

Appendix 1

Territoriality, breeding philopatry, and nest site selection of Chestnut Seedeater (*Sporophila cinnamomea*) in grasslands of southern Brazil

This document includes:

Table S1. Breeding territories of Chestnut Seedeater (*Sporophila cinnamomea*) estimated with KDE 95th density isopleth.

Table S2. Raw banding data of Chestnut Seedeater (*Sporophila cinnamomea*).

Fig. S1. Kernel contour of the estimated breeding territory of 15 adult male Chestnut Seedeaters (*Sporophila cinnamomea*).

Table S1. Breeding territories of Chestnut Seedeater (*Sporophila cinnamomea*) estimated with Kernel Density Estimator 95th density isopleth (KDE 95th). The number of locations recorded in the territory. Percentages used to estimate core area sizes for 30 males monitored during the breeding seasons 2018–2019 and 2019–2020 in the grasslands of Rio Grande do Sul, in the Pampas grasslands of southern Brazil.

Bird ID	Locations	Territory area (ha)	Core use area estimate (%)	Core use area (ha)	No. of cores	Territory (%) [§]	Use (%) [#]	Intensity ^{††}
C79902 [†]	51	2.25	0.3	0.2	1	9	41.2	4.6
C79903 [†]	50	1.53	0.4	0.29	1	19	50	2.6
C79904 [†]	53	2.16	0.2	0.17	1	7.7	30.2	3.9
C79905 [†]	46	2.22	0.2	0.17	1	7.4	34.8	4.7
C79906 [†]	50	0.97	0.5	0.25	1	25.3	68	2.7
C79907 [†]	50	1.57	0.4	0.26	1	16.7	50	3
C79909 [†]	50	1.94	0.3	0.22	1	11.5	42	3.7
C79910 [†]	45	1.68	0.4	0.26	1	15.6	51.1	3.3
C79911 [†]	48	1.67	0.3	0.23	1	13.9	37.5	2.7
C79913 [†]	43	1.55	0.4	0.33	1	21.5	60.5	2.8
C79914 [†]	50	1.51	0.4	0.3	1	20.1	52	2.6
C79915 [†]	52	1.6	0.4	0.25	1	15.8	57.7	3.7

Table S1. Continuation.

C79916 [†]	50	1.89	0.3	0.22	1	11.8	44	3.7
C79917 [†]	45	2.18	0.2	0.17	2	7.9	35.6	4.5
C79918 [†]	50	2.31	0.3	0.25	1	10.8	38	3.5
C79919 [†]	46	2.82	0.2	0.19	2	6.8	30.4	4.5
C79922 [†]	44	1.63	0.4	0.26	1	16.1	47.7	3
C79923 [†]	46	1.64	0.3	0.24	1	14.5	41.3	2.9
C79929 [†]	47	1.07	0.5	0.24	1	22.6	68.1	3
C79930 [†]	47	1.39	0.4	0.22	1	16.1	53.2	3.3
C79947 [†]	50	2.51	0.2	0.14	1	5.5	32	5.8
C111768 [‡]	43	1.38	0.4	0.2	1	14.2	62.8	4.4
C111770 [‡]	32	1.89	0.3	0.23	1	11.9	43.8	3.7
C111771 [‡]	34	2.57	0.2	0.21	2	8.1	41.2	5.1
C111772 [‡]	51	2.92	0.2	0.21	2	7.2	41.2	5.8
C111774 [‡]	25	1.78	0.3	0.24	1	13.4	56	4.2
C111777 [‡]	48	3.2	0.1	0.1	2	3.2	18.8	5.8
C111786 [‡]	45	2.46	0.2	0.15	1	6	40	6.6
C111787 [‡]	53	1.5	0.4	0.27	2	18.1	62.3	3.4
C111788 [‡]	41	1.41	0.4	0.3	1	21	58.5	2.8
C79902 [‡]	37	1.42	0.4	0.2	1	13.7	62.2	4.5
C79904 [‡]	50	1.18	0.5	0.32	1	27.5	56	2
C79905 [‡]	43	1.31	0.4	0.24	1	18.1	60.5	3.3
C79907 [‡]	50	2.02	0.3	0.28	2	13.9	56	4

Table S1. Continuation.

C79909 [‡]	41	1.88	0.3	0.19	1	10.1	46.3	4.6
C79910 [‡]	46	1.95	0.3	0.21	1	10.9	50	4.6
C79916 [‡]	34	3.7	0.1	0.12	1	3.1	23.5	7.5
C79919 [‡]	45	1.67	0.3	0.19	1	11.2	44.4	4
C79930 [‡]	40	1.96	0.3	0.28	2	14.2	50	3.5

[‡]Season 2019–2020.

[§]Percent territory = proportion contained in core areas.

[#]Percent use = proportion of locations in core areas.

^{††}Intensity = ratio between percent use and percent territory.

Table S2. Number of birds captured, banded, and re-sighted per breeding season (2018–2022) at two grasslands areas in Southern Brazil. C: capture; X: sighting.

Band number	Sex	2018–2019	2019–2020	2020–2021	2021–2022
C79902	M	C	X	X	
C79903	M	C	X	X	
C79904	M	C	X	X	X
C79905	M	C	X	X	
C79906	M	C	X		
C79907	M	C	X	X	X
C79908	F	C	X	X	X
C79909	M	C	X	X	X
C79910	M	C	X	X	X
C79911	M	C			
C79912	F	C		X	
C79913	M	C	X		
C79914	M	C			
C79915	M	C	X		
C79916	M	C	X		
C79917	M	C			
C79918	M	C			
C79919	M	C	X		
C79922	M	C			
C79923	M	C			X
C79929	M	C		X	X
C79930	M	C	X	X	X
C79933	M	C	X	X	X
C79934	M	C			
C79947	M	C	X		
C79948	M	C	X		X
C79949	M	C	X		X
C111757	M	C	X		
C111761	F	C			
C111762	M	C			
C111768	M		C	X	
C111769	M		C		
C111770	M		C	X	
C111771	M		C		
C111772	M		C	X	
C111773	M		C		
C111774	M		C		
C111775	F		C		
C111776	M		C		
C111777	M		C	X	
C111778	M		C	X	X
C111779	M		C		X

Table S2. Continuation.

C111780	M	C		
C111781	M	C	X	X
C111783	F	C		
C111785	M	C		
C111786	M	C	X	X
C111787	M	C		
C111788	M	C		
C111789	M	C		
C111791	M	C		
C111792	M	C		
C111793	M	C	X	
C111796	F	C		
C111797	M	C		
C111798	M	C		
C111799	M	C		
C57804	F	C		
C57813	M	C	X	X
C57814	F	C		
C57819	M	C		
C110451	M		C	
C110452	M		C	
C110453	F		C	
C110454	M		C	X
C110455	M		C	
C110456	M		C	
C110457	M		C	X
C57820	M		C	
C57821	M		C	X

Fig. S1. Kernel contour of the estimated breeding territory (95th isolines shown) and recorded locations of 15 adult male Chestnut Seedeaters (*Sporophila cinnamomea*) during the breeding season (2018–2019) in the grasslands of Rio Grande do Sul, in the Pampas grasslands of southern Brazil.

