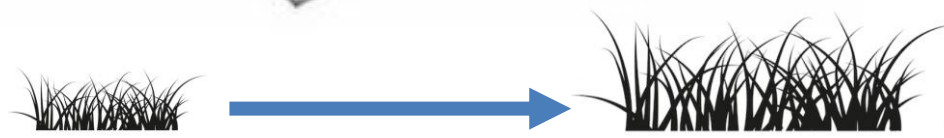
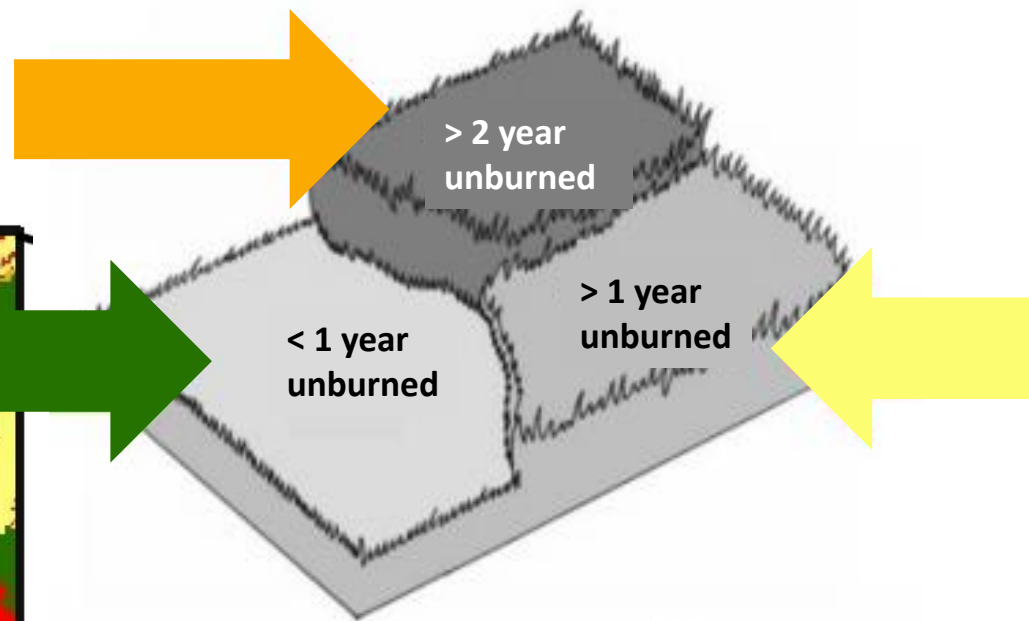
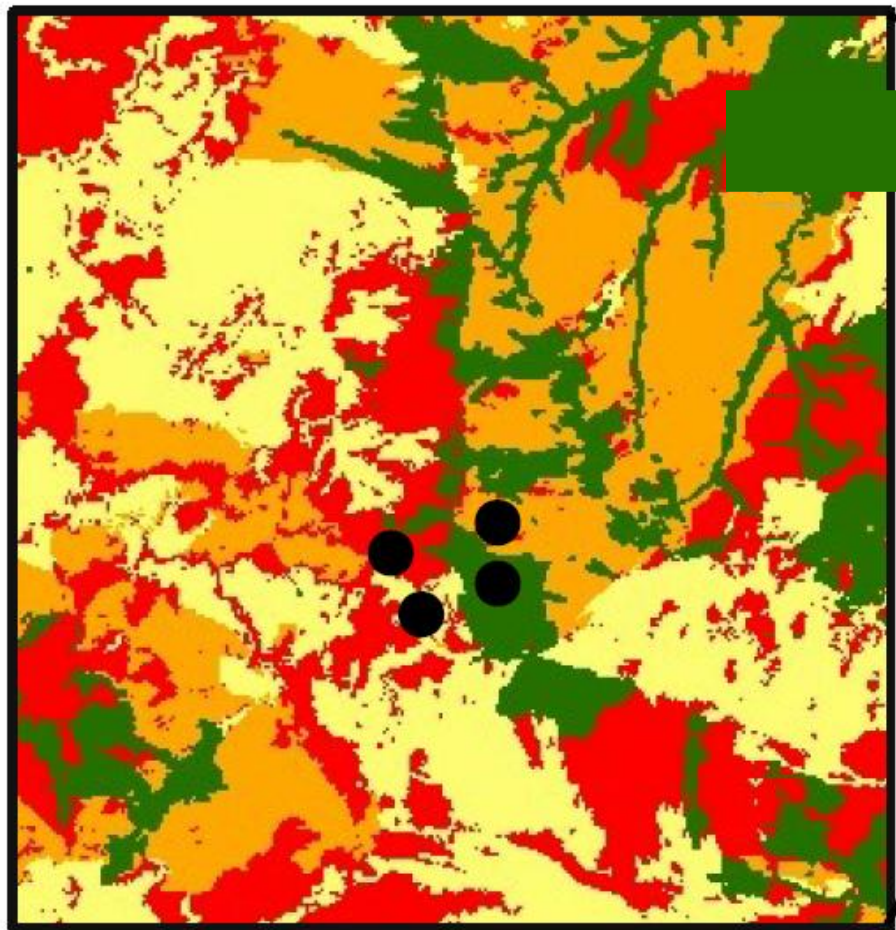


TSLF
Time Since Last Fire



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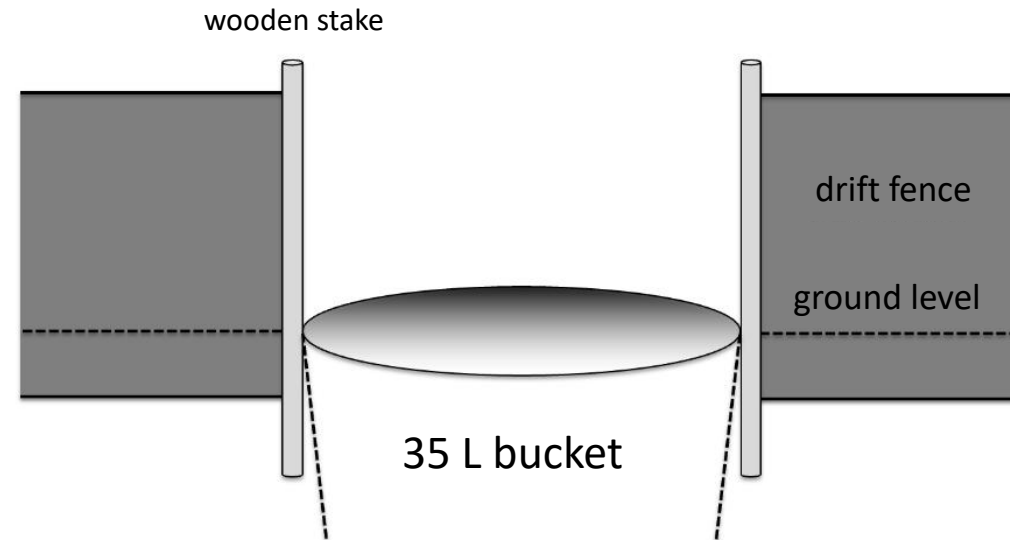


TSLF
Time Since Last Fire



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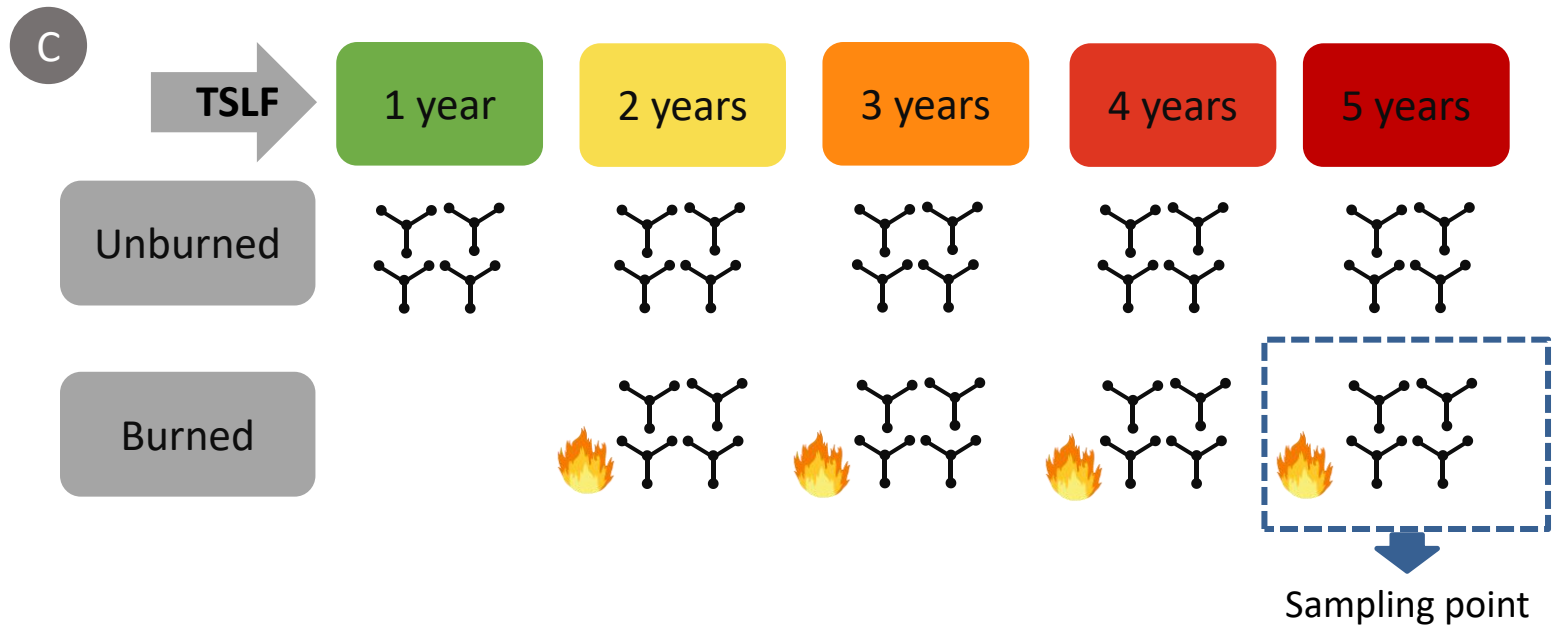
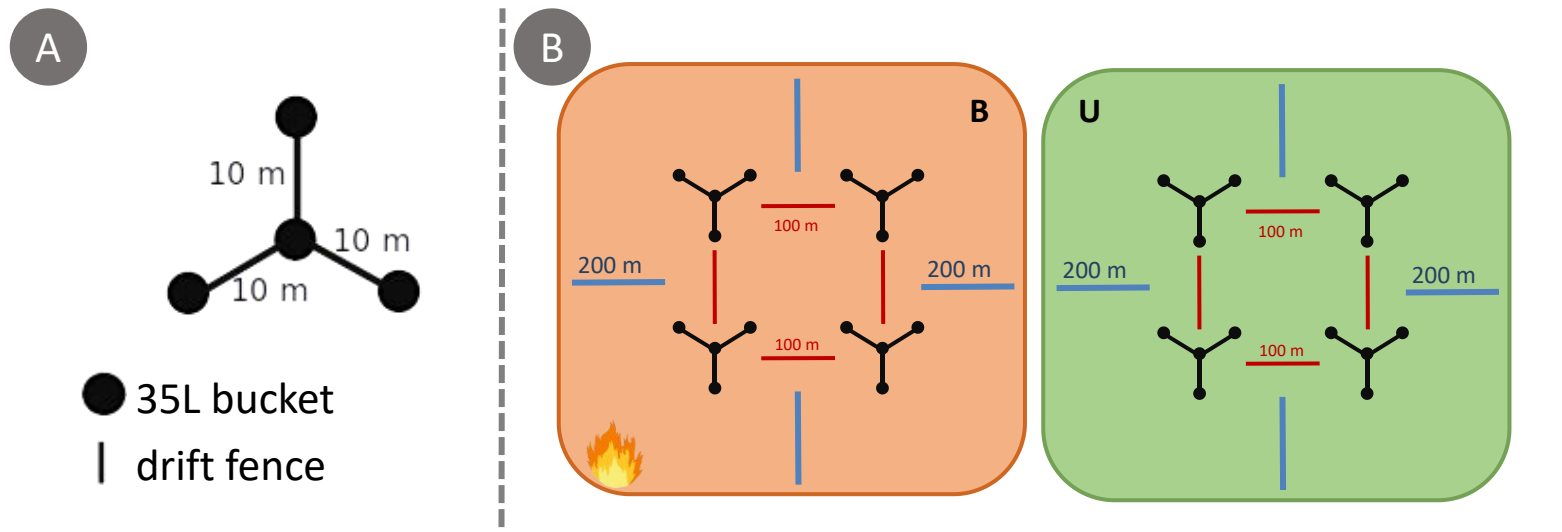
Methods



Pitfall traps



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Prescribed burn in SGTES.



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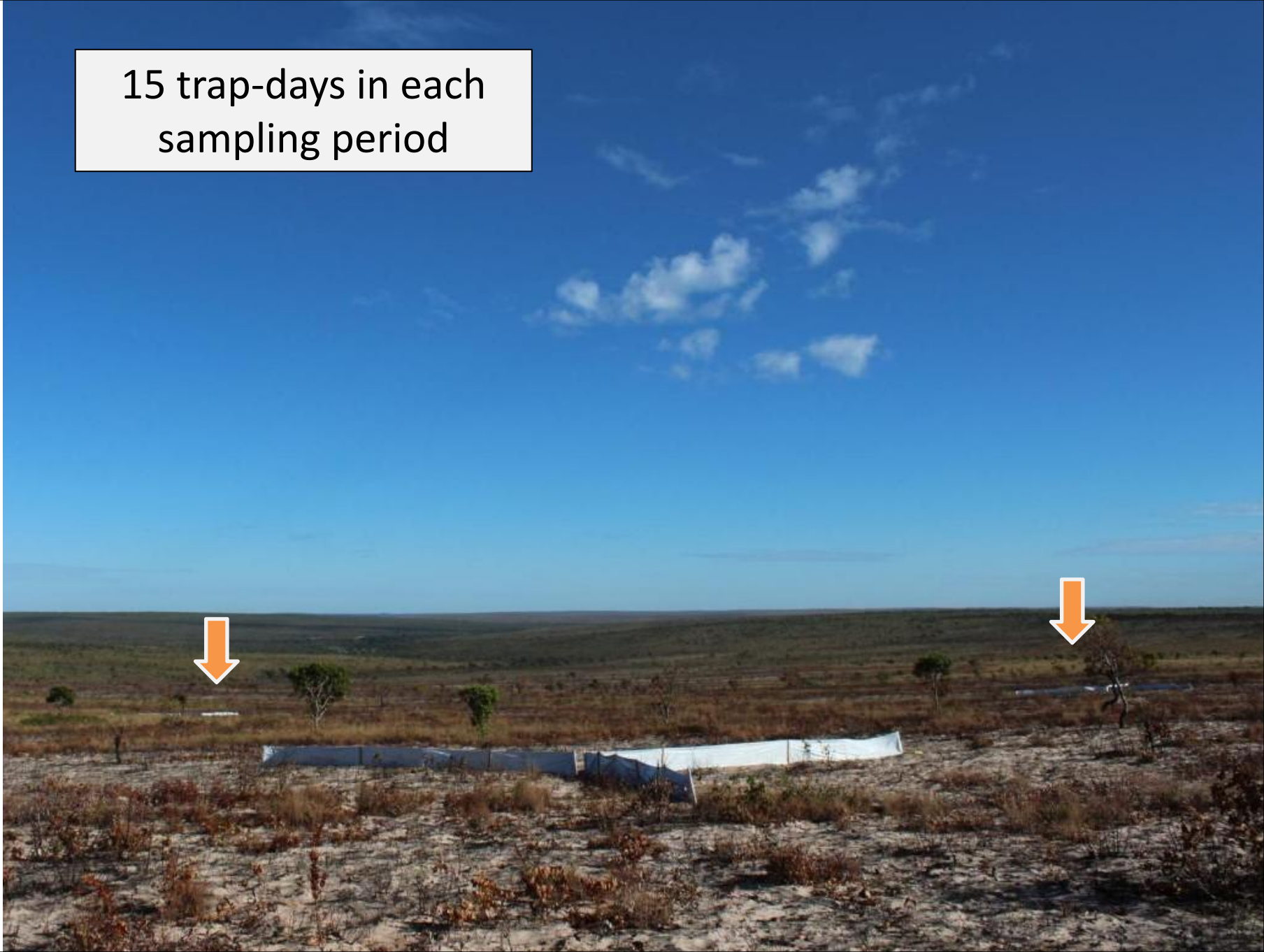
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15 trap-days in each
sampling period



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Methods

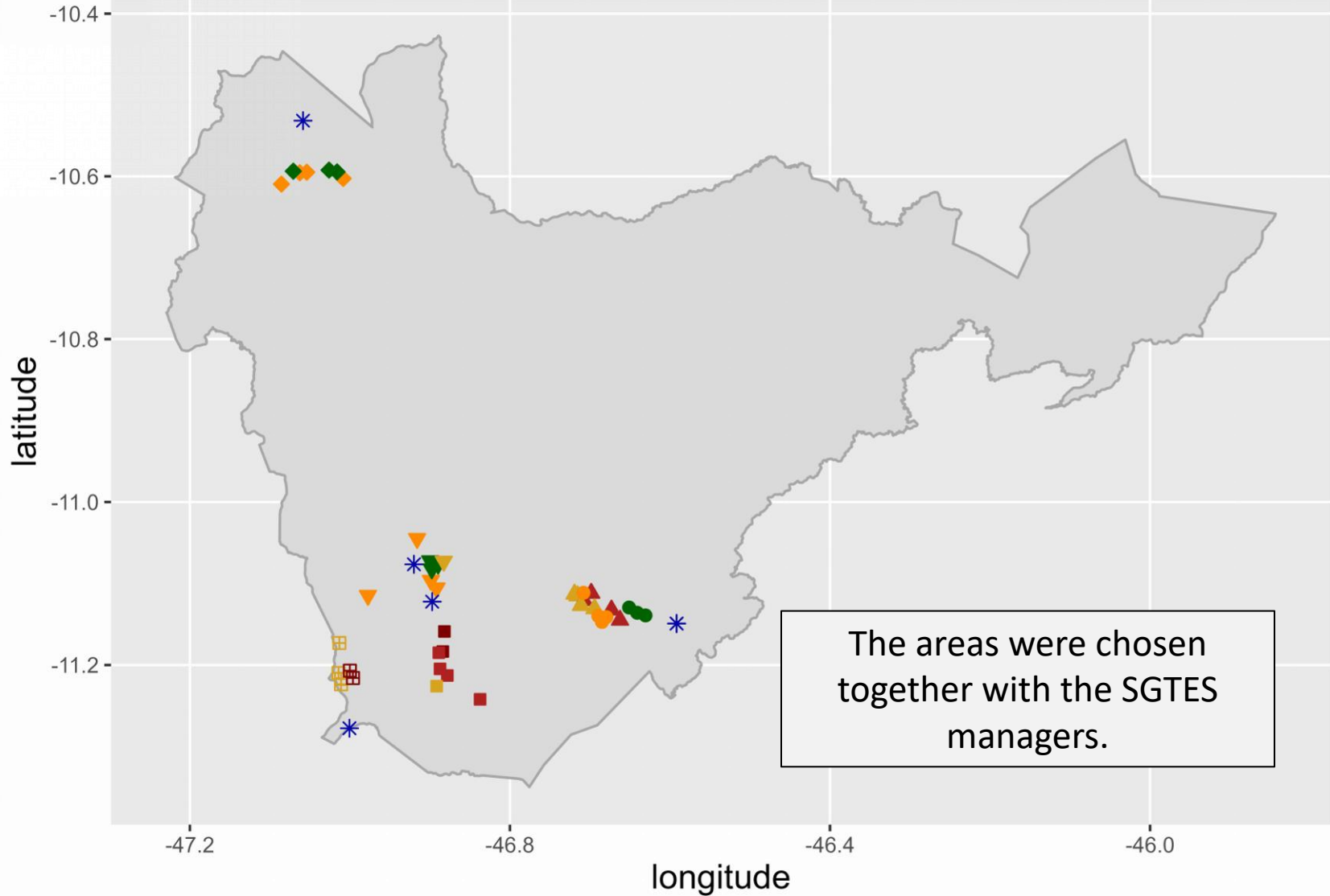


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Sampling period

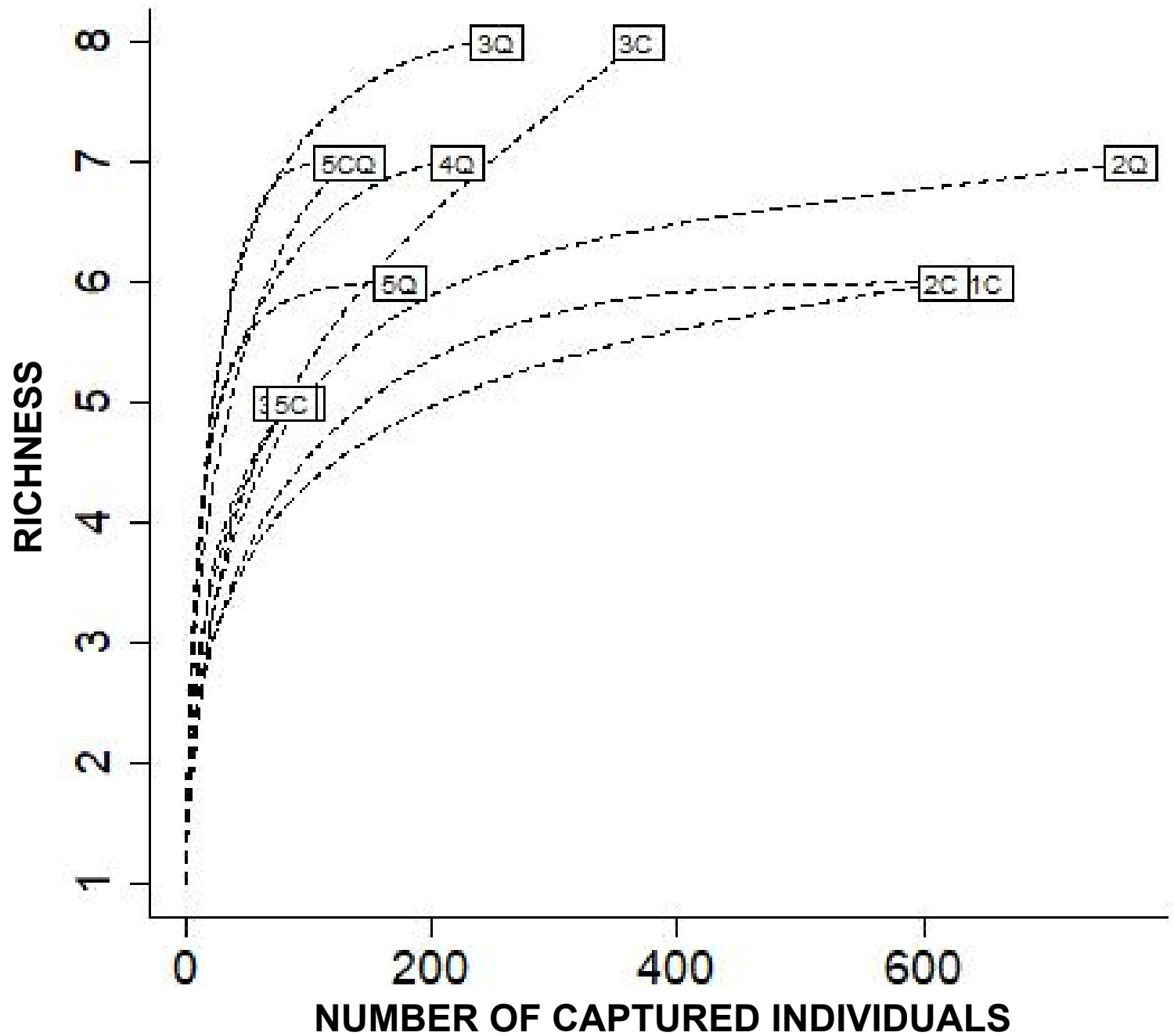
- ▽ C1
- C2
- △ C3
- C4
- ◇ C5
- ▣ C6
- * camp

TSLF

- 1
- 2
- 3
- 4
- 5
- camp



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Richness and abundance of lizards

Specie	1U	2U	2B	3U	3B	4U	4B	5U	5B	TOTAL	%	% acum
<i>Tropidurus oreadicus</i>	433	433	597	195	120	80	119	73	66	2116	65%	65%
<i>Ameivula jalapensis</i>	181	146	115	134	73	23	43	8	70	793	24%	89%
<i>Vanzossaura savanicola</i>	23	24	12	27	28	9	21	1	12	157	5%	94%
<i>Brasiliscincus heathi</i>	0	0	5	5	9	4	29	3	16	71	2%	96%
<i>Hemidactylus brasilianus</i>	7	8	30	1	11	3	2	0	3	65	2%	98%
<i>Bachia oxyrhina</i>	4	3	7	4	7	4	6	2	8	45	1%	99%
<i>Ameiva ameiva</i>	3	1	1	1	0	4	0	0	0	10	0%	100%
<i>Anolis meridionalis</i>	0	0	0	1	2	0	0	0	0	3	0%	100%
<i>Copeoglossum nigropunctatum</i>	0	0	0	0	2	0	0	0	0	2	0%	100%
<i>Salvator duseni</i>	0	0	0	0	0	0	2	0	0	2	0%	100%
Sampling points (n)	9	5	7	5	4	3	5	1	2			
Richness	7	7	8	9	9	8	7	6	7			



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T. oreadicus : most abundant specie



65% of all captures



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Ameiva ameiva



Bachia oxyrhina



Hemidactylus brasilianus



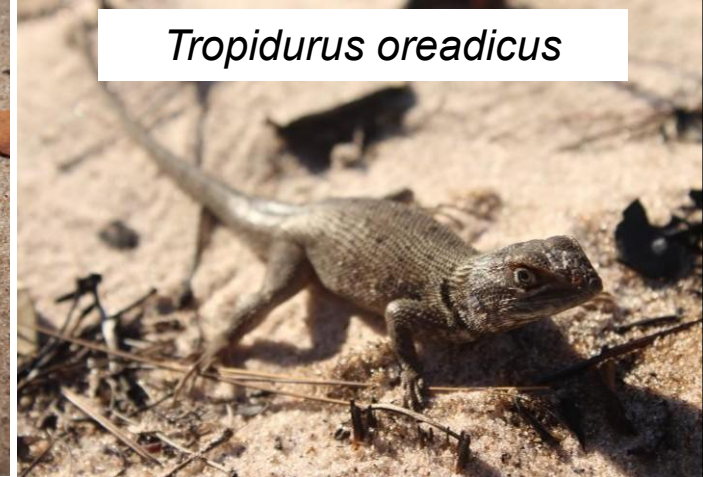
Ameivula jalapensis



Brasiliscincus heathi



Tropidurus oreadicus



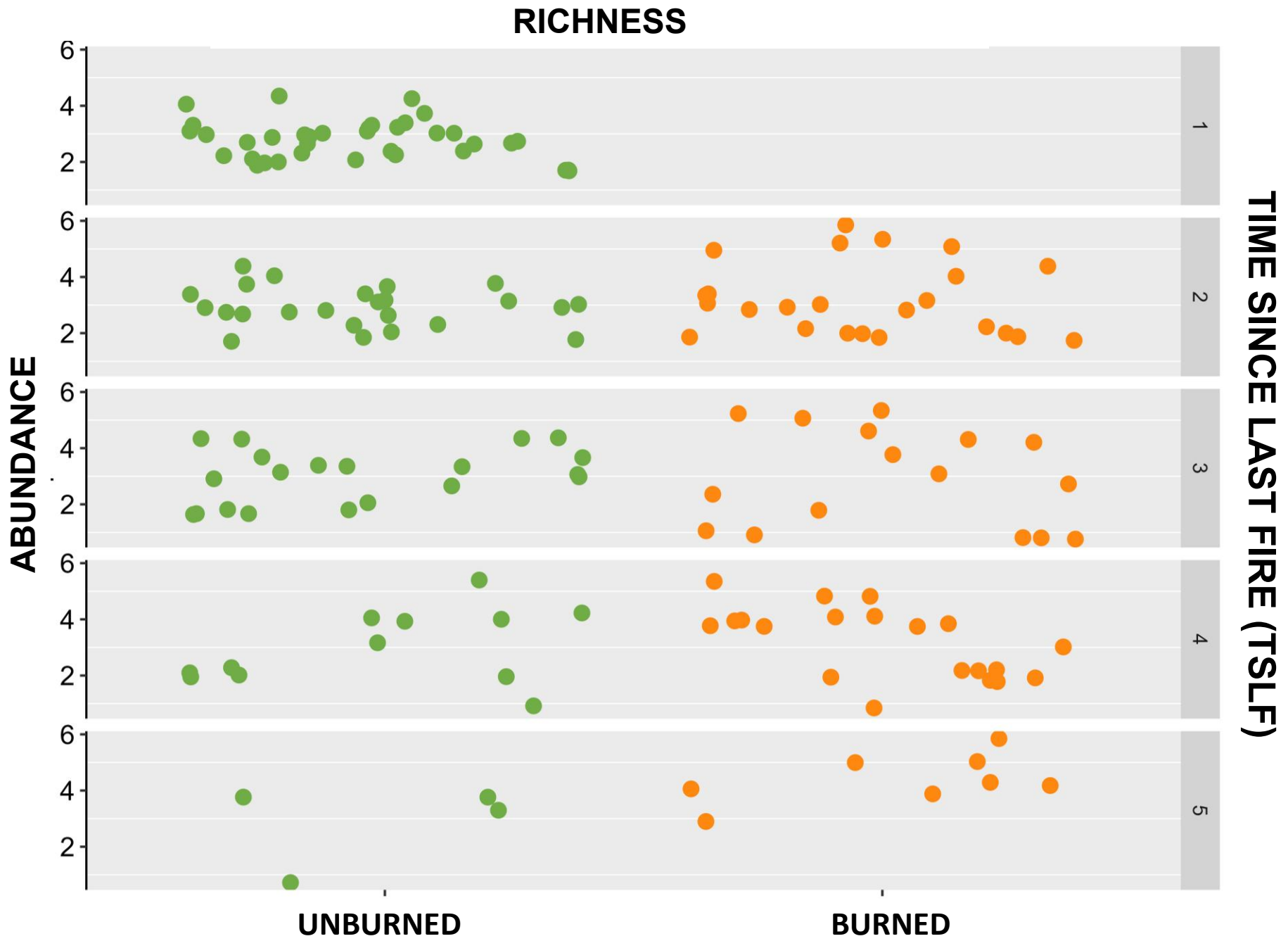
Vanzossaura savanicola



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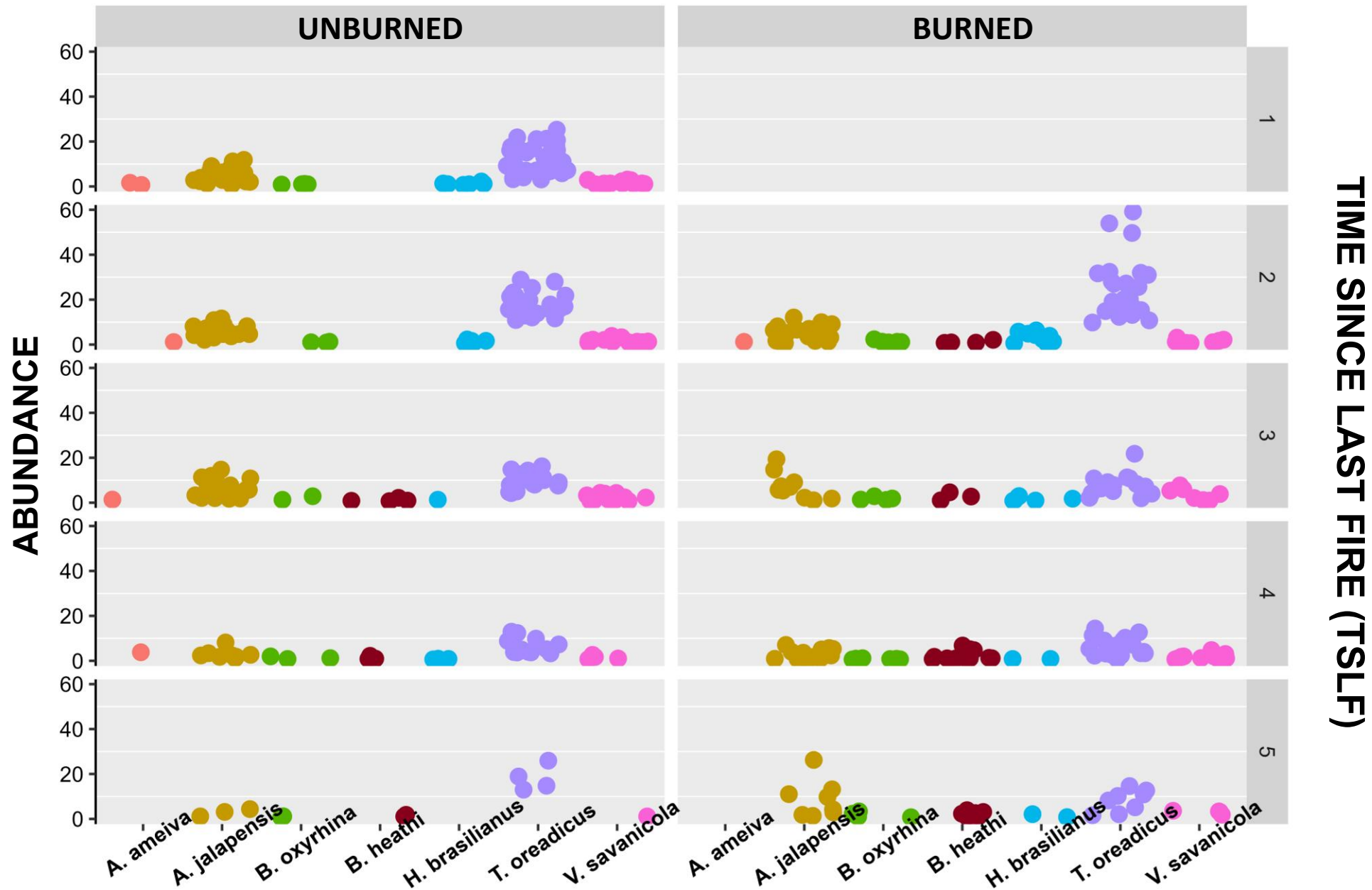


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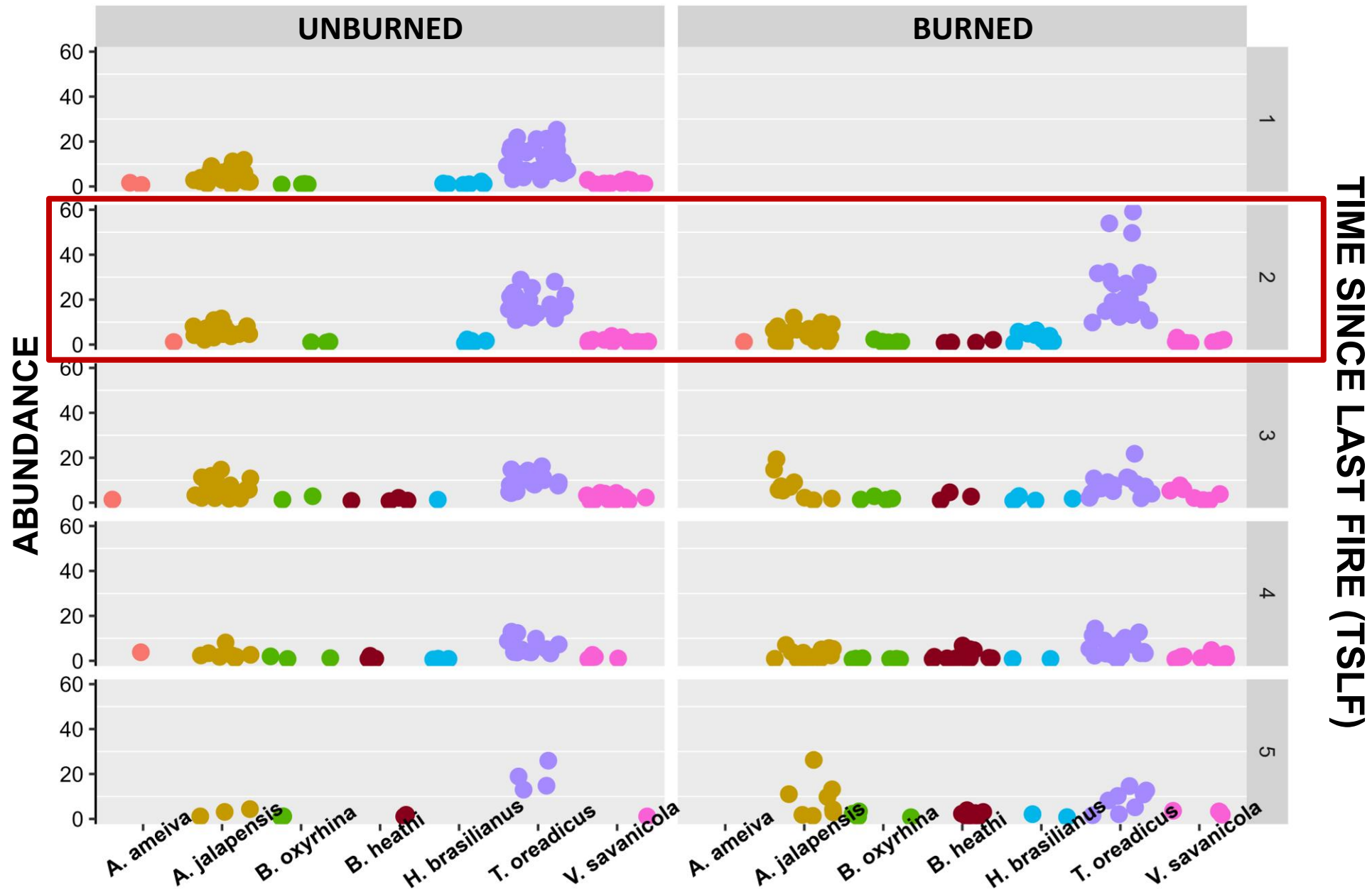




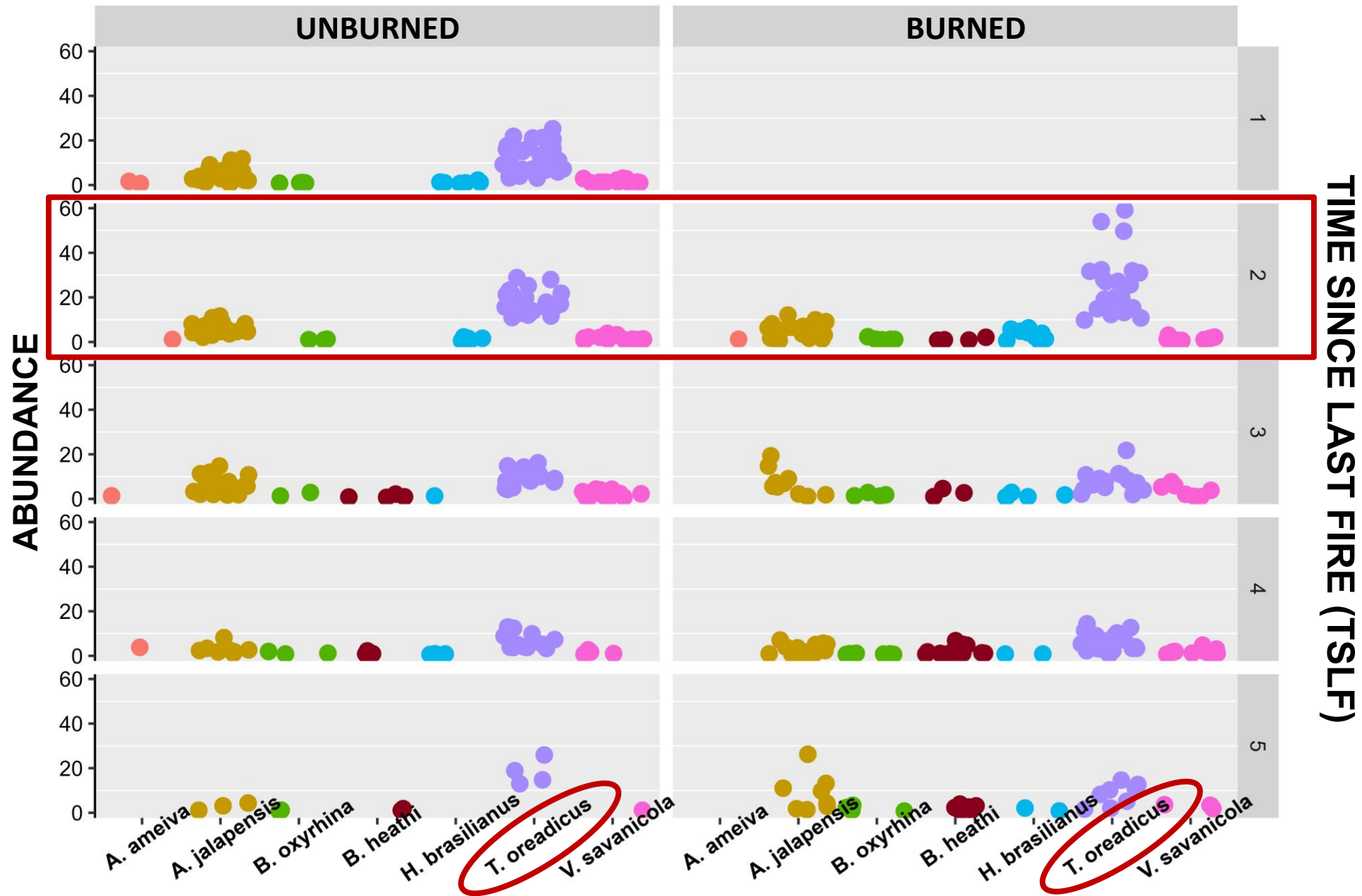
ABUNDANCE (all species)



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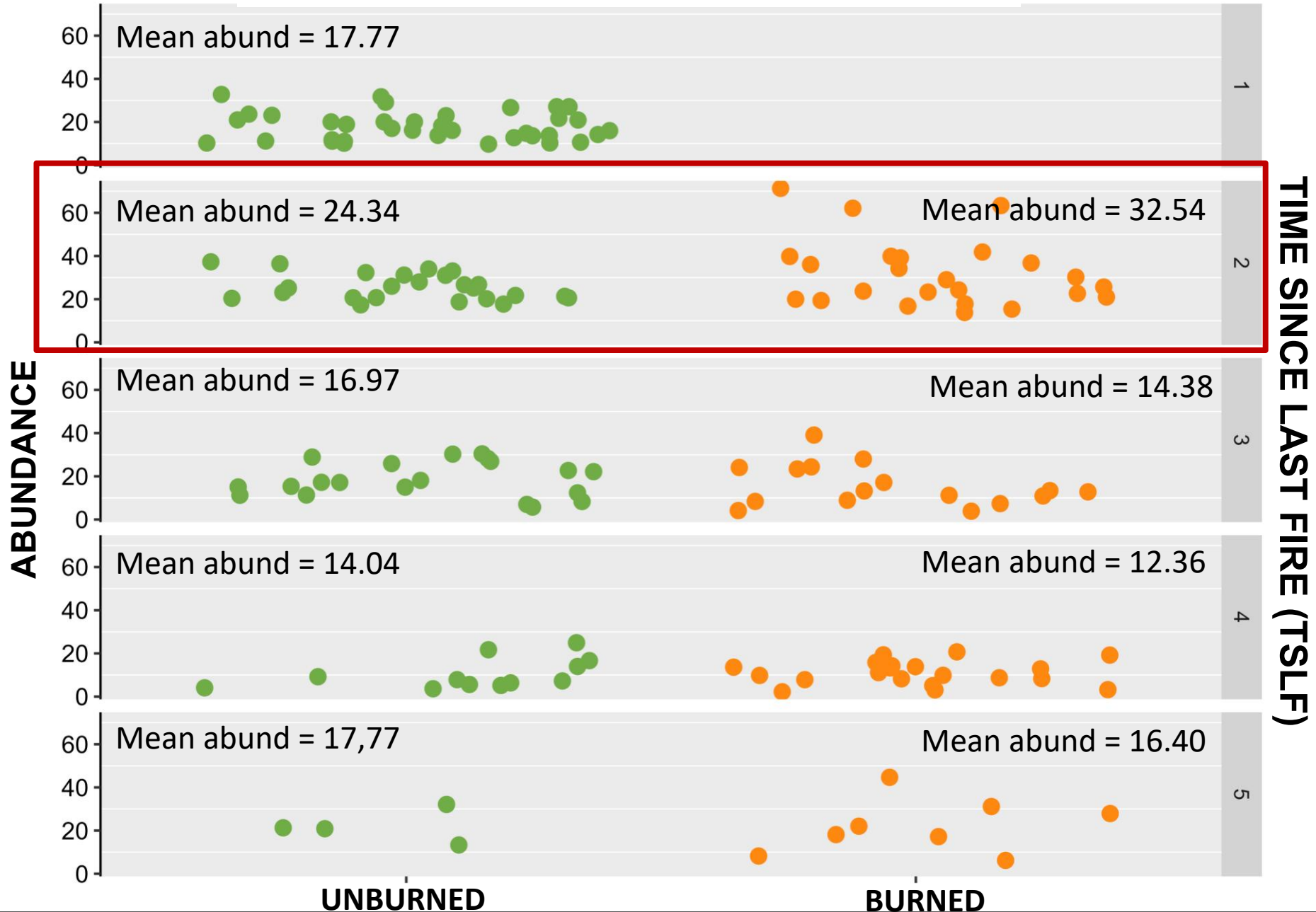


ABUNDANCE (all species)



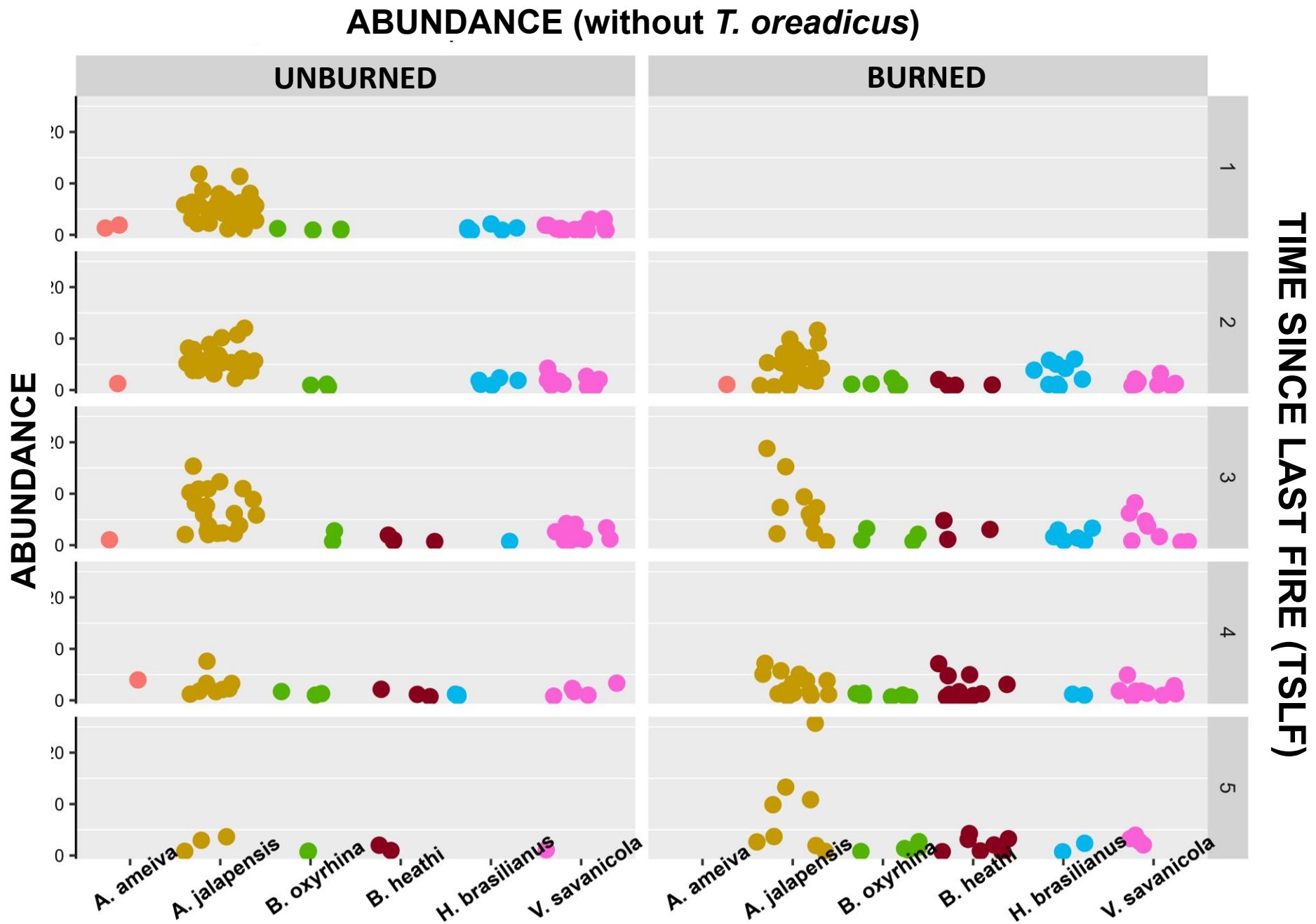


ABUNDANCE (all species)



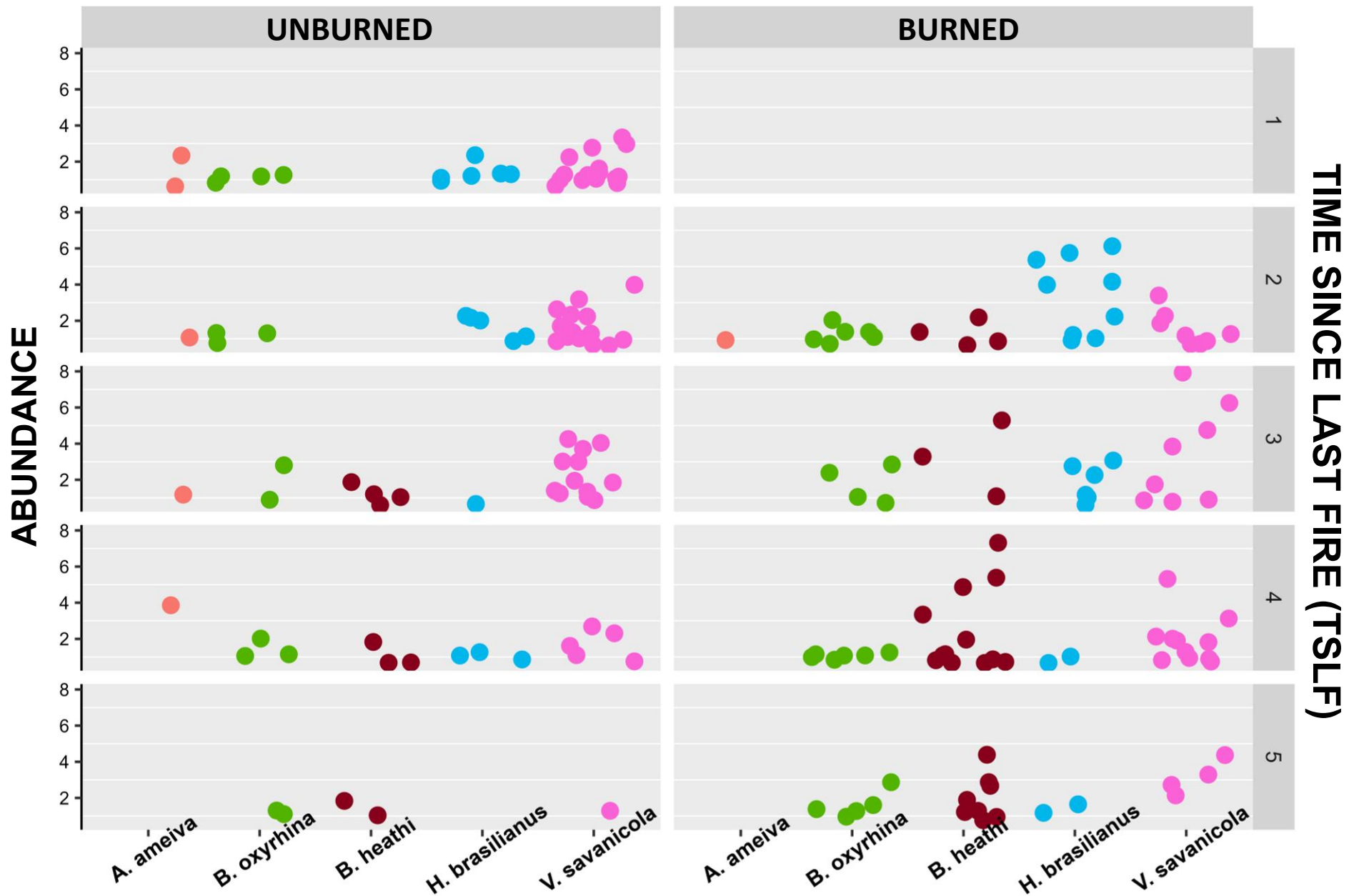


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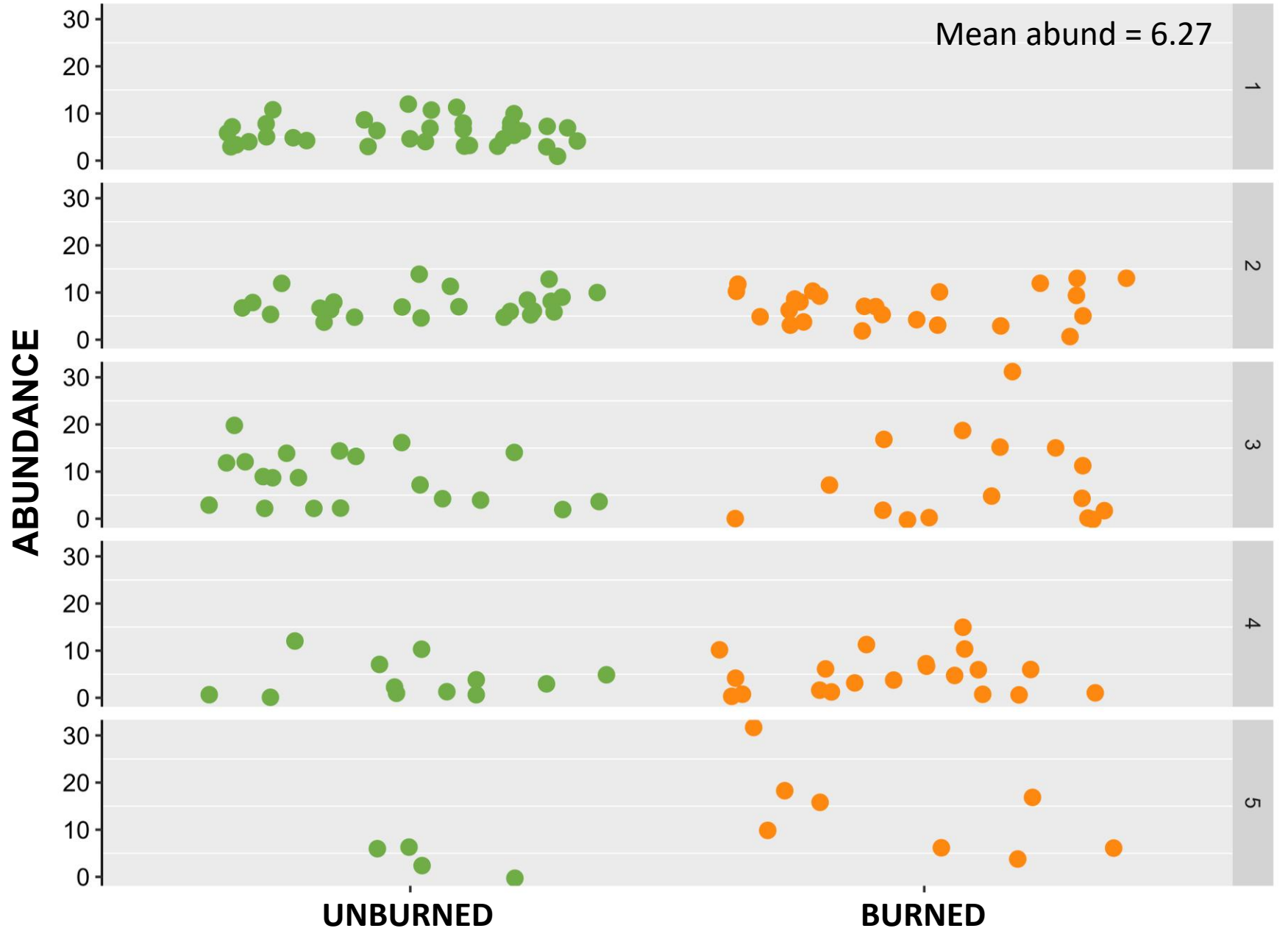


ABUNDANCE (without *T. oreadicus* and *A. jalapensis*)

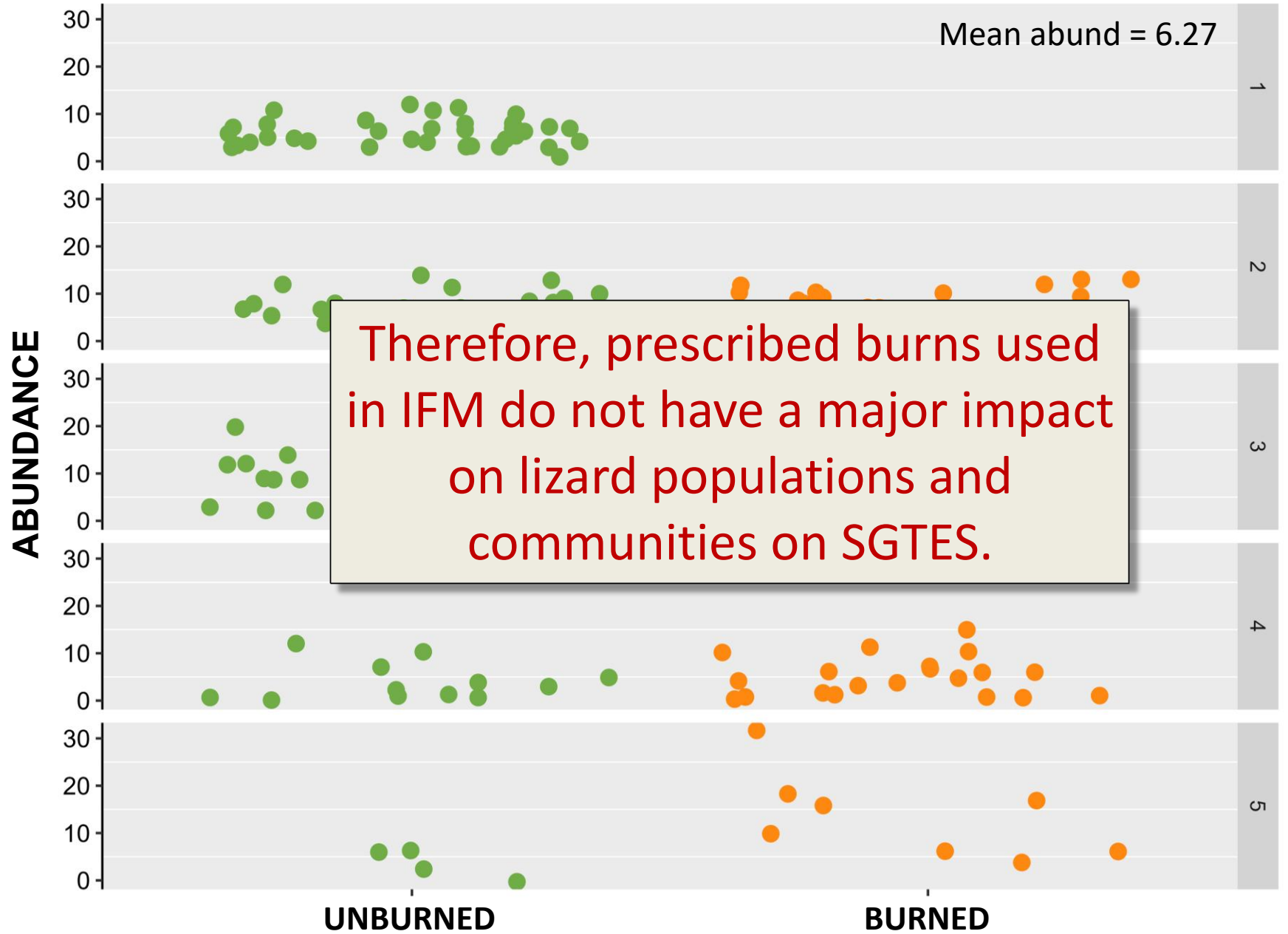


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ABUNDANCE (without *T. oreadicus*)



ABUNDANCE (without *T. oreadicus*)



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THANK YOU!!

brugomes@ib.usp.br



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