2021 Post Season Furbearer Report

The Oklahoma Department of Wildlife Conservation (ODWC) gathers information about furbearing animal populations and fur prices from a limited number of sources. One source is the Annual Roadside Survey and is used to gather trend data concerning population dynamics. A second source of data includes numbers and species of pelts as well as average price paid per pelt sold at annual fur auctions in Oklahoma. For a third source, we have incorporated data from our annual bowhunter observation survey.

The Annual Roadside Survey is conducted each spring by ODWC employees as they go about driving to and from work assignments across the state. A standardized report form is provided to each employee with instructions to indicate which area of the state, how many miles are driven, and the number and species of furbearers, either live or dead, are observed each day. This data is collected, analyzed, and reported in Table 1 and Figures 1-9 as an index of reported observations per 100 miles driven to take effort into account and not solely rely on observations of individuals. While there is a great deal of variability from year to year due to weather influences, population fluctuations, and sampling methodology, the overall trends that are based on 10 years of data show generalized broad-scale stability across most of the furbearer species we monitor.

Tables 2 and 3 depict data collected at fur auctions held each year in our state. Over the history of this project various groups have sponsored these sales including the Oklahoma Furbearer Alliance (OFBA) and the Fur Takers of Oklahoma (FTO). In most years there are two auctions, although some years might have only one. Since 2019 there has been only 1 auction per year sponsored by the OFBA.

Depending on the species, the availability of harvest data directly relates to the average price per pelt that is offered. The years that prices are down, there are not nearly the number of animals sold at auctions and therefore a reduction in the amount of data that can be collected. This method of data collection does not capture those animals that are harvested and held over in hopes that the following year will bring better prices. Such "stockpiling" can appear as deflated numbers when they are held over and inflated numbers when the prices increase in subsequent years. For this and other reasons it is the trend data that is much more reliable than looking solely at individual numbers. Starting in 2013, the quantities of most pelts sold at in-state auctions have drastically reduced. More trappers seem to be shipping their furs directly to the major auction houses instead of selling at local auctions.

Additionally, prices paid at these auctions do not necessarily have a direct correlation with population abundance or harvest pressure. International fur markets that buy fur harvested in Oklahoma have numerous factors that will decide the price they are willing to pay for the fur. Weather, economics and politics are three in a very long list of factors that will drive the price up or down *independent* of supply.

Tables 4, 5 and 6 represent data that was collected from our Bowhunter Observation Survey from October 1 to November 31. Figure 10 depicts the zoogeographic regions used in our Annual Roadside Survey and our Bowhunter Observation Survey. Figure 11 represents the comparison of observations over the life of the survey thus far. The ODWC asked bowhunters of Oklahoma to record their

observations of all wildlife while in the field. These observations were then standardized for each species to show observations per 1,000 hours in the field. Due to low participation rates, the 2021 report will be the last year in which this data will be available for comparison.

In summary, the 2021 Annual Roadside Survey in comparison with 2020 was a split bag. When the linear trend line over a 10-year period is added, there is an increasing trend for all species except for gray fox and red fox, with striped skunk being nearly even across the period. One reason to consider for both fox species downward trend progression is fewer overall roadside observations leading to more volatile fluctuations in the trendline. Fur auction results indicate a somewhat cyclic market and price paid for fur with prices peaking during the 2013 auctions and markedly dropping at the 2016 auctions in both price per pelt and total number of pelts sold at in-state auction. Since the drop in 2016, the in-state auction market has shown some overall stability. This may not be represented in the numbers below due to the overwhelmingly poor condition of fur that is brought to auction. Fur that is prime and put up well will always bring more at auction, it just depends on if that extra work is worth it to the fur taker. The final year for our Bowhunter Observation Survey was a continuation of the declining participation that was experienced since the inception of the survey.

Table-1:Survey Indices of Furbearers Recorded by Species during Annual Roadside Survey.

Species/Year	Bobcat	Raccoon	Gray Fox	Red Fox	Coyote	Skunk	Opossum	Beaver	River Otter*
2012	0.04	0.75	0.01	0.01	0.33	2.06	0.77	0.01	N/A
2013	0.04	0.65	0.00	0.01	0.34	1.57	0.55	0.01	N/A
2014	0.04	0.81	0.01	0.01	0.38	2.19	0.93	0.01	N/A
2015	0.04	0.69	0.01	0.00	0.44	1.54	0.96	0.04	N/A
2016	0.03	0.63	0.00	0.01	0.38	1.56	1.08	0.04	0.02
2017	0.04	0.77	0.01	0.01	0.39	1.76	0.95	0.04	0.02
2018	0.04	0.83	0.01	0.01	0.36	1.58	0.91	0.05	0.02
2019	0.06	0.77	0.01	0.01	0.37	1.43	0.74	0.04	0.02
2020	0.05	0.88	0	0	0.43	1.79	1.13	0.06	0.04
2021	0.04	0.92	0.01	0.01	0.33	2.01	0.91	0.05	0.03

^{*} Indices data was not available until 2016.

Figure 1: Number of Bobcat Recorded during Annual Roadside Survey

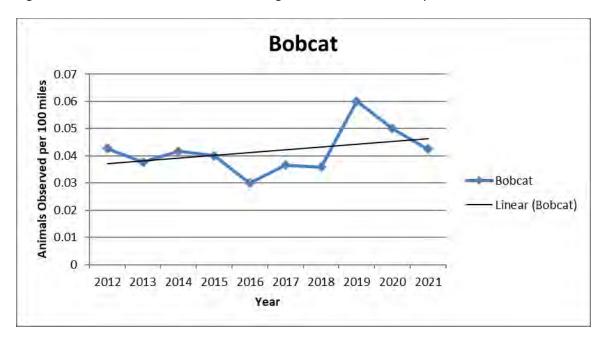


Figure 2: Number of Raccoon Recorded during Annual Roadside Survey

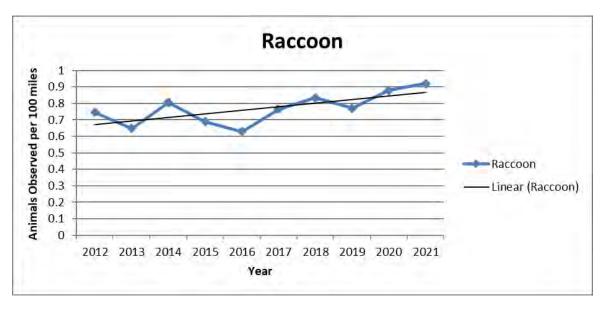


Figure 3: Number of Gray Fox Recorded during Annual Roadside Survey

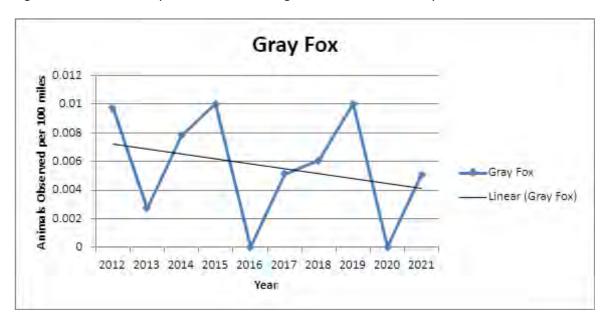


Figure 4: Number of Red Fox Recorded during Annual Roadside Survey

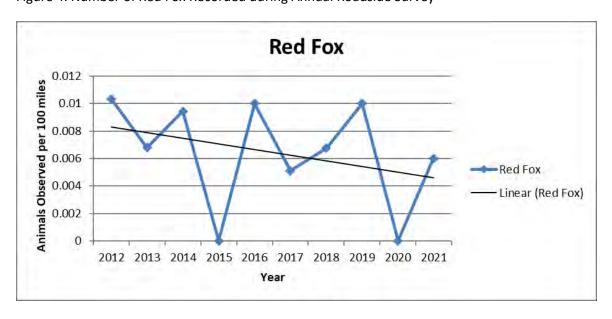


Figure 5: Number of Coyote Recorded during Annual Roadside Survey

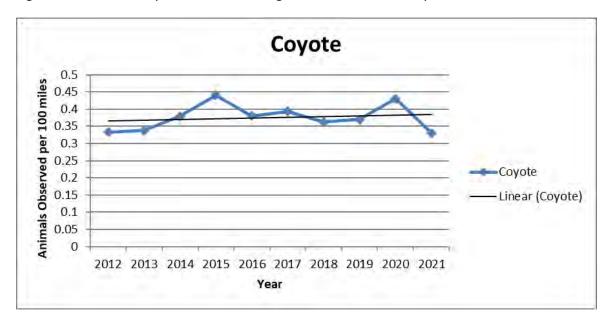


Figure 6: Number of Striped Skunk Recorded during Annual Roadside Survey

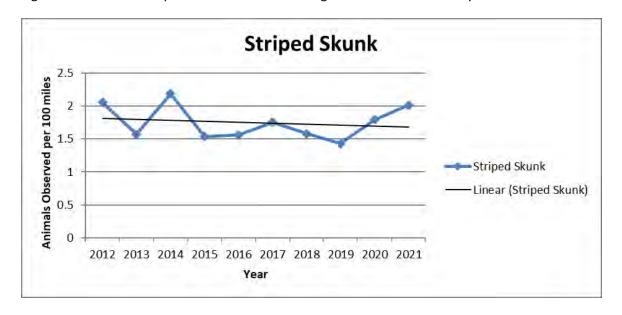


Figure 7: Number of Opossum Recorded during Annual Roadside Survey

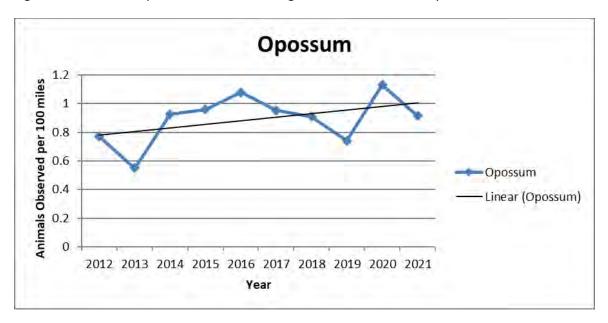


Figure 8: Number of Beaver Recorded during Annual Roadside Survey

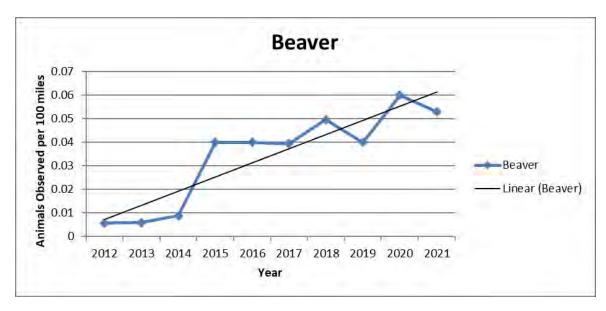


Figure 9: Number of River Otter Recorded during Annual Roadside Survey

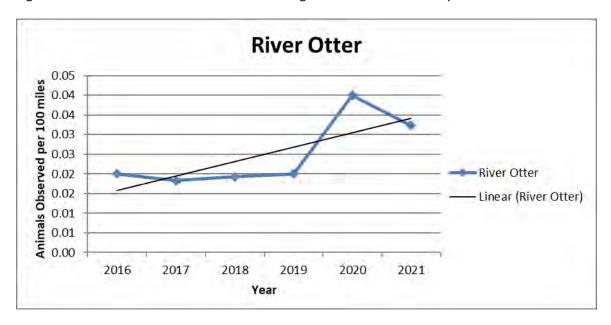


Table-2: Total Number of Pelts by Year Sold at OFBA and FTO Auctions in Oklahoma

Species/Year	Badger	Beaver	Bobcat	Coyote	Gray Fox	Red Fox	Mink	Muskrat	Nutria	Opossum	Raccoon	Striped Skunk	River Otter*
2012	99	1364	3569	1244	304	60	15	25	1	1353	11292	58	208
2013	3	539	821	558	112	14	3	18	0	488	3377	218	90
2014	2	360	903	467	179	16	13	67	0	236	3189	73	96
2015	4	160	564	474	54	4	3	38	0	578	1887	127	49
2016	0	92	288	260	34	1	3	34	0	470	609	79	40
2017	2	41	165	208	6	1	4	54	0	88	450	45	9
2018	3	66	204	182	32	1	0	8	0	69	305	43	18
2019	2	95	107	173	6	0	1	6	0	60	247	43	17
2020	1	85	100	166	22	0	6	17	0	65	266	102	23
2021	0	30	57	154	6	0	0	8	0	18	108	59	7

Table-3: Average Price per Pelt Sold at OFBA and FTO Auctions in Oklahoma

Species/Year	Badger	Beaver	Bobcat	Coyote	Gray Fox	Red Fox	Mink	Muskrat	Nutria	Opossum	Raccoon	St. Skunk	R. Otter
2012	10.81	6.69	87.89	8.15	16.27	20.07	12.16	4.93	2	1.03	6.29	2.43	63.44
2013	10.83	10.45	157.4	13.9	20.09	40.51	24.5	7.22	*	1.09	10.12	2.05	71.45
2014	10	7.02	104.48	11.38	22.57	30.3	13.36	7.14	*	0.89	5.81	4.21	50.08
2015	10.75	4.7	77.5	12.6	15.08	20.34	6.25	3.93	*	0.92	3.61	2.06	29.49
2016	*	5.09	32.63	5.4	9.56	15	17	2.67	*	0.34	1.25	3.33	16.39
2017	3.5	4.27	39.06	8.35	8.38	9	9.67	3.06	*	0.37	1.59	2.11	19.61
2018	3.5	3.34	37.16	14.46	9.24	31	*	2.75	*	0.67	1.34	4.56	18.21
2019	11.5	5.71	25.17	18.43	8.08	*	9	3.08	*	0.55	2.05	6.65	23.71
2020	11	2.24	20.58	14.39	9.35	*	2.25	4.07	*	0.96	1.67	5.82	15.74
2021	*	6.13	14.59	9.73	7.08	*	*	3.06	*	0.49	1.25	3.37	12.71

Table 4. Standardized furbearer observations from the 2020-season Bowhunter Observation Survey, statewide and by land type.

	Statewide	Public Land	Private Land
Species	Ob	servations per 1,000 Ho	ours
Total Furbearers	92.9	57.5	105.0
Red Fox	2.1	4.6	1.2
Opossum	10.6	6.9	11.9
Badger	0.0	0.0	0.0
River Otter	0.1	0.6	0.0
Striped Skunk	7.5	1.2	9.7
Bobcat	8.1	2.9	9.9
Raccoon	35.5	15.5	42.3
Gray Fox	2.1	5.8	0.8
Coyote	26.9	20.1	29.3

Figure 10: Zoogeographic map of Oklahoma

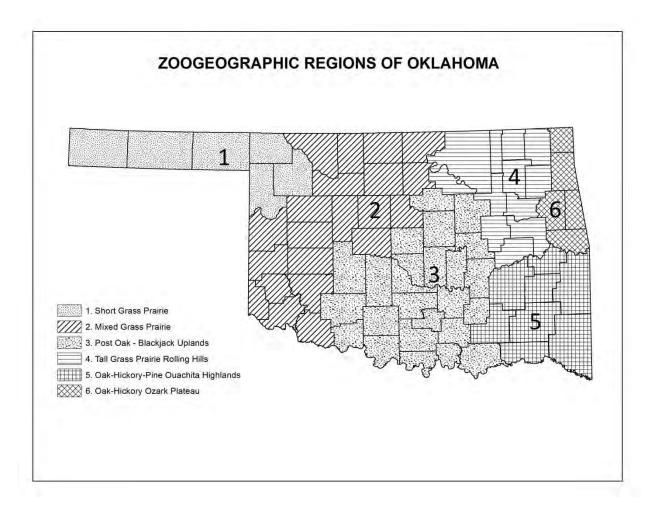


Table 5. Standardized furbearer observations from the 2020-season Bowhunter Observation Survey, by zoogeographic regions.

Zoogeographic	Red Fox	Opossum	Badger	River Otter	Striped Skunk	Bobcat	Raccoon	Gray Fox	Coyote	Total Obs.
Region*				Obse	rvations p	er 1,000	Hours			
1	0.00	0.00	0.00	0.00	9.90	0.00	19.80	0.00	128.71	158.42
2	0.00	19.13	0.00	0.00	10.93	12.30	67.62	0.00	46.45	156.42
3	2.92	6.26	0.00	0.42	7.09	6.67	25.85	0.83	14.18	64.22
4	4.37	10.20	0.00	0.00	7.29	8.02	40.09	5.10	31.34	106.41
5	0.00	14.96	0.00	0.00	6.90	5.75	23.01	0.00	16.11	66.74
6	1.75	3.49	0.00	0.00	1.75	8.73	5.24	8.73	19.20	48.87

^{*}Zoogeographic Regions: 1- Short Grass Prairie; 2 - Mixed Grass Prairie; 3 - Post Oak - Blackjack Uplands; 4 - Tall Grass Prairie Rolling Hills; 5 - Oak-Hickory-Pine Ouachita Highlands; 6 - Oak-Hickory Ozark Plateau

Table 6. Standardized furbearer observations from the 2020-season Bowhunter Observation

Survey, by county.

	Red Fox	Opossum	Badger	River Otter	Striped Skunk	Bobcat	Raccoon	Gray Fox	Coyote	Total Obs.
County				Obse	rvations pe	er 1,000 H	Iours			
Adair	0.00	10.10	0.00	0.00	0.00	20.20	0.00	20.20	50.51	101.01
Alfalfa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.78	27.78
Atoka	0.00	17.09	0.00	0.00	42.74	0.00	34.19	0.00	17.09	111.11
Beaver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beckham	0.00	0.00	0.00	0.00	129.03	0.00	0.00	0.00	0.00	129.03
Blaine	0.00	9.35	0.00	0.00	0.00	0.00	9.35	0.00	9.35	28.04
Bryan	0.00	2.91	0.00	0.00	0.00	2.91	20.35	2.91	5.81	34.88
Caddo	0.00	12.50	0.00	0.00	0.00	0.00	25.00	0.00	37.50	75.00
Canadian	0.00	0.00	0.00	0.00	0.00	264.71	29.41	0.00	0.00	294.12
Carter	0.00	30.30	0.00	0.00	0.00	0.00	212.12	0.00	30.30	272.73
Cherokee	0.00	0.00	0.00	0.00	3.69	11.07	7.38	0.00	18.45	40.59
Choctaw	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cimarron	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00
Cleveland	0.00	4.94	0.00	0.00	2.47	9.88	7.41	0.00	4.94	29.63
Coal	0.00	49.18	0.00	0.00	196.72	16.39	49.18	0.00	16.39	327.87
Comanche	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cotton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Craig	0.00	39.47	0.00	0.00	13.16	26.32	65.79	0.00	92.11	236.84
Creek	0.00	7.58	0.00	0.00	0.00	7.58	7.58	3.79	18.94	45.45
Custer	0.00	0.00	0.00	0.00	26.32	0.00	111.84	0.00	6.58	144.74
Delaware	14.29	14.29	0.00	0.00	0.00	0.00	0.00	42.86	0.00	71.43
Dewey	0.00	0.00	0.00	0.00	0.00	0.00	395.83	0.00	145.83	541.67
Ellis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Garfield	0.00	85.11	0.00	0.00	10.64	0.00	127.66	0.00	63.83	287.23
Garvin	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grady	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grant	0.00	39.13	0.00	0.00	26.09	26.09	60.87	0.00	21.74	173.91
Greer	0.00	0.00	0.00	0.00	0.00	0.00	83.33	0.00	0.00	83.33
Harmon	0.00	0.00	0.00	0.00	0.00	5.81	0.00	0.00	63.95	69.77
Harper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Haskell	0.00	17.86	0.00	0.00	8.93	17.86	8.93	0.00	26.79	80.36
Hughes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jackson	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jefferson	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Johnston	0.00	13.79	0.00	6.90	6.90	6.90	55.17	0.00	13.79	103.45
Kay	0.00	133.33	0.00	0.00	0.00	66.67	400.00	0.00	200.00	800.00
Kingfisher	0.00	0.00	0.00	0.00	0.00	0.00	43.48	0.00	130.43	173.91
Kiowa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Latimer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.48	43.48
LeFlore	0.00	7.46	0.00	0.00	0.00	0.00	29.85	0.00	14.93	52.24
Lincoln	0.00	12.05	0.00	0.00	0.00	0.00	30.12	0.00	48.19	90.36

Table 6 Continued.

	Red Fox	Opossum	Badger	River Otter	Striped Skunk	Bobcat	Raccoon	Gray Fox	Coyote	Total Obs.
County				Obse	rvations pe	er 1,000 H	Iours			
Logan	0.00	12.20	0.00	0.00	0.00	0.00	12.20	0.00	18.29	42.68
Love	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.07	74.07
Major	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Marshall	0.00	0.00	0.00	0.00	0.00	0.00	333.33	0.00	0.00	333.33
Mayes	0.00	20.13	0.00	0.00	13.42	0.00	20.13	6.71	26.85	87.25
McClain	0.00	0.00	0.00	0.00	0.00	0.00	111.11	0.00	55.56	166.67
McCurtain	0.00	0.00	0.00	0.00	0.00	0.00	23.35	0.00	0.00	23.35
McIntosh	0.00	0.00	0.00	0.00	0.00	250.00	0.00	0.00	0.00	250.00
Murray	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Muskogee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Noble	0.00	38.46	0.00	0.00	0.00	38.46	384.62	0.00	0.00	461.54
Nowata	0.00	16.00	0.00	0.00	0.00	0.00	120.00	0.00	8.00	144.00
Okfuskee	0.00	0.00	0.00	0.00	0.00	11.90	0.00	0.00	11.90	23.81
Oklahoma	43.48	0.00	0.00	0.00	0.00	0.00	21.74	0.00	0.00	65.22
Okmulgee	0.00	25.64	0.00	0.00	0.00	17.09	76.92	0.00	59.83	179.49
Osage	0.00	0.00	0.00	0.00	0.00	6.99	45.45	0.00	41.96	94.41
Ottawa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	10.00
Pawnee	0.00	7.38	0.00	0.00	11.07	11.07	0.00	0.00	33.21	62.73
Payne	0.00	0.00	0.00	0.00	14.39	28.78	14.39	0.00	14.39	71.94
Pittsburg	0.00	44.94	0.00	0.00	0.00	16.85	28.09	0.00	33.71	123.60
Pontotoc	0.00	0.00	0.00	0.00	7.19	7.19	64.75	0.00	0.00	79.14
Pottawatomie	39.37	0.00	0.00	0.00	0.00	7.87	0.00	0.00	7.87	55.12
Pushmataha	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roger Mills	0.00	0.00	0.00	0.00	0.00	0.00	21.74	0.00	108.70	130.43
Rogers	0.00	0.00	0.00	0.00	25.64	0.00	8.55	0.00	17.09	51.28
Seminole	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sequoyah	0.00	0.00	0.00	0.00	0.00	0.00	30.30	0.00	0.00	30.30
Stephens	0.00	0.00	0.00	0.00	0.00	0.00	18.87	0.00	0.00	18.87
Texas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1222.22	1222.22
Tillman	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tulsa	0.00	0.00	0.00	0.00	16.39	0.00	65.57	0.00	16.39	98.36
Wagoner	0.00	14.08	0.00	0.00	0.00	0.00	70.42	0.00	0.00	84.51
Washington	77.92	0.00	0.00	0.00	0.00	12.99	0.00	77.92	0.00	168.83
Washita	0.00	100.00	0.00	0.00	0.00	0.00	200.00	0.00	0.00	300.00
Woods	0.00	23.12	0.00	0.00	5.78	0.00	63.58	0.00	80.92	173.41

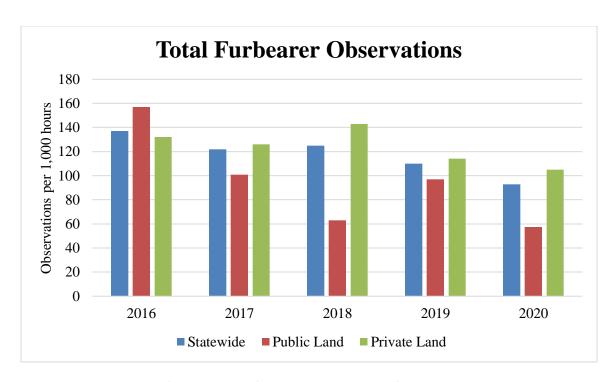


Figure 11. Comparison of standardized furbearer observations from the 2016 through 2020-seasons Bowhunter Observation Survey, statewide and by land type.