

Supplementary Information

Table S1. Sampling sites (camera IDs), site-level covariates and white-tailed deer detections.

Cam. ID	Sector	lon (W)	lat (N)	Sampling Effort (cam./days)	Detection Zone Area (sq.m)	Elevation (m)	Habitat _1	Habitat _2	Habitat _3	dist. trail (m)	decay dist. ($\alpha=10$)	Trail Density (m)	Deer Detections (n)
1	preservation	-73.15	45.54	16.94	26.77	278.71	-2.16	0.59	0.20	525.72	0.98	0.00	27
2	preservation	-73.15	45.54	16.95	11.29	265.09	-1.86	0.44	-0.27	481.40	0.98	0.00	17
3	preservation	-73.15	45.54	16.97	9.11	252.71	-1.35	0.07	-0.56	587.12	0.98	0.00	13
5	preservation	-73.14	45.54	16.99	28.76	179.88	-0.58	0.26	-0.63	816.75	0.99	0.00	17
6	service	-73.15	45.54	15.62	12.45	136.44	0.40	1.04	2.31	575.96	0.98	0.00	28
7	preservation	-73.15	45.55	16.66	65.83	185.88	0.03	0.88	-0.53	200.77	0.95	0.00	12
8	preservation	-73.15	45.55	16.67	11.97	194.28	0.18	0.83	-0.57	209.27	0.95	0.00	4
9	public	-73.16	45.55	17.93	19.68	205.65	1.87	-0.07	-0.24	36.79	0.76	58.15	17
10	public	-73.16	45.55	17.95	18.78	219.31	1.85	0.01	-0.40	30.24	0.72	79.83	31
12	public	-73.16	45.55	18.00	25.72	209.88	1.49	0.21	-0.93	18.62	0.58	86.50	9
13	public	-73.15	45.55	18.02	18.33	202.30	0.89	0.52	-0.76	70.45	0.87	0.00	19
14	public	-73.16	45.55	16.72	54.53	202.92	1.71	-0.10	0.03	103.85	0.91	0.00	38
15	public	-73.16	45.55	18.08	32.53	173.48	2.33	-0.61	0.59	101.21	0.91	0.00	61
17	public	-73.16	45.55	17.91	22.75	188.86	2.29	-0.60	0.62	49.21	0.82	20.30	62
18	public	-73.16	45.54	17.88	17.93	188.78	2.55	-0.74	1.01	62.38	0.85	0.00	41
19	public	-73.16	45.54	17.87	29.43	189.96	2.25	-0.06	1.83	40.02	0.78	76.04	51
21	preservation	-73.15	45.56	23.90	14.70	225.97	1.30	-0.14	-0.96	29.83	0.72	87.79	1
22	preservation	-73.15	45.56	23.95	24.78	183.97	1.36	0.20	-0.52	203.63	0.95	0.00	18

Cam. ID	Sector	lon (W)	lat (N)	Sampling Effort (cam./days)	Detection Zone Area (sq.m)	Elevation (m)	Habitat _1	Habitat _2	Habitat _3	dist. trail (m)	decay dist. ($\alpha=10$)	Trail Density (m)	Deer Detections (n)
23	preservation	-73.15	45.56	23.01	6.36	152.87	0.45	0.42	0.69	374.01	0.97	0.00	11
24	preservation	-73.15	45.56	23.92	30.29	214.70	0.65	-0.40	-0.49	51.41	0.82	0.00	7
25	public	-73.16	45.56	24.00	21.16	242.78	-0.04	-1.46	-1.04	52.08	0.83	0.00	9
26	public	-73.16	45.56	24.03	30.66	269.31	0.30	-1.04	-1.11	40.45	0.78	62.48	14
27	public	-73.16	45.56	24.07	29.79	294.65	-0.67	-1.60	-1.18	19.20	0.59	91.58	9
28	public	-73.17	45.56	23.60	15.15	388.78	0.48	-0.29	-0.13	33.51	0.74	67.73	15
29	public	-73.16	45.55	23.63	23.67	323.44	0.38	-0.32	-0.94	35.35	0.75	54.05	15
30	public	-73.16	45.55	23.66	5.65	207.58	1.11	0.50	-0.79	27.06	0.69	90.19	1
31	preservation	-73.15	45.56	21.02	4.23	299.03	0.65	-0.19	-0.94	192.47	0.95	0.00	3
32	preservation	-73.14	45.55	21.03	13.61	363.29	0.75	-0.12	-0.93	501.31	0.98	0.00	4
33	preservation	-73.15	45.55	21.06	17.78	317.90	0.57	0.22	-0.80	458.18	0.98	0.00	11
34	preservation	-73.15	45.55	21.07	16.09	309.60	0.31	0.54	-0.67	391.77	0.97	0.00	14
35	preservation	-73.14	45.55	21.10	37.22	338.91	0.63	0.32	-0.78	602.60	0.98	0.00	17
36	preservation	-73.14	45.55	21.11	13.83	369.43	0.90	0.58	-0.74	845.27	0.99	0.00	11
37	preservation	-73.14	45.55	20.65	17.14	387.87	1.06	0.39	-0.82	985.59	0.99	0.00	2
38	preservation	-73.14	45.55	20.62	21.92	378.88	1.58	0.31	-0.89	1,070.55	0.99	0.00	7
39	preservation	-73.14	45.55	20.60	27.12	368.52	1.77	0.29	-0.75	1,097.31	0.99	0.00	7
40	preservation	-73.14	45.55	20.69	20.16	355.81	0.24	0.27	-0.14	1,228.47	0.99	0.00	3
41	preservation	-73.14	45.55	20.66	12.73	368.03	-0.34	0.31	-0.65	949.15	0.99	0.00	6
42	preservation	-73.14	45.55	20.69	14.30	302.08	-1.47	0.48	0.05	1,034.99	0.99	0.00	2
43	preservation	-73.14	45.54	20.69	13.39	260.04	-1.16	0.44	-0.27	968.86	0.99	0.00	11
44	preservation	-73.14	45.54	20.70	11.98	237.57	-1.39	0.38	-0.19	1,004.81	0.99	0.00	4
45	preservation	-73.15	45.54	20.70	25.82	176.21	-0.67	0.26	-0.58	283.64	0.97	0.00	2

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46	public	-73.16	45.54	23.43	19.13	242.81	0.43	0.62	-0.33	23.67	0.66	88.12	8
47	public	-73.16	45.54	22.20	10.22	232.87	-0.47	1.06	-0.41	100.65	0.91	0.00	44
48	public	-73.17	45.54	23.43	16.39	226.76	-1.63	1.46	-0.13	98.07	0.90	0.00	20
49	public	-73.17	45.54	26.95	10.97	289.25	-0.18	0.89	-0.31	160.44	0.94	0.00	5
50	public	-73.17	45.54	26.96	11.85	253.19	0.30	0.60	-0.14	143.99	0.93	0.00	9
51	public	-73.17	45.56	21.01	11.11	300.34	-2.58	1.40	-0.01	65.77	0.86	0.00	28
52	public	-73.17	45.56	21.01	21.23	313.51	-1.89	0.97	-0.24	13.26	0.47	159.56	4
53	public	-73.17	45.56	21.02	13.79	289.46	-2.53	1.19	-0.08	35.95	0.76	0.00	19
54	public	-73.17	45.55	21.03	10.61	234.92	-2.55	0.89	-0.17	191.68	0.95	0.00	5
55	public	-73.17	45.55	21.03	6.07	281.45	-1.38	0.18	-0.54	18.34	0.58	104.37	4
56	public	-73.17	45.55	21.03	9.07	319.51	-0.63	0.13	-0.66	163.01	0.94	0.00	18
57	public	-73.17	45.55	21.05	10.29	300.84	0.38	0.04	-0.83	149.24	0.94	0.00	4
58	public	-73.16	45.55	21.05	9.41	253.73	0.85	0.06	-0.89	137.01	0.93	0.00	7
59	public	-73.16	45.55	21.06	16.22	210.31	1.30	0.42	-0.84	72.35	0.87	0.00	15
60	service	-73.15	45.54	28.89	10.59	153.87	0.89	1.03	2.19	413.15	0.98	0.00	13
62	preservation	-73.14	45.54	27.91	8.34	211.41	-1.55	0.53	-0.22	998.31	0.99	0.00	2
63	preservation	-73.14	45.54	27.88	11.85	206.87	-2.02	0.46	0.00	956.27	0.99	0.00	6
64	preservation	-73.14	45.54	27.86	10.88	179.63	-2.50	0.44	0.27	964.62	0.99	0.00	9
65	preservation	-73.15	45.54	27.84	12.46	160.47	-3.44	0.60	1.50	879.78	0.99	0.00	36
66	preservation	-73.14	45.54	27.82	29.26	131.63	-3.35	1.42	2.30	971.87	0.99	0.00	32
67	public	-73.15	45.55	30.31	47.90	221.33	0.89	0.58	-0.74	101.51	0.91	0.00	17
68	public	-73.16	45.55	30.28	9.78	273.07	1.12	0.50	-0.80	131.31	0.93	0.00	9
69	public	-73.15	45.55	34.00	8.68	194.89	1.65	0.03	-0.22	39.78	0.78	60.37	48

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70	public	-73.16	45.54	27.99	4.74	190.44	2.41	-0.60	0.53	38.39	0.77	60.25	23
71	public	-73.17	45.55	27.96	8.02	219.33	1.05	0.33	-0.29	37.56	0.77	51.81	15
72	public	-73.17	45.55	29.97	22.28	230.19	1.34	-0.21	-1.04	81.35	0.88	0.00	19
73	preservation	-73.15	45.55	28.98	5.09	191.97	0.89	0.58	-0.74	26.65	0.69	88.31	7
74	public	-73.15	45.55	21.91	14.14	198.45	0.37	-0.25	-0.92	51.25	0.82	0.00	31
75	public	-73.15	45.55	28.98	15.52	201.01	0.21	-0.43	-0.95	6.30	0.20	100.58	16
76	public	-73.15	45.55	29.02	24.16	211.93	0.28	-0.60	-1.01	37.16	0.76	52.08	7
77	public	-73.15	45.56	29.03	28.68	232.86	0.25	-0.69	-1.03	82.43	0.89	0.00	4
78	public	-73.15	45.56	28.53	25.19	225.59	0.20	-0.55	-0.98	41.47	0.79	46.51	10
79	public	-73.16	45.55	32.64	14.24	185.28	2.29	-0.68	0.81	23.14	0.65	88.72	30
80	preservation	-73.15	45.56	27.99	18.93	183.91	1.01	0.17	-0.19	154.18	0.94	0.00	9
81	preservation	-73.15	45.56	28.06	23.70	174.21	0.44	0.05	0.26	248.90	0.96	0.00	21
82	preservation	-73.15	45.56	22.85	23.92	168.96	1.40	0.30	-0.44	386.00	0.97	0.00	11
83	public	-73.16	45.56	37.05	13.52	259.83	0.30	-1.28	-1.17	130.27	0.93	0.00	8
84	public	-73.16	45.56	36.55	7.15	362.26	-0.02	-0.81	-1.02	30.39	0.72	110.66	123
85	public	-73.17	45.56	29.39	29.56	383.12	0.09	0.82	-0.56	103.04	0.91	0.00	10
86	public	-73.16	45.55	29.30	14.95	224.13	0.76	0.10	-0.87	28.15	0.70	107.56	31
87	public	-73.16	45.55	29.27	25.13	202.48	1.34	0.42	-0.85	144.92	0.93	0.00	18
88	public	-73.16	45.56	37.03	14.97	288.30	0.43	-0.70	-1.06	116.76	0.92	0.00	13
89	preservation	-73.15	45.56	37.03	6.66	351.44	0.71	-0.11	-0.91	328.17	0.97	0.00	22
90	preservation	-73.14	45.55	37.04	8.24	300.44	1.67	-0.28	1.93	745.42	0.99	0.00	8
91	preservation	-73.15	45.55	37.02	21.27	271.07	0.24	0.79	-0.59	326.87	0.97	0.00	3
92	preservation	-73.15	45.55	37.03	26.51	256.95	0.53	0.71	-0.65	186.07	0.95	0.00	64

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93	preservation	-73.14	45.55	36.53	17.98	338.67	0.69	0.37	-0.77	676.16	0.99	0.00	26
94	preservation	-73.15	45.55	36.97	14.05	336.62	-0.07	0.92	-0.50	544.21	0.98	0.00	33
95	preservation	-73.15	45.55	36.97	9.12	317.44	-0.23	0.97	-0.47	473.12	0.98	0.00	13
96	preservation	-73.14	45.55	36.97	9.39	332.36	0.03	0.88	-0.53	684.02	0.99	0.00	4
97	public	-73.17	45.56	28.06	11.06	314.89	-2.02	1.02	-0.20	20.25	0.61	114.20	31
98	public	-73.17	45.56	28.03	38.14	273.87	-2.89	1.32	0.01	15.29	0.52	0.00	45
99	public	-73.17	45.56	28.01	25.22	248.37	-3.14	0.98	-0.06	25.52	0.68	0.00	15
100	public	-73.17	45.56	28.02	15.56	338.14	-0.55	0.35	-0.61	204.55	0.95	0.00	9
102	public	-73.16	45.55	28.02	21.82	253.99	0.83	0.11	-0.87	117.54	0.92	0.00	5
104	public	-73.17	45.55	13.70	12.37	240.71	0.50	-0.28	-0.94	41.35	0.79	97.93	3
105	public	-73.17	45.55	20.84	8.78	263.31	0.31	-0.26	-0.91	14.21	0.49	101.35	8
106	service	-73.15	45.54	18.99	6.73	150.90	-0.94	1.09	1.27	571.30	0.98	0.00	72
107	service	-73.15	45.53	18.98	12.05	96.84	-1.81	0.93	2.44	900.03	0.99	0.00	74
108	preservation	-73.14	45.54	37.38	10.04	187.21	-2.16	0.27	0.19	1,157.78	0.99	0.00	45
109	preservation	-73.14	45.54	37.39	10.69	145.61	-2.42	0.43	0.37	1,228.88	0.99	0.00	138
110	preservation	-73.14	45.54	37.39	18.90	118.85	-2.81	0.52	0.84	1,326.67	0.99	0.00	86
111	preservation	-73.14	45.54	37.40	12.22	158.87	-2.63	0.23	1.16	1,271.17	0.99	0.00	30
112	preservation	-73.14	45.54	36.91	10.97	153.04	-2.53	0.24	2.14	1,329.85	0.99	0.00	14
114	public	-73.17	45.54	17.34	10.94	207.75	-2.59	1.80	0.11	196.21	0.95	0.00	16
115	public	-73.17	45.54	24.42	11.61	276.30	-2.03	1.60	-0.03	93.77	0.90	0.00	7
116	public	-73.17	45.54	20.34	23.93	242.87	0.00	0.89	-0.52	157.45	0.94	0.00	4
118	preservation	-73.14	45.54	24.70	11.33	223.83	-1.26	0.41	-0.31	975.83	0.99	0.00	6
119	preservation	-73.14	45.54	45.97	12.54	215.16	-0.81	0.40	-0.55	899.54	0.99	0.00	2

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120	preservation	-73.14	45.54	45.95	19.13	180.12	-0.46	0.30	-0.64	801.09	0.99	0.00	24
121	preservation	-73.14	45.55	45.94	25.28	181.96	-0.35	0.38	-0.63	744.75	0.99	0.00	205
122	preservation	-73.15	45.54	45.93	5.17	183.06	-0.86	0.13	-0.63	759.58	0.99	0.00	69
123	service	-73.16	45.54	46.31	33.45	129.87	1.57	0.95	3.21	533.16	0.98	0.00	2
124	service	-73.15	45.54	46.31	22.50	161.36	0.95	0.93	1.53	210.17	0.95	0.00	91
125	service	-73.15	45.54	46.28	40.92	169.72	1.22	0.72	1.09	115.18	0.92	0.00	43
126	public	-73.17	45.55	25.09	14.07	230.23	1.19	-0.33	-1.05	76.76	0.88	0.00	9
128	public	-73.16	45.55	43.98	12.07	255.83	0.71	0.08	-0.87	56.13	0.84	0.00	43
129	preservation	-73.15	45.56	34.22	37.15	233.61	0.23	-0.23	-0.89	37.58	0.77	65.33	13
130	preservation	-73.15	45.56	44.34	16.52	235.87	0.17	-0.28	-0.90	46.13	0.81	21.74	11
131	preservation	-73.15	45.55	44.33	13.60	231.85	0.15	-0.29	-0.90	70.06	0.87	0.00	45
132	public	-73.15	45.55	44.32	10.32	208.09	0.17	-0.53	-0.97	13.70	0.48	96.05	11
133	public	-73.16	45.54	24.97	26.81	179.20	2.47	-0.49	1.22	10.31	0.38	98.54	10
134	service	-73.15	45.54	24.98	14.42	171.31	1.38	0.31	1.30	100.48	0.91	0.00	35
135	service	-73.15	45.54	44.29	5.40	177.58	0.24	0.80	0.64	216.17	0.95	0.00	55
136	preservation	-73.15	45.54	42.95	39.95	210.92	-0.60	0.73	0.20	301.45	0.97	0.00	57
137	public	-73.16	45.54	39.95	54.00	249.01	0.51	0.44	0.04	136.03	0.93	0.00	71
139	preservation	-73.15	45.56	38.95	26.18	176.85	0.30	-0.17	0.15	239.67	0.96	0.00	89
141	public	-73.15	45.56	38.92	10.22	187.91	-0.43	-1.05	0.21	317.63	0.97	0.00	33
142	public	-73.15	45.56	38.91	17.57	194.75	-0.16	-0.87	-0.20	253.80	0.96	0.00	57
144	public	-73.16	45.56	32.93	8.42	219.88	-0.01	-1.22	-0.77	83.12	0.89	0.00	32
145	public	-73.16	45.55	15.26	24.68	224.00	0.24	-0.69	-1.03	176.71	0.94	0.00	13
146	public	-73.17	45.56	24.08	22.07	381.56	0.04	0.72	-0.58	121.25	0.92	0.00	36

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147	public	-73.18	45.55	37.02	11.07	135.07	-2.86	1.28	0.01	119.38	0.92	0.00	22
148	public	-73.18	45.55	37.01	14.86	153.47	-2.76	1.38	0.03	127.65	0.92	0.00	23
149	public	-73.18	45.56	18.95	22.56	208.77	-2.81	0.82	-0.16	68.63	0.86	0.00	53
150	public	-73.17	45.55	18.43	15.79	284.87	-0.07	0.05	-0.77	28.55	0.70	149.98	6
152	public	-73.17	45.55	18.41	5.35	307.86	-0.42	0.04	-0.72	55.60	0.84	0.00	8
153	public	-73.15	45.56	29.93	33.56	290.27	0.82	-0.38	-0.87	155.96	0.94	0.00	19
154	public	-73.16	45.56	14.75	14.50	274.47	0.30	-1.27	-1.19	123.71	0.92	0.00	2
155	public	-73.16	45.56	23.90	21.57	290.82	0.35	-0.93	-1.12	141.42	0.93	0.00	21
156	public	-73.16	45.56	16.39	6.79	368.88	-0.50	-1.84	-0.62	98.66	0.90	0.00	4
157	public	-73.17	45.56	24.40	4.05	381.93	0.10	-2.56	0.94	124.74	0.92	0.00	20
158	public	-73.16	45.56	21.01	18.83	357.86	-1.64	-6.40	1.03	283.71	0.97	0.00	25
159	public	-73.16	45.56	23.89	22.29	346.22	-2.34	-7.00	0.60	332.45	0.97	0.00	2
160	public	-73.16	45.56	9.89	5.33	352.76	-2.68	-6.95	0.23	335.08	0.97	0.00	1
161	public	-73.16	45.56	23.89	14.27	350.56	-2.90	-6.68	0.03	332.26	0.97	0.00	62
162	preservation	-73.14	45.55	22.37	12.65	339.79	1.38	0.26	-0.72	1,215.91	0.99	0.00	28
163	preservation	-73.14	45.55	22.37	12.99	305.01	1.45	0.30	-0.65	1,253.24	0.99	0.00	11
164	preservation	-73.14	45.55	22.38	6.11	301.87	1.65	0.40	-0.27	1,188.28	0.99	0.00	8
165	preservation	-73.14	45.55	21.90	9.03	268.85	1.50	0.58	0.86	1,097.69	0.99	0.00	14
166	preservation	-73.14	45.56	21.99	14.68	256.11	1.57	0.05	3.22	1,015.53	0.99	0.00	40
167	preservation	-73.14	45.56	22.00	14.01	239.85	1.49	-0.14	3.21	965.70	0.99	0.00	28
168	preservation	-73.14	45.56	22.00	21.31	249.30	1.31	-0.62	3.45	782.68	0.99	0.00	9
169	preservation	-73.14	45.56	22.00	39.32	249.87	1.81	-0.94	3.11	624.42	0.98	0.00	20
170	preservation	-73.13	45.55	28.33	18.91	148.71	-2.07	0.85	4.69	1,478.99	0.99	0.00	44

Cam. ID	Sector	lon (W)	lat (N)	Sampling Effort (cam./days)	Detection Zone Area (sq.m)	Elevation (m)	Habitat _1	Habitat _2	Habitat _3	dist. trail (m)	decay dist. ($\alpha=10$)	Trail Density (m)	Deer Detections (n)
171	preservation	-73.13	45.55	21.01	18.03	130.96	1.22	-0.70	3.98	1,651.03	0.99	0.00	12
172	preservation	-73.13	45.55	20.99	20.66	144.15	1.55	-0.87	3.21	1,589.25	0.99	0.00	9
173	preservation	-73.13	45.55	20.95	16.41	215.31	1.47	-0.15	1.53	1,340.32	0.99	0.00	15
174	preservation	-73.13	45.55	20.94	11.89	228.61	1.44	-0.03	1.28	1,322.90	0.99	0.00	31
175	preservation	-73.14	45.55	21.01	24.97	245.81	1.59	0.36	1.83	1,081.32	0.99	0.00	13

Table S2. Post-hoc pairwise mean comparison tests with Bonferroni corrections of the white-tailed deer detection rate between age-sex classes and sectors of the GNR.

contrast	Segment	estimate	SE	df	z.ratio	p.value
public - preservation	female	0.3351	0.1658	Inf	2.0207	0.1299
service - preservation	female	0.7122	0.3405	Inf	2.0919	0.1094
service - public	female	0.3772	0.3368	Inf	1.1199	0.7882
public - preservation	juvenile	0.0757	0.1838	Inf	0.4120	1.0000
service - preservation	juvenile	1.1359	0.3451	Inf	3.2911	0.0030
service - public	juvenile	1.0601	0.3426	Inf	3.0941	0.0059
public - preservation	male	-0.2862	0.2193	Inf	-1.3050	0.5757
service - preservation	male	0.0699	0.4576	Inf	0.1528	1.0000
service - public	male	0.3562	0.4610	Inf	0.7726	1.0000
public - preservation	unknown	-0.0933	0.1926	Inf	-0.4845	1.0000
service - preservation	unknown	0.9519	0.3598	Inf	2.6455	0.0245
service - public	unknown	1.0452	0.3593	Inf	2.9086	0.0109

contrast	Sector	estimate	SE	df	z.ratio	p.value
juvenile - female	preservation	-0.5361	0.1051	Inf	-5.1009	0.0000
male - female	preservation	-1.1307	0.1247	Inf	-9.0654	0.0000
male - juvenile	preservation	-0.5946	0.1368	Inf	-4.3447	0.0001

contrast	Sector	estimate	SE	df	z.ratio	p.value
unknown - female	preservation	−0.7138	0.1108	Inf	−6.4401	0.0000
unknown - juvenile	preservation	−0.1777	0.1237	Inf	−1.4362	0.9057
unknown - male	preservation	0.4169	0.1409	Inf	2.9579	0.0186
juvenile - female	public	−0.7955	0.1005	Inf	−7.9130	0.0000
male - female	public	−1.7520	0.1411	Inf	−12.4168	0.0000
male - juvenile	public	−0.9566	0.1536	Inf	−6.2262	0.0000
unknown - female	public	−1.1422	0.1120	Inf	−10.1947	0.0000
unknown - juvenile	public	−0.3468	0.1269	Inf	−2.7328	0.0377
unknown - male	public	0.6098	0.1593	Inf	3.8279	0.0008
juvenile - female	service	−0.1125	0.2028	Inf	−0.5546	1.0000
male - female	service	−1.7730	0.3566	Inf	−4.9719	0.0000
male - juvenile	service	−1.6605	0.3584	Inf	−4.6328	0.0000
unknown - female	service	−0.4742	0.2240	Inf	−2.1170	0.2056
unknown - juvenile	service	−0.3617	0.2293	Inf	−1.5775	0.6881
unknown - male	service	1.2988	0.3725	Inf	3.4871	0.0029

Table S3. Comparison of white-tailed deer activity level at six different time points during the day (1: 0:00, 2: 3:00, 3: 8:00, 4: 13:00, 5: 18:00, 6: 23:00). Difference: difference in activity level, W: Wald Statistics.

Sector	Time_Comparison	Difference	SE	W	p
Preservation	1v2	0.00	0.05	0.00	0.99
Preservation	1v3	0.00	0.05	0.00	0.96
Preservation	1v4	-0.02	0.05	0.27	0.60
Preservation	1v5	0.00	0.05	0.00	0.95
Preservation	1v6	0.00	0.05	0.01	0.94
Preservation	2v3	0.00	0.05	0.00	0.95
Preservation	2v4	-0.03	0.05	0.30	0.58
Preservation	2v5	0.00	0.05	0.00	0.96
Preservation	2v6	0.00	0.05	0.01	0.93
Preservation	3v4	-0.02	0.05	0.24	0.63
Preservation	3v5	0.01	0.04	0.01	0.91
Preservation	3v6	0.00	0.05	0.00	0.98
Preservation	4v5	0.03	0.05	0.36	0.55
Preservation	4v6	0.02	0.05	0.18	0.67
Preservation	5v6	-0.01	0.05	0.02	0.89
Public	1v2	-0.08	0.06	1.97	0.16

Sector	Time_Comparison	Difference	SE	W	p
Public	1v3	0.07	0.05	2.18	0.14
Public	1v4	0.02	0.05	0.11	0.75
Public	1v5	0.06	0.05	1.86	0.17
Public	1v6	0.03	0.05	0.31	0.58
Public	2v3	0.15	0.06	7.41	0.01
Public	2v4	0.10	0.06	2.87	0.09
Public	2v5	0.15	0.06	6.94	0.01
Public	2v6	0.11	0.06	3.66	0.06
Public	3v4	-0.05	0.05	1.30	0.25
Public	3v5	-0.01	0.04	0.02	0.89
Public	3v6	-0.04	0.04	0.88	0.35
Public	4v5	0.05	0.04	1.05	0.30
Public	4v6	0.01	0.05	0.05	0.82
Public	5v6	-0.04	0.04	0.67	0.41
Service	1v2	-0.18	0.19	0.97	0.32
Service	1v3	0.02	0.14	0.02	0.90
Service	1v4	0.07	0.13	0.29	0.59
Service	1v5	0.19	0.09	4.27	0.04
Service	1v6	0.06	0.13	0.20	0.65

Sector	Time_Comparison	Difference	SE	W	p
Service	2v3	0.20	0.20	1.09	0.30
Service	2v4	0.26	0.19	1.85	0.17
Service	2v5	0.38	0.16	5.41	0.02
Service	2v6	0.25	0.19	1.69	0.19
Service	3v4	0.05	0.14	0.14	0.71
Service	3v5	0.17	0.11	2.62	0.11
Service	3v6	0.04	0.14	0.08	0.77
Service	4v5	0.12	0.10	1.62	0.20
Service	4v6	−0.01	0.14	0.01	0.94
Service	5v6	−0.13	0.10	1.90	0.17

Table S4. Model selection using a set of seven distance variables to test for an effect of the distance to the nearest trail: Euclidean distance, and 7 decay distances, with alpha ranging from 10 to 1000, representing a relationship that plateaued at 195m, 965m, 1930m, 3860m, 7798m, 11,698m and 19,494m, respectively. Fit measures for the model with the best fitting decay distance of 10 m are highlighted in bold.

Distance	AICc	deltaAIC	Log-likelihood	Weight
Euclidean	3,189.45	114.19	0.0000	0.0000
decay, alpha = 10	3,075.27	0.0000	1.0000	1.0000
decay, alpha = 50	3,183.66	108.39	0.0000	0.0000
decay, alpha = 100	3,187.67	112.40	0.0000	0.0000
decay, alpha = 200	3,187.99	112.72	0.0000	0.0000
decay, alpha = 400	3,187.94	112.67	0.0000	0.0000
decay, alpha = 600	3,187.95	112.69	0.0000	0.0000
decay, alpha = 1000	3,186.56	111.29	0.0000	0.0000

Figure S1. Principal Component Analysis conducted on the percent cover of ecotypes within a buffer of 400 m around 163 sites at the Gault Nature Reserve. Plot of the variable contribution along the first 3 PCA axes (**a**, **b**) and plot of camera sites colored by sector (**c**, **d**). Main tree essences assemblages) present at the GNR; FC1: red oak stands, FE1: maple/hickory stands, FE2: maple/basswood stands, FE6: maple/red oak stands, MJ1: yellow birch/sugar maple stands, RP1: pine (white or red) stands, RT1: hemlock stands.

