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Wildlife Research

Supplementary Material

Movement ecology of adult and juvenile spotted turtles (*Clemmys guttata*) in a seasonally dynamic environment

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Supplemental Materials

Supplemental Table S1. Home-range estimates (ha) for individual spotted turtles (*Clemmys guttata*), estimated using 1) minimum convex polygon (MCP), 2) 95% bivariate kernel density estimate (KDE), and 3) 95% autocorrelated kernel density estimate (AKDE) with 95% confidence intervals (CI). Additional intrinsic turtle characteristics, age and sex, and year are also included. Data are derived from spotted turtle radio-telemetry conducted from 2016-2019 in Virginia, USA.

ID	Year	Sex	Age	MCP	KDE	AKDE	LowerC I	UpperC I
7	2017	F	A	0.22	0.47	0.34	0.23	0.47
7	2019	F	A	0.96	2.04	1.52	1.09	2.02
13	2016	F	A	0.18	1.01	0.46	0.24	0.73
15	2018	F	A	1.51	3.49	2.66	1.29	4.50
22	2016	F	A	1.35	3.04	2.34	0.00	4.15
24	2018	F	A	3.53	7.22	5.83	3.59	8.61
28	2017	F	A	2.62	5.26	2.70	1.64	4.00
42	2017	F	A	3.05	4.77	4.67	3.05	6.62
42	2018	F	A	1.41	3.15	2.76	1.81	3.92
42	2019	F	A	0.87	2.61	2.21	1.16	3.60
49	2017	F	A	2.36	4.22	3.80	2.32	5.64
72	2017	F	A	5.51	12.97	8.11	5.09	11.80
92	2017	F	A	4.53	7.87	6.28	3.46	9.93
94	2017	F	A	4.81	8.99	10.21	4.23	18.78
102	2017	F	A	1.32	4.83	2.16	1.38	3.10
102	2018	F	A	0.20	0.66	0.30	0.19	0.44
142	2019	F	A	2.12	8.46	7.05	1.95	15.36
148	2018	F	A	5.26	16.31	12.75	6.41	21.24
217	2018	F	A	11.09	36.77	26.53	10.18	50.57
233	2018	F	A	1.90	5.64	3.66	1.46	6.84
239	2019	F	A	1.54	5.15	3.07	1.72	4.81

252	2019	F	A	0.17	0.35	0.98	0.28	2.12
266	2018	F	A	7.28	17.63	18.18	7.40	33.72
4	2016	M	A	0.55	0.90	0.70	0.45	1.00
4	2017	M	A	1.91	3.27	4.83	1.96	8.97
4	2018	M	A	1.50	1.68	1.50	1.01	2.09
4	2019	M	A	0.41	1.19	0.74	0.51	1.00
9	2017	M	A	2.16	3.74	3.86	2.43	5.61
9	2018	M	A	1.45	2.90	2.79	1.81	3.97
9	2019	M	A	1.97	4.05	3.69	2.29	5.41
12	2016	M	A	1.21	3.34	3.38	1.02	7.13
12	2017	M	A	1.85	7.38	3.76	2.32	5.54
14	2016	M	A	0.67	1.68	1.49	0.78	2.42
17	2016	M	A	53.14	381.29	451.00	68.23	1187.65
17	2018	M	A	0.35	0.75	0.54	0.38	0.74
20	2018	M	A	5.49	19.55	9.59	5.61	14.61
51	2017	M	A	0.39	1.01	0.86	0.46	1.38
53	2017	M	A	4.62	9.26	10.07	4.69	17.46
61	2017	M	A	1.66	2.40	2.58	1.80	3.50
63	2017	M	A	2.23	4.21	3.64	2.32	5.24
69	2017	M	A	1.26	3.88	3.69	1.60	6.63
76	2017	M	A	3.01	1.85	1.80	1.41	2.24
83	2017	M	A	1.89	5.07	3.66	2.22	5.44
101	2017	M	A	0.38	0.77	0.70	0.46	0.99
101	2018	M	A	3.66	10.05	9.26	4.19	16.30
101	2019	M	A	2.13	20.21	5.09	2.63	8.35
103	2017	M	A	0.53	0.81	0.68	0.51	0.87
123	2018	M	A	5.34	35.92	29.75	8.03	65.45
123	2019	M	A	0.15	0.49	0.26	0.17	0.37
143	2018	M	A	4.64	10.04	9.51	4.52	16.32
181	2019	M	A	2.04	7.18	4.23	2.67	6.15

228	2018	M	A	4.85	11.70	9.29	5.76	13.63
231	2018	M	A	56.74	166.10	304.90	82.57	669.77
7020	2019	M	A	1.11	4.49	2.91	1.62	4.58
37	2018	J	J	1.52	7.44	4.31	1.83	7.83
37	2019	J	J	0.61	1.68	1.30	0.77	1.96
160	2018	J	J	4.83	6.78	5.07	3.71	6.63
162	2018	J	J	0.57	2.03	1.30	0.72	2.04
162	2019	J	J	0.93	3.31	2.42	1.40	3.71
180	2018	J	J	0.11	0.19	0.16	0.10	0.23
234	2018	J	J	0.28	0.33	0.25	0.18	0.33
242	2019	J	J	2.13	3.93	2.47	1.67	3.43
284	2018	J	J	0.27	1.09	0.83	0.28	1.68
285	2018	J	J	0.35	0.75	0.70	0.36	1.15
287	2018	J	J	0.70	1.41	3.16	0.50	8.20
288	2018	J	J	0.15	0.44	0.30	0.19	0.44
298	2018	J	J	0.52	5.12	2.59	1.03	4.84
298	2019	J	J	0.37	1.98	0.82	0.47	1.25
300	2017	J	J	1.06	3.40	1.90	1.12	2.87
300	2018	J	J	1.00	2.81	1.98	1.02	3.24
300	2019	J	J	0.68	2.53	2.31	0.75	4.74
313	2019	J	J	0.07	0.80	0.24	0.10	0.43
361	2019	J	J	1.36	5.88	4.75	1.72	9.30
363	2019	J	J	0.12	0.72	0.35	0.19	0.55
365	2019	J	J	0.17	0.75	0.34	0.18	0.54
377	2019	J	J	0.69	4.30	2.44	1.03	4.46

Supplemental Figure S1. Spatial overlap of five individual spotted turtle (*Clemmys guttata*) home-range distributions (autocorrelated kernel density estimate) at a single site in a given year. Data is derived from spotted turtle radio-telemetry conducted from 2016-2019 in Virginia.

