

Table 1. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2011 statewide, east (EBR) and west (WBR) of the Blue Ridge Mountains, and on private and public lands in Virginia.

Animal	Total Seen	Animals Seen/100 hrs. \pm SE				
		State	EBR	WBR	Private Land	Public Land
Deer (antlered)	3,028	13.56 \pm 0.64	15.12 \pm 0.83	10.21 \pm 0.84	14.09 \pm 0.69	10.29 \pm 1.76
Deer (doe)	6,700	30.00 \pm 1.28	31.31 \pm 1.66	27.20 \pm 1.76	31.80 \pm 1.39	18.99 \pm 2.37
Deer (fawn)	3,083	13.81 \pm 0.85	14.10 \pm 1.06	13.18 \pm 1.38	14.87 \pm 0.95	7.27 \pm 1.28
Deer (unknown)	2,142	9.59 \pm 0.57	9.67 \pm 0.71	9.43 \pm 0.93	9.91 \pm 0.63	7.62 \pm 1.06
Gray Squirrel	21,887	98.00 \pm 3.71	102.44 \pm 4.59	88.51 \pm 6.01	100.54 \pm 4.00	82.47 \pm 7.40
Fox Squirrel	1,205	5.40 \pm 0.78	1.33 \pm 0.34	14.08 \pm 2.12	5.53 \pm 0.88	4.56 \pm 0.97
Turkey (bearded)	903	4.04 \pm 0.42	3.56 \pm 0.44	5.07 \pm 0.91	4.30 \pm 0.44	2.45 \pm 0.80
Turkey (no beard)	2,754	12.33 \pm 1.20	10.59 \pm 1.22	16.06 \pm 2.62	13.29 \pm 1.30	6.50 \pm 1.85
Turkey (unknown)	2,018	9.04 \pm 1.09	8.51 \pm 1.38	10.17 \pm 1.72	9.66 \pm 1.23	5.23 \pm 1.60
Turkey (total)	5,675	25.41 \pm 1.86	22.67 \pm 2.01	31.30 \pm 3.80	27.25 \pm 2.00	14.18 \pm 3.38
Grouse	118	0.53 \pm 0.11	0.10 \pm 0.05	1.45 \pm 0.32	0.33 \pm 0.08	1.72 \pm 0.56
Bear (adult)	135	0.60 \pm 0.10	0.28 \pm 0.06	1.29 \pm 0.28	0.50 \pm 0.10	1.24 \pm 0.33
Bear (cub)	45	0.20 \pm 0.04	0.05 \pm 0.02	0.52 \pm 0.12	0.15 \pm 0.04	0.54 \pm 0.20
Bear (total)	180	0.81 \pm 0.13	0.34 \pm 0.07	1.81 \pm 0.36	0.65 \pm 0.13	1.78 \pm 0.48
Red Fox	214	0.96 \pm 0.15	1.23 \pm 0.21	0.38 \pm 0.10	1.03 \pm 0.17	0.51 \pm 0.17
Gray Fox	108	0.48 \pm 0.07	0.56 \pm 0.09	0.32 \pm 0.09	0.49 \pm 0.08	0.41 \pm 0.16
Coyote	162	0.73 \pm 0.11	0.61 \pm 0.13	0.97 \pm 0.24	0.73 \pm 0.12	0.67 \pm 0.28
Bobcat	41	0.18 \pm 0.04	0.17 \pm 0.04	0.21 \pm 0.07	0.17 \pm 0.04	0.25 \pm 0.12
Raccoon	255	1.14 \pm 0.12	1.18 \pm 0.15	1.05 \pm 0.20	1.17 \pm 0.13	0.99 \pm 0.31
Opossum	46	0.21 \pm 0.04	0.23 \pm 0.05	0.15 \pm 0.06	0.20 \pm 0.05	0.22 \pm 0.09
Striped Skunk	53	0.24 \pm 0.05	0.21 \pm 0.06	0.30 \pm 0.10	0.25 \pm 0.06	0.16 \pm 0.07
River Otter	13	0.06 \pm 0.03	0.05 \pm 0.03	0.08 \pm 0.06	0.06 \pm 0.03	0.06 \pm 0.06
Mink	6	0.03 \pm 0.02	0.04 \pm 0.02	0.00 \pm 0.00	0.03 \pm 0.02	0.00 \pm 0.00
Dog	405	1.81 \pm 0.30	2.21 \pm 0.37	0.97 \pm 0.47	2.05 \pm 0.34	0.35 \pm 0.15
House Cat	149	0.67 \pm 0.11	0.53 \pm 0.09	0.97 \pm 0.27	0.70 \pm 0.12	0.45 \pm 0.17
Hunter	943	4.22 \pm 0.61	3.32 \pm 0.61	6.15 \pm 1.33	3.47 \pm 0.55	8.83 \pm 2.36
Total Hunters		394	285	138	370	103
Total Hunts		5,199	3,659	1,540	4,581	618
Total Hours		22,333	15,215	7,118	19,195	3,138
Avg. Hrs. Per Hunt		4.30 \pm 0.03	4.16 \pm 0.04	4.62 \pm 0.07	4.19 \pm 0.03	5.08 \pm 0.11

Table 2. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2011 on private and public lands east (EBR) and west (WBR) of the Blue Ridge Mountains in Virginia.

Animal	<u>Animals Seen/100 hrs. \pm SE</u>			
	EBR		WBR	
	Private Land	Public Land	Private Land	Public Land
Deer (antlered)	15.49 \pm 0.87	11.22 \pm 2.35	10.42 \pm 0.79	9.62 \pm 2.53
Deer (doe)	32.37 \pm 1.73	20.17 \pm 4.43	30.31 \pm 2.07	18.14 \pm 2.57
Deer (fawn)	14.64 \pm 1.11	8.34 \pm 2.60	15.48 \pm 1.79	6.49 \pm 1.16
Deer (unknown)	9.89 \pm 0.75	7.36 \pm 1.61	9.98 \pm 1.15	7.81 \pm 1.41
Gray Squirrel	103.42 \pm 4.80	92.21 \pm 13.38	93.00 \pm 7.06	75.42 \pm 7.92
Fox Squirrel	1.40 \pm 0.36	0.68 \pm 0.44	16.38 \pm 2.73	7.37 \pm 1.55
Turkey (bearded)	3.81 \pm 0.46	0.91 \pm 0.47	5.59 \pm 1.02	3.57 \pm 1.29
Turkey (no beard)	11.35 \pm 1.32	2.58 \pm 1.08	18.36 \pm 3.08	9.35 \pm 2.89
Turkey (unknown)	9.07 \pm 1.50	2.50 \pm 1.13	11.19 \pm 2.07	7.20 \pm 2.55
Turkey (total)	24.24 \pm 2.16	5.99 \pm 2.00	35.14 \pm 4.32	20.12 \pm 5.21
Grouse	0.09 \pm 0.05	0.15 \pm 0.11	0.96 \pm 0.24	2.86 \pm 0.91
Bear (adult)	0.28 \pm 0.06	0.30 \pm 0.19	1.08 \pm 0.32	1.92 \pm 0.52
Bear (cub)	0.04 \pm 0.02	0.15 \pm 0.15	0.82 \pm 0.31	0.39 \pm 0.18
Bear (total)	0.32 \pm 0.08	0.46 \pm 0.29	1.49 \pm 0.40	2.75 \pm 0.75
Red Fox	1.24 \pm 0.22	1.06 \pm 0.34	0.47 \pm 0.14	0.11 \pm 0.08
Gray Fox	0.55 \pm 0.10	0.61 \pm 0.32	0.34 \pm 0.11	0.27 \pm 0.14
Coyote	0.62 \pm 0.13	0.53 \pm 0.33	1.04 \pm 0.28	0.77 \pm 0.43
Bobcat	0.16 \pm 0.04	0.30 \pm 0.18	0.21 \pm 0.08	0.22 \pm 0.16
Raccoon	1.19 \pm 0.16	1.14 \pm 0.39	1.11 \pm 0.23	0.88 \pm 0.46
Opossum	0.23 \pm 0.06	0.23 \pm 0.13	0.13 \pm 0.06	0.22 \pm 0.14
Striped Skunk	0.22 \pm 0.06	0.08 \pm 0.07	0.32 \pm 0.13	0.22 \pm 0.11
River Otter	0.05 \pm 0.03	0.00 \pm 0.00	0.08 \pm 0.08	0.11 \pm 0.11
Mink	0.04 \pm 0.02	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Dog	2.37 \pm 0.40	0.53 \pm 0.27	1.23 \pm 0.63	0.22 \pm 0.17
House Cat	0.55 \pm 0.10	0.30 \pm 0.24	1.11 \pm 0.35	0.55 \pm 0.23
Hunter	3.09 \pm 0.63	5.69 \pm 2.01	4.45 \pm 1.11	11.10 \pm 3.62
Total Hunters	271	46	124	59
Total Hunts	3,372	287	1,209	331
Total Hours	13,896	1,319	5,299	1,819
Avg. Hrs. Per Hunt	4.12 \pm 0.04	4.59 \pm 0.15	4.38 \pm 0.07	5.50 \pm 0.15

Table 3. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2011 within geographic regions of Virginia.

Animal	<u>Animals Seen/ 100 hrs. \pm SE</u>				
	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Deer (antlered)	15.60 \pm 1.66	12.44 \pm 0.96	17.23 \pm 1.51	11.77 \pm 1.32	8.67 \pm 0.91
Deer (doe)	26.72 \pm 2.22	29.31 \pm 2.59	37.59 \pm 3.44	28.71 \pm 2.66	25.70 \pm 2.30
Deer (fawn)	13.21 \pm 1.73	13.50 \pm 2.11	15.51 \pm 1.62	13.98 \pm 2.30	12.39 \pm 1.53
Deer (unknown)	10.57 \pm 1.50	7.29 \pm 0.92	11.07 \pm 1.17	10.02 \pm 1.49	8.84 \pm 1.13
Gray Squirrel	76.85 \pm 5.94	100.92 \pm 7.68	128.28 \pm 8.27	75.16 \pm 8.41	101.73 \pm 7.82
Fox Squirrel	0.00 \pm 0.00	2.01 \pm 0.82	1.97 \pm 0.57	14.65 \pm 3.32	13.51 \pm 2.66
Turkey (bearded)	1.90 \pm 0.41	5.22 \pm 0.86	3.57 \pm 0.85	7.88 \pm 1.57	2.29 \pm 0.57
Turkey (no beard)	10.87 \pm 1.89	14.87 \pm 2.84	6.26 \pm 1.32	19.59 \pm 3.87	12.56 \pm 3.36
Turkey (unknown)	11.45 \pm 2.47	9.26 \pm 3.24	4.98 \pm 1.04	14.71 \pm 2.95	5.68 \pm 1.56
Turkey (total)	24.22 \pm 3.57	29.35 \pm 4.43	14.81 \pm 2.05	42.18 \pm 5.83	20.53 \pm 3.98
Grouse	0.02 \pm 0.02	0.06 \pm 0.03	0.21 \pm 0.14	1.38 \pm 0.39	1.51 \pm 0.49
Bear (adult)	0.18 \pm 0.12	0.48 \pm 0.10	0.19 \pm 0.09	0.82 \pm 0.25	1.76 \pm 0.48
Bear (cub)	0.04 \pm 0.04	0.08 \pm 0.05	0.04 \pm 0.03	0.25 \pm 0.12	0.78 \pm 0.21
Bear (total)	0.22 \pm 0.15	0.56 \pm 0.12	0.23 \pm 0.10	1.07 \pm 0.33	2.54 \pm 0.62
Red Fox	0.30 \pm 0.09	0.26 \pm 0.11	3.03 \pm 0.52	0.37 \pm 0.17	0.39 \pm 0.12
Gray Fox	0.66 \pm 0.17	0.82 \pm 0.20	0.21 \pm 0.07	0.34 \pm 0.15	0.31 \pm 0.09
Coyote	0.68 \pm 0.26	0.60 \pm 0.19	0.55 \pm 0.18	1.21 \pm 0.41	0.73 \pm 0.25
Bobcat	0.18 \pm 0.09	0.24 \pm 0.08	0.10 \pm 0.04	0.28 \pm 0.13	0.14 \pm 0.07
Raccoon	1.12 \pm 0.25	1.25 \pm 0.30	1.18 \pm 0.22	1.13 \pm 0.28	0.98 \pm 0.30
Opossum	0.32 \pm 0.09	0.10 \pm 0.05	0.27 \pm 0.12	0.17 \pm 0.08	0.14 \pm 0.08
Striped Skunk	0.10 \pm 0.04	0.20 \pm 0.07	0.32 \pm 0.15	0.25 \pm 0.16	0.34 \pm 0.12
River Otter	0.08 \pm 0.06	0.04 \pm 0.04	0.02 \pm 0.02	0.06 \pm 0.06	0.11 \pm 0.11
Mink	0.02 \pm 0.02	0.06 \pm 0.06	0.04 \pm 0.03	0.00 \pm 0.00	0.00 \pm 0.00
Dog	2.20 \pm 0.73	1.81 \pm 0.41	2.60 \pm 0.73	1.75 \pm 0.94	0.20 \pm 0.11
House Cat	0.40 \pm 0.15	0.42 \pm 0.13	0.74 \pm 0.17	1.44 \pm 0.52	0.50 \pm 0.15
Hunter	5.22 \pm 1.43	1.59 \pm 0.36	3.15 \pm 0.98	7.34 \pm 1.63	4.98 \pm 2.11
Total Hunters	100	107	123	72	71
Total Hunts	1,177	1,176	1,306	747	793
Total Hours	4,996	4,978	5,241	3,542	3,576
Avg. Hrs. Per Hunt	4.25 \pm 0.07	4.23 \pm 0.07	4.01 \pm 0.06	4.74 \pm 0.10	4.51 \pm 0.08

Table 4. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters by week from 1 October to 18 November 2011 in Virginia.

Animal	<u>Animals Seen/100 hrs. + SE</u>							
	Day 1 (10/1)	Week 1 (10/3-8)	Week 2 (10/10-15)	Week 3 (10/17-22)	Week 4 (10/24-29)	Week 5 (10/31-11/5)	Week 6 (11/7-12)	Week 7 (11/14-18)
Deer (antlered)	13.35 ± 1.62	10.63 ± 0.81	9.40 ± 0.80	9.94 ± 0.82	13.71 ± 1.03	19.79 ± 1.53	17.16 ± 1.26	14.81 ± 1.70
Deer (doe)	34.68 ± 2.66	32.92 ± 1.91	27.22 ± 1.88	26.47 ± 1.98	29.29 ± 2.47	29.97 ± 1.99	30.34 ± 2.54	30.39 ± 3.21
Deer (fawn)	16.51 ± 1.66	15.76 ± 1.30	12.66 ± 1.29	13.96 ± 1.38	13.07 ± 1.37	12.25 ± 1.19	13.51 ± 1.77	13.15 ± 1.86
Deer (unknown)	5.75 ± 0.78	9.97 ± 0.91	8.18 ± 0.94	9.84 ± 1.02	12.07 ± 1.07	9.88 ± 1.15	8.97 ± 0.84	11.24 ± 2.11
Gray Squirrel	77.90 ± 4.23	104.05 ± 4.96	88.61 ± 4.49	119.67 ± 6.45	105.08 ± 5.87	101.83 ± 5.80	87.01 ± 5.27	82.49 ± 7.25
Fox Squirrel	4.76 ± 1.20	5.46 ± 0.77	5.53 ± 1.20	6.19 ± 1.08	6.50 ± 1.71	4.49 ± 1.16	5.19 ± 1.18	4.60 ± 1.17
Turkey (bearded)	3.77 ± 0.88	4.34 ± 0.69	3.19 ± 0.69	3.21 ± 0.87	3.92 ± 0.93	5.24 ± 1.06	3.75 ± 0.82	5.04 ± 1.29
Turkey (no beard)	13.79 ± 3.04	11.12 ± 1.86	12.39 ± 2.32	12.08 ± 2.32	10.87 ± 1.89	10.81 ± 2.13	15.35 ± 3.51	13.73 ± 4.13
Turkey (unknown)	6.24 ± 1.77	7.59 ± 1.36	12.15 ± 2.28	10.58 ± 2.63	8.03 ± 1.68	12.04 ± 2.74	6.45 ± 1.44	7.47 ± 2.54
Turkey (total)	23.80 ± 3.78	23.04 ± 2.54	27.73 ± 3.48	25.87 ± 3.78	22.82 ± 2.99	28.08 ± 3.78	25.55 ± 4.10	26.24 ± 5.16
Grouse	0.49 ± 0.29	0.58 ± 0.20	0.34 ± 0.13	0.77 ± 0.27	0.60 ± 0.30	0.33 ± 0.22	0.52 ± 0.20	0.64 ± 0.24
Bear (adult)	0.80 ± 0.23	0.71 ± 0.18	0.20 ± 0.09	1.04 ± 0.29	0.71 ± 0.23	0.42 ± 0.16	0.58 ± 0.17	0.32 ± 0.19
Bear (cub)	0.31 ± 0.16	0.15 ± 0.09	0.00 ± 0.00	0.44 ± 0.14	0.30 ± 0.17	0.06 ± 0.04	0.25 ± 0.11	0.19 ± 0.19
Bear (total)	1.11 ± 0.34	0.86 ± 0.23	0.20 ± 0.09	1.47 ± 0.37	1.01 ± 0.37	0.48 ± 0.18	0.83 ± 0.22	0.51 ± 0.31
Red Fox	1.11 ± 0.33	1.02 ± 0.23	0.75 ± 0.22	0.74 ± 0.26	0.97 ± 0.28	1.32 ± 0.25	0.80 ± 0.23	1.02 ± 0.29
Gray Fox	0.62 ± 0.23	0.53 ± 0.15	0.41 ± 0.15	0.44 ± 0.14	0.60 ± 0.20	0.51 ± 0.16	0.46 ± 0.15	0.26 ± 0.13
Coyote	0.74 ± 0.25	0.89 ± 0.24	0.54 ± 0.19	0.44 ± 0.16	1.23 ± 0.43	0.66 ± 0.25	0.71 ± 0.29	0.51 ± 0.34
Bobcat	0.06 ± 0.06	0.05 ± 0.04	0.20 ± 0.08	0.23 ± 0.10	0.11 ± 0.08	0.24 ± 0.08	0.37 ± 0.15	0.13 ± 0.09

Table 4 (continued). Observations of selected animals (per 100 hours of hunting) by cooperating archery hunters by week from 1 October to 18 November 2011 in Virginia.

Animal	<u>Animals Seen/100 hrs. + SE</u>							
	Day 1 (10/1)	Week 1 (10/3-8)	Week 2 (10/10-15)	Week 3 (10/17-22)	Week 4 (10/24-29)	Week 5 (10/31-11/5)	Week 6 (11/7-12)	Week 7 (11/14-18)
Raccoon	0.80 ± 0.33	1.70 ± 0.32	1.80 ± 0.32	0.74 ± 0.21	1.38 ± 0.36	0.69 ± 0.19	0.98 ± 0.25	0.51 ± 0.20
Opossum	0.31 ± 0.14	0.20 ± 0.07	0.17 ± 0.09	0.20 ± 0.09	0.15 ± 0.07	0.18 ± 0.08	0.31 ± 0.10	0.13 ± 0.09
Striped Skunk	0.37 ± 0.19	0.15 ± 0.06	0.37 ± 0.12	0.17 ± 0.07	0.07 ± 0.05	0.30 ± 0.12	0.31 ± 0.13	0.19 ± 0.14
River Otter	0.25 ± 0.25	0.08 ± 0.06	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.06 ± 0.06	0.12 ± 0.10	0.00 ± 0.00
Mink	0.00 ± 0.00	0.05 ± 0.04	0.00 ± 0.00	0.10 ± 0.10	0.00 ± 0.00	0.03 ± 0.03	0.00 ± 0.00	0.00 ± 0.00
Dog	1.48 ± 0.50	1.45 ± 0.49	1.15 ± 0.29	1.61 ± 0.41	2.32 ± 0.69	1.89 ± 0.38	2.73 ± 0.79	1.79 ± 0.73
House Cat	1.05 ± 0.30	0.63 ± 0.17	0.34 ± 0.16	0.64 ± 0.19	0.90 ± 0.22	0.99 ± 0.21	0.55 ± 0.15	0.19 ± 0.11
Hunter	5.13 ± 0.85	3.83 ± 0.75	4.51 ± 1.45	4.79 ± 1.04	3.62 ± 0.66	4.49 ± 0.81	4.54 ± 0.84	2.43 ± 0.69
Total Hunters	295	341	320	309	278	304	208	144
Total Hunts	307	945	730	713	706	763	683	352
Total Hours	1,618	3,940	2,947	2,988	2,677	3,340	3,257	1,566
Avg. Hrs. Per Hunt	5.27 ± 0.14	4.17 ± 0.07	4.04 ± 0.08	4.19 ± 0.09	3.79 ± 0.08	4.38 ± 0.09	4.77 ± 0.10	4.45 ± 0.14

Table 5. Doe-buck and fawn-doe ratio estimates (a) east and west of the Blue Ridge Mountains, (b) by land ownership, (c) by region, and (d) by week of survey season based on cooperating archery hunter observations in Virginia from 1 October to 18 November 2011.

(a)

Ratio	Statewide	East of BR	West of BR
Doe: Buck	2.21	2.07	2.66
Fawn: Doe	0.46	0.45	0.48

(b)

Ratio	Private	Public
Doe: Buck	2.26	1.85
Fawn: Doe	0.47	0.38

(c)

Ratio	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Doe: Buck	1.71	2.30	2.18	2.60	2.96
Fawn: Doe	0.49	0.46	0.41	0.50	0.48

(d)

Ratio	Day 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Doe: Buck	2.60	3.10	2.90	2.66	2.14	1.51	1.77	2.05
Fawn: Doe	0.48	0.48	0.47	0.53	0.45	0.41	0.45	0.43

Table 6. Statewide total observations and total observations per 100 hunts of miscellaneous animals by cooperating archery hunters 1 October to 18 November 2011 in Virginia.

Animal	Total Observations	Observations / 100 Hunts
Bats	1	0.02
Beaver	12	0.25
Buzzard	0	0.00
Chipmunk	172	3.63
Crow	448	9.46
Doves	40	0.84
Ducks	139	2.94
Eagle	61	1.29
Falcon	5	0.11
Flying Squirrels	6	0.13
Geese	599	12.65
Groundhog	84	1.77
Hawk	198	4.18
Hérons	10	0.21
Miscellaneous Birds	57	1.20
Mouse	4	0.08
Muskrat	0	0.00
Nutria	0	0.00
Owl	40	0.84
Pheasant	0	0.00
Quail	122	2.58
Rabbit	80	1.69
Red Squirrel	0	0.00
Shrew	0	0.00
Sika & Other Deer	0	0.00
Snake	0	0.00
Snipe	0	0.00
Turtles	3	0.06
Weasel	0	0.00
Woodcock	13	0.27

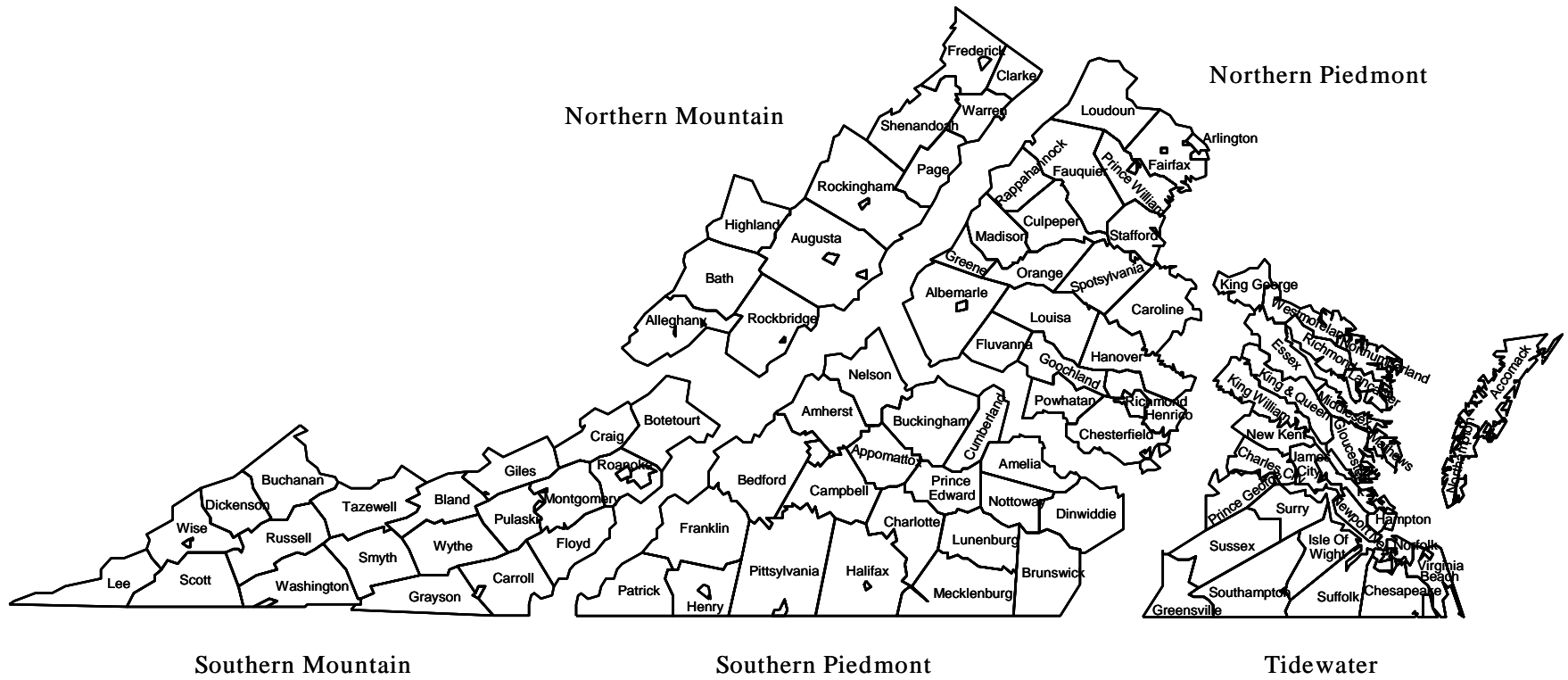


Figure 1. Geographic regions used for analyses in this report.

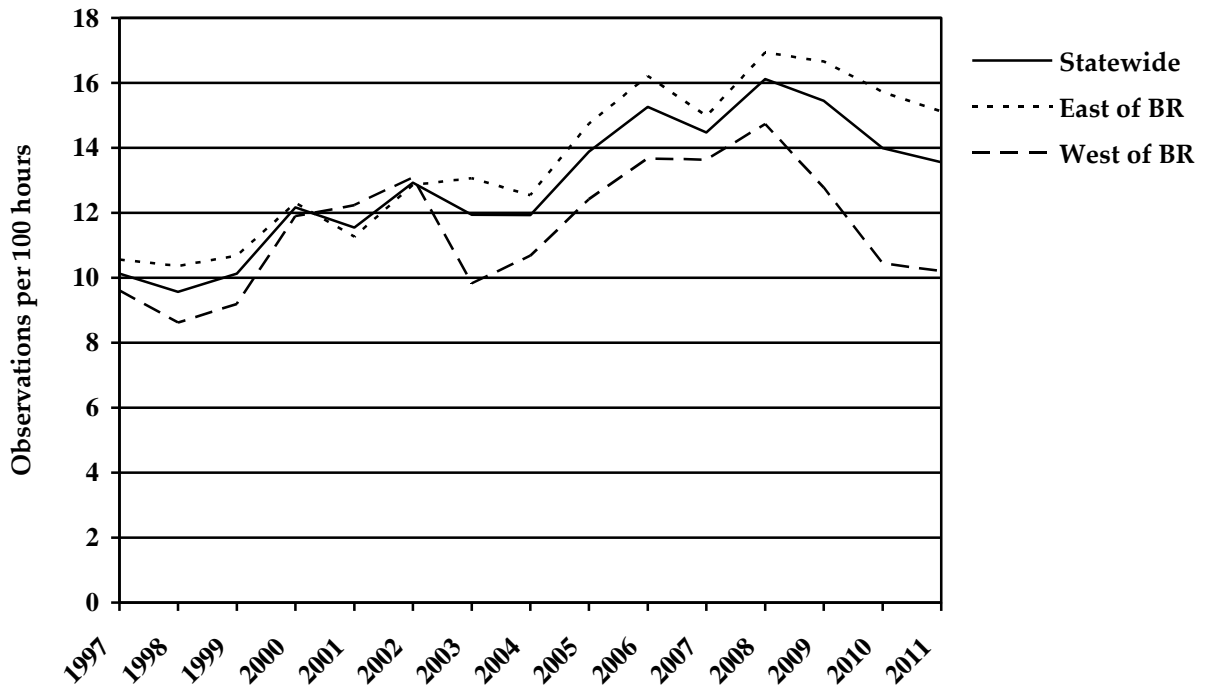


Figure 2. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

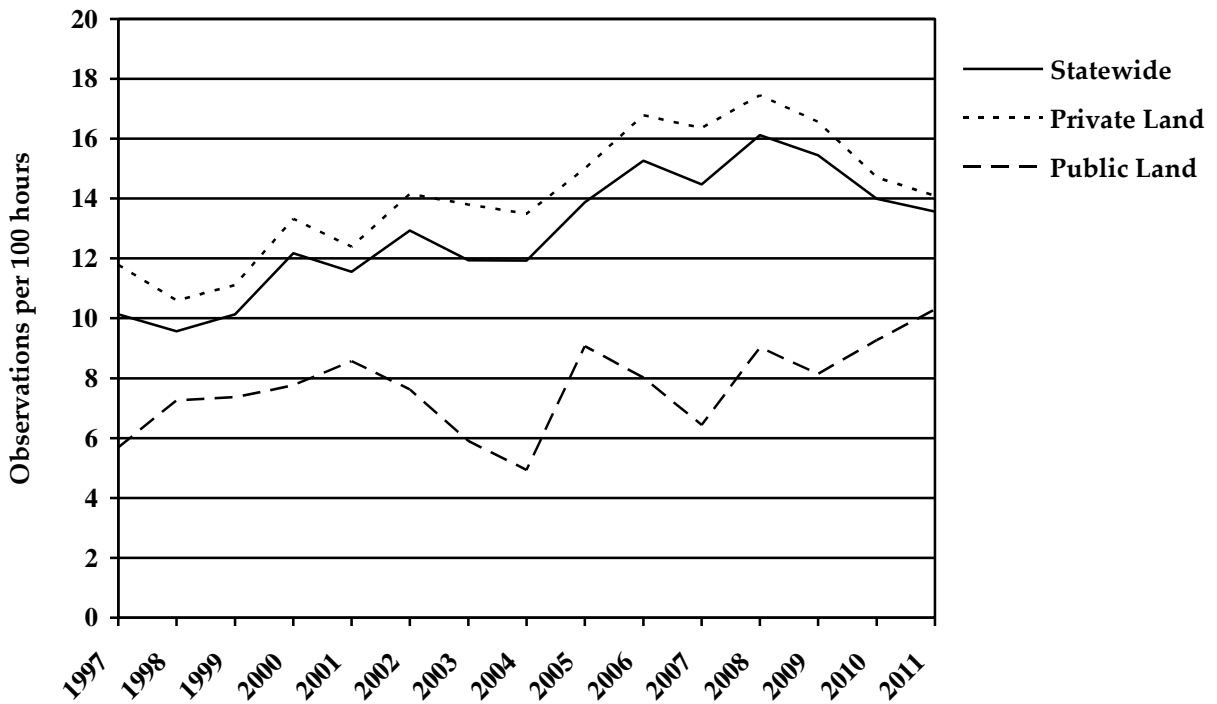


Figure 3. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

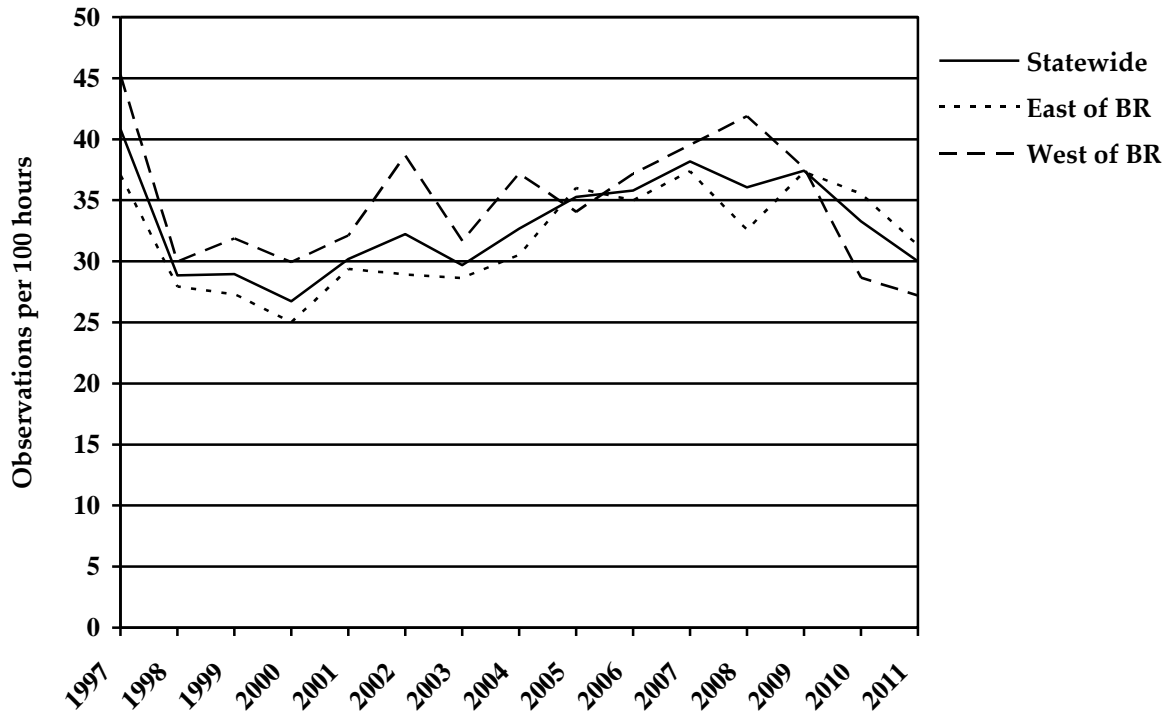


Figure 4. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

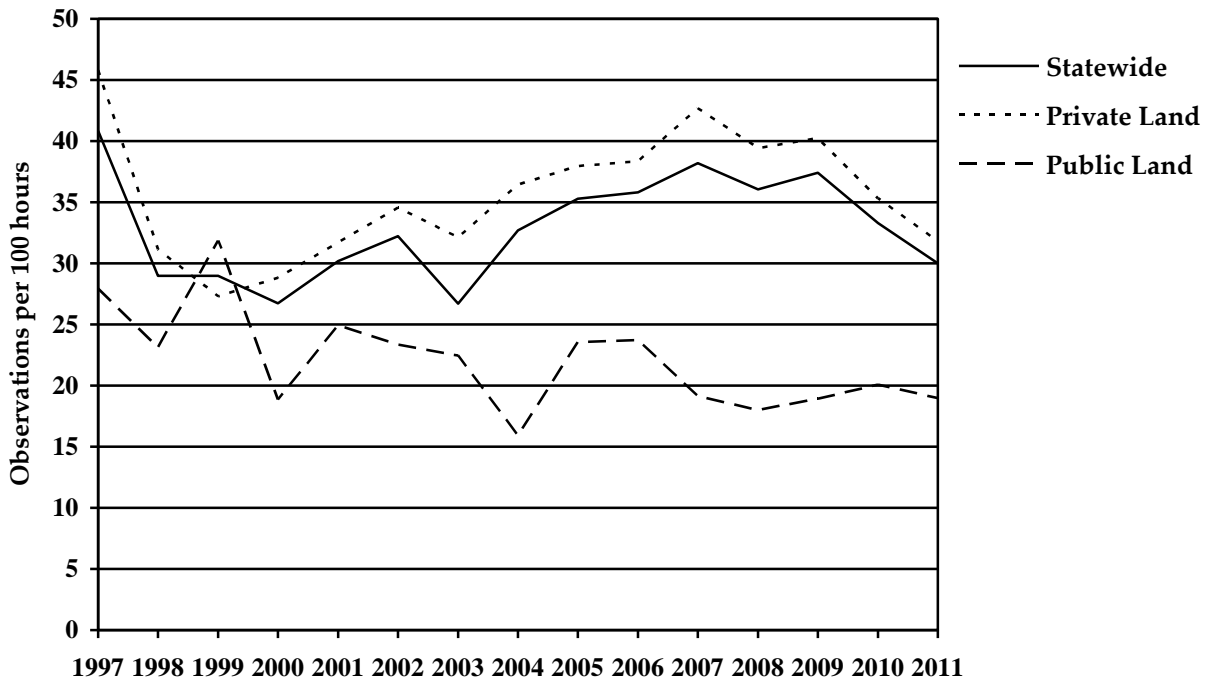


Figure 5. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

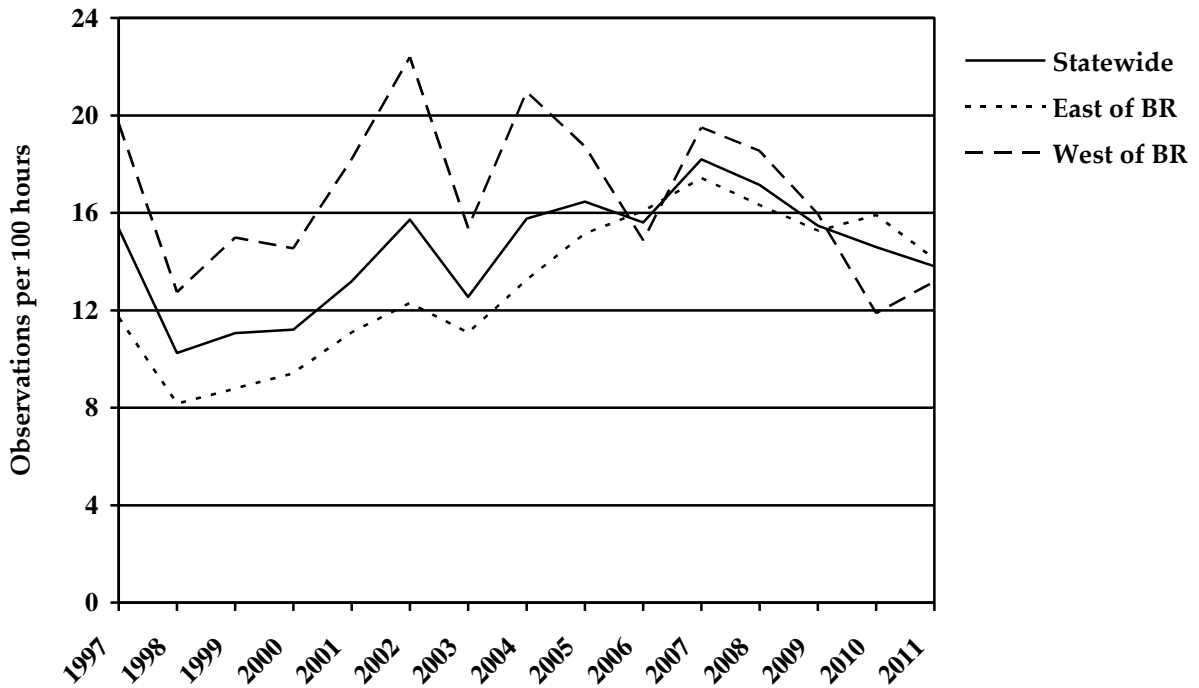


Figure 6. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

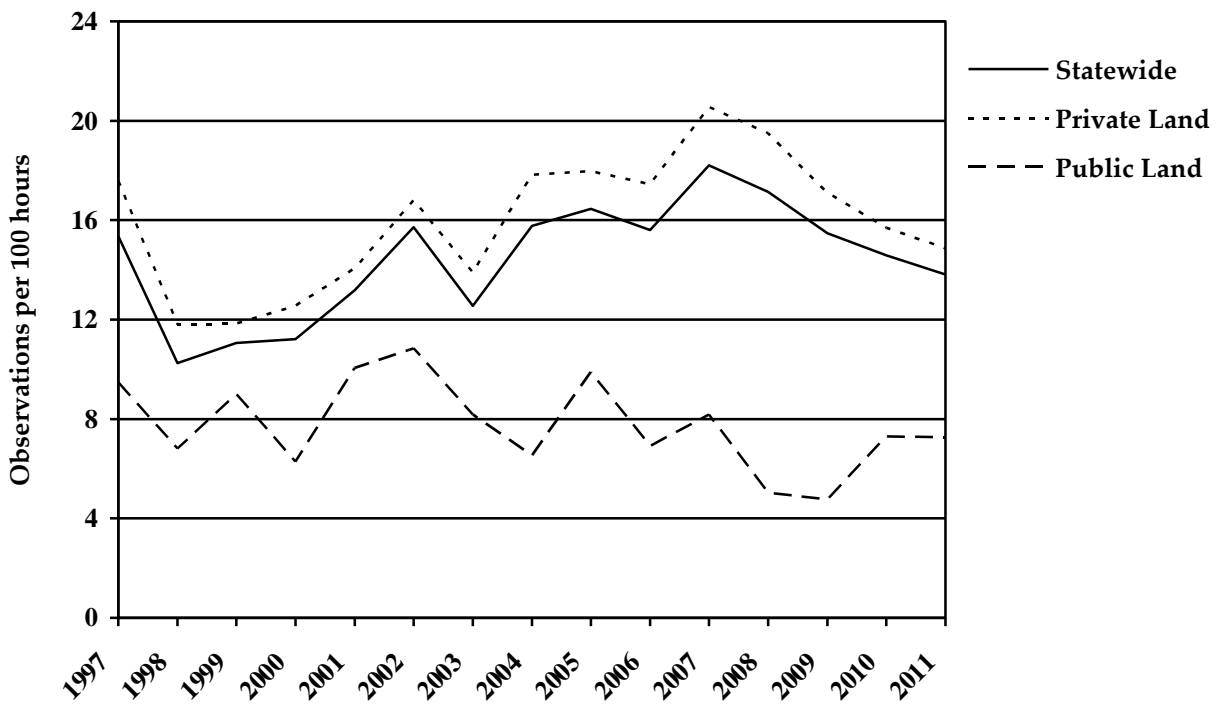


Figure 7. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

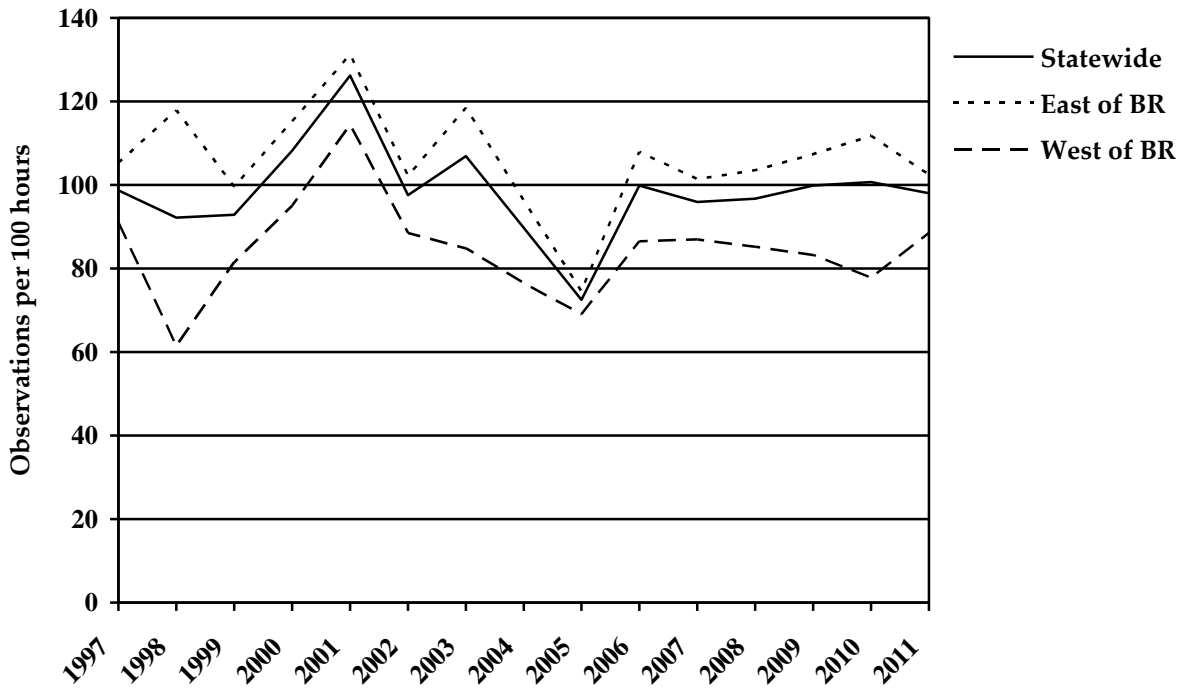


Figure 8. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

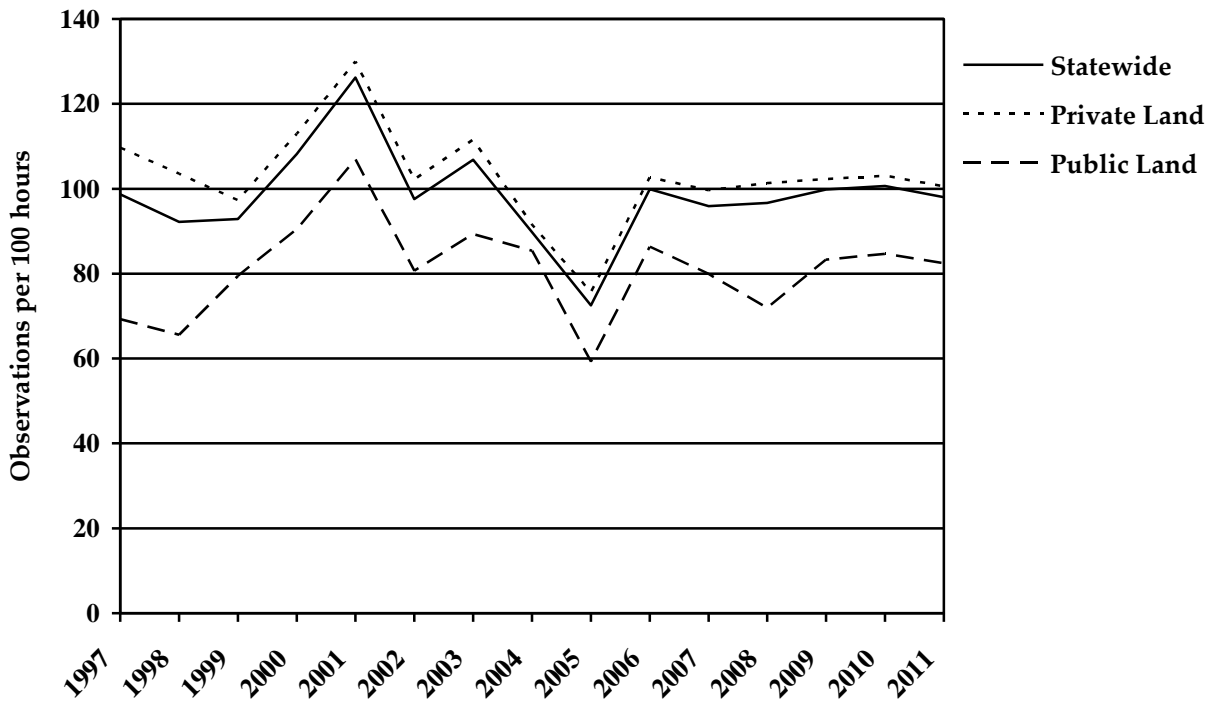


Figure 9. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

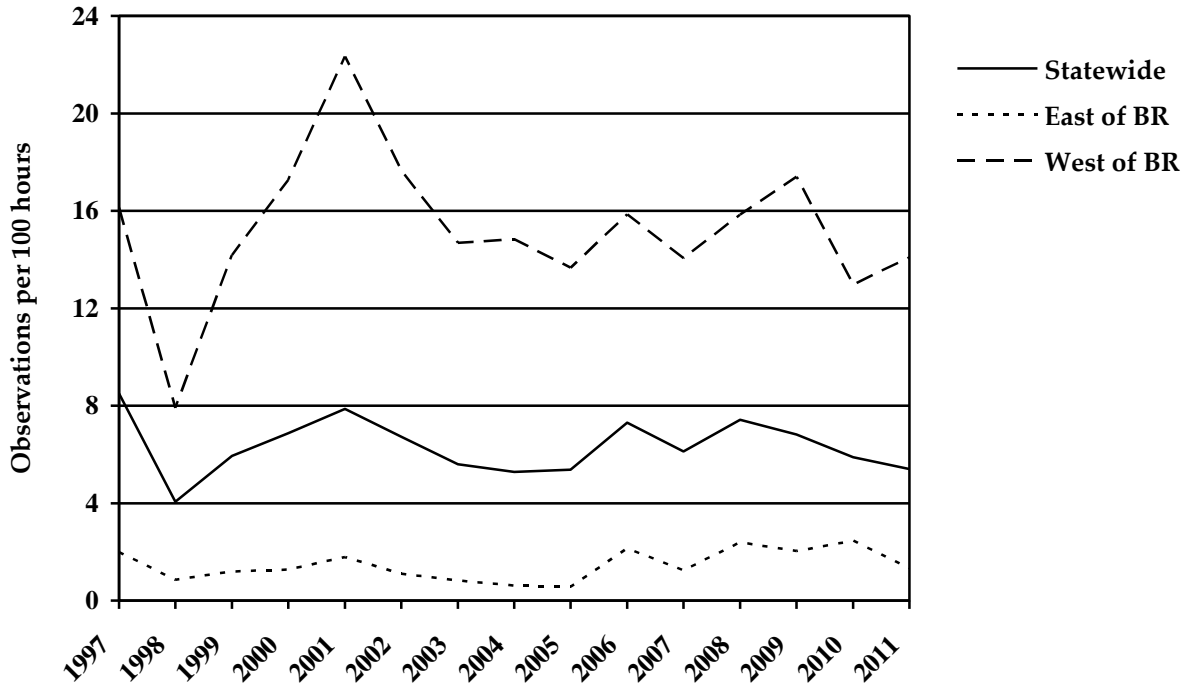


Figure 10. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

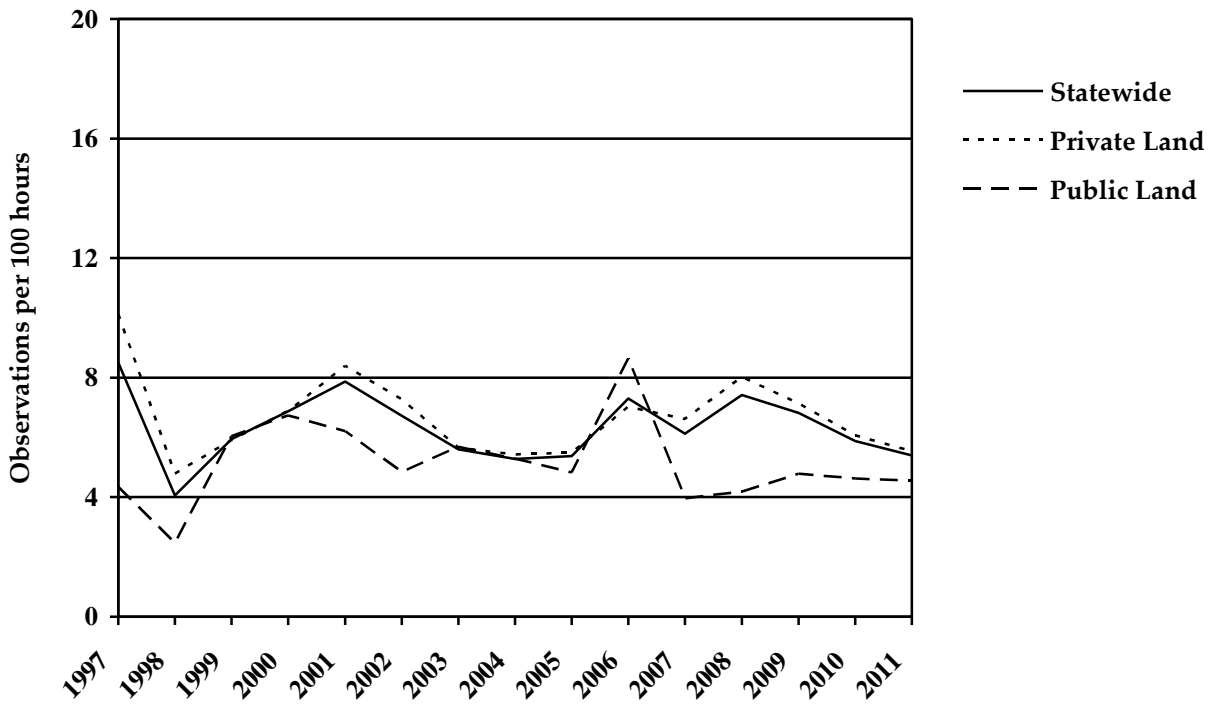


Figure 11. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

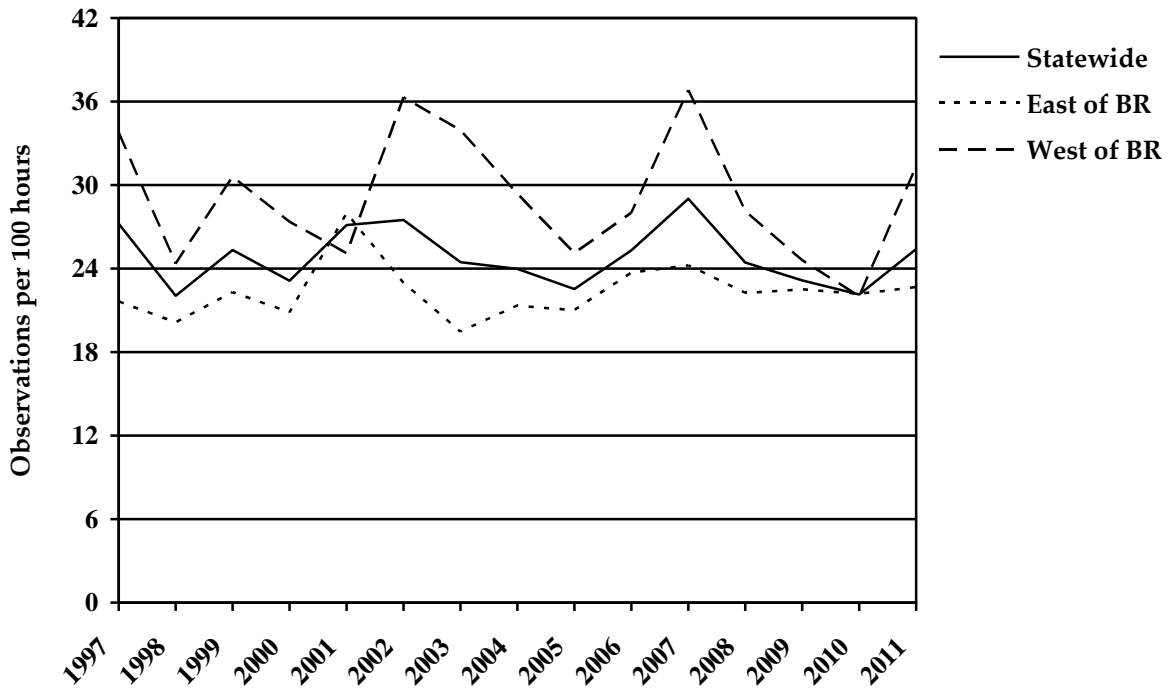


Figure 12. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

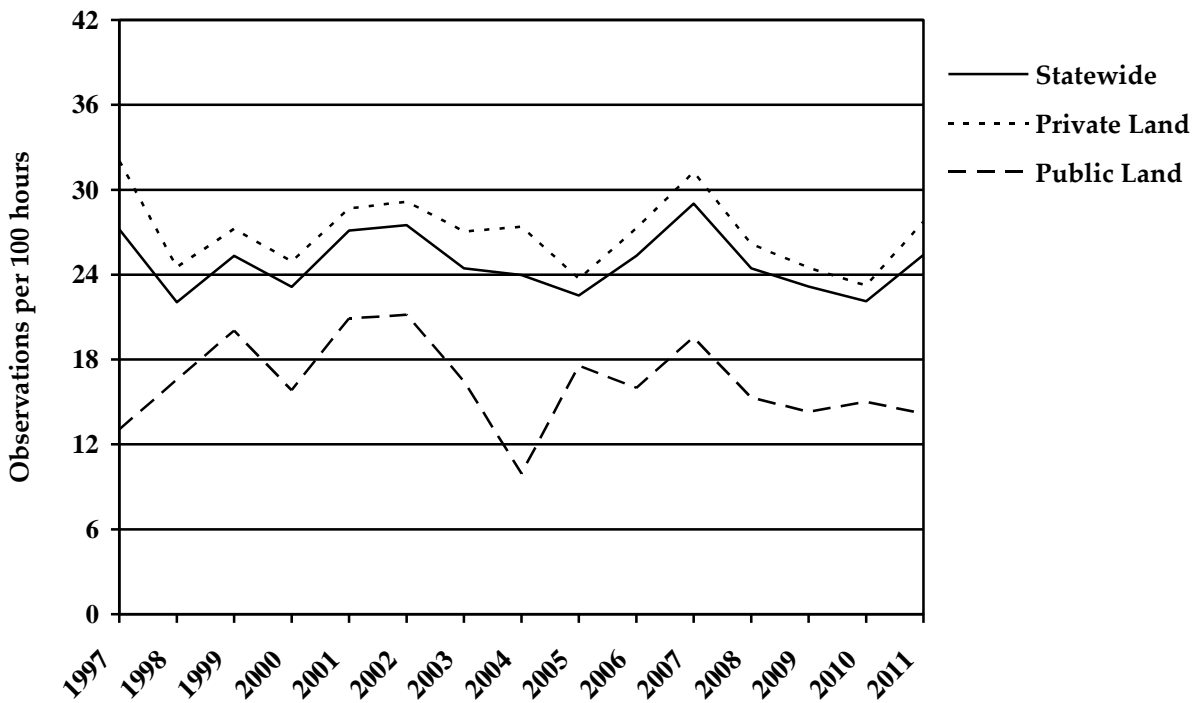


Figure 13. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

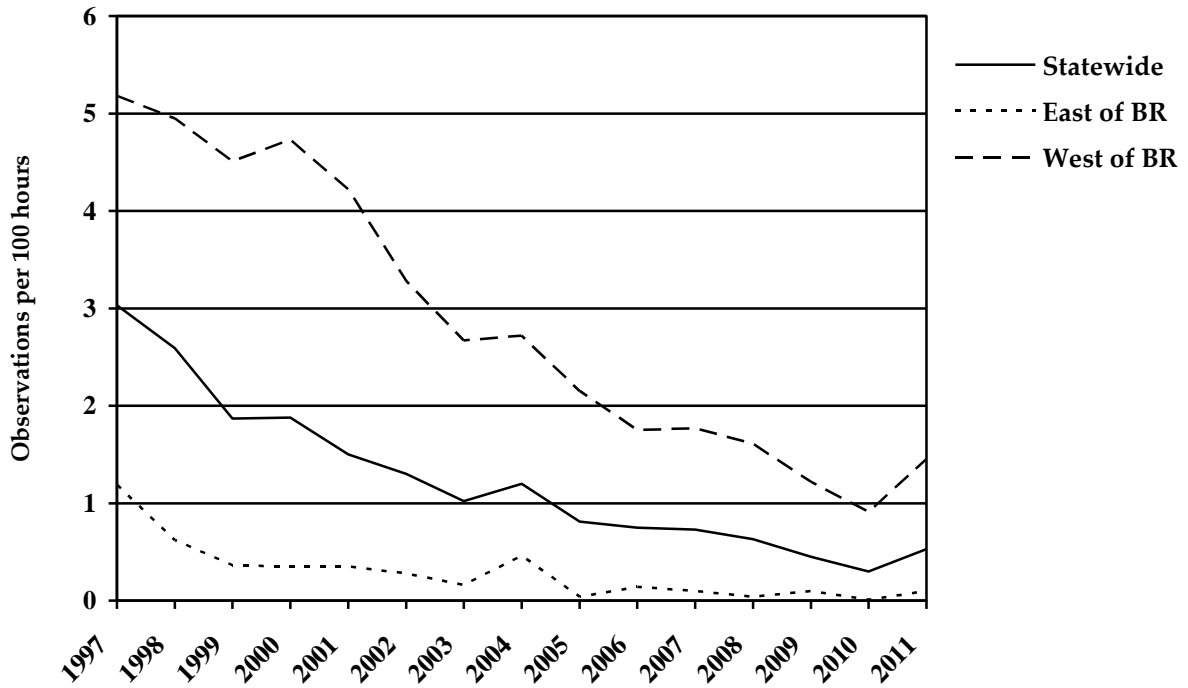


Figure 14. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

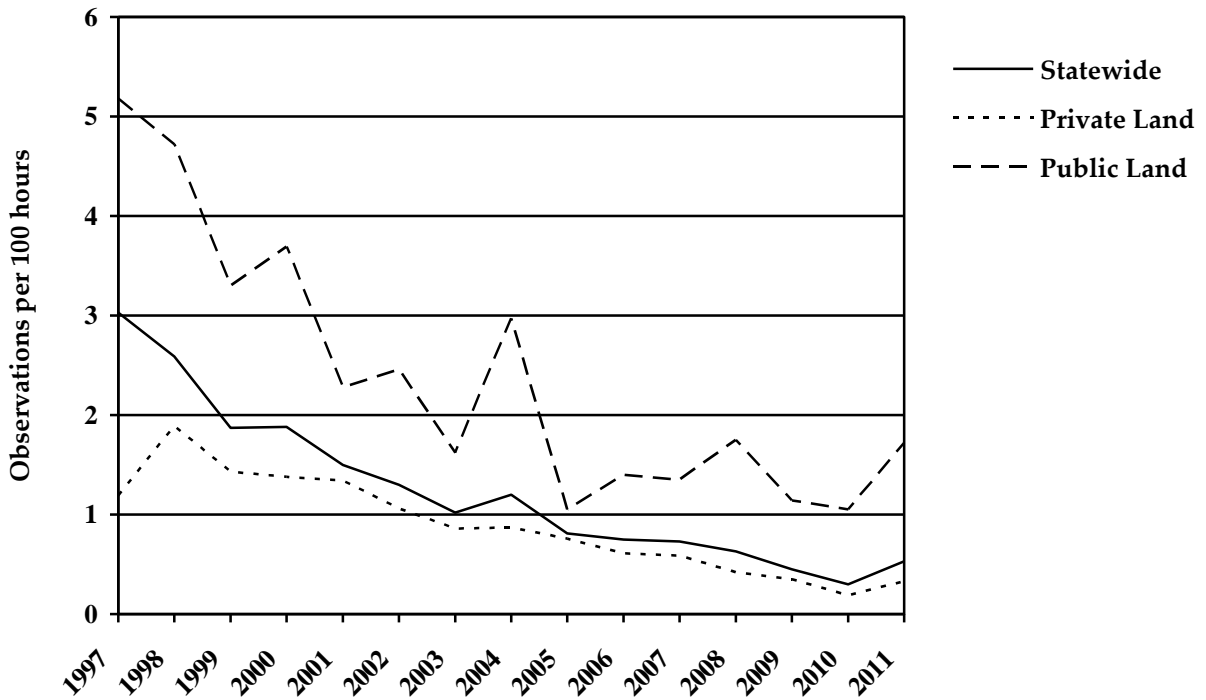


Figure 15. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

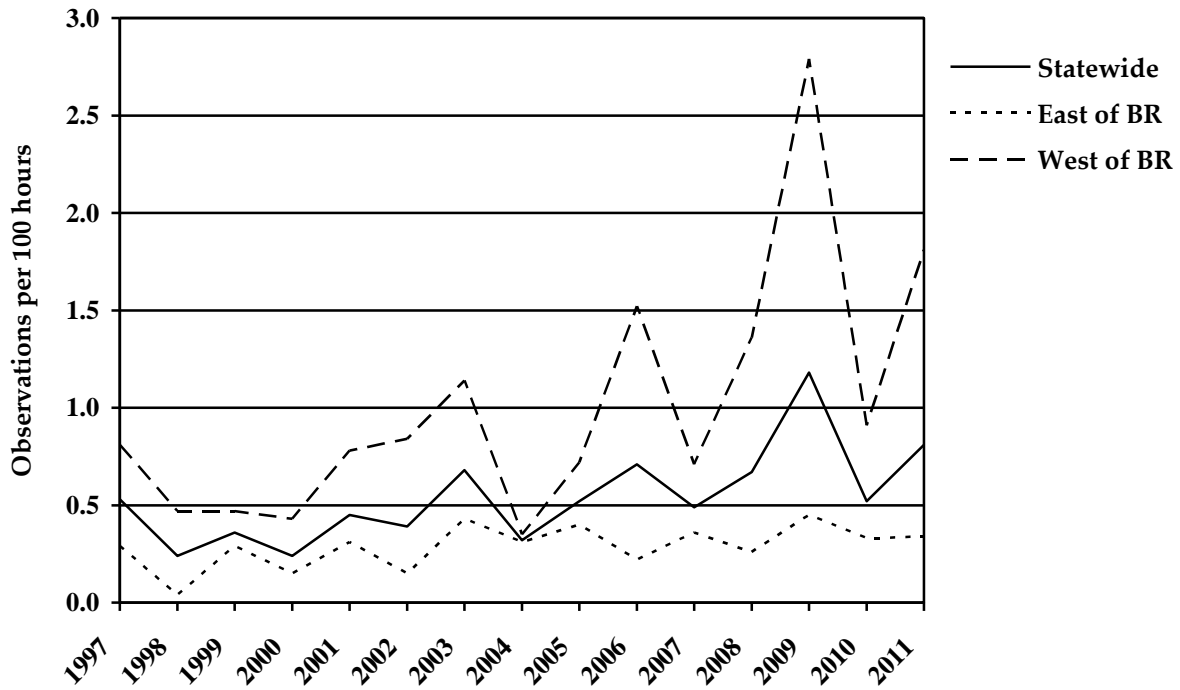


Figure 16. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

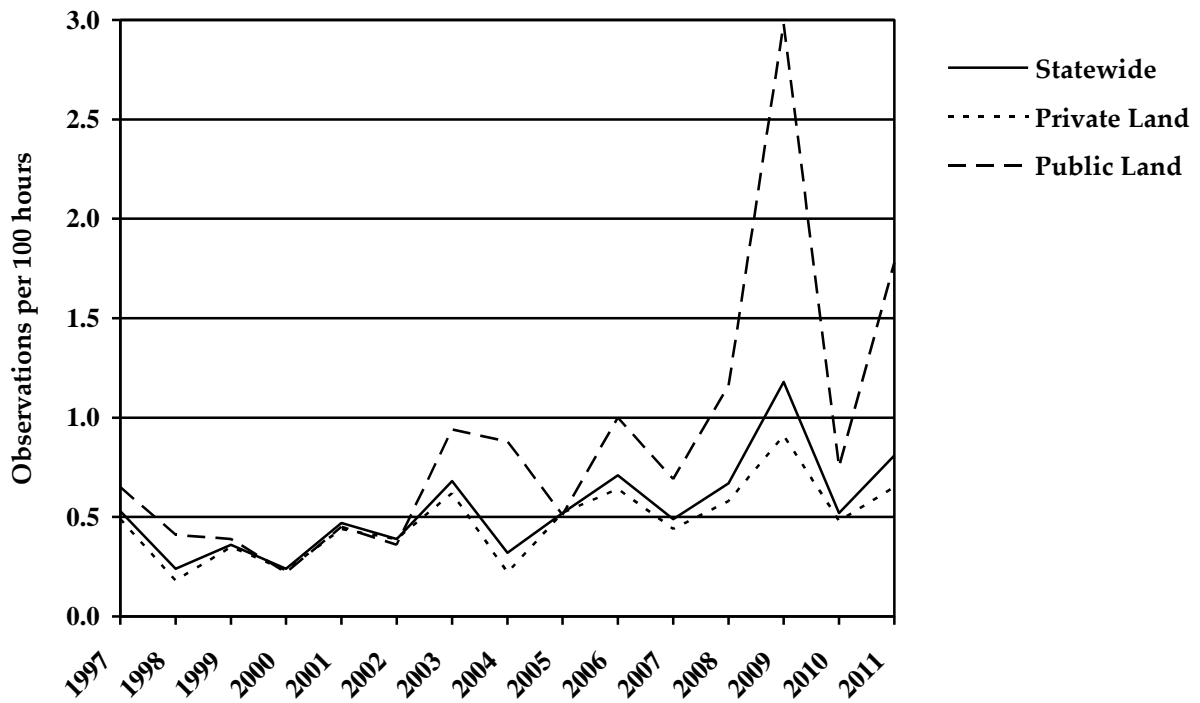


Figure 17. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

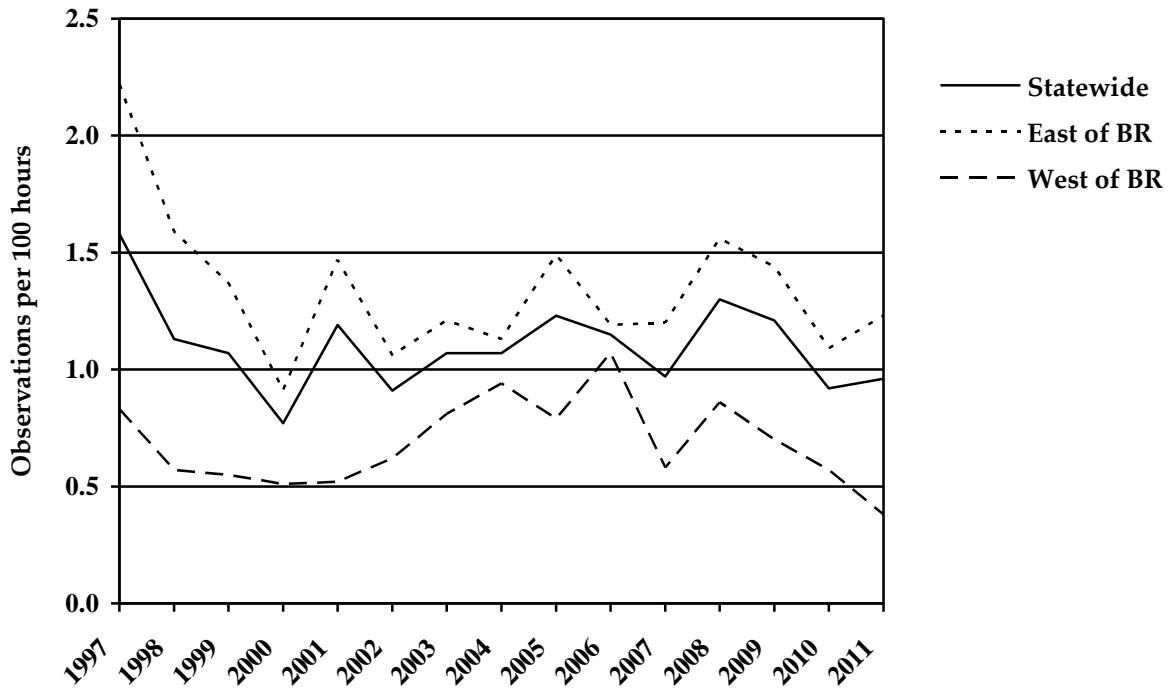


Figure 18. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

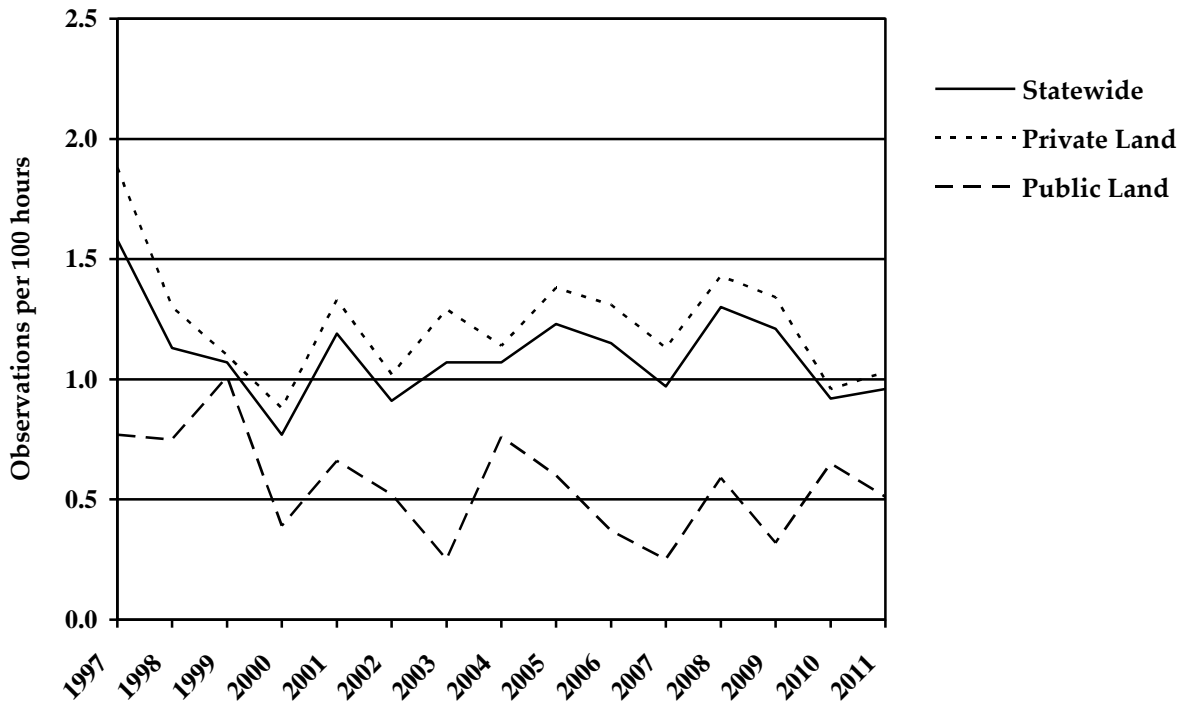


Figure 19. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

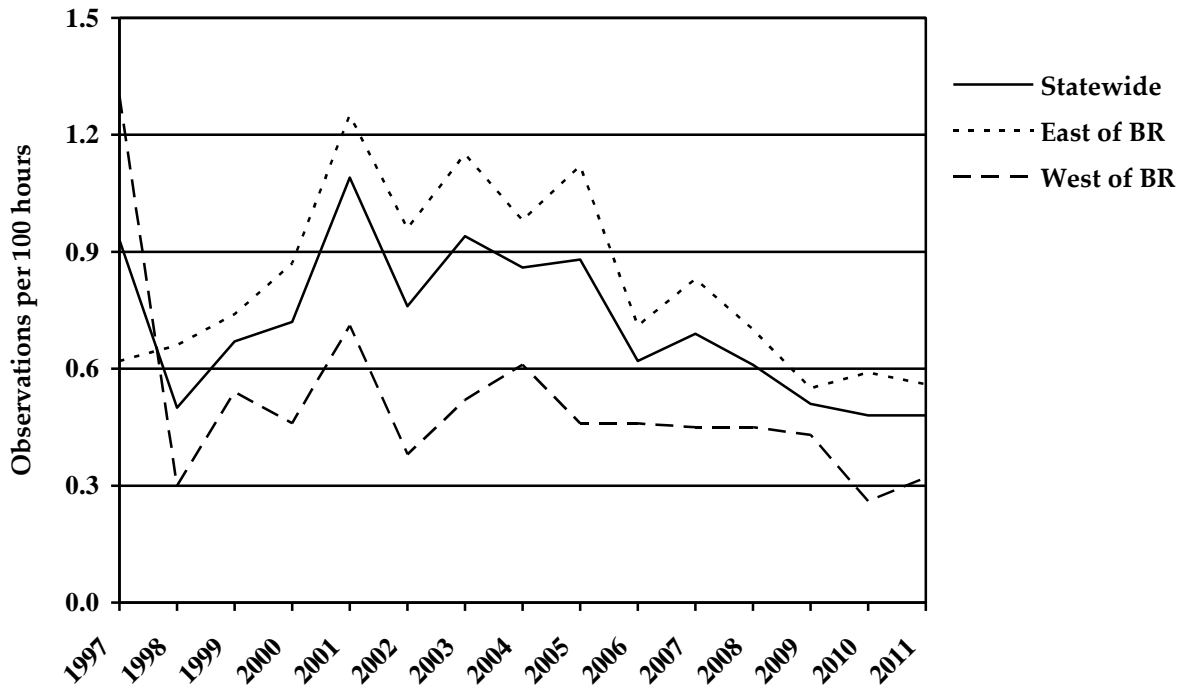


Figure 20. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

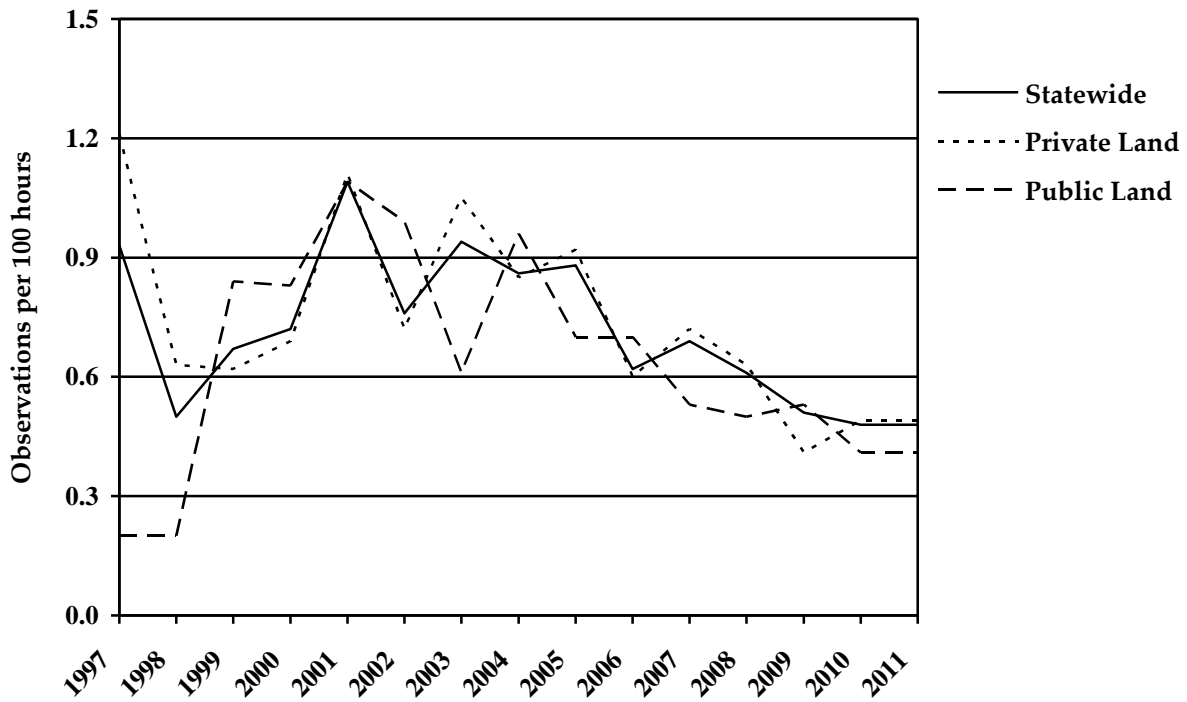


Figure 21. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

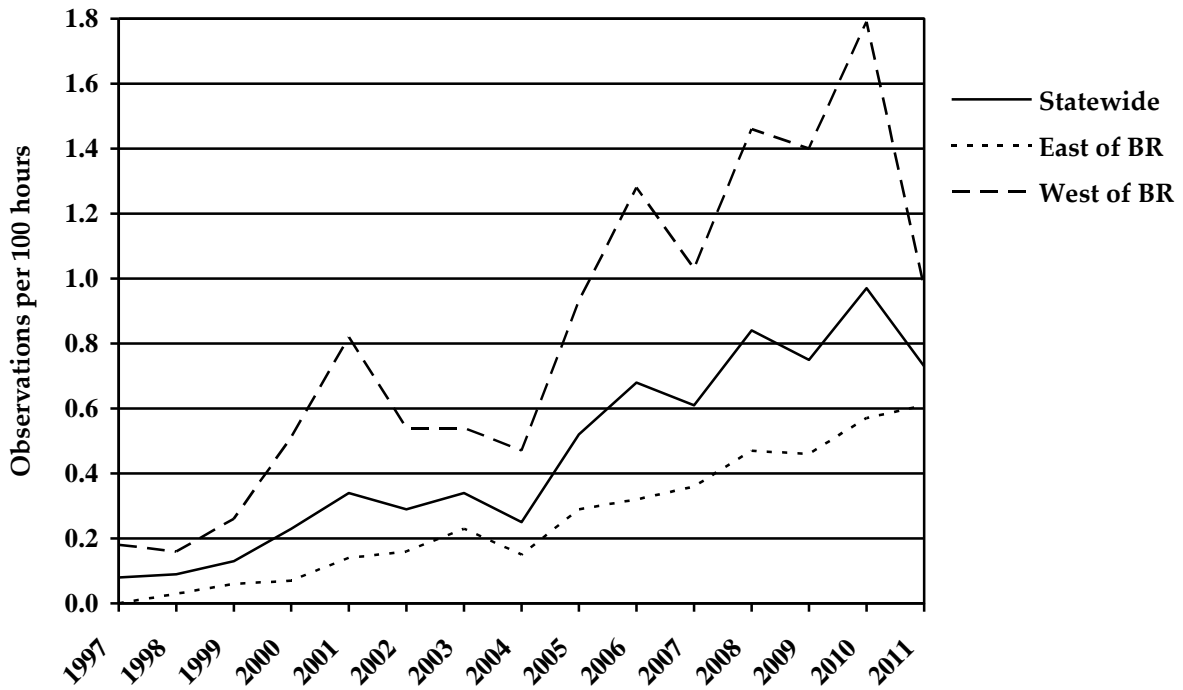


Figure 22. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

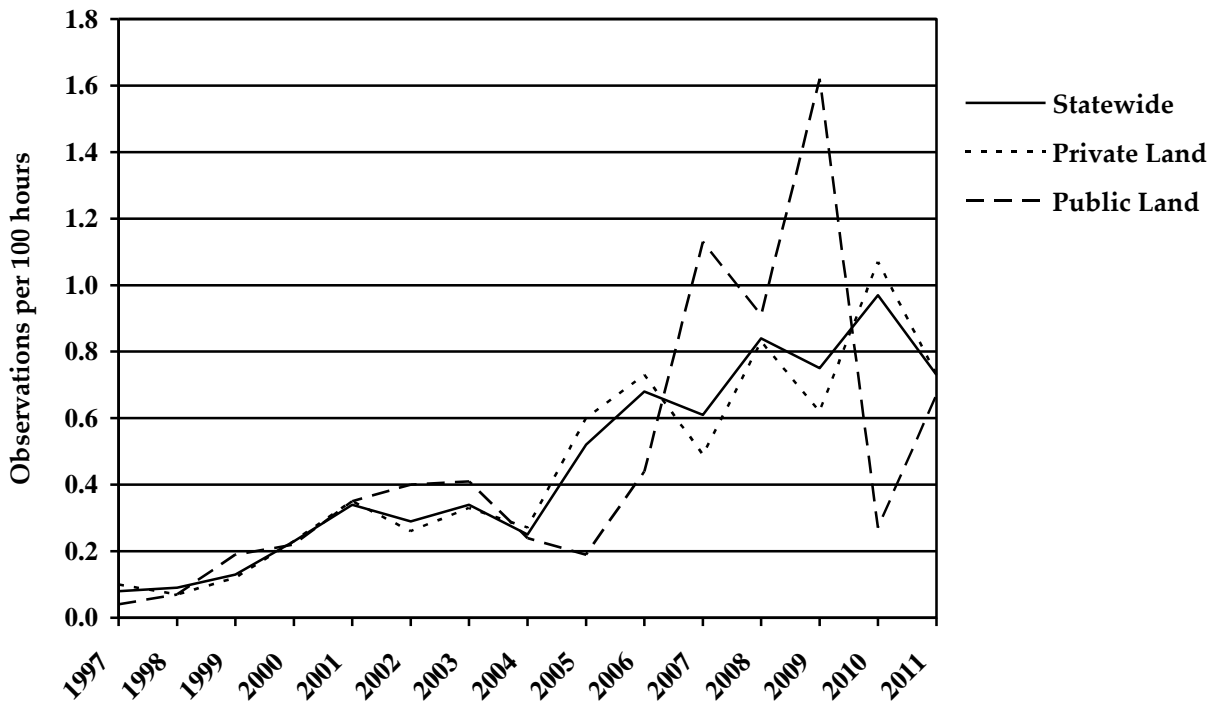


Figure 23. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

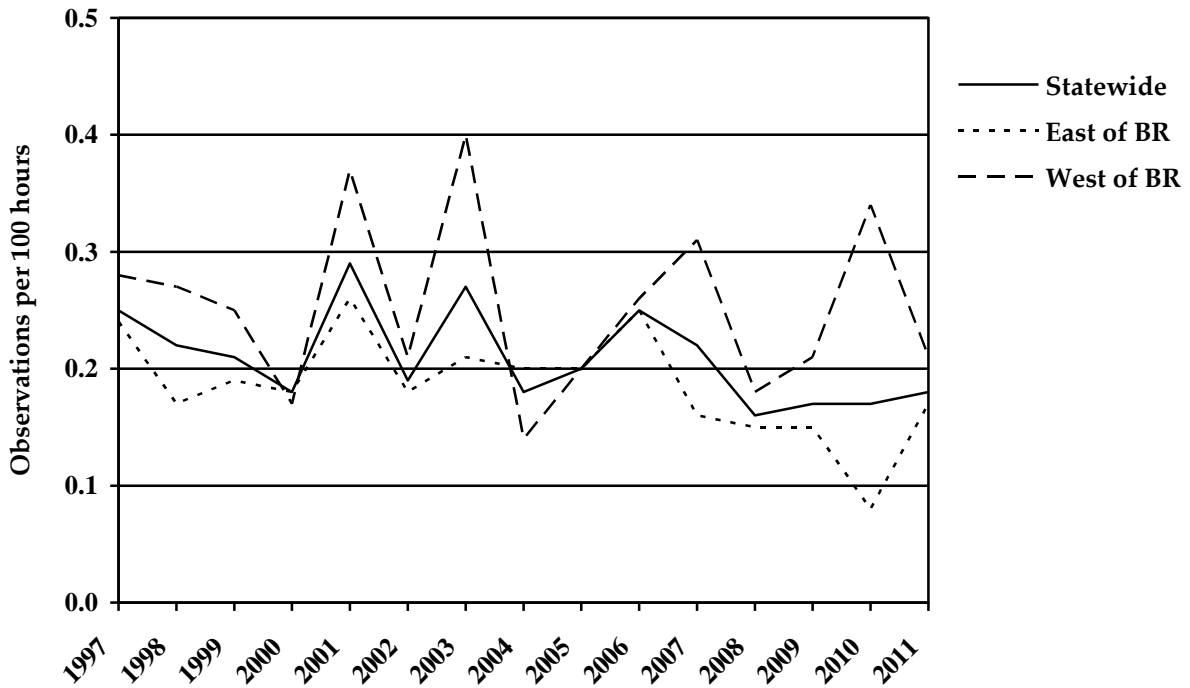


Figure 24. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

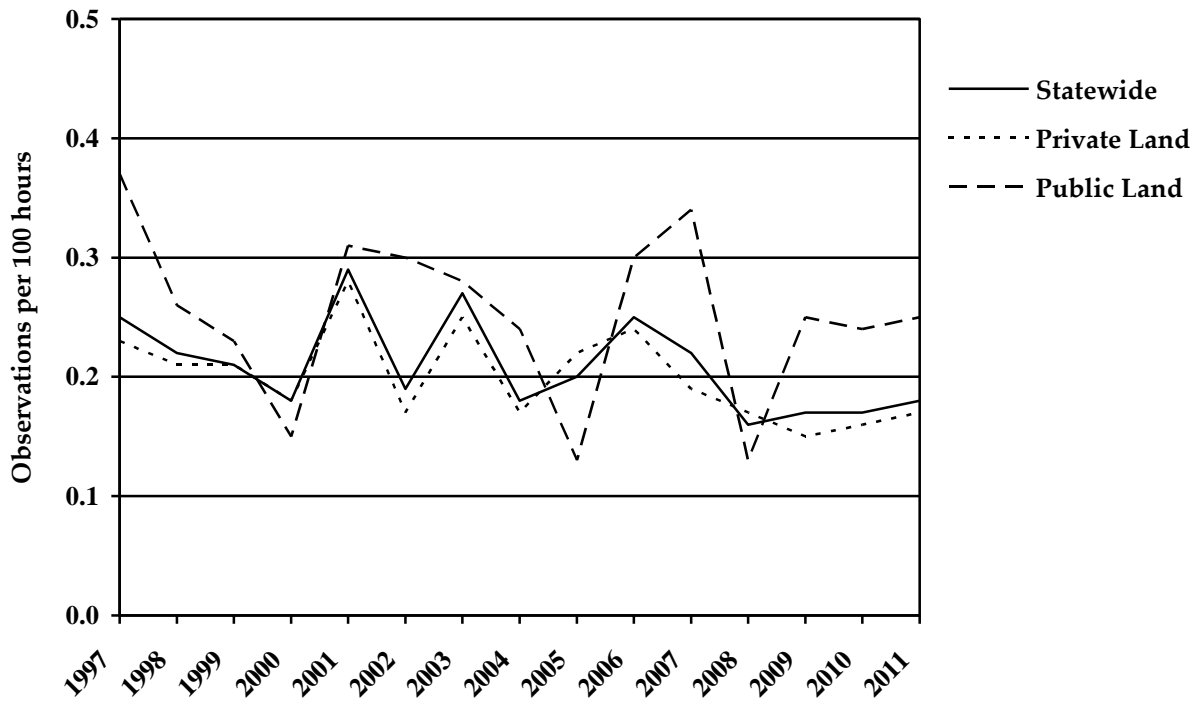


Figure 25. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

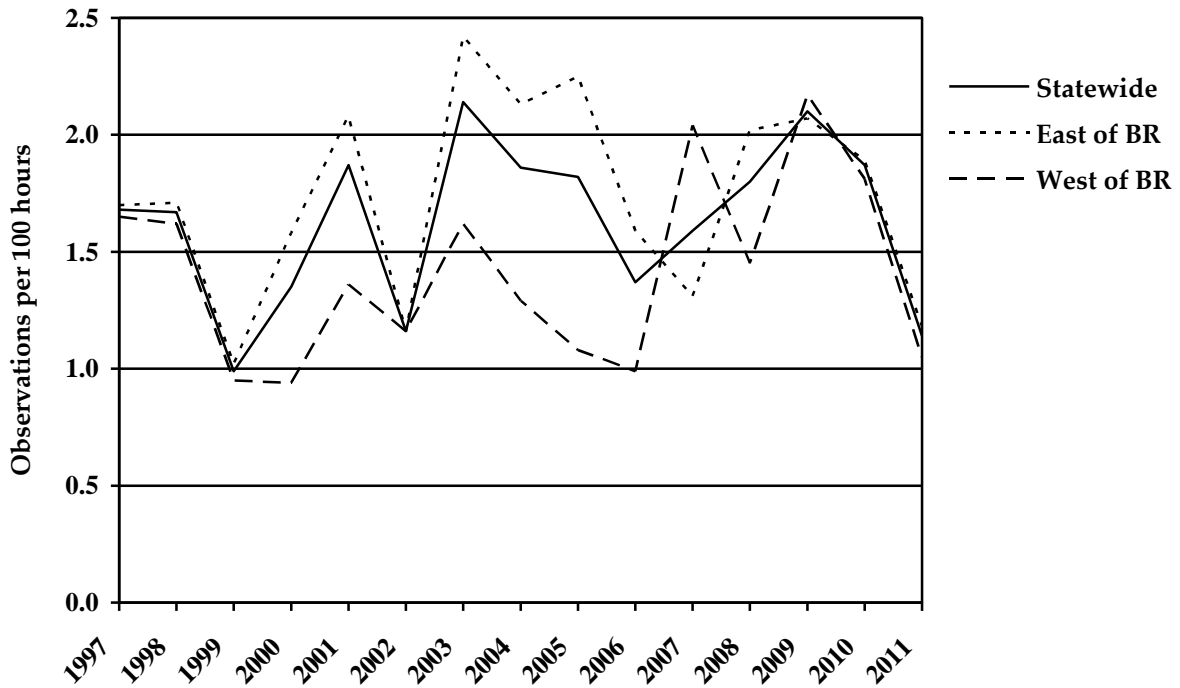


Figure 26. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

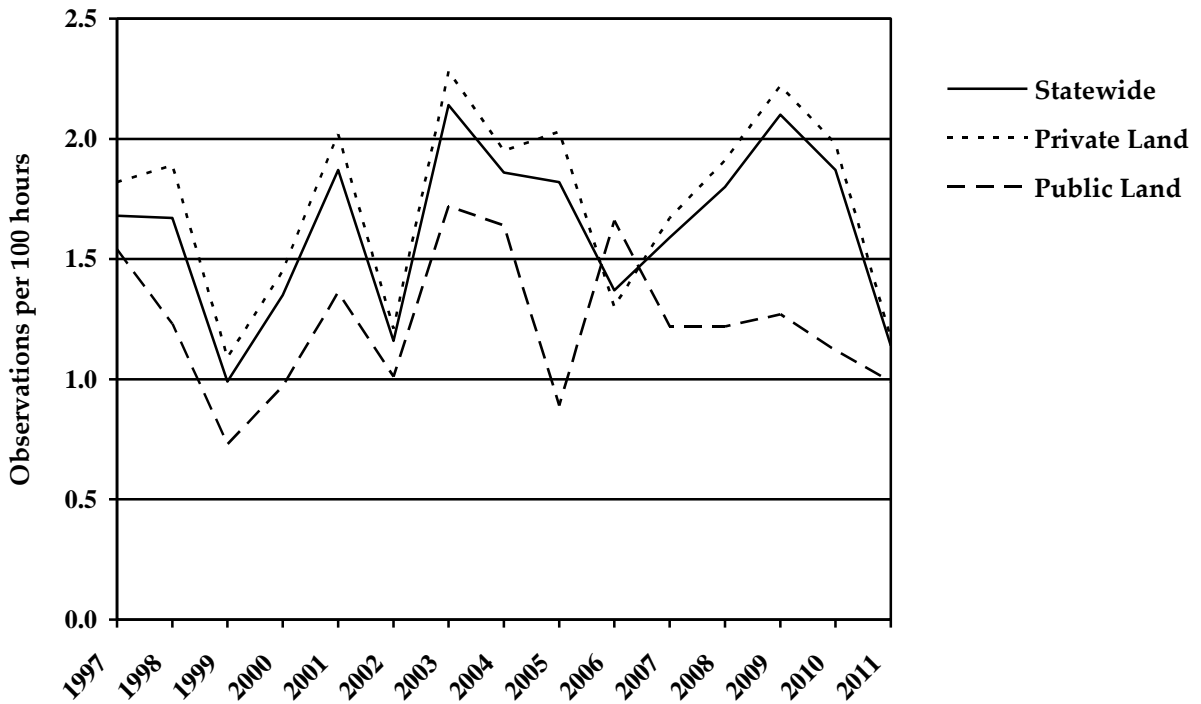


Figure 27. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

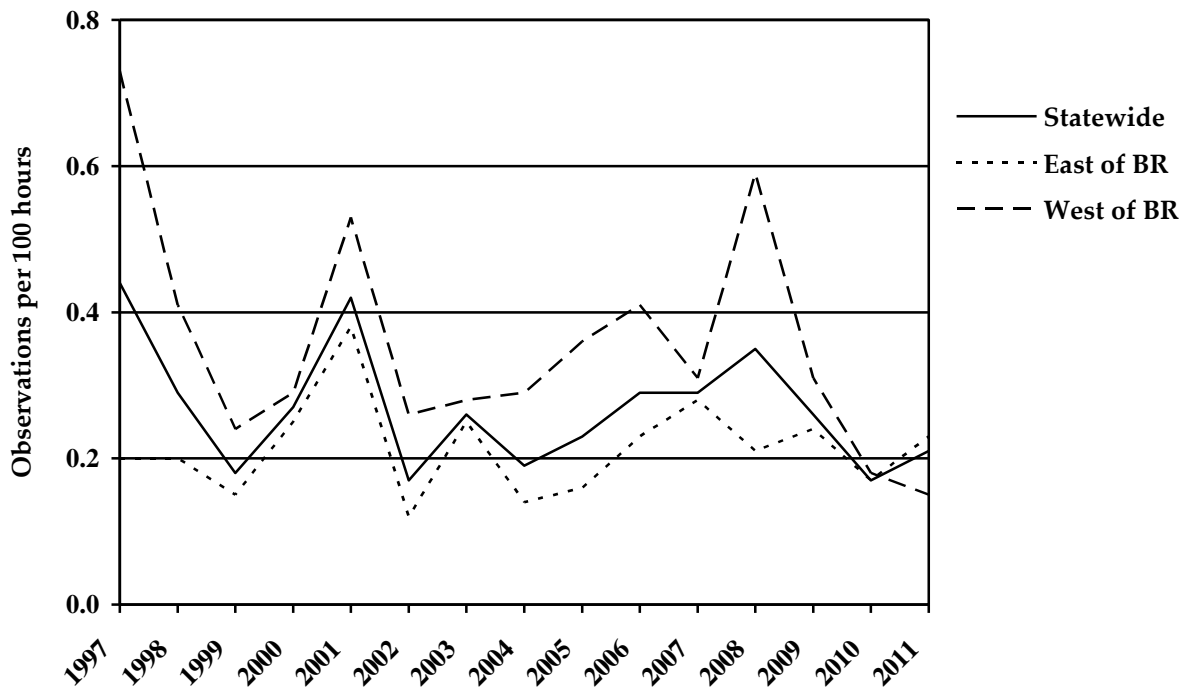


Figure 28. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

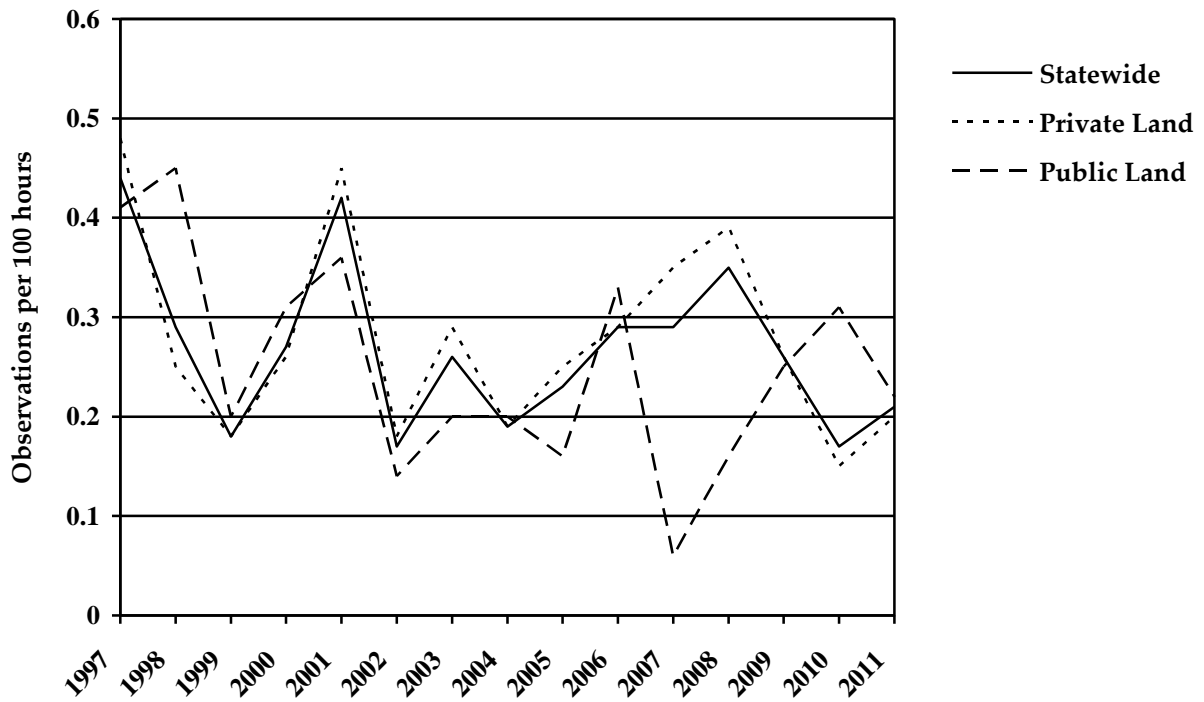


Figure 29. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

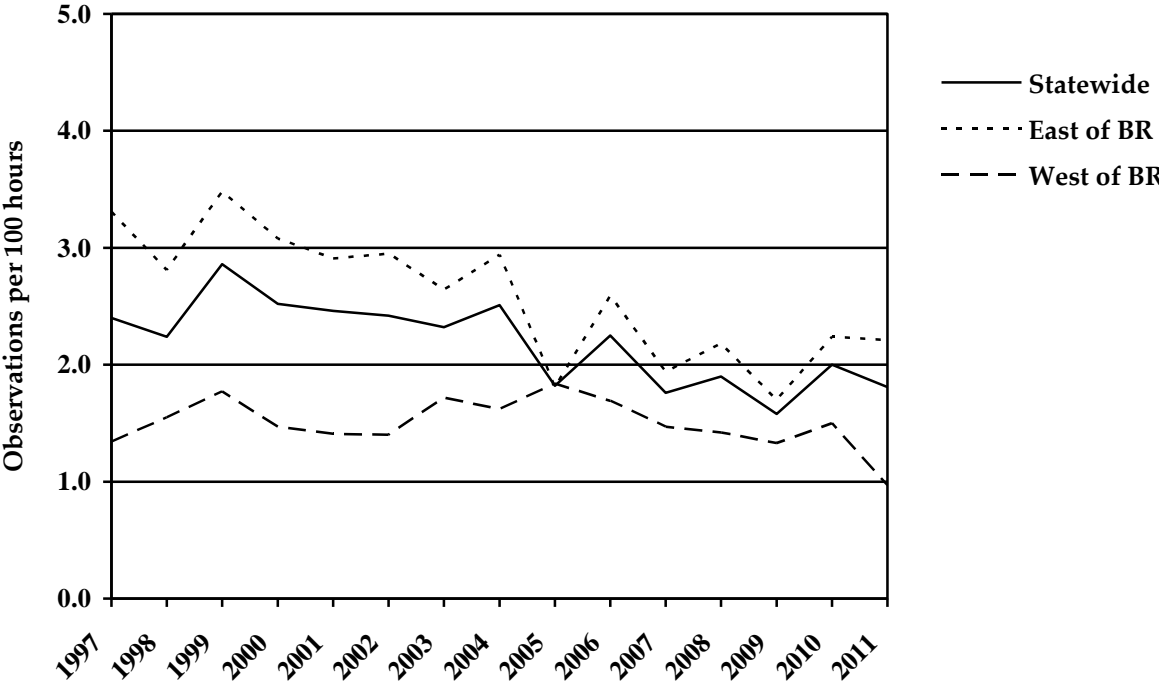


Figure 30. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

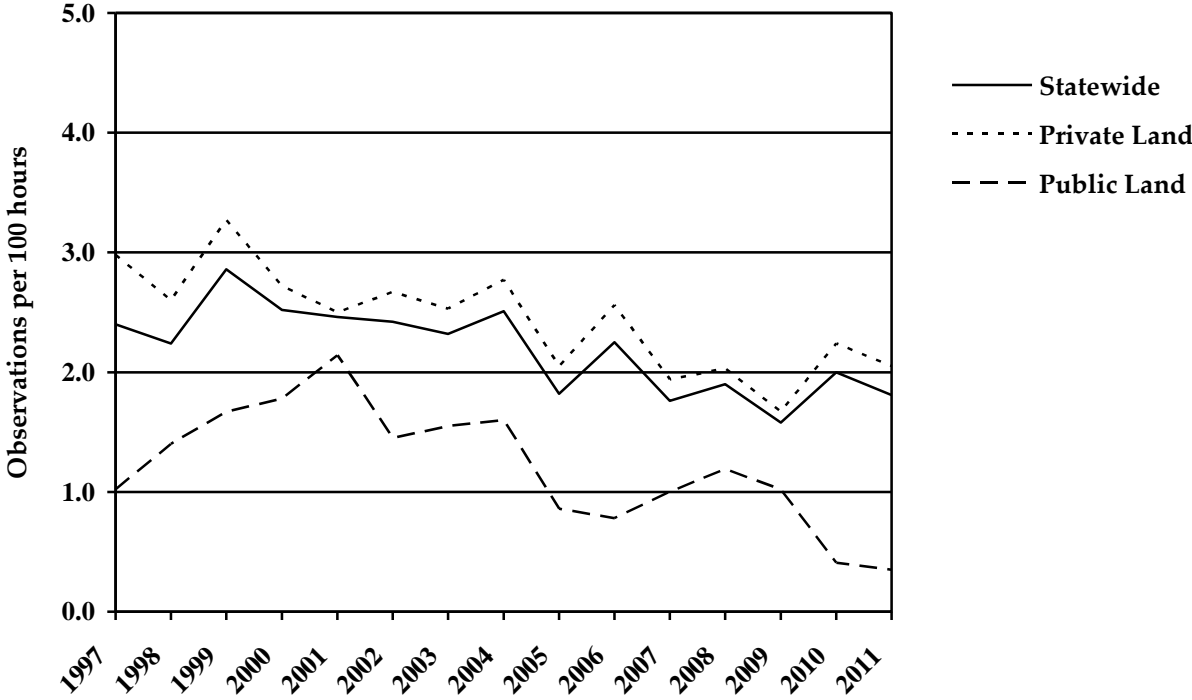


Figure 31. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

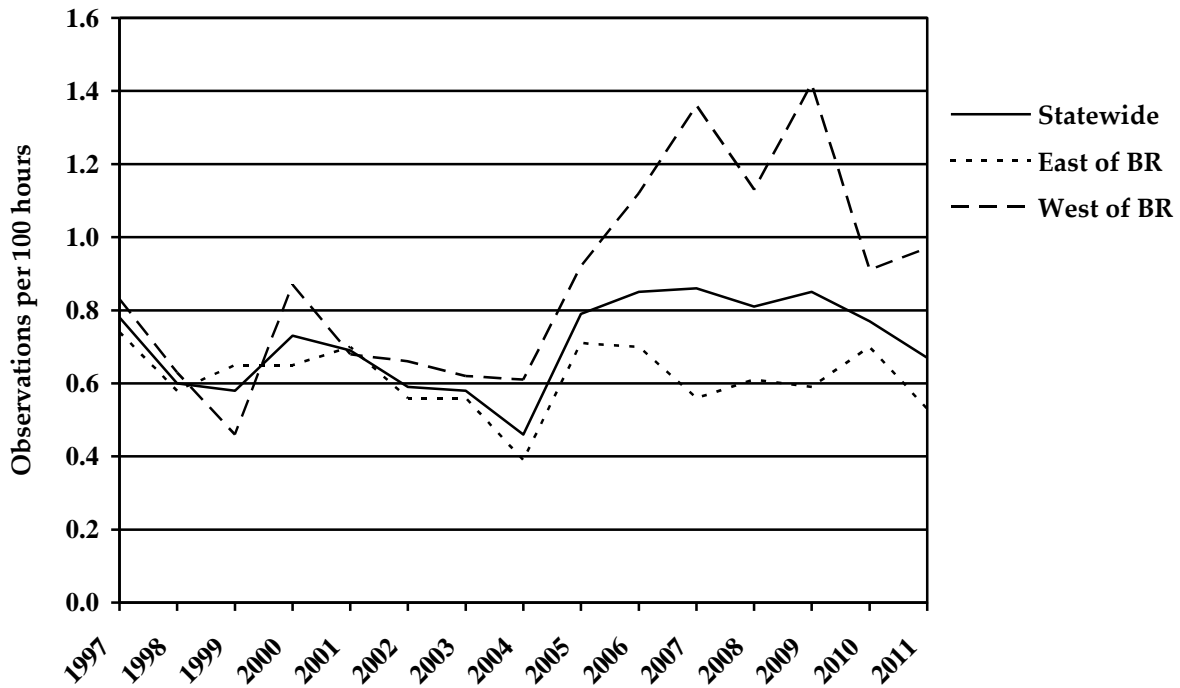


Figure 32. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

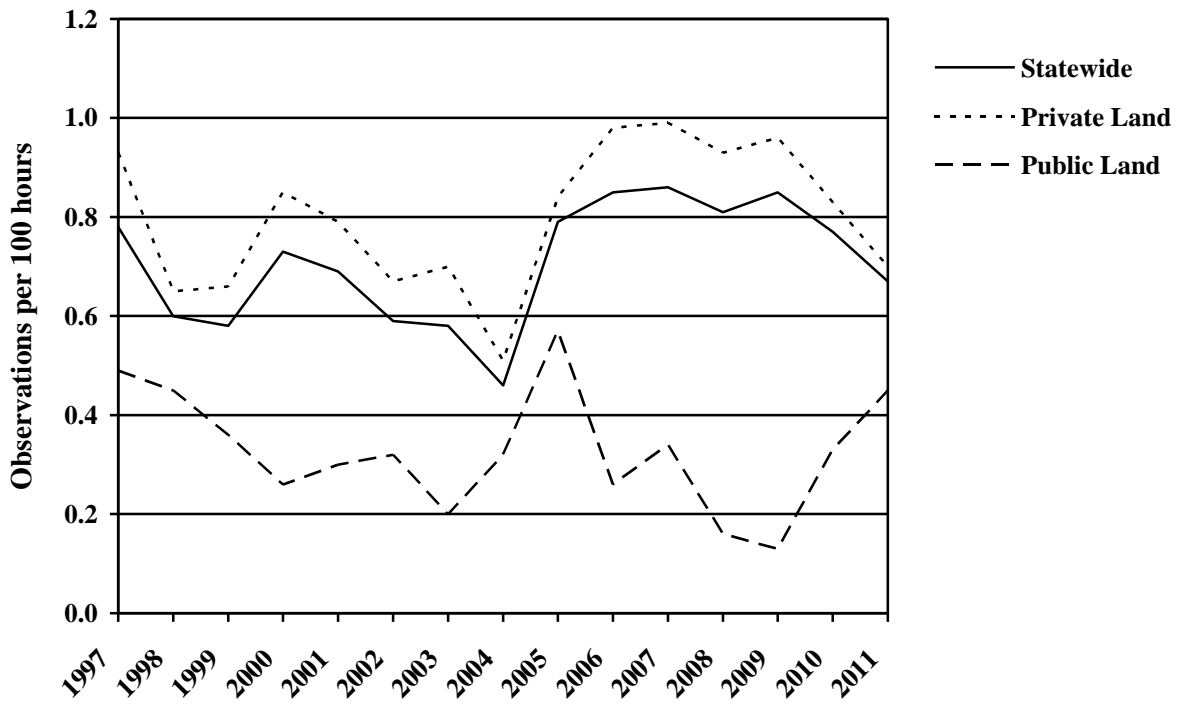


Figure 33. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

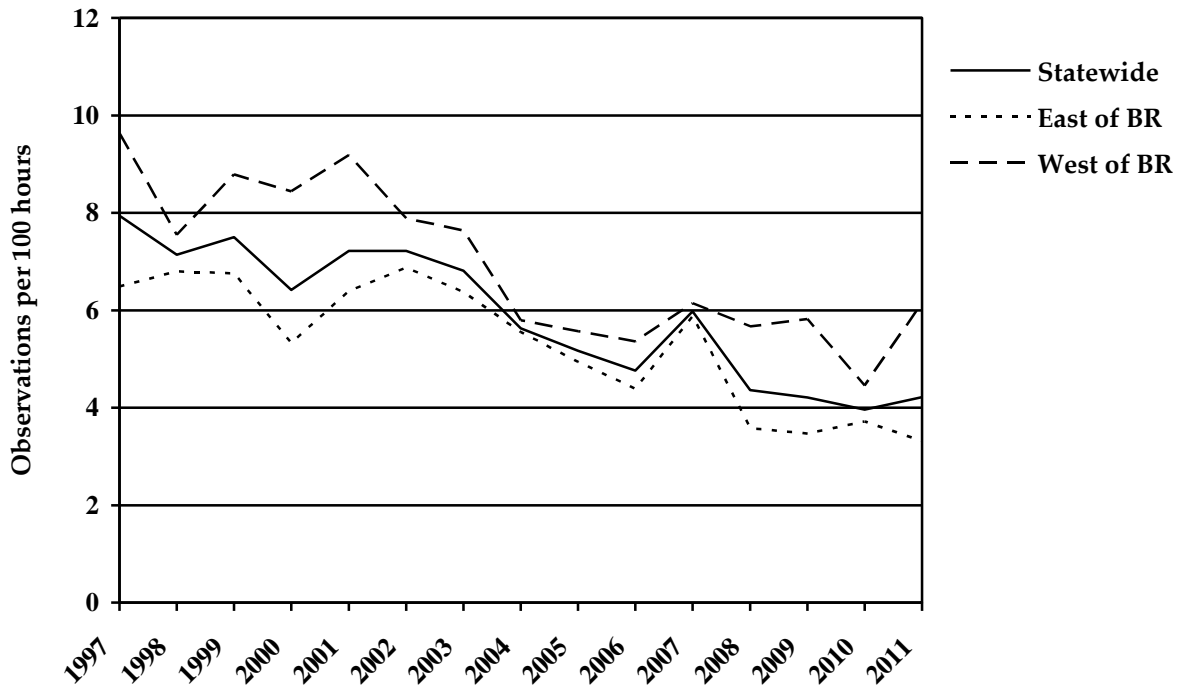


Figure 34. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 east and west of the Blue Ridge Mountains and statewide in Virginia.

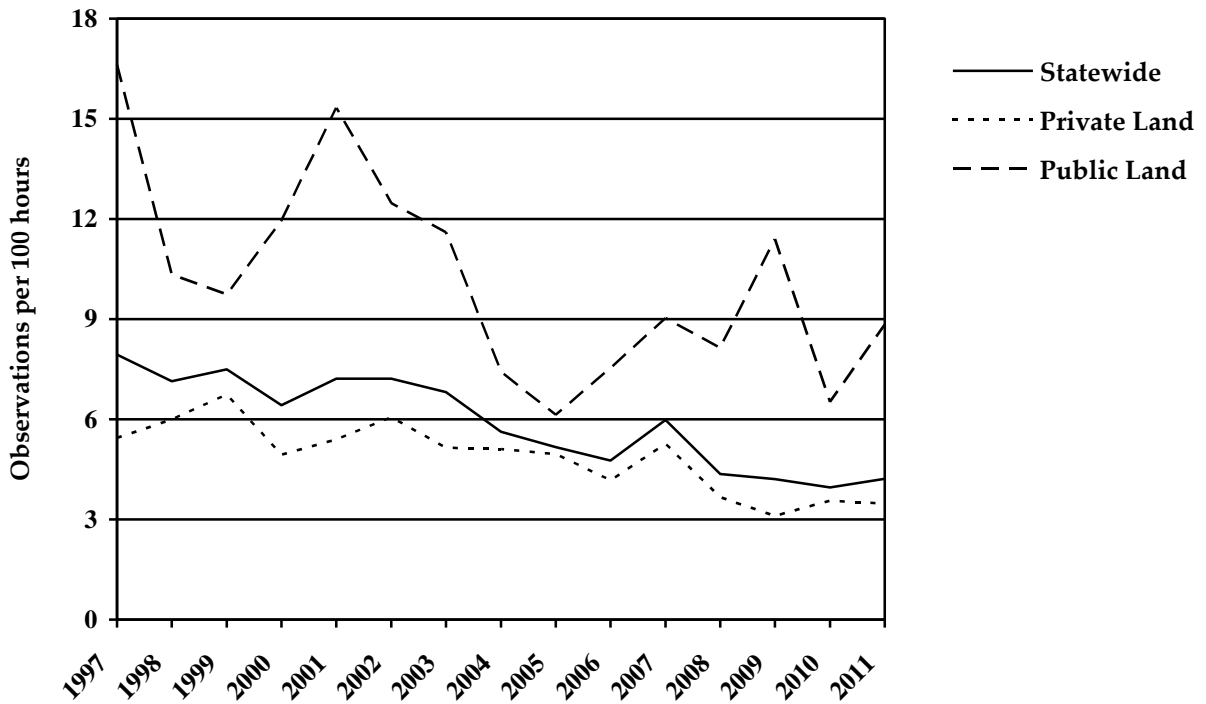


Figure 35. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2011 by land ownership and statewide in Virginia.

2011 Bowhunter Observation Record

Virginia Department of Game and Inland Fisheries

Please see instructions on back of form.

Name: _____

Address: _____

City and Zip Code: _____

*** Mast Crop and Weather Codes:**

Mast Crop: 1) none 2) light 3) moderate 4) heavy

Precipitation: 1) none 2) drizzle 3) moderate 4) heavy

Wind: 1) none 2) light 3) breezy 4) strong

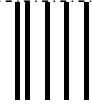
Temperature: 1) <40° F 2) 40-70° F 3) >70° F

Date	Number of Hours Hunted	County	Public Owned Land? (Yes or No)	Deer (antlered)	Deer (does)	Deer (fawns)	Deer (unknown)	Gray Squirrel	Fox Squirrel	Turkey (bearded)	Turkey (no beard)	Turkey (unknown)	Grouse	Bear (adult)	Bear (cub)	Red Fox	Gray Fox	Coyote	Bobcat	Raccoon	Opossum	Striped Skunk	Otter	Mink	Dog	House Cat	Hunter	Other Animals & Number Seen	Mast*	Precipitation*	Wind*	Temperature*	
Oct 3	4 ½	Example	Yes		1	2													1									Eagle:1	3	2	1	2	

Appendix 1. Survey instrument for 2011 Virginia Bowhunter Survey.

INSTRUCTIONS

1. If you wish to participate in next years survey, and do not wish to maintain your confidentiality, please fill in your name and address at the top of the form and in the return address box below.
2. Enter *number of hours* for each *date* you hunted **between Oct. 1 and Nov. 18** (early season) **only**.
3. Write in the *county* where you hunted. If you hunted in more than one county on one day, record different counties on different lines of the form.
4. Report whether or not you are hunting on *publicly owned land* (state or federal).
5. Enter the *number* of animals and other hunters you observed while hunting. Begin observations upon leaving your vehicle and end observations when you return to your vehicle.
6. If you saw a species *not listed* at the top of the chart, enter the *name* and *number* of animals in the "Other Animals" column near the right side of the form.
7. On the last four columns of the chart, record the *most conditions* and *average weather* conditions for the time period you hunted. Use the *numbers (codes)* given at the top right corner of the form.
8. *Fold* this form along the lines below so that our address shows, and *tape* it together.
9. Please *mail* this form to us by **January 1, 2012**. *No postage is needed*.



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VIRGINIA BOWHUNTER SURVEY
VA DEPT OF GAME AND INLAND FISHERIES
PO BOX 996
VERONA VA 24482-9901



Name: _____
Address: _____
City/Town: _____

If you wish to continue to participate in the Virginia Bowhunter Survey, and do not wish to maintain confidentiality, please enter your name and address in the return address box. Thank you.

RETURN ADDRESS (OPTIONAL).

DO YOU KNOW OF OTHER HUNTERS WHO WOULD LIKE TO PARTICIPATE IN THE BOWHUNTER SURVEY? IF SO, PLEASE ENTER THEIR NAMES AND ADDRESSES BELOW:

Name: _____
Address: _____
City/Town: _____

Name: _____
Address: _____
City/Town: _____

THANK YOU FOR PARTICIPATING!!

Tape Here

Appendix 3. Virginia counties hunted, hunts per county, and percentage of total state hunts per county by cooperating archery hunters 1 October to 18 November 2011 in Virginia.

County	No. Hunts	% of Hunts	County	No. Hunts	% of Hunts
Accomack	48	0.96	King William	103	2.06
Albemarle	72	1.44	Lancaster	52	1.04
Alleghany	0	0.00	Lee	26	0.52
Amelia	29	0.58	Loudoun	52	1.04
Amherst	81	1.62	Louisa	11	0.22
Appomattox	13	0.26	Lunenburg	14	0.28
Augusta	138	2.76	Madison	42	0.84
Bath	47	0.94	Mathews	13	0.26
Bedford	238	4.76	Mecklenburg	54	1.08
Bland	28	0.56	Middlesex	11	0.22
Botetourt	96	1.92	Montgomery	30	0.60
Brunswick	103	2.06	Nelson	30	0.60
Buchanan	22	0.44	New Kent	40	0.80
Buckingham	13	0.26	Northampton	63	1.26
Campbell	19	0.38	Northumberland	19	0.38
Caroline	40	0.80	Nottoway	62	1.24
Carroll	57	1.14	Orange	42	0.84
Charles City	54	1.08	Page	37	0.74
Charlotte	10	0.20	Patrick	52	1.04
Chesapeake	12	0.24	Pittsylvania	139	2.78
Chesterfield	109	2.18	Powhatan	26	0.52
Clarke	24	0.48	Prince Edward	39	0.78
Craig	16	0.32	Prince George	90	1.80
Culpeper	52	1.04	Prince William	60	1.20
Cumberland	47	0.94	Pulaski	11	0.22
Dickenson	18	0.36	Rappahannock	126	2.52
Dinwiddie	44	0.88	Richmond	6	0.12
Essex	36	0.72	Roanoke	61	1.22
Fairfax	203	4.06	Rockbridge	132	2.64
Fauquier	197	3.94	Rockingham	94	1.88
Floyd	54	1.08	Russell	8	0.16
Fluvanna	76	1.52	Scott	16	0.32
Franklin	126	2.52	Shenandoah	236	4.72
Frederick	6	0.12	Smyth	53	1.06
Giles	52	1.04	Southampton	177	3.54
Gloucester	15	0.30	Spotsylvania	15	0.30
Goochland	21	0.42	Stafford	27	0.54
Grayson	36	0.72	Suffolk	29	0.58
Greene	15	0.30	Surry	54	1.08
Greensville	39	0.78	Sussex	61	1.22
Halifax	0	0.00	Tazewell	15	0.30
Hanover	86	1.72	Virginia Beach	23	0.46
Henrico	34	0.68	Warren	22	0.44
Henry	63	1.26	N. News / Hampton	2	0.04
Highland	57	1.14	Washington	85	1.70
Isle of Wight	31	0.62	Westmoreland	76	1.52
James City	18	0.36	Wise	14	0.28
King & Queen	18	0.36	Wythe	46	0.92
King George	86	1.72	York	1	0.02