

Supplementary Materials:

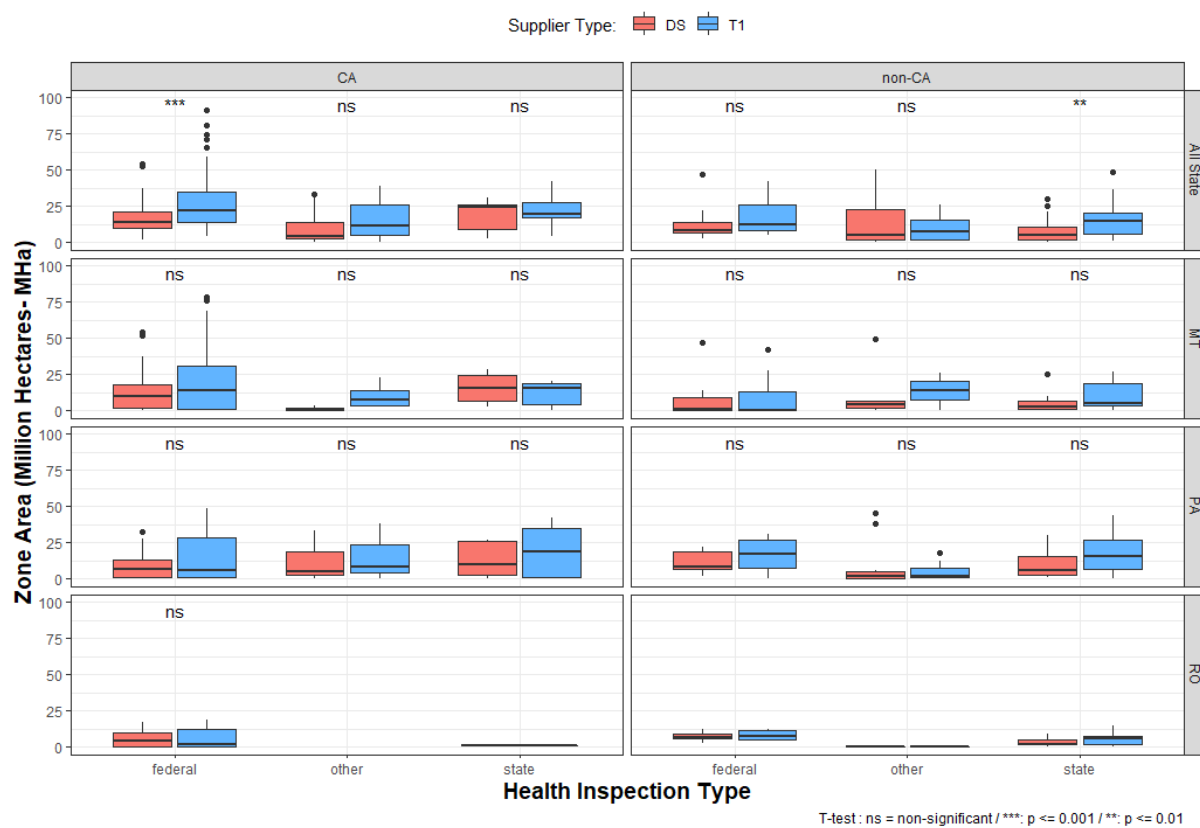


Figure S1. Boxplot showing the supply zone areas per health inspection type, per CA, per state for direct (red) and tier-1 indirect (blue) suppliers.

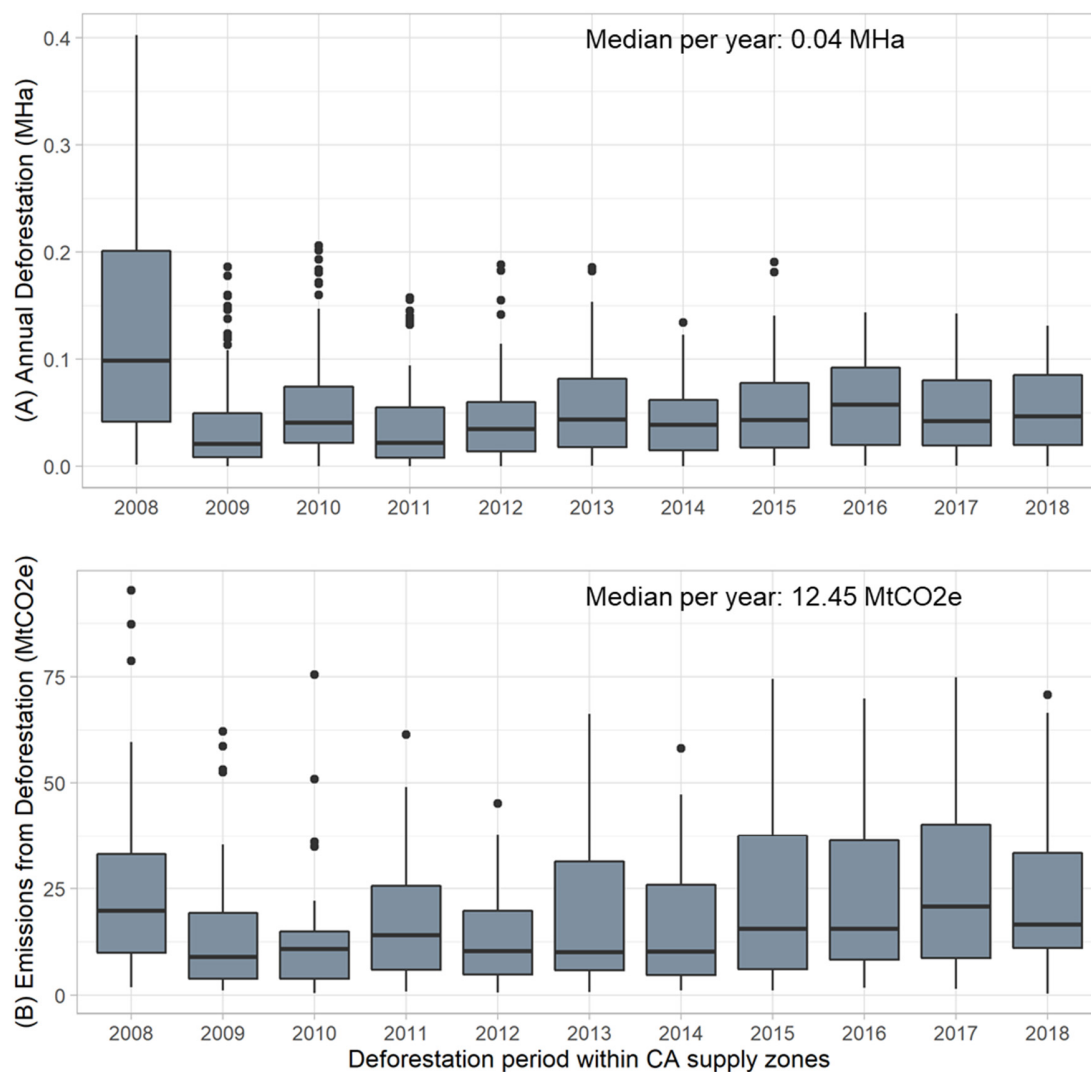


Figure S2. Boxplot showing the annual deforestation (A) and associated carbon emissions (B) within the CA supply zones.

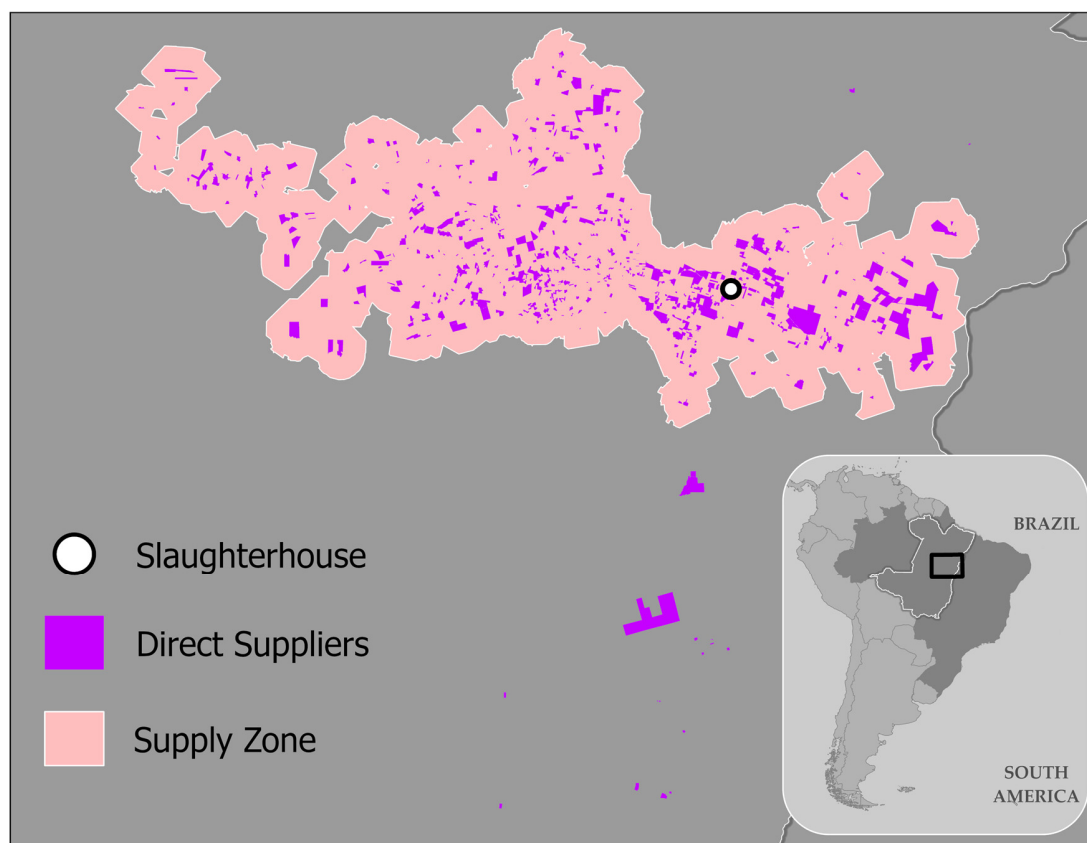


Figure S3. Example of a supply zone drawn from the direct suppliers of a single slaughterhouse.

Table S1. Total number of cattle heads moved for various purposes using GTAs in Pará, Mato Grosso, and Rondônia, for the period from 2013 to 2018.

Purposes	Cattle moved using GTA in Pará, Mato Grosso, and Rondônia between the years 2013 and 2018	
	Total Heads	% Total Heads
Non-Slaughter	175,726,735	75%
Engorda	136,037,280	58%
Reproducao	31,591,942	14%
Quarentena	2,348,062	1%
Exportacao	2,092,897	1%
Leilao	2,064,279	1%
Retorno de aglomeracao	792,163	0%
Esporte	243,935	0%
Cria	202,290	0%
Aglomeracao com finalidade comercial	197,087	0%
Exposicao	57,308	0%

Purposes	Cattle moved using GTA in Pará, Mato Grosso, and Rondônia between the years 2013 and 2018	
	Total Heads	% Total Heads
Pesagem	22,378	0%
Recria	22,348	0%
Retorno de abatedouro	11,339	0%
Atendimento veterinario	9,175	0%
Outras	7,898	0%
Lazer	7,823	0%
Servico	6,223	0%
Cria/engorda	5,129	0%
Destruicao	2,873	0%
Feira	1,357	0%
Trabalho	994	0%
Aglomeracao sem finalidade comercial	811	0%
Saída de abatedouro/frigorífico	676	0%
Cria/reproducao	345	0%
Comercializacao	82	0%
Pesquisa	21	0%
Sacrificio	10	0%
Equoterapia	7	0%
Postura	3	0%
Slaughter	57,182,002	25%
Abate	57,181,510	25%
Abate Sanitario	492	0%
Total	232,908,737	100%