



# Sheep and Goats Death Loss

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## Sheep and Lamb Death Losses

**Sheep and lamb** losses from animal predators and non-predator causes in the United States totaled 600,300. This report provides detailed breakouts of sheep and lamb losses after docking by predators and non-predator causes, as well as data on non-lethal predator control measures.

Sheep and lamb losses from animal predators totaled 224,200. This represented 37.3 percent of the total losses from all causes and resulted in a loss of \$18.3 million to farmers and ranchers. Coyotes and dogs caused the majority of sheep and lamb losses accounting for 60.5 percent and 13.3 percent respectively.

Sheep and lamb losses from non-predator causes totaled 376,100 or 62.7 percent of the total losses. Respiratory problems was the leading cause of non-predator deaths accounting for 17.5 percent, followed by digestive problems at 17.1 percent.

Farmers and ranchers throughout the United States spent 9.8 million dollars on non-lethal methods to control predators. Fencing was the most frequently used method at 52.5 percent. Night penning, guard dogs, and lamb sheds were the next most commonly used methods of preventing sheep and lamb losses at 32.9 percent, 31.8 percent, and 30.8 percent respectively.

A total of 415,200 **goats and kids** were lost in 2004. Diseases and other known causes accounted for 180,000 deaths or 43.4 percent of the total deaths. Predators accounted for 155,000 deaths or 37.3 percent of the total while the remainder of goat and kid losses at 80,200 or 19.3 percent resulted from unknown causes.

This report is released as a cooperative effort between the National Agricultural Statistics Service and Animal and Plant Health Inspection Service - Wildlife Services and Veterinary Services.

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**Losses of Sheep and Lambs from Predators: Number of Head  
and Total Value, United States, 2004**

| Predator                             | Number<br>of Head | % of Total<br>Predators | Total<br>Value       |
|--------------------------------------|-------------------|-------------------------|----------------------|
|                                      | <i>Number</i>     | <i>Percent</i>          | <i>1,000 Dollars</i> |
| Coyotes                              | 135,600           | 60.5                    | 10,707               |
| Dogs                                 | 29,800            | 13.3                    | 2,807                |
| Mountain Lions,<br>Cougars, or Pumas | 12,700            | 5.7                     | 1,101                |
| Bears                                | 8,500             | 3.8                     | 769                  |
| Foxes                                | 4,200             | 1.9                     | 285                  |
| Eagles                               | 6,300             | 2.8                     | 438                  |
| Bobcats                              | 11,100            | 4.9                     | 814                  |
| All Other Predators                  | 16,000            | 7.1                     | 1,376                |
| US                                   | 224,200           | 100.0                   | 18,297               |

**Losses of Sheep and Lambs from Non-Predators: Number of Head  
and Total Value, United States, 2004**

| Non-Predator         | Number<br>of Head | % of Total<br>Non-Predators | Total<br>Value       |
|----------------------|-------------------|-----------------------------|----------------------|
|                      | <i>Number</i>     | <i>Percent</i>              | <i>1,000 Dollars</i> |
| Digestive Problems   | 64,250            | 17.1                        | 5,216                |
| Respiratory Problems | 65,800            | 17.5                        | 5,064                |
| Metabolic Problems   | 11,800            | 3.1                         | 1,099                |
| Other Diseases       | 17,500            | 4.7                         | 1,701                |
| Weather Related      | 39,450            | 10.5                        | 2,840                |
| Lambing Problems     | 53,400            | 14.2                        | 4,715                |
| Old Age              | 39,900            | 10.6                        | 5,181                |
| On Their Back        | 3,800             | 1.0                         | 436                  |
| Poisoning            | 10,300            | 2.7                         | 1,010                |
| Theft                | 2,400             | 0.6                         | 199                  |
| Other Non-Predator   | 19,400            | 5.2                         | 1,659                |
| Unknown Non-Predator | 48,100            | 12.8                        | 4,164                |
| US                   | 376,100           | 100.0                       | 33,284               |

**Losses of Sheep and Lambs: By All Causes, Predators and Non-Predators,  
Number by State and United States, 2004**

| State                   | All Causes  |             | Predators   |             | Non-Predators |             |
|-------------------------|-------------|-------------|-------------|-------------|---------------|-------------|
|                         | Sheep       | Lambs       | Sheep       | Lambs       | Sheep         | Lambs       |
|                         | <i>Head</i> | <i>Head</i> | <i>Head</i> | <i>Head</i> | <i>Head</i>   | <i>Head</i> |
| AZ                      | 2,000       | 2,000       | 1,500       | 500         | 500           | 1,500       |
| CA                      | 15,000      | 11,000      | 4,000       | 7,000       | 11,000        | 4,000       |
| CO                      | 5,000       | 19,000      | 2,200       | 8,000       | 2,800         | 11,000      |
| ID                      | 10,000      | 12,000      | 4,100       | 6,800       | 5,900         | 5,200       |
| IL                      | 3,000       | 6,000       | 900         | 800         | 2,100         | 5,200       |
| IN                      | 2,500       | 7,000       | 600         | 700         | 1,900         | 6,300       |
| IA                      | 6,000       | 25,000      | 500         | 1,700       | 5,500         | 23,300      |
| KS                      | 4,000       | 8,000       | 900         | 2,000       | 3,100         | 6,000       |
| KY                      | 1,400       | 3,200       | 600         | 1,300       | 800           | 1,900       |
| MD                      | 600         | 1,900       | 200         | 700         | 400           | 1,200       |
| MI                      | 3,000       | 6,000       | 400         | 800         | 2,600         | 5,200       |
| MN                      | 8,000       | 17,000      | 1,200       | 1,900       | 6,800         | 15,100      |
| MO                      | 2,500       | 7,500       | 200         | 900         | 2,300         | 6,600       |
| MT                      | 13,000      | 14,000      | 2,900       | 7,900       | 10,100        | 6,100       |
| NE                      | 4,000       | 10,000      | 500         | 1,500       | 3,500         | 8,500       |
| NV                      | 6,000       | 12,000      | 3,400       | 9,000       | 2,600         | 3,000       |
| N ENG <sup>1</sup>      | 1,000       | 2,600       | 300         | 400         | 700           | 2,200       |
| NM                      | 7,000       | 6,000       | 2,700       | 4,000       | 4,300         | 2,000       |
| NY                      | 5,000       | 6,000       | 1,300       | 1,100       | 3,700         | 4,900       |
| NC                      | 1,300       | 2,300       | 300         | 500         | 1,000         | 1,800       |
| ND                      | 4,000       | 8,000       | 700         | 3,000       | 3,300         | 5,000       |
| OH                      | 5,000       | 15,000      | 500         | 1,500       | 4,500         | 13,500      |
| OK                      | 3,000       | 8,000       | 1,000       | 2,700       | 2,000         | 5,300       |
| OR                      | 8,000       | 8,000       | 2,800       | 5,800       | 5,200         | 2,200       |
| PA                      | 4,000       | 9,000       | 600         | 1,200       | 3,400         | 7,800       |
| SD                      | 10,000      | 27,000      | 2,000       | 5,000       | 8,000         | 22,000      |
| TN                      | 1,000       | 2,000       | 600         | 1,100       | 400           | 900         |
| TX                      | 41,000      | 58,000      | 16,000      | 41,000      | 25,000        | 17,000      |
| UT                      | 11,000      | 18,000      | 5,700       | 14,800      | 5,300         | 3,200       |
| VA                      | 2,500       | 7,500       | 600         | 2,400       | 1,900         | 5,100       |
| WA                      | 3,000       | 2,000       | 900         | 1,400       | 2,100         | 600         |
| WV                      | 2,500       | 5,000       | 1,100       | 2,200       | 1,400         | 2,800       |
| WI                      | 3,000       | 10,000      | 400         | 1,200       | 2,600         | 8,800       |
| WY                      | 11,000      | 18,000      | 3,000       | 14,000      | 8,000         | 4,000       |
| Oth<br>Sts <sup>2</sup> | 6,000       | 11,000      | 1,800       | 3,000       | 4,200         | 8,000       |
| US                      | 215,300     | 385,000     | 66,400      | 157,800     | 148,900       | 227,200     |

<sup>1</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>2</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC. These states appear in the January Sheep and Goat report as Other States and all losses for this category in this report will pertain to these same states.

**Losses of Sheep and Lambs from Predators and Non-Predators:  
Total Value per Head and Total Value, by State and United States, 2004**

| State                   | Value per Head     |                    | Total Value<br>Predator<br>Losses |                      | Total Value<br>Non-Predator<br>Losses |                      |
|-------------------------|--------------------|--------------------|-----------------------------------|----------------------|---------------------------------------|----------------------|
|                         | Sheep <sup>1</sup> | Lambs <sup>2</sup> | Sheep                             | Lambs                | Sheep                                 | Lambs                |
|                         | <i>Dollars</i>     | <i>Dollars</i>     | <i>1,000 Dollars</i>              | <i>1,000 Dollars</i> | <i>1,000 Dollars</i>                  | <i>1,000 Dollars</i> |
| AZ                      | 145.00             | 57.00              | 218                               | 29                   | 73                                    | 86                   |
| CA                      | 129.00             | 54.00              | 516                               | 378                  | 1,419                                 | 216                  |
| CO                      | 136.00             | 91.00              | 299                               | 728                  | 381                                   | 1,001                |
| ID                      | 129.00             | 57.00              | 529                               | 388                  | 761                                   | 296                  |
| IL                      | 165.00             | 60.00              | 149                               | 48                   | 347                                   | 312                  |
| IN                      | 170.00             | 61.00              | 102                               | 43                   | 323                                   | 384                  |
| IA                      | 141.00             | 57.00              | 71                                | 97                   | 776                                   | 1,328                |
| KS                      | 127.00             | 57.00              | 114                               | 114                  | 394                                   | 342                  |
| KY                      | 160.00             | 61.00              | 96                                | 79                   | 128                                   | 116                  |
| MD                      | 142.00             | 62.00              | 28                                | 43                   | 57                                    | 74                   |
| MI                      | 143.00             | 56.00              | 57                                | 45                   | 372                                   | 291                  |
| MN                      | 129.00             | 57.00              | 155                               | 108                  | 877                                   | 861                  |
| MO                      | 133.00             | 61.00              | 27                                | 55                   | 306                                   | 403                  |
| MT                      | 124.00             | 67.00              | 360                               | 529                  | 1,252                                 | 409                  |
| NE                      | 142.00             | 59.00              | 71                                | 89                   | 497                                   | 502                  |
| NV                      | 129.00             | 59.00              | 439                               | 531                  | 335                                   | 177                  |
| N ENG <sup>3</sup>      | 222.00             | 75.00              | 67                                | 30                   | 155                                   | 165                  |
| NM                      | 111.00             | 60.00              | 300                               | 240                  | 477                                   | 120                  |
| NY                      | 150.00             | 68.00              | 195                               | 75                   | 555                                   | 333                  |
| NC                      | 140.00             | 63.00              | 42                                | 32                   | 140                                   | 113                  |
| ND                      | 125.00             | 62.00              | 88                                | 186                  | 413                                   | 310                  |
| OH                      | 150.00             | 59.00              | 75                                | 89                   | 675                                   | 797                  |
| OK                      | 145.00             | 58.00              | 145                               | 157                  | 290                                   | 307                  |
| OR                      | 116.00             | 57.00              | 325                               | 331                  | 603                                   | 125                  |
| PA                      | 146.00             | 69.00              | 88                                | 83                   | 496                                   | 538                  |
| SD                      | 129.00             | 69.00              | 258                               | 345                  | 1,032                                 | 1,518                |
| TN                      | 137.00             | 61.00              | 82                                | 67                   | 55                                    | 55                   |
| TX                      | 100.00             | 66.00              | 1,600                             | 2,706                | 2,500                                 | 1,122                |
| UT                      | 128.00             | 58.00              | 730                               | 858                  | 678                                   | 186                  |
| VA                      | 139.00             | 61.00              | 83                                | 146                  | 264                                   | 311                  |
| WA                      | 123.00             | 58.00              | 111                               | 81                   | 258                                   | 35                   |
| WV                      | 120.00             | 61.00              | 132                               | 134                  | 168                                   | 171                  |
| WI                      | 162.00             | 56.00              | 65                                | 67                   | 421                                   | 493                  |
| WY                      | 120.00             | 68.00              | 360                               | 952                  | 960                                   | 272                  |
| Oth<br>Sts <sup>4</sup> | 146.00             | 58.00              | 263                               | 174                  | 613                                   | 464                  |
| US <sup>5</sup>         | 127.00             | 63.00              | 8,240                             | 10,057               | 19,051                                | 14,233               |

<sup>1</sup> Sheep value per head is based on a two-year straight average of the value of ewes reported in the January 1 Sheep Survey from 2004 to 2005.

<sup>2</sup> Lamb value per head is based on the market year average lamb price. An average lamb weight of 60 pounds was used in all States except Colorado, where a 90 pound average was used.

<sup>3</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>5</sup> US value per head is weighted between predator and non-predator losses for sheep and lambs. US value of sheep and lamb losses is the sum of state sheep and lamb losses.

**Losses of Sheep and Lambs: Number and Percent by Coyotes  
and Dogs by State and United States, 2004**

| State                   | Coyotes     |                  |             |                  | Dogs        |                  |             |                  |
|-------------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|
|                         | Sheep       | % Total Predator | Lambs       | % Total Predator | Sheep       | % Total Predator | Lambs       | % Total Predator |
|                         | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                      | 700         | 46.7             | 400         | 80.0             | 500         | 33.3             | 100         | 20.0             |
| CA                      | 2,000       | 50.0             | 5,200       | 74.3             | 800         | 20.0             | 900         | 12.9             |
| CO                      | 1,100       | 50.0             | 5,000       | 62.5             | 200         | 9.1              | 700         | 8.8              |
| ID                      | 2,600       | 63.4             | 4,500       | 66.2             | 400         | 9.8              | 1,000       | 14.7             |
| IL                      | 300         | 33.3             | 500         | 62.5             | 300         | 33.3             |             |                  |
| IN                      | 100         | 16.7             | 400         | 57.1             | 500         | 83.3             | 300         | 42.9             |
| IA                      | 200         | 40.0             | 1,000       | 58.8             | 200         | 40.0             | 700         | 41.2             |
| KS                      | 300         | 33.3             | 1,000       | 50.0             | 500         | 55.6             | 800         | 40.0             |
| KY                      | 200         | 33.3             | 600         | 46.2             | 100         | 16.7             | 600         | 46.2             |
| MD                      |             |                  | 100         | 14.3             | 100         | 50.0             | 100         | 14.3             |
| MI                      | 200         | 50.0             | 500         | 62.5             | 100         | 25.0             | 100         | 12.5             |
| MN                      | 200         | 16.7             | 400         | 21.1             | 700         | 58.3             | 1,000       | 52.6             |
| MO                      | 100         | 50.0             | 600         | 66.7             | 100         | 50.0             | 300         | 33.3             |
| MT                      | 1,500       | 51.7             | 6,200       | 78.5             | 400         | 13.8             | 100         | 1.3              |
| NE                      | 300         | 60.0             | 1,200       | 80.0             | 100         | 20.0             | 100         | 6.7              |
| NV                      | 2,300       | 67.6             | 7,400       | 82.2             | 100         | 2.9              |             |                  |
| N ENG <sup>1</sup>      | 300         | 100.0            | 400         | 100.0            |             |                  |             |                  |
| NM                      | 1,100       | 40.7             | 2,000       | 50.0             | 900         | 33.3             |             |                  |
| NY                      | 1,000       | 76.9             | 700         | 63.6             | 200         | 15.4             | 200         | 18.2             |
| NC                      | 100         | 33.3             | 200         | 40.0             | 100         | 33.3             | 100         | 20.0             |
| ND                      | 700         | 100.0            | 2,800       | 93.3             |             |                  | 200         | 6.7              |
| OH                      | 100         | 20.0             | 700         | 46.7             | 300         | 60.0             | 300         | 20.0             |
| OK                      | 600         | 60.0             | 1,800       | 66.7             | 400         | 40.0             | 600         | 22.2             |
| OR                      | 1,400       | 50.0             | 4,300       | 74.1             | 400         | 14.3             | 300         | 5.2              |
| PA                      | 200         | 33.3             | 900         | 75.0             | 400         | 66.7             | 200         | 16.7             |
| SD                      | 1,700       | 85.0             | 3,700       | 74.0             | 100         | 5.0              | 200         | 4.0              |
| TN                      | 300         | 50.0             | 700         | 63.6             | 300         | 50.0             | 300         | 27.3             |
| TX                      | 7,500       | 46.9             | 22,000      | 53.7             | 4,500       | 28.1             | 3,000       | 7.3              |
| UT                      | 3,200       | 56.1             | 9,500       | 64.2             | 300         | 5.3              | 300         | 2.0              |
| VA                      | 400         | 66.7             | 1,700       | 70.8             | 200         | 33.3             | 300         | 12.5             |
| WA                      | 500         | 55.6             | 1,000       | 71.4             | 100         | 11.1             | 300         | 21.4             |
| WV                      | 700         | 63.6             | 1,400       | 63.6             | 300         | 27.3             | 300         | 13.6             |
| WI                      | 200         | 50.0             | 900         | 75.0             | 200         | 50.0             | 200         | 16.7             |
| WY                      | 2,100       | 70.0             | 10,500      | 75.0             | 100         | 3.3              | 300         | 2.1              |
| Oth<br>Sts <sup>2</sup> | 100         | 5.6              | 1,100       | 36.7             | 1,200       | 66.7             | 800         | 26.7             |
| US                      | 34,300      | 51.7             | 101,300     | 64.2             | 15,100      | 22.7             | 14,700      | 9.3              |

<sup>1</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>2</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

**Losses of Sheep and Lambs: Number and Percent by Mountain Lions, Cougars,  
or Pumas, and Bears by State and United States, 2004**

| State                   | Mountain Lions, Cougars, or Pumas <sup>1</sup> |                  |             |                  | Bears <sup>2</sup> |                  |             |                  |
|-------------------------|--|------------------|-------------|------------------|--------------------|------------------|-------------|------------------|
|                         | Sheep  | % Total Predator | Lambs       | % Total Predator | Sheep              | % Total Predator | Lambs       | % Total Predator |
|                         | <i>Head</i>                                    | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i>        | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                      | 200  | 13.3             |             |                  |                    |                  |             |                  |
| CA                      | 500  | 12.5             | 500         | 7.1              |                    |                  | 100         | 1.4              |
| CO                      | 200  | 9.1              | 100         | 1.3              | 600                | 27.3             | 1,700       | 21.3             |
| ID                      | 200  | 4.9              | 200         | 2.9              | 500                | 12.2             | 500         | 7.4              |
| IA                      | 100  | 20.0             |             |                  |                    |                  |             |                  |
| MN                      |  |                  |             |                  |                    |                  | 100         | 5.3              |
| MT                      |  |                  | 400         | 5.1              | 500                | 17.2             | 300         | 3.8              |
| NV                      | 900  | 26.5             | 1,200       | 13.3             |                    |                  | 200         | 2.2              |
| NM                      | 100  | 3.7              | 400         | 10.0             | 100                | 3.7              | 200         | 5.0              |
| NC                      | 100  | 33.3             | 100         | 20.0             |                    |                  |             |                  |
| OR                      | 500  | 17.9             | 700         | 12.1             | 100                | 3.6              |             |                  |
| SD                      |  |                  | 100         | 2.0              |                    |                  |             |                  |
| TX                      | 300  | 1.9              | 600         | 1.5              |                    |                  |             |                  |
| UT                      | 1,300  | 22.8             | 2,600       | 17.6             | 700                | 12.3             | 1,500       | 10.1             |
| WA                      | 200  | 22.2             |             |                  |                    |                  | 100         | 7.1              |
| WV                      |  |                  |             |                  | 100                | 9.1              | 100         | 4.5              |
| WY                      | 400  | 13.3             | 600         | 4.3              | 200                | 6.7              | 700         | 5.0              |
| Oth<br>Sts <sup>3</sup> |  |                  | 100         | 3.3              | 100                | 5.6              |             |                  |
| Unpub <sup>4</sup>      | 100  |                  |             |                  | 100                |                  |             |                  |
| US                      | 5,100  | 7.7              | 7,600       | 4.8              | 3,000              | 4.5              | 5,500       | 3.5              |

<sup>1</sup> Unpublished States include KS, NE, and SD for sheep.

<sup>2</sup> Unpublished States include CA, NV and N ENG for sheep.

<sup>3</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ and SC.

<sup>4</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent by Foxes and Eagles  
by State and United States, 2004**

| State | Foxes       |                  |             |                  | Eagles      |                  |             |                  |
|-------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|
|       | Sheep       | % Total Predator | Lambs       | % Total Predator | Sheep       | % Total Predator | Lambs       | % Total Predator |
|       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| MD    |             |                  | 100         | 14.3             |             |                  |             |                  |
| MI    |             |                  |             |                  |             |                  | 100         | 12.5             |
| MT    |             |                  | 300         | 3.8              |             |                  | 200         | 2.5              |
| NE    |             |                  |             |                  |             |                  | 200         | 13.3             |
| NM    |             |                  |             |                  | 200         | 7.4              | 400         | 10.0             |
| OR    |             |                  |             |                  |             |                  | 200         | 3.4              |
| SD    |             |                  | 200         | 4.0              |             |                  | 400         | 8.0              |
| TX    | 300         | 1.9              | 2,000       | 4.9              | 400         | 2.5              | 3,000       | 7.3              |
| UT    |             |                  | 400         | 2.7              |             |                  | 100         | 0.7              |
| VA    |             |                  |             |                  |             |                  | 200         | 8.3              |
| WV    |             |                  | 100         | 4.5              |             |                  |             |                  |
| WY    |             |                  | 800         | 5.7              | 100         | 3.3              | 800         | 5.7              |
| US    | 300         | 0.5              | 3,900       | 2.5              | 700         | 1.1              | 5,600       | 3.5              |



**Losses of Sheep and Lambs: Number and Percent by Bobcats  
and All Other Animals by State and United States, 2004**

| State                   | Bobcats <sup>1</sup> |                  |             |                  | All Other Predators <sup>2</sup> |                  |             |                  |
|-------------------------|----------------------|------------------|-------------|------------------|----------------------------------|------------------|-------------|------------------|
|                         | Sheep                | % Total Predator | Lambs       | % Total Predator | Sheep                            | % Total Predator | Lambs       | % Total Predator |
|                         | <i>Head</i>          | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i>                      | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                      |                      |                  |             |                  | 100                              | 6.7              |             |                  |
| CA                      |                      |                  | 100         | 1.4              | 700                              | 17.5             | 200         | 2.9              |
| CO                      |                      |                  |             |                  | 100                              | 4.5              | 500         | 6.3              |
| ID                      |                      |                  |             |                  | 400                              | 9.8              | 600         | 8.8              |
| IL                      | 200                  | 22.2             | 200         | 25.0             | 100                              | 11.1             | 100         | 12.5             |
| KS                      |                      |                  |             |                  | 100                              | 11.1             | 200         | 10.0             |
| KY                      |                      |                  |             |                  | 300                              | 50.0             | 100         | 7.7              |
| MD                      |                      |                  |             |                  | 100                              | 50.0             | 400         | 57.1             |
| MI                      |                      |                  |             |                  | 100                              | 25.0             | 100         | 12.5             |
| MN                      |                      |                  |             |                  | 300                              | 25.0             | 400         | 21.1             |
| MT                      |                      |                  |             |                  | 500                              | 17.2             | 400         | 5.1              |
| NE                      |                      |                  |             |                  | 100                              | 20.0             |             |                  |
| NV                      |                      |                  |             |                  | 100                              | 2.9              | 200         | 2.2              |
| NM                      | 200                  | 7.4              | 1,000       | 25.0             | 100                              | 3.7              |             |                  |
| NY                      |                      |                  |             |                  | 100                              | 7.7              | 200         | 18.2             |
| NC                      |                      |                  |             |                  |                                  |                  | 100         | 20.0             |
| OH                      |                      |                  |             |                  | 100                              | 20.0             | 500         | 33.3             |
| OK                      |                      |                  | 100         | 3.7              |                                  |                  | 200         | 7.4              |
| OR                      |                      |                  |             |                  | 400                              | 14.3             | 300         | 5.2              |
| PA                      |                      |                  |             |                  |                                  |                  | 100         | 8.3              |
| SD                      |                      |                  |             |                  | 200                              | 10.0             | 400         | 8.0              |
| TN                      |                      |                  |             |                  |                                  |                  | 100         | 9.1              |
| TX                      | 1,700                | 10.6             | 7,000       | 17.1             | 1,300                            | 8.1              | 3,400       | 8.3              |
| UT                      | 100                  | 1.8              | 100         | 0.7              | 100                              | 1.8              | 300         | 2.0              |
| VA                      |                      |                  | 100         | 4.2              |                                  |                  | 100         | 4.2              |
| WA                      |                      |                  |             |                  | 100                              | 11.1             |             |                  |
| WV                      |                      |                  |             |                  |                                  |                  | 300         | 13.6             |
| WI                      |                      |                  |             |                  |                                  |                  | 100         | 8.3              |
| WY                      |                      |                  | 100         | 0.7              | 100                              | 3.3              | 200         | 1.4              |
| Oth<br>Sts <sup>3</sup> |                      |                  | 100         | 3.3              | 200                              | 11.1             | 800         | 26.7             |
| Unpub <sup>4</sup>      |                      |                  | 100         |                  |                                  |                  |             |                  |
| US                      | 2,200                | 3.3              | 8,900       | 5.6              | 5,700                            | 8.6              | 10,300      | 6.5              |

<sup>1</sup> Unpublished States include AZ, KS, NV, and SD for lambs.

<sup>2</sup> Other predators include wolves, ravens, vultures, and other animals.

<sup>3</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>4</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent from Digestive  
and Respiratory Problems by State and United States, 2004**

| State                   | Digestive Problems <sup>1</sup> |                     |             |                     | Respiratory Problems <sup>2</sup> |                     |             |                     |
|-------------------------|---------------------------------|---------------------|-------------|---------------------|-----------------------------------|---------------------|-------------|---------------------|
|                         | Sheep                           | % Total<br>Non-Pred | Lambs       | % Total<br>Non-Pred | Sheep                             | % Total<br>Non-Pred | Lambs       | % Total<br>Non-Pred |
|                         | <i>Head</i>                     | <i>Pct</i>          | <i>Head</i> | <i>Pct</i>          | <i>Head</i>                       | <i>Pct</i>          | <i>Head</i> | <i>Pct</i>          |
| AZ                      | 50                              | 10.0                | 100         | 6.7                 | 100                               | 20.0                | 1,200       | 80.0                |
| CA                      | 1,300                           | 11.8                | 800         | 20.0                | 1,800                             | 16.4                | 900         | 22.5                |
| CO                      | 200                             | 7.1                 | 3,600       | 32.7                | 100                               | 3.6                 | 4,100       | 37.3                |
| ID                      | 200                             | 3.4                 | 1,400       | 26.9                | 500                               | 8.5                 | 800         | 15.4                |
| IL                      | 200                             | 9.5                 | 1,000       | 19.2                | 500                               | 23.8                | 1,200       | 23.1                |
| IN                      | 300                             | 15.8                | 800         | 12.7                | 200                               | 10.5                | 2,200       | 34.9                |
| IA                      | 600                             | 10.9                | 3,400       | 14.6                | 700                               | 12.7                | 8,600       | 36.9                |
| KS                      | 300                             | 9.7                 | 900         | 15.0                | 500                               | 16.1                | 2,200       | 36.7                |
| KY                      | 100                             | 12.5                | 200         | 10.5                | 100                               | 12.5                | 200         | 10.5                |
| MD                      | 100                             | 25.0                | 100         | 8.3                 |                                   |                     | 100         | 8.3                 |
| MI                      | 500                             | 19.2                | 1,400       | 26.9                | 200                               | 7.7                 | 1,300       | 25.0                |
| MN                      | 600                             | 8.8                 | 3,000       | 19.9                | 800                               | 11.8                | 4,000       | 26.5                |
| MO                      | 400                             | 17.4                | 1,600       | 24.2                | 100                               | 4.3                 | 1,000       | 15.2                |
| MT                      | 500                             | 5.0                 | 1,200       | 19.7                | 800                               | 7.9                 | 1,000       | 16.4                |
| NE                      | 300                             | 8.6                 | 1,300       | 15.3                | 400                               | 11.4                | 1,100       | 12.9                |
| NV                      | 100                             | 3.8                 | 100         | 3.3                 | 800                               | 30.8                | 1,500       | 50.0                |
| N ENG <sup>3</sup>      | 100                             | 14.3                | 300         | 13.6                |                                   |                     | 100         | 4.5                 |
| NM                      | 600                             | 14.0                | 400         | 20.0                | 500                               | 11.6                | 200         | 10.0                |
| NY                      | 100                             | 2.7                 | 200         | 4.1                 | 400                               | 10.8                | 600         | 12.2                |
| NC                      | 100                             | 10.0                | 800         | 44.4                |                                   |                     | 100         | 5.6                 |
| ND                      | 300                             | 9.1                 | 700         | 14.0                | 300                               | 9.1                 | 1,200       | 24.0                |
| OH                      | 400                             | 8.9                 | 2,800       | 20.7                | 200                               | 4.4                 | 3,000       | 22.2                |
| OK                      | 400                             | 20.0                | 500         | 9.4                 | 400                               | 20.0                | 800         | 15.1                |
| OR                      | 500                             | 9.6                 | 400         | 18.2                | 300                               | 5.8                 | 900         | 40.9                |
| PA                      | 400                             | 11.8                | 900         | 11.5                | 100                               | 2.9                 | 900         | 11.5                |
| SD                      | 900                             | 11.3                | 3,200       | 14.5                | 1,000                             | 12.5                | 4,800       | 21.8                |
| TN                      | 100                             | 25.0                | 100         | 11.1                |                                   |                     | 200         | 22.2                |
| TX                      | 6,800                           | 27.2                | 5,500       | 32.4                | 1,700                             | 6.8                 | 2,700       | 15.9                |
| UT                      | 400                             | 7.5                 | 500         | 15.6                | 200                               | 3.8                 | 300         | 9.4                 |
| VA                      | 200                             | 10.5                | 800         | 15.7                | 200                               | 10.5                | 700         | 13.7                |
| WA                      | 200                             | 9.5                 | 100         | 16.7                | 200                               | 9.5                 | 200         | 33.3                |
| WV                      | 300                             | 21.4                | 400         | 14.3                | 200                               | 14.3                | 500         | 17.9                |
| WI                      | 200                             | 7.7                 | 1,400       | 15.9                | 200                               | 7.7                 | 1,700       | 19.3                |
| WY                      | 500                             | 6.3                 | 1,000       | 25.0                | 300                               | 3.8                 | 700         | 17.5                |
| Oth<br>Sts <sup>4</sup> | 1,000                           | 23.8                | 4,100       | 51.3                | 200                               | 4.8                 | 800         | 10.0                |
| US                      | 19,250                          | 12.9                | 45,000      | 19.8                | 14,000                            | 9.4                 | 51,800      | 22.8                |

<sup>1</sup> Includes bloat, scours, parasites, enterotoxemia, acidosis, etc.

<sup>2</sup> Includes pneumonia, shipping fever, etc.

<sup>3</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

**Losses of Sheep and Lambs: Number and Percent from Metabolic Problems  
and Other Diseases by State and United States, 2004**

| State                | Metabolic Problems <sup>1</sup> |                  |             |                  | Other Diseases <sup>2</sup> |                  |             |                  |
|----------------------|---------------------------------|------------------|-------------|------------------|-----------------------------|------------------|-------------|------------------|
|                      | Sheep                           | % Total Non-Pred | Lambs       | % Total Non-Pred | Sheep                       | % Total Non-Pred | Lambs       | % Total Non-Pred |
|                      | <i>Head</i>                     | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i>                 | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                   |                                 |                  |             |                  |                             |                  |             |                  |
| CA                   | 200                             | 1.8              | 100         | 2.5              | 1,300                       | 11.8             | 200         | 5.0              |
| CO                   |                                 |                  |             |                  | 300                         | 10.7             | 100         | 0.9              |
| ID                   | 900                             | 15.3             | 100         | 1.9              | 500                         | 8.5              | 400         | 7.7              |
| IL                   | 100                             | 4.8              | 100         | 1.9              | 100                         | 4.8              |             |                  |
| IN                   |                                 |                  | 100         | 1.6              |                             |                  | 300         | 4.8              |
| IA                   | 100                             | 1.8              | 500         | 2.1              | 100                         | 1.8              | 800         | 3.4              |
| KS                   | 100                             | 3.2              |             |                  | 100                         | 3.2              | 100         | 1.7              |
| KY                   |                                 |                  |             |                  |                             |                  | 100         | 5.3              |
| MD                   |                                 |                  | 100         | 8.3              |                             |                  |             |                  |
| MI                   | 100                             | 3.8              | 100         | 1.9              | 100                         | 3.8              | 200         | 3.8              |
| MN                   | 600                             | 8.8              | 500         | 3.3              | 300                         | 4.4              | 400         | 2.6              |
| MO                   | 100                             | 4.3              | 400         | 6.1              | 100                         | 4.3              | 500         | 7.6              |
| MT                   | 300                             | 3.0              | 200         | 3.3              | 900                         | 8.9              | 200         | 3.3              |
| NE                   | 100                             | 2.9              | 100         | 1.2              | 200                         | 5.7              | 700         | 8.2              |
| NV                   | 100                             | 3.8              |             |                  |                             |                  | 100         | 3.3              |
| N ENG <sup>3</sup>   | 100                             | 14.3             |             |                  |                             |                  | 100         | 4.5              |
| NM                   | 100                             | 2.3              |             |                  | 200                         | 4.7              | 200         | 10.0             |
| NY                   | 100                             | 2.7              | 100         | 2.0              | 600                         | 16.2             |             |                  |
| NC                   |                                 |                  | 300         | 16.7             |                             |                  |             |                  |
| ND                   | 100                             | 3.0              | 200         | 4.0              | 200                         | 6.1              | 100         | 2.0              |
| OH                   | 200                             | 4.4              | 500         | 3.7              | 200                         | 4.4              | 100         | 0.7              |
| OK                   |                                 |                  | 100         | 1.9              |                             |                  | 100         | 1.9              |
| OR                   | 300                             | 5.8              | 100         | 4.5              | 200                         | 3.8              | 100         | 4.5              |
| PA                   | 100                             | 2.9              | 700         | 9.0              | 300                         | 8.8              | 300         | 3.8              |
| SD                   | 200                             | 2.5              | 500         | 2.3              | 400                         | 5.0              | 600         | 2.7              |
| TN                   |                                 |                  |             |                  |                             |                  | 100         | 11.1             |
| TX                   | 800                             | 3.2              | 700         | 4.1              | 2,500                       | 10.0             | 800         | 4.7              |
| UT                   | 100                             | 1.9              | 100         | 3.1              | 500                         | 9.4              | 200         | 6.3              |
| VA                   | 100                             | 5.3              | 100         | 2.0              |                             |                  |             |                  |
| WA                   | 100                             | 4.8              | 100         | 16.7             |                             |                  |             |                  |
| WV                   |                                 |                  |             |                  |                             |                  |             |                  |
| WI                   | 100                             | 3.8              | 200         | 2.3              | 200                         | 7.7              | 300         | 3.4              |
| WY                   | 300                             | 3.8              | 300         | 7.5              | 400                         | 5.0              | 300         | 7.5              |
| Oth Sts <sup>4</sup> |                                 |                  |             |                  | 100                         | 2.4              | 100         | 1.3              |
| Unpub <sup>5</sup>   | 100                             |                  |             |                  | 100                         |                  | 100         |                  |
| US                   | 5,500                           | 3.7              | 6,300       | 2.8              | 9,900                       | 6.6              | 7,600       | 3.3              |

<sup>1</sup> Unpublished States include IN, KY, MD, and OK for sheep. Includes milk fever, twin lamb disease, pregnancy toxemia, etc.

<sup>2</sup> Unpublished States include AZ, KY and N Eng for sheep only; IL and NY for lambs only; MD, NC, VA, WA, and WV for sheep and lambs. Includes mastitis, foot rot, boils, etc.

<sup>3</sup> New England includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>5</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent from Weather  
and Lambing Problems by State and United States, 2004**

| State                   | Weather Related <sup>1</sup> |                     |             |                     | Lambing Problems <sup>2</sup> |                     |             |                     |
|-------------------------|------------------------------|---------------------|-------------|---------------------|-------------------------------|---------------------|-------------|---------------------|
|                         | Sheep                        | % Total<br>Non-Pred | Lambs       | % Total<br>Non-Pred | Sheep                         | % Total<br>Non-Pred | Lambs       | % Total<br>Non-Pred |
|                         | <i>Head</i>                  | <i>Pct</i>          | <i>Head</i> | <i>Pct</i>          | <i>Head</i>                   | <i>Pct</i>          | <i>Head</i> | <i>Pct</i>          |
| AZ                      | 50                           | 10.0                |             |                     |                               |                     |             |                     |
| CA                      | 200                          | 1.8                 | 600         | 15.0                | 600                           | 5.5                 |             |                     |
| CO                      | 100                          | 3.6                 | 800         | 7.3                 | 500                           | 17.9                |             |                     |
| ID                      | 100                          | 1.7                 | 500         | 9.6                 | 1,100                         | 18.6                |             |                     |
| IL                      |                              |                     | 1,100       | 21.2                | 200                           | 9.5                 | 1,300       | 25.0                |
| IN                      |                              |                     | 1,300       | 20.6                | 500                           | 26.3                | 1,000       | 15.9                |
| IA                      | 100                          | 1.8                 | 1,000       | 4.3                 | 1,000                         | 18.2                | 5,700       | 24.5                |
| KS                      | 200                          | 6.5                 | 1,600       | 26.7                | 400                           | 12.9                | 600         | 10.0                |
| KY                      |                              |                     | 200         | 10.5                | 400                           | 50.0                | 1,000       | 52.6                |
| MD                      |                              |                     | 400         | 33.3                | 100                           | 25.0                | 300         | 25.0                |
| MI                      |                              |                     | 900         | 17.3                | 300                           | 11.5                | 400         | 7.7                 |
| MN                      | 200                          | 2.9                 | 1,400       | 9.3                 | 1,000                         | 14.7                | 2,400       | 15.9                |
| MO                      | 100                          | 4.3                 | 900         | 13.6                | 500                           | 21.7                | 1,600       | 24.2                |
| MT                      | 500                          | 5.0                 | 1,400       | 23.0                | 1,300                         | 12.9                |             |                     |
| NE                      | 800                          | 22.9                | 1,200       | 14.1                | 300                           | 8.6                 | 2,400       | 28.2                |
| NV                      |                              |                     | 500         | 16.7                | 100                           | 3.8                 |             |                     |
| N ENG <sup>3</sup>      |                              |                     | 300         | 13.6                | 100                           | 14.3                | 1,000       | 45.5                |
| NM                      | 300                          | 7.0                 | 200         | 10.0                | 500                           | 11.6                |             |                     |
| NY                      |                              |                     | 2,000       | 40.8                | 800                           | 21.6                | 1,800       | 36.7                |
| NC                      |                              |                     | 100         | 5.6                 | 100                           | 10.0                | 200         | 11.1                |
| ND                      | 300                          | 9.1                 | 600         | 12.0                | 300                           | 9.1                 | 1,500       | 30.0                |
| OH                      | 200                          | 4.4                 | 2,600       | 19.3                | 1,100                         | 24.4                | 1,000       | 7.4                 |
| OK                      |                              |                     | 800         | 15.1                | 500                           | 25.0                | 1,100       | 20.8                |
| OR                      | 300                          | 5.8                 | 200         | 9.1                 | 500                           | 9.6                 |             |                     |
| PA                      | 200                          | 5.9                 | 2,000       | 25.6                | 600                           | 17.6                | 1,600       | 20.5                |
| SD                      | 300                          | 3.8                 | 3,500       | 15.9                | 900                           | 11.3                | 5,500       | 25.0                |
| TN                      |                              |                     | 300         | 33.3                | 100                           | 25.0                | 100         | 11.1                |
| TX                      | 1,000                        | 4.0                 | 3,000       | 17.6                | 2,400                         | 9.6                 |             |                     |
| UT                      | 100                          | 1.9                 | 300         | 9.4                 | 600                           | 11.3                |             |                     |
| VA                      |                              |                     | 800         | 15.7                | 200                           | 10.5                | 1,000       | 19.6                |
| WA                      |                              |                     |             |                     | 200                           | 9.5                 |             |                     |
| WV                      |                              |                     | 200         | 7.1                 | 100                           | 7.1                 | 600         | 21.4                |
| WI                      | 100                          | 3.8                 | 1,100       | 12.5                | 700                           | 26.9                | 1,000       | 11.4                |
| WY                      | 400                          | 5.0                 | 800         | 20.0                | 1,800                         | 22.5                |             |                     |
| Oth<br>Sts <sup>4</sup> | 100                          | 2.4                 | 1,100       | 13.8                | 200                           | 4.8                 | 300         | 3.8                 |
| Unpub <sup>5</sup>      | 100                          |                     |             |                     |                               |                     |             |                     |
| US                      | 5,750                        | 3.9                 | 33,700      | 14.8                | 20,000                        | 13.4                | 33,400      | 14.7                |

<sup>1</sup> Unpublished States include KY, N Eng, NY, TN, and VA for sheep. Includes chilling, drowning, lightning, etc.

<sup>2</sup> Lambs lost due to lambing problems are not applicable for AZ, CA, ID, MT, NV, NM, OR, TX, UT, WA, and WY. These States ask lambs lost before and after docking while all other States only ask for lambs lost. Estimates shown here are after docking losses only. Before docking loss estimates are available in state level publications for CO, ID, MT, UT, and WY.

<sup>3</sup> New England includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>5</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent from Old Age  
and Being on Their Back by State and United States, 2004**

| State                   | Old Age <sup>1</sup> |                  |             |                  | On Their Back <sup>2</sup> |                  |             |                  |
|-------------------------|----------------------|------------------|-------------|------------------|----------------------------|------------------|-------------|------------------|
|                         | Sheep                | % Total Non-Pred | Lambs       | % Total Non-Pred | Sheep                      | % Total Non-Pred | Lambs       | % Total Non-Pred |
|                         | <i>Head</i>          | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i>                | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                      | 100                  | 20.0             |             |                  |                            |                  |             |                  |
| CA                      | 3,900                | 35.5             |             |                  | 100                        | 0.9              |             |                  |
| CO                      | 600                  | 21.4             |             |                  | 100                        | 3.6              | 100         | 0.9              |
| ID                      | 1,100                | 18.6             |             |                  | 200                        | 3.4              | 100         | 1.9              |
| IL                      | 600                  | 28.6             |             |                  |                            |                  |             |                  |
| IN                      | 400                  | 21.1             |             |                  |                            |                  |             |                  |
| IA                      | 2,200                | 40.0             |             |                  |                            |                  | 100         | 0.4              |
| KS                      | 1,000                | 32.3             |             |                  |                            |                  |             |                  |
| KY                      | 100                  | 12.5             |             |                  |                            |                  |             |                  |
| MD                      | 200                  | 50.0             |             |                  |                            |                  | 100         | 8.3              |
| MI                      | 900                  | 34.6             |             |                  | 100                        | 3.8              |             |                  |
| MN                      | 1,700                | 25.0             |             |                  | 100                        | 1.5              |             |                  |
| MO                      | 800                  | 34.8             |             |                  |                            |                  |             |                  |
| MT                      | 3,400                | 33.7             |             |                  | 400                        | 4.0              |             |                  |
| NE                      | 700                  | 20.0             |             |                  |                            |                  |             |                  |
| NV                      | 1,000                | 38.5             |             |                  |                            |                  |             |                  |
| N ENG <sup>3</sup>      | 300                  | 42.9             |             |                  |                            |                  |             |                  |
| NM                      | 700                  | 16.3             |             |                  | 200                        | 4.7              |             |                  |
| NY                      | 900                  | 24.3             |             |                  | 200                        | 5.4              |             |                  |
| NC                      | 200                  | 20.0             |             |                  |                            |                  |             |                  |
| ND                      | 1,200                | 36.4             |             |                  | 100                        | 3.0              |             |                  |
| OH                      | 1,100                | 24.4             |             |                  | 100                        | 2.2              | 100         | 0.7              |
| OK                      | 300                  | 15.0             |             |                  |                            |                  |             |                  |
| OR                      | 1,100                | 21.2             |             |                  | 200                        | 3.8              |             |                  |
| PA                      | 1,100                | 32.4             |             |                  | 100                        | 2.9              |             |                  |
| SD                      | 2,800                | 35.0             |             |                  | 200                        | 2.5              | 100         | 0.5              |
| TN                      | 100                  | 25.0             |             |                  |                            |                  |             |                  |
| TX                      | 4,600                | 18.4             |             |                  | 100                        | 0.4              |             |                  |
| UT                      | 1,200                | 22.6             |             |                  | 100                        | 1.9              |             |                  |
| VA                      | 700                  | 36.8             |             |                  | 100                        | 5.3              |             |                  |
| WA                      | 800                  | 38.1             |             |                  |                            |                  |             |                  |
| WV                      | 600                  | 42.9             |             |                  |                            |                  |             |                  |
| WI                      | 800                  | 30.8             |             |                  |                            |                  |             |                  |
| WY                      | 1,900                | 23.8             |             |                  | 600                        | 7.5              | 100         | 2.5              |
| Oth<br>Sts <sup>4</sup> | 800                  | 19.0             |             |                  |                            |                  |             |                  |
| Unpub <sup>5</sup>      |                      |                  |             |                  |                            |                  | 100         |                  |
| US                      | 39,900               | 26.8             |             |                  | 3,000                      | 2.0              | 800         | 0.4              |

<sup>1</sup> Not applicable for Lambs.

<sup>2</sup> Unpublished States include IL, MI, MO, and OR for lambs.

<sup>3</sup> New England includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>5</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent from Poisoning  
and Theft by State and United States, 2004**

| State                | Poisoning <sup>1</sup> |                  |             |                  | Theft       |                  |             |                  |
|----------------------|------------------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|
|                      | Sheep                  | % Total Non-Pred | Lambs       | % Total Non-Pred | Sheep       | % Total Non-Pred | Lambs       | % Total Non-Pred |
|                      | <i>Head</i>            | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                   |                        |                  |             |                  |             |                  | 100         | 6.7              |
| CA                   | 500                    | 4.5              | 200         | 5.0              |             |                  | 100         | 2.5              |
| CO                   | 500                    | 17.9             | 400         | 3.6              |             |                  | 200         | 1.8              |
| ID                   | 200                    | 3.4              | 600         | 11.5             |             |                  |             |                  |
| IL                   | 100                    | 4.8              |             |                  |             |                  |             |                  |
| IN                   | 100                    | 5.3              |             |                  |             |                  |             |                  |
| IA                   | 100                    | 1.8              | 100         | 0.4              |             |                  |             |                  |
| MI                   |                        |                  | 100         | 1.9              |             |                  | 100         | 1.9              |
| MN                   | 100                    | 1.5              | 200         | 1.3              |             |                  |             |                  |
| MT                   | 500                    | 5.0              | 300         | 4.9              |             |                  |             |                  |
| NE                   |                        |                  | 100         | 1.2              |             |                  |             |                  |
| NV                   | 100                    | 3.8              |             |                  |             |                  |             |                  |
| NM                   | 400                    | 9.3              | 100         | 5.0              | 100         | 2.3              | 400         | 20.0             |
| NY                   |                        |                  |             |                  |             |                  | 100         | 2.0              |
| ND                   | 100                    | 3.0              |             |                  |             |                  |             |                  |
| OH                   | 300                    | 6.7              | 200         | 1.5              |             |                  | 100         | 0.7              |
| OK                   |                        |                  | 300         | 5.7              | 100         | 5.0              |             |                  |
| OR                   | 100                    | 1.9              | 100         | 4.5              |             |                  |             |                  |
| SD                   | 100                    | 1.3              | 200         | 0.9              |             |                  |             |                  |
| TX                   | 800                    | 3.2              | 600         | 3.5              | 100         | 0.4              | 600         | 3.5              |
| UT                   | 500                    | 9.4              | 200         | 6.3              |             |                  |             |                  |
| VA                   |                        |                  | 100         | 2.0              |             |                  |             |                  |
| WV                   |                        |                  | 100         | 3.6              |             |                  |             |                  |
| WY                   | 1,200                  | 15.0             | 600         | 15.0             | 300         | 3.8              |             |                  |
| Oth Sts <sup>3</sup> |                        |                  |             |                  | 100         | 2.4              |             |                  |
| Unpub <sup>4</sup>   | 100                    |                  |             |                  |             |                  |             |                  |
| US                   | 5,800                  | 3.9              | 4,500       | 2.0              | 700         | 0.5              | 1,700       | 0.7              |

<sup>1</sup> Unpublished States include KS, MO, NE, and WV for sheep. Includes nitrate poisoning, noxious feeds, noxious weeds, etc.

<sup>2</sup> New England includes CT, ME, MA, NH, RI, and VT.

<sup>3</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

<sup>4</sup> States with values that did not meet publication requirements were combined into an Unpublished States category.

**Losses of Sheep and Lambs: Number and Percent from Other Non-Predators  
and Unknown Non-Predators by State and United States, 2004**

| State                | Other Non-Predator <sup>1</sup> |                  |             |                  | Unknown Non-Predator <sup>2</sup> |                  |             |                  |
|----------------------|---------------------------------|------------------|-------------|------------------|-----------------------------------|------------------|-------------|------------------|
|                      | Sheep                           | % Total Non-Pred | Lambs       | % Total Non-Pred | Sheep                             | % Total Non-Pred | Lambs       | % Total Non-Pred |
|                      | <i>Head</i>                     | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       | <i>Head</i>                       | <i>Pct</i>       | <i>Head</i> | <i>Pct</i>       |
| AZ                   | 100                             | 20.0             |             |                  | 100                               | 20.0             | 100         | 6.7              |
| CA                   | 600                             | 5.5              | 200         | 5.0              | 500                               | 4.5              | 900         | 22.5             |
| CO                   |                                 |                  | 600         | 5.5              | 400                               | 14.3             | 1,100       | 10.0             |
| ID                   | 400                             | 6.8              | 200         | 3.8              | 700                               | 11.9             | 1,100       | 21.2             |
| IL                   | 100                             | 4.8              | 200         | 3.8              | 200                               | 9.5              | 300         | 5.8              |
| IN                   | 100                             | 5.3              | 300         | 4.8              | 300                               | 15.8             | 300         | 4.8              |
| IA                   | 300                             | 5.5              | 1,700       | 7.3              | 300                               | 5.5              | 1,400       | 6.0              |
| KS                   | 100                             | 3.2              | 300         | 5.0              | 400                               | 12.9             | 300         | 5.0              |
| KY                   |                                 |                  | 100         | 5.3              | 100                               | 12.5             | 100         | 5.3              |
| MD                   |                                 |                  |             |                  |                                   |                  | 100         | 8.3              |
| MI                   | 100                             | 3.8              | 400         | 7.7              | 300                               | 11.5             | 300         | 5.8              |
| MN                   | 600                             | 8.8              | 1,300       | 8.6              | 800                               | 11.8             | 1,900       | 12.6             |
| MO                   |                                 |                  | 300         | 4.5              | 200                               | 8.7              | 300         | 4.5              |
| MT                   | 300                             | 3.0              | 400         | 6.6              | 1,200                             | 11.9             | 1,400       | 23.0             |
| NE                   | 100                             | 2.9              | 200         | 2.4              | 600                               | 17.1             | 1,400       | 16.5             |
| NV                   |                                 |                  |             |                  | 400                               | 15.4             | 800         | 26.7             |
| N ENG <sup>3</sup>   |                                 |                  | 300         | 13.6             | 100                               | 14.3             | 100         | 4.5              |
| NM                   | 200                             | 4.7              | 200         | 10.0             | 500                               | 11.6             | 300         | 15.0             |
| NY                   | 200                             | 5.4              |             |                  | 400                               | 10.8             | 100         | 2.0              |
| NC                   |                                 |                  | 200         | 11.1             | 600                               | 60.0             | 100         | 5.6              |
| ND                   | 100                             | 3.0              | 600         | 12.0             | 300                               | 9.1              | 100         | 2.0              |
| OH                   | 200                             | 4.4              | 900         | 6.7              | 500                               | 11.1             | 2,200       | 16.3             |
| OK                   | 100                             | 5.0              | 300         | 5.7              | 200                               | 10.0             | 1,300       | 24.5             |
| OR                   | 1,000                           | 19.2             | 100         | 4.5              | 700                               | 13.5             | 300         | 13.6             |
| PA                   | 100                             | 2.9              | 400         | 5.1              | 400                               | 11.8             | 1,000       | 12.8             |
| SD                   | 200                             | 2.5              | 700         | 3.2              | 1,000                             | 12.5             | 2,900       | 13.2             |
| TN                   |                                 |                  |             |                  | 100                               | 25.0             | 100         | 11.1             |
| TX                   | 1,300                           | 5.2              | 600         | 3.5              | 2,900                             | 11.6             | 2,500       | 14.7             |
| UT                   |                                 |                  |             |                  | 1,600                             | 30.2             | 1,600       | 50.0             |
| VA                   | 100                             | 5.3              | 400         | 7.8              | 300                               | 15.8             | 1,200       | 23.5             |
| WA                   | 400                             | 19.0             | 100         | 16.7             | 200                               | 9.5              | 100         | 16.7             |
| WV                   |                                 |                  | 300         | 10.7             | 200                               | 14.3             | 700         | 25.0             |
| WI                   | 100                             | 3.8              | 400         | 4.5              | 200                               | 7.7              | 2,700       | 30.7             |
| WY                   |                                 |                  |             |                  | 300                               | 3.8              | 200         | 5.0              |
| Oth Sts <sup>4</sup> | 300                             | 7.1              | 600         | 7.5              | 1,000                             | 23.8             | 800         | 10.0             |
| US                   | 7,100                           | 4.8              | 12,300      | 5.4              | 18,000                            | 12.1             | 30,100      | 13.2             |

<sup>1</sup> Includes accidents, fire, starvation, dehydration, etc.

<sup>2</sup> Exact cause of death is unidentifiable.

<sup>3</sup> New England includes CT, ME, MA, NH, RI, and VT.

<sup>4</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

**Non-Lethal Methods Used to Prevent Losses of Sheep and Lambs to Predators,  
by State and United States, 2004**

| State                   | Fencing        | Guard Dogs     | Llamas         | Donkeys        | Lamb Shed      |
|-------------------------|----------------|----------------|----------------|----------------|----------------|
|                         | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> |
| AZ                      | 40.1           | 86.5           | 1.2            | 2.4            | 32.2           |
| CA                      | 71.9           | 39.1           | 8.6            | 3.4            | 33.8           |
| CO                      | 50.7           | 28.8           | 39.0           | 2.4            | 43.7           |
| ID                      | 55.7           | 57.8           | 12.6           | 2.3            | 40.8           |
| IL                      | 52.6           | 25.8           | 7.2            | 7.8            | 52.6           |
| IN                      | 58.6           | 23.4           | 19.3           | 7.6            | 52.7           |
| IA                      | 27.9           | 48.5           | 16.3           | 3.3            | 29.5           |
| KS                      | 26.9           | 23.6           | 13.8           | 9.3            | 37.3           |
| KY                      | 59.7           | 54.4           | 8.4            | 10.9           | 13.7           |
| MD                      | 64.9           | 9.1            | 1.3            | 17.5           | 32.3           |
| MI                      | 85.0           | 5.2            | 3.4            | 0.8            | 9.5            |
| MN                      | 58.7           | 29.2           | 6.5            | 3.5            | 57.8           |
| MO                      | 20.9           | 40.8           | 22.5           | 7.2            | 9.9            |
| MT                      | 23.4           | 25.3           | 27.7           | 7.0            | 44.4           |
| NE                      | 35.9           | 44.0           | 10.9           | 7.7            | 45.1           |
| NV                      | 77.5           | 19.7           | 20.1           | 2.6            | 30.4           |
| N ENG <sup>1</sup>      | 60.6           | 53.6           | 18.3           | 3.1            | 18.4           |
| NM                      | 42.7           | 34.2           | 13.1           | 4.5            | 32.7           |
| NY                      | 81.1           | 10.1           | 5.6            | 2.1            | 1.2            |
| NC                      | 50.1           | 24.8           | 24.2           | 47.9           | 24.6           |
| ND                      | 21.0           | 30.8           | 22.7           | 6.7            | 4.5            |
| OH                      | 48.2           | 26.5           | 20.4           | 10.2           | 23.2           |
| OK                      | 67.6           | 35.2           | 19.2           | 16.5           | 13.4           |
| OR                      | 53.6           | 17.0           | 19.4           | 9.7            | 47.9           |
| PA                      | 58.0           | 41.7           | 6.7            | 10.2           | 57.6           |
| SD                      | 19.4           | 23.1           | 20.8           | 12.1           | 41.4           |
| TN                      | 27.3           | 28.5           | 4.3            | 21.7           | 16.0           |
| TX                      | 32.0           | 28.5           | 10.5           | 23.5           | 16.3           |
| UT                      | 48.4           | 31.4           | 23.4           | 7.9            | 49.4           |
| VA                      | 57.3           | 31.5           | 11.6           | 9.4            | 22.8           |
| WA                      | 68.5           | 25.0           | 16.4           | 6.7            | 35.4           |
| WV                      | 67.3           | 15.5           | 0.4            | 12.9           | 22.8           |
| WI                      | 35.7           | 15.5           | 11.8           | 6.2            | 36.5           |
| WY                      | 48.3           | 56.9           | 50.3           | 3.4            | 18.0           |
| Oth<br>Sts <sup>2</sup> | 69.0           | 44.9           | 1.7            | 11.7           | 33.5           |
| US                      | 52.5           | 31.8           | 14.0           | 9.1            | 30.8           |

<sup>1</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>2</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.



**Non-Lethal Methods Used to Prevent Losses of Sheep and Lambs to Predators,  
by State and United States, 2004**

| State                   | Herding        | Night Penning  | Fright Tactics | Removing<br>Carion |
|-------------------------|----------------|----------------|----------------|--------------------|
|                         | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i>     |
| AZ                      | 11.6           | 27.8           | 2.4            | 4.2                |
| CA                      | 10.0           | 35.6           | 5.9            | 12.5               |
| CO                      | 4.7            | 69.8           | 2.7            | 31.6               |
| ID                      | 5.7            | 14.8           | 4.2            | 5.3                |
| IL                      | 8.3            | 53.9           | 5.5            | 23.5               |
| IN                      | 6.4            | 39.3           | 3.4            | 27.1               |
| IA                      | 1.7            | 14.9           | 0.8            | 1.4                |
| KS                      | 2.1            | 39.7           | 1.8            | 9.6                |
| KY                      | 1.4            | 45.0           | 3.8            | 1.5                |
| MD                      | 0.6            | 3.3            | 7.5            | 1.8                |
| MI                      | 1.9            | 10.2           | 0.4            | 1.5                |
| MN                      | 7.1            | 37.8           | 1.6            | 28.4               |
| MO                      | 5.7            | 34.2           |                | 0.4                |
| MT                      | 18.7           | 33.7           | 7.1            | 28.6               |
| NE                      | 5.5            | 56.7           | 2.5            | 8.8                |
| NV                      | 18.5           | 51.0           | 0.7            | 15.0               |
| N ENG <sup>1</sup>      | 1.7            | 34.5           | 0.1            | 1.0                |
| NM                      | 5.4            | 53.5           | 11.3           | 26.0               |
| NY                      | 0.3            | 31.8           | 0.3            | 2.0                |
| NC                      | 0.7            | 10.5           | 0.3            | 12.0               |
| ND                      | 0.5            | 34.8           | 2.9            | 1.6                |
| OH                      | 0.8            | 38.3           | 1.8            | 6.0                |
| OK                      | 2.2            | 31.2           |                | 2.6                |
| OR                      | 4.6            | 39.8           | 2.3            | 37.4               |
| PA                      | 22.4           | 41.0           | 3.2            | 7.3                |
| SD                      | 6.0            | 39.3           | 2.4            | 16.4               |
| TN                      | 8.2            | 41.8           | 4.0            | 4.3                |
| TX                      | 5.2            | 23.7           | 0.8            | 4.7                |
| UT                      | 14.4           | 27.7           | 5.5            | 33.3               |
| VA                      | 5.8            | 21.5           | 3.2            | 12.0               |
| WA                      | 2.4            | 36.6           | 2.0            | 1.0                |
| WV                      | 14.2           | 12.0           | 1.3            | 10.6               |
| WI                      | 3.8            | 27.9           | 3.1            | 18.4               |
| WY                      | 6.5            | 55.7           | 1.6            | 2.7                |
| Oth<br>Sts <sup>2</sup> | 4.5            | 19.3           | 0.2            | 16.1               |
| US                      | 5.7            | 32.9           | 2.2            | 11.7               |

<sup>1</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>2</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

**Non-Lethal Methods Used to Prevent Losses of Sheep and Lambs to Predators,  
by State and United States, 2004**

| State                   | Culling        | Change<br>Bedding | Frequent<br>Checks | Other          |
|-------------------------|----------------|-------------------|--------------------|----------------|
|                         | <i>Percent</i> | <i>Percent</i>    | <i>Percent</i>     | <i>Percent</i> |
| AZ                      | 15.0           | 22.9              | 27.1               | 1.2            |
| CA                      | 16.2           | 12.3              | 11.8               | 2.4            |
| CO                      | 32.4           | 3.4               | 9.5                | 2.1            |
| ID                      | 6.9            | 5.9               | 15.6               | 1.0            |
| IL                      | 23.6           | 7.9               | 22.4               | 7.3            |
| IN                      | 42.6           | 34.5              | 36.5               | 3.4            |
| IA                      | 1.4            | 0.3               | 1.5                | 2.0            |
| KS                      | 8.0            | 1.7               | 3.9                | 7.8            |
| KY                      | 4.7            | 8.7               | 5.3                | 13.3           |
| MD                      | 9.9            | 0.9               | 16.2               | 0.6            |
| MI                      | 4.7            | 3.2               | 8.4                | 1.6            |
| MN                      | 32.9           | 7.6               | 17.3               | 3.2            |
| MO                      | 0.8            | 0.2               | 5.9                | 1.0            |
| MT                      | 32.4           | 19.2              | 31.1               | 1.5            |
| NE                      | 16.9           | 9.0               | 9.2                | 6.8            |
| NV                      | 4.0            | 18.3              | 16.4               | 1.4            |
| N ENG <sup>1</sup>      | 1.1            | 14.5              | 2.0                | 4.7            |
| NM                      | 14.5           | 11.0              | 33.5               | 6.4            |
| NY                      | 0.2            | 2.0               |                    | 2.2            |
| NC                      | 5.8            | 9.9               | 13.1               | 0.7            |
| ND                      | 2.9            | 2.0               | 6.2                | 10.7           |
| OH                      | 11.7           | 6.6               | 11.4               | 5.3            |
| OK                      | 2.9            | 0.7               | 3.6                | 6.5            |
| OR                      | 28.7           | 10.3              | 32.2               | 1.9            |
| PA                      | 21.7           | 11.6              | 19.2               | 0.8            |
| SD                      | 25.1           | 14.2              | 18.9               | 5.2            |
| TN                      | 4.7            | 3.6               | 20.8               | 0.4            |
| TX                      | 11.2           | 6.5               | 16.7               | 4.2            |
| UT                      | 42.1           | 27.5              | 24.1               | 4.6            |
| VA                      | 18.5           | 11.8              | 18.6               | 4.4            |
| WA                      | 4.0            | 0.1               | 2.5                | 2.0            |
| WV                      | 10.9           | 13.6              | 65.1               | 2.8            |
| WI                      | 14.1           | 10.0              | 3.9                | 9.1            |
| WY                      | 6.6            | 3.3               | 11.7               | 7.2            |
| Oth<br>Sts <sup>2</sup> | 3.4            | 6.8               | 3.1                | 4.3            |
| US                      | 13.8           | 8.9               | 14.0               | 3.8            |

<sup>1</sup> N ENG includes CT, ME, MA, NH, RI, and VT.

<sup>2</sup> Other States include AL, AK, AR, DE, FL, GA, HI, LA, MS, NJ, and SC.

**Losses of All Goats: Number by Predators,  
Diseases or Other Known Causes, Unknown Causes, and Total Value, 2004**

| Item                               | Losses      |             | Total Value          |
|------------------------------------|-------------|-------------|----------------------|
|                                    | Goats       | Kids        | All Goat Losses      |
|                                    | <i>Head</i> | <i>Head</i> | <i>1,000 Dollars</i> |
| Predator                           | 40,000      | 115,000     | 15,965               |
| Diseases and<br>Other Known Causes | 60,000      | 120,000     | 18,540               |
| Unknown Causes                     | 29,200      | 51,000      | 8,261                |
| Total                              | 129,200     | 286,000     | 42,766               |

<sup>1</sup> Goat value per head is based on a two-year straight average, using Texas data, of the value of all goats reported in the January 1 Sheep and Goat Survey from 2004 to 2005.

## Reliability of Sheep and Goat Predator and Non-Predator Loss Estimates

**Survey Procedures:** A random sample of U.S. producers was surveyed to provide data for these estimates. Survey procedures ensured that all sheep producers, regardless of size, had a chance to be included in the survey. Large producers were sampled more heavily than small operations. About 22,000 operators were contacted during the first half of January by mail, telephone and face-to-face personal interview.

**Estimation Procedures:** Total death losses from all causes for sheep and lambs were as reported in *"Meat Animals, Production, Disposition, and Income - 2004"* (released April 28, 2005).

In setting the predator and non-predator loss estimates, first total predator and non-predator losses were estimated as a percent of total losses, then specific predator and non-predator losses were estimated as a percent of total predator and non-predator losses.

**Revision Policy:** Revisions to previous estimates are made to improve the current estimate. Previous year estimates are subject to revision when current estimates are made. Estimates for losses from all causes are subject to revision in next year's *"Meat Animals, Production, Disposition, and Income"*. No revision to predator or non-predator losses is planned.

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