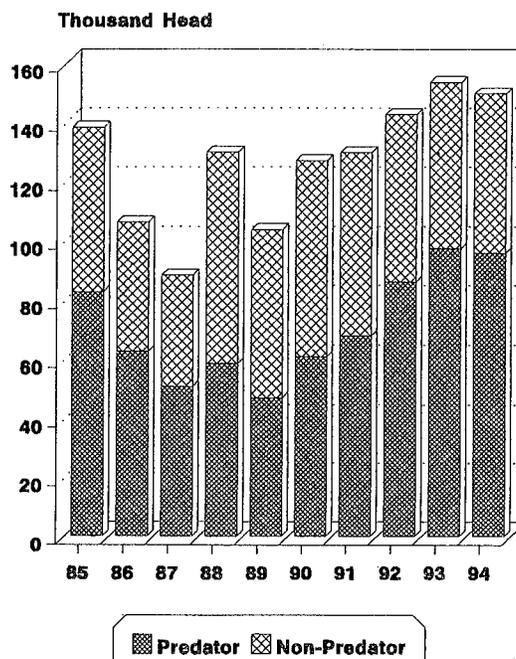


SHEEP LOSSES TO ALL CAUSES - 1994

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 made this report possible. Thanks also go to 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 important documentation for the sheep industry and for those involved with predator issues.

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



HIGHLIGHTS

PREDATOR LOSSES DOWN 2 PERCENT: Wyoming sheep producers lost 96,000 sheep and lambs to predators in 1994, down 2 percent from 1993. Coyotes were the main predator taking 72 percent of the total predator losses and 42 percent of all losses. Losses to coyotes were down 4 percent. Sheep and lamb losses to all causes decreased 3 percent from 1993. This is the first decrease in 5 years in total sheep and lamb losses to predators.

ALL LAMB LOSSES DOWN 6 PERCENT: Sheep producers lost 115,000 lambs before or after docking in 1994, 6 percent less than in 1993. Losses to predators accounted for 70 percent of the total. Predator losses were down 7 percent from last year. More disease and lambing problems were reported but weather related deaths were down.

SHEEP LOSSES UP: Sheep losses in Wyoming during 1994 totaled 35,000 head, up 9 percent from 1993. Predator losses increased 43 percent to 15,000 head and were also 43 percent of the total. Non-predator losses decreased 7 percent. Coyotes killed 11,500 adult sheep which is up from 8,500 in 1993. Old age was the leading non-predator cause of death followed closely by weather and disease.

VALUE OF LOSSES ALMOST \$7 MILLION: Sheep producers in Wyoming lost almost \$7 million from sheep and lamb deaths in 1994. Predation accounted for \$4.27 million which was up from \$4.21 million in 1993. Total dollar value for all losses in 1994 was down 1 percent from the previous year. This decrease was due to both fewer head lost to predators and a lower value per head for lambs.

LOSSES OF SHEEP AND LAMBS BY CAUSE: WYOMING, 1989-94 1/

Cause of Loss	1989	1990	1991	1992	1993	1994
Number of Head						
Coyotes	34,800	43,900	51,300	67,300	72,000	69,000
Bobcats	300	100	200	300	700	600
Dogs	1,400	1,800	1,600	1,000	900	800
Bears	900	500	1,100	800	1,100	2,600
Eagles	4,600	6,100	4,300	5,400	9,500	11,100
Fox	3,800	7,200	7,000	9,200	11,400	9,000
Mountain Lions	1,200	1,100	2,200	2,000	1,800	2,000
Other Predators	100	200	200	300	100	900
Total Predators	47,100	60,900	67,900	86,300	97,500	96,000
Weather	11,500	15,200	17,200	11,600	17,800	11,900
Disease	8,500	12,200	10,600	12,600	9,800	16,100
Lambing	8,700	14,000	12,300	13,200	9,800	9,400
Poison	7,000	7,700	6,500	6,400	7,500	5,200
Old Age	6,700	5,700	5,600	4,400	3,800	4,200
On Back	2,500	1,800	2,000	1,800	1,900	1,200
Theft	4,800	3,700	4,700	2,600	2,700	3,000
Other Known Causes	7,200	6,100	3,200	4,100	3,200	3,000
Total Loss From All Causes	104,000	127,300	130,000	143,000	154,000	150,000

Percent of Total by Cause						
Coyotes	33.5	34.5	39.5	47.1	46.7	46.0
Bobcats	0.3	0.1	0.2	0.2	0.4	0.4
Dogs	1.3	1.4	1.2	0.7	0.6	0.5
Bears	0.9	0.4	0.8	0.6	0.7	1.7
Eagles	4.4	4.8	3.3	3.8	6.2	7.4
Fox	3.6	5.7	5.4	6.4	7.4	6.0
Mountain Lions	1.2	0.9	1.7	1.4	1.2	1.3
Other Predators	0.1	0.2	0.2	0.2	0.1	0.6
Total Predators	45.3	47.8	52.2	60.3	63.3	64.0
Weather	11.1	11.9	13.2	8.1	11.5	7.9
Disease	8.2	9.6	8.2	8.8	6.4	10.7
Lambing	8.4	11.0	9.5	9.2	6.4	6.3
Poison	6.7	6.0	5.0	4.5	4.9	3.5
Old Age	6.4	4.5	4.3	3.1	2.5	2.8
On Back	2.4	1.4	1.5	1.3	1.2	0.8
Theft	4.6	2.9	3.6	1.8	1.7	2.0
Other Known Causes	6.9	4.8	2.5	2.9	2.1	2.0
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0

Dollar Value of Losses by Cause						
Coyotes	1,730,900	1,533,000	1,720,700	2,597,500	3,128,500	3,087,800
Bobcats	21,400	3,000	5,900	13,300	28,200	29,700
Dogs	88,500	90,000	57,200	40,500	44,300	43,400
Bears	68,800	24,000	52,100	36,200	60,300	132,500
Eagles	200,700	192,000	130,900	194,500	388,200	472,500
Fox	154,800	220,500	211,100	324,800	464,800	362,800
Mountain Lions	56,900	42,000	88,000	83,700	91,200	94,200
Other Predators	4,000	6,000	5,900	13,300	4,000	44,600
Total Predators	2,326,000	2,110,500	2,271,800	3,303,800	4,209,500	4,267,500
Weather	582,500	555,000	575,400	444,500	808,100	570,100
Disease	521,000	523,500	431,100	542,700	461,700	732,400
Lambing	524,200	586,500	455,800	552,700	475,000	438,700
Poison	476,000	375,000	328,700	309,300	414,400	276,400
Old Age	582,900	427,500	347,200	275,000	254,600	287,700
On Back	212,700	135,000	117,500	107,000	119,300	76,500
Theft	346,300	187,500	194,500	135,000	164,900	191,300
Other Known Causes	436,400	223,500	108,000	187,500	153,000	157,100
Total Loss From All Causes	6,008,000	5,124,000	4,830,000	5,857,500	7,060,600	6,997,500

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

LOSSES OF SHEEP BY CAUSE: WYOMING, 1989-94 1/

Cause of Loss	1989	1990	1991	1992	1993	1994
	Number of Head					
Coyotes	7,500	4,800	6,100	8,800	8,500	11,500
Bobcats	—	—	100	—	—	200
Dogs	700	800	300	200	300	400
Bears	700	200	600	300	600	1,000
Eagles	400	200	100	200	200	1,000
Fox	100	100	100	100	200	100
Mountain Lions	200	200	700	500	700	500
Other Predators	—	—	—	100	—	300
Total Predators	9,800	6,300	7,900	10,300	10,500	15,000
Weather	2,700	2,200	2,000	1,400	3,400	3,300
Disease	3,900	3,500	3,600	3,700	2,500	3,100
Lambing	3,800	3,700	2,800	3,300	3,000	2,200
Poison	4,200	3,200	4,200	3,100	4,200	2,400
Old Age	6,700	5,700	5,600	4,400	3,800	4,200
On Back	2,400	1,800	1,800	1,600	1,600	1,000
Theft	3,300	1,700	1,700	1,600	2,100	2,500
Other Known Causes	3,200	900	400	1,600	900	1,300
Total Loss From All Causes	40,000	29,000	30,000	31,000	32,000	35,000
	Percent of Total by Cause					
Coyotes	18.8	16.5	20.3	28.4	26.6	32.9
Bobcats	0.5	—	—	0.3	—	0.6
Dogs	1.7	2.8	1.0	0.6	0.9	1.1
Bears	1.7	0.7	2.0	1.0	1.9	2.9
Eagles	1.0	0.7	0.3	0.6	0.6	2.9
Fox	0.3	0.3	0.3	0.3	0.6	0.3
Mountain Lions	0.5	0.7	2.3	1.6	2.2	1.4
Other Predators	—	—	—	0.3	—	0.9
Total Predators	24.5	21.7	26.3	33.2	32.8	42.9
Weather	6.7	7.6	6.7	4.5	10.6	9.4
Disease	9.7	12.1	12.0	11.9	7.8	8.9
Lambing	9.5	12.8	9.3	10.6	9.4	6.3
Poison	10.5	11.0	14.0	10.0	13.1	6.9
Old Age	16.8	19.7	18.7	14.2	11.9	12.0
On Back	6.0	6.2	6.0	5.2	5.0	2.9
Theft	8.3	5.9	5.7	5.2	6.6	7.1
Other Known Causes	8.0	3.1	1.3	5.2	2.8	3.7
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0
	Dollar Value of Losses by Cause					
Coyotes	652,500	360,000	378,200	550,000	569,500	787,800
Bobcats	17,400	—	—	6,300	—	13,700
Dogs	60,900	60,000	18,600	12,500	20,100	27,400
Bears	60,900	15,000	37,200	18,700	40,200	68,500
Eagles	34,800	15,000	6,200	12,500	13,400	68,500
Fox	8,700	7,500	6,200	6,300	13,400	6,800
Mountain Lions	17,400	15,000	43,400	31,200	46,900	34,200
Other Predators	—	—	—	6,300	—	20,600
Total Predators	852,600	472,500	489,800	643,800	703,500	1,027,500
Weather	234,900	165,000	124,000	87,500	227,800	226,100
Disease	339,300	262,500	223,200	231,200	167,500	212,400
Lambing	330,600	277,500	173,600	206,200	201,000	150,700
Poison	365,400	240,000	260,400	193,800	281,400	164,400
Old Age	582,900	427,500	347,200	275,000	254,600	287,700
On Back	208,800	135,000	111,600	100,000	107,200	68,500
Theft	287,100	127,500	105,400	100,000	140,700	171,300
Other Known Causes	278,400	67,500	24,800	100,000	60,300	89,100
Total Loss From All Causes	3,480,000	2,175,000	1,860,000	1,937,500	2,144,000	2,397,500

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: 1989-\$87.00; 1990-\$75.00; 1991-\$62.00; 1992-\$62.50; 1993-\$67.00; 1994-\$68.50.

LOSSES OF LAMBS BY CAUSE: WYOMING, 1989-94 1/

Cause of Loss	1989	1990	1991	1992	1993	1994
Number of Head						
Coyotes	27,300	39,100	45,200	58,500	63,500	57,500
Bobcats	100	100	200	200	700	400
Dogs	700	1,000	1,300	800	600	400
Bears	200	300	500	500	500	1,600
Eagles	4,200	5,900	4,200	5,200	9,300	10,100
Fox	3,700	7,100	6,900	9,100	11,200	8,900
Mountain Lions	1,000	900	1,500	1,500	1,100	1,500
Other Predators	100	200	200	200	100	600
Total Predators	37,300	54,600	60,000	76,000	87,000	81,000
Weather	8,800	13,000	15,200	10,200	14,400	8,600
Disease	4,600	8,700	7,000	8,900	7,300	13,000
Lambing	4,900	10,300	9,500	9,900	6,800	7,200
Poison	2,800	4,500	2,300	3,300	3,300	2,800
On Back	100		200	200	300	200
Theft	1,500	2,000	3,000	1,000	600	500
Other Known Causes	4,000	5,200	2,800	2,500	2,300	1,700
Total Loss From All Causes	64,000	98,300	100,000	112,000	122,000	115,000
Percent of Total by Cause						
Coyotes	42.6	39.8	45.2	52.2	52.0	50.0
Bobcats	0.2	0.1	0.2	0.2	0.6	0.3
Dogs	1.1	1.0	1.3	0.7	0.5	0.3
Bears	0.3	0.3	0.5	0.4	0.4	1.4
Eagles	6.6	6.0	4.2	4.6	7.6	8.8
Fox	5.8	7.2	6.9	8.1	9.2	7.7
Mountain Lions	1.5	0.9	1.5	1.3	0.9	1.3
Other Predators	0.2	0.2	0.2	0.2	0.1	0.5
Total Predators	58.3	55.5	60.0	67.9	71.3	70.4
Weather	13.7	13.2	15.2	9.1	11.8	7.5
Disease	7.2	8.9	7.0	7.9	6.0	11.3
Lambing	7.7	10.5	9.5	8.8	5.6	6.3
Poison	4.4	4.6	2.3	2.9	2.7	2.4
On Back	0.2	—	0.2	0.2	0.2	0.2
Theft	2.3	2.0	3.0	0.9	0.5	0.4
Other Known Causes	6.2	5.3	2.8	2.2	1.9	1.5
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	1,078,400	1,173,000	1,342,500	2,047,500	2,559,000	2,300,000
Bobcats	4,000	3,000	5,900	7,000	28,200	16,000
Dogs	27,600	30,000	38,600	28,000	24,200	16,000
Bears	7,900	9,000	14,900	17,500	20,100	64,000
Eagles	165,900	177,000	124,700	182,000	374,800	404,000
Fox	146,100	213,000	204,900	318,500	451,400	356,000
Mountain Lions	39,500	27,000	44,600	52,500	44,300	60,000
Other Predators	4,000	6,000	5,900	7,000	4,000	24,000
Total Predators	1,473,400	1,638,000	1,782,000	2,660,000	3,506,000	3,240,000
Weather	347,600	390,000	451,400	357,000	580,300	344,000
Disease	181,700	261,000	207,900	311,500	294,200	520,000
Lambing	193,600	309,000	282,200	346,500	274,000	288,000
Poison	110,600	135,000	68,300	115,500	133,000	112,000
On Back	3,900	—	5,900	7,000	12,100	8,000
Theft	59,200	60,000	89,100	35,000	24,200	20,000
Other Known Causes	158,000	156,000	83,200	87,500	92,700	68,000
Total Loss From All Causes	2,528,000	2,949,000	2,970,000	3,920,000	4,916,600	4,600,000

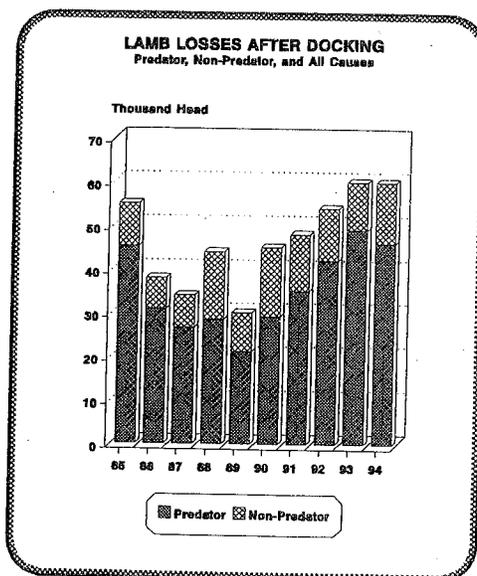
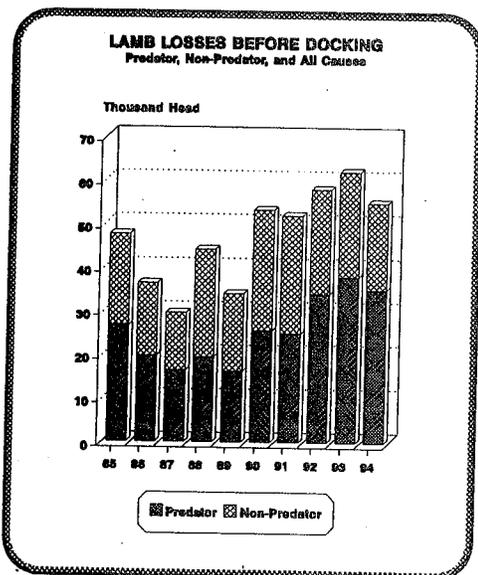
1/Includes all lamb losses both before and after docking.

2/Lamb value per head based on the annual hundredweight prices received by farmers and ranchers for a 60 pound lamb.

Lamb value: 1989-\$39.50; 1990-\$30.00; 1991-\$29.70; 1992-\$35.00; 1993-\$40.30; 1994-\$40.00.

LOSSES OF LAMBS BEFORE DOCKING: WYOMING, 1989-94

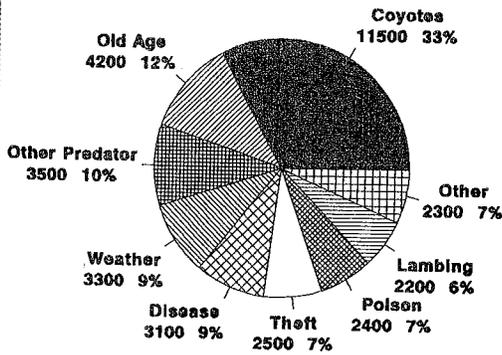
Cause of Loss	1989	1990	1991	1992	1993	1994
Number of Head						
Coyotes	10,100	15,100	16,400	23,500	22,500	20,000
Bobcats	—	100	100	100	300	200
Dogs	200	200	200	300	200	200
Bears	—	100	200	100	—	200
Eagles	2,900	4,300	2,500	3,300	6,200	7,200
Fox	2,600	5,500	4,600	5,900	8,600	6,500
Mountain Lions	100	800	700	—	200	400
Other Predators	—	100	100	100	—	300
Total Predators	16,200	25,500	24,900	34,000	38,000	35,000
Weather	7,100	10,300	12,700	8,900	13,000	7,100
Disease	2,300	3,700	2,900	3,600	3,000	5,000
Lambing	4,900	10,300	9,500	9,900	6,800	7,200
Poison	800	1,100	300	700	400	200
On Back	—	—	100	100	200	—
Theft	200	200	300	200	100	—
Other Known Causes	2,500	2,200	1,300	600	500	500
Total Loss From All Causes	34,000	53,300	52,000	58,000	62,000	55,000



LOSSES OF LAMBS AFTER DOCKING: WYOMING, 1989-94

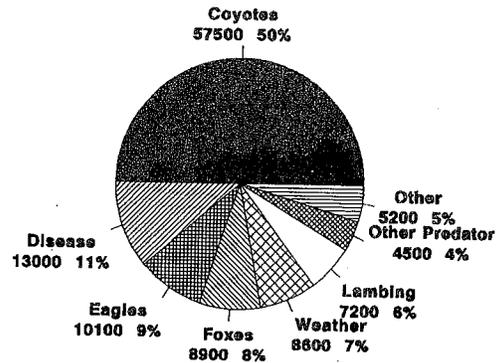
Cause of Loss	1989	1990	1991	1992	1993	1994
Number of Head						
Coyotes	17,200	24,000	28,800	35,000	41,000	37,500
Bobcats	100	—	100	100	400	200
Dogs	500	800	1,100	500	400	200
Bears	200	200	300	400	500	1,400
Eagles	1,300	1,600	1,700	1,900	3,100	2,900
Fox	1,100	1,600	2,300	3,200	2,600	2,400
Mountain Lions	600	800	700	800	900	1,100
Other Predators	100	100	100	100	100	300
Total Predators	21,100	29,100	35,100	42,000	49,000	46,000
Weather	1,700	2,700	2,500	1,300	1,400	1,500
Disease	2,300	5,000	4,100	5,300	4,300	8,000
Poison	2,000	3,400	2,000	2,600	2,900	2,600
On Back	100	—	100	100	100	200
Theft	1,300	1,800	2,700	800	500	500
Other Known Causes	1,500	3,000	1,500	1,900	1,800	1,200
Total Loss From All Causes	30,000	45,000	48,000	54,000	60,000	60,000

Sheep Losses by Cause Wyoming 1994



Total Losses = 35,000

All Lamb Losses by Cause Wyoming 1994



Total Losses = 115,000

LOSSES OF SHEEP AND LAMBS: PERCENT BY CAUSE WITHIN EACH AGRICULTURAL STATISTICS DISTRICT, WYOMING, 1994 1/

Cause of Loss	Agricultural Statistics District					
	North West	North East	West	South Central	South East	State
	Percent					
Coyotes	39.7	40.5	56.2	57.1	38.3	46.0
Bobcats	—	0.5	—	0.8	0.2	0.4
Dogs	1.5	0.1	0.3	0.7	0.6	0.5
Bears	0.7	0.5	8.9	1.9	—	1.7
Eagles	4.9	7.2	5.3	8.6	9.5	7.4
Fox	5.4	8.0	7.4	3.4	5.3	6.0
Mountain Lions	2.2	1.2	1.5	1.7	0.2	1.3
Other Predators	0.5	1.1	0.3	0.1	0.6	0.6
Total Predators	54.9	59.1	79.9	74.3	54.7	64.0
Weather	7.6	11.9	3.3	6.0	6.4	7.9
Disease	18.4	8.2	4.7	4.2	23.9	10.7
Lambing	10.3	7.6	2.4	3.4	7.2	6.3
Poison	1.2	3.7	2.7	5.4	2.5	3.5
Old Age	2.5	3.3	4.4	2.1	2.1	2.8
On Back	1.2	1.1	0.3	0.5	0.6	0.8
Theft	—	4.3	—	1.3	1.2	2.0
All Other Causes	3.9	0.9	2.4	2.6	1.4	2.0
Total Loss All Causes	100.0	100.0	100.0	100.0	100.0	100.0

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