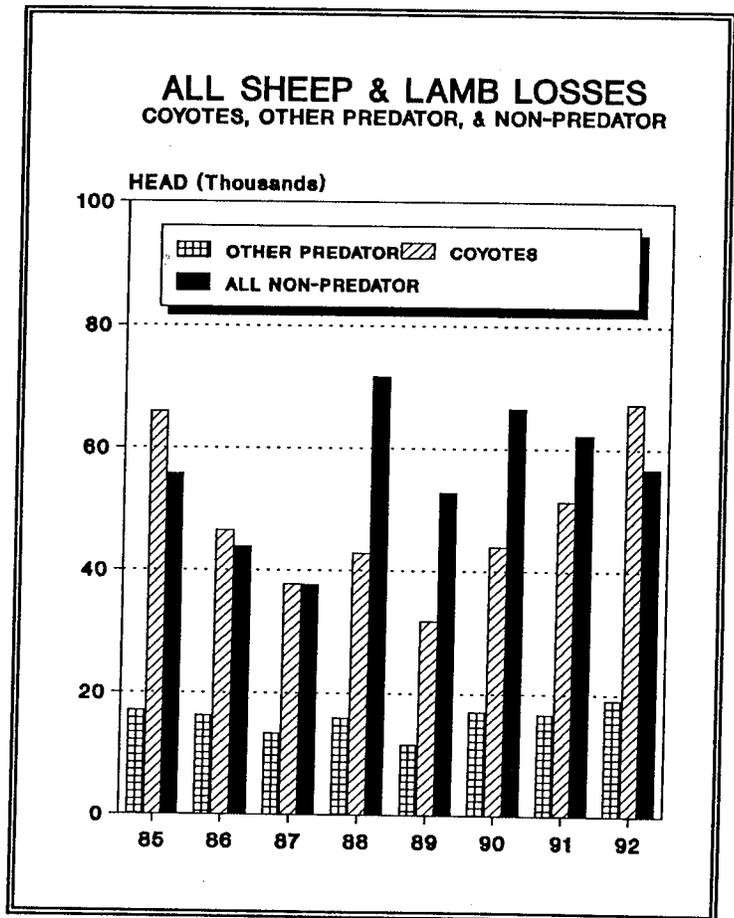


SHEEP LOSSES TO ALL CAUSES - 1992

This annual report is funded by the Wyoming Department of Agriculture and supported by the Wyoming Wool Growers Association. 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.

My thanks go to all the Wyoming ranchers and farmers whose voluntary cooperation made this report possible. I also want to thank the staff of field and telephone interviewers who did an excellent job of collecting the data. This series of reports based on information from a scientifically designed survey is valuable documentation for the sheep industry.



HIGHLIGHTS

PREDATOR LOSSES JUMP 27 PERCENT: Wyoming sheep producers lost 86,300 sheep and lambs to predators in 1992, up 27 percent from 1991. Coyotes were the main predator taking 78 percent of the total predator losses and 47 percent of all losses. Losses to coyotes were up 31 percent. Sheep and lamb losses to all causes increased 10 percent from 1991 with non-predator losses actually declining 9 percent due mostly to the mild winter. This is the third consecutive year with an increase in total sheep and lamb losses to predators.

ALL LAMB LOSSES UP 12 PERCENT: Sheep producers lost 112,000 lambs before or after docking in 1992, 12 percent more than in 1991. Losses to predators accounted for 68 percent of the total. Predator losses were up 27 percent from last year. Coyotes took 77 percent of the lambs lost to predators. Declines in weather losses led to a 10 percent drop in non-predator losses.

SHEEP LOSSES UP: Sheep losses in Wyoming during 1992 totaled 31,000 head, up 3 percent from 1991. Predator losses jumped 30 percent to 10,300 head or 33 percent of the total. Non-predator losses dropped 6 percent. Coyotes killed 8,800 adult sheep which is up from 6,100 in 1991. Old age, disease, lambing, and poison were the major non-predator causes of loss.

VALUE OF LOSSES NEARLY \$6 MILLION: Sheep producers in Wyoming lost \$5.9 million from sheep and lamb deaths in 1992. Predation accounted for \$3.3 million which was up from \$2.3 million in 1991. Coyotes alone cost producers \$2.6 million. Total dollar value for all losses in 1992 was up 21 percent from the previous year. This large increase was due to both more head lost to predators and higher prices.

LOSSES OF SHEEP AND LAMBS BY CAUSE: Wyoming 1987-92 1/

Cause of loss	1987	1988	1989	1990	1991	1992
Number of head						
Coyotes	37,700	42,700	34,800	43,900	51,300	67,300
Bobcats	200	700	300	100	200	300
Dogs	1,500	1,900	1,400	1,800	1,600	1,000
Bears	1,500	900	900	500	1,100	800
Eagles	3,500	4,900	4,600	6,100	4,300	5,400
Fox	2,600	4,600	3,800	7,200	7,000	9,200
Mountain Lions	3,800	2,600	1,200	1,100	2,200	2,000
Other Predators	200	300	100	200	200	300
Total Predators	51,000	58,600	47,100	60,900	67,900	86,300
Weather	9,700	19,900	11,500	15,200	17,200	11,600
Disease	5,000	11,100	8,500	12,200	10,600	12,600
Lambing	5,900	12,800	8,700	14,000	12,300	13,200
Poison	4,500	8,800	7,000	7,700	6,500	6,400
Old Age	3,800	5,500	6,700	5,700	5,600	4,400
On Back	1,500	2,500	2,500	1,800	2,000	1,800
Theft	3,200	4,300	4,800	3,700	4,700	2,600
Other Known Causes	4,000	6,700	7,200	6,100	3,200	4,100
Total Loss From All Causes	88,600	130,200	104,000	127,300	130,000	143,000

Percent of total by cause

Coyotes	42.6	32.8	33.5	34.4	39.5	47.1
Bobcats	.2	.5	.3	.1	.2	.2
Dogs	1.7	1.5	1.3	1.4	1.2	.7
Bears	1.7	.7	.9	.4	.8	.6
Eagles	4.0	3.8	4.4	4.8	3.3	3.8
Fox	2.9	3.5	3.6	5.7	5.4	6.4
Mountain Lions	4.3	2.0	1.2	.9	1.7	1.4
Other Predators	.2	.2	.1	.2	.2	.2
Total Predators	57.6	45.0	45.3	47.8	52.2	60.3
Weather	10.9	15.3	11.1	11.9	13.2	8.1
Disease	5.6	8.5	8.2	9.6	8.2	8.8
Lambing	6.7	9.8	8.4	11.0	9.5	9.2
Poison	5.1	6.8	6.7	6.0	5.0	4.5
Old Age	4.3	4.2	6.4	4.5	4.3	3.1
On Back	1.7	1.9	2.4	1.4	1.5	1.3
Theft	3.6	3.3	4.6	2.9	3.6	1.8
Other Known Causes	4.5	5.2	6.9	4.8	2.5	2.9
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0

Dollar value of losses by cause

Coyotes	2,065,500	2,188,600	1,730,900	1,533,000	1,720,700	2,597,500
Bobcats	9,700	28,500	21,400	3,000	5,900	13,300
Dogs	99,400	137,100	88,500	90,000	57,200	40,500
Bears	94,900	69,200	68,800	24,000	52,100	36,200
Eagles	173,900	199,400	200,700	192,000	130,900	194,500
Fox	125,800	192,600	154,800	220,500	211,100	324,800
Mountain Lions	250,800	138,400	56,900	42,000	88,000	83,700
Other Predators	9,700	17,700	4,000	6,000	5,900	13,300
Total Predators	2,829,700	2,971,500	2,326,000	2,110,500	2,271,800	3,303,800
Weather	554,200	1,152,000	582,500	555,000	575,400	444,500
Disease	304,500	609,200	521,000	523,500	431,100	542,700
Lambing	365,800	754,400	524,200	586,500	455,800	552,700
Poison	338,200	586,200	476,000	375,000	328,700	309,300
Old Age	353,400	522,500	582,900	427,500	347,200	275,000
On Back	135,000	232,100	212,700	135,000	117,500	107,000
Theft	248,500	332,500	346,300	187,500	194,500	135,000
Other Known Causes	273,900	419,300	436,400	223,500	108,000	187,500
Total Loss From All Causes	5,403,200	7,579,700	6,008,000	5,124,000	4,830,000	5,857,500

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

LOSSES OF SHEEP BY CAUSE: Wyoming 1987-92

Cause of Loss	1987	1988	1989	1990	1991	1992
Number of head						
Coyotes	5,400	8,300	7,500	4,800	6,100	8,800
Bobcats	:	:	200	:	:	100
Dogs	600	1,100	700	800	300	200
Bears	500	600	700	200	600	300
Eagles	100	:	400	200	100	200
Fox	:	100	100	100	100	100
Mountain Lions	1,500	600	200	200	700	500
Other Predators	:	100	:	:	:	100
Total Predators	8,100	10,800	9,800	6,300	7,900	10,300
Weather	1,900	6,300	2,700	2,200	2,000	1,400
Disease	1,400	2,900	3,900	3,500	3,600	3,700
Lambing	1,800	4,300	3,800	3,700	2,800	3,300
Poison	2,700	4,200	4,200	3,200	4,200	3,100
Old Age	3,800	5,500	6,700	5,700	5,600	4,400
On Back	1,400	2,400	2,400	1,800	1,800	1,600
Theft	2,100	2,900	3,300	1,700	1,700	1,600
Other Known Causes	1,800	2,700	3,200	900	400	1,600
Total Loss From All Causes	25,000	42,000	40,000	29,000	30,000	31,000
Percent of total by cause						
Coyotes	21.6	19.9	18.8	16.5	20.3	28.4
Bobcats	:	:	.5	:	:	.3
Dogs	2.4	2.6	1.7	2.8	1.0	.6
Bears	2.0	1.4	1.7	.7	2.0	1.0
Eagles	.4	:	1.0	.7	.3	.6
Fox	:	.2	.3	.3	.3	.3
Mountain Lions 1/	6.0	1.4	.5	.7	2.3	1.6
Other Predators	:	.2	:	:	:	.3
Total Predators	32.4	25.7	24.5	21.7	26.3	33.2
Weather	7.6	15.0	6.7	7.6	6.7	4.5
Disease	5.6	6.9	9.7	12.1	12.0	11.9
Lambing	7.2	10.2	9.5	12.8	9.3	10.6
Poison	10.8	10.0	10.5	11.0	14.0	10.0
Old Age	15.2	13.1	16.8	19.7	18.7	14.2
On Back	5.6	5.7	6.0	6.2	6.0	5.2
Theft	8.4	6.9	8.3	5.9	5.7	5.2
Other Known Causes	7.2	6.5	8.0	3.1	1.3	5.2
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0
Dollar value of losses by cause 2/						
Coyotes	502,200	788,500	652,500	360,000	378,200	550,000
Bobcats	:	:	17,400	:	:	6,300
Dogs	55,800	104,500	60,900	60,000	18,600	12,500
Bears	46,500	57,000	60,900	15,000	37,200	18,700
Eagles	9,300	:	34,800	15,000	6,200	12,500
Fox	:	9,500	8,700	7,500	6,200	6,300
Mountain Lions 1/	139,500	57,000	17,400	15,000	43,400	31,200
Other Predators	:	9,500	:	:	:	6,300
Total Predators	753,300	1,026,000	852,600	472,500	489,800	643,800
Weather	176,700	598,500	234,900	165,000	124,000	87,500
Disease	130,200	275,500	339,300	262,500	223,200	231,200
Lambing	167,400	408,500	330,600	277,500	173,600	206,200
Poison	251,100	399,000	365,400	240,000	260,400	193,800
Old Age	353,400	522,500	582,900	427,500	347,200	275,000
On Back	130,200	228,000	208,800	135,000	111,600	100,000
Theft	195,300	275,500	287,100	127,500	105,400	100,000
Other Known Causes	167,400	256,500	278,400	67,500	24,800	100,000
Total Loss From All Causes	2,325,000	3,990,000	3,480,000	2,175,000	1,860,000	1,937,500

1/Mountain Lions reported as separate item beginning in 1986, previous years included with Other Predators.

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

Sheep value: 1987-\$93.00; 1988-\$95.00; 1989-\$87.00; 1990-\$75.00; 1991-\$62.00; 1992-\$62.50

LOSSES OF LAMBS BY CAUSE: Wyoming 1987-92 1/

Cause of loss	1987	1988	1989	1990	1991	1992
Number of head						
Coyotes	32,300	34,400	27,300	39,100	45,200	58,500
Bobcats	200	700	100	100	200	200
Dogs	900	800	700	1,000	1,300	800
Bears	1,000	300	200	300	500	500
Eagles	3,400	4,900	4,200	5,900	4,200	5,200
Fox	2,600	4,500	3,700	7,100	6,900	9,100
Mountain Lions 2/	2,300	2,000	1,000	900	1,500	1,500
Other Predators	200	200	100	200	200	200
Total Predators	42,900	47,800	37,300	54,600	60,000	76,000
Weather	7,800	13,600	8,800	13,000	15,200	10,200
Disease	3,600	8,200	4,600	8,700	7,000	8,900
Lambing	4,100	8,500	4,900	10,300	9,500	9,900
Poison	1,800	4,600	2,800	4,500	2,300	3,300
On Back	100	100	100		200	200
Theft	1,100	1,400	1,500	2,000	3,000	1,000
Other Known Causes	2,200	4,000	4,000	5,200	2,800	2,500
Total Loss From All Causes	63,600	88,200	64,000	98,300	100,000	112,000

Percent of total by cause

Coyotes	50.8	39.0	42.6	39.8	45.2	52.2
Bobcats	.3	.8	.2	.1	.2	.2
Dogs	1.4	.9	1.1	1.0	1.3	.7
Bears	1.6	.3	.3	.3	.5	.4
Eagles	5.3	5.6	6.6	6.0	4.2	4.6
Fox	4.1	5.1	5.8	7.2	6.9	8.1
Mountain Lions 2/	3.6	2.3	1.5	.9	1.5	1.3
Other Predators	.3	.2	.2	.2	.2	.2
Total Predators	67.4	54.2	58.3	55.5	60.0	67.9
Weather	12.3	15.4	13.7	13.2	15.2	9.1
Disease	5.7	9.3	7.2	8.9	7.0	7.9
Lambing	6.4	9.7	7.7	10.5	9.5	8.8
Poison	2.8	5.2	4.4	4.6	2.3	2.9
On Back	.2	.1	.2		.2	.2
Theft	1.7	1.6	2.3	2.0	3.0	.9
All Other Causes	3.5	4.5	6.2	5.3	2.8	2.2
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0

Dollar value of losses by cause 3/

Coyotes	1,563,300	1,400,100	1,078,400	1,173,000	1,342,500	2,047,500
Bobcats	9,700	28,500	4,000	3,000	5,900	7,000
Dogs	43,600	32,600	27,600	30,000	38,600	28,000
Bears	48,400	12,200	7,900	9,000	14,900	17,500
Eagles	164,600	199,400	165,900	177,000	124,700	182,000
Fox	125,800	183,100	146,100	213,000	204,900	318,500
Mountain Lions 2/	111,300	81,400	39,500	27,000	44,600	52,500
Other Predators	9,700	8,200	4,000	6,000	5,900	7,000
Total Predators	2,076,400	1,945,500	1,473,400	1,638,000	1,782,000	2,660,000
Weather	377,500	553,500	347,600	390,000	451,400	357,000
Disease	174,300	333,700	181,700	261,000	207,900	311,500
Lambing	198,400	345,900	193,600	309,000	282,200	346,500
Poison	87,100	187,200	110,600	135,000	68,300	115,500
On Back	4,800	4,100	3,900		5,900	7,000
Theft	53,200	57,000	59,200	60,000	89,100	35,000
All Other Causes	106,500	162,800	158,000	156,000	83,200	87,500
Total Loss From All Causes	3,078,200	3,589,700	2,528,000	2,949,000	2,970,000	3,920,000

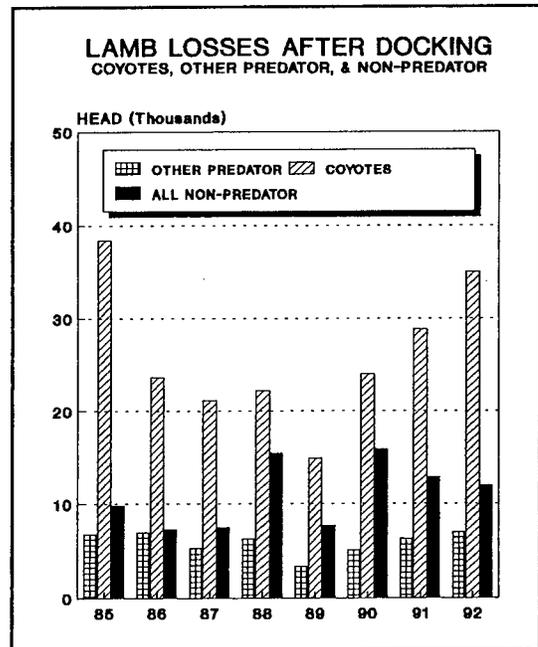
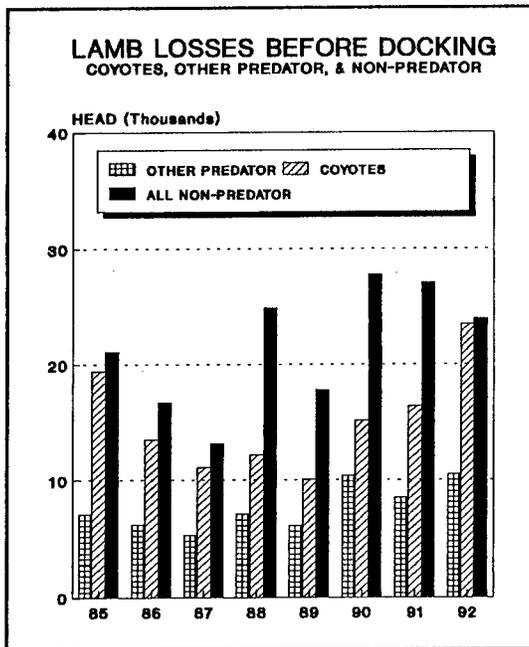
1/Includes all lamb losses both before and after docking.

2/Mountain Lions reported as separate item beginning in 1986, previous years included with Other Predators.

3/Lamb value per head based on the annual hundredweight prices received by farmers and ranchers for a 60 pound lamb.
Lamb value: 1987-\$48.40; 1988-\$40.70; 1989-\$39.50; 1990-\$30.00; 1991-\$29.70; 1992-\$35.00.

LOSSES OF LAMBS BEFORE DOCKING: Wyoming 1987-92

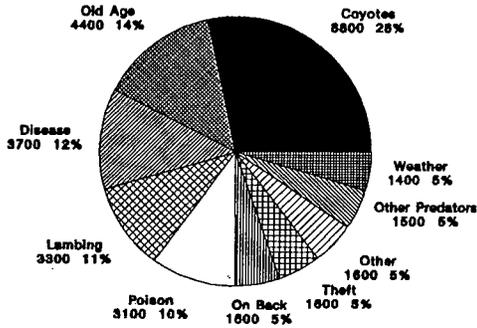
Cause of loss	1987	1988	1989	1990	1991	1992
Number of head						
Coyotes	11,100	12,200	10,100	15,100	16,400	23,500
Bobcats	100	100		100	100	100
Dogs	300	300	200	200	200	300
Bears				100	200	100
Eagles	2,600	3,000	2,900	4,300	2,500	3,300
Fox	2,100	3,400	2,600	5,500	4,600	5,900
Mountain Lions 2/	100	300	400	100	800	700
Other Predators	100			100	100	100
Total Predators	16,400	19,300	16,200	25,500	24,900	34,000
Weather	6,300	10,300	7,100	10,300	12,700	8,900
Disease	1,600	3,400	2,300	3,700	2,900	3,600
Lambing	4,100	8,500	4,900	10,300	9,500	9,900
Poison	300	900	800	1,100	300	700
On Back	100	100			100	100
Theft		300	200	200	300	200
Other Known Causes	800	1,400	2,500	2,200	1,300	600
Total Loss From All Causes	29,600	44,200	34,000	53,300	52,000	58,000



LOSSES OF LAMBS AFTER DOCKING: Wyoming 1987-92

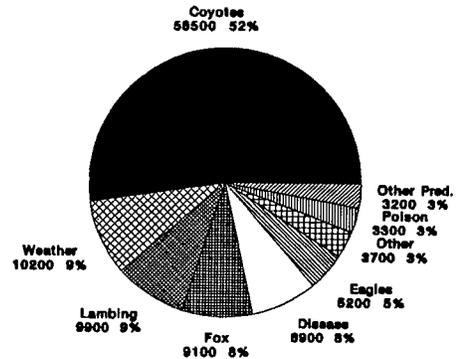
Cause of loss	1987	1988	1989	1990	1991	1992
Number of head						
Coyotes	21,200	22,200	17,200	24,000	28,800	35,000
Bobcats	100	600	100		100	100
Dogs	600	500	500	800	1,100	500
Bears	1,000	300	200	200	300	400
Eagles	800	1,900	1,300	1,600	1,700	1,900
Fox	500	1,100	1,100	1,600	2,300	3,200
Mountain Lions 2/	2,200	1,700	600	800	700	800
Other Predators	100	200	100	100	100	100
Total Predators	26,500	28,500	21,100	29,100	35,100	42,000
Weather	1,500	3,300	1,700	2,700	2,500	1,300
Disease	2,000	4,800	2,300	5,000	4,100	5,300
Poison	1,500	3,700	2,000	3,400	2,000	2,600
On Back			100		100	100
Theft	1,100	1,100	1,300	1,800	2,700	800
Other Known Causes	1,400	2,600	1,500	3,000	1,500	1,900
Total Loss From All Causes	34,000	44,000	30,000	45,000	48,000	54,000

Sheep Losses by Cause Wyoming, 1992



Total Losses = 31,000

All Lamb Losses by Cause Wyoming, 1992



Total Losses = 112,000

LOSSES OF SHEEP AND LAMBS: Percent By Cause Within Each Agricultural Statistics District, Wyoming 1992 1/

Cause of Loss	Agricultural Statistics District					
	North	North	South	South	State	
	West	East	West	Central	East	Percent
Coyotes	42.7	45.6	48.7	57.2	38.9	47.1
Bobcats	0.1	0.2	0.5		0.3	0.2
Dogs	1.3	0.7	0.8	0.3	0.7	0.7
Bears	1.2	0.1	1.0	0.9		0.6
Eagles	3.0	3.8	3.8	4.1	4.0	3.8
Fox	3.7	7.9	11.2	2.6	7.6	6.4
Mountain Lions	2.1	2.7	0.1	1.0		1.4
Other Predators	0.6	0.2		0.2		0.2
Total predators	54.8	61.1	65.9	66.3	51.6	60.3
Weather	6.6	8.9	7.1	8.8	7.7	8.1
Disease	13.6	6.3	7.5	4.4	16.2	8.8
Lambing	12.6	8.8	5.9	8.2	11.0	9.2
Poison	3.4	4.7	3.4	5.1	5.1	4.5
Old Age	3.6	2.6	2.6	3.2	3.9	3.1
On Back	0.8	1.1	2.3	1.0	1.6	1.3
Theft	0.4	3.9	2.3	0.1	1.1	1.8
All Other Known Causes	4.3	2.7	3.1	2.9	1.7	2.9
Total Loss-All Causes	100.0	100.0	100.0	100.0	100.0	100.0

1/Includes all lamb losses before and after docking.