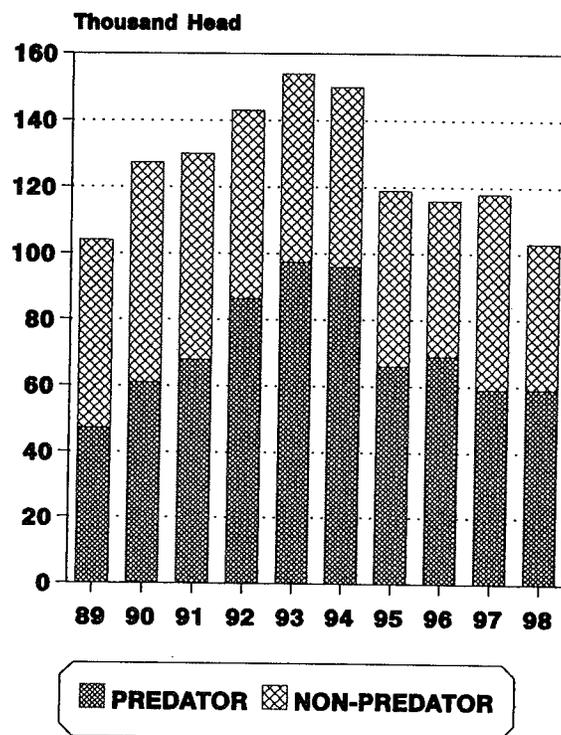


## SHEEP LOSSES TO ALL CAUSES - 1998

*This annual report is funded by the Wyoming Department of Agriculture. A survey of producers is conducted in early January and is used to estimate total sheep and lamb inventory on hand January 1 and to estimate sheep and lamb losses to all causes during the previous year. Our thanks go to all the Wyoming ranchers and farmers whose voluntary cooperation makes this report possible.*

*The report for 1998 indicates that the total sheep and lambs lost to predators was the same as in 1997 despite a little smaller inventory and lamb crop. When measured as a percentage of supply, lamb predator losses increased slightly. Losses were 10.8 percent of total supply (lambs lost before docking plus lambs docked or branded), up from 10.7 percent the previous year. Non-predator losses were lower than in 1997 when a Spring storm increased losses significantly. The value of sheep and lamb losses to all causes in 1998 is estimated at \$5.56 million.*

### ALL SHEEP & LAMB LOSSES Predator, Non-Predator, and All Causes



### HIGHLIGHTS

**PREDATOR LOSSES UNCHANGED:** Wyoming sheep producers lost 59,000 sheep and lambs to predators in 1998, unchanged from 1997. Coyotes were again the biggest predator taking 67 percent of the total predator losses and 38 percent of all losses. Eagles were the second most common predator taking 8,400 head or 14 percent of predator losses.

**ALL LAMB LOSSES DOWN 13 PERCENT:** Sheep producers lost 82,000 lambs before or after docking in 1998, 13 percent less than in 1997. Losses to predators accounted for 63 percent of the total. Losses of lambs to weather related causes dropped 27 percent from the previous year and losses to diseases dropped 24 percent.

**SHEEP LOSSES DOWN 13 PERCENT:** Sheep losses in Wyoming during 1998 totaled 21,000 head, down 3,000 head from 1997. However, predator losses increased 2,000 head while non-predator losses dropped 26 percent to 5,000 head. Coyotes accounted for almost one-fourth of all sheep deaths.

**VALUE OF LOSSES DOWN 28 PERCENT:** Sheep producers in Wyoming lost an estimated \$5.56 million from sheep and lamb deaths in 1998, down 28 percent from the previous year. Predation accounted for \$2.92 million. Lower prices and fewer total losses resulted in the lower total value.

## LOSSES OF SHEEP AND LAMBS BY CAUSE: WYOMING 1993-98 1/

Cause of Loss	1993	1994	1995	1996	1997	1998
	<b>Number of Head</b>					
Coyotes	72,000	69,000	48,000	49,000	41,000	39,500
Bobcats	700	600	300	400	500	600
Dogs	900	800	1,100	1,200	800	1,000
Bears	1,100	2,600	1,500	900	900	1,500
Eagles	9,500	11,100	7,800	8,500	7,000	8,400
Fox	11,400	9,000	5,600	6,800	6,300	5,400
Mountain Lions	1,800	2,000	1,100	1,800	2,100	1,900
Other Predators	100	900	600	400	400	700
<b>Total Predators</b>	<b>97,500</b>	<b>96,000</b>	<b>66,000</b>	<b>69,000</b>	<b>59,000</b>	<b>59,000</b>
Weather	17,800	11,900	23,700	17,100	30,000	15,400
Disease	9,800	16,100	8,200	9,000	12,300	10,300
Lambing	9,800	9,400	6,900	8,500	6,200	6,700
Poison	7,500	5,200	3,500	3,100	3,300	3,500
Old Age	3,800	4,200	3,700	3,400	1,900	3,100
On Back	1,900	1,200	1,200	1,000	700	900
Theft	2,700	3,000	1,400	1,400	1,300	900
Other Known Causes	3,200	3,000	4,400	3,500	3,300	3,200
<b>Total Loss From All Causes</b>	<b>154,000</b>	<b>150,000</b>	<b>119,000</b>	<b>116,000</b>	<b>118,000</b>	<b>103,000</b>

	<b>Percent of Total by Cause</b>					
Coyotes	46.7	46.0	40.3	42.2	34.7	38.3
Bobcats	0.4	0.4	0.3	0.3	0.4	0.6
Dogs	0.6	0.5	0.9	1.0	0.7	1.0
Bears	0.7	1.7	1.3	0.8	0.8	1.5
Eagles	6.2	7.4	6.6	7.3	5.9	8.2
Fox	7.4	6.0	4.7	5.9	5.3	5.2
Mountain Lions	1.2	1.3	0.9	1.6	1.8	1.8
Other Predators	0.1	0.6	0.5	0.3	0.3	0.7
<b>Total Predators</b>	<b>63.3</b>	<b>64.0</b>	<b>55.5</b>	<b>59.5</b>	<b>50.0</b>	<b>57.3</b>
Weather	11.5	7.9	19.9	14.7	25.4	14.9
Disease	6.4	10.7	6.9	7.8	10.4	10.0
Lambing	6.4	6.3	5.8	7.3	5.3	6.5
Poison	4.9	3.5	2.9	2.7	2.8	3.4
Old Age	2.5	2.8	3.1	2.9	1.6	3.0
On Back	1.2	0.8	1.0	0.9	0.6	0.9
Theft	1.7	2.0	1.2	1.2	1.1	0.9
Other Known Causes	2.1	2.0	3.7	3.0	2.8	3.1
<b>Total Loss From All Causes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

	<b>Dollar Value of Losses by Cause</b>					
Coyotes	3,128,500	3,087,800	2,556,000	2,916,200	2,496,200	1,969,450
Bobcats	28,200	29,700	17,520	25,430	32,690	25,860
Dogs	44,300	43,400	68,360	83,870	49,670	59,120
Bears	60,300	132,500	90,690	60,060	59,720	96,690
Eagles	388,200	472,500	387,540	478,800	400,590	388,740
Fox	464,800	362,800	272,450	371,670	360,970	232,740
Mountain Lions	91,200	94,200	62,180	116,330	132,030	108,590
Other Predators	4,000	44,600	28,860	21,640	27,030	35,510
<b>Total Predators</b>	<b>4,209,500</b>	<b>4,267,500</b>	<b>3,483,600</b>	<b>4,074,000</b>	<b>3,558,900</b>	<b>2,916,700</b>
Weather	808,100	570,100	1,195,590	1,038,810	2,224,800	786,560
Disease	461,700	732,400	437,680	566,490	744,470	540,050
Lambing	475,000	438,700	396,780	543,230	407,990	395,570
Poison	414,400	276,400	245,600	232,140	243,850	257,650
Old Age	254,600	287,700	292,300	312,800	190,950	299,150
On Back	119,300	76,500	91,710	88,210	61,570	81,510
Theft	164,900	191,300	98,240	106,060	95,530	60,150
Other Known Causes	153,000	157,100	254,900	223,460	204,340	223,360
<b>Total Loss From All Causes</b>	<b>7,060,600</b>	<b>6,997,500</b>	<b>6,496,400</b>	<b>7,185,200</b>	<b>7,732,400</b>	<b>5,560,700</b>

1/Includes all lamb losses from birth both before and after docking.

## LOSSES OF SHEEP BY CAUSE: WYOMING 1993-98 1/

Cause of Loss	1993	1994	1995	1996	1997	1998
<b>Number of Head</b>						
Coyotes	8,500	11,500	8,000	7,000	4,000	5,000
Bobcats	—	200	100	100	100	—
Dogs	300	400	500	500	100	—
Bears	600	1,000	600	300	200	300
Eagles	200	1,000	400	500	100	600
Fox	200	100	100	100	100	500
Mountain Lions	700	500	300	500	300	—
Other Predators	—	300	—	—	100	500
<b>Total Predators</b>	<b>10,500</b>	<b>15,000</b>	<b>10,000</b>	<b>9,000</b>	<b>5,000</b>	<b>7,000</b>
Weather	3,400	3,300	1,800	3,000	12,000	2,300
Disease	2,500	3,100	1,400	2,100	1,100	1,800
Lambing	3,000	2,200	2,100	2,200	1,300	2,000
Poison	4,200	2,400	2,500	1,700	1,300	2,000
Old Age	3,800	4,200	3,700	3,400	1,900	3,100
On Back	1,600	1,000	1,100	900	500	800
Theft	2,100	2,500	1,000	800	500	400
Other Known Causes	900	1,300	1,400	900	400	1,600
<b>Total Loss From All Causes</b>	<b>32,000</b>	<b>35,000</b>	<b>25,000</b>	<b>24,000</b>	<b>24,000</b>	<b>21,000</b>
<b>Percent of Total by Cause</b>						
Coyotes	26.6	32.9	32.0	29.2	16.7	23.8
Bobcats	—	0.6	0.4	0.4	0.4	—
Dogs	0.9	1.1	2.0	2.1	0.4	—
Bears	1.9	2.9	2.4	1.3	0.8	1.4
Eagles	0.6	2.9	1.6	2.1	0.4	2.9
Fox	0.6	0.3	0.4	0.4	0.4	2.4
Mountain Lions	2.2	1.4	1.2	2.1	1.3	—
Other Predators	—	0.9	—	—	0.4	2.4
<b>Total Predators</b>	<b>32.8</b>	<b>42.9</b>	<b>40.0</b>	<b>37.5</b>	<b>20.8</b>	<b>0.4</b>
Weather	10.6	9.4	7.2	12.5	50.0	11.0
Disease	7.8	8.9	5.6	8.8	4.6	8.6
Lambing	9.4	6.3	8.4	9.2	5.4	9.5
Poison	13.1	6.9	10.0	7.1	5.4	9.5
Old Age	11.9	12.0	14.8	14.2	7.9	14.8
On Back	5.0	2.9	4.4	3.8	2.1	3.8
Theft	6.6	7.1	4.0	3.3	2.1	1.9
Other Known Causes	2.8	3.7	5.6	3.8	1.7	7.6
<b>Total Loss From All Causes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Dollar Value of Losses by Cause 1/</b>						
Coyotes	569,500	787,800	632,000	644,000	402,000	482,500
Bobcats	—	13,700	7,900	9,200	10,050	—
Dogs	20,100	27,400	39,500	46,000	10,050	—
Bears	40,200	68,500	47,400	27,600	20,100	28,950
Eagles	13,400	68,500	31,600	46,000	10,050	57,900
Fox	13,400	6,800	7,900	9,200	10,050	48,250
Mountain Lions	46,900	34,200	23,700	46,000	30,150	—
Other Predators	—	20,600	—	—	10,050	48,250
<b>Total Predators</b>	<b>703,500</b>	<b>1,027,500</b>	<b>790,000</b>	<b>828,000</b>	<b>502,500</b>	<b>675,500</b>
Weather	227,800	226,100	142,200	276,000	1,206,000	221,950
Disease	167,500	212,400	110,600	193,200	110,550	173,700
Lambing	201,000	150,700	165,900	202,400	130,650	193,000
Poison	281,400	164,400	197,500	156,400	130,650	193,000
Old Age	254,600	287,700	292,300	312,800	190,950	299,150
On Back	107,200	68,500	86,900	82,800	50,250	77,200
Theft	140,700	171,300	79,000	73,600	50,250	38,600
Other Known Causes	60,300	89,100	110,600	82,800	40,200	154,400
<b>Total Loss From All Causes</b>	<b>2,144,000</b>	<b>2,397,500</b>	<b>1,975,000</b>	<b>2,208,000</b>	<b>2,412,000</b>	<b>2,026,500</b>

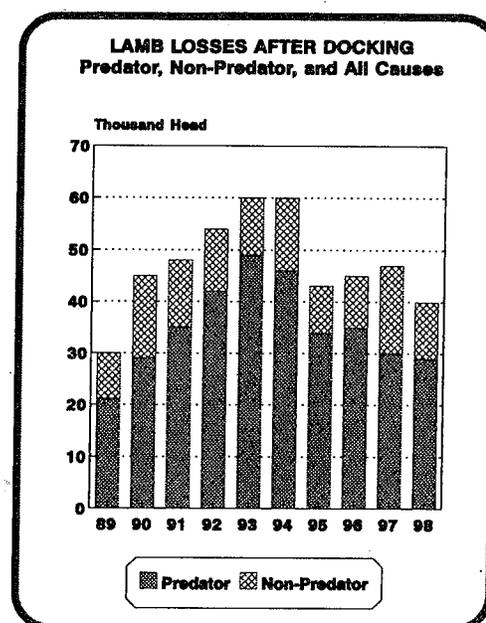
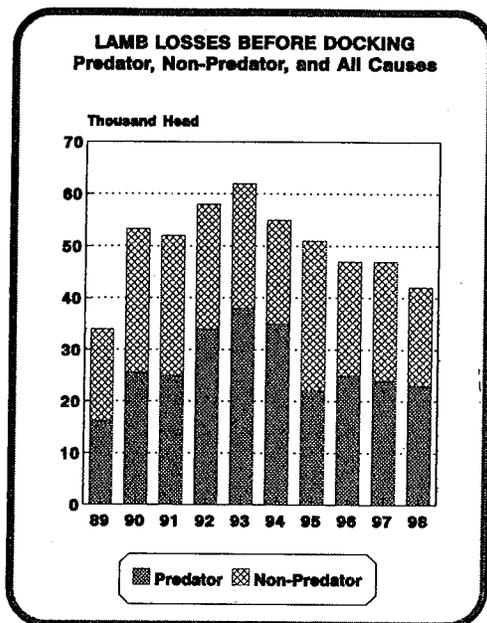
1/Sheep value per head based on a two-year average value per head of ewes 1+ years.  
 Sheep value: 1993-\$67.00; 1994-\$68.50; 1995-\$79.00; 1996-\$92.00; 1997-\$100.50; 1998-\$96.50.

## LOSSES OF LAMBS BY CAUSE: WYOMING 1993-98 1/

Cause of Loss	1993	1994	1995	1996	1997	1998
<b>Number of Head</b>						
Coyotes	63,500	57,500	40,000	42,000	37,000	34,500
Bobcats	700	400	200	300	400	600
Dogs	600	400	600	700	700	700
Bears	500	1,600	900	600	700	900
Eagles	9,300	10,100	7,400	8,000	6,900	7,900
Fox	11,200	8,900	5,500	6,700	6,200	5,400
Mountain Lions	1,100	1,500	800	1,300	1,800	1,400
Other Predators	100	600	600	400	300	600
<b>Total Predators</b>	<b>87,000</b>	<b>81,000</b>	<b>56,000</b>	<b>60,000</b>	<b>54,000</b>	<b>52,000</b>
Weather	14,400	8,600	21,900	14,100	18,000	13,100
Disease	7,300	13,000	6,800	6,900	11,200	8,500
Lambing	6,800	7,200	4,800	6,300	4,900	4,700
Poison	3,300	2,800	1,000	1,400	2,000	1,500
On Back	300	200	100	100	200	100
Theft	600	500	400	600	800	500
Other Known Causes	2,300	1,700	3,000	2,600	2,900	1,600
<b>Total Loss From All Causes</b>	<b>122,000</b>	<b>115,000</b>	<b>94,000</b>	<b>92,000</b>	<b>94,000</b>	<b>82,000</b>
<b>Percent of Total by Cause</b>						
Coyotes	52.0	50.0	42.6	45.7	39.4	42.1
Bobcats	0.6	0.3	0.2	0.3	0.4	0.7
Dogs	0.5	0.3	0.6	0.8	0.7	0.9
Bears	0.4	1.4	1.0	0.7	0.7	1.1
Eagles	7.6	8.8	7.9	8.7	7.3	9.6
Fox	9.2	7.7	5.9	7.3	6.6	6.6
Mountain Lions	0.9	1.3	0.9	1.4	1.9	1.7
Other Predators	0.1	0.5	0.6	0.4	0.3	0.7
<b>Total Predators</b>	<b>71.3</b>	<b>70.4</b>	<b>59.6</b>	<b>65.2</b>	<b>57.4</b>	<b>63.4</b>
Weather	11.8	7.5	23.3	15.3	19.1	16.0
Disease	6.0	11.3	7.2	7.5	11.9	10.4
Lambing	5.6	6.3	5.1	6.8	5.2	5.7
Poison	2.7	2.4	1.1	1.5	2.1	1.8
On Back	0.2	0.2	0.1	0.1	0.2	0.1
Theft	0.5	0.4	0.4	0.7	0.9	0.6
Other Known Causes	1.9	1.5	3.2	2.8	3.1	2.0
<b>Total Loss From All Causes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Dollar Value of Losses by Cause 2/</b>						
Coyotes	2,559,000	2,300,000	1,924,000	2,272,200	2,094,200	1,486,950
Bobcats	28,200	16,000	9,620	16,230	22,640	25,860
Dogs	24,200	16,000	28,860	37,870	39,620	30,170
Bears	20,100	64,000	43,290	32,460	39,620	38,790
Eagles	374,800	404,000	355,940	432,800	390,540	340,490
Fox	451,400	356,000	264,550	362,470	350,920	232,740
Mountain Lions	44,300	60,000	38,480	70,330	101,880	60,340
Other Predators	4,000	24,000	28,860	21,640	16,980	25,860
<b>Total Predators</b>	<b>3,506,000</b>	<b>3,240,000</b>	<b>2,693,600</b>	<b>3,246,000</b>	<b>3,056,400</b>	<b>2,241,200</b>
Weather	580,300	344,000	1,053,390	762,810	1,018,800	564,610
Disease	294,200	520,000	327,080	373,290	633,920	366,350
Lambing	274,000	288,000	230,880	340,830	277,340	202,570
Poison	133,000	112,000	48,100	75,740	113,200	64,650
On Back	12,100	8,000	4,810	5,410	11,320	4,310
Theft	24,200	20,000	19,240	32,460	45,280	21,550
Other Known Causes	92,700	68,000	144,300	140,660	164,140	68,960
<b>Total Loss From All Causes</b>	<b>4,916,600</b>	<b>4,600,000</b>	<b>4,521,400</b>	<b>4,977,200</b>	<b>5,320,400</b>	<b>3,534,200</b>

1/Includes all lamb losses both before and after docking.

2/Lamb value per head based on the annual hundredweight prices received by farmers and ranchers for a 60 pound lamb.  
Lamb value: 1993-\$40.30; 1994-\$40.00; 1995-\$48.10; 1996-\$54.10; 1997-\$56.60; 1998-\$43.10.



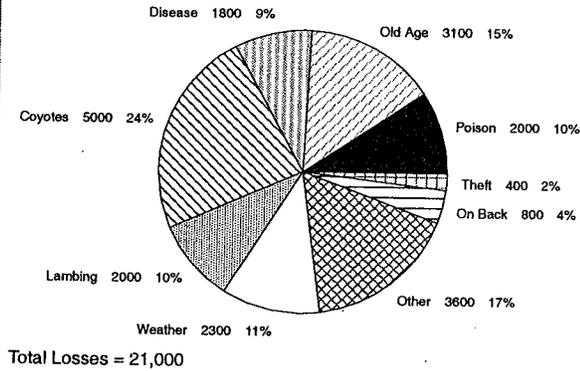
### LOSSES OF LAMBS BEFORE DOCKING: WYOMING 1993-98

Cause of Loss	1993	1994	1995	1996	1997	1998
Number of Head						
Coyotes	22,500	20,000	13,000	14,000	13,000	12,000
Bobcats	300	200	100	100	300	400
Dogs	200	200	200	300	300	200
Bears	—	200	100	—	100	—
Eagles	6,200	7,200	4,400	5,400	4,700	5,500
Fox	8,600	6,500	3,600	4,700	5,200	4,100
Mountain Lions	200	400	100	200	200	300
Other Predators	—	300	500	300	200	500
<b>Total Predators</b>	<b>38,000</b>	<b>35,000</b>	<b>22,000</b>	<b>25,000</b>	<b>24,000</b>	<b>23,000</b>
Weather	13,000	7,100	21,000	12,000	13,200	9,300
Disease	3,000	5,000	1,800	2,800	3,400	4,000
Lambing	6,800	7,200	4,800	6,300	4,900	4,700
Poison	400	200	400	100	500	100
On Back	200	—	—	—	—	—
Theft	100	—	—	300	—	300
Other Known Causes	500	500	1,000	500	1,000	600
<b>Total Loss From All Causes</b>	<b>62,000</b>	<b>55,000</b>	<b>51,000</b>	<b>47,000</b>	<b>47,000</b>	<b>42,000</b>

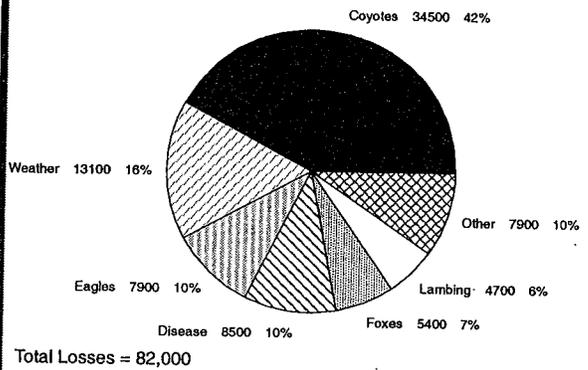
### LOSSES OF LAMBS AFTER DOCKING: WYOMING 1993-98

Cause of Loss	1993	1994	1995	1996	1997	1998
Number of Head						
Coyotes	41,000	37,500	27,000	28,000	24,000	22,500
Bobcats	400	200	100	200	100	200
Dogs	400	200	400	400	400	500
Bears	500	1,400	800	600	600	900
Eagles	3,100	2,900	3,000	2,600	2,200	2,400
Fox	2,600	2,400	1,900	2,000	1,000	1,300
Mountain Lions	900	1,100	700	1,100	1,600	1,100
Other Predators	100	300	100	100	100	100
<b>Total Predators</b>	<b>49,000</b>	<b>46,000</b>	<b>34,000</b>	<b>35,000</b>	<b>30,000</b>	<b>29,000</b>
Weather	1,400	1,500	900	2,100	4,800	3,800
Disease	4,300	8,000	5,000	4,100	7,800	4,500
Poison	2,900	2,600	600	1,300	1,500	1,400
On Back	100	200	100	100	200	100
Theft	500	500	400	300	800	200
Other Known Causes	1,800	1,200	2,000	2,100	1,900	1,000
<b>Total Loss From All Causes</b>	<b>60,000</b>	<b>60,000</b>	<b>43,000</b>	<b>45,000</b>	<b>47,000</b>	<b>40,000</b>

**Sheep Losses by Cause**  
Wyoming 1998



**Lamb Losses by Cause**  
Wyoming 1998



**LOSSES OF SHEEP AND LAMBS: PERCENT BY CAUSE**  
**WITHIN EACH AGRICULTURAL STATISTICS DISTRICT, WYOMING 1998 1/**

Cause of Loss	Northwest	Northeast	West	South Central	Southeast	State
	Percent					
Coyotes	18.7	42.9	50.0	41.8	30.6	38.3
Bobcats	—	0.3	2.5	—	0.6	0.6
Dogs	1.3	0.9	1.3	0.5	1.3	1.0
Bears	0.7	1.8	4.4	0.5	—	1.5
Eagles	1.3	7.4	3.1	13.6	13.8	8.2
Fox	2.0	5.3	5.0	4.5	9.4	5.2
Mountain Lions	2.0	2.6	0.6	2.3	0.6	1.8
Other Predators	0.7	0.6	1.9	0.5	—	0.7
<b>Total Predators</b>	<b>26.7</b>	<b>61.8</b>	<b>68.8</b>	<b>63.6</b>	<b>56.3</b>	<b>57.3</b>
Weather	15.3	16.2	6.9	14.1	21.3	15.0
Disease	28.7	5.3	3.8	12.3	5.6	10.0
Lambing	9.3	7.6	3.8	4.1	7.5	6.5
Poison	4.0	2.6	6.3	3.2	1.9	3.4
Old Age	3.3	2.9	5.0	0.9	3.8	3.0
On Back	2.0	0.9	0.6	0.5	0.6	0.9
Theft	3.3	0.6	—	0.5	0.6	0.9
All Other Causes	7.3	2.1	5.0	0.9	2.5	3.1
<b>Total Loss All Causes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

1/Includes all lamb losses both before and after docking.