

Table 1. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 5 October to 15 November 2013 statewide, east (EBR) and west (WBR) of the Blue Ridge Mountains, and on private and public lands in Virginia.

Animal	Total	<u>Animals Seen/100 hrs. ± SE</u>				
	Seen	State	EBR	WBR	Private Land	Public Land
Deer (antlered)	2,434	13.16 ± 0.84	13.84 ± 1.00	11.78 ± 1.55	13.88 ± 0.92	8.68 ± 1.76
Deer (doe)	5,944	32.14 ± 1.61	32.48 ± 1.95	31.45 ± 2.80	33.95 ± 1.80	20.89 ± 2.39
Deer (fawn)	2,625	14.19 ± 1.12	14.15 ± 1.34	14.29 ± 2.03	15.33 ± 1.27	7.12 ± 1.27
Deer (unknown)	1,779	9.62 ± 0.66	9.12 ± 0.81	10.62 ± 1.14	9.90 ± 0.72	7.90 ± 1.69
Gray Squirrel	15,194	82.15 ± 3.76	86.64 ± 4.62	73.06 ± 6.12	84.20 ± 4.17	69.44 ± 6.98
Fox Squirrel	829	4.48 ± 0.58	0.81 ± 0.18	11.92 ± 1.50	4.66 ± 0.64	3.38 ± 0.91
Turkey (bearded)	1,090	5.89 ± 0.65	6.30 ± 0.86	5.07 ± 0.97	6.39 ± 0.74	2.80 ± 0.90
Turkey (no beard)	2,873	15.53 ± 1.48	16.84 ± 1.92	12.90 ± 2.20	16.94 ± 1.66	6.85 ± 2.20
Turkey (unknown)	2,009	10.86 ± 1.07	10.41 ± 1.18	11.78 ± 2.17	11.15 ± 1.13	9.10 ± 2.73
Turkey (total)	5,972	32.29 ± 2.26	33.55 ± 2.75	29.75 ± 3.96	34.47 ± 2.48	18.75 ± 4.24
Grouse	71	0.38 ± 0.10	0.07 ± 0.04	1.01 ± 0.29	0.26 ± 0.09	1.13 ± 0.45
Bear (adult)	106	0.57 ± 0.09	0.29 ± 0.09	1.14 ± 0.21	0.48 ± 0.09	1.13 ± 0.38
Bear (cub)	50	0.27 ± 0.06	0.16 ± 0.06	0.49 ± 0.12	0.20 ± 0.06	0.70 ± 0.24
Bear (total)	156	0.84 ± 0.13	0.45 ± 0.13	1.63 ± 0.30	0.68 ± 0.13	1.83 ± 0.56
Red Fox	207	1.11 ± 0.15	1.36 ± 0.21	0.64 ± 0.16	1.16 ± 0.16	0.86 ± 0.37
Gray Fox	64	0.35 ± 0.06	0.42 ± 0.08	0.20 ± 0.07	0.35 ± 0.06	0.31 ± 0.17
Coyote	164	0.89 ± 0.13	0.52 ± 0.09	1.63 ± 0.33	0.83 ± 0.13	1.25 ± 0.39
Bobcat	30	0.16 ± 0.04	0.18 ± 0.05	0.13 ± 0.05	0.18 ± 0.04	0.08 ± 0.05
Raccoon	373	2.02 ± 0.21	2.16 ± 0.27	1.73 ± 0.29	2.10 ± 0.23	1.52 ± 0.44
Opossum	72	0.39 ± 0.06	0.35 ± 0.07	0.47 ± 0.12	0.41 ± 0.07	0.23 ± 0.11
Striped Skunk	62	0.34 ± 0.07	0.24 ± 0.07	0.52 ± 0.18	0.34 ± 0.08	0.31 ± 0.21
Elk	0	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Feral Hog	1	0.01 ± 0.01	0.00 ± 0.00	0.01 ± 0.01	0.01 ± 0.01	0.00 ± 0.00
Dog	272	1.47 ± 0.30	1.67 ± 0.38	1.06 ± 0.45	1.46 ± 0.30	1.52 ± 0.98
House Cat	168	0.91 ± 0.13	0.75 ± 0.15	1.23 ± 0.27	0.85 ± 0.13	1.28 ± 0.50
Hunter	771	4.17 ± 0.62	3.48 ± 0.74	5.56 ± 1.08	3.33 ± 0.56	9.34 ± 2.54
Total Hunters		358	250	133	331	91
Total Hunts		4,303	2,973	1,330	3,751	552
Total Hours		18,496	12,377	6,119	15,925	2,571
Avg. Hrs. Per Hunt		4.30 ± 0.03	4.16 ± 0.04	4.60 ± 0.07	4.25 ± 0.04	4.66 ± 0.10

Table 2. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 5 October to 15 November 2013 on private and public lands east (EBR) and west (WBR) of the Blue Ridge Mountains in Virginia.

Animal	<u>Animals Seen/100 hrs. ± SE</u>			
	EBR		WBR	
	Private Land	Public Land	Private Land	Public Land
Deer (antlered)	14.35 ± 1.07	9.34 ± 2.33	12.81 ± 1.78	8.04 ± 2.64
Deer (doe)	33.50 ± 2.13	23.40 ± 3.54	35.00 ± 3.39	18.51 ± 3.13
Deer (fawn)	14.85 ± 1.45	7.91 ± 2.23	16.46 ± 2.52	6.37 ± 1.24
Deer (unknown)	9.32 ± 0.86	7.35 ± 2.29	11.23 ± 1.31	8.42 ± 2.46
Gray Squirrel	87.99 ± 4.96	74.67 ± 10.31	75.41 ± 7.30	64.48 ± 8.85
Fox Squirrel	0.78 ± 0.19	1.04 ± 0.70	13.65 ± 1.74	5.61 ± 1.66
Turkey (bearded)	6.60 ± 0.93	3.67 ± 1.62	5.92 ± 1.17	1.97 ± 0.81
Turkey (no beard)	17.90 ± 2.08	7.43 ± 3.90	14.71 ± 2.63	6.30 ± 2.19
Turkey (unknown)	11.00 ± 1.27	5.11 ± 2.38	11.48 ± 2.34	12.90 ± 4.35
Turkey (total)	35.50 ± 2.93	16.21 ± 6.64	21.16 ± 5.15	32.10 ± 4.70
Grouse	0.03 ± 0.02	0.40 ± 0.32	0.79 ± 0.28	1.82 ± 0.80
Bear (adult)	0.23 ± 0.07	0.80 ± 0.63	1.06 ± 0.43	1.44 ± 0.43
Bear (cub)	0.13 ± 0.06	0.48 ± 0.30	0.37 ± 0.37	0.91 ± 0.38
Bear (total)	0.36 ± 0.11	1.28 ± 0.84	1.44 ± 0.32	2.35 ± 0.74
Red Fox	1.32 ± 0.21	1.67 ± 0.76	0.79 ± 0.19	0.08 ± 0.07
Gray Fox	0.41 ± 0.08	0.48 ± 0.33	0.21 ± 0.08	0.15 ± 0.10
Coyote	0.50 ± 0.09	0.64 ± 0.41	1.58 ± 0.39	1.82 ± 0.61
Bobcat	0.20 ± 0.06	0.00 ± 0.00	0.12 ± 0.06	0.15 ± 0.10
Raccoon	2.18 ± 0.29	1.92 ± 0.73	1.90 ± 0.34	1.14 ± 0.73
Opossum	0.37 ± 0.08	0.16 ± 0.11	0.52 ± 0.14	0.30 ± 0.19
Striped Skunk	0.22 ± 0.06	0.40 ± 0.39	0.60 ± 0.22	0.23 ± 0.17
Elk	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Feral Hog	0.00 ± 0.00	0.00 ± 0.00	0.02 ± 0.02	0.00 ± 0.00
Dog	1.76 ± 0.42	0.88 ± 0.39	0.77 ± 0.25	2.12 ± 1.89
House Cat	0.76 ± 0.15	0.64 ± 0.39	1.04 ± 0.23	1.90 ± 0.89
Hunter	2.95 ± 0.69	8.23 ± 3.88	4.23 ± 0.85	10.39 ± 3.25
Total Hunters	232	42	118	51
Total Hunts	2,684	289	1,067	263
Total Hours	11,125	1,252	4,800	1,318
Avg. Hrs. Per Hunt	4.14 ± 0.04	4.33 ± 0.15	4.50 ± 0.08	5.01 ± 0.15

Table 3. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 5 October to 15 November 2013 within geographic regions of Virginia.

Animal	<u>Animals Seen/ 100 hrs. ± SE</u>				
	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Deer (antlered)	15.36 ± 1.86	14.04 ± 1.84	12.28 ± 1.45	10.83 ± 1.74	12.93 ± 2.66
Deer (doe)	27.28 ± 2.70	35.15 ± 3.78	35.01 ± 3.50	32.61 ± 3.86	30.04 ± 4.09
Deer (fawn)	13.23 ± 2.25	13.51 ± 2.77	15.51 ± 1.96	14.66 ± 3.34	13.83 ± 2.02
Deer (unknown)	8.91 ± 1.60	9.76 ± 1.60	8.79 ± 1.05	10.65 ± 1.53	10.59 ± 1.72
Gray Squirrel	69.71 ± 6.31	83.01 ± 7.84	105.09 ± 8.48	73.57 ± 8.63	72.44 ± 8.69
Fox Squirrel	0.17 ± 0.11	1.47 ± 0.50	0.84 ± 0.25	12.24 ± 2.00	11.53 ± 2.22
Turkey (bearded)	5.39 ± 1.01	11.24 ± 2.29	3.05 ± 0.69	5.27 ± 1.05	4.83 ± 1.73
Turkey (no beard)	17.04 ± 2.82	21.35 ± 3.95	12.92 ± 3.18	15.53 ± 3.22	9.73 ± 2.91
Turkey (unknown)	8.64 ± 1.98	12.15 ± 2.24	10.58 ± 1.93	13.79 ± 3.54	9.37 ± 2.15
Turkey (total)	31.07 ± 3.74	44.73 ± 5.72	26.56 ± 4.49	34.59 ± 5.36	23.92 ± 5.91
Grouse	0.05 ± 0.03	0.00 ± 0.00	0.15 ± 0.10	1.14 ± 0.45	0.86 ± 0.33
Bear (adult)	0.05 ± 0.05	0.40 ± 0.16	0.42 ± 0.19	1.11 ± 0.30	1.19 ± 0.29
Bear (cub)	0.10 ± 0.10	0.16 ± 0.10	0.22 ± 0.13	0.51 ± 0.17	0.47 ± 0.18
Bear (total)	0.15 ± 0.14	0.56 ± 0.21	0.64 ± 0.28	1.62 ± 0.42	1.66 ± 0.42
Red Fox	0.49 ± 0.14	0.32 ± 0.10	3.01 ± 0.52	0.54 ± 0.19	0.76 ± 0.26
Gray Fox	0.41 ± 0.13	0.59 ± 0.15	0.29 ± 0.12	0.00 ± 0.00	0.43 ± 0.15
Coyote	0.41 ± 0.10	0.94 ± 0.23	0.27 ± 0.11	1.77 ± 0.50	1.48 ± 0.43
Bobcat	0.22 ± 0.13	0.24 ± 0.07	0.09 ± 0.04	0.18 ± 0.08	0.07 ± 0.05
Raccoon	3.40 ± 0.62	1.44 ± 0.32	1.62 ± 0.37	2.00 ± 0.46	1.40 ± 0.33
Opossum	0.39 ± 0.11	0.37 ± 0.13	0.29 ± 0.12	0.75 ± 0.21	0.14 ± 0.07
Striped Skunk	0.10 ± 0.06	0.29 ± 0.16	0.33 ± 0.11	0.60 ± 0.29	0.43 ± 0.18
Elk	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Feral Hog	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.03	0.00 ± 0.00
Dog	0.85 ± 0.29	3.16 ± 1.15	1.20 ± 0.28	1.56 ± 0.80	0.47 ± 0.24
House Cat	0.53 ± 0.22	0.80 ± 0.23	0.91 ± 0.29	1.71 ± 0.46	0.65 ± 0.19
Hunter	3.59 ± 1.37	2.89 ± 1.24	3.87 ± 1.24	6.91 ± 1.65	3.93 ± 1.33
Total Hunters	80	84	112	73	60
Total Hunts	970	937	1,066	699	631
Total Hours	4,120	3,378	4,519	3,342	2,776
Avg. Hrs. Per Hunt	4.25 ± 0.07	3.99 ± 0.07	4.24 ± 0.07	4.78 ± 0.10	4.40 ± 0.09

Table 4. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters by week from 5 October to 15 November 2013 in Virginia.

Animal	<u>Animals Seen/100 hrs. + SE</u>						
	Day 1 (10/5)	Week 1 (10/7-12)	Week 2 (10/14-19)	Week 3 (10/21-26)	Week 4 (10/28-11/2)	Week 5 (11/4-9)	Week 6 (11/11-15)
Deer (antlered)	8.61 ± 1.20	11.63 ± 1.16	9.19 ± 0.96	16.08 ± 1.46	12.11 ± 1.03	15.09 ± 1.26	17.95 ± 1.77
Deer (doe)	19.53 ± 1.98	35.23 ± 2.58	32.69 ± 2.24	39.16 ± 2.88	26.49 ± 2.14	29.89 ± 2.53	35.30 ± 3.34
Deer (fawn)	8.37 ± 1.14	16.80 ± 1.69	15.18 ± 1.48	17.70 ± 1.67	11.62 ± 1.28	13.91 ± 1.93	11.60 ± 2.21
Deer (unknown)	5.98 ± 0.98	10.91 ± 1.21	10.78 ± 1.36	10.90 ± 1.25	9.53 ± 1.35	8.57 ± 0.95	8.20 ± 1.08
Gray Squirrel	102.77 ± 5.90	93.35 ± 6.03	94.17 ± 5.13	84.73 ± 6.12	72.49 ± 4.41	67.90 ± 4.45	67.97 ± 6.14
Fox Squirrel	5.66 ± 1.03	5.85 ± 1.28	4.63 ± 0.77	3.00 ± 0.58	5.13 ± 0.99	4.32 ± 0.72	3.22 ± 0.66
Turkey (bearded)	3.51 ± 0.96	6.53 ± 1.13	4.86 ± 1.09	5.09 ± 0.90	7.40 ± 1.46	6.04 ± 1.33	6.80 ± 1.51
Turkey (no beard)	10.21 ± 2.23	21.14 ± 3.13	12.40 ± 2.25	15.52 ± 2.27	15.88 ± 2.54	16.27 ± 3.38	14.05 ± 3.11
Turkey (unknown)	13.95 ± 3.20	12.11 ± 2.51	9.71 ± 1.88	9.54 ± 1.83	14.55 ± 2.36	7.93 ± 1.76	10.24 ± 2.91
Turkey (total)	27.66 ± 4.15	39.78 ± 4.64	26.96 ± 3.15	30.15 ± 3.34	37.83 ± 4.02	30.24 ± 4.35	31.09 ± 4.98
Grouse	0.96 ± 0.40	0.51 ± 0.26	0.19 ± 0.10	0.30 ± 0.15	0.31 ± 0.20	0.22 ± 0.10	0.59 ± 0.22
Bear (adult)	1.36 ± 0.45	0.72 ± 0.18	0.55 ± 0.20	0.46 ± 0.14	0.63 ± 0.18	0.51 ± 0.19	0.14 ± 0.08
Bear (cub)	0.40 ± 0.21	0.41 ± 0.18	0.16 ± 0.11	0.13 ± 0.10	0.42 ± 0.17	0.35 ± 0.18	0.05 ± 0.04
Bear (total)	1.75 ± 0.54	1.13 ± 0.32	0.71 ± 0.25	0.59 ± 0.21	1.05 ± 0.32	0.86 ± 0.30	0.18 ± 0.09
Red Fox	0.88 ± 0.26	0.96 ± 0.24	0.97 ± 0.23	1.22 ± 0.23	1.26 ± 0.23	1.37 ± 0.31	1.00 ± 0.30
Gray Fox	0.24 ± 0.14	0.27 ± 0.11	0.52 ± 0.14	0.40 ± 0.16	0.35 ± 0.12	0.35 ± 0.14	0.18 ± 0.11
Coyote	2.23 ± 0.73	0.96 ± 0.26	0.52 ± 0.20	0.92 ± 0.27	0.70 ± 0.17	0.70 ± 0.21	1.00 ± 0.33
Bobcat	0.08 ± 0.08	0.07 ± 0.05	0.19 ± 0.08	0.07 ± 0.05	0.38 ± 0.20	0.16 ± 0.07	0.14 ± 0.08

Table 4 (continued). Observations of selected animals (per 100 hours of hunting) by cooperating archery hunters by week from 5 October to 15 November 2013 in Virginia.

Animal	<u>Animals Seen/100 hrs. + SE</u>						
	Day 1 (10/6)	Week 1 (10/8-13)	Week 2 (10/15-20)	Week 3 (10/22-27)	Week 4 (10/29-11/3)	Week 5 (11/5-10)	Week 6 (11/12-16)
Raccoon	2.55 ± 0.55	2.09 ± 0.40	2.14 ± 0.51	2.87 ± 0.47	1.64 ± 0.32	1.72 ± 0.40	1.18 ± 0.29
Opossum	0.08 ± 0.08	0.92 ± 0.24	0.36 ± 0.12	0.43 ± 0.13	0.31 ± 0.11	0.06 ± 0.04	0.41 ± 0.13
Striped Skunk	0.16 ± 0.11	0.31 ± 0.11	0.26 ± 0.11	0.46 ± 0.19	0.17 ± 0.08	0.32 ± 0.12	0.63 ± 0.31
Elk	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Feral Hog	0.00 ± 0.00	0.03 ± 0.03	0.03 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Dog	1.28 ± 0.40	1.81 ± 0.44	1.65 ± 0.46	1.19 ± 0.38	1.15 ± 0.29	1.50 ± 0.44	1.63 ± 0.60
House Cat	0.80 ± 0.25	1.23 ± 0.30	0.78 ± 0.20	0.89 ± 0.27	0.73 ± 0.22	0.96 ± 0.31	0.91 ± 0.31
Hunter	6.22 ± 1.04	3.59 ± 0.62	3.79 ± 0.79	2.91 ± 0.55	5.76 ± 1.79	4.25 ± 0.83	3.85 ± 1.24
Total Hunters	247	292	301	301	278	220	181
Total Hunts	256	715	775	765	674	656	462
Total Hours	1,254	2,923	3,089	3,029	2,865	3,128	2,207
Avg. Hrs. Per Hunt	4.90 ± 0.15	4.09 ± 0.08	3.99 ± 0.07	3.96 ± 0.07	4.25 ± 0.09	4.77 ± 0.10	4.78 ± 0.12

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 5 October to 15 November 2013.

(a)

Ratio	Statewide	East of BR	West of BR
Doe: Buck	2.44	2.35	2.67
Fawn: Doe	0.44	0.44	0.45

(b)

Ratio	Private	Public
Doe: Buck	2.45	2.41
Fawn: Doe	0.45	0.34

(c)

Ratio	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Doe: Buck	1.78	2.50	2.85	3.01	2.32
Fawn: Doe	0.48	0.38	0.46	0.45	0.46

(d)

Ratio	Day 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Doe: Buck	2.27	3.03	3.56	2.44	2.19	1.98	1.97
Fawn: Doe	0.43	0.48	0.46	0.45	0.44	0.47	0.33

Table 6. Statewide total observations and total observations per 100 hunts of miscellaneous animals by cooperating archery hunters 5 October to 15 November 2013 in Virginia.

Animal	Total Observations	Observations / 100 Hunts
Bats	1	0.02
Beaver	12	0.25
Buzzard	5	0.11
Chipmunk	96	2.03
Crow	407	8.60
Doves	12	0.25
Ducks	54	1.14
Eagle	60	1.27
Falcon	8	0.17
Flying Squirrels	2	0.04
Geese	341	7.20
Groundhog	88	1.86
Hawk	155	3.27
Herons	4	0.08
Mink	1	0.02
Miscellaneous Birds	48	1.01
Mouse	0	0.00
Muskrat	1	0.02
Nutria	0	0.00
Otter	18	0.38
Owl	37	0.78
Pheasant	11	0.23
Quail	138	2.91
Rabbit	99	2.09
Red Squirrel	6	0.13
Shrew	0	0.00
Sika & Other Deer	2	0.04
Snake	4	0.08
Snipe	0	0.00
Turtles	3	0.06
Weasel	1	0.02
Woodcock	3	0.06

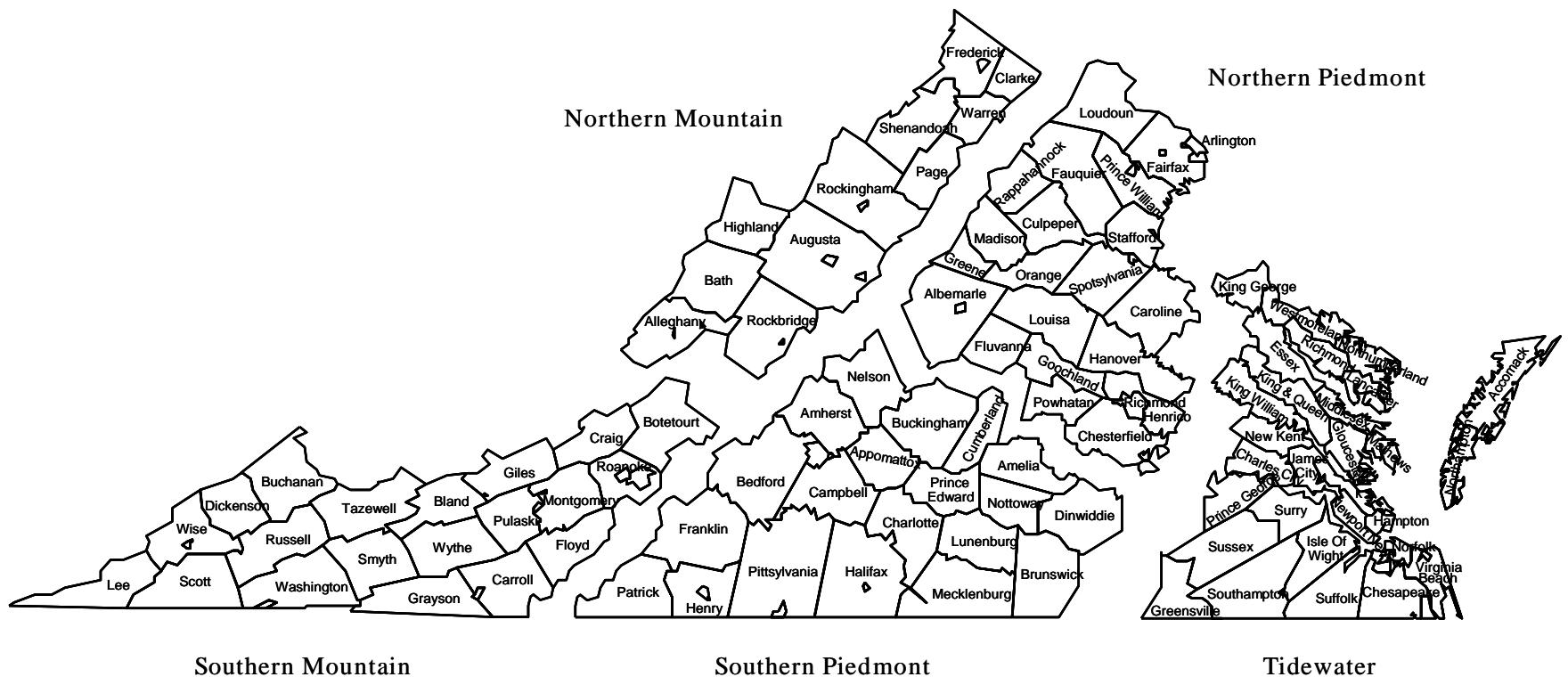


Figure 1. Geographic regions used for analyses in this report.

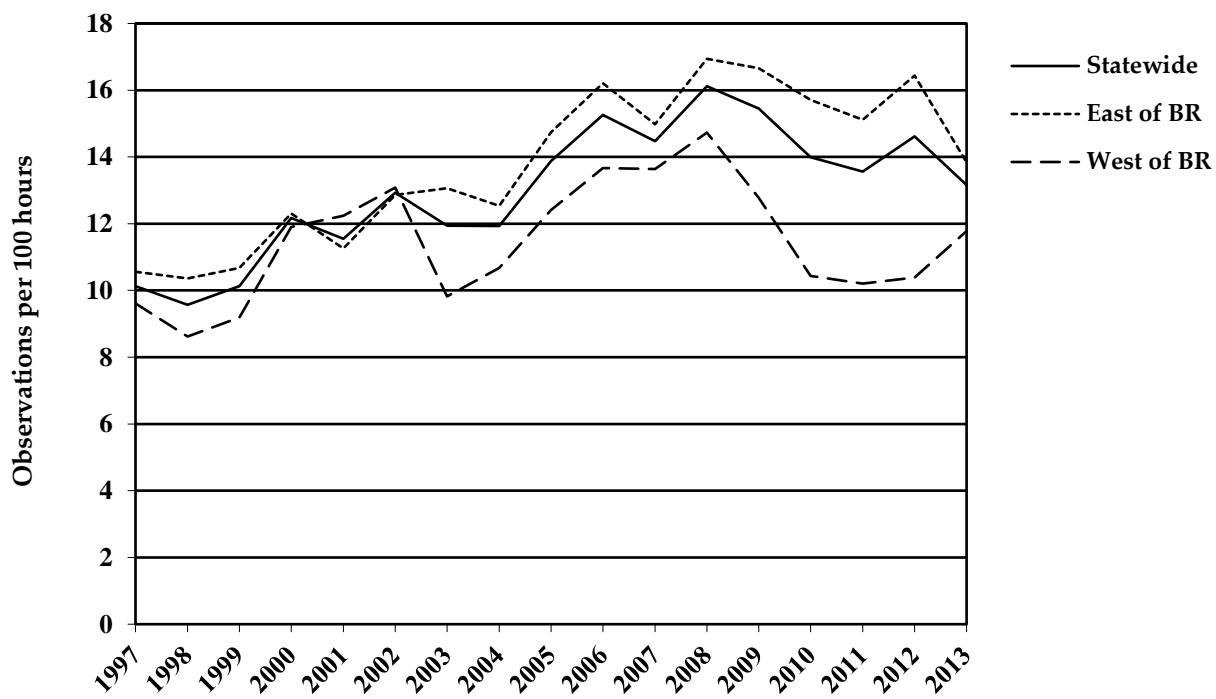


Figure 2. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.



Figure 3. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

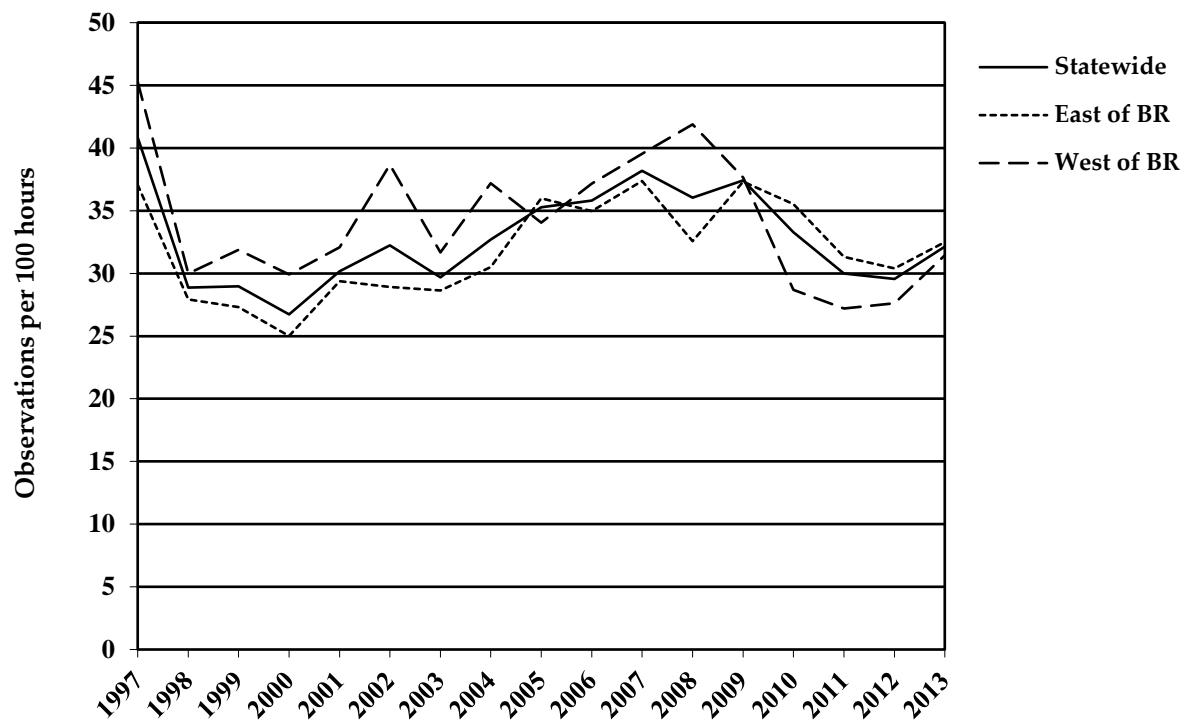


Figure 4. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

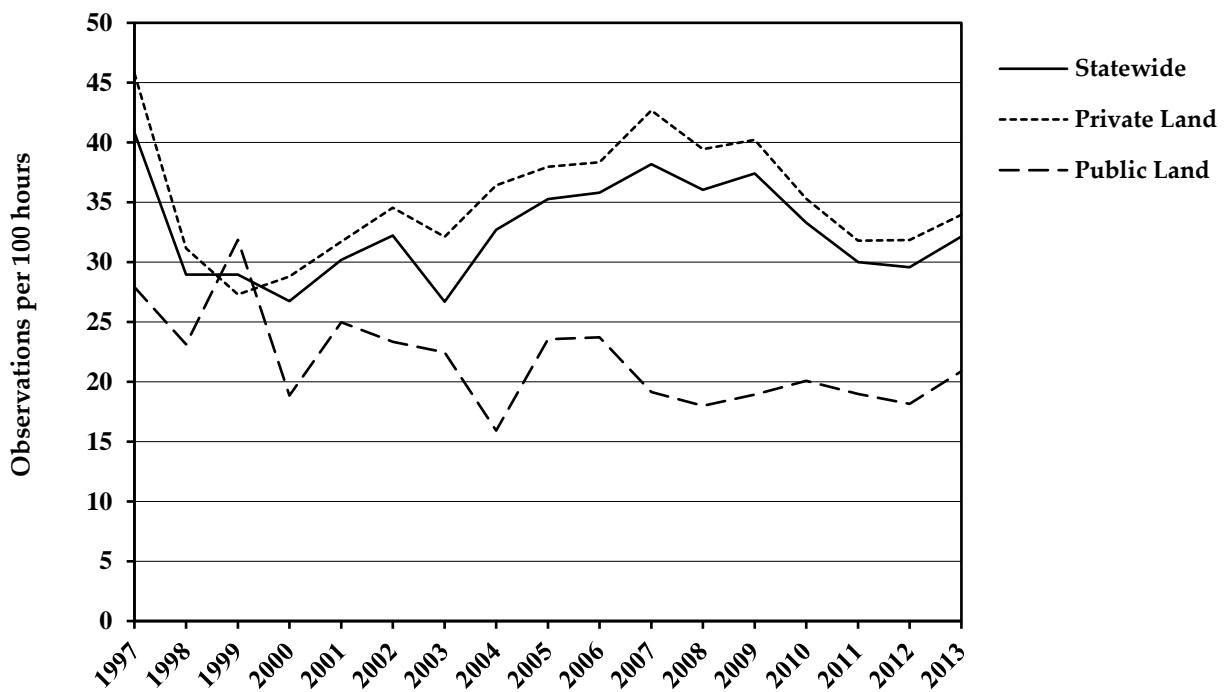


Figure 5. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

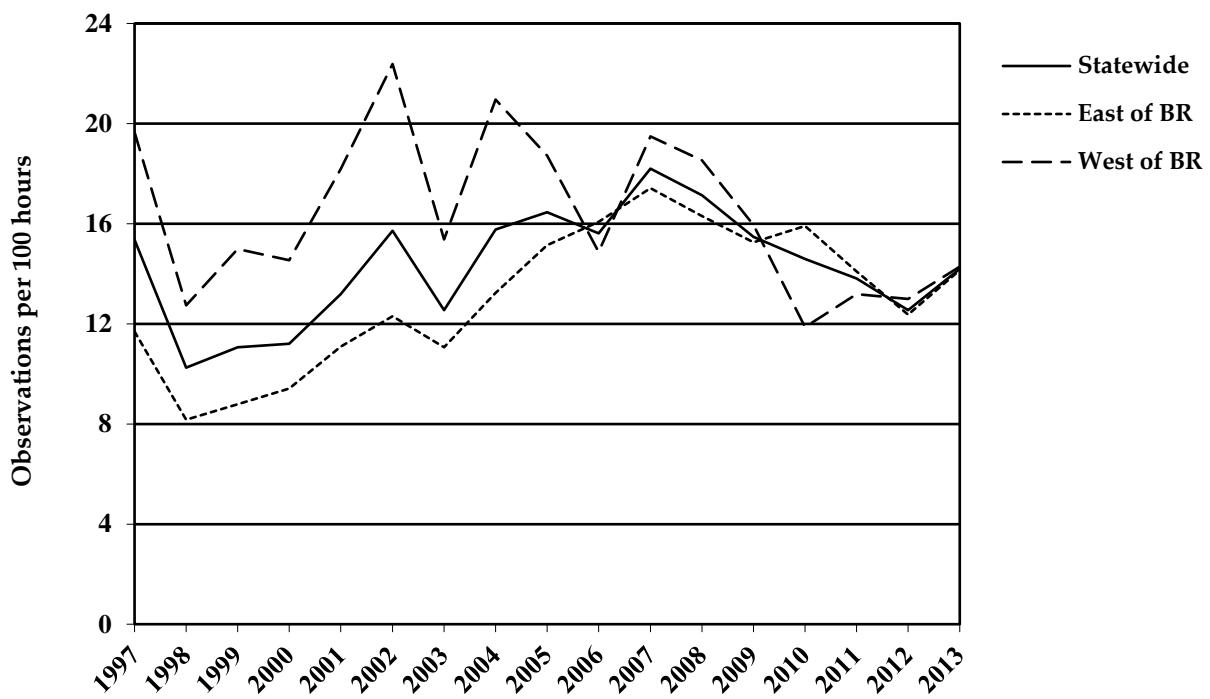


Figure 6. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

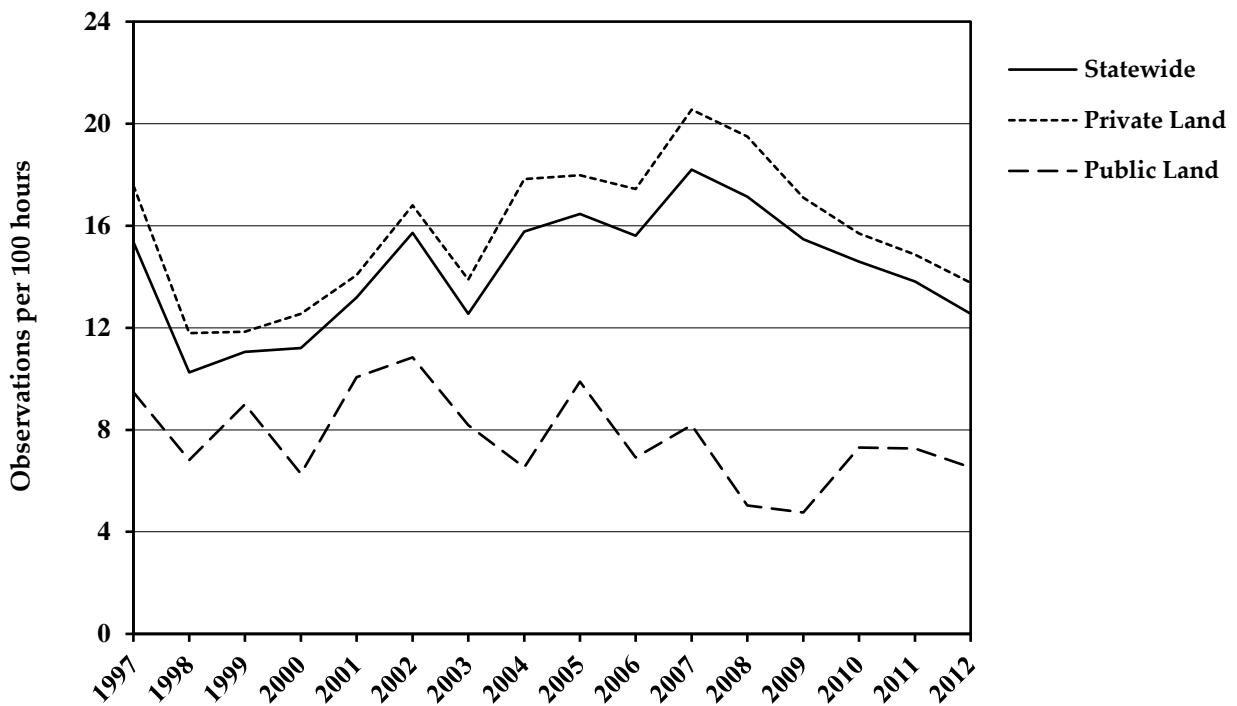


Figure 7. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

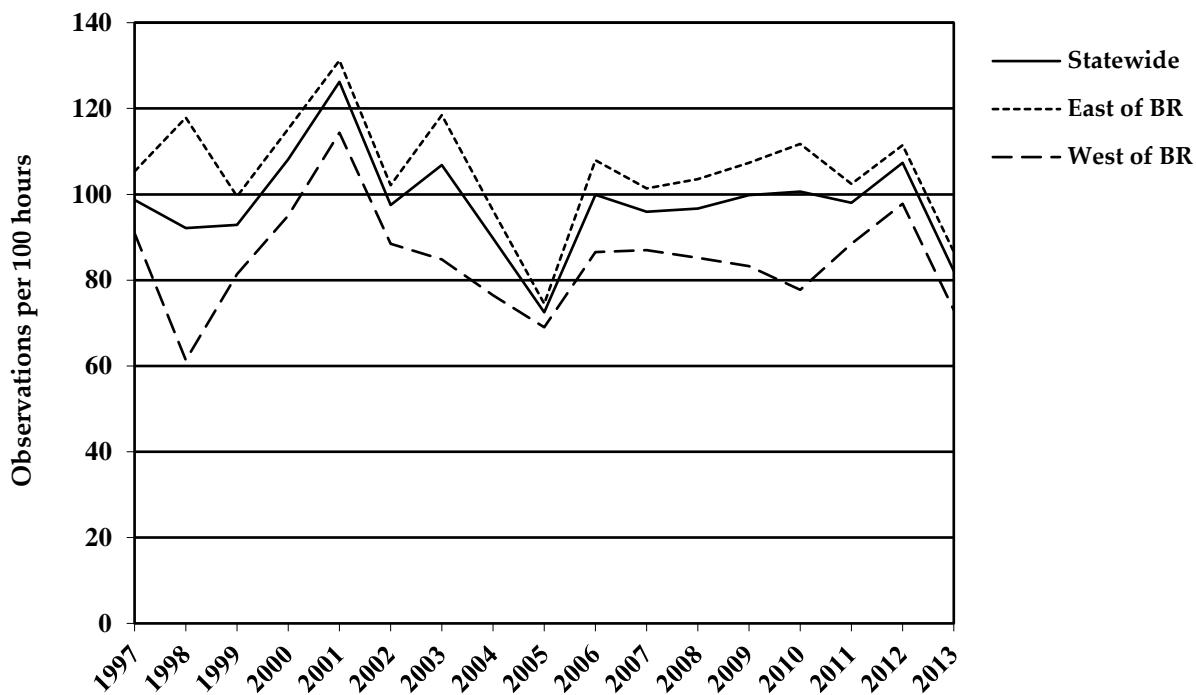


Figure 8. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

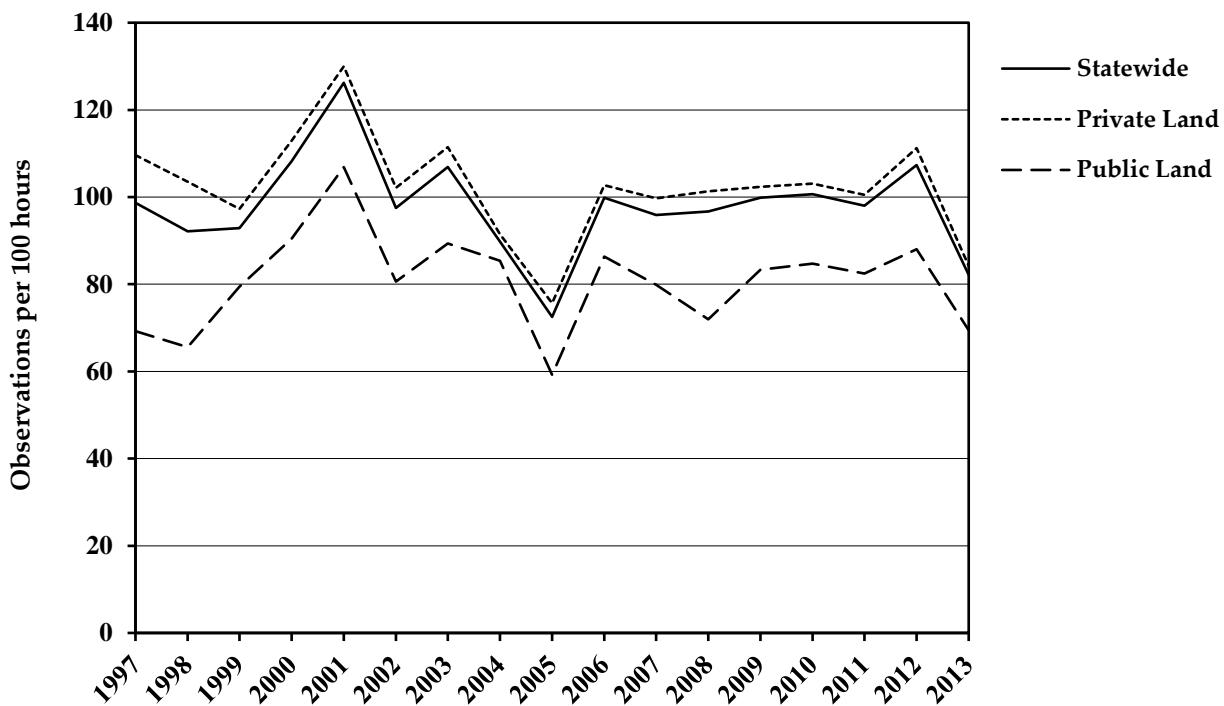


Figure 9. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

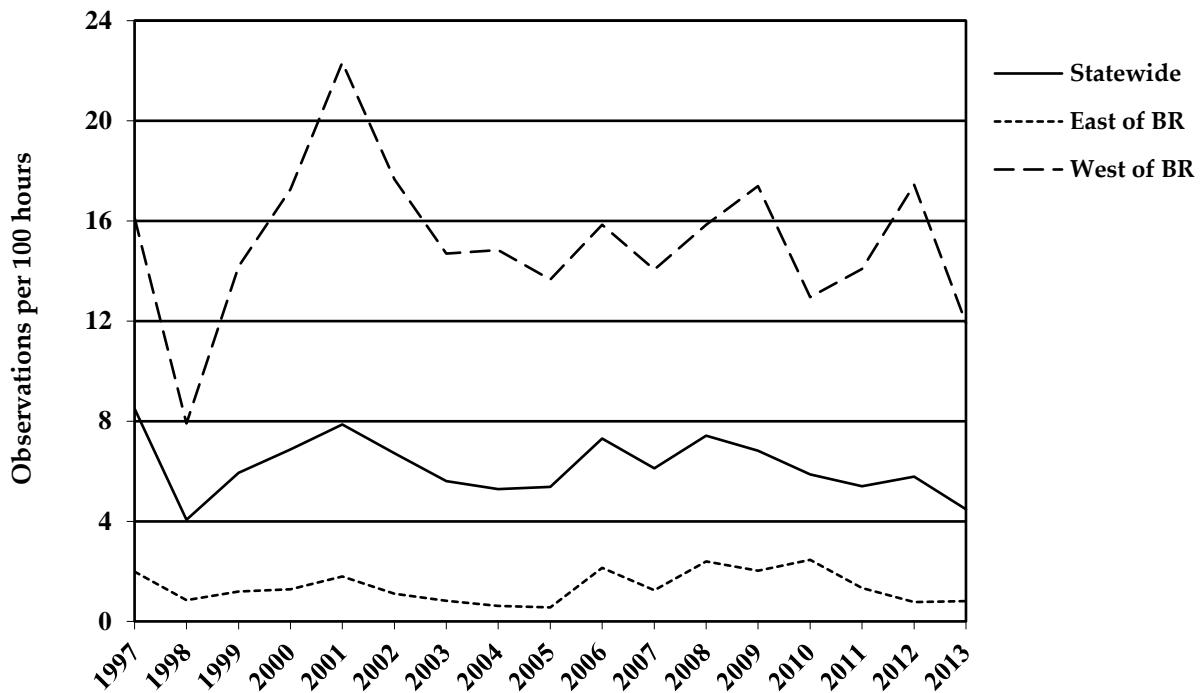


Figure 10. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

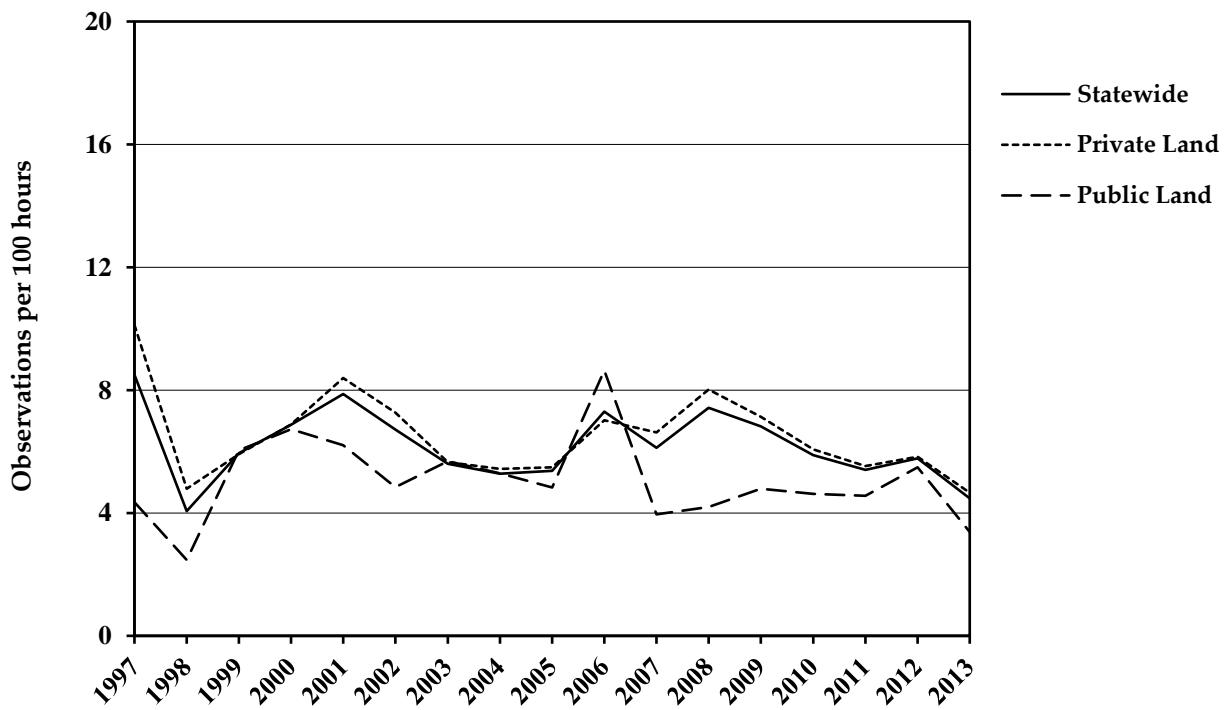


Figure 11. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

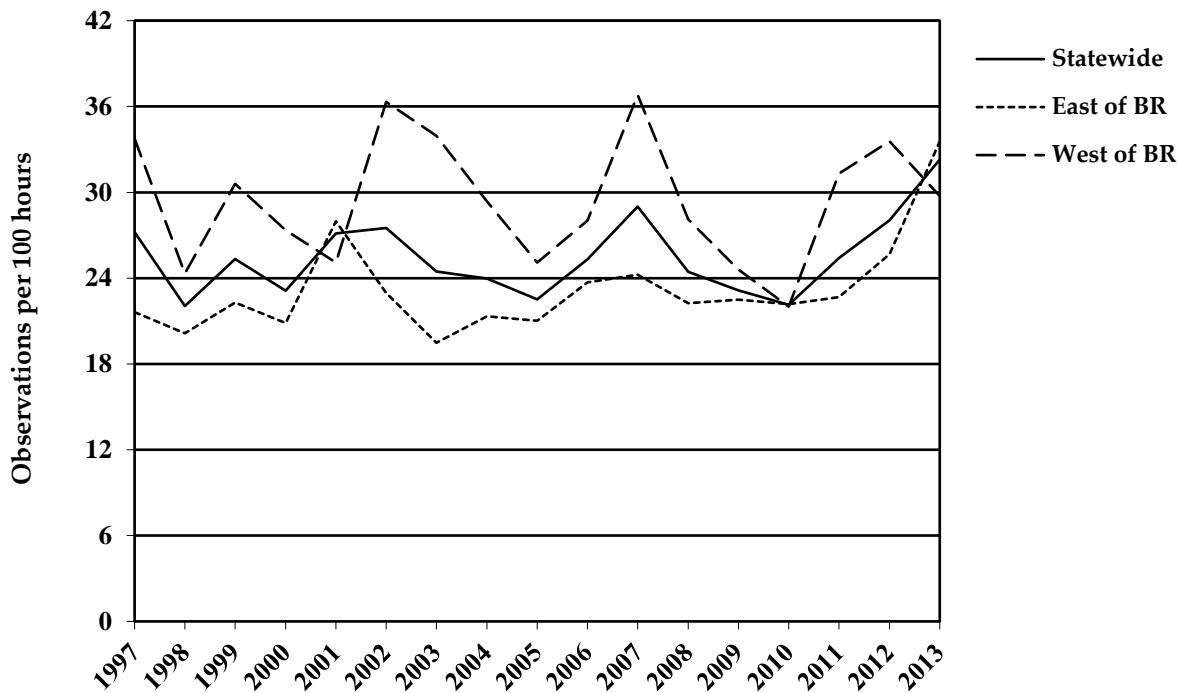


Figure 12. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

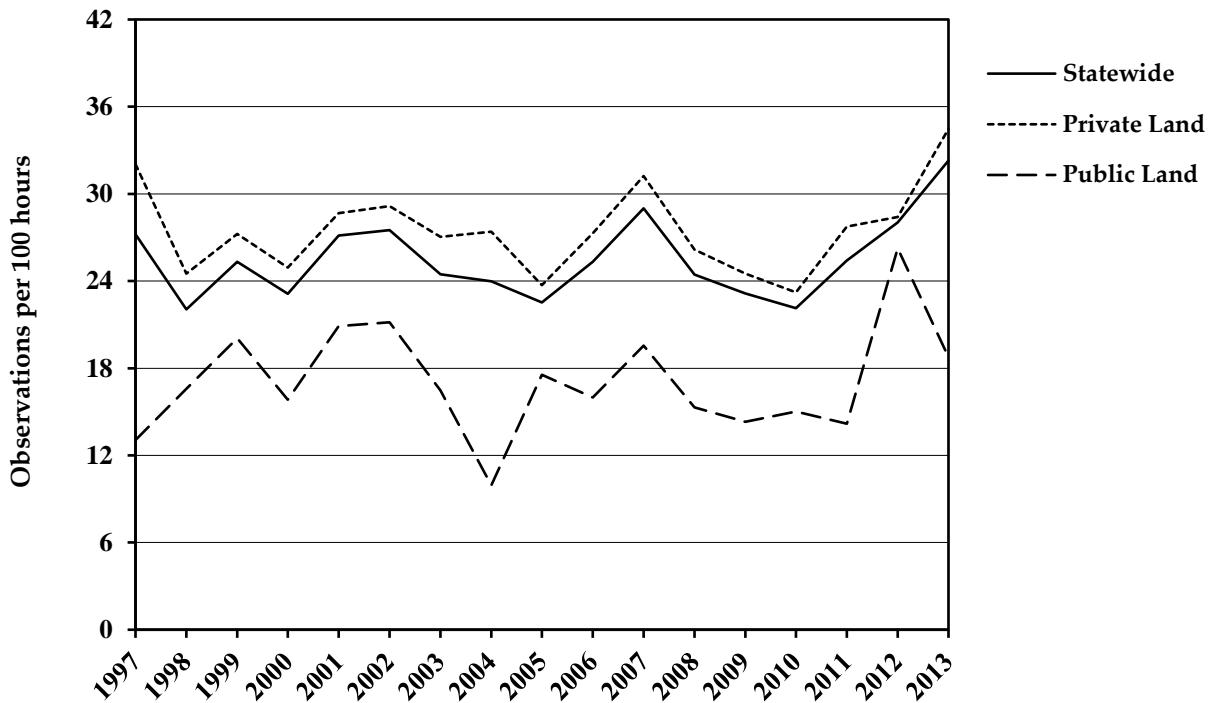


Figure 13. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

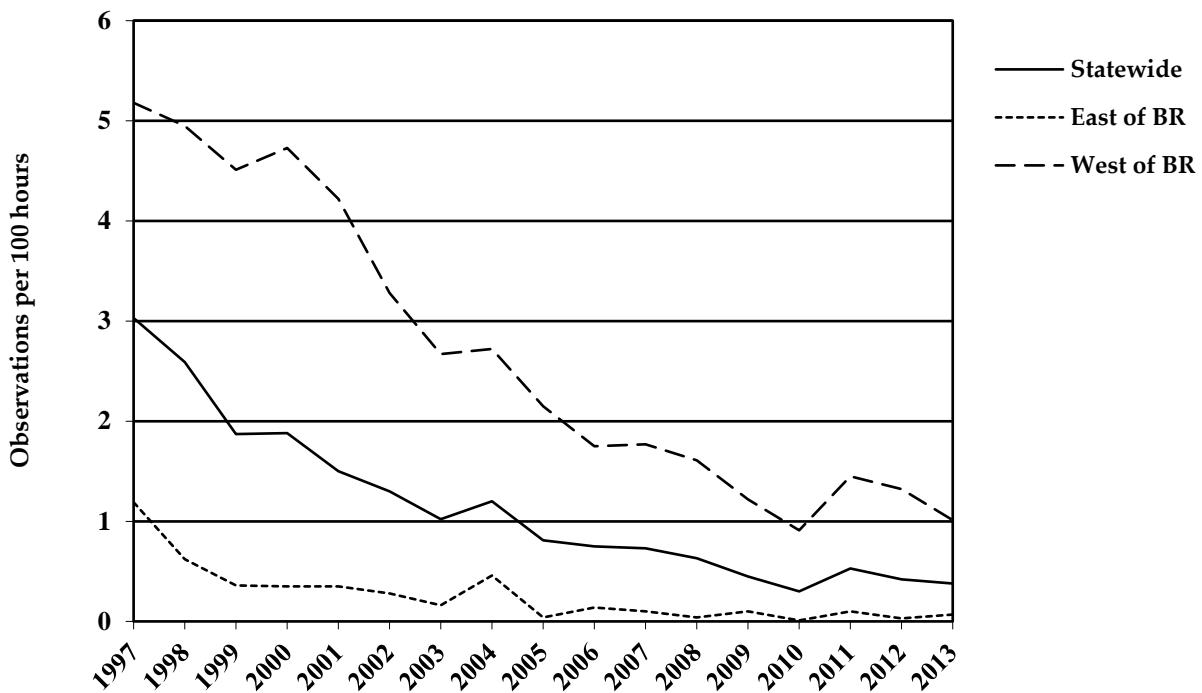


Figure 14. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

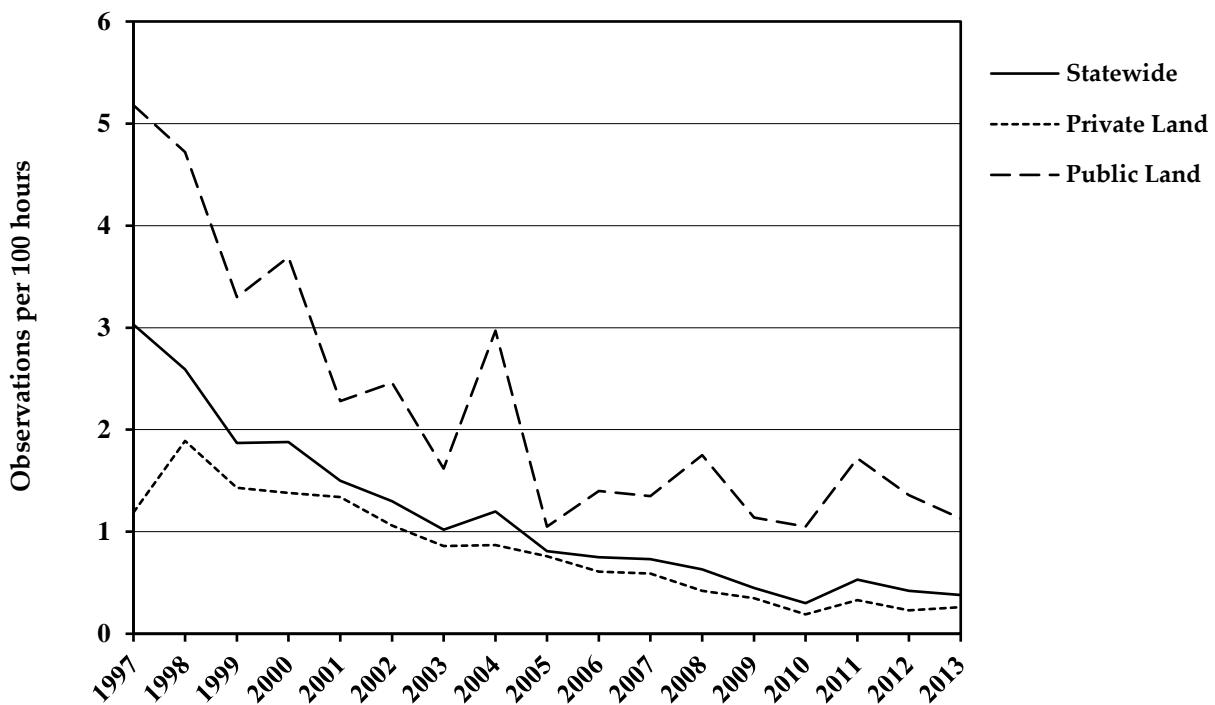


Figure 15. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

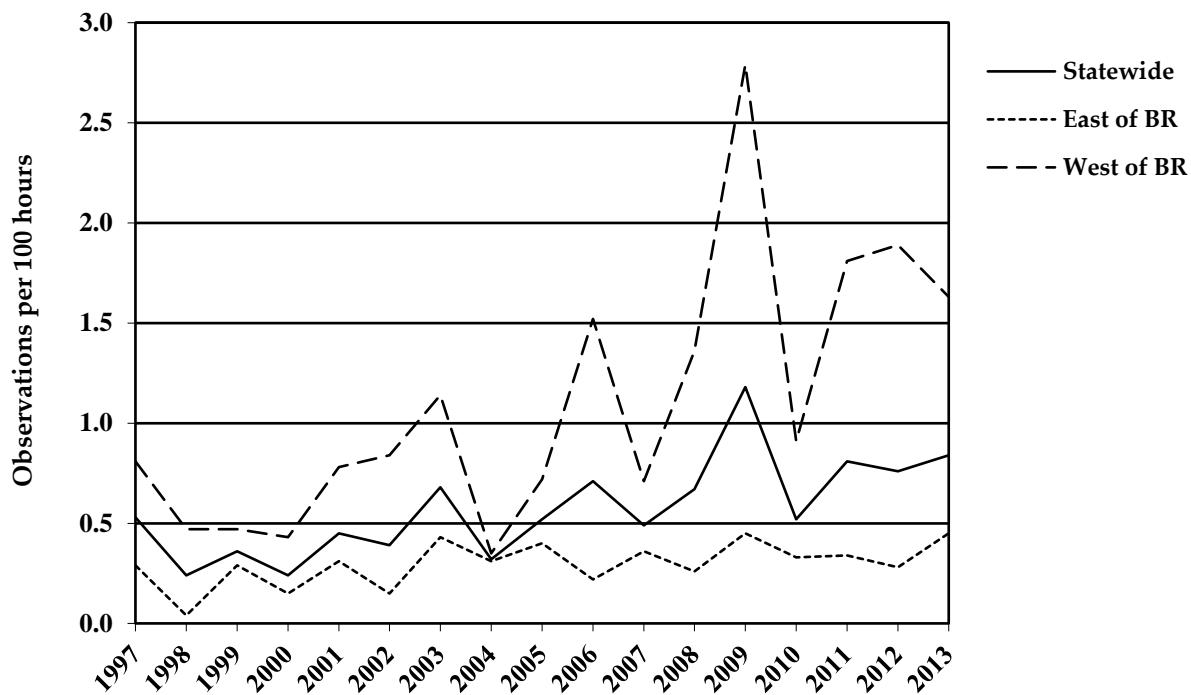


Figure 16. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

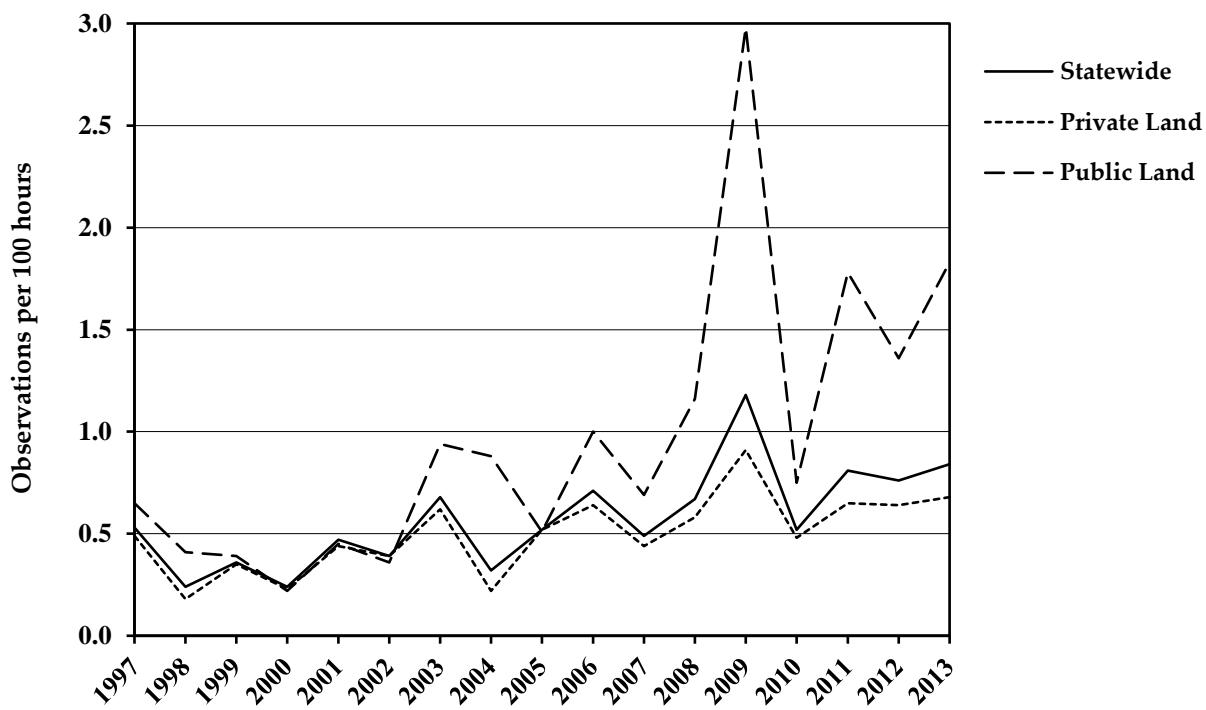


Figure 17. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

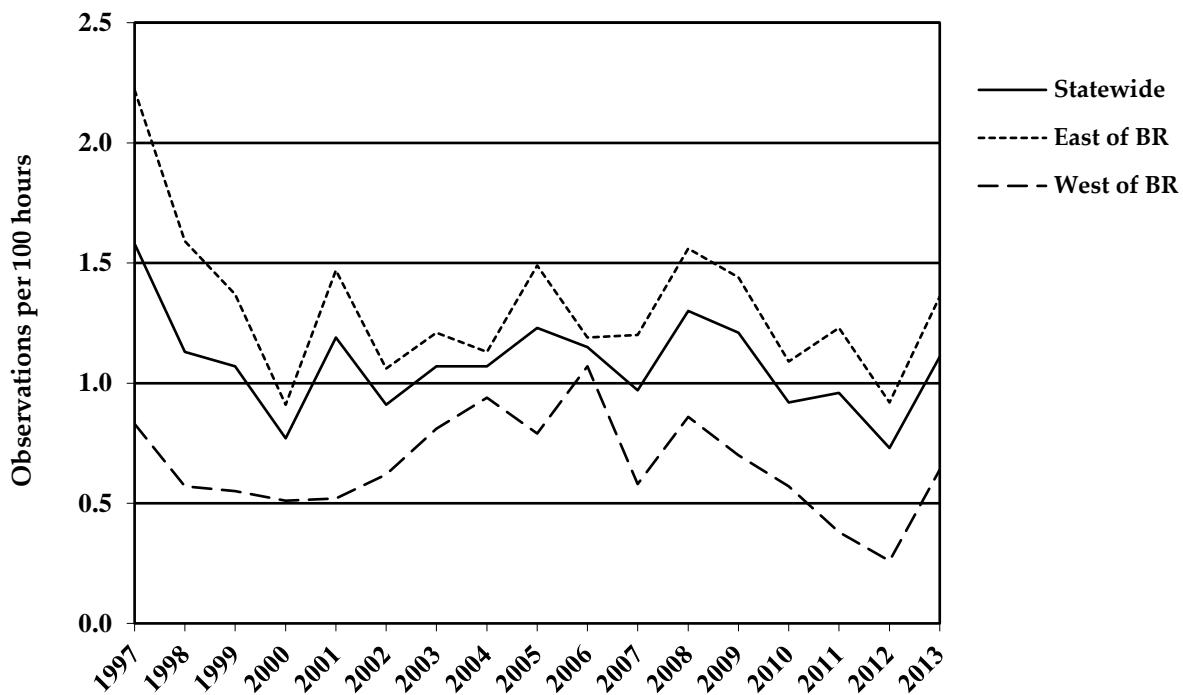


Figure 18. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

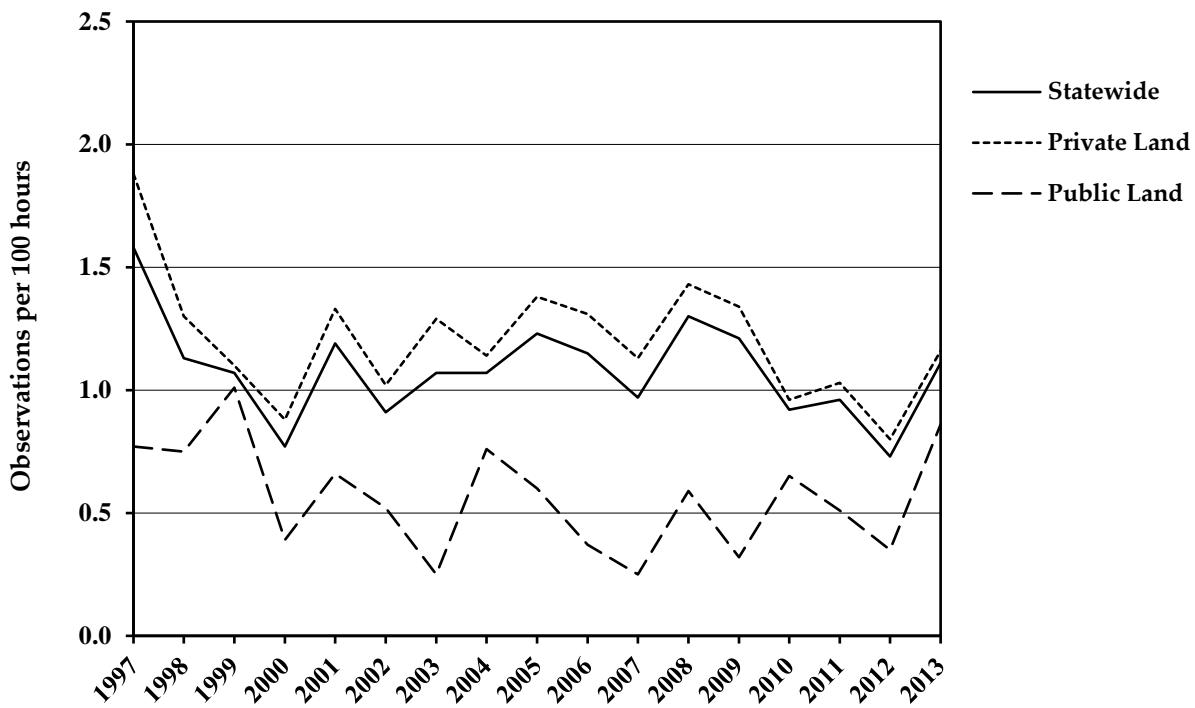


Figure 19. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

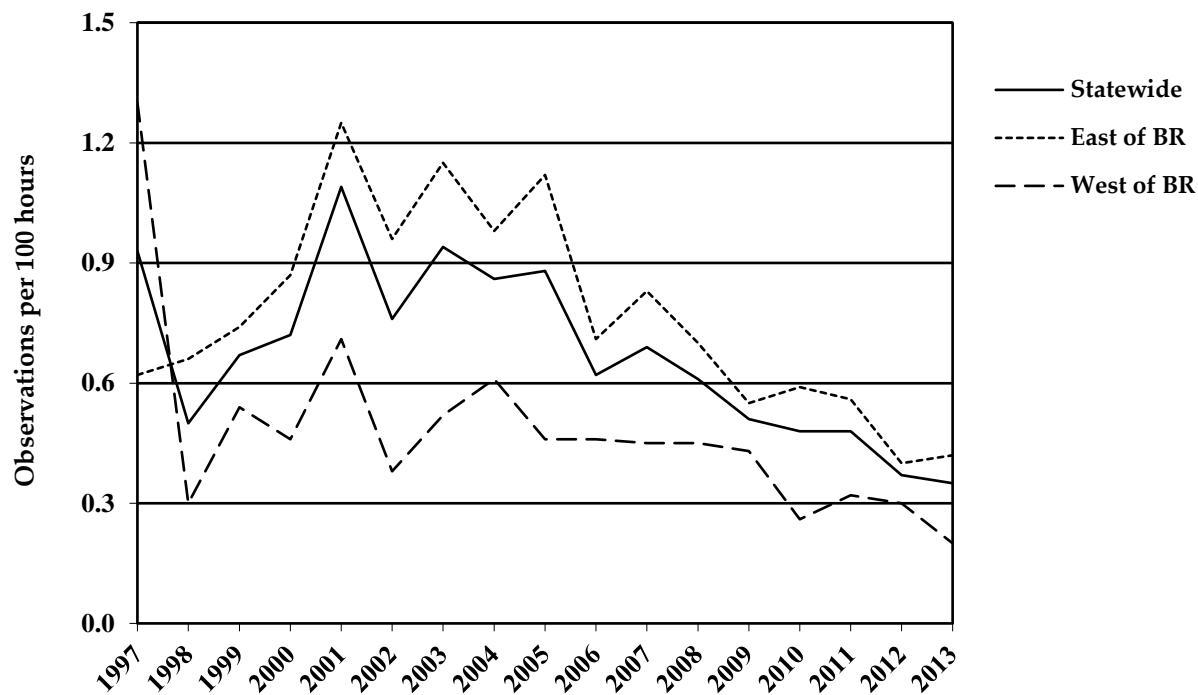


Figure 20. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

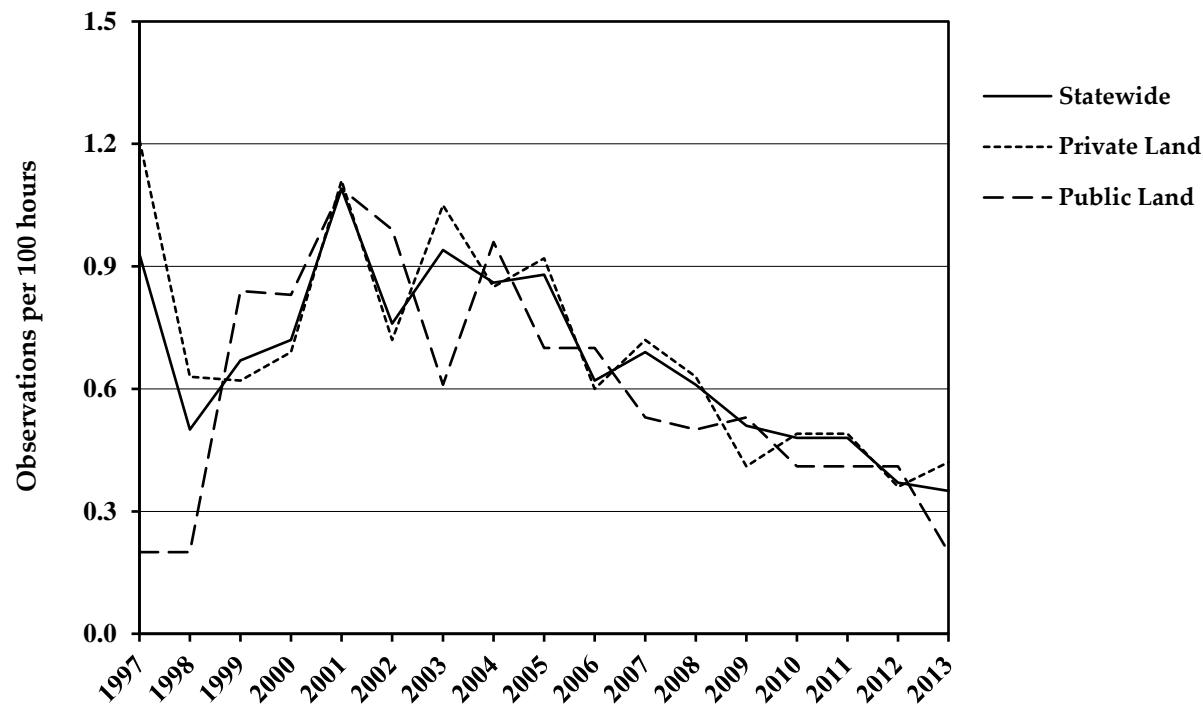


Figure 21. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

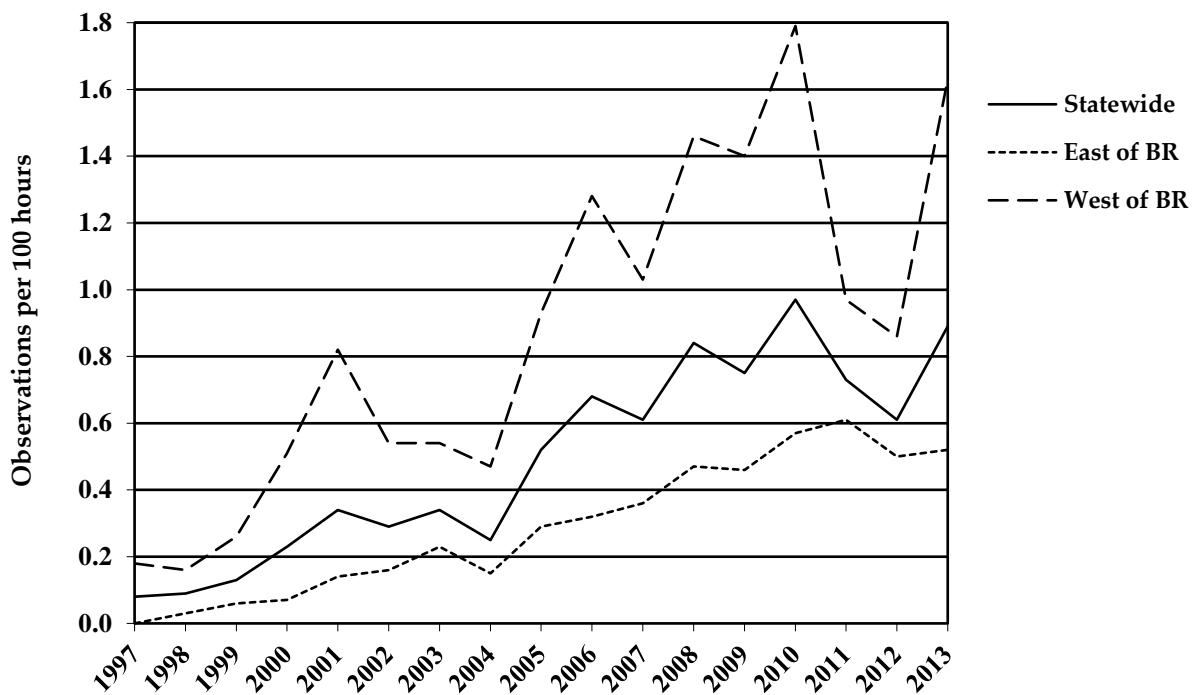


Figure 22. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

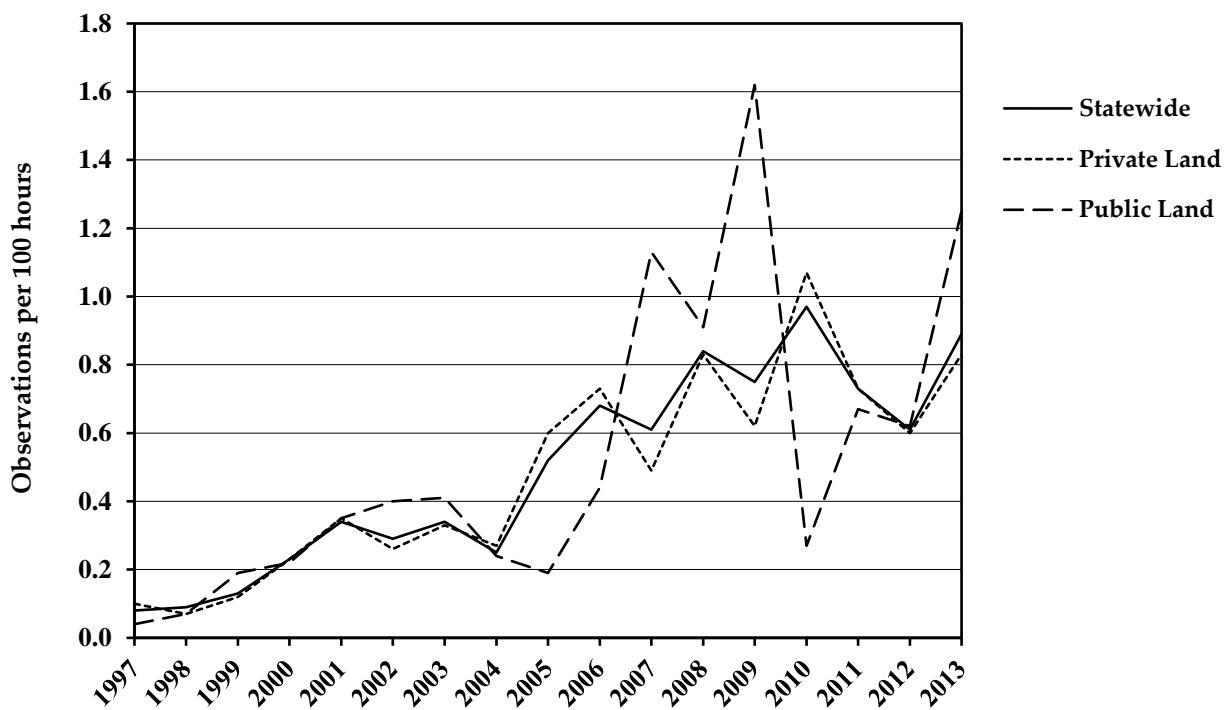


Figure 23. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

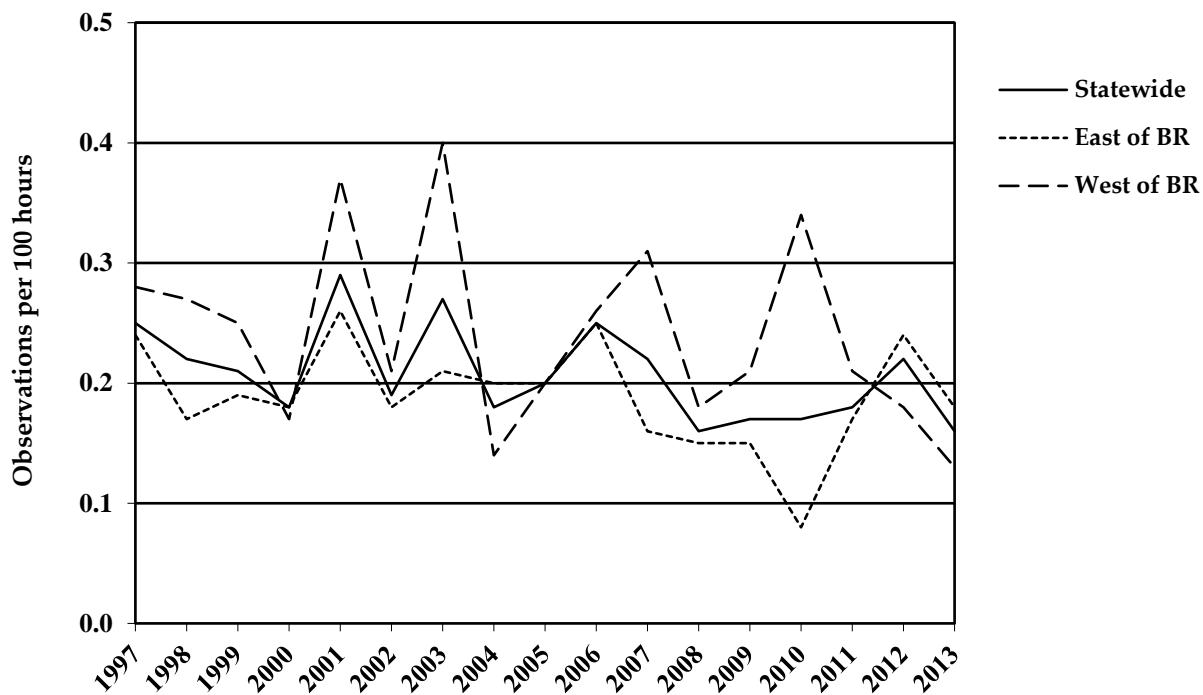


Figure 24. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

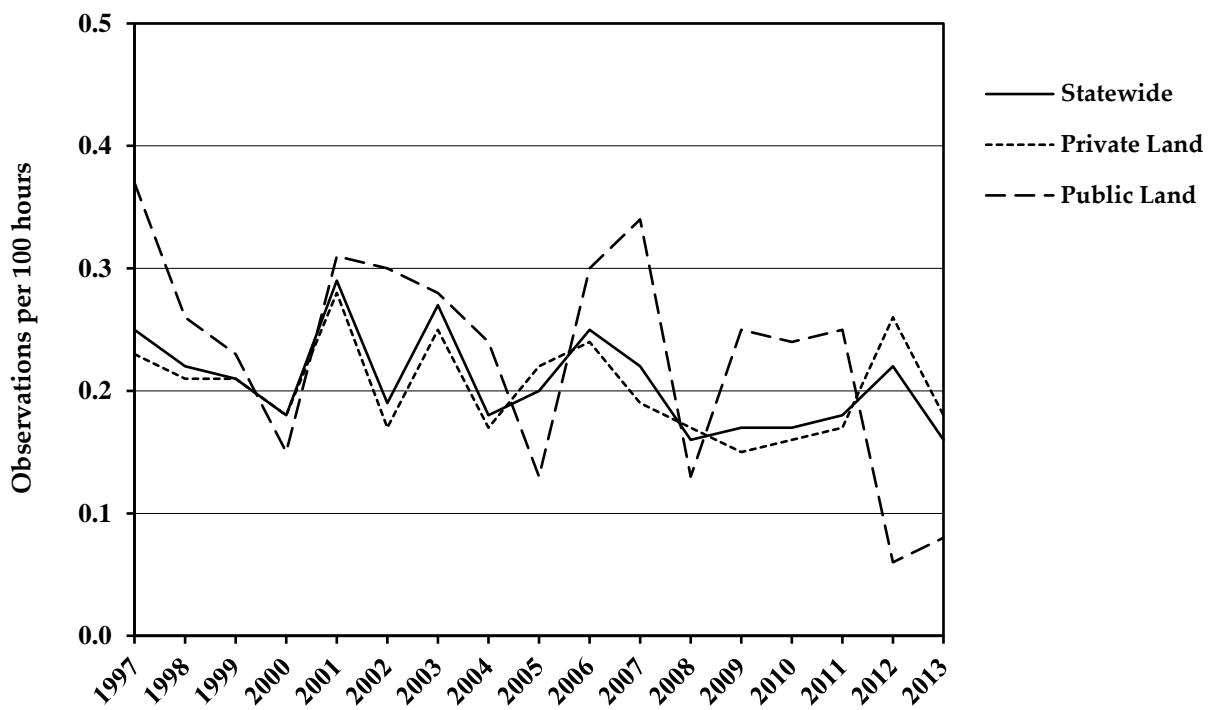


Figure 25. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

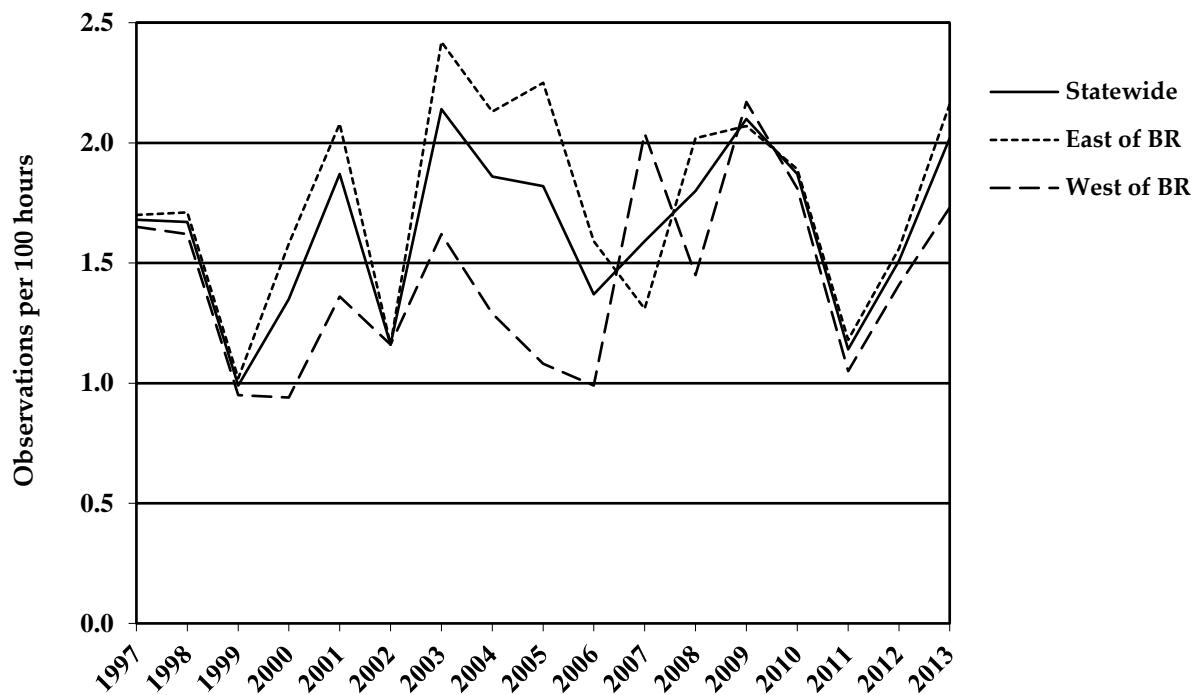


Figure 26. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

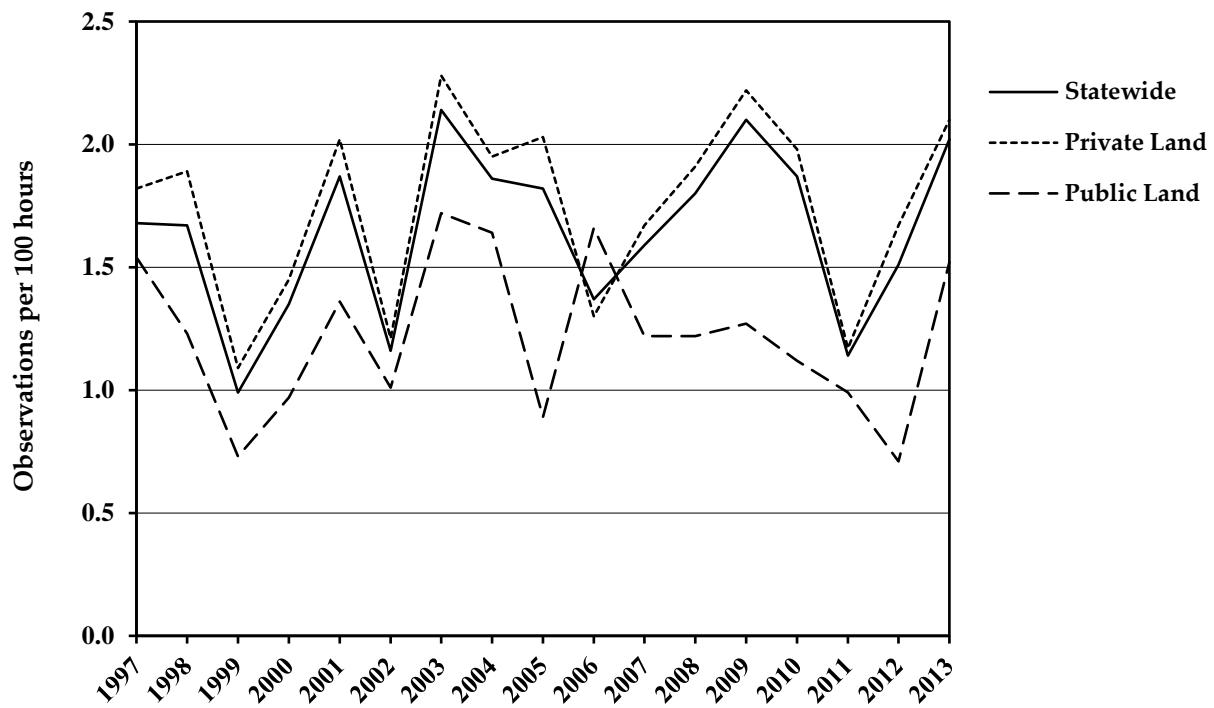


Figure 27. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

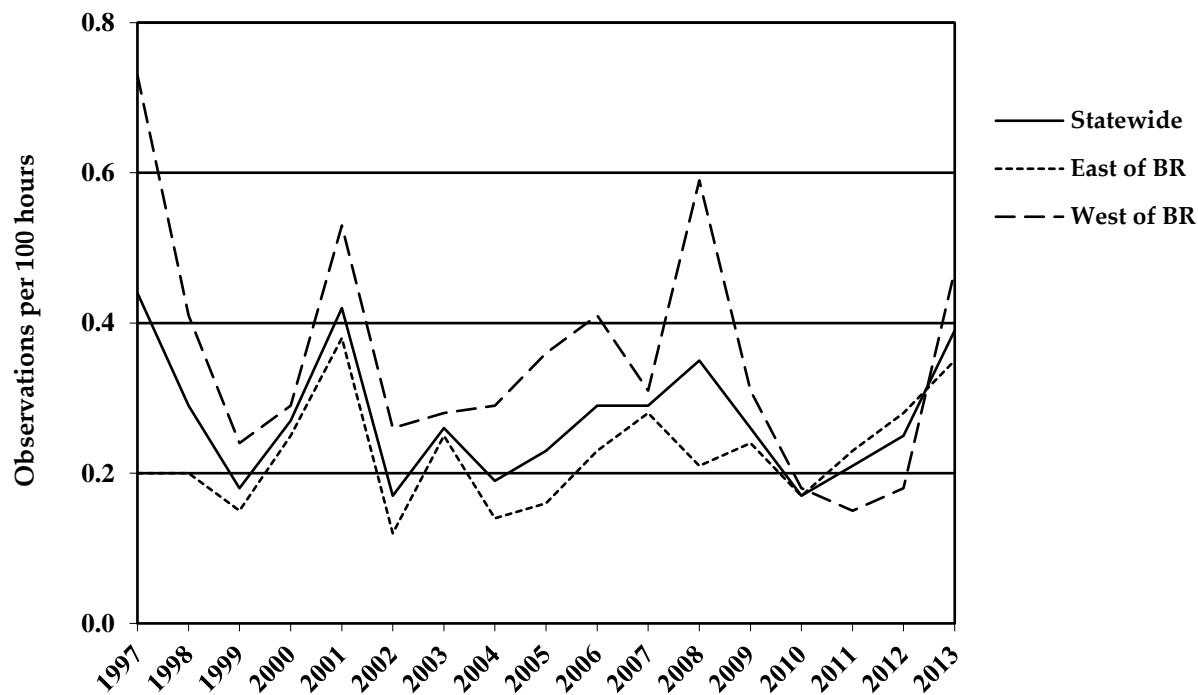


Figure 28. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

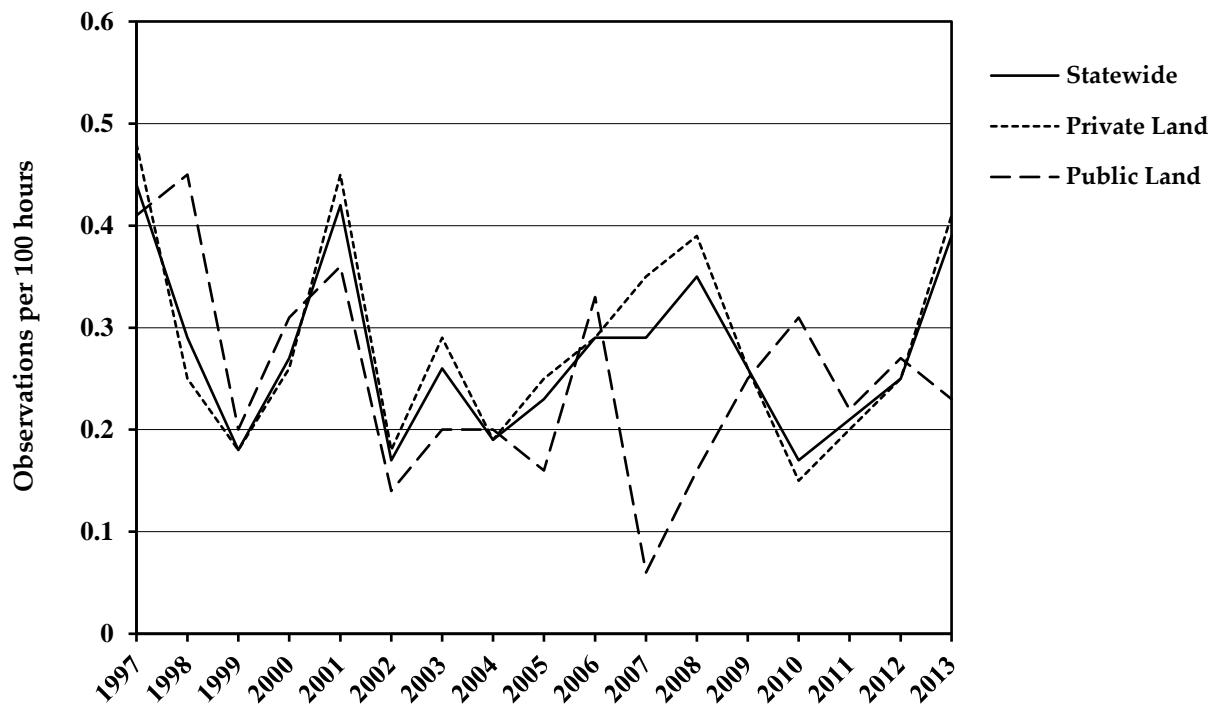


Figure 29. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

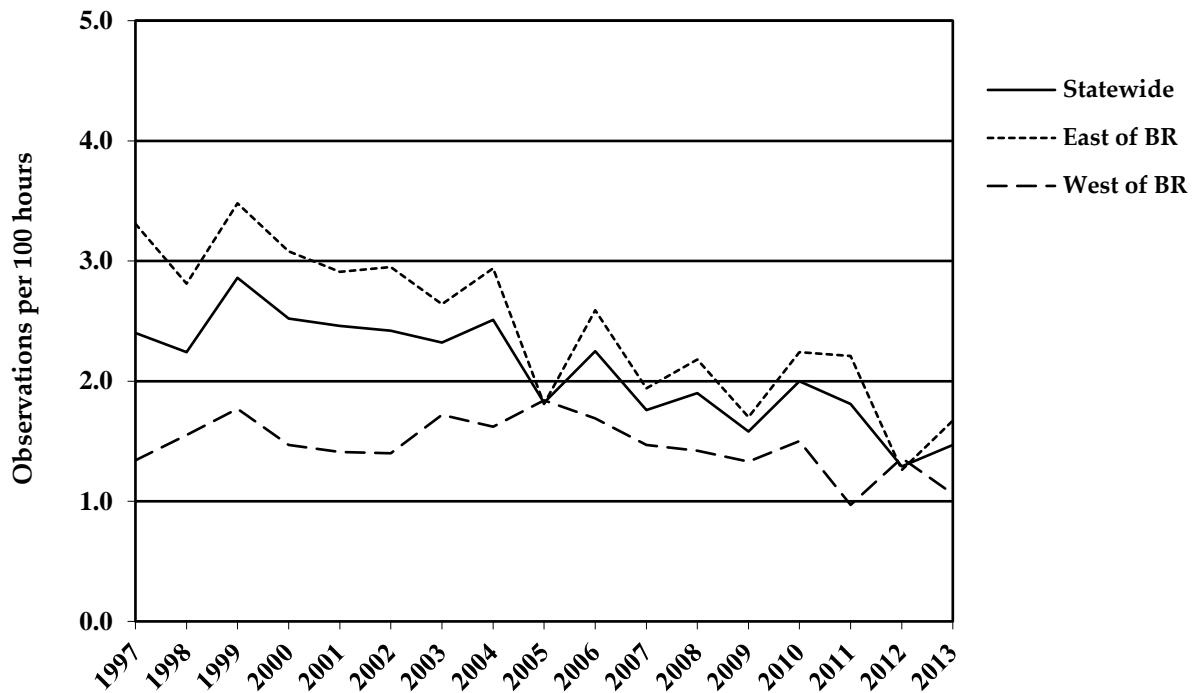


Figure 30. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

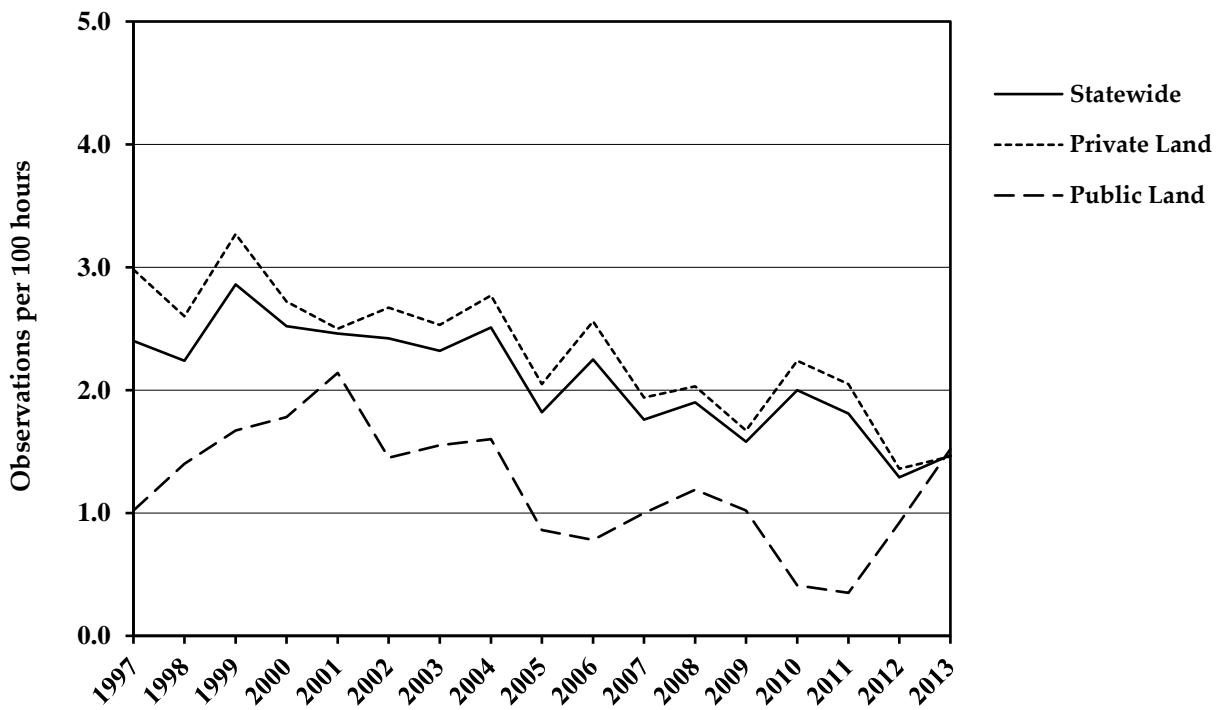


Figure 31. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

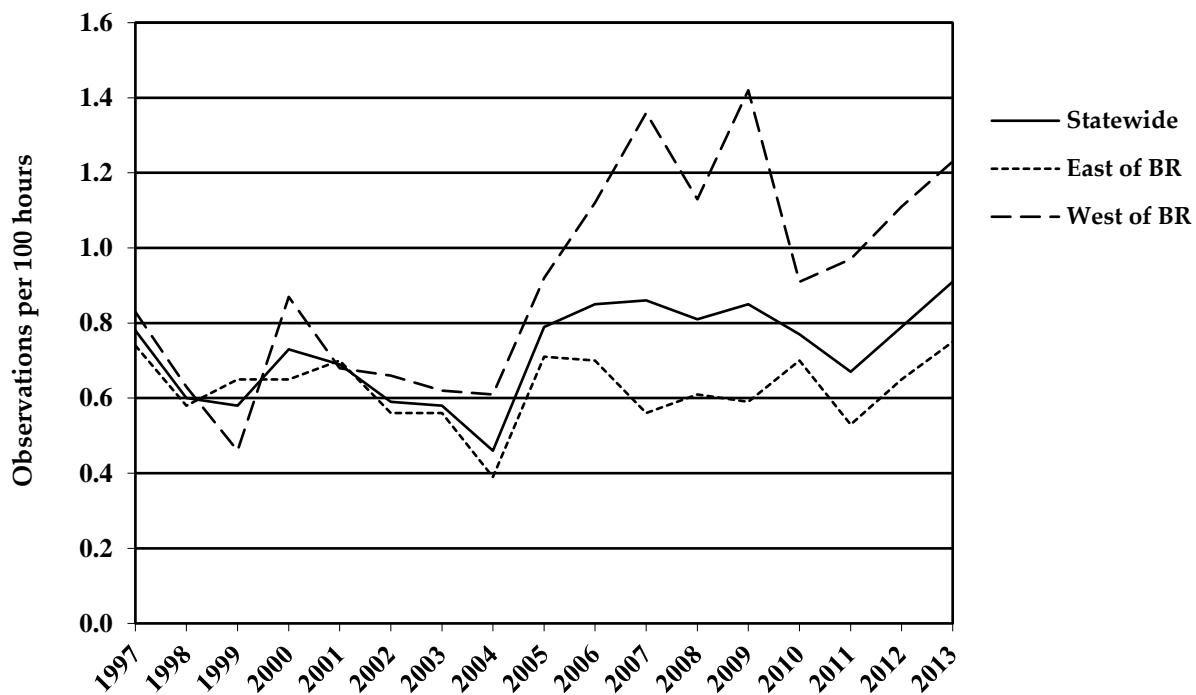


Figure 32. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

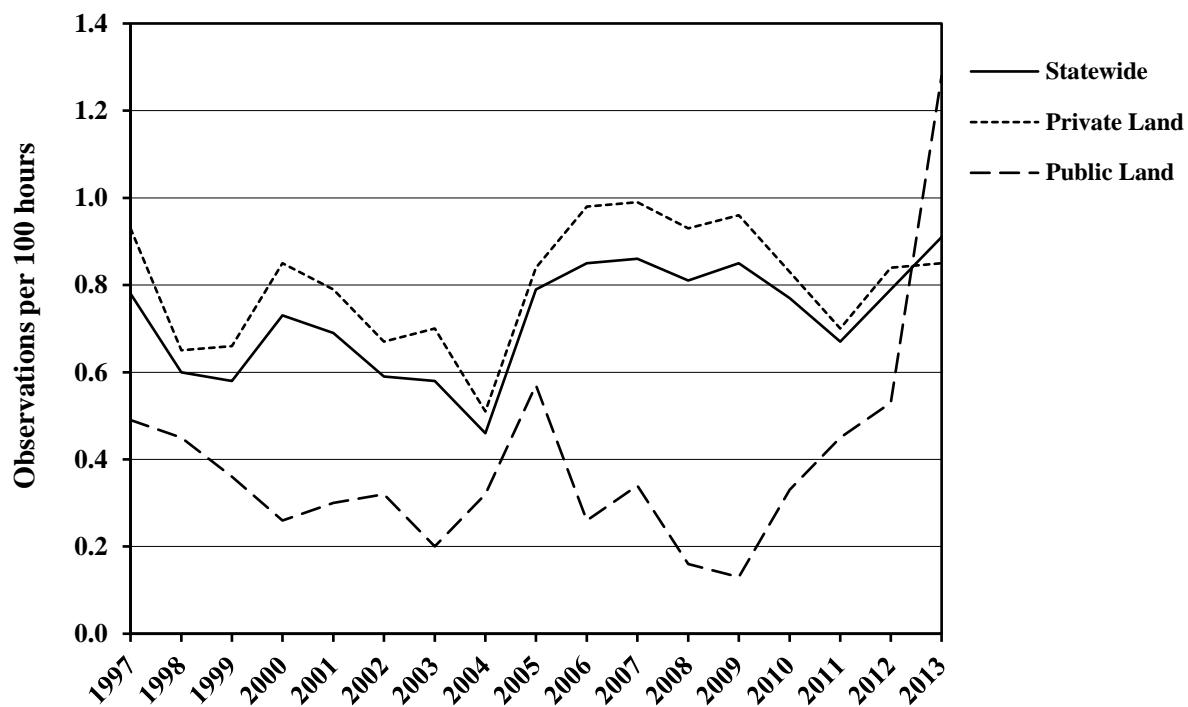


Figure 33. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

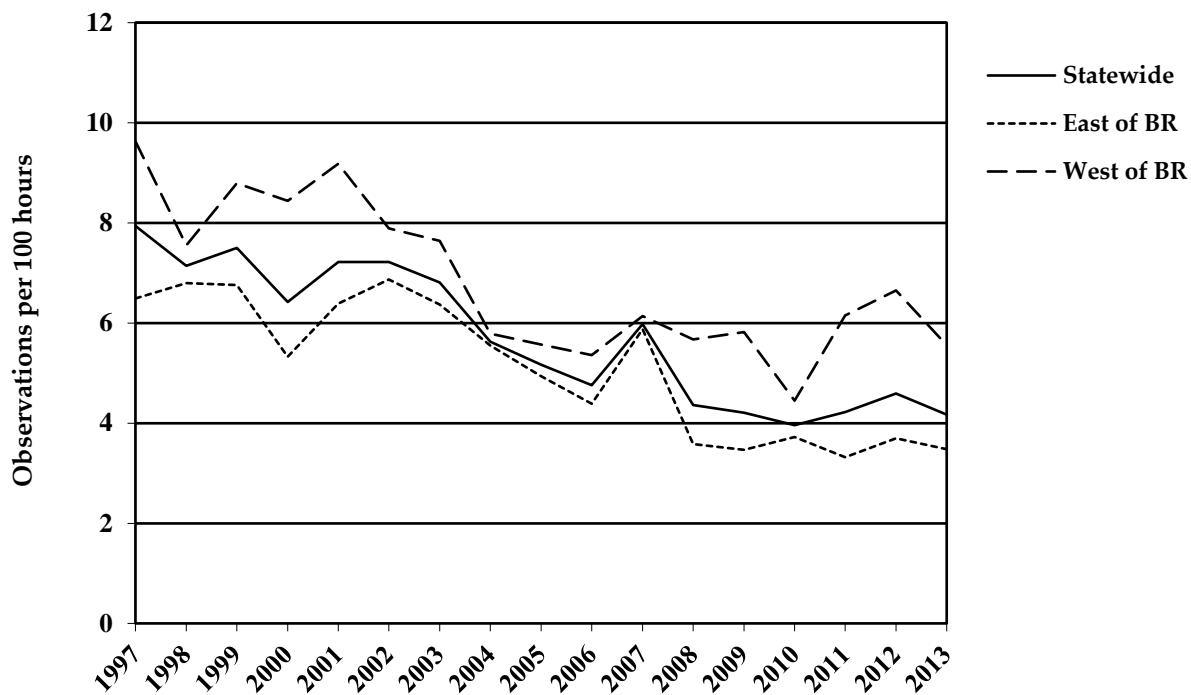


Figure 34. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 east and west of the Blue Ridge Mountains and statewide in Virginia.

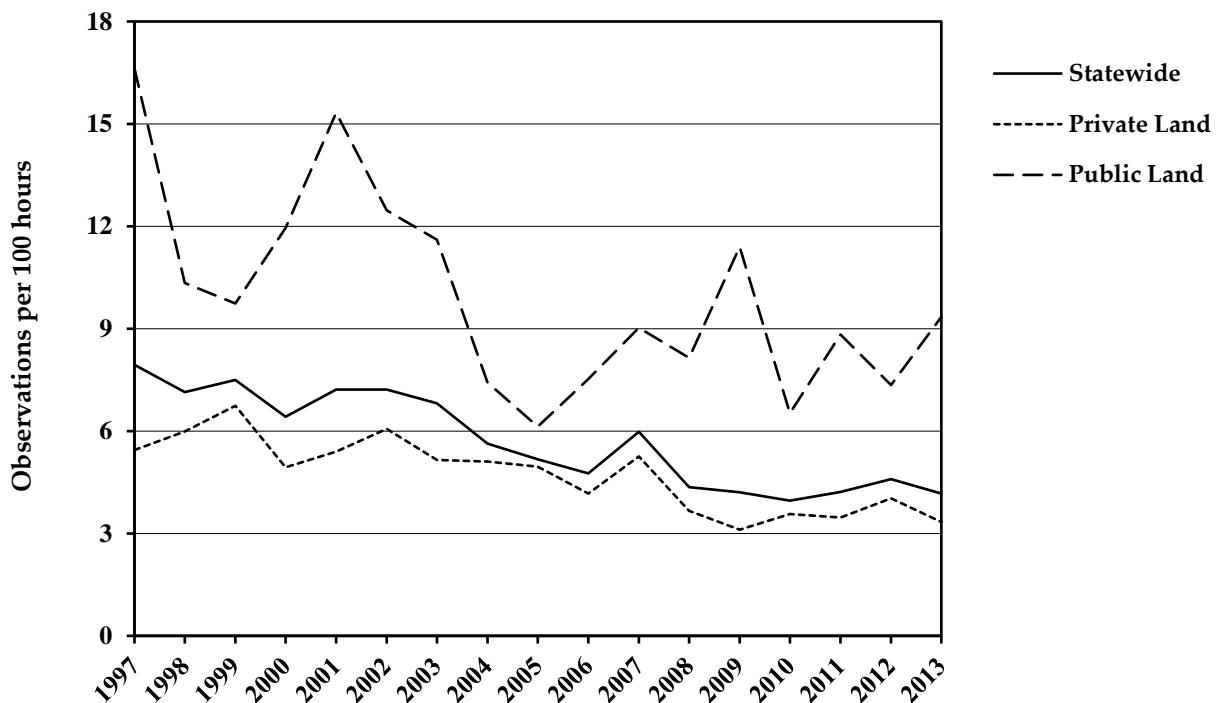


Figure 35. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2013 by land ownership and statewide in Virginia.

2013 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

INSTRUCTIONS

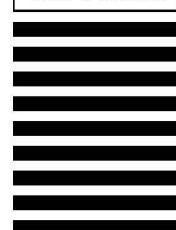
1. If you wish to participate in next years survey, and do not wish to maintain your confidentiality, please fill in your name and address at the top of the form and in the return address box below.
2. Enter *number of hours* for each *date* you hunted **between Oct. 5 and Nov. 15** (early season) **only**.
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, 2014**. *No postage is needed.*



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BOWHUNTER SURVEY
VA DEPT OF GAME & 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!!

PRINT NAME

Appendix 3. Virginia counties hunted, hunts per county, and percentage of total state hunts per county by cooperating archery hunters 5 October to 15 November 2013 in Virginia.

County	No. Hunts	% of Hunts	County	No. Hunts	% of Hunts
Accomack	15	0.35	King William	93	2.16
Albemarle	62	1.44	Lancaster	29	0.67
Alleghany	0	0.00	Lee	27	0.63
Amelia	31	0.72	Loudoun	70	1.63
Amherst	48	1.12	Louisa	45	1.05
Appomattox	18	0.28	Lunenburg	14	0.33
Augusta	98	2.28	Madison	38	0.88
Bath	17	0.40	Mathews	12	0.28
Bedford	129	3.00	Mecklenburg	24	0.56
Bland	22	0.51	Middlesex	1	0.02
Botetourt	69	1.60	Montgomery	24	0.56
Brunswick	86	2.00	Nelson	32	0.74
Buchanan	7	0.16	New Kent	34	0.79
Buckingham	0	0.00	Northampton	23	0.53
Campbell	10	0.23	Northumberland	55	1.28
Caroline	20	0.46	Nottoway	44	1.02
Carroll	78	1.81	Orange	17	0.40
Charles City	24	0.56	Page	11	0.26
Charlotte	21	0.49	Patrick	30	0.70
Chesapeake	0	0.00	Pittsylvania	95	2.21
Chesterfield	49	1.14	Powhatan	19	0.44
Clarke	49	1.14	Prince Edward	28	0.65
Craig	20	0.46	Prince George	89	2.07
Culpeper	59	1.37	Prince William	54	1.25
Cumberland	11	0.26	Pulaski	13	0.30
Dickenson	10	0.23	Rappahannock	63	1.46
Dinwiddie	74	1.72	Richmond	23	0.53
Essex	12	0.28	Roanoke	59	1.37
Fairfax	115	2.67	Rockbridge	99	2.30
Fauquier	169	3.93	Rockingham	113	2.63
Floyd	44	1.02	Russell	4	0.09
Fluvanna	88	2.05	Scott	9	0.20
Franklin	115	2.67	Shenandoah	184	4.28
Frederick	23	0.53	Smyth	68	1.58
Giles	74	1.72	Southampton	168	3.90
Gloucester	13	0.30	Spotsylvania	49	1.14
Goochland	26	0.60	Stafford	30	0.70
Grayson	38	0.88	Suffolk	16	0.37
Greene	7	0.16	Surry	88	2.05
Greenville	27	0.63	Sussex	72	1.67
Halifax	69	1.60	Tazewell	16	0.37
Hanover	59	1.37	Virginia Beach	21	0.49
Henrico	27	0.63	Warren	21	0.49
Henry	64	1.49	N. News / Hampton	1	0.02
Highland	16	0.37	Washington	61	1.42
Isle of Wight	17	0.40	Westmoreland	70	1.63
James City	0	0.00	Wise	16	0.37
King & Queen	11	0.26	Wythe	46	1.07
King George	48	1.12	York	8	0.19