

# United States Department of Agriculture National Agricultural Statistics Service



## **Montana Sheep and Lamb Loss 2010**

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### Montana Sheep and Lamb Loss 2010

Total Loss, Cause of Death and Value of Loss

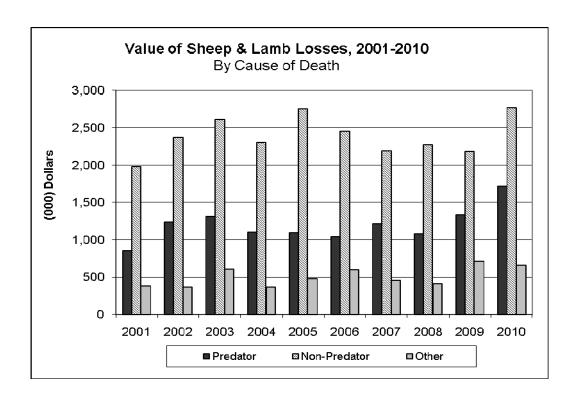
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Montana sheep and lamb producers lost 49,000 animals to weather, predators, disease and other causes during 2010, representing a total value of \$5.1 million, according to a survey conducted by USDA, National Agricultural Statistics Service, Montana Field Office. The total number of sheep and lambs lost was down 7,000 head from last year, but the total value of inventory lost was 22 percent more than a year ago. The January 1, 2010 inventory was 4 percent less than the previous year. Sheep and lamb deaths amounted to 10.0 percent of the January 1 inventory and lambs born, down 1 percent from last year.

The number of sheep and lambs lost to all predators totaled 17,800 head, down 1,000 head from last year. Lamb losses by all predators amounted to 14,800 head, down 4 percent from last year. The number of sheep lost to all predators totaled 3,000, down 400 head from a year ago. Predators caused an estimated \$1.7 million in losses in 2010, up 29 percent from the previous year. Losses due to predators amounted to 3.6 percent of the January 1 inventory plus lambs born and 36 percent of all sheep and lamb deaths. Coyotes remained the largest predator for both sheep and lambs. Coyotes accounted for 68 percent of the predator caused losses and 25 percent of all death losses in the state. The value of losses attributed to coyotes was \$1.1 million.

The total value of non-predatory losses was \$2.8 million in 2010, compared with \$2.2 million in 2009. Non-predatory losses accounted for 51 percent of all losses. The largest non-predatory cause of losses was weather at 8,700 head. Sheep lost to non-predatory factors totaled 8,100 head, 8 percent lower than 2009. Non-predatory lamb losses came in at 17,100 head, 2,100 head less than a year ago.

Producers reported considerable less sheep and lambs lost to unknown causes this past year. The number of sheep and lambs lost to unknown causes decreased 35 percent from last year. Lambs lost to unknown causes totaled 4,100 head, compared with 6,400 head last year. Unknown causes claimed 1,900 sheep, compared with 2,800 head last year. The value of sheep and lambs lost to unknown causes decreased slightly to \$0.7 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, 2001-2010

	January 1 Inventory	Lamb Crop	All Sheep		Lamb Losses		Percent of Total				
Year		Lamo Crop	Losses	Before Docking	After Docking	All Lambs	Total Loss	Inventory Lost 1/			
				(000) Head							
2001	360	340	19	24	23	47	66	9.1			
2002	335	295	18	25	24	49	67	10.2			
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	225	13	18	18	36	49	10.0			

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, 2001-2010

Year	Preda	ator Losses	N. D. L.	TT 1	Value of Losses					
	Total	Percent of Total Inventory Lost 1/	Non-Predator Loss	Unknown Causes	Predator	Non Predator	Unknown	Total		
	(000) Head	Percent	(000) Head		(000) Dollars					
2001	19.9	2.7	38.6	7.5	850.8	1,980.6	375.0	3,206.4		
2002	21.4	3.3	39.9	5.7	1,236.0	2,378.2	366.6	3,980.8		
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	17.8	3.6	25.2	6.0	1,717.7	2,772.4	657.6	5,147.7		

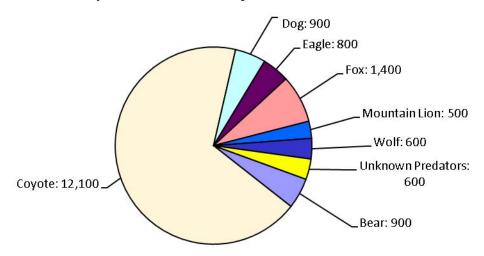
1/ Total inventory equals Jan 1 inventory, plus lamb crop, plus lambs lost before docking.

Table 3: Sheep & Lambs: Death Losses by Cause, Montana 2009-2010

Tuble of Bricep to Luni	SHEEP LOSS				2007 201	LAMB LOSS				TOTAL LOSS			
Cause of Loss	Number of Head			Value in Dollars (000) 1/		Number of Head		Value in Dollars (000) 2/		Number of Head		Value in Dollars (000)	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	
Predators													
Bear	200	300	23.2	51.0	200	600	12.1	49.0	400	900	35.3	100.0	
Bobcat					100		6.1		100		6.1		
Coyote	2,500	1,800	290.5	306.0	12,100	10,300	733.3	840.5	14,600	12,100	1,023.8	1,146.5	
Dog	200	300	23.2	51.0	200	600	12.1	49.0	400	900	35.3	100.0	
Eagle					600	800	36.3	65.3	600	800	36.3	65.3	
Fox					1,300	1,400	78.8	114.2	1,300	1,400	78.8	114.2	
Mountain Lion		200		34.0	300	300	18.2	24.5	300	500	18.2	58.5	
Wolf	400	200	46.5	34.0	300	400	18.2	32.6	700	600	64.7	66.6	
Other Animals					100		6.1		100		6.1		
Unknown Predators	100	200	11.6	34.0	200	400	12.1	32.6	300	600	23.7	66.6	
<b>Total Predators</b>	3,400	3,000	395.0	510.0	15,400	14,800	933.3	1,207.7	18,800	17,800	1,328.3	1,717.7	
Non-Predators													
Digestive	300	3/	34.8	3/	400	3/	24.2	3/	700	3/	59.0	3/	
Internal Parasites	200	3/	23.2	3/	200	3/	12.1	3/	400	3/	35.3	3/	
Respiratory	400	3/	46.6	3/	1,900	3/	115.1	3/	2,300	3/	161.7	3/	
Metabolic		3/		3/	200	3/	12.1	3/	200	3/	12.1	3/	
Other Diseases	900	3/	104.5	3/	900	3/	54.5	3/	1,800	3/	159.0	3/	
Total Diseases	1,800	1,400	209.1	238.0	3,600	3,500	218.0	285.6	5,400	4,900	427.1	523.6	
Lambing Complications	700	1,200	81.3	204.0	3,600	4,300	218.2	350.9	4,300	5,500	299.5	554.9	
Old Age	2,800	2,900	325.3	493.0					2,800	2,900	325.3	493.0	
On Back	300	400	34.8	68.0	100		6.1		400	400	40.9	68.0	
Poison	400	400	46.6	68.0	200	300	12.1	24.5	600	700	58.7	92.5	
Theft		200		34.0		300		24.5		500		58.5	
Weather Conditions	2,700	1,200	313.6	204.0	10,800	7,500	654.5	612.0	13,500	8,700	968.1	816.0	
Other	100	400	11.6	68.0	900	1,200	54.5	97.9	1,000	1,600	66.1	165.9	
Total Non-Predators	8,800	8,100	1,022.3	1,377.0	19,200	17,100	1,163.4	1,395.4	28,000	25,200	2,185.7	2,772.4	
Unknown Causes	2,800	1,900	325.3	323.0	6,400	4,100	387.8	334.6	9,200	6,000	713.1	657.6	
Total Loss	15,000	13,000	1,742.6	2,210.0	41,000	36,000	2,484.5	2,937.7	56,000	49,000	4,227.1	5,147.7	

<sup>1/</sup> Using average reported value for Ewes 1+.

### Sheep and Lamb Loss by Predators 2010



<sup>2/</sup> Lamb values equal to market year average price received for lambs multiplied by an average weight of 60 pounds per lamb.

<sup>3/</sup> Breakouts not asked in 2010.

<sup>--</sup> Denotes less than 100 head.

Table 4: Sheep & Lambs: Percent of Death Losses by Cause, Montana, 2001-2010

Cause of Loss	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Predators										
Bear	1	1	1	2	1	1	1	2	1	2
Bobcat										
Coyote	22	21	20	21	19	20	23	20	26	25
Dog	2	1	2	2	1	1	2	1	1	2
Eagle	2	2	2	2	2	2	2	2	1	2
Fox	1	2	2	2	2	1	2	3	2	3
Mountain Lion	1	1	1	1		1	1	1	1	1
Wolf		1	1	1	1	1	1	1	1	1
Other Animals										
Unknown Predators	2	2	2	1	1	1	2	1	1	1
Total Predators 1/	30	31	30	31	27	28	34	30	34	36
Non-Predators										
Digestive	2/	2/	2/	7	2/	2/	2/	2/	1	2/
Internal Parasites	2/	2/	2/	2/	2/	2/	2/	2/	1	2/
Respiratory	2/	2/	2/	10	2/	2/	2/	2/	4	2/
Metabolic	2/	2/	2/	2	2/	2/	2/	2/	1	2/
Other Diseases	2/	2/	2/	3	2/	2/	2/	2/	3	2/
Total Diseases	16	12	14	22	17	13	16	11	10	10
Lambing Complications	11	12	15	11	13	13	13	11	8	11
Old Age	8	4	6	8	7	6	6	7	5	6
On Back	1	1	2	1	2	1	1	1	1	1
Poison	2	2	2	2	3	3	2	2	1	1
Theft	1	1	3		1	1	1	1		1
Weather Conditions	13	20	11	12	15	18	14	23	24	18
Other	7	7	5	3	5	3	2	3	2	3
Total Non-Predators 1/	58	60	57	59	62	58	55	58	50	51
Unknown Causes	12	9	13	10	11	14	11	11	16	12
Total Loss 1/	100	100	100	100	100	100	100	100	100	100

<sup>1/</sup> Totals may not add due to rounding.

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<sup>2/</sup> Not available.

<sup>--</sup> Denotes less than 1 percent.