

## Supplementary Material Appendix 2

June 13, 2019

Gerber, B. D., M. B. Hooten, C. P. Peck, M. B. Rice, J. H. Gammonley, A. D. Apa, and A. J. Davis. 2019. Extreme site fidelity as an optimal strategy in an unpredictable and homogeneous environment.

Table A1: Data table displaying the number of telemetry locations, the number of total azimuths for all telemetry locations, the number of aerial locations, and the number of known locations for each Gunnison sage-grouse by year and season

Id	Bird ID	Year	Season	Telemetry Locations	Azimuths	Aerial Locations	Known Locations
1	GB0403	2004	Breeding	11	29	0	0
2	GB0403	2004	Brooding	20	60	0	0
3	GB0403	2005	Breeding	10	30	1	10
4	GB0414	2004	Breeding	12	35	0	0
5	GB0414	2004	Brooding	21	63	0	0
6	GB0415	2005	Breeding	14	79	0	7
7	GB0415	2005	Brooding	12	61	0	3
8	GB0502	2005	Breeding	15	48	2	5
9	GB0502	2005	Brooding	24	99	0	1
10	GB0502	2006	Breeding	37	183	0	1
11	GB0502	2006	Brooding	31	131	0	1
12	GB0503	2005	Breeding	14	44	1	16
13	GB0503	2005	Brooding	15	53	1	2
14	GB0505	2005	Breeding	16	53	2	5
15	GB0505	2005	Brooding	18	81	0	1
16	GB0506	2005	Breeding	15	54	1	8
17	GB0506	2005	Brooding	23	89	0	0
18	GB0506	2006	Breeding	31	131	1	1
19	GB0506	2006	Brooding	30	137	1	6
20	GB0506	2007	Breeding	23	85	0	0
21	GB0506	2007	Brooding	27	103	0	0
22	GB0506	2008	Brooding	25	89	0	3
23	GB0506	2009	Brooding	15	48	1	0
24	GB0506	2010	Breeding	26	101	0	1
25	GB0507	2005	Breeding	10	34	0	8
26	GB0507	2005	Brooding	23	92	0	0
27	GB0507	2006	Brooding	27	117	0	0
28	GB0507	2007	Breeding	45	168	0	1
29	GB0507	2007	Brooding	50	197	0	4
30	GB0507	2008	Brooding	14	60	0	3
31	GB0507	2009	Breeding	16	63	0	0
32	GB0507	2009	Brooding	12	50	1	1
33	GB0507	2010	Breeding	10	42	0	1
34	GB0507	2010	Brooding	17	62	0	2
35	GB0508	2005	Breeding	22	77	1	3

36	GB0508	2005	Brooding	18	82	0	0
37	GB0510	2005	Breeding	9	35	1	11
38	GB0510	2005	Brooding	23	91	0	0
39	GB0510	2006	Breeding	23	93	0	4
40	GB0510	2006	Brooding	26	102	0	1
41	GB0510	2007	Breeding	24	102	0	1
42	GB0513	2005	Breeding	16	48	1	12
43	GB0513	2005	Brooding	16	64	1	4
44	GB0513	2006	Breeding	19	75	0	3
45	GB0513	2006	Brooding	27	103	0	2
46	GB0613	2006	Breeding	9	57	1	2
47	GB0613	2006	Brooding	25	120	1	0
48	GB0616	2006	Breeding	17	107	0	3
49	GB0616	2006	Brooding	25	115	0	2
50	GB0618	2006	Breeding	9	37	0	2
51	GB0618	2006	Brooding	22	96	0	0
52	GB0620	2006	Breeding	9	42	0	2
53	GB0620	2006	Brooding	22	93	0	3
54	GB0620	2007	Breeding	13	45	0	3
55	GB0620	2007	Brooding	42	164	0	3
56	GB0620	2008	Brooding	19	79	0	0
57	GB0620	2009	Breeding	8	35	0	2
58	GB0620	2009	Brooding	12	47	1	2
59	GB0620	2010	Breeding	12	42	0	1
60	GB0624	2006	Breeding	32	131	0	2
61	GB0624	2006	Brooding	18	70	0	0
62	GB0627	2006	Breeding	15	57	0	1
63	GB0627	2006	Brooding	19	73	0	1
64	GB0627	2007	Breeding	25	103	0	0
65	GB0627	2007	Brooding	46	183	0	1
66	GB0628	2006	Breeding	15	61	1	1
67	GB0628	2006	Brooding	13	52	0	1
68	GB0630	2006	Breeding	9	35	1	2
69	GB0630	2006	Brooding	9	38	1	3
70	GB0631	2006	Breeding	22	89	0	3
71	GB0631	2006	Brooding	24	102	0	0
72	GB0632	2006	Breeding	23	89	0	2
73	GB0632	2006	Brooding	19	72	0	0
74	GB0634	2006	Breeding	20	79	0	1
75	GB0634	2006	Brooding	18	72	0	1
76	GB0636	2006	Breeding	19	70	0	2
77	GB0636	2006	Brooding	29	110	2	0
78	GB0636	2007	Breeding	43	164	0	1
79	GB0636	2007	Brooding	41	143	0	3
80	GB0636	2008	Breeding	18	85	0	1
81	GB0636	2008	Brooding	14	56	0	3
82	GB0640	2006	Breeding	25	96	0	2
83	GB0640	2007	Breeding	10	37	0	1
84	GB0641	2006	Breeding	28	112	0	3
85	GB0641	2007	Breeding	35	118	0	1
86	GB0641	2007	Brooding	27	82	0	0
87	GB0703	2007	Breeding	33	129	0	6
88	GB0703	2007	Brooding	43	153	0	5
89	GB0703	2008	Breeding	13	61	0	2

90	GB0703	2008	Brooding	11	43	0	6
91	GB0708	2007	Breeding	24	83	0	1
92	GB0708	2007	Brooding	30	116	0	0
93	GB0709	2007	Breeding	23	81	0	1
94	GB0709	2007	Brooding	29	112	0	0
95	GB0709	2008	Brooding	31	130	0	3
96	GB0710	2007	Breeding	24	90	0	1
97	GB0710	2007	Brooding	28	110	0	0
98	GB0710	2008	Brooding	27	105	0	2
99	GB0710	2009	Breeding	9	35	0	1
100	GB0711	2007	Breeding	17	52	0	1
101	GB0711	2007	Brooding	28	85	0	5
102	GB0712	2007	Breeding	34	128	0	5
103	GB0712	2007	Brooding	41	151	0	3
104	GB0713	2007	Breeding	32	138	0	1
105	GB0713	2007	Brooding	45	178	0	0
106	GB0714	2007	Breeding	39	131	0	5
107	GB0714	2007	Brooding	23	69	0	14
108	GB0716	2007	Breeding	18	56	1	0
109	GB0716	2007	Brooding	35	106	0	5
110	GB0717	2008	Breeding	9	45	0	1
111	GB0717	2008	Brooding	12	48	0	2
112	GB0718	2007	Breeding	29	91	0	4
113	GB0718	2007	Brooding	23	69	0	2
114	GB0718	2008	Breeding	14	62	0	1
115	GB0718	2008	Brooding	12	51	1	0
116	GB0718	2009	Brooding	20	64	1	3
117	GB0721	2007	Breeding	38	151	0	1
118	GB0721	2007	Brooding	45	163	0	0
119	GB0721	2008	Brooding	24	97	0	4
120	GB0721	2009	Breeding	30	132	0	3
121	GB0721	2009	Brooding	21	85	1	2
122	GB0721	2010	Breeding	38	173	0	1
123	GB0721	2010	Brooding	27	105	0	0
124	GB0722	2007	Breeding	21	78	0	0
125	GB0722	2007	Brooding	46	165	0	0
126	GB0722	2008	Breeding	10	48	0	3
127	GB0722	2008	Brooding	14	58	0	3
128	GB0722	2009	Breeding	18	73	0	2
129	GB0723	2007	Breeding	10	33	0	0
130	GB0723	2007	Brooding	16	48	0	0
131	GB0724	2007	Breeding	33	123	0	2
132	GB0724	2007	Brooding	34	123	0	0
133	GB0724	2008	Breeding	15	63	0	3
134	GB0724	2008	Brooding	10	42	1	0
135	GB0725	2007	Breeding	37	157	0	2
136	GB0725	2007	Brooding	34	111	0	0
137	GB0727	2007	Breeding	20	76	1	1
138	GB0727	2007	Brooding	18	58	0	0
139	GB0728	2007	Brooding	18	56	0	0
140	GB0728	2008	Brooding	25	97	0	4
141	GB0731	2007	Breeding	20	79	2	0
142	GB0731	2007	Brooding	39	139	0	3
143	GB0731	2008	Breeding	22	106	0	1

144	GB0731	2008	Brooding	26	102	0	2
145	GB0731	2009	Breeding	15	62	0	1
146	GB0731	2009	Brooding	20	68	1	1
147	GB0732	2007	Breeding	23	91	0	0
148	GB0732	2007	Brooding	42	148	0	2
149	GB0732	2008	Breeding	24	113	0	1
150	GB0732	2008	Brooding	12	51	0	1
151	GB0732	2009	Breeding	15	67	0	2
152	GB0732	2009	Brooding	13	44	1	1
153	GB0732	2010	Breeding	34	152	0	4
154	GB0732	2010	Brooding	26	108	1	0
155	GB0734	2007	Breeding	18	63	0	1
156	GB0734	2007	Brooding	37	121	0	0
157	GB0734	2008	Brooding	14	53	0	2
158	GB0734	2009	Breeding	12	50	0	3
159	GB0741	2008	Breeding	11	51	0	2
160	GB0741	2008	Brooding	15	66	0	2
161	GB0741	2009	Breeding	31	119	0	1
162	GB0741	2009	Brooding	15	62	0	1
163	GB0804	2008	Breeding	14	60	1	3
164	GB0804	2008	Brooding	27	113	0	1
165	GB0804	2009	Breeding	23	106	0	2
166	GB0804	2009	Brooding	22	93	1	1
167	GB0804	2010	Breeding	19	75	0	2
168	GB0804	2010	Brooding	12	48	1	1
169	GB0805	2008	Brooding	22	92	0	2
170	GB0805	2009	Breeding	20	82	0	2
171	GB0805	2009	Brooding	24	98	1	1
172	GB0805	2010	Breeding	10	40	0	0
173	GB0805	2010	Brooding	14	58	1	0
174	GB0806	2008	Breeding	14	59	0	1
175	GB0806	2008	Brooding	21	89	0	0
176	GB0808	2008	Breeding	14	67	0	2
177	GB0808	2008	Brooding	12	47	0	0
178	GB0811	2008	Breeding	11	50	0	3
179	GB0811	2008	Brooding	25	101	0	3
180	GB0813	2008	Breeding	9	36	0	4
181	GB0813	2008	Brooding	27	114	0	0
182	GB0815	2008	Breeding	11	45	0	0
183	GB0815	2008	Brooding	27	104	0	0
184	GB0815	2009	Breeding	7	28	0	3
185	GB0815	2009	Brooding	7	37	1	2
186	GB0815	2010	Breeding	10	41	0	1
187	GB0818	2008	Breeding	12	54	0	1
188	GB0818	2008	Brooding	23	90	0	1
189	GB0818	2010	Breeding	23	89	0	2
190	GB0818	2010	Brooding	11	44	0	0
191	GB0820	2008	Brooding	9	33	1	2
192	GB0820	2009	Breeding	23	93	0	4
193	GB0820	2009	Brooding	11	44	1	0
194	GB0820	2010	Brooding	15	58	1	0
195	GB0821	2008	Brooding	18	73	1	1
196	GB0821	2009	Breeding	15	63	0	0
197	GB0821	2009	Brooding	21	83	1	3

198	GB0821	2010	Breeding	20	71	0	1
199	GB0821	2010	Brooding	13	48	1	2
200	GB0822	2008	Breeding	11	56	0	1
201	GB0822	2008	Brooding	20	81	0	0
202	GB0822	2009	Breeding	19	83	0	1
203	GB0824	2008	Breeding	13	56	0	1
204	GB0824	2009	Brooding	16	60	0	1
205	GB0828	2008	Breeding	15	73	0	1
206	GB0828	2010	Brooding	11	44	0	0
207	GB0904	2009	Breeding	11	46	0	1
208	GB0904	2009	Brooding	13	40	0	0
209	GB0908	2009	Breeding	17	68	0	1
210	GB0908	2009	Brooding	19	64	1	0
211	GB0910	2010	Breeding	10	44	0	3
212	GB0910	2010	Brooding	9	36	1	1
213	GB0911	2009	Brooding	21	81	1	0
214	GB0911	2010	Breeding	16	69	0	1
215	GB0911	2010	Brooding	8	31	0	3
216	GB0913	2009	Breeding	19	83	0	3
217	GB0913	2009	Brooding	21	80	1	0
218	GB0913	2010	Breeding	18	67	0	2
219	GB0913	2010	Brooding	10	38	1	1
220	GB0915	2009	Breeding	12	43	0	2
221	GB0915	2009	Brooding	11	44	1	0
222	GB0915	2010	Breeding	33	125	0	1
223	GB0915	2010	Brooding	18	62	0	0
224	GB0916	2009	Breeding	21	91	0	2
225	GB0916	2009	Brooding	18	71	1	0
226	GB0917	2009	Breeding	15	59	0	0
227	GB0917	2009	Brooding	13	55	1	1
228	GB0917	2010	Breeding	13	52	0	1
229	GB0917	2010	Brooding	18	73	0	1
230	GB0918	2009	Breeding	14	50	0	1
231	GB0918	2009	Brooding	13	50	1	0
232	GB0918	2010	Breeding	25	95	0	1
233	GB0918	2010	Brooding	21	75	0	0
234	GB0920	2009	Breeding	17	72	0	3
235	GB0920	2009	Brooding	13	55	1	1
236	GB0921	2009	Breeding	25	102	0	2
237	GB0921	2009	Brooding	23	80	1	0
238	GB0921	2010	Breeding	30	123	0	2
239	GB0921	2010	Brooding	25	113	1	0
240	GB0922	2009	Breeding	31	135	0	2
241	GB0922	2009	Brooding	26	89	1	0
242	GB0922	2010	Breeding	31	143	0	3
243	GB0922	2010	Brooding	27	109	1	0
244	GB0923	2009	Breeding	16	65	0	0
245	GB0923	2009	Brooding	14	58	1	1
246	GB0923	2010	Breeding	16	56	0	1
247	GB0923	2010	Brooding	17	70	1	1
248	GB0924	2009	Breeding	24	108	0	3
249	GB0924	2009	Brooding	22	93	1	0
250	GB0924	2010	Breeding	12	48	0	1
251	GB0925	2009	Breeding	15	57	0	0

252	GB0925	2009	Brooding	13	51	1	0
253	GB0925	2010	Breeding	12	57	0	2
254	GB0925	2010	Brooding	15	60	0	0
255	GB0927	2009	Breeding	29	127	0	1
256	GB0927	2009	Brooding	20	82	0	3
257	GB0928	2010	Breeding	16	63	0	1
258	GB0928	2010	Brooding	11	48	0	0
259	GB0929	2009	Breeding	25	101	0	1
260	GB0929	2009	Brooding	15	54	1	0
261	GB0929	2010	Breeding	13	55	0	2
262	GB0929	2010	Brooding	15	55	1	0
263	GB0931	2010	Breeding	12	48	0	1
264	GB0931	2010	Brooding	14	57	1	2
265	GB0932	2010	Breeding	20	86	0	5
266	GB0932	2010	Brooding	14	56	1	0
267	GB0933	2009	Breeding	21	84	0	1
268	GB0933	2009	Brooding	16	69	1	0
269	GB0933	2010	Breeding	36	142	0	1
270	GB0933	2010	Brooding	14	56	1	1
271	GB0935	2010	Breeding	17	69	0	2
272	GB0935	2010	Brooding	17	69	1	2
273	GB0936	2009	Breeding	25	100	0	1
274	GB0936	2009	Brooding	16	60	1	0
275	GB0936	2010	Brooding	10	38	0	1
276	GB0937	2009	Breeding	20	85	0	3
277	GB0937	2009	Brooding	10	43	1	0
278	GB0974	2009	Breeding	17	65	0	1
279	GB0974	2010	Breeding	14	57	0	2
280	GB0974	2010	Brooding	19	75	1	0
281	GB0991	2010	Breeding	30	113	0	2
282	GB0991	2010	Brooding	21	69	0	2
283	GB1005	2010	Breeding	22	84	0	2
284	GB1005	2010	Brooding	15	57	0	0
285	GB1007	2010	Breeding	27	104	0	1
286	GB1007	2010	Brooding	11	44	0	2
287	GB1008	2010	Breeding	10	39	0	0
288	GB1008	2010	Brooding	10	41	0	1
289	GB1009	2010	Breeding	15	59	0	0
290	GB1009	2010	Brooding	19	77	0	2
291	GB1014	2010	Breeding	25	110	0	0
292	GB1014	2010	Brooding	27	110	0	0
293	GB1016	2010	Breeding	13	49	0	2
294	GB1016	2010	Brooding	16	64	0	0
295	GB1031	2010	Breeding	33	149	0	1
296	GB1031	2010	Brooding	27	105	0	0
297	GB1035	2010	Breeding	32	142	0	1
298	GB1035	2010	Brooding	22	91	0	0

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