

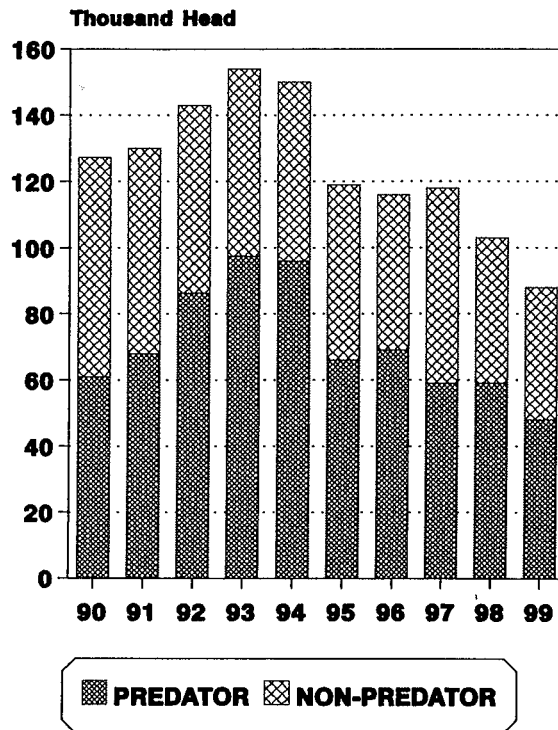
## SHEEP LOSSES TO ALL CAUSES - 1999

*Losses of sheep and lambs to predators, weather, diseases, and other causes has long been a significant risk to producers. In the past 10 years, an average of 11 percent of the lamb crop (before and after docking) in Wyoming has been lost to predators alone. When other causes are added in, this percentage increases to 18 percent. This annual report documents the magnitude and value of these losses. The report is now funded by the Wyoming Business Council, Agribusiness Division.*

*The source for the underlying data on which these statistics are based is our January survey of nearly all Wyoming sheep producers. The survey is used to estimate sheep and lamb inventories in the State on January 1, the previous year lamb crop, and losses by cause.*

*The 1999 report indicates that total sheep and lambs lost to predators was down 19 percent from the previous year due in part to a 10 percent drop in January 1 inventories and to an 11 percent drop in the annual lamb crop. When measured as a percentage of supply, lamb predator losses accounted for 10 percent of all lambs dropped, down from 11 percent in 1998. Non-predator losses were also lower thanks to mild weather. The value of sheep and lamb losses to all causes in 1999 is estimated at \$4.76 million.*

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



Includes lamb deaths before docking

### HIGHLIGHTS

**PREDATOR LOSSES DOWN:** Wyoming sheep producers lost 48,000 sheep and lambs to predators in 1999, down 19 percent from 1998. The 1999 lamb crop was 11 percent smaller than in 1998. Coyotes were the biggest predator taking 65 percent of the total predator losses and 35 percent of all losses.

**ALL LAMB LOSSES DOWN 15 PERCENT:** Sheep producers lost 70,000 lambs before or after docking in 1999, 15 percent less than in 1998. Losses to predators accounted for 60 percent of the total. Losses of lambs to weather related causes dropped 41 percent from the previous year but losses to diseases increased 46 percent.

**SHEEP LOSSES DOWN 14 PERCENT:** Sheep losses in Wyoming during 1999 totaled 18,000 head, down 3,000 head from 1998. Predator losses decreased by 1,000 head to 6,000 and non-predator losses dropped 2,000 head to 12,000.

**VALUE OF LOSSES DOWN 14 PERCENT:** Sheep producers in Wyoming lost an estimated \$4.76 million from sheep and lamb deaths in 1999, down 14 percent from the previous year. Predation accounted for \$2.43 million. Fewer total losses resulted in the lower total value.

## LOSSES OF SHEEP AND LAMBS BY CAUSE: WYOMING 1994-99 1/

Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	69,000	48,000	49,000	41,000	39,500	31,000
Bobcats	600	300	400	500	600	500
Dogs	800	1,100	1,200	800	1,000	900
Bears	2,600	1,500	900	900	1,500	800
Eagles	11,100	7,800	8,500	7,000	8,400	7,400
Fox	9,000	5,600	6,800	6,300	5,400	4,700
Mountain Lions	2,000	1,100	1,800	2,100	1,900	2,000
Ravens 2/	—	—	—	—	—	200
Vultures 2/	—	—	—	—	—	200
Other Predators	900	600	400	400	700	300
<b>Total Predators</b>	<b>96,000</b>	<b>66,000</b>	<b>69,000</b>	<b>59,000</b>	<b>59,000</b>	<b>48,000</b>
Weather	11,900	23,700	17,100	30,000	15,400	8,600
Disease	16,100	8,200	9,000	12,300	10,300	14,000
Lambing Complications	9,400	6,900	8,500	6,200	6,700	6,100
Poison	5,200	3,500	3,100	3,300	3,500	3,900
Old Age	4,200	3,700	3,400	1,900	3,100	3,500
On Back	1,200	1,200	1,000	700	900	1,000
Theft	3,000	1,400	1,400	1,300	900	100
Other Known Causes	3,000	4,400	3,500	3,300	3,200	2,800
<b>Total Loss From All Causes</b>	<b>150,000</b>	<b>119,000</b>	<b>116,000</b>	<b>118,000</b>	<b>103,000</b>	<b>88,000</b>
	Percent of Total by Cause					
Coyotes	46.0	40.3	42.2	34.7	38.3	35.2
Bobcats	0.4	0.3	0.3	0.4	0.6	0.6
Dogs	0.5	0.9	1.0	0.7	1.0	1.0
Bears	1.7	1.3	0.8	0.8	1.5	0.9
Eagles	7.4	6.6	7.3	5.9	8.2	8.4
Fox	6.0	4.7	5.9	5.3	5.2	5.3
Mountain Lions	1.3	0.9	1.6	1.8	1.8	2.3
Raven 2/	—	—	—	—	—	0.2
Vultures 2/	—	—	—	—	—	0.2
Other Predators	0.6	0.5	0.3	0.3	0.7	0.5
<b>Total Predators</b>	<b>64.0</b>	<b>55.5</b>	<b>59.5</b>	<b>50.0</b>	<b>57.3</b>	<b>54.5</b>
Weather	7.9	19.9	14.7	25.4	14.9	9.8
Disease	10.7	6.9	7.8	10.4	10.0	15.9
Lambing Complications	6.3	5.8	7.3	5.3	6.5	6.9
Poison	3.5	2.9	2.7	2.8	3.4	4.4
Old Age	2.8	3.1	2.9	1.6	3.0	4.0
On Back	0.8	1.0	0.9	0.6	0.9	1.1
Theft	2.0	1.2	1.2	1.1	0.9	0.1
Other Known Causes	2.0	3.7	3.0	2.8	3.1	3.2
<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>
	Dollar Value of Losses by Cause					
Coyotes	3,087,800	2,556,000	2,916,200	2,496,200	1,969,450	1,577,800
Bobcats	29,700	17,520	25,430	32,690	25,860	22,700
Dogs	43,400	68,360	83,870	49,670	59,120	57,900
Bears	132,500	90,690	60,060	59,720	96,690	49,100
Eagles	472,500	387,540	478,800	400,590	388,740	353,000
Fox	362,800	272,450	371,670	360,970	232,740	217,640
Mountain Lions	94,200	62,180	116,330	132,030	108,590	120,620
Ravens 2/	—	—	—	—	—	9,080
Vultures 2/	—	—	—	—	—	9,080
Other Predators	44,600	28,860	21,640	27,030	35,510	17,880
<b>Total Predators</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>	<b>2,434,800</b>
Weather	570,100	1,195,590	1,038,810	2,224,800	786,560	428,780
Disease	732,400	437,680	566,490	744,470	540,050	703,760
Lambing Complications	438,700	396,780	543,230	407,990	395,570	357,880
Poison	276,400	245,600	232,140	243,850	257,650	258,000
Old Age	287,700	292,300	312,800	190,950	299,150	308,000
On Back	76,500	91,710	88,210	61,570	81,510	88,000
Theft	191,300	98,240	106,060	95,530	60,150	8,800
Other Known Causes	157,100	254,900	223,460	204,340	223,360	173,980
<b>Total Loss From All Causes</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>	<b>4,762,000</b>

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

2/Included in "other predators" prior to 1999.

## LOSSES OF SHEEP BY CAUSE: WYOMING 1994-99 1/

Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	11,500	8,000	7,000	4,000	5,000	4,000
Bobcats	200	100	100	100	—	—
Dogs	400	500	500	100	300	400
Bears	1,000	600	300	200	600	300
Eagles	1,000	400	500	100	500	400
Fox	100	100	100	100	—	100
Mountain Lions	500	300	500	300	500	700
Other Predators	300	—	—	100	100	100
<b>Total Predators</b>	<b>15,000</b>	<b>10,000</b>	<b>9,000</b>	<b>5,000</b>	<b>7,000</b>	<b>6,000</b>
Weather	3,300	1,800	3,000	12,000	2,300	900
Disease	3,100	1,400	2,100	1,100	1,800	1,600
Lambing Complications	2,200	2,100	2,200	1,300	2,000	1,900
Poison	2,400	2,500	1,700	1,300	2,000	1,900
Old Age	4,200	3,700	3,400	1,900	3,100	3,500
On Back	1,000	1,100	900	500	800	1,000
Theft	2,500	1,000	800	500	400	100
Other Known Causes	1,300	1,400	900	400	1,600	1,100
<b>Total Loss From All Causes</b>	<b>35,000</b>	<b>25,000</b>	<b>24,000</b>	<b>24,000</b>	<b>21,000</b>	<b>18,000</b>
	Percent of Total by Cause					
Coyotes	32.9	32.0	29.2	16.7	23.8	22.2
Bobcats	0.6	0.4	0.4	0.4	—	—
Dogs	1.1	2.0	2.1	0.4	1.4	2.2
Bears	2.9	2.4	1.3	0.8	2.9	1.7
Eagles	2.9	1.6	2.1	0.4	2.4	2.2
Fox	0.3	0.4	0.4	0.4	—	0.6
Mountain Lions	1.4	1.2	2.1	1.3	2.4	3.9
Other Predators	0.9	—	—	0.4	0.5	0.6
<b>Total Predators</b>	<b>42.9</b>	<b>40.0</b>	<b>37.5</b>	<b>20.8</b>	<b>33.3</b>	<b>33.3</b>
Weather	9.4	7.2	12.5	50.0	11.0	5.0
Disease	8.9	5.6	8.8	4.6	8.6	8.9
Lambing Complications	6.3	8.4	9.2	5.4	9.5	10.6
Poison	6.9	10.0	7.1	5.4	9.5	10.6
Old Age	12.0	14.8	14.2	7.9	14.8	19.4
On Back	2.9	4.4	3.8	2.1	3.8	5.6
Theft	7.1	4.0	3.3	2.1	1.9	0.6
Other Known Causes	3.7	5.6	3.8	1.7	7.6	6.1
<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>
	Dollar Value of Losses by Cause 1/					
Coyotes	787,800	632,000	644,000	402,000	482,500	352,000
Bobcats	13,700	7,900	9,200	10,050	—	—
Dogs	27,400	39,500	46,000	10,050	28,950	35,200
Bears	68,500	47,400	27,600	20,100	57,900	26,400
Eagles	68,500	31,600	46,000	10,050	48,250	35,200
Fox	6,800	7,900	9,200	10,050	—	8,800
Mountain Lions	34,200	23,700	46,000	30,150	48,250	61,600
Other Predators	20,600	—	—	10,050	9,650	8,800
<b>Total Predators</b>	<b>1,027,500</b>	<b>790,000</b>	<b>828,000</b>	<b>502,500</b>	<b>675,500</b>	<b>528,000</b>
Weather	226,100	142,200	276,000	1,206,000	221,950	79,200
Disease	212,400	110,600	193,200	110,550	173,700	140,800
Lambing Complications	150,700	165,900	202,400	130,650	193,000	167,200
Poison	164,400	197,500	156,400	130,650	193,000	167,200
Old Age	287,700	292,300	312,800	190,950	299,150	308,000
On Back	68,500	86,900	82,800	50,250	77,200	88,000
Theft	171,300	79,000	73,600	50,250	38,600	8,800
Other Known Causes	89,100	110,600	82,800	40,200	154,400	96,800
<b>Total Loss From All Causes</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>	<b>1,584,000</b>

1/Sheep value per head based on a two-year average value per head of ewes 1+ years.

Sheep value: 1994-\$68.50; 1995-\$79.00; 1996-\$92.00; 1997-\$100.50; 1998-\$96.50; 1999-\$88.00.

### LOSSES OF LAMBS BY CAUSE: WYOMING 1994-99 1/

Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	57,500	40,000	42,000	37,000	34,500	27,000
Bobcats	400	200	300	400	600	500
Dogs	400	600	700	700	700	500
Bears	1,600	900	600	700	900	500
Eagles	10,100	7,400	8,000	6,900	7,900	7,000
Fox	8,900	5,500	6,700	6,200	5,400	4,600
Mountain Lions	1,500	800	1,300	1,800	1,400	1,300
Ravens 2/	—	—	—	—	—	200
Vultures 2/	—	—	—	—	—	200
Other Predators	600	600	400	300	600	200
<b>Total Predators</b>	<b>81,000</b>	<b>56,000</b>	<b>60,000</b>	<b>54,000</b>	<b>52,000</b>	<b>42,000</b>
Weather	8,600	21,900	14,100	18,000	13,100	7,700
Disease	13,000	6,800	6,900	11,200	8,500	12,400
Lambing Complications	7,200	4,800	6,300	4,900	4,700	4,200
Poison	2,800	1,000	1,400	2,000	1,500	2,000
On Back	200	100	100	200	100	—
Theft	500	400	600	800	500	—
Other Known Causes	1,700	3,000	2,600	2,900	1,600	1,700
<b>Total Loss From All Causes</b>	<b>115,000</b>	<b>94,000</b>	<b>92,000</b>	<b>94,000</b>	<b>82,000</b>	<b>70,000</b>

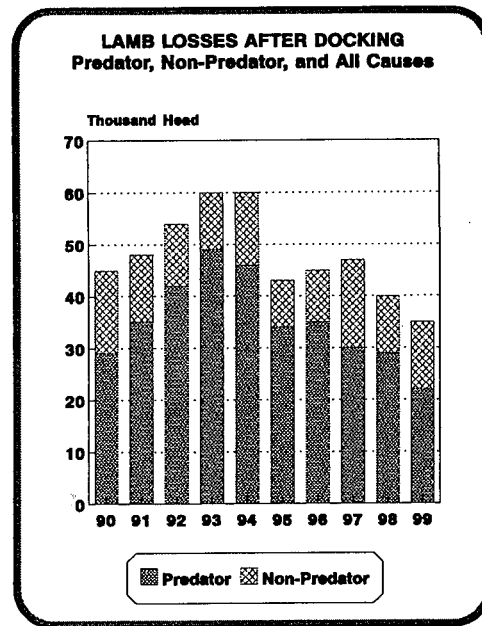
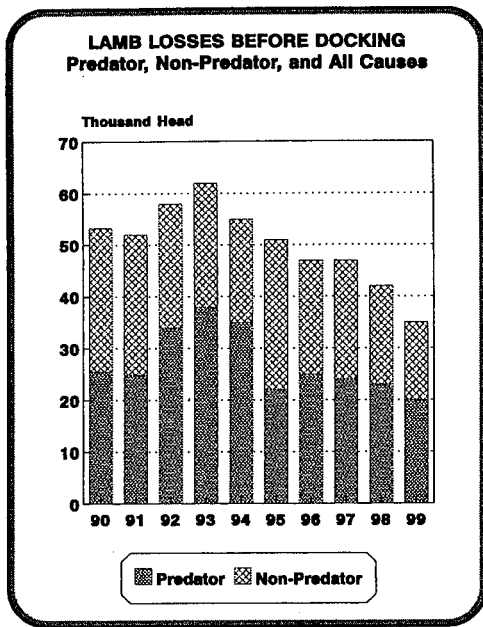
	Percent of Total by Cause					
Coyotes	50.0	42.6	45.7	39.4	42.1	38.6
Bobcats	0.3	0.2	0.3	0.4	0.7	0.7
Dogs	0.3	0.6	0.8	0.7	0.9	0.7
Bears	1.4	1.0	0.7	0.7	1.1	0.7
Eagles	8.8	7.9	8.7	7.3	9.6	10.0
Fox	7.7	5.9	7.3	6.6	6.6	6.6
Mountain Lions	1.3	0.9	1.4	1.9	1.7	1.9
Ravens 2/	—	—	—	—	—	0.3
Vultures 2/	—	—	—	—	—	0.3
Other Predators	0.5	0.6	0.4	0.3	0.7	0.3
<b>Total Predators</b>	<b>70.4</b>	<b>59.6</b>	<b>65.2</b>	<b>57.4</b>	<b>63.4</b>	<b>60.0</b>
Weather	7.5	23.3	15.3	19.1	16.0	11.0
Disease	11.3	7.2	7.5	11.9	10.4	17.7
Lambing Complications	6.3	5.1	6.8	5.2	5.7	6.0
Poison	2.4	1.1	1.5	2.1	1.8	2.9
On Back	0.2	0.1	0.1	0.2	0.1	—
Theft	0.4	0.4	0.7	0.9	0.6	—
Other Known Causes	1.5	3.2	2.8	3.1	2.0	2.4
<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>

	Dollar Value of Losses by Cause 3/					
Coyotes	2,300,000	1,924,000	2,272,200	2,094,200	1,486,950	1,225,800
Bobcats	16,000	9,620	16,230	22,640	25,860	22,700
Dogs	16,000	28,860	37,870	39,620	30,170	22,700
Bears	64,000	43,290	32,460	39,620	38,790	22,700
Eagles	404,000	355,940	432,800	390,540	340,490	317,800
Fox	356,000	264,550	362,470	350,920	232,740	208,840
Mountain Lions	60,000	38,480	70,330	101,880	60,340	59,020
Ravens 2/	—	—	—	—	—	9,080
Vultures 2/	—	—	—	—	—	9,080
Other Predators	24,000	28,860	21,640	16,980	25,860	9,080
<b>Total Predators</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>	<b>1,906,800</b>
Weather	344,000	1,053,390	762,810	1,018,800	564,610	349,580
Disease	520,000	327,080	373,290	633,920	366,350	562,960
Lambing Complications	288,000	230,880	340,830	277,340	202,570	190,680
Poison	112,000	48,100	75,740	113,200	64,650	90,800
On Back	8,000	4,810	5,410	11,320	4,310	—
Theft	20,000	19,240	32,460	45,280	21,550	—
Other Known Causes	68,000	144,300	140,660	164,140	68,960	77,180
<b>Total Loss From All Causes</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>	<b>3,178,000</b>

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

2/Included in "other predators" prior to 1999.

3/Lamb value per head based on the annual hundredweight prices received by farmers and ranchers for a 60 pound lamb.  
Lamb value: 1994-\$40.00; 1995-\$48.10; 1996-\$54.10; 1997-\$56.60; 1998-\$43.10; 1999-\$45.40.



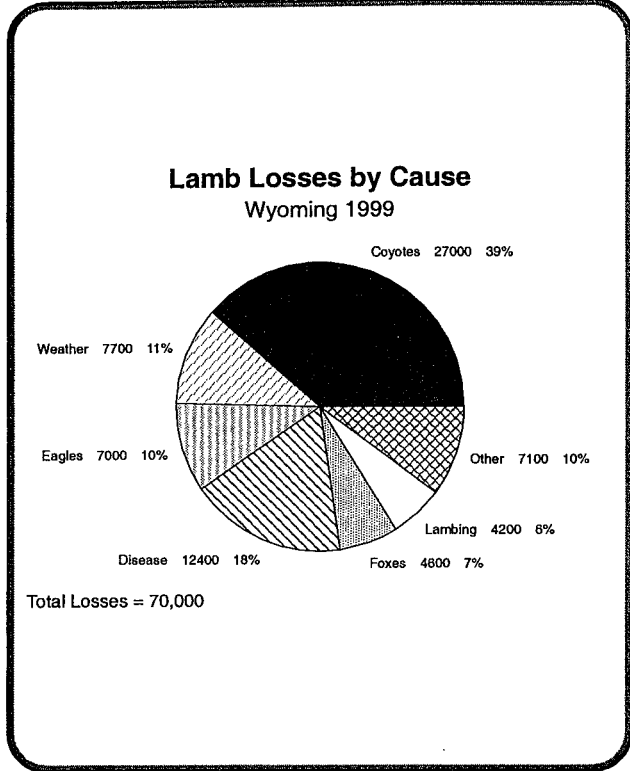
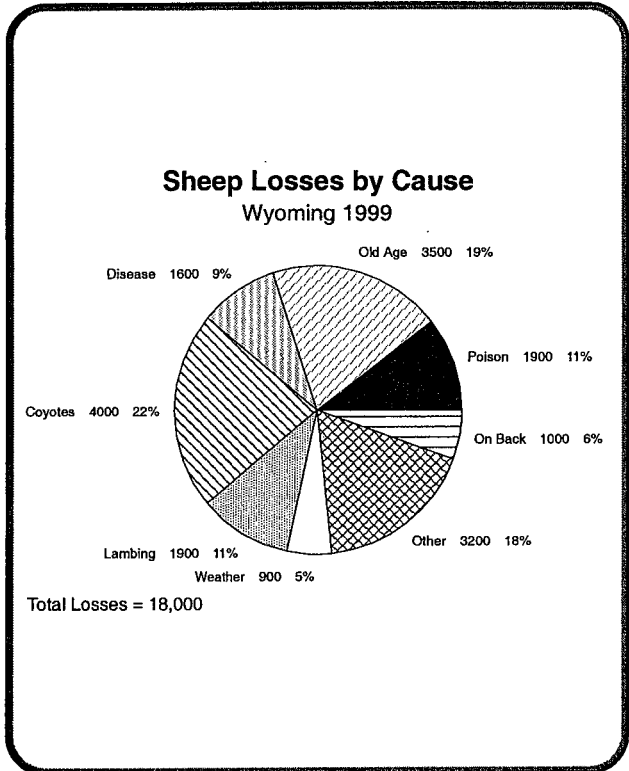
**LOSSES OF LAMBS BEFORE DOCKING: WYOMING 1994-99**

Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	20,000	13,000	14,000	13,000	12,000	10,000
Bobcats	200	100	100	300	400	500
Dogs	200	200	300	300	200	100
Bears	200	100	—	100	—	—
Eagles	7,200	4,400	5,400	4,700	5,500	4,800
Fox	6,500	3,600	4,700	5,200	4,100	3,600
Mountain Lions	400	100	200	200	300	400
Ravens 1/	—	—	—	—	—	200
Vultures 1/	—	—	—	—	—	200
Other Predators	300	500	300	200	500	200
<b>Total Predators</b>	<b>35,000</b>	<b>22,000</b>	<b>25,000</b>	<b>24,000</b>	<b>23,000</b>	<b>20,000</b>
Weather	7,100	21,000	12,000	13,200	9,300	6,200
Disease	5,000	1,800	2,800	3,400	4,000	4,000
Lambing Complications	7,200	4,800	6,300	4,900	4,700	4,200
Poison	200	400	100	500	100	200
On Back	—	—	—	—	—	—
Theft	—	—	300	—	300	—
Other Known Causes	500	1,000	500	1,000	600	400
<b>Total Loss From All Causes</b>	<b>55,000</b>	<b>51,000</b>	<b>47,000</b>	<b>47,000</b>	<b>42,000</b>	<b>35,000</b>

1/ Included in "other predators" prior to 1999.

**LOSSES OF LAMBS AFTER DOCKING: WYOMING 1994-99**

Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	37,500	27,000	28,000	24,000	22,500	17,000
Bobcats	200	100	200	100	200	—
Dogs	200	400	400	400	500	400
Bears	1,400	800	600	600	900	500
Eagles	2,900	3,000	2,600	2,200	2,400	2,200
Fox	2,400	1,900	2,000	1,000	1,300	1,000
Mountain Lions	1,100	700	1,100	1,600	1,100	900
Other Predators	300	100	100	100	100	—
<b>Total Predators</b>	<b>46,000</b>	<b>34,000</b>	<b>35,000</b>	<b>30,000</b>	<b>29,000</b>	<b>22,000</b>
Weather	1,500	900	2,100	4,800	3,800	1,500
Disease	8,000	5,000	4,100	7,800	4,500	8,400
Poison	2,600	600	1,300	1,500	1,400	1,800
On Back	200	100	100	200	100	—
Theft	500	400	300	800	200	—
Other Known Causes	1,200	2,000	2,100	1,900	1,000	1,300
<b>Total Loss From All Causes</b>	<b>60,000</b>	<b>43,000</b>	<b>45,000</b>	<b>47,000</b>	<b>40,000</b>	<b>35,000</b>



### LOSSES OF SHEEP AND LAMBS: PERCENT BY CAUSE WITHIN EACH AGRICULTURAL STATISTICS DISTRICT, WYOMING 1999 1/

Cause of Loss	Northwest	Northeast	West	South Central	Southeast	State
Percent						
Coyotes	21.9	40.7	26.0	45.4	35.8	35.2
Bobcats	—	1.0	—	—	1.0	0.6
Dogs	1.9	0.3	4.0	—	0.5	1.0
Bears	0.6	0.3	4.0	1.5	—	0.9
Eagles	1.9	10.0	3.0	15.4	9.4	8.4
Fox	1.9	5.7	9.0	2.3	7.9	5.3
Mountain Lions	3.1	1.7	—	4.6	2.1	2.3
Ravens	—	—	2.0	—	—	0.2
Vultures	—	—	—	—	1.1	0.2
Other Predators	—	0.3	2.0	—	—	0.4
<b>Total Predators</b>	<b>31.3</b>	<b>60.0</b>	<b>50.0</b>	<b>69.2</b>	<b>57.8</b>	<b>54.5</b>
Weather	7.5	11.0	18.0	6.2	7.9	9.8
Disease	45.0	7.7	12.0	6.2	13.2	15.9
Lambing Complications	6.3	6.0	8.0	4.6	10.0	6.9
Poison	2.5	5.7	6.0	3.1	4.2	4.4
Old Age	3.1	5.3	1.0	5.4	3.2	4.0
On Back	1.8	1.0	—	1.5	1.1	1.2
Theft	—	—	1.0	—	—	0.1
All Other Causes	2.5	3.3	4.0	3.8	2.6	3.2
<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.