

Highlights of the Sheep and Lamb Predator Death Loss in the United States, 2004 Report

The Sheep and Lamb Predator Death Loss in the United States, 2004 report was a cooperative effort between the Animal and Plant Health Inspection Service's (APHIS) Wildlife Services and its National Animal Health Monitoring System. The report provides a breakdown by size group and region of sheep and lamb death loss in the United States in 2004 for all causes. Where possible, 1994 and 1999 death losses were provided for comparison, as funding is provided by APHIS every five years.

Data for the report were gathered via a stratified random sample of U.S. producers surveyed by the National Agricultural Statistics Service. Survey procedures ensured that all sheep producers, regardless of operation size, had an opportunity to be included in the survey. Large operations were sampled more heavily than small operations. About 22,000 operators were contacted during the first half of January 2005 by mail, telephone, and face-to-face interviews. The following are highlights excerpted from the Sheep and Lamb Predator Death Loss in the United States, 2004 report, which was released in September 2007.

Sheep and lamb nonpredator and predator death loss—1994, 1999, and 2004

Since 1994, predator causes accounted for over one-third of U.S. sheep and lamb death losses. In 2004, 37.3 percent of losses were due to predator causes (table 1).

Table 1. Number of sheep and lamb death losses by cause and percentage of loss by cause—by year:

Cause	Number and Percent Loss					
	1994*		1999		2004	
	Number	Pct.	Number	Pct.	Number	Pct.
Nonpredator	577,950	61.1	472,700	63.2	376,100	62.7
Predator	368,050	38.9	275,700	36.8	224,200	37.3
Total	946,000	100.0	748,400	100.0	600,300	100.0

*Total sheep and lamb death losses for 1994 have been revised. See full report for complete discussion: <<http://nahms.aphis.usda.gov/sheep>>

Cause of loss

Coyotes were the leading cause of sheep predator loss in 2004, accounting for 51.7 percent of sheep deaths due to predators. Dogs were the second leading cause of loss, accounting for 22.7 percent of predator losses. Losses due to "other" predators increased from 1994 to 2004 (table 2).

Table 2. Percentage of sheep predator death loss by cause and by year:

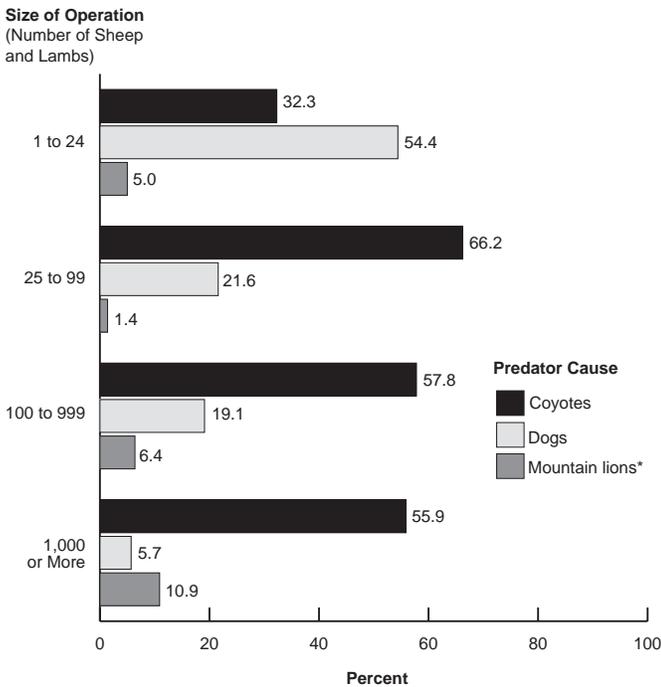
Predator Cause	Percent Predator Loss		
	1994	1999*	2004*
Bears	4.3	4.6	4.5
Bobcats or lynx	2.7	3.0	3.3
Coyotes	58.5	51.7	51.7
Dogs	18.4	25.7	22.7
Mountain lions**	10.7	7.6	7.7
Foxes	0.8	0.9	0.5
Eagles	1.8	1.0	1.1
Other predators (wolves, ravens, vultures, other animals, and unknown predators)	2.8	5.3	8.6
Total	100.0	99.8	100.1

*Cause-specific percentages do not sum to 100.0 due to rounding.

**Also known as cougars, pumas, and panthers.

The percentage of sheep death loss due to coyotes was lower in the smallest operation size category than in the larger size categories. The percentage of losses attributable to dogs decreased as operation size increased (figure 1).

Figure 1. Percentage of Sheep Predator Death Loss by Selected Causes and by Size of Operation



*Also known as cougars, pumas, and panthers

- Coyotes accounted for the highest percentage of sheep losses in every region* in 2004 except the Southeast/Other region, where dogs accounted for the highest percentage of predator loss.
- In the West Central region, 5.2 percent of all lambs born were lost to predators in 2004. The Central region had the lowest percentage death loss due to predators (1.6 percent of lamb crop).
- Coyotes accounted for the highest percentages of death loss in lambs in 1994, 1999, and 2004 (69.4, 64.3, and 64.2 percent of total predator loss, respectively). The percentages of lamb death loss due to coyotes were similar across operation sizes during 2004.

***Regions:**

Pacific: California, Oregon, and Washington

West Central: Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Texas, Utah, and Wyoming

Central: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, and Wisconsin

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New York, Ohio, Pennsylvania, Rhode Island**, Virginia, Vermont, and West Virginia

Southeast/Other: Alabama, Alaska, Arkansas, Delaware, Florida, Georgia, Hawaii, Kentucky, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, South Carolina, and Tennessee

**For the 1994 estimates, Rhode Island was included in the Southeast/Other region. In 1999 and 2004, Rhode Island was included in the Northeast region.

Nonlethal control methods

Nonlethal predator control methods were used by 31.9 percent of all operations in 2004 (table 3).

Table 3. Percentage of operations by nonlethal predator control methods used:

Percent Operations, 2004		
Control Method	Pct.	Std. Error
Guard dogs	10.3	(1.0)
Llamas	4.4	(0.5)
Donkeys	3.0	(0.3)
Fencing	16.6	(1.4)
Lamb shed	9.9	(0.7)
Herding	1.9	(0.3)
Night penning	10.6	(0.8)
Fright tactics	0.7	(0.1)
Removing carrion	3.9	(0.4)
Culling*	4.4	(0.4)
Change bedding	2.8	(0.4)
Frequent checks	4.5	(0.4)
Other	1.2	(0.1)
Any method	31.9	(1.4)

*Culling as a nonlethal strategy: Producers sometimes remove older, sick, or injured sheep from a flock for overall herd quality. In addition, it is suggested that fewer predators are attracted to the flock when these animals—which are more susceptible to predation by mountain lions, bears, and black vultures—are removed.

For more information, contact:

USDA:APHIS:VS:CEAH
 NRRRC Building B, M.S. 2E7
 2150 Centre Avenue
 Fort Collins, CO 80526-8117
 970.494.7000
 E-mail: NAHMS@aphis.usda.gov
 http://nahms.aphis.usda.gov

#N499.0907

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.