

Fore CAST REPORT

Date: May 1, 2018 Regarding: 2014 - 2017 United States Animal Loss Claims (External Dissemination) Prepared by: David Fennig, Strategic Analyst

# **Executive Summary**

The purpose of this *Fore***CAST**<sup>SM</sup> is to analyze claims with the loss type "animal" submitted to the Insurance Service Office (ISO), occurring in the 50 United States and the District of Columbia from January 2014 through December 2017. The analysis focuses on date of loss, loss location, as well as by type of policy, and type of animal identified in the loss description (if applicable) to establish trends that may help enhance awareness for member companies.

Pennsylvania was the top state for animal loss claims from January 2014 through December 2017; with 145,728 claims. The rest of the top 10 states for animal loss claims were New York, Texas, Wisconsin, North Carolina, Ohio, Virginia, Missouri, Georgia and Michigan. The top 10 states represented just over 50% of the total number of animal loss claims during this timeframe.

San Antonio, TX; Austin, TX; New York, NY; Pittsburgh, PA; and Rochester, NY make up the top 5 cities for animal loss claims in the US from 2014 through 2017. All 5 of these cities are located in states that are in the top 10 for animal loss claims.

"Personal Automobile" was the policy type most affected by animal loss claims from 2014 through 2017. Overall, Personal Automobile claims made up 97% of all Animal loss claims during the time period.

Finally, "Deer" was the most common animal involved in the claims analyzed. Of the claims that included a type of animal involved, deer showed up over 25 times more often than the next type of animal; "Raccoon".

#### Introduction

According to the New York Times (<u>http://www.nytimes.com/2013/11/03/automobiles/deer-mating-season-drivers-beware.html</u>), animal – vehicle collisions have caused over 2,080 fatal crashes in the United States between the years 2001 and 2011. The article further reports, and this report substantiates, that crashes involving white-tailed deer are most likely to occur from October to December. The article linked above further validates a connection between the time of year and the number of animal related vehicle accidents in the US.

In an effort to identify recent trends in animal loss claims, an analysis of the Insurance Service Office (ISO) ClaimSearch data was performed. Claims containing the loss type "animal" submitted between January 1, 2014 and April 20, 2018, and with a date of loss between 2014 and 2017 were analyzed.

This report is divided into 6 sections. Section 1 analyzes animal loss claims by date of loss. Section 2 looks at animal claims by state in which the loss occurred, while section 3 looks at the city in which the loss occurred. Section 4 looks at policy type involved. Section 5 reviews the type of animal identified in the loss description of each claim, when available. Section 6 shows losses mapped across the US, while section 7 is a conclusion.



## Section 1: United States Animal Claims by Date of Loss

A total of 1,740,425 animal loss claims were identified with a date of loss from January 1, 2014 to December 31, 2017. Animal loss claims increased 5% between 2014 and 2015; from 415,917 to 434,820. Animal loss claims then increased an additional 3% between 2015 and 2016; to 446,981. Finally, claims decreased by 1% from 2016 to 2017. Overall, in the 4 years researched, animal loss claims increased 6%.

The following table shows animal loss claims, by loss month, from 2014 through 2017. The majority of animal loss claims occur in the autumn months of October and November. This is likely due to the concurrence of deer mating season.

Animal Loss Claims 2014 – 2017: By Loss Month						
Month	2014	2015	2016	2017	Monthly Average	
January	31,503	34,934	37,660	35,074	34,793	
February	23,846	23,673	29,972	29,378	26,717	
March	30,484	29,883	28,479	27,357	29,051	
April	26,919	26,331	26,432	27,043	26,681	
Мау	30,425	31,053	32,534	32,388	31,600	
June	32,092	33,390	34,747	33,949	33,545	
July	26,490	27,616	27,854	26,933	27,223	
August	22,343	24,426	23,817	23,760	23,587	
September	27,720	29,505	30,309	29,275	29,203	
October	52,496	55,776	55,794	57,787	55,463	
November	68,213	72,544	75,749	75,557	73,016	
December	43,386	45,689	43,634	44,206	44,229	
Total	415,917	434,820	446,981	442,707		
Yearly Percent Change	-	5%	3%	-1%		

Note: Percentages have been rounded to the nearest whole number.

The following graph shows animal loss claims by month from 2014 through 2017.





## Section 2: United States Animal Claims by State

The following table represents the top 10 loss states with the largest combined total of Animal loss claims from 2014 through 2017. These loss states represent 51% of the total animal loss claims during this time. Pennsylvania was the top loss state with 145,728 claims, or 8% of the total claims between 2014 and 2017. This was roughly 26% more than the state with the second highest amount of animal claims, New York. The animal loss claim totals for all states are viewable in Appendix 1.

	Animal Loss Claims 2014 – 2017: Top 10 Animal Loss States							
State	2014	2015	2016	2017	Total	State % of US Animal Claim Total		
Pennsylvania	36,492	37,567	37,680	33,989	145,728	8%		
New York	30,008	26,695	27,681	31,286	115,670	7%		
Texas	24,255	26,031	26,165	28,585	105,036	6%		
Wisconsin	18,908	20,571	21,388	20,415	81,282	5%		
North Carolina	19,425	20,355	19,832	19,640	79,252	5%		
Ohio	18,944	20,061	19,694	20,122	78,821	5%		
Virginia	19,486	19,861	20,409	18,348	78,104	4%		
Missouri	16,270	17,703	17,777	18,374	70,124	4%		
Georgia	16,283	17,422	17,899	15,165	66,769	4%		
Michigan	14,309	14,038	17,239	18,424	64,010	4%		
Yearly Top 10 State Totals	214,380	220,304	225,764	224,348	884,796			
Top 10: % of Yearly Total	52%	51%	51%	51%	51%			

Note: Percentages have been rounded to the nearest whole number.

The following graph shows animal loss claims for the top 10 animal loss states from 2014 through 2017.





## Section 3: United States Animal Loss Claims by City

The following table represents the top 10 cities with the largest combined total of animal loss claims from 2014 through 2017. The top 10 cities below represented just over 1% of the total animal loss claims for the US. San Antonio was the city with the most animal loss claims between 2014 and 2017, with a total of 3,556. Three (3) of the top 10 cities were located in Texas, while only 1 city was located in Pennsylvania; the state with the most animal loss claims contain a loss city, but all claims contain a loss state.

Animal Loss Claims 2014 – 2017: Top 10 Animal Loss Cities						
City	2014	2015	2016	2017	Total	
San Antonio, TX	1,022	963	957	1,003	3,945	
Austin, TX	591	564	690	607	2,452	
New York, NY	637	691	557	557	2,442	
Pittsburgh, PA	516	558	549	492	2,115	
Rochester, NY	466	484	472	507	1,929	
Baltimore, MD	498	460	465	473	1,896	
Charlotte, NC	446	453	452	465	1,816	
Kansas City, MO	500	447	417	416	1,780	
Los Angeles, CA	303	370	461	486	1,620	
Houston, TX	386	427	409	391	1,613	
Yearly Top 10 City Totals	5,365	5,417	5,429	5,397	21,608	

The following graph shows animal loss claims by city from 2014 through 2017.





## Section 4: United States Animal Loss Claims by Policy Type

The following table represents all 6 policy types identified in Animal loss claims from January 2014 through December 2017. The policy type "Personal Auto" was the top policy type with 1,689,016, or 97% of the total number of Animal loss claims between 2014 and 2017.

Animal Loss Claims 2014 – 2017: By Policy Type							
Policy Type	2014	2015	2016	2017	Total	% of US Policy Type Total	
Personal Auto	404,552	423,047	433,327	428,090	1,689,016	97%	
Commercial Automobile	11,203	11,623	13,460	14,385	50,671	3%	
Personal Property – Homeowners	116	150	192	229	687	>1%	
Personal Property – Mobile Home	45	0	0	0	45	>1%	
Commercial Multi-Peril	1	0	1	3	5	>1%	
Boat Owners	0	0	1	0	1	>1%	
Total	415,917	434,820	446,981	442,707	1,740,425		

Note: Percentages have been rounded to the nearest whole number.

## Section 5: United States Animal Claims by Animal

The following table represents the top 5 animals identified in animal loss claims from 2014 through 2017. While all claims analyzed in this report have the loss type "animal", not every claim may explicitly state the type of animal involved. Deer and Raccoon were the animals most common, and were also the most commonly misspelled. To account for this, the search term "Deer" includes the terms "Deer, Deers, Dear, Dears and Dee", while "Raccoon" includes the terms "Raccoon, Raccoons, Racoon and Raccoons". The remaining animals include both singular and plural forms of each.

Animal Loss Claims 2014 – 2017: Losses by Animal Type						
Animal	2014	2015	2016	2017	Total	
Deer	174,278	150,589	136,648	122,650	584,165	
Raccoon	6,414	5,866	5,719	4,645	22,644	
Dog	7,275	5,527	4,182	3,626	20,610	
Turkey	1,920	1,867	1,800	1,702	7,289	
Coyote	1,667	1,547	1,494	1,315	6,023	
Top 5 Total	191,554	165,396	149,843	133,938	640,731	
Top 5: % of Yearly Total	46%	38%	34%	30%	37%	

Note: Percentages have been rounded to the nearest whole number.



#### Section 6: Animal Loss Claim Map



#### Section 7: Conclusion

Research indicates that animal loss claims are on an, overall, upward trajectory. Animal loss claims increased 5% between 2014 and 2015; from 415,917 to 434,820. They then increased an additional 3% between 2015 and 2016; to 446,981. Between 2016 and 2017, animal loss claims took a 1% decrease. Overall, from 2014 through 2017, animal loss claims increased a total of 6% from 415,917 to 442,707. Deer are the number 1 animal to be involved in animal loss claims, eclipsing all other animal types. The majority of animal loss claims occur in the autumn months of October and November. This is likely due to the simultaneity of deer mating season, as noted above. Finally, the highest volume of animal claims are located in the Mid-Atlantic, Appalachian and Great Lakes Regions of the United States. The University of Minnesota (https://conservancy.umn.edu/handle/11299/178246) published a report in 2016 on white-tailed deer density in the eastern United States. Many of the top 10 states in this animal forecast correlate with states that have dense populations according to the University of Minnesota report; including Wisconsin, North Carolina, Ohio, Pennsylvania, Michigan and New York.



	Animal Loss Claims 2014 – 2017							
State				2017 Count	Total			
PA	36,492	37,567	37,680	33,989	145,728			
NY	30,008	26,695	27,681	31,286	115,670			
тх	24,255	26,031	26,165	28,585	105,036			
wi	18,908	20,571	21,388	20,415	81,282			
NC	19,425	20,355	19,832	19,640	79,252			
ОН	18,944	20,061	19,694	20,122	78,821			
VA	19,486	19,861	20,409	18,348	78,104			
мо	16,270	17,703	17,777	18,374	70,124			
GA	16,283	17,422	17,899	15,165	66,769			
MI	14,309	14,038	17,239	18,424	64,010			
СА	12,513	13,771	15,797	17,489	59,570			
NJ	14,186	13,379	14,817	16,905	59,287			
MD	12,321	12,567	12,846	12,483	50,217			
MN	11,194	12,704	13,532	11,942	49,372			
SC	11,671	12,177	12,371	12,027	48,246			
IA	11,145	12,177	11,808	11,328	46,715			
<u>ار</u>	10,507	11,163	11,035	10,472	43,177			
IN	9,930	10,006	9,036	8,555	37,527			
KS	7,921	8,511	8,474	7,590	32,496			
FL	7,017	7,276	8,198	8,614	31,105			
AL	7,336	7,407	7,836	7,673	30,252			
WV	6,985	7,407	6,772	5,659	26,853			
TN	6,175	6,863	7,043	6,410	26,491			
ОК	5,225	5,684	6,211	6,913	24,033			
AR	5,605	6,108	6,006	6,114	24,033			
MS	6,434	5,553	5,223	5,008	23,833			
CO	5,037	5,384	5,902	5,562	22,210			
WA	4,801		5,362	5,302	20,588			
KY	4,671	5,117 5,294		4,979	20,388			
NE	3,847	4,488	5,220 4,227	4,979	16,749			
	3,847		4,227					
OR	,	4,137		3,810	15,836			
UT	3,531 2,931	3,958 3,400	4,111	3,630	15,230			
MT	,		3,575	3,814	13,720			
AZ	2,661 2,764	3,054	3,511	3,385	12,611			
SD CT	,	3,134	3,335	2,839	12,072			
	3,206	2,730	2,736	3,268	11,940			
	2,427	2,887	2,662	2,803	10,779			
ID	2,328	2,794	2,732	2,373	10,227			
NM WY	1,721	1,962	2,381	2,234	8,298			
	1,594	1,970	2,129	2,080	7,773			
ME	1,871	1,976	1,765	2,072	7,684			
MA	1,261	1,556	1,864	2,187	6,868			
ND	1,429	1,698	1,909	1,462	6,498			
DE	1,373	1,414	1,570	1,578	5,935			
NH	1,165	1,279	1,424	1,634	5,502			
NV	818	954	1,122	1,214	4,108			
VT	929	904	1,068	1,044	3,945			
RI	514	519	543	692	2,268			
AK	376	425	449	451	1,701			
HI	184	234	309	368	1,095			
DC	166	208	184	203	761			

# Appendix 1