

Appendix 1. Estimated abundance of grassland songbird focal species for each 80-ha sampling cell for 2018 and 2019.

cell	year	grazer	BAIS	GRSP	SPPI	LARB	CCLO	LASP	HOLA	SAVS	VESP	MCLO	BRSP	WEME
1076	2018	cow	0.00	0.00	0.00	6.38	7.99	0.00	11.47	0.00	0.00	0.00	42.66	15.74
1076	2019	cow	0.00	0.00	0.00	10.68	0.00	0.00	69.33	8.48	51.04	0.00	143.02	26.17
1243	2018	cow	0.00	0.00	0.00	19.15	0.00	0.00	11.47	0.00	3.25	0.00	10.67	13.99
1243	2019	cow	0.00	0.00	0.00	7.18	0.00	0.00	32.85	0.00	3.25	0.00	51.44	13.67
1391	2018	cow	0.00	0.00	0.00	0.00	3.99	0.00	20.65	0.00	8.13	0.00	53.33	13.99
1392	2018	cow	0.00	15.13	0.00	2.13	0.00	0.00	16.06	0.00	9.76	0.00	21.33	19.23
1392	2019	cow	0.00	18.46	0.00	10.76	0.00	0.00	26.28	4.58	11.39	0.00	22.86	10.25
1553	2018	cow	0.00	0.00	0.00	2.13	0.00	0.00	13.76	0.00	1.63	0.00	26.66	20.98
1600	2018	bison	12.27	37.81	0.00	0.00	19.96	0.00	11.47	10.47	4.88	0.00	21.33	22.73
1878	2018	cow	0.00	0.00	0.00	116.89	0.00	0.00	50.05	0.00	13.49	0.00	0.00	21.06
1878	2019	cow	0.00	0.00	0.00	5.38	0.00	0.00	32.85	0.00	16.27	0.00	17.15	10.25
1921	2018	bison	0.00	52.94	0.00	0.00	0.00	0.00	4.59	0.00	3.25	0.00	16.00	27.98
1922	2018	cow	0.00	30.25	0.00	0.00	0.00	0.00	9.18	0.00	6.51	0.00	21.33	19.23
1922	2019	cow	0.00	36.92	0.00	0.00	0.00	0.00	19.71	0.00	19.52	0.00	34.29	20.50
2027	2018	cow	0.00	22.69	0.00	0.00	15.97	0.00	6.88	6.98	13.02	0.00	16.00	24.48
2027	2019	cow	0.00	92.30	0.00	0.00	0.00	0.00	13.14	13.73	8.13	0.00	34.29	18.79
2146	2018	cow	0.00	0.00	0.00	23.41	3.99	0.00	25.24	0.00	6.51	0.00	10.67	22.73
2146	2019	cow	0.00	0.00	0.00	28.47	0.00	0.00	69.33	0.00	25.52	0.00	28.60	33.31
2197	2018	cow	0.00	0.00	0.00	132.47	0.00	0.00	0.00	0.00	6.75	0.00	31.95	25.28
2254	2018	cow	0.00	0.00	0.00	19.15	3.99	0.00	11.47	0.00	8.13	0.00	74.66	12.24
2334	2018	cow	10.22	60.50	5.60	0.00	55.90	0.00	6.88	6.98	0.00	0.00	0.00	12.24
2334	2019	cow	54.12	163.76	10.68	0.00	86.06	0.00	0.00	16.66	0.00	0.00	0.00	11.62
2648	2018	cow	18.40	45.38	5.60	0.00	39.93	0.00	0.00	10.47	0.00	0.00	0.00	8.74
2648	2019	cow	38.66	93.57	10.68	0.00	86.06	0.00	0.00	38.88	0.00	0.00	0.00	29.04
2673	2018	cow	0.00	0.00	0.00	155.85	0.00	0.00	100.10	0.00	26.99	0.00	53.25	21.06
2845	2018	bison	0.00	168.97	0.00	15.59	0.00	0.00	16.68	0.00	40.48	0.00	31.95	46.34
2846	2018	bison	2.04	68.07	0.00	14.90	0.00	0.00	0.00	0.00	6.51	0.00	0.00	19.23
2847	2018	bison	0.00	68.07	0.00	6.38	0.00	0.00	11.47	0.00	9.76	0.00	0.00	27.98
2847	2019	bison	0.00	74.47	69.94	0.00	0.00	0.00	0.00	0.00	31.90	0.00	0.00	35.69

2881	2018	cow	0.00	42.24	0.00	116.89	0.00	27.09	116.78	0.00	13.49	0.00	0.00	46.34
2947	2018	bison	0.00	22.69	0.00	0.00	0.00	0.00	0.00	0.00	8.13	0.00	5.33	15.74
2947	2019	bison	0.00	92.30	0.00	1.79	0.00	0.00	0.00	0.00	13.01	0.00	22.86	22.21
3133	2018	cow	0.00	126.73	0.00	0.00	54.70	18.06	16.68	0.00	40.48	0.00	31.95	54.77
3133	2019	cow	15.75	0.00	19.97	0.00	0.00	0.00	0.00	0.00	9.76	0.00	0.00	17.09
333	2018	cow	0.00	15.13	0.00	44.69	0.00	0.00	20.65	0.00	4.88	0.00	16.00	15.74
333	2019	cow	0.00	0.00	0.00	3.59	4.13	0.00	39.42	0.00	9.76	0.00	34.29	11.96
3368	2018	cow	0.00	0.00	0.00	17.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.48
3368	2019	cow	0.00	0.00	0.00	13.37	0.00	0.00	0.00	0.00	7.42	0.00	0.00	104.69
3767	2018	cow	0.00	126.73	0.00	0.00	54.70	9.03	16.68	0.00	26.99	0.00	21.30	37.91
3767	2019	cow	0.00	93.57	5.34	0.00	0.00	0.00	0.00	0.00	9.21	0.00	0.00	31.94
3791	2018	cow	0.00	0.00	0.00	54.55	0.00	27.09	16.68	0.00	26.99	0.00	74.55	50.55
3791	2019	cow	0.00	0.00	0.00	32.06	0.00	0.00	9.85	0.00	7.32	0.00	14.29	66.11
3978	2018	cow	0.00	295.70	16.62	0.00	54.70	0.00	16.68	0.00	33.73	0.00	0.00	58.98
3978	2019	cow	30.92	187.15	7.12	0.00	0.00	0.00	0.00	0.00	23.03	0.00	0.00	29.04
4248	2018	bison	0.00	0.00	0.00	109.10	0.00	0.00	33.37	0.00	20.24	0.00	42.60	46.34
4248	2019	bison	0.00	23.39	0.00	17.15	0.00	0.00	5.41	0.00	16.12	0.00	25.72	23.23
4458	2018	bison	0.00	22.69	0.00	8.51	0.00	0.00	13.76	0.00	4.88	0.00	16.00	22.73
4458	2019	bison	0.00	70.18	0.00	20.58	0.00	0.00	5.41	0.00	9.21	0.00	5.14	37.75
4461	2018	bison	0.00	0.00	0.00	2.13	0.00	0.00	0.00	0.00	14.64	0.00	48.00	22.73
4461	2019	bison	0.00	0.00	0.00	6.86	0.00	0.00	0.00	0.00	16.12	0.00	15.43	40.66
4660	2018	bison	0.00	0.00	0.00	38.96	0.00	0.00	83.41	0.00	20.24	0.00	74.55	46.34
4660	2019	bison	0.00	49.65	0.00	0.00	0.00	0.00	17.33	0.00	76.56	0.00	100.12	38.07
4672	2018	bison	0.00	0.00	0.00	0.00	0.00	0.00	4.59	0.00	4.88	0.00	58.66	27.98
4672	2019	bison	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.18	0.00	214.54	42.83
4682	2018	cow	0.00	168.97	0.00	0.00	0.00	0.00	0.00	0.00	26.99	0.00	106.50	50.55
4682	2019	cow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.42	0.00	85.81	47.58
4767	2018	bison	0.00	126.73	0.00	0.00	0.00	9.03	0.00	0.00	40.48	0.00	42.60	50.55
4767	2019	bison	0.00	74.47	0.00	0.00	0.00	0.00	52.00	0.00	70.18	0.00	57.21	42.83
4771	2018	bison	0.00	7.56	0.00	2.13	0.00	16.23	0.00	0.00	9.76	0.00	16.00	22.73
4771	2019	bison	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.88	0.00	11.43	11.96
510	2018	cow	0.00	0.00	0.00	0.00	11.98	0.00	2.29	0.00	1.63	0.00	21.33	19.23

510	2019	cow	0.00	0.00	0.00	0.00	15.43	0.00	69.33	0.00	44.66	0.00	200.23	33.31
5157	2018	cow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.24	0.00	42.60	54.77
546	2018	cow	0.00	0.00	0.00	36.18	0.00	0.00	25.24	0.00	1.63	2.75	0.00	10.49
546	2019	cow	0.00	0.00	0.00	0.00	0.00	0.00	26.28	0.00	13.01	0.00	5.72	3.42
722	2018	cow	0.00	7.56	0.00	0.00	43.92	0.00	6.88	0.00	4.88	0.00	26.66	22.73
722	2019	cow	0.00	0.00	0.00	3.56	169.72	0.00	138.65	0.00	19.14	0.00	57.21	45.21
831	2018	cow	0.00	0.00	0.00	0.00	3.99	0.00	4.59	0.00	6.51	0.00	32.00	19.23
831	2019	cow	0.00	46.79	0.00	0.00	0.00	0.00	5.41	0.00	16.12	0.00	77.15	23.23
Grass01	2019	bison	92.95	148.94	17.49	0.00	231.43	0.00	34.66	0.00	6.38	0.00	0.00	35.69
Grass02	2019	bison	0.00	0.00	0.00	0.00	200.58	0.00	329.30	0.00	25.52	108.33	0.00	26.17
Grass03	2019	none	0.00	42.68	0.00	32.04	0.00	0.00	0.00	0.00	13.39	0.00	0.00	226.34
Grass04	2019	none	0.00	0.00	0.00	5.34	0.00	0.00	0.00	0.00	6.70	0.00	0.00	204.79
Grass11	2019	cow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.88	0.00	57.60	161.67
Grass12	2019	cow	0.00	18.46	0.00	0.00	0.00	542.67	0.00	0.00	4.88	0.00	45.72	17.09
Grass13	2019	cow	0.00	0.00	8.74	15.43	0.00	0.00	48.18	0.00	42.88	0.00	102.37	27.08
Grass14	2019	cow	0.00	0.00	0.00	6.86	0.00	0.00	21.62	0.00	18.43	0.00	15.43	29.04
Grass16	2019	cow	52.50	55.38	89.88	0.00	12.40	0.00	6.57	9.15	0.00	0.00	0.00	15.38
Grass17	2019	cow	46.39	46.79	7.12	0.00	0.00	0.00	0.00	38.88	4.61	0.00	0.00	23.23
Grass18	2019	cow	42.00	110.76	69.91	0.00	16.54	0.00	13.14	13.73	3.25	0.00	0.00	15.38
Grass19	2019	cow	0.00	24.82	0.00	0.00	46.29	0.00	138.65	0.00	63.80	0.00	71.51	45.21
Grass21	2019	cow	0.00	163.76	0.00	0.00	0.00	0.00	27.03	0.00	25.33	0.00	15.43	26.14
Grass22	2019	bison	0.00	0.00	0.00	0.00	0.00	271.33	0.00	0.00	4.88	0.00	62.87	13.67
PD10	2019	bison	10.50	0.00	0.00	0.00	0.00	0.00	13.14	0.00	0.00	0.00	0.00	10.25
PD100	2019	bison	5.25	0.00	0.00	0.00	37.21	0.00	39.42	0.00	4.88	2.09	11.43	8.54
PD11	2019	cow	0.00	0.00	0.00	10.29	38.25	0.00	59.46	0.00	4.61	0.00	5.14	23.23
PD12	2019	cow	0.00	0.00	0.00	46.26	0.00	0.00	155.99	0.00	38.28	0.00	42.91	26.17
PD17	2019	cow	0.00	0.00	0.00	0.00	0.00	0.00	86.66	0.00	51.04	0.00	0.00	49.96
PD22	2019	bison	31.76	135.23	20.39	0.00	250.88	0.00	20.96	47.97	19.26	0.00	33.94	88.93
PD23	2019	bison	0.00	73.04	0.89	3.43	0.00	0.00	59.55	13.89	0.00	0.00	14.30	28.01
PD24	2019	cow	0.00	0.00	0.00	13.35	19.12	0.00	87.56	0.00	18.00	0.00	39.09	63.64
PD4	2019	bison	0.00	23.39	0.00	0.00	0.00	0.00	43.24	0.00	20.73	0.00	15.43	23.23
PD44	2019	bison	0.00	148.94	34.97	0.00	0.00	0.00	52.00	0.00	70.18	0.00	0.00	28.55

PD48	2019	cow	0.00	46.79	1.78	3.43	28.69	0.00	43.24	0.00	9.21	0.00	0.00	26.14
SB02	2019	bison	30.92	46.79	1.78	0.00	38.25	0.00	32.43	5.55	9.21	0.00	0.00	20.33