



Montana Sheep and Lamb Loss 2013

Cooperating with the Montana Department of Agriculture
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Total Loss, Cause of Death and Value of Loss

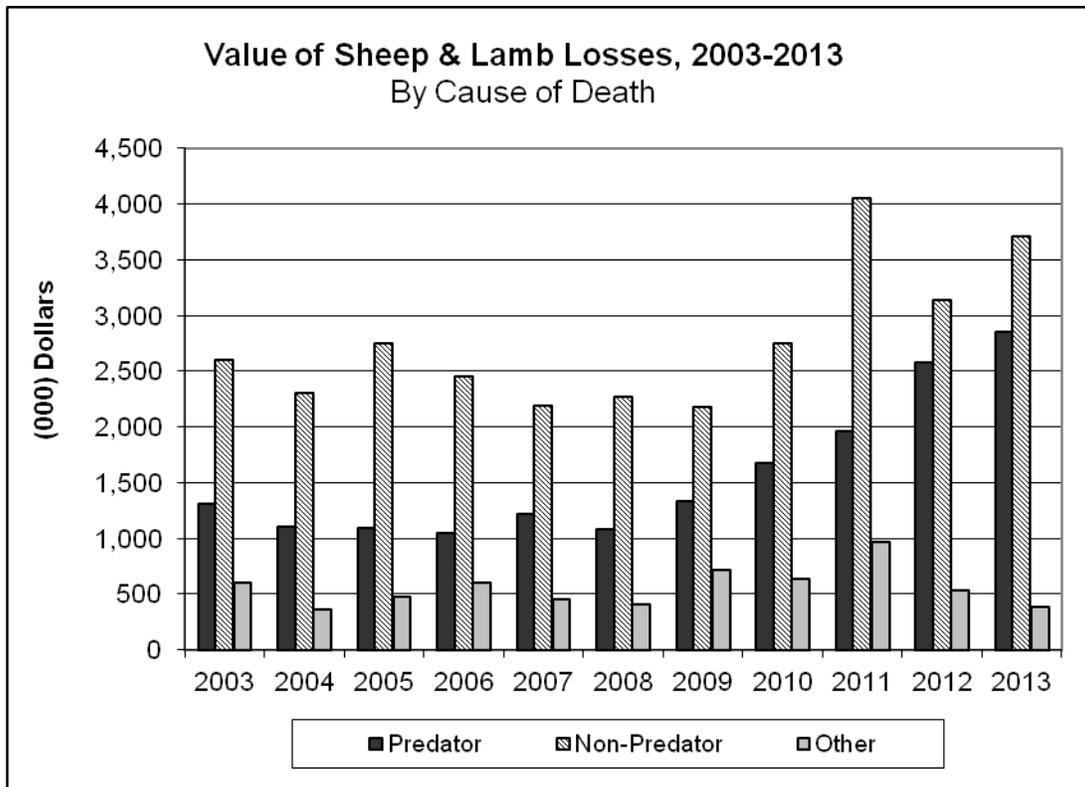
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Montana sheep and lamb producers lost 39,700 animals to weather, predators, disease and other causes during 2013, representing a total value of \$7.0 million, according to a survey conducted by USDA, National Agricultural Statistics Service, Montana Field Office. The total number of sheep and lambs lost was 3,300 head less than last year, and the total value of inventory lost was 11 percent more than a year ago. The January 1, 2013 inventory was 4 percent above the previous year. Sheep and lamb deaths amounted to 8.9 percent of the January 1 inventory and lambs born, down 0.7 percent from last year.

The number of sheep and lambs lost to all predators totaled 16,200 head, down 2,100 head from last year. Lamb losses by all predators amounted to 13,300 head, down 5.7 percent from last year. The number of sheep lost to all predators totaled 2,900, down 1,300 head from a year ago. Predators caused an estimated \$2.8 million in losses in 2013, up 10.7 percent from the previous year. Losses due to predators amounted to 3.6 percent of the January 1 inventory plus lambs born and 41 percent of all sheep and lamb deaths. Coyotes remained the largest predator for both sheep and lambs. Coyotes accounted for 79 percent of the predator caused losses and 32 percent of all death losses in the state. The value of losses attributed to coyotes was \$2.3 million.

The total value of non-predatory losses was \$3.7 million in 2013, compared with \$3.1 million in 2012. Non-predatory losses accounted for 53 percent of all losses. The largest non-predatory cause of losses was due to weather conditions at 6,100 head. Sheep lost to non-predatory factors totaled 6,900 head, up 3 percent from 2012. Non-predatory lamb losses came in at 14,100 head, 300 head less than a year ago.

Producers reported less sheep and lambs lost to unknown causes this past year. Lambs lost to unknown causes totaled 1,600 head, compared with 2,500 head last year. Unknown causes claimed 900 sheep, compared with 1,100 head last year. The value of sheep and lambs lost to unknown causes decreased to \$0.4 million.



Methodology and Definitions

The sheep and lamb survey utilized multi-frame sampling procedures. The survey involved drawing a random sample from a list of livestock producers maintained by the USDA, National Agricultural Statistics Service, Montana Field Office. In addition, sheep producers living in a selected sample of area segments were interviewed. This procedure assures complete coverage of sheep producers by accounting for ranchers/farmers who may not be on the list.

Sheep and lamb loss estimates published by the USDA include sheep losses for the entire year, but include only those lamb losses that occur after docking. This special report also includes an estimate of lambs lost before docking.

Cooperation

This study was undertaken at the request of the Montana Wool Growers Association who also provided funding. The USDA, National Agricultural Statistics Service, Montana Field Office conducted the survey and expresses appreciation to all cooperating sheep producers.

Table 1: Sheep & Lambs: Inventory, Death Loss, and Percent of Total Inventory Lost, Montana, 2003-2013

Year	January 1 Inventory	Lamb Crop	All Sheep Losses	Lamb Losses			Total Loss	Percent of Total Inventory Lost ^{1/}
				Before Docking	After Docking	All Lambs		
				(000) Head				
2003	310	275	17	21	20	41	58	9.6
2004	300	260	13	17	14	31	44	7.6
2005	295	255	12	19	15	34	46	8.1
2006	280	255	14	20	17	37	51	9.2
2007	275	255	14	18	18	36	50	9.1
2008	270	235	14	19	17	36	50	9.5
2009	255	235	15	21	20	41	56	11.0
2010	245	220	13	18	17	35	48	9.9
2011	230	205	12	20	16	36	48	10.5
2012	225	210	12	15	16	31	43	9.6
2013	235	200	11	13	16	29	40	8.9

^{1/} Total inventory equals January 1 inventory, plus lamb crop, plus lambs lost before docking.

Table 2: Sheep & Lambs: Death Losses by Cause and Value of Loss, Montana, 2003-2013

Year	Predator Losses		Non-Predator Loss	Unknown Causes	Value of Losses			
	Total	Percent of Total Inventory Lost ^{1/}			Predator	Non Predator	Unknown	Total
	(000) Head	Percent			(000) Head		(000) Dollars	
2003	17.7	2.9	33.0	7.3	1,309.2	2,608.0	605.7	4,522.9
2004	13.7	2.4	26.0	4.3	1,102.6	2,306.2	364.3	3,773.1
2005	12.4	2.2	28.4	5.2	1,096.4	2,755.6	477.6	4,329.6
2006	14.1	2.5	29.6	7.3	1,044.4	2,453.7	600.3	4,098.4
2007	17.0	3.1	27.5	5.5	1,214.4	2,189.3	458.0	3,861.7
2008	15.2	2.9	29.2	5.6	1,078.3	2,272.6	412.7	3,763.6
2009	18.8	3.7	28.0	9.2	1,328.3	2,185.7	713.1	4,227.1
2010	17.3	3.6	24.9	5.8	1,676.9	2,747.9	641.2	5,006.0
2011	13.6	3.0	28.2	6.2	1,967.1	4,057.3	971.6	6,996.0
2012	18.3	4.1	21.1	3.6	2,574.0	3,135.0	531.0	6,240.0
2013	16.2	3.6	21.0	2.5	2,849.5	3,709.5	442.0	7,001.0

^{1/} Total inventory equals Jan 1 inventory, plus lamb crop, plus lambs lost before docking.

Table 3: Sheep & Lambs: Death Losses by Cause, Montana 2012-2013

Cause of Loss	SHEEP LOSS				LAMB LOSS				TOTAL LOSS			
	Number of Head		Value in Dollars (000) ^{1/}		Number of Head		Value in Dollars (000) ^{2/}		Number of Head		Value in Dollars (000)	
	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
Predators												
Bear	400	300	84.0	54.0	400	500	48.0	87.5	800	800	132.0	141.5
Bobcat	--	--	--	--	--	100	--	17.5	--	100	--	17.5
Coyote	2,700	2,200	567.0	396.0	11,200	10,600	1,344.0	1,855.0	13,900	12,800	1,911.0	2,251.0
Dog	500	100	105.0	18.0	400	200	48.0	35.0	900	300	153.0	53.0
Eagle	--	100	--	18.0	400	600	48.0	105.0	400	700	48.0	123.0
Fox	--	--	--	--	600	600	72.0	105.0	600	600	72.0	105.0
Mountain Lion	300	100	63.0	18.0	400	100	48.0	17.5	700	200	111.0	35.5
Wolf	100	--	21.0	--	200	--	24.0	--	300	--	45.0	--
Other Animals	--	--	--	--	100	100	12.0	17.5	100	100	12.0	17.5
Unknown Predators	200	100	42.0	18.0	400	500	48.0	87.5	600	600	90.0	105.5
Total Predators	4,200	2,900	882.0	522.0	14,100	13,300	1,692.0	2,327.5	18,300	16,200	2,574.0	2,849.5
Non-Predators												
Total Diseases	1,000	1,400	210.0	252.0	3,300	3,500	396.0	612.5	4,300	4,900	606.0	864.5
Lambing Complications	800	800	168.0	144.0	5,200	3,600	624.0	630.0	6,000	4,400	792.0	774.0
Old Age	2,700	2,900	567.0	522.0	--	--	--	--	2,700	2,900	567.0	522.0
On Back	200	300	42.0	54.0	--	--	--	--	200	300	42.0	54.0
Poison	400	300	84.0	54.0	500	300	60.0	52.5	900	600	144.0	106.5
Theft	--	100	--	18.0	--	200	--	35.0	--	300	--	53.0
Weather Conditions	900	500	189.0	90.0	4,700	5,600	564.0	980.0	5,600	6,100	753.0	1,070.0
Other	700	600	147.0	108.0	700	900	84.0	157.5	1,400	1,500	231.0	265.5
Total Non-Predators	6,700	6,900	1,407.0	1,242.0	14,400	14,100	1,728.0	2,467.5	21,100	21,000	3,135.0	3,709.5
Unknown Causes	1,100	900	231.0	162.0	2,500	1,600	300.0	280.0	3,600	2,500	531.0	442.0
Total Loss	12,000	10,700	2,520.0	1,926.0	31,000	29,000	3,720.0	5,075.0	43,000	39,700	6,240.0	7,001.0

^{1/} Using average reported value for Ewes 1+.

^{2/} Using average reported value for Market lambs under 1 year.

-- Denotes less than 100 head.

Sheep and Lamb Loss by Predators 2013

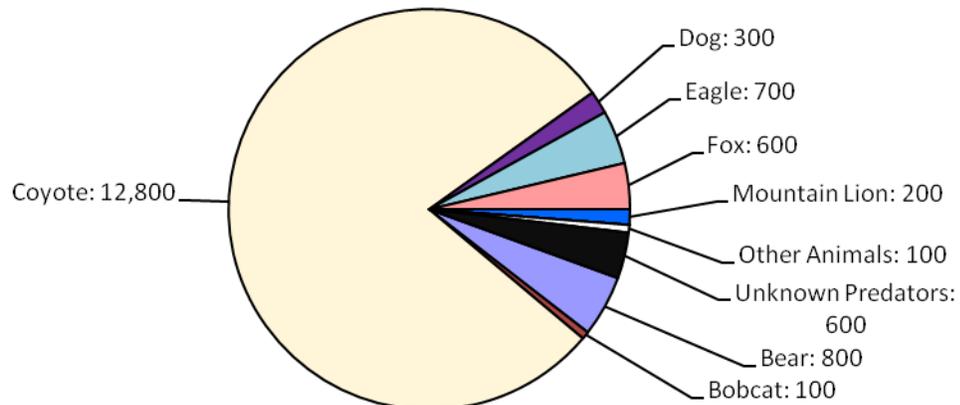


Table 4: Sheep & Lambs: Percent of Death Losses by Cause, Montana, 2003-2013

Cause of Loss	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Predators											
Bear	1	2	1	1	1	2	1	2	2	2	2
Bobcat	--	--	--	--	--	--	--	--	--	--	--
Coyote	20	21	19	20	23	20	26	25	20	32	32
Dog	2	2	1	1	2	1	1	2	1	2	1
Eagle	2	2	2	2	2	2	1	2	2	1	2
Fox	2	2	2	1	2	3	2	3	2	1	2
Mountain Lion	1	1	--	1	1	1	1	1	1	2	1
Wolf	1	1	1	1	1	1	1	1	--	1	--
Other Animals	--	--	--	--	--	--	--	--	--	--	--
Unknown Predators	2	1	1	1	2	1	1	1	1	1	1
Total Predators ^{1/}	30	31	27	28	34	30	34	36	28	43	41
Non-Predators											
Digestive	**	7	**	**	**	**	1	**	**	**	**
Internal Parasites	**	**	**	**	**	**	1	**	**	**	**
Respiratory	**	10	**	**	**	**	4	**	**	**	**
Metabolic	**	2	**	**	**	**	1	**	**	**	**
Other Diseases	**	3	**	**	**	**	3	**	**	**	**
Total Diseases	14	22	17	13	16	11	10	10	11	10	12
Lambing Complications	15	11	13	13	13	11	8	11	9	14	11
Old Age	6	8	7	6	6	7	5	6	4	6	7
On Back	2	1	2	1	1	1	1	1	1	--	1
Poison	2	2	3	3	2	2	1	1	1	2	2
Theft	3	--	1	1	1	1	--	1	1	--	1
Weather Conditions	11	12	15	18	14	23	24	18	27	13	15
Other	5	3	5	3	2	3	2	3	4	3	4
Total Non-Predators ^{1/}	57	59	62	58	55	58	50	51	59	49	53
Unknown Causes	13	10	11	14	11	11	16	12	13	8	6
Total Loss ^{1/}	100										

^{1/} Totals may not add due to rounding.

-- Denotes less than 1 percent.

** Not Available.

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