

Table 1. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2016 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)	2,010	13.47 ± 0.76	13.71 ± 0.82	13.03 ± 1.53	14.31 ± 0.81	6.49 ± 1.31
Deer (doe)	4,268	28.60 ± 1.82	26.53 ± 1.52	32.44 ± 4.25	29.75 ± 1.96	19.02 ± 3.69
Deer (fawn)	1,927	12.91 ± 1.25	11.67 ± 1.02	15.23 ± 2.91	14.05 ± 1.76	3.43 ± 1.11
Deer (unknown)	1,247	8.36 ± 0.62	8.09 ± 0.75	8.86 ± 1.06	8.85 ± 0.67	4.24 ± 1.09
Gray Squirrel	11,655	78.10 ± 3.91	82.26 ± 4.38	70.39 ± 7.70	80.96 ± 4.21	54.33 ± 6.97
Fox Squirrel	652	4.37 ± 0.65	1.32 ± 0.39	10.02 ± 1.48	4.65 ± 0.72	2.06 ± 0.77
Turkey (bearded)	816	5.47 ± 0.73	5.58 ± 0.81	5.26 ± 1.40	5.80 ± 0.79	2.68 ± 1.19
Turkey (no beard)	1,623	10.88 ± 1.31	9.31 ± 1.10	13.77 ± 3.00	11.26 ± 1.39	7.67 ± 3.92
Turkey (unknown)	1,344	9.01 ± 1.37	7.19 ± 1.48	12.38 ± 2.76	9.17 ± 1.49	7.61 ± 3.00
Turkey (total)	3,783	25.35 ± 2.28	22.08 ± 2.13	31.41 ± 5.03	26.24 ± 2.47	17.96 ± 5.59
Grouse	47	0.31 ± 0.12	0.01 ± 0.01	0.88 ± 0.33	0.22 ± 0.11	1.12 ± 0.63
Bear (adult)	115	0.77 ± 0.12	0.42 ± 0.13	1.42 ± 0.26	0.66 ± 0.12	1.68 ± 0.71
Bear (cub)	45	0.30 ± 0.08	0.19 ± 0.07	0.52 ± 0.17	0.27 ± 0.08	0.56 ± 0.33
Bear (total)	160	1.07 ± 0.18	0.61 ± 0.16	1.93 ± 0.39	0.93 ± 0.17	2.25 ± 0.88
Red Fox	128	0.86 ± 0.20	1.06 ± 0.30	0.48 ± 0.13	0.95 ± 0.22	0.12 ± 0.09
Gray Fox	59	0.40 ± 0.08	0.50 ± 0.12	0.21 ± 0.08	0.37 ± 0.08	0.62 ± 0.42
Coyote	168	1.13 ± 0.19	0.99 ± 0.22	1.38 ± 0.34	1.04 ± 0.19	1.81 ± 0.81
Bobcat	22	0.15 ± 0.04	0.15 ± 0.05	0.13 ± 0.06	0.16 ± 0.04	0.06 ± 0.06
Raccoon	247	1.66 ± 0.26	1.87 ± 0.34	1.26 ± 0.36	1.78 ± 0.28	0.62 ± 0.37
Opossum	41	0.27 ± 0.07	0.26 ± 0.06	0.31 ± 0.16	0.27 ± 0.07	0.31 ± 0.16
Striped Skunk	28	0.19 ± 0.04	0.24 ± 0.06	0.10 ± 0.04	0.20 ± 0.05	0.06 ± 0.06
Elk	0	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Feral Hog	0	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
Dog	199	1.33 ± 0.32	1.30 ± 0.35	1.40 ± 0.64	1.22 ± 0.27	2.31 ± 1.98
House Cat	128	0.86 ± 0.25	0.52 ± 0.28	1.49 ± 0.50	0.73 ± 0.21	1.93 ± 1.54
Hunter	411	2.75 ± 0.46	1.52 ± 0.31	5.05 ± 1.09	2.09 ± 0.37	8.23 ± 2.74
Total Hunters		288	194	113	270	52
Total Hunts		3,515	2,387	1,128	3,189	326
Total Hours		14,923	9,695	5,228	13,320	1,603
Avg. Hrs. Per Hunt		4.25 ± 0.04	4.06 ± 0.04	4.63 ± 0.08	4.18 ± 0.04	4.92 ± 0.14



Table 2. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2016 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 ± 0.85	4.58 ± 1.70	14.23 ± 1.79	7.73 ± 1.76
Deer (doe)	27.20 ± 1.61	16.90 ± 2.55	35.18 ± 4.94	20.41 ± 5.91
Deer (fawn)	12.29 ± 1.07	2.69 ± 1.35	17.80 ± 3.46	3.92 ± 1.57
Deer (unknown)	8.52 ± 0.79	1.89 ± 0.82	9.56 ± 1.25	5.77 ± 1.46
Gray Squirrel	84.03 ± 4.50	57.01 ± 13.42	74.44 ± 9.15	52.58 ± 7.59
Fox Squirrel	1.40 ± 0.41	0.16 ± 0.15	11.55 ± 1.73	3.30 ± 1.22
Turkey (bearded)	5.82 ± 0.84	2.21 ± 1.45	5.78 ± 1.68	2.99 ± 1.72
Turkey (no beard)	9.72 ± 1.16	3.47 ± 2.16	14.54 ± 3.48	10.41 ± 5.41
Turkey (unknown)	7.41 ± 1.58	4.11 ± 1.87	12.94 ± 3.20	9.90 ± 4.64
Turkey (total)	22.94 ± 2.25	9.79 ± 4.23	33.25 ± 5.96	23.30 ± 7.52
Grouse	0.01 ± 0.01	0.00 ± 0.00	0.66 ± 0.33	1.86 ± 1.00
Bear (adult)	0.32 ± 0.09	1.90 ± 1.52	1.39 ± 0.30	1.55 ± 0.64
Bear (cub)	0.18 ± 0.07	0.32 ± 0.32	0.47 ± 0.18	0.72 ± 0.49
Bear (total)	0.50 ± 0.13	2.21 ± 1.57	1.86 ± 0.43	2.27 ± 1.05
Red Fox	1.14 ± 0.32	0.00 ± 0.00	0.54 ± 0.15	0.21 ± 0.15
Gray Fox	0.43 ± 0.11	1.42 ± 1.08	0.23 ± 0.09	0.10 ± 0.10
Coyote	0.97 ± 0.23	1.26 ± 0.88	1.20 ± 0.31	2.16 ± 1.22
Bobcat	0.15 ± 0.05	0.16 ± 0.15	0.16 ± 0.07	0.00 ± 0.00
Raccoon	1.91 ± 0.36	1.26 ± 0.87	1.50 ± 0.44	0.21 ± 0.21
Opossum	0.24 ± 0.06	0.47 ± 0.35	0.33 ± 0.19	0.21 ± 0.13
Striped Skunk	0.24 ± 0.07	0.16 ± 0.16	0.12 ± 0.05	0.00 ± 0.00
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	0.00 ± 0.00	0.00 ± 0.00
Dog	1.38 ± 0.38	0.16 ± 0.16	0.87 ± 0.27	3.71 ± 3.22
House Cat	0.55 ± 0.30	0.00 ± 0.00	1.10 ± 0.21	3.20 ± 2.48
Hunter	1.32 ± 0.32	4.26 ± 1.46	3.73 ± 0.85	10.83 ± 4.12
Total Hunters	185	19	97	37
Total Hunts	2,261	126	928	200
Total Hours	9,061	633	4,258	970
Avg. Hrs. Per Hunt	4.01 ± 0.04	5.03 ± 0.23	4.59 ± 0.08	4.85 ± 0.17

Table 3. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters from 1 October to 18 November 2016 within geographic regions of Virginia.

Animal	<u>Animals Seen/ 100 hrs. ± SE</u>				
	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Deer (antlered)	12.20 ± 1.25	14.52 ± 1.49	14.58 ± 1.52	14.72 ± 2.36	10.93 ± 1.73
Deer (doe)	19.81 ± 2.39	27.81 ± 2.44	32.13 ± 2.57	38.48 ± 6.89	24.94 ± 3.91
Deer (fawn)	8.72 ± 1.50	10.61 ± 1.74	15.28 ± 1.83	17.00 ± 4.79	13.03 ± 2.69
Deer (unknown)	7.29 ± 1.22	6.54 ± 0.98	9.96 ± 1.43	8.22 ± 1.32	9.64 ± 1.75
Gray Squirrel	75.36 ± 5.61	75.24 ± 7.78	93.95 ± 8.38	77.90 ± 12.80	61.07 ± 6.22
Fox Squirrel	0.20 ± 0.11	2.79 ± 0.93	1.36 ± 0.75	9.09 ± 1.76	11.19 ± 2.51
Turkey (bearded)	6.23 ± 1.51	5.81 ± 1.61	4.79 ± 1.13	6.81 ± 2.32	3.34 ± 1.20
Turkey (no beard)	10.72 ± 1.90	9.60 ± 2.18	7.75 ± 1.50	10.33 ± 2.54	18.04 ± 5.95
Turkey (unknown)	6.12 ± 1.54	8.91 ± 4.41	7.00 ± 1.80	12.68 ± 4.16	12.00 ± 3.47
Turkey (total)	23.06 ± 3.12	24.32 ± 5.35	19.54 ± 2.82	29.81 ± 6.51	33.38 ± 7.95
Grouse	0.00 ± 0.00	0.04 ± 0.04	0.00 ± 0.00	0.28 ± 0.13	1.63 ± 0.71
Bear (adult)	0.00 ± 0.00	0.54 ± 0.16	0.75 ± 0.34	1.11 ± 0.30	1.80 ± 0.44
Bear (cub)	0.00 ± 0.00	0.31 ± 0.13	0.28 ± 0.15	0.62 ± 0.27	0.39 ± 0.21
Bear (total)	0.00 ± 0.00	0.85 ± 0.25	1.02 ± 0.39	1.73 ± 0.51	2.19 ± 0.60
Red Fox	0.17 ± 0.12	0.50 ± 0.23	2.32 ± 0.77	0.45 ± 0.20	0.51 ± 0.14
Gray Fox	0.63 ± 0.19	0.62 ± 0.30	0.28 ± 0.13	0.14 ± 0.07	0.30 ± 0.14
Coyote	0.69 ± 0.26	1.01 ± 0.33	1.27 ± 0.47	1.28 ± 0.54	1.50 ± 0.38
Bobcat	0.24 ± 0.11	0.21 ± 0.10	0.10 ± 0.05	0.13 ± 0.06	0.15 ± 0.07
Raccoon	2.86 ± 0.78	0.66 ± 0.23	1.77 ± 0.39	1.21 ± 0.55	1.33 ± 0.46
Opossum	0.34 ± 0.11	0.12 ± 0.07	0.28 ± 0.13	0.45 ± 0.27	0.13 ± 0.07
Striped Skunk	0.17 ± 0.09	0.35 ± 0.18	0.22 ± 0.09	0.07 ± 0.05	0.13 ± 0.07
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	0.00 ± 0.00	0.00 ± 0.00
Dog	0.49 ± 0.23	2.09 ± 1.00	1.52 ± 0.60	2.21 ± 1.14	0.39 ± 0.20
House Cat	0.20 ± 0.11	0.12 ± 0.07	1.11 ± 0.72	2.07 ± 0.88	0.77 ± 0.24
Hunter	1.80 ± 0.58	1.12 ± 0.54	1.52 ± 0.46	5.84 ± 1.50	4.07 ± 1.58
Total Hunters	63	72	89	61	53
Total Hunts	843	651	893	588	540
Total Hours	3,499	2,582	3,613	2,895	2,334
Avg. Hrs. Per Hunt	4.25 ± 0.07	3.97 ± 0.09	4.05 ± 0.07	4.92 ± 0.11	4.32 ± 0.10

Table 4. Observations of selected animals (per 100 hours hunting) by cooperating archery hunters by week from 1 October to 18 November 2016 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)	13.95 ± 1.77	11.10 ± 1.26	12.38 ± 1.20	10.99 ± 1.17	11.71 ± 1.06	15.08 ± 1.32	16.31 ± 1.44	16.54 ± 1.68
Deer (doe)	32.83 ± 3.80	32.67 ± 3.02	32.77 ± 2.23	25.09 ± 2.35	24.33 ± 2.28	24.51 ± 3.14	26.98 ± 2.91	37.74 ± 3.87
Deer (fawn)	15.92 ± 2.04	15.88 ± 2.21	14.26 ± 1.50	10.05 ± 1.51	11.16 ± 1.52	11.10 ± 2.04	11.83 ± 1.86	15.29 ± 2.74
Deer (unknown)	10.00 ± 2.16	9.03 ± 1.33	9.54 ± 1.39	7.80 ± 1.10	8.79 ± 1.11	7.56 ± 1.06	7.47 ± 1.07	7.09 ± 1.40
Gray Squirrel	62.33 ± 5.35	72.03 ± 5.30	79.65 ± 5.84	74.47 ± 4.88	87.30 ± 4.82	94.82 ± 10.98	73.83 ± 5.99	65.13 ± 6.54
Fox Squirrel	5.31 ± 1.24	5.15 ± 1.06	4.33 ± 1.07	4.12 ± 1.02	3.46 ± 0.77	3.35 ± 0.72	4.57 ± 1.10	5.70 ± 1.38
Turkey (bearded)	4.69 ± 1.88	6.53 ± 1.46	5.45 ± 1.08	4.62 ± 1.31	7.52 ± 1.79	4.02 ± 0.84	4.77 ± 1.09	5.63 ± 2.06
Turkey (no beard)	10.49 ± 2.99	13.23 ± 2.57	10.46 ± 2.46	9.11 ± 3.62	14.90 ± 3.32	11.10 ± 2.42	7.84 ± 1.84	9.31 ± 2.46
Turkey (unknown)	10.00 ± 3.63	9.14 ± 2.76	8.97 ± 2.89	9.80 ± 2.41	10.75 ± 3.32	9.53 ± 2.00	6.77 ± 1.40	7.79 ± 2.51
Turkey (total)	25.18 ± 4.75	28.90 ± 4.09	24.88 ± 4.16	23.53 ± 5.62	33.17 ± 5.50	24.65 ± 3.49	19.38 ± 2.81	22.73 ± 4.73
Grouse	0.12 ± 0.12	0.32 ± 0.15	0.16 ± 0.08	0.19 ± 0.11	0.96 ± 0.64	0.34 ± 0.17	0.12 ± 0.09	0.14 ± 0.10
Bear (adult)	0.86 ± 0.40	1.54 ± 0.36	1.00 ± 0.25	0.69 ± 0.27	0.59 ± 0.19	0.57 ± 0.18	0.54 ± 0.20	0.35 ± 0.15
Bear (cub)	0.49 ± 0.30	0.64 ± 0.28	0.48 ± 0.24	0.19 ± 0.14	0.14 ± 0.14	0.19 ± 0.14	0.29 ± 0.14	0.00 ± 0.00
Bear (total)	1.36 ± 0.60	2.18 ± 0.53	1.48 ± 0.44	0.87 ± 0.36	0.73 ± 0.28	0.77 ± 0.26	0.83 ± 0.27	0.35 ± 0.15
Red Fox	0.86 ± 0.54	0.96 ± 0.27	0.80 ± 0.25	0.75 ± 0.32	0.68 ± 0.27	1.20 ± 0.37	0.95 ± 0.48	0.56 ± 0.28
Gray Fox	0.12 ± 0.12	0.69 ± 0.35	0.48 ± 0.17	0.25 ± 0.12	0.36 ± 0.14	0.38 ± 0.15	0.42 ± 0.20	0.21 ± 0.17
Coyote	1.73 ± 0.75	1.81 ± 0.57	1.40 ± 0.36	1.00 ± 0.31	0.87 ± 0.26	1.01 ± 0.37	1.12 ± 0.35	0.14 ± 0.10
Bobcat	0.25 ± 0.17	0.11 ± 0.07	0.28 ± 0.12	0.00 ± 0.00	0.18 ± 0.11	0.05 ± 0.05	0.21 ± 0.09	0.07 ± 0.07

Table 4 (continued). Observations of selected animals (per 100 hours of hunting) by cooperating archery hunters by week from 1 October to 18 November 2016 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	1.23 ± 0.60	1.49 ± 0.45	2.60 ± 0.59	2.06 ± 0.50	1.69 ± 0.44	1.96 ± 0.54	1.04 ± 0.35	0.56 ± 0.30
Opossum	0.49 ± 0.24	0.37 ± 0.14	0.24 ± 0.11	0.37 ± 0.17	0.36 ± 0.18	0.14 ± 0.08	0.08 ± 0.06	0.35 ± 0.20
Striped Skunk	0.49 ± 0.24	0.16 ± 0.12	0.24 ± 0.10	0.19 ± 0.11	0.09 ± 0.06	0.10 ± 0.07	0.17 ± 0.10	0.28 ± 0.17
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	0.00 ± 0.00
Feral Hog	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	0.00 ± 0.00
Dog	1.23 ± 0.71	1.81 ± 0.86	0.96 ± 0.41	1.25 ± 0.37	1.46 ± 0.46	2.30 ± 0.75	1.00 ± 0.32	0.49 ± 0.29
House Cat	0.62 ± 0.32	1.75 ± 0.72	0.48 ± 0.16	0.81 ± 0.28	0.96 ± 0.37	0.96 ± 0.40	0.37 ± 0.15	1.04 ± 0.47
Hunter	3.33 ± 0.97	2.71 ± 0.76	2.40 ± 0.56	2.62 ± 0.64	2.51 ± 0.56	3.11 ± 0.68	3.57 ± 0.85	1.74 ± 0.67
Total Hunters	156	200	235	197	213	205	163	120
Total Hunts	158	474	607	424	558	474	509	311
Total Hours	810	1,883	2,496	1,602	2,195	2,089	2,409	1,439
Avg. Hrs. Per Hunt	5.13 ± 0.20	3.97 ± 0.10	4.11 ± 0.09	3.78 ± 0.09	3.93 ± 0.08	4.41 ± 0.11	4.73 ± 0.11	4.63 ± 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 2016.

(a)

Ratio	Statewide	East of BR	West of BR
Doe: Buck	2.12	1.94	2.49
Fawn: Doe	0.45	0.44	0.47

(b)

Ratio	Private	Public
Doe: Buck	2.08	2.93
Fawn: Doe	0.47	0.18

(c)

Ratio	Tidewater	S. Piedmont	N. Piedmont	S. Mountain	N. Mountain
Doe: Buck	1.62	1.91	2.20	2.62	2.28
Fawn: Doe	0.44	0.38	0.48	0.44	0.52

(d)

Ratio	Day 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Doe: Buck	2.35	2.94	2.65	2.28	2.08	1.63	1.65	1.98
Fawn: Doe	0.48	0.49	0.44	0.40	0.46	0.45	0.44	0.47

Table 6. Statewide total observations and total observations per 100 hunts of miscellaneous animals by cooperating archery hunters 1 October to 18 November 2016 in Virginia.

Animal	Total Observations	Observations / 100 Hunts
Bats	4	0.11
Beaver	6	0.17
Buzzard	7	0.20
Chipmunk	30	0.85
Crow	127	3.61
Doves	4	0.11
Ducks	189	5.38
Eagle	94	2.67
Falcon	1	0.03
Flying Squirrels	0	0.00
Geese	1,258	35.79
Groundhog	37	1.05
Hawk	121	3.44
Herons	6	0.17
Mink	1	0.03
Miscellaneous Birds	29	0.83
Mouse	4	0.11
Muskrat	1	0.03
Nutria	0	0.00
Otter	9	0.26
Owl	42	1.19
Pheasant	0	0.00
Quail	14	0.40
Rabbit	49	1.39
Red Squirrel	0	0.00
Shrew	0	0.00
Sika & Other Deer	0	0.00
Snake	2	0.06
Snipe	0	0.00
Turtles	1	0.03
Weasel	0	0.00
Woodcock	8	0.23

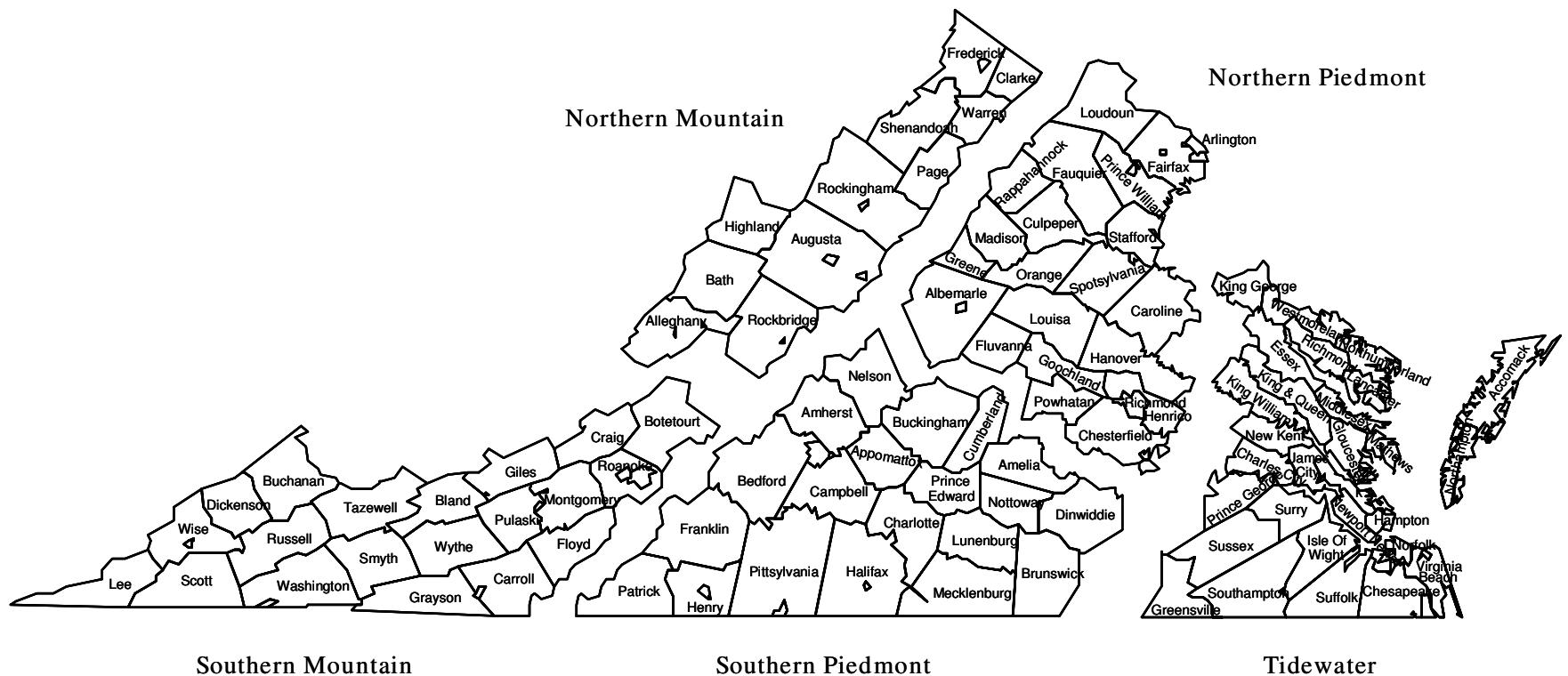


Figure 1. Geographic regions used for analyses in this report.

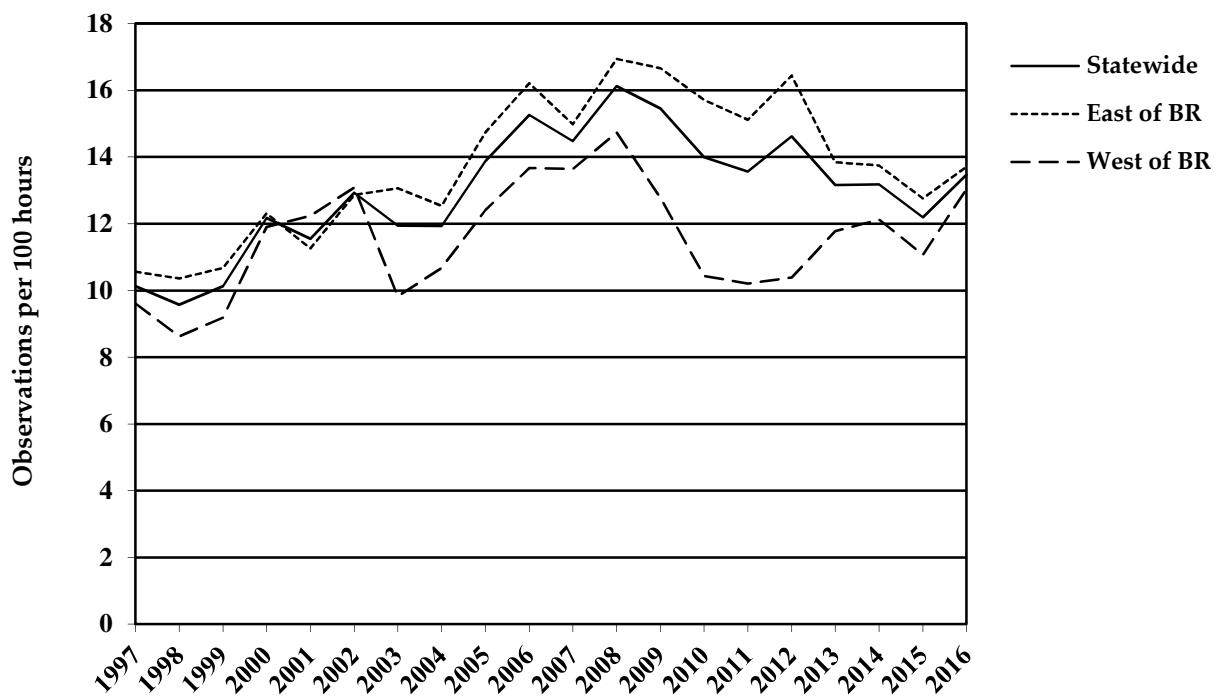


Figure 2. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

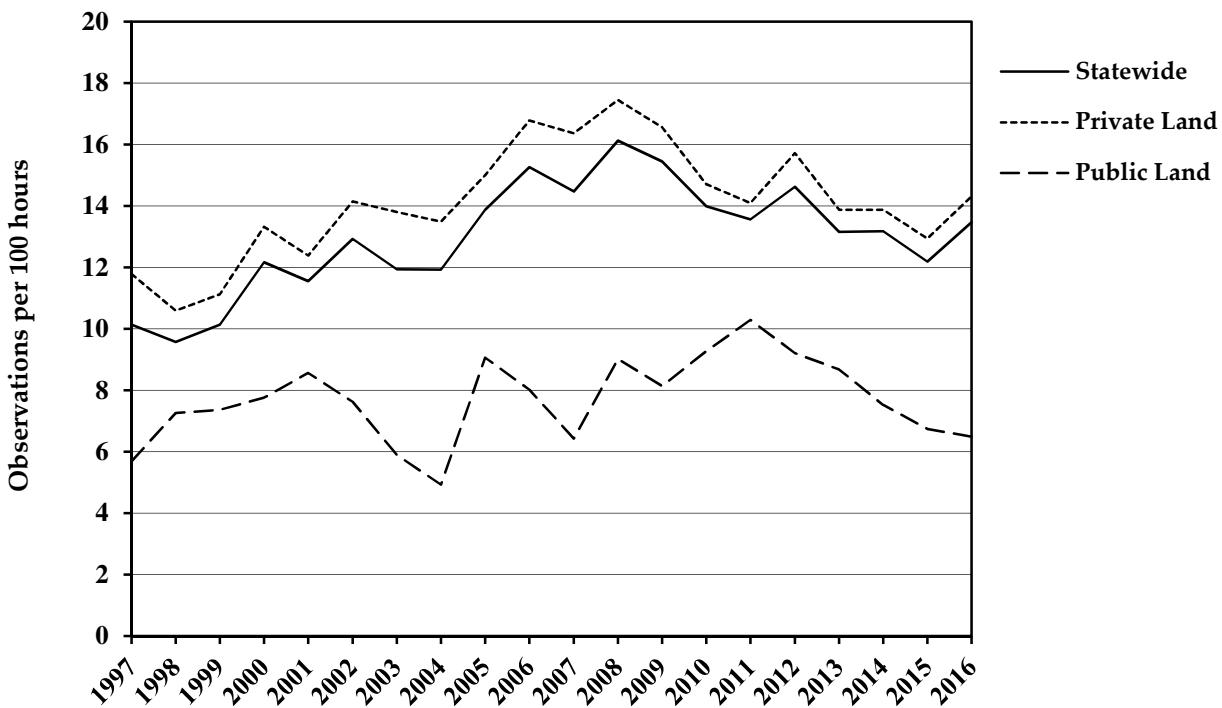


Figure 3. Antlered deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

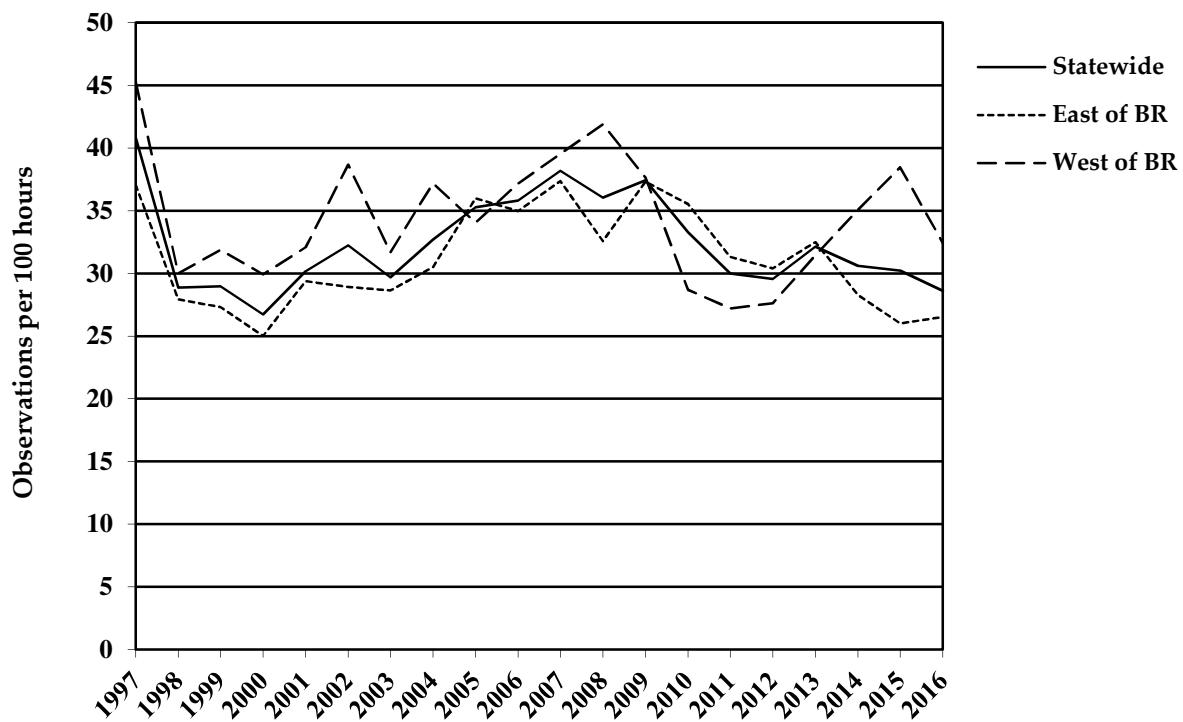


Figure 4. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.



Figure 5. Doe deer observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

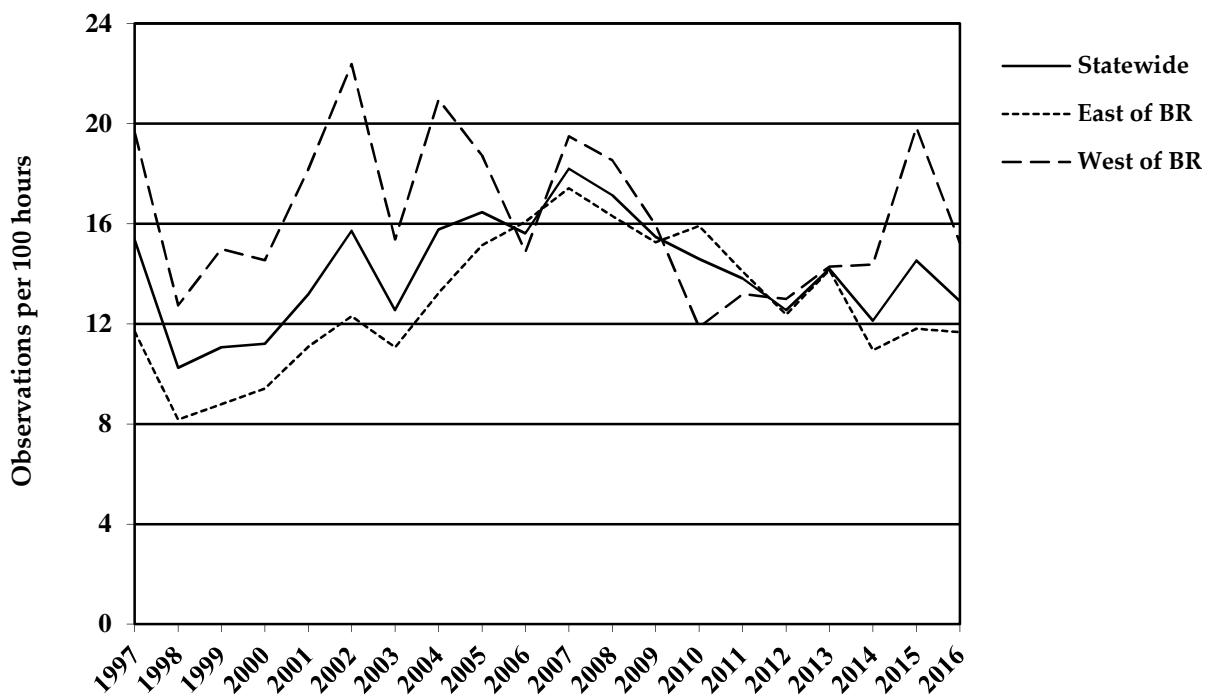


Figure 6. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

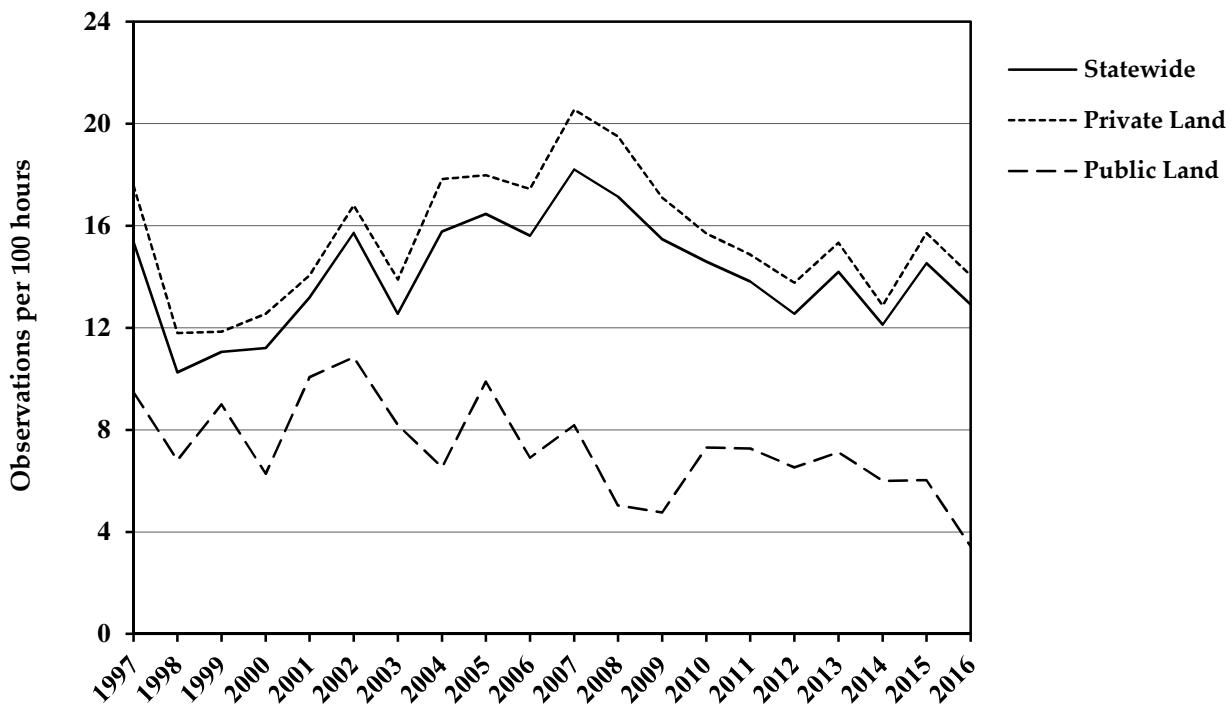


Figure 7. Fawns observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

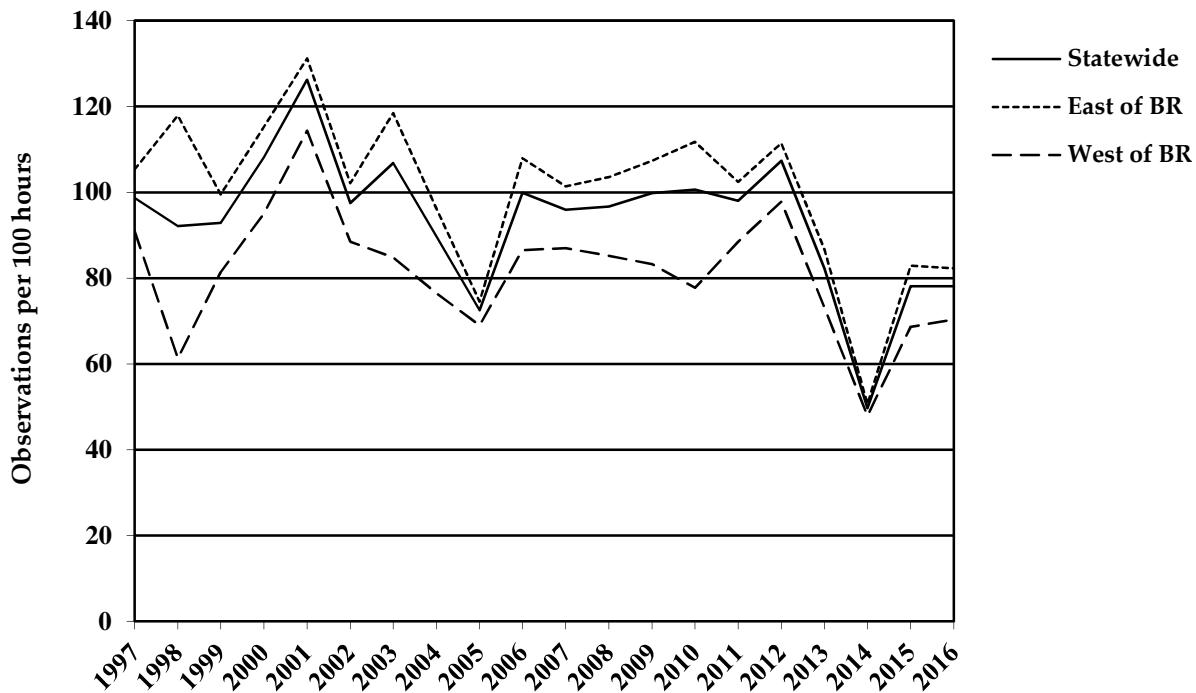


Figure 8. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

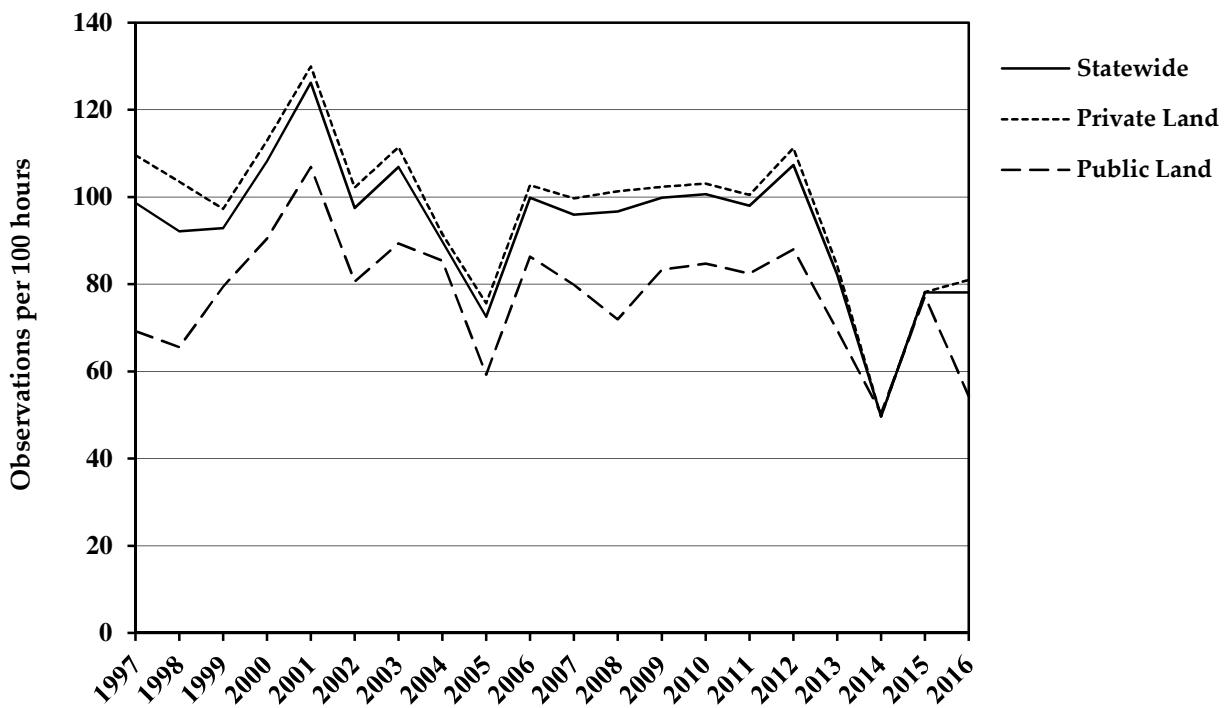


Figure 9. Gray squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

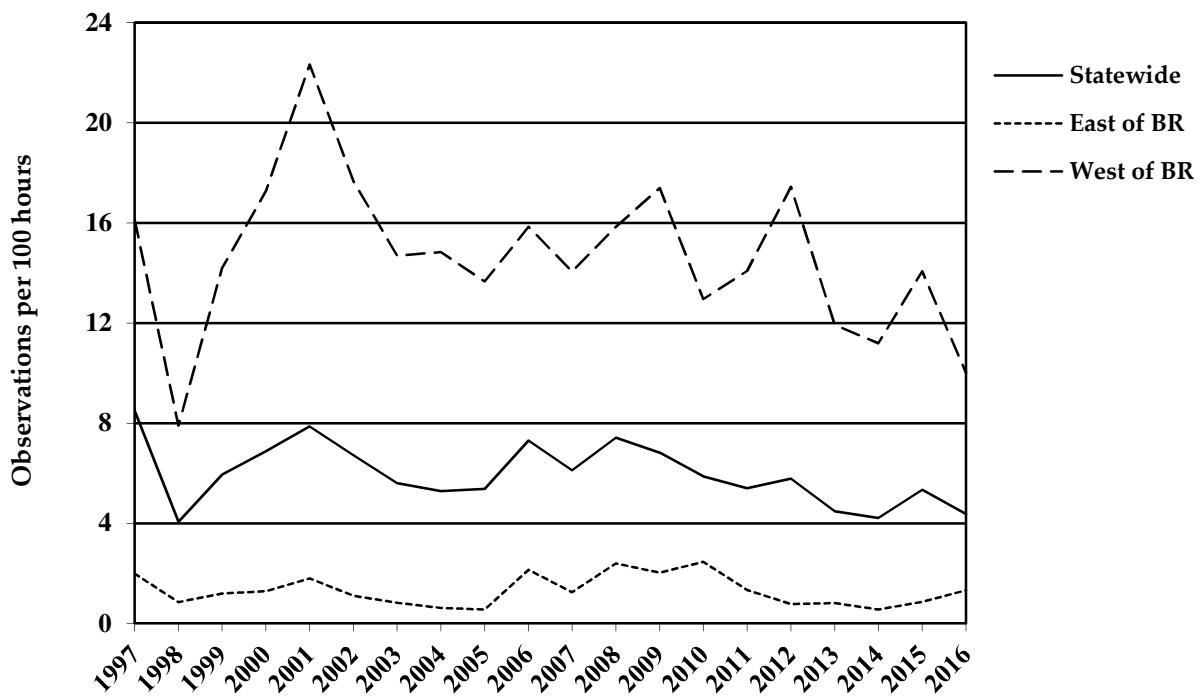


Figure 10. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

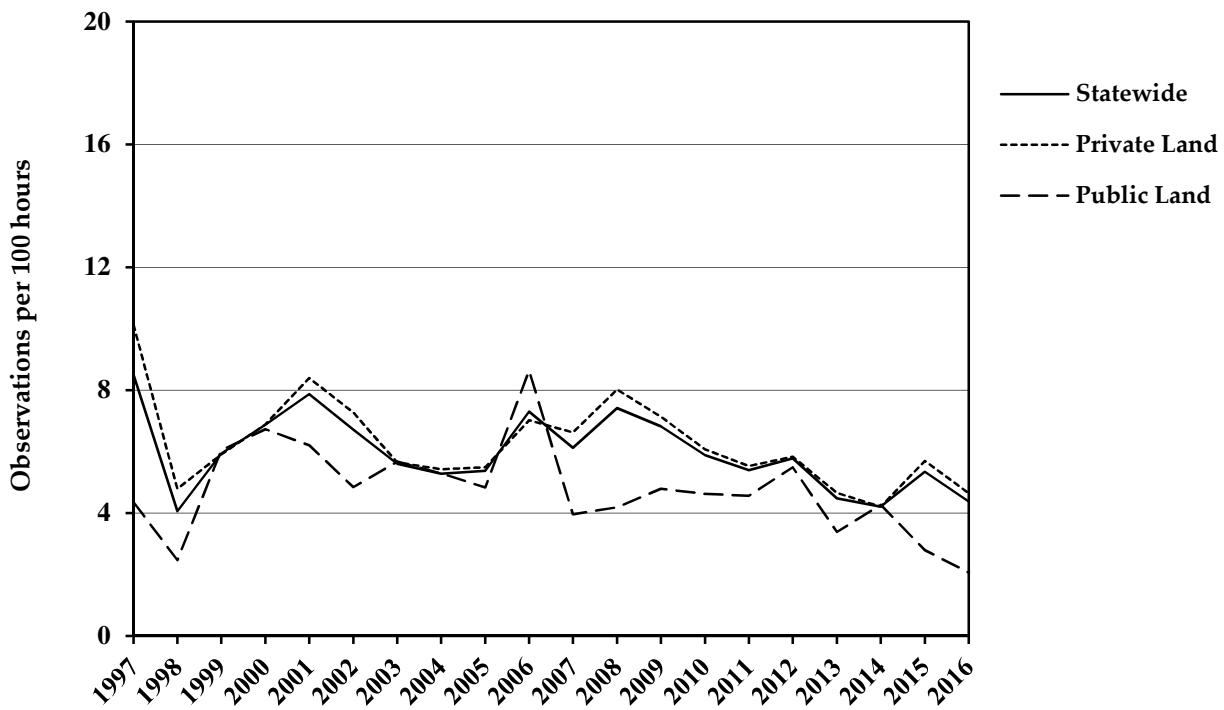


Figure 11. Fox squirrels observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

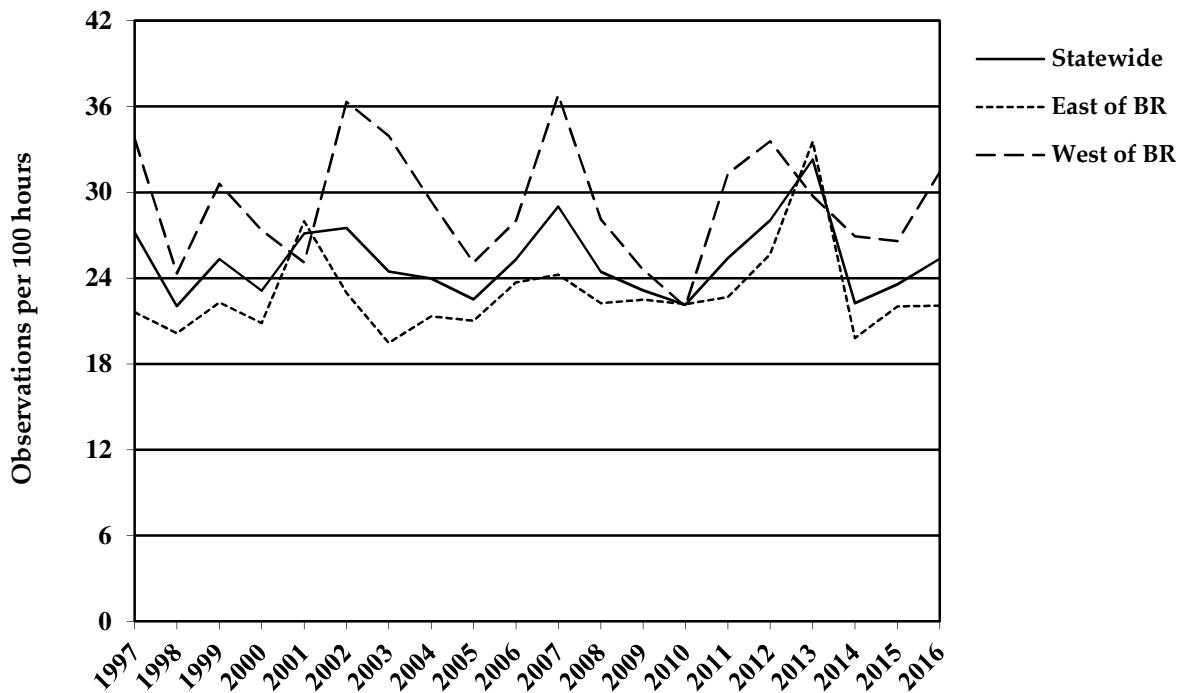


Figure 12. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

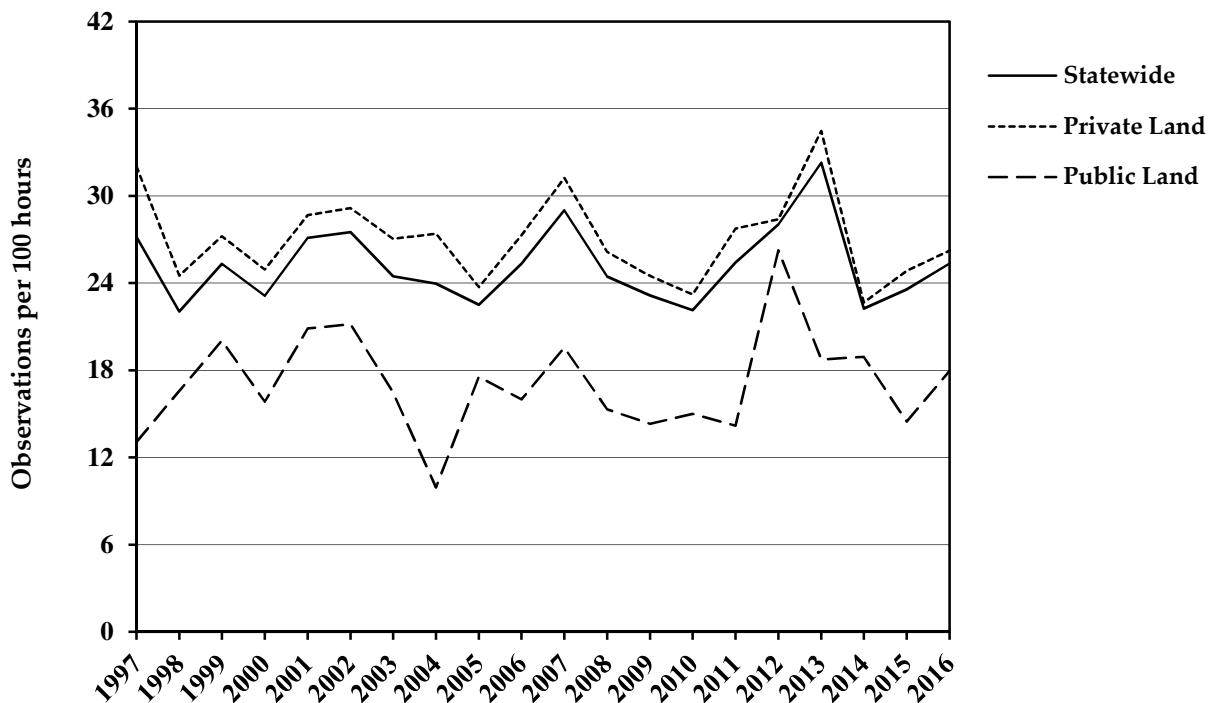


Figure 13. Wild turkeys observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

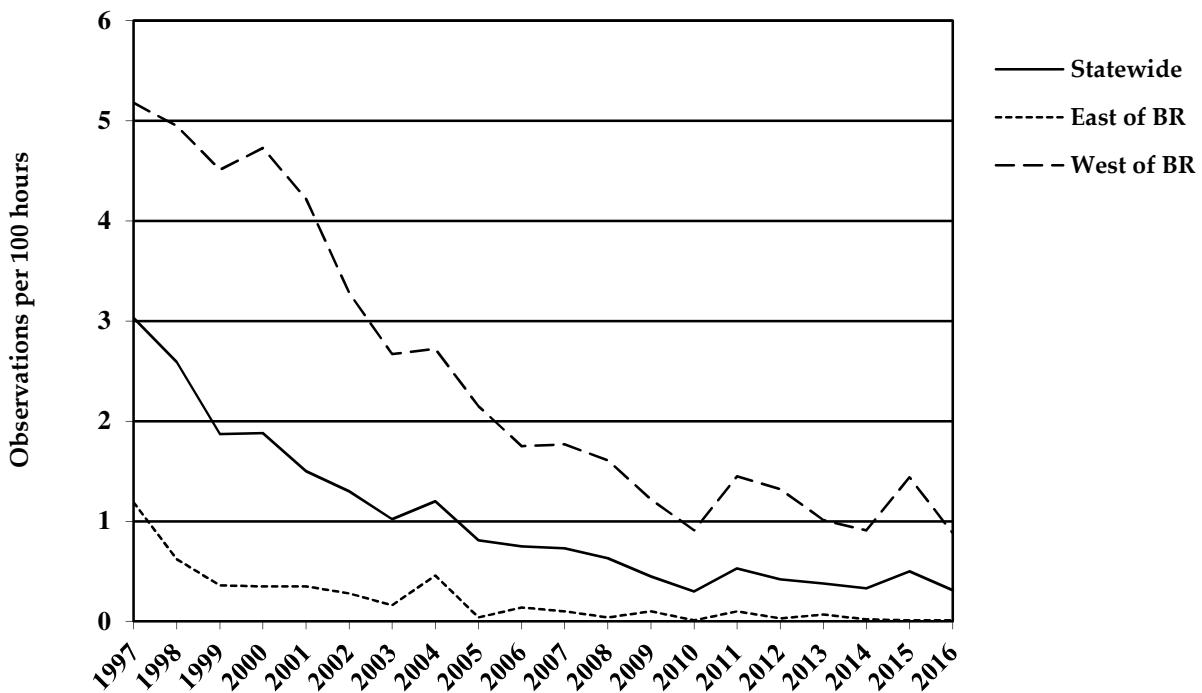


Figure 14. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

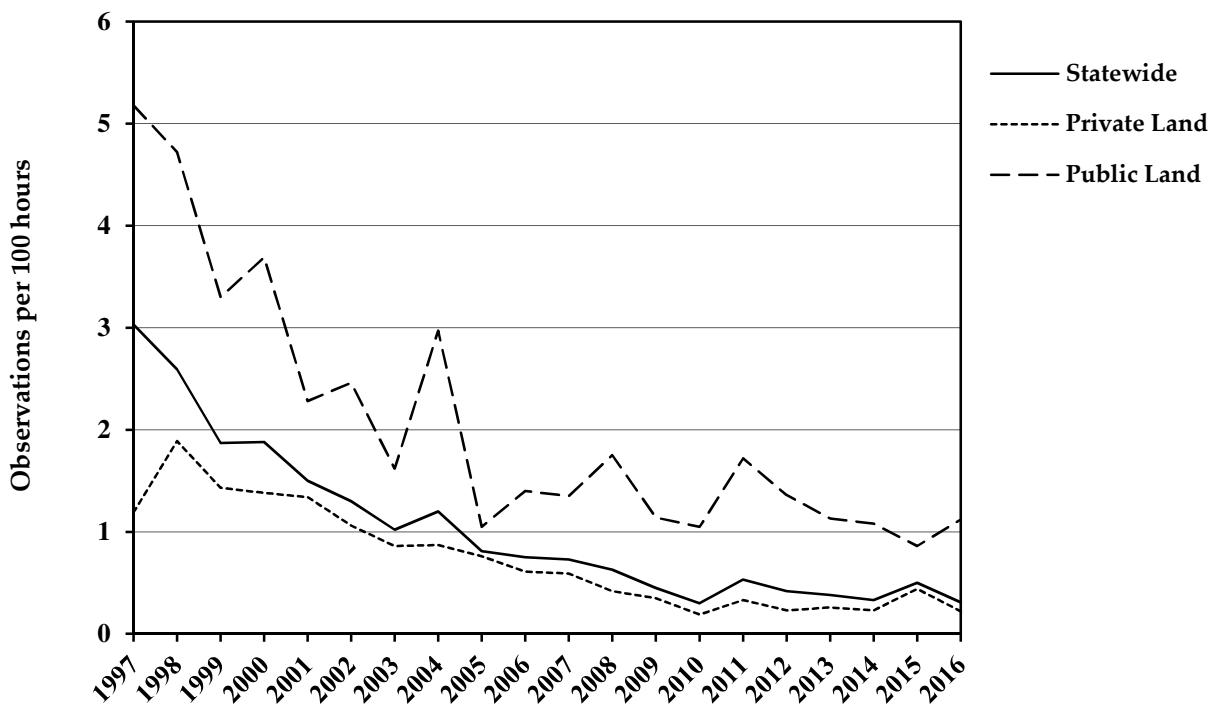


Figure 15. Ruffed grouse observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

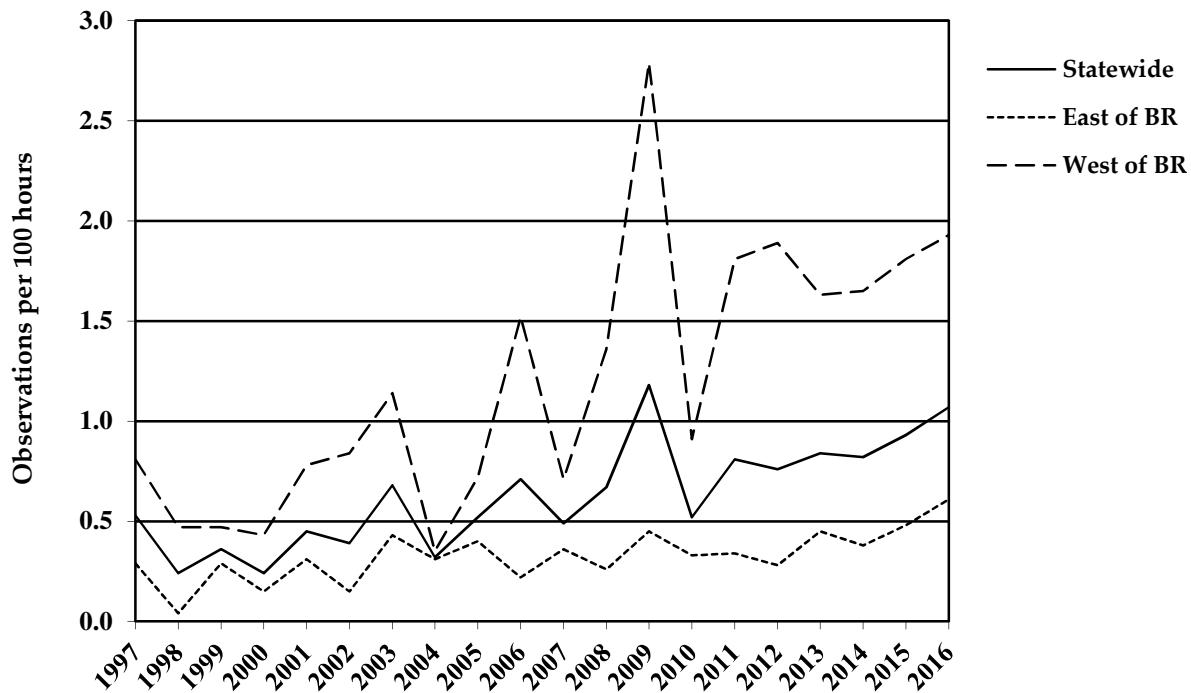


Figure 16. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

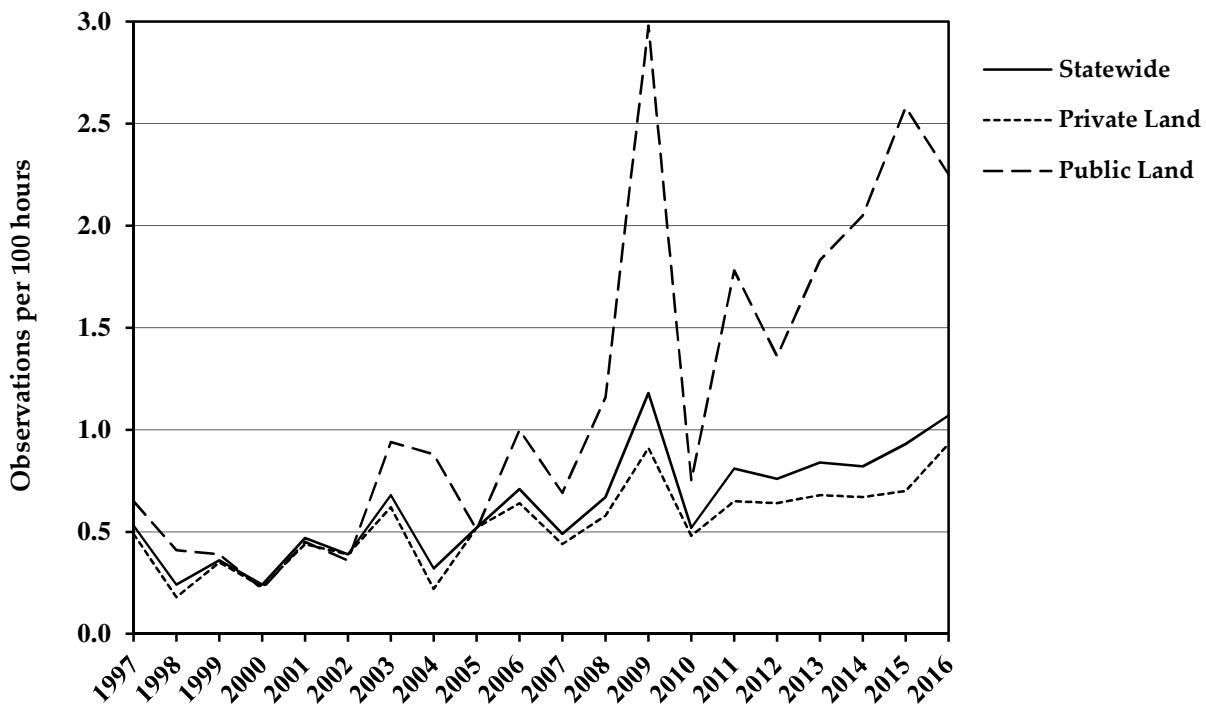


Figure 17. Black bears observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

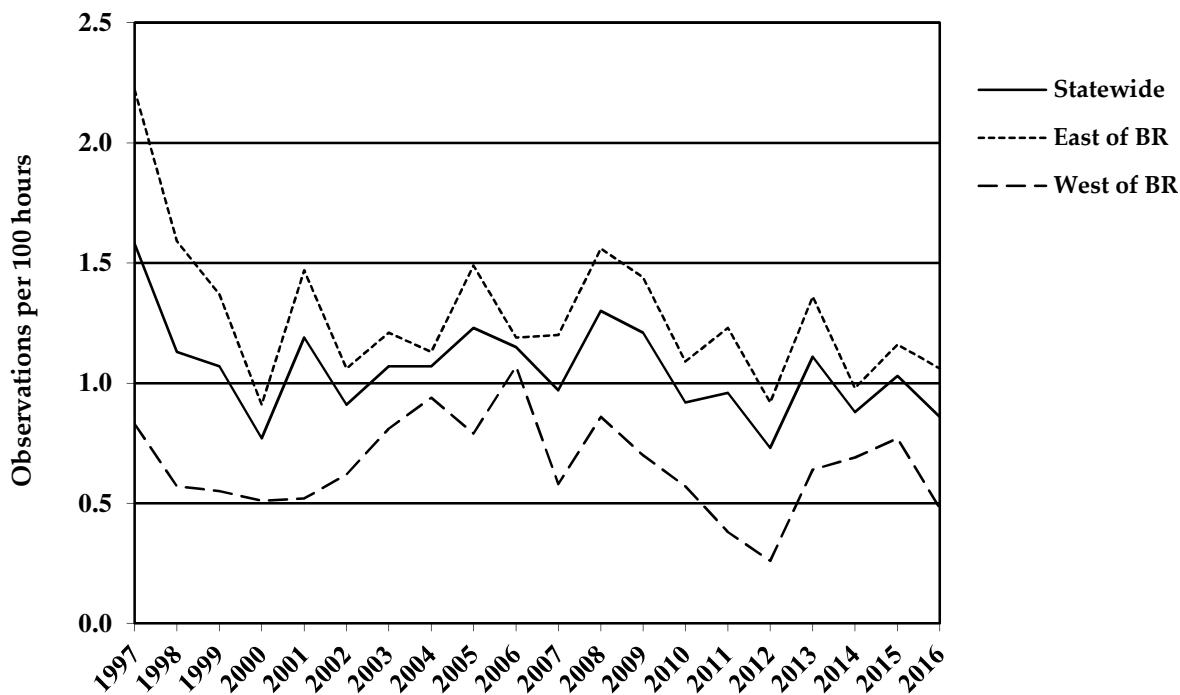


Figure 18. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

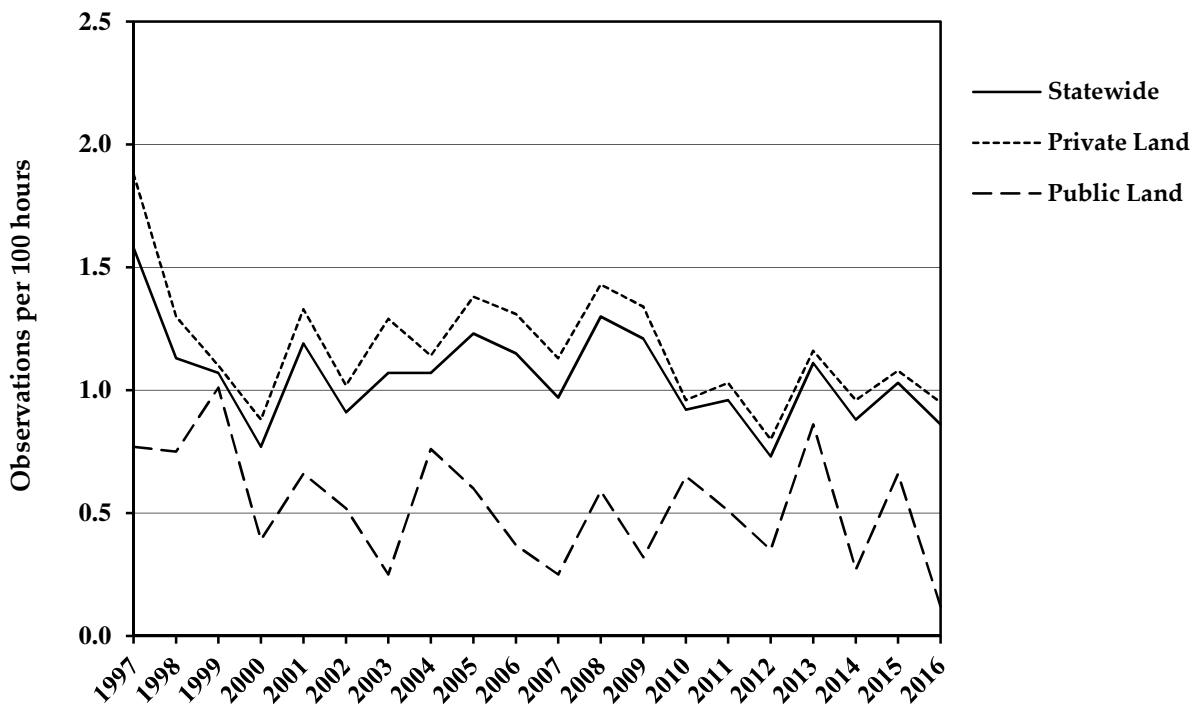


Figure 19. Red foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

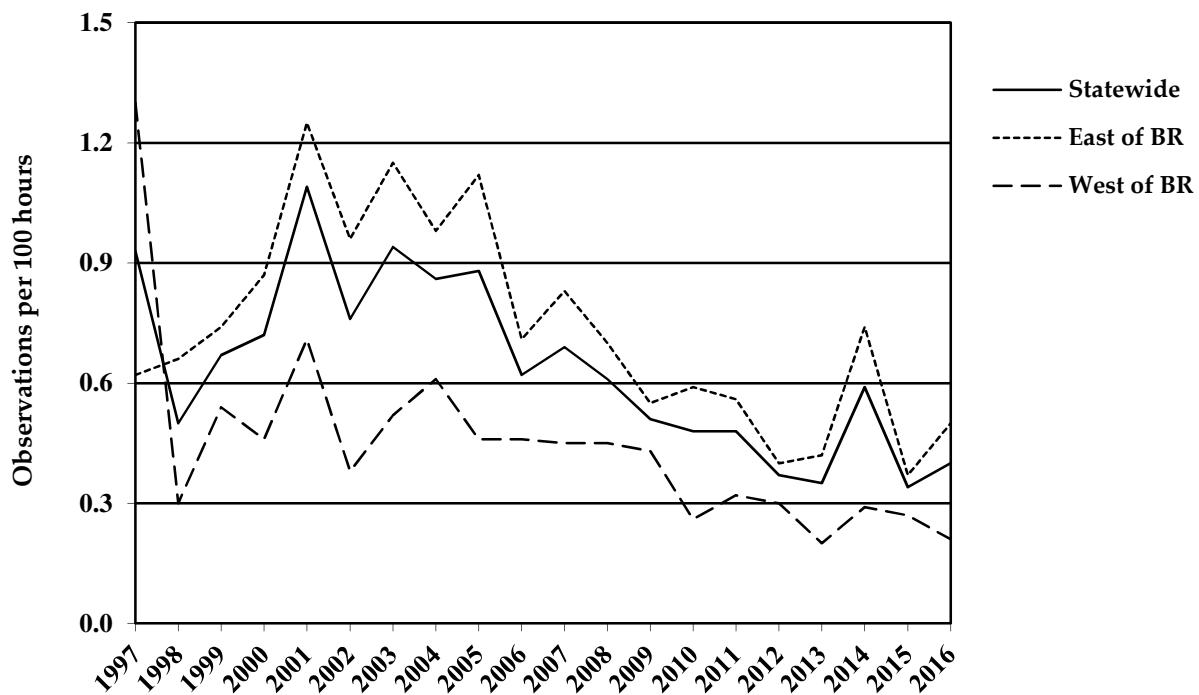


Figure 20. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

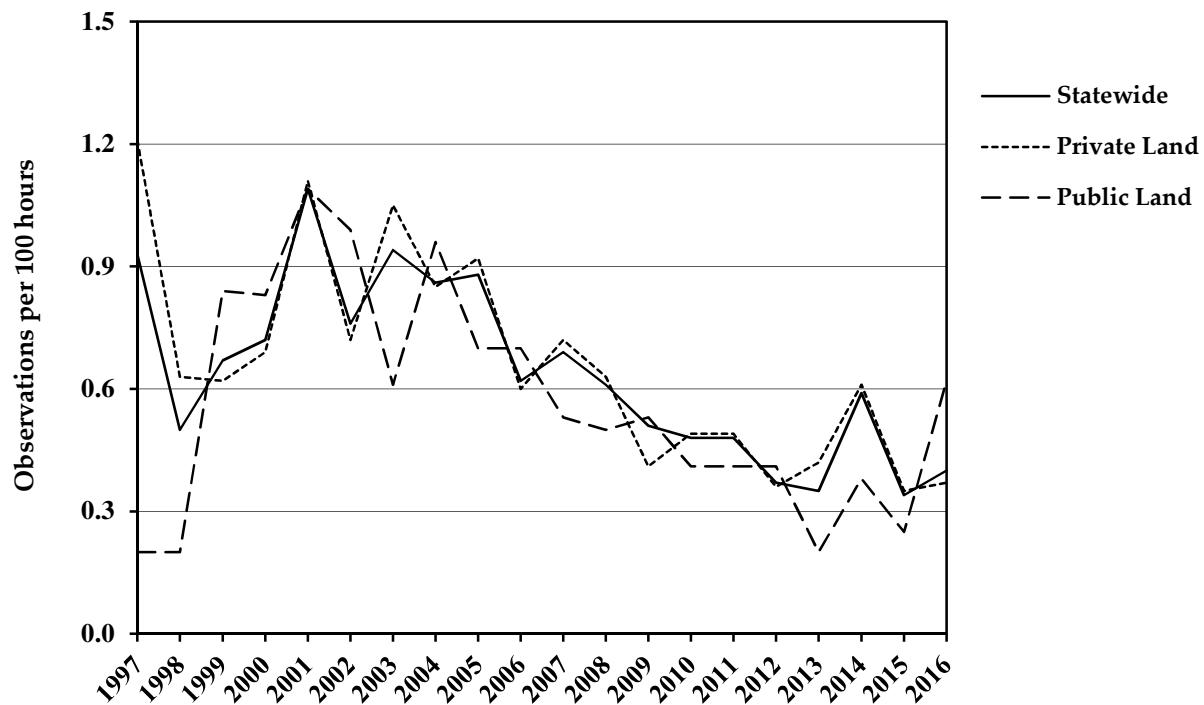


Figure 21. Gray foxes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

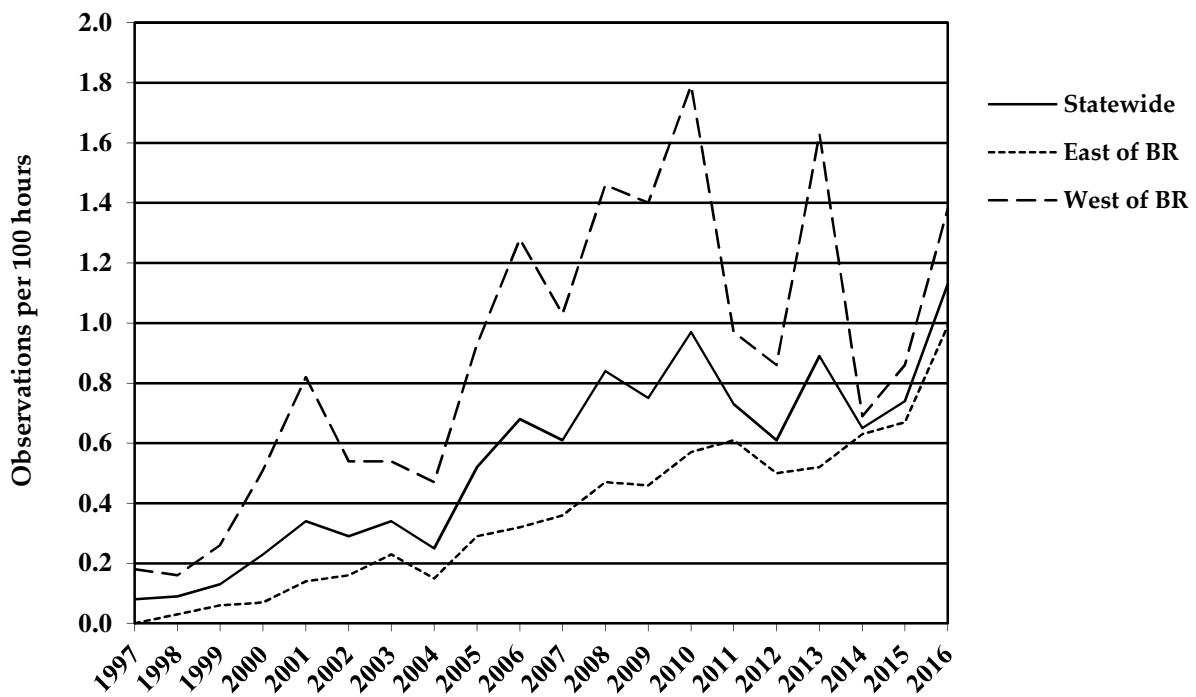


Figure 22. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

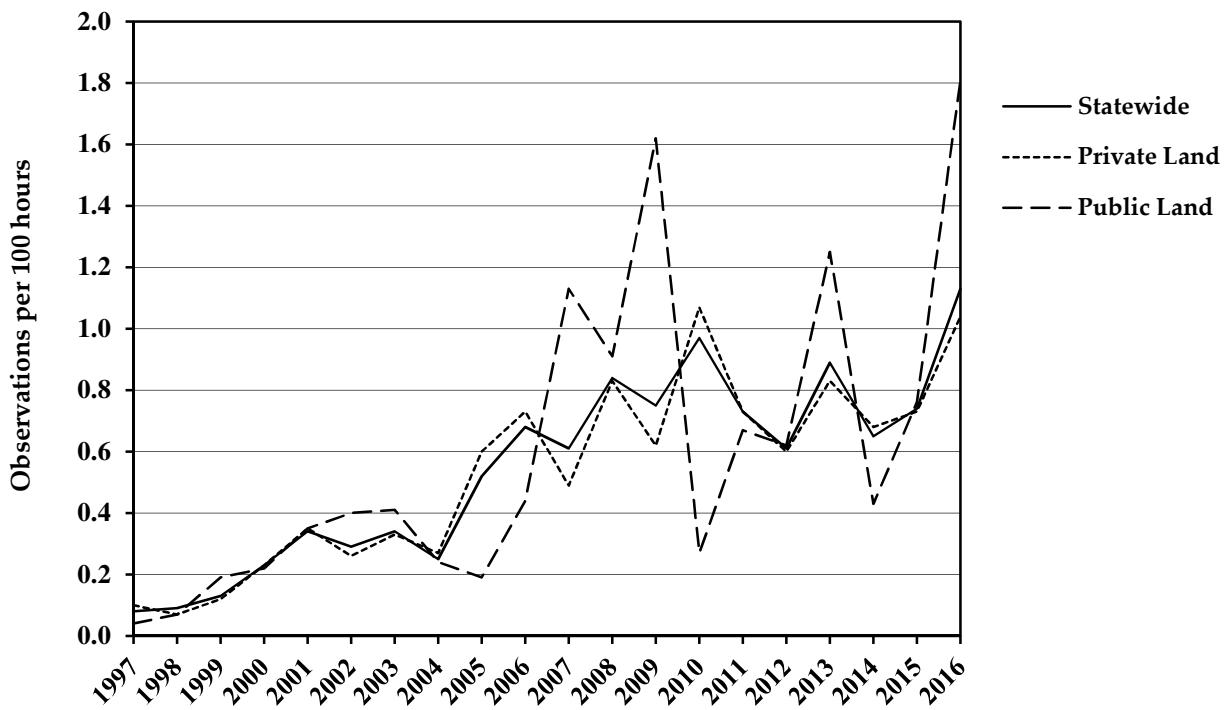


Figure 23. Coyotes observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

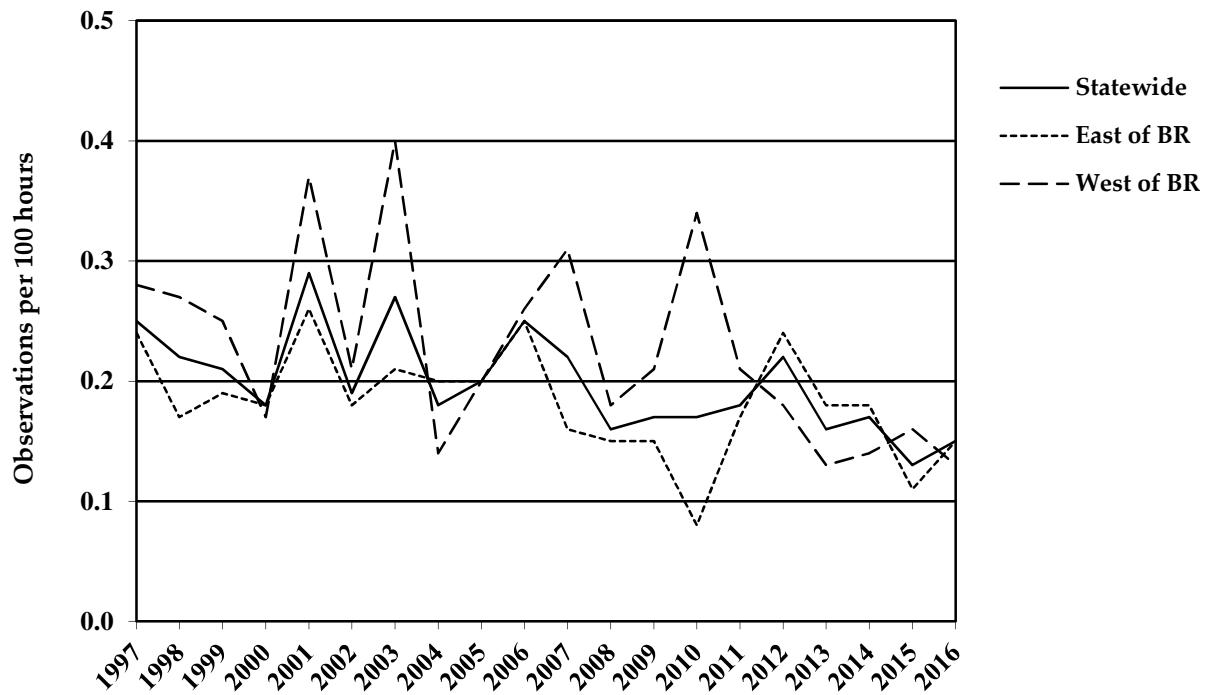


Figure 24. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

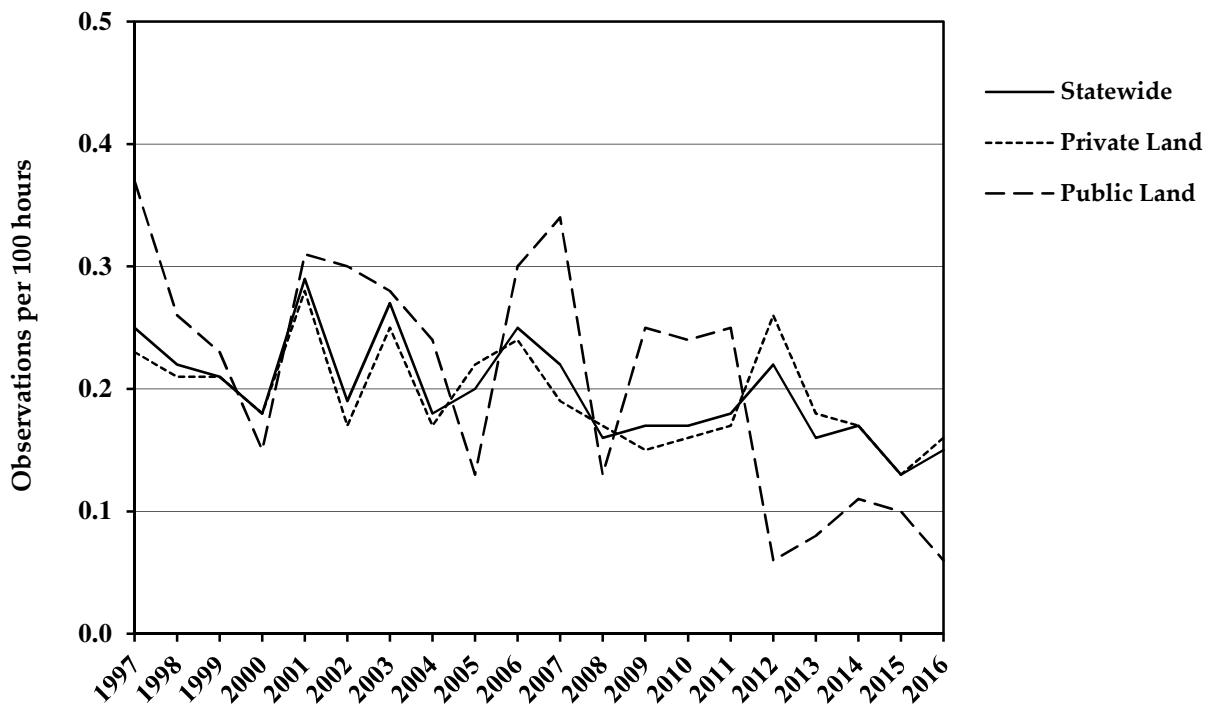


Figure 25. Bobcats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

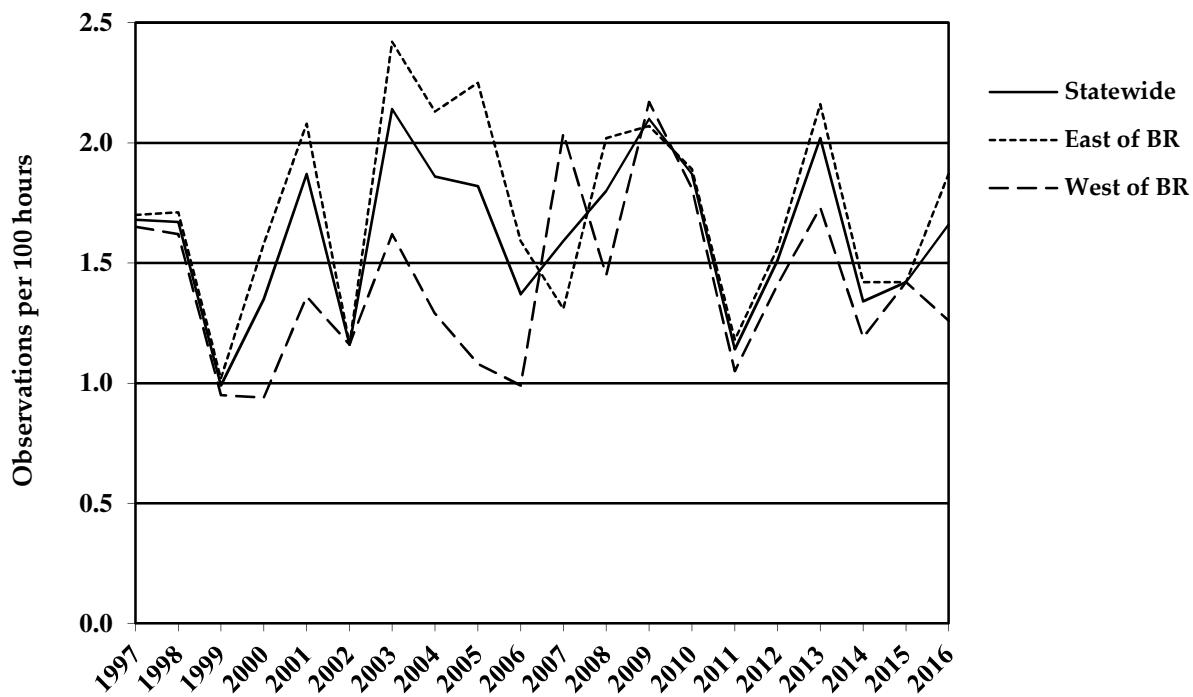


Figure 26. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.



Figure 27. Raccoons observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

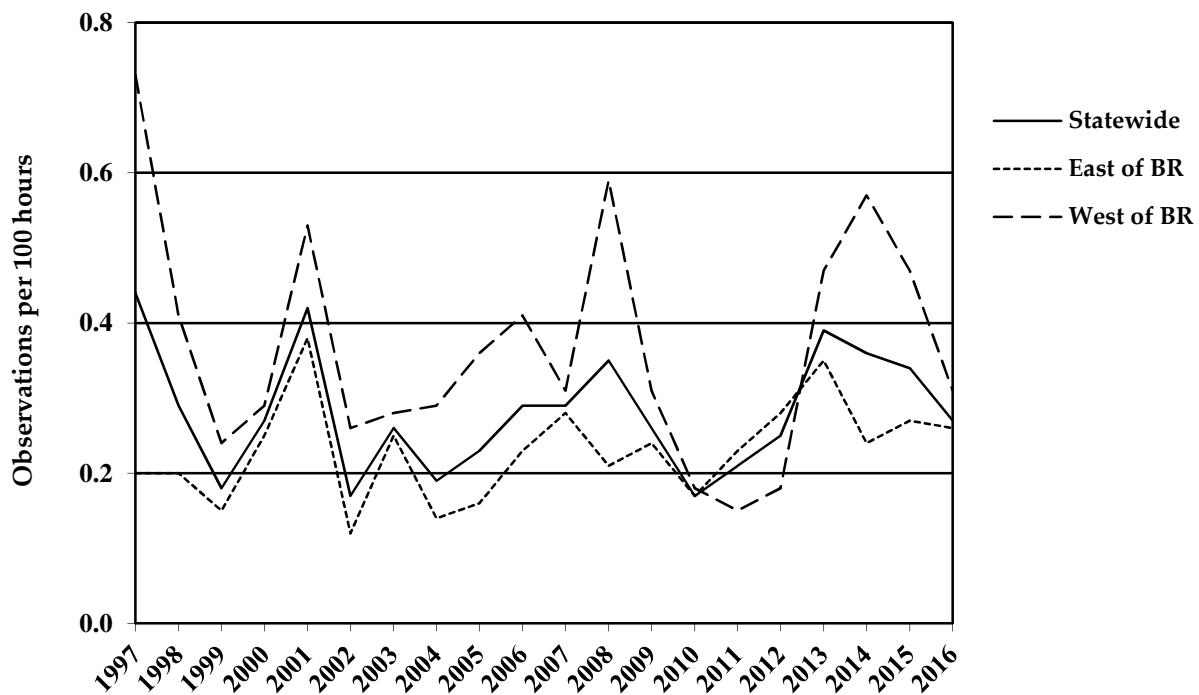


Figure 28. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

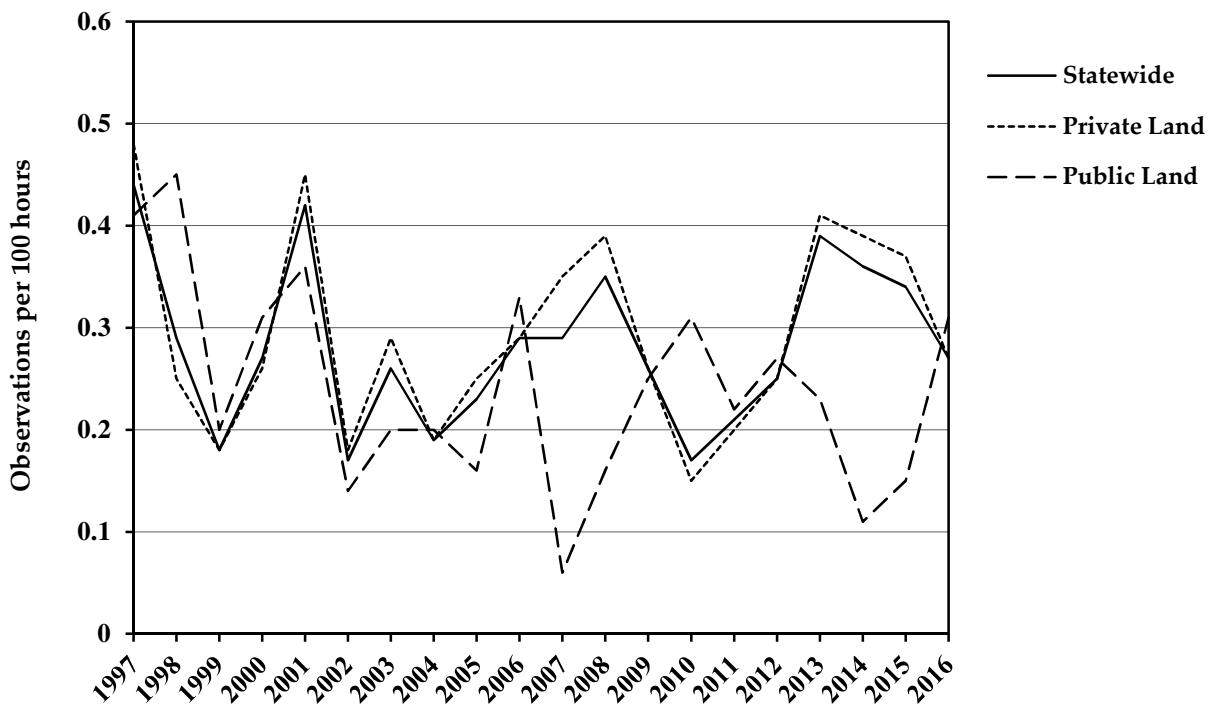


Figure 29. Opossums observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

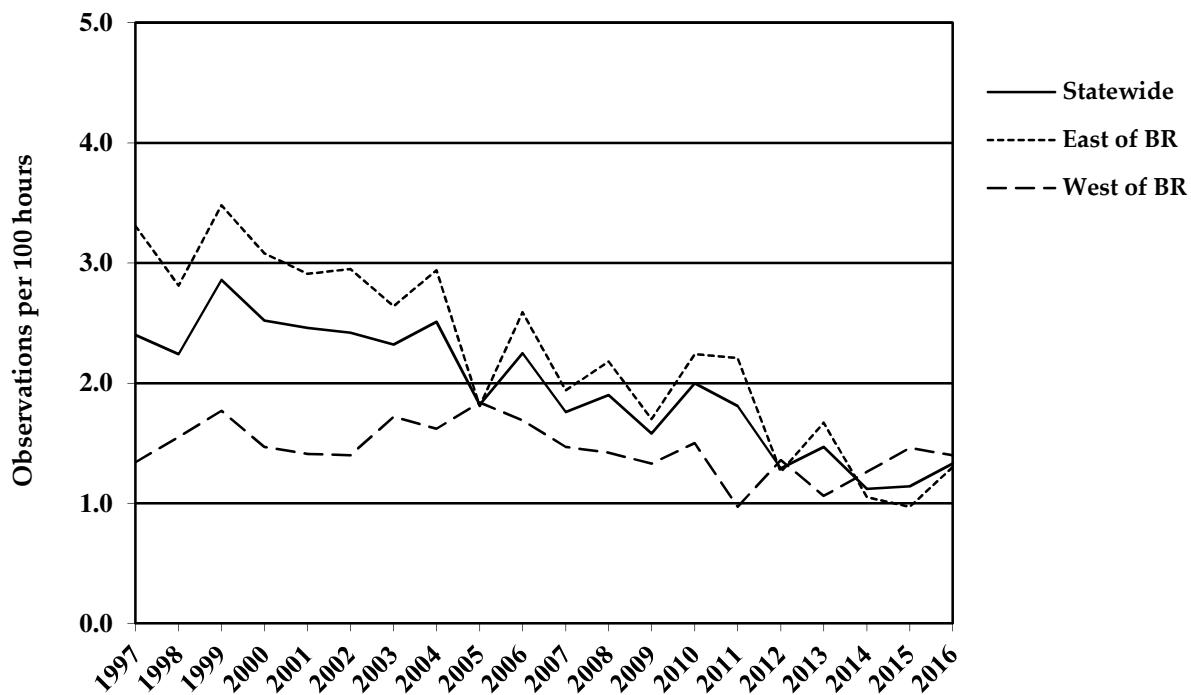


Figure 30. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

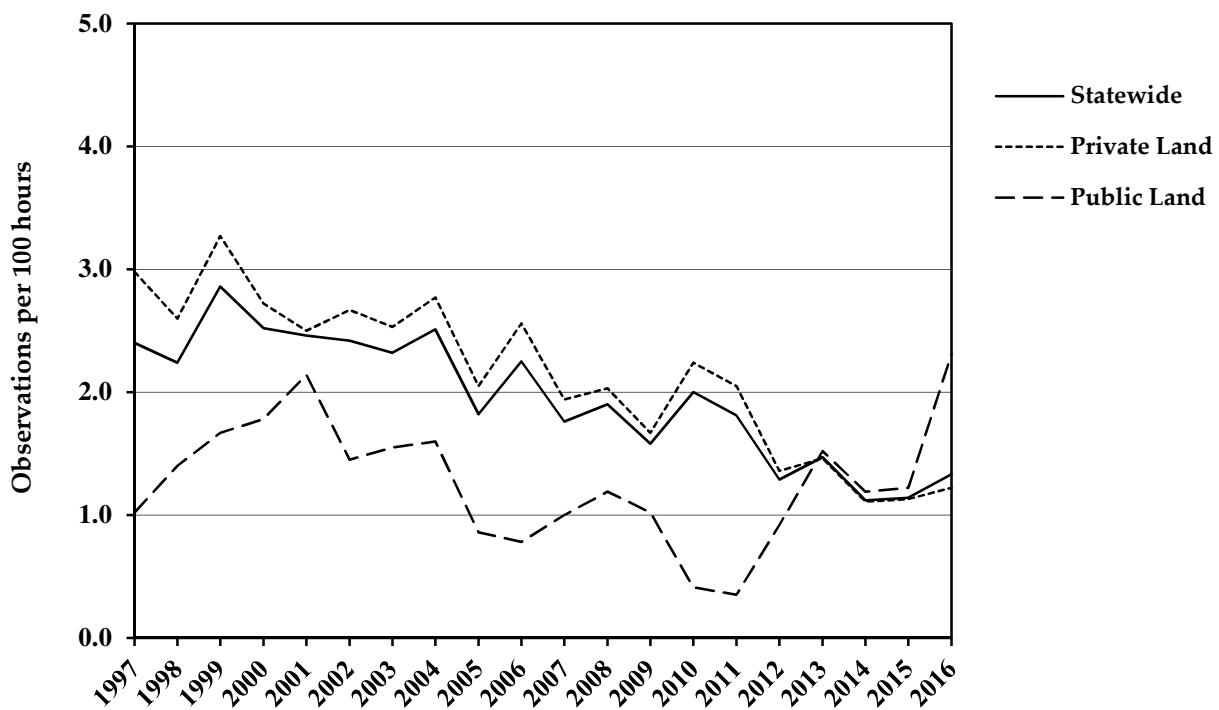


Figure 31. Dogs observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

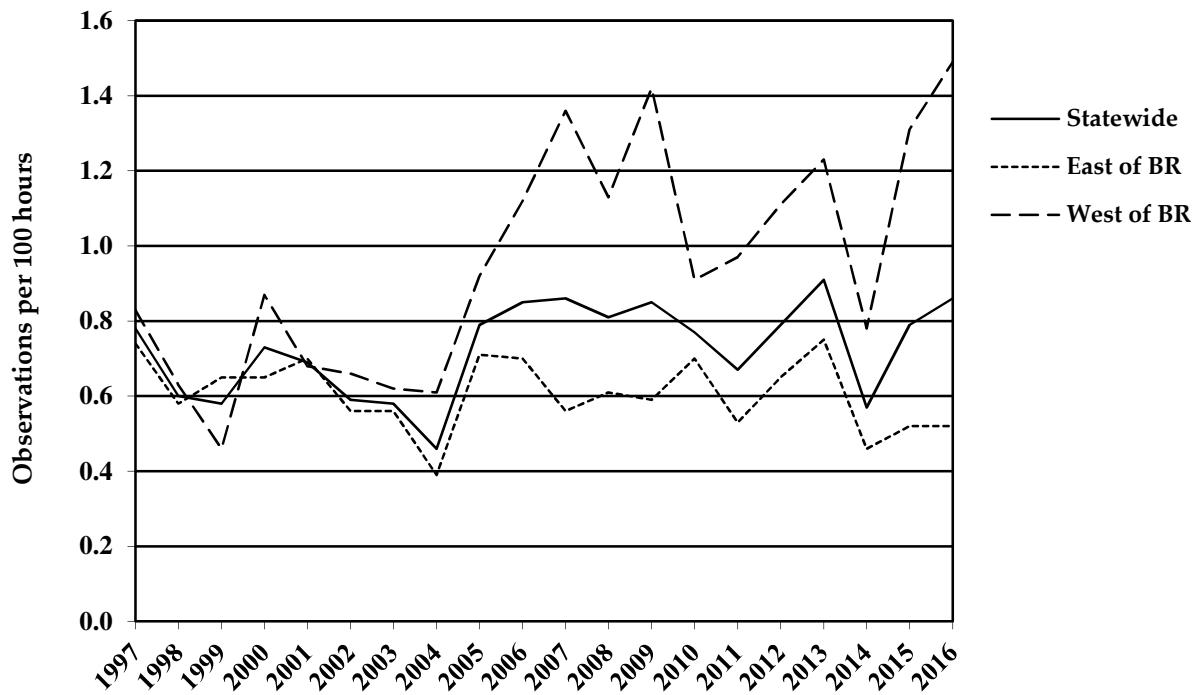


Figure 32. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

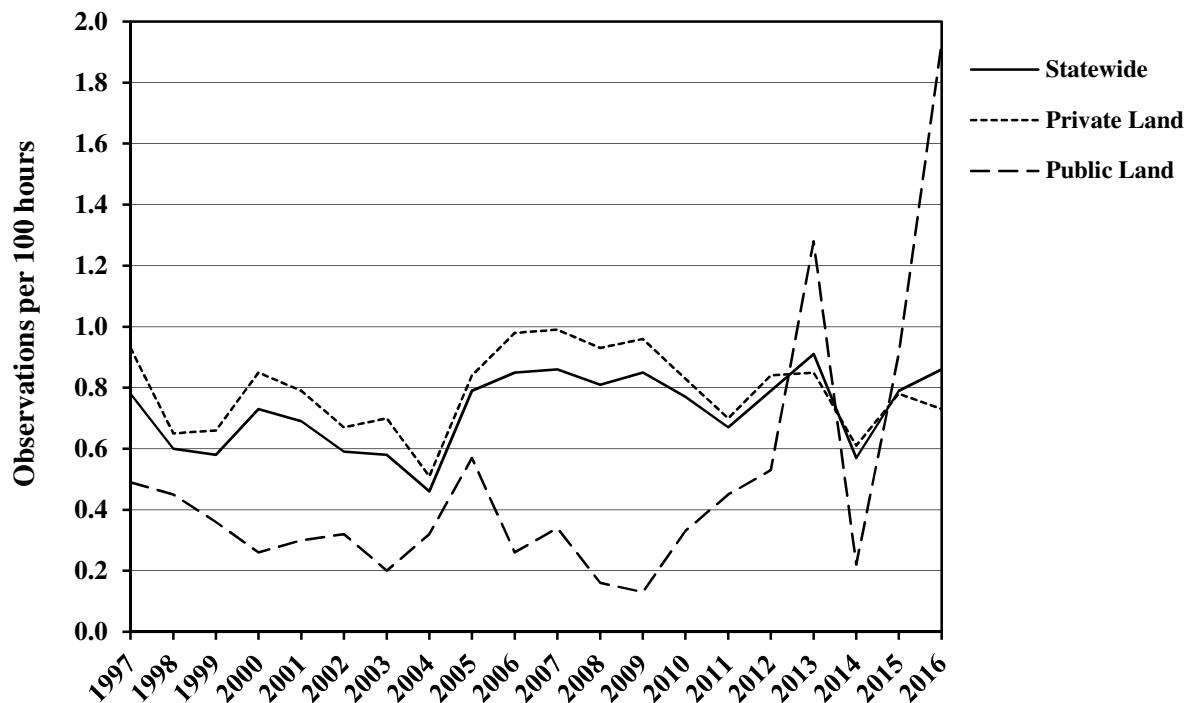


Figure 33. House cats observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

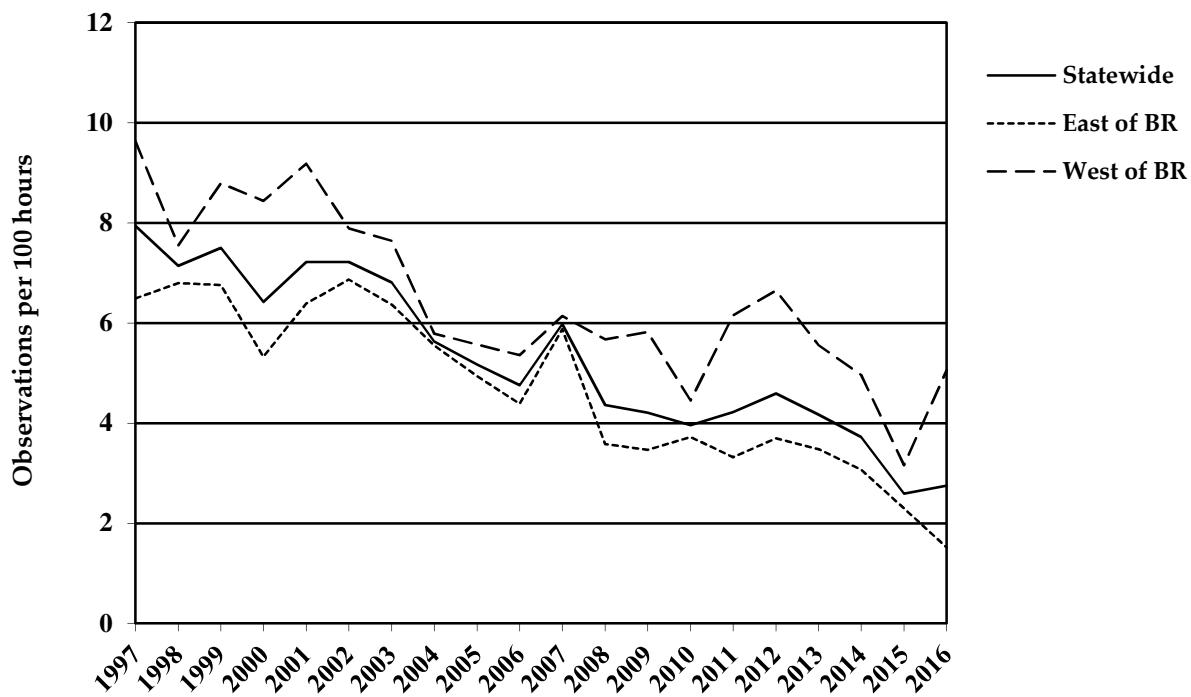


Figure 34. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 east and west of the Blue Ridge Mountains and statewide in Virginia.

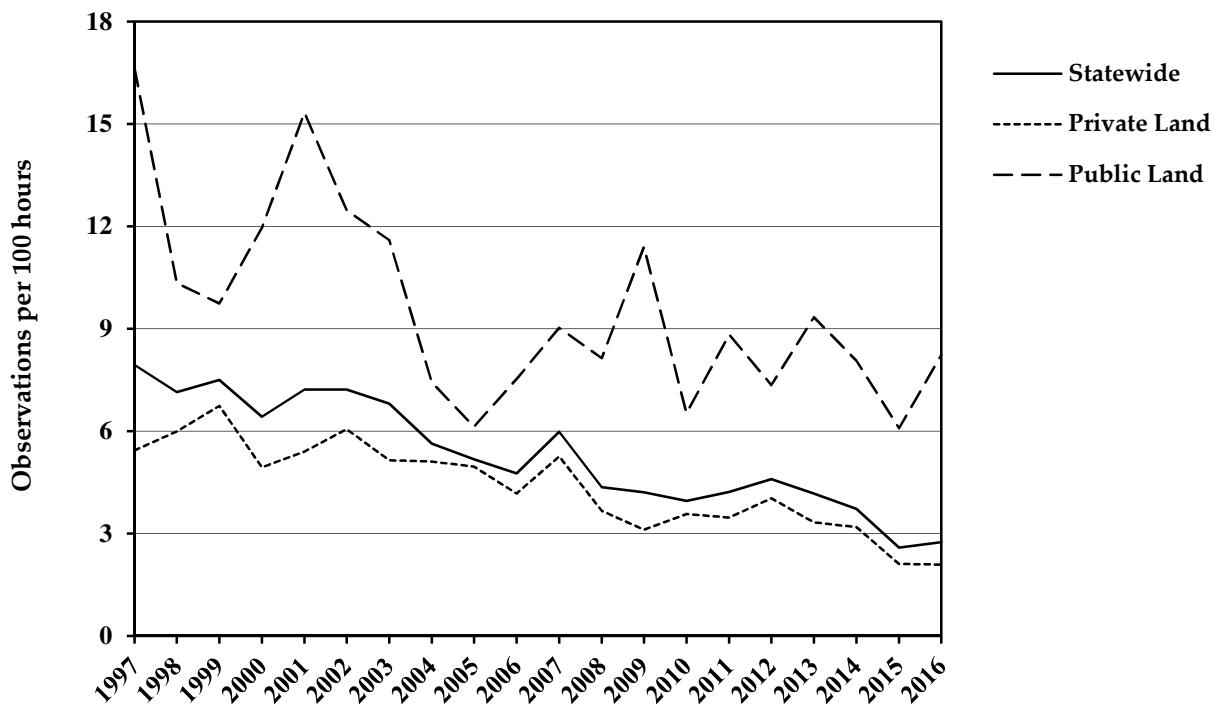


Figure 35. Hunters observed (per 100 hours of hunting) by cooperating early archery hunters from 1997-2016 by land ownership and statewide in Virginia.

## **2016 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

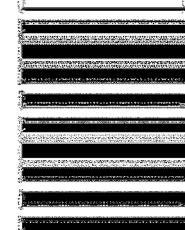
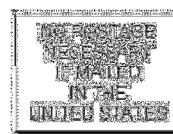
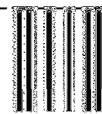
Wind:      1) none      2) light      3) breezy      4) strong

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

## Appendix 1. Survey instrument for 2016 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**. Do not separate morning and evening hunts on different lines (combine data from both hunts).
3. Write in the *county* where you hunted. If you hunted in more than one county on a single day, record different counties on different lines of the form.
4. Report whether or not you were hunting on *public 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 abundance* (acorn crop) and *average weather* conditions for the time period hunted. Use the *number codes* 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, 2017**. *No postage is needed*.



**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!!**

*Your ady*

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 2016 in Virginia.

County	No. Hunts	% of Hunts	County	No. Hunts	% of Hunts
Accomack	10	0.28	King William	82	2.33
Albemarle	93	2.65	Lancaster	38	1.08
Alleghany	14	0.40	Lee	6	0.17
Amelia	11	0.31	Loudoun	13	0.37
Amherst	87	2.48	Louisa	32	0.91
Appomattox	20	0.57	Lunenburg	13	0.37
Augusta	89	2.53	Madison	67	1.91
Bath	18	0.51	Mathews	26	0.74
Bedford	140	3.98	Mecklenburg	2	0.06
Bland	19	0.54	Middlesex	0	0.00
Botetourt	23	0.65	Montgomery	44	1.25
Brunswick	36	1.02	Nelson	35	1.00
Buchanan	20	0.57	New Kent	17	0.48
Buckingham	7	0.20	Northampton	0	0.00
Campbell	3	0.09	Northumberland	19	0.54
Caroline	1	0.03	Nottoway	36	1.02
Carroll	42	1.19	Orange	27	0.77
Charles City	60	1.71	Page	5	0.14
Charlotte	15	0.43	Patrick	26	0.74
Chesapeake	0	0.00	Pittsylvania	89	2.53
Chesterfield	26	0.74	Powhatan	26	0.74
Clarke	18	0.51	Prince Edward	8	0.23
Craig	37	1.05	Prince George	67	1.91
Culpeper	87	2.48	Prince William	65	1.85
Cumberland	25	0.71	Pulaski	15	0.43
Dickenson	34	0.97	Rappahannock	50	1.42
Dinwiddie	12	0.34	Richmond	6	0.17
Essex	14	0.40	Roanoke	30	0.85
Fairfax	65	1.85	Rockbridge	59	1.68
Fauquier	134	3.81	Rockingham	96	2.73
Floyd	68	1.93	Russell	17	0.48
Fluvanna	48	1.37	Scott	5	0.14
Franklin	58	1.65	Shenandoah	149	4.24
Frederick	38	1.08	Smyth	21	0.60
Giles	28	0.80	Southampton	157	4.47
Gloucester	46	1.31	Spotsylvania	42	1.19
Goochland	14	0.40	Stafford	17	0.48
Grayson	12	0.34	Suffolk	25	0.71
Greene	3	0.09	Surry	38	1.08
Greenville	30	0.85	Sussex	32	0.91
Halifax	9	0.26	Tazewell	33	0.94
Hanover	47	1.34	Virginia Beach	12	0.34
Henrico	36	1.02	Warren	19	0.54
Henry	19	0.54	N. News / Hampton	5	0.14
Highland	35	1.00	Washington	94	2.67
Isle of Wight	14	0.40	Westmoreland	72	2.05
James City	20	0.57	Wise	0	0.00
King & Queen	4	0.11	Wythe	40	1.14
King George	46	1.31	York	3	0.09