

# Milk Production



USDA  
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## January Milk Production Up 3.7 Percent

**Milk production** in the 20 major States during January totaled 11.7 billion pounds, up 3.7 percent from production in these same States in January 1998. December revised production, at 11.5 billion pounds was up 3.7 percent from December 1997.

**Production per cow** in the 20 major States averaged 1,523 pounds for January, 57 pounds above January 1998.

**The number of cows** on farms in the 20 major States was 7.71 million head, 19,000 head less than January 1998 but 1,000 head more than December 1998.

**Special this issue:**

Annual Revisions, 1997-1998  
Inventory, Operations, and Production by Size Group, including the new  
200-499 and 500+ Size Groups.

**Milk Cows and Production: By Quarter, United States, 1998-99 <sup>1</sup>**

| Quarter | Milk Cows <sup>2</sup> |                   | Milk Per Cow <sup>3</sup> |               | Milk Production <sup>3</sup> |                       |                  |
|---------|------------------------|-------------------|---------------------------|---------------|------------------------------|-----------------------|------------------|
|         | 1998                   | 1999              | 1998                      | 1999          | 1998                         | 1999                  | Change From 1998 |
|         | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>Pounds</i>             | <i>Pounds</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Percent</i>   |
| Jan-Mar | 9,176                  |                   | 4,268                     |               | 39,164                       |                       |                  |
| Apr-Jun | 9,171                  |                   | 4,451                     |               | 40,821                       |                       |                  |
| Jul-Sep | 9,149                  |                   | 4,210                     |               | 38,519                       |                       |                  |
| Oct-Dec | 9,137                  |                   | 4,261                     |               | 38,937                       |                       |                  |
| Annual  | 9,158                  |                   | 17,192                    |               | 157,441                      |                       |                  |

<sup>1</sup> May not add due to rounding.

<sup>2</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>3</sup> Excludes milk sucked by calves.

**Milk Cows and Production: By Month, 20 Selected States, 1998-99**

| Month  | Milk Cows <sup>1</sup> |                   | Milk Per Cow <sup>2</sup> |               | Milk Production <sup>2</sup> |                       |                  |
|--------|------------------------|-------------------|---------------------------|---------------|------------------------------|-----------------------|------------------|
|        | 1998                   | 1999              | 1998                      | 1999          | 1998                         | 1999                  | Change From 1998 |
|        | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>Pounds</i>             | <i>Pounds</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Percent</i>   |
| Jan    | 7,728                  | 7,709             | 1,466                     | 1,523         | 11,327                       | 11,742                | 3.7              |
| Feb    | 7,716                  |                   | 1,347                     |               | 10,394                       |                       |                  |
| Mar    | 7,709                  |                   | 1,515                     |               | 11,678                       |                       |                  |
| Apr    | 7,713                  |                   | 1,501                     |               | 11,579                       |                       |                  |
| May    | 7,719                  |                   | 1,556                     |               | 12,011                       |                       |                  |
| Jun    | 7,718                  |                   | 1,477                     |               | 11,396                       |                       |                  |
| Jul    | 7,709                  |                   | 1,468                     |               | 11,314                       |                       |                  |
| Aug    | 7,708                  |                   | 1,443                     |               | 11,124                       |                       |                  |
| Sep    | 7,701                  |                   | 1,386                     |               | 10,672                       |                       |                  |
| Oct    | 7,695                  |                   | 1,446                     |               | 11,125                       |                       |                  |
| Nov    | 7,697                  |                   | 1,407                     |               | 10,829                       |                       |                  |
| Dec    | 7,708                  |                   | 1,489                     |               | 11,481                       |                       |                  |
| Annual | 7,710                  |                   | 17,501                    |               | 134,930                      |                       |                  |

<sup>1</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

**Estimated Milk Production: United States, 1998-99**

| Month | By Month              |                       |                  | Cumulative            |                       |                  |
|-------|-----------------------|-----------------------|------------------|-----------------------|-----------------------|------------------|
|       | 1998                  | 1999                  | Change From 1998 | 1998                  | 1999                  | Change From 1998 |
|       | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Percent</i>   | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Percent</i>   |
| Jan   | 13,282                | 13,769                | 3.7              | 13,282                | 13,769                | 3.7              |
| Feb   | 12,188                |                       |                  | 25,470                |                       |                  |
| Mar   | 13,694                |                       |                  | 39,164                |                       |                  |
| Apr   | 13,510                |                       |                  | 52,674                |                       |                  |
| May   | 14,015                |                       |                  | 66,689                |                       |                  |
| Jun   | 13,296                |                       |                  | 79,985                |                       |                  |
| Jul   | 13,162                |                       |                  | 93,147                |                       |                  |
| Aug   | 12,942                |                       |                  | 106,089               |                       |                  |
| Sep   | 12,415                |                       |                  | 118,504               |                       |                  |
| Oct   | 12,956                |                       |                  | 131,460               |                       |                  |
| Nov   | 12,611                |                       |                  | 144,071               |                       |                  |
| Dec   | 13,370                |                       |                  | 157,441               |                       |                  |

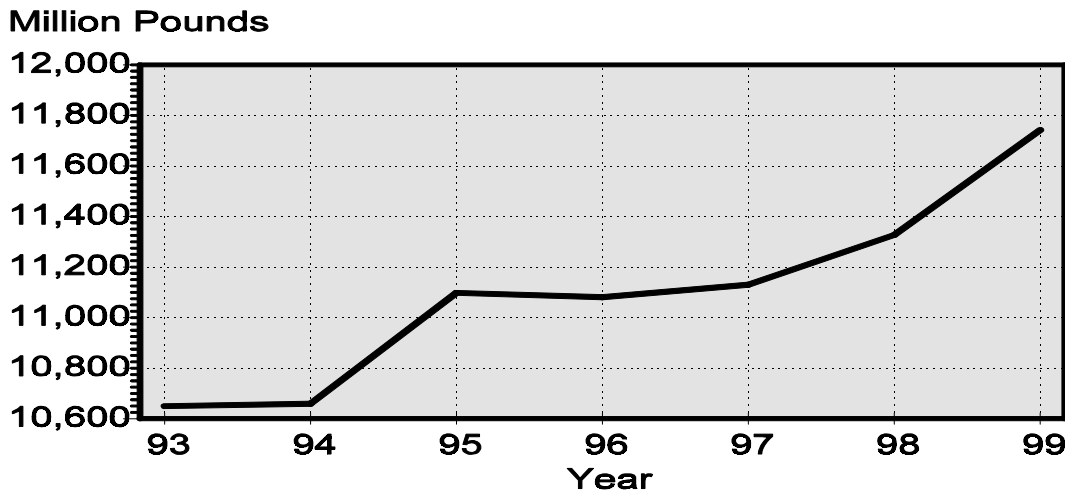
**Milk Cows and Production: By State, January 1998-99**

| Month          | Milk Cows <sup>1</sup> |                   | Milk Per Cow <sup>2</sup> |               | Milk Production <sup>2</sup> |                       | Change From 1998 |
|----------------|------------------------|-------------------|---------------------------|---------------|------------------------------|-----------------------|------------------|
|                | 1998                   | 1999              | 1998                      | 1999          | 1998                         | 1999                  |                  |
|                | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>Pounds</i>             | <i>Pounds</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Percent</i>   |
| AZ             | 130                    | 132               | 1,800                     | 1,910         | 234                          | 252                   | 7.7              |
| CA             | 1,402                  | 1,442             | 1,670                     | 1,690         | 2,341                        | 2,437                 | 4.1              |
| FL             | 160                    | 158               | 1,375                     | 1,380         | 220                          | 218                   | -0.9             |
| ID             | 283                    | 302               | 1,640                     | 1,640         | 464                          | 495                   | 6.7              |
| IL             | 130                    | 125               | 1,400                     | 1,430         | 182                          | 179                   | -1.6             |
| IN             | 135                    | 137               | 1,370                     | 1,380         | 185                          | 189                   | 2.2              |
| IA             | 225                    | 230               | 1,440                     | 1,515         | 324                          | 348                   | 7.4              |
| KY             | 145                    | 135               | 1,035                     | 1,075         | 150                          | 145                   | -3.3             |
| MI             | 298                    | 301               | 1,480                     | 1,545         | 441                          | 465                   | 5.4              |
| MN             | 555                    | 545               | 1,420                     | 1,510         | 788                          | 823                   | 4.4              |
| MO             | 175                    | 165               | 1,155                     | 1,240         | 202                          | 205                   | 1.5              |
| NM             | 216                    | 218               | 1,510                     | 1,725         | 326                          | 376                   | 15.3             |
| NY             | 700                    | 702               | 1,380                     | 1,440         | 966                          | 1,011                 | 4.7              |
| OH             | 265                    | 260               | 1,430                     | 1,440         | 379                          | 374                   | -1.3             |
| PA             | 625                    | 617               | 1,495                     | 1,475         | 934                          | 910                   | -2.6             |
| TX             | 368                    | 340               | 1,340                     | 1,470         | 493                          | 500                   | 1.4              |
| VT             | 163                    | 162               | 1,385                     | 1,445         | 226                          | 234                   | 3.5              |
| VA             | 125                    | 122               | 1,295                     | 1,285         | 162                          | 157                   | -3.1             |
| WA             | 250                    | 248               | 1,745                     | 1,860         | 436                          | 461                   | 5.7              |
| WI             | 1,378                  | 1,368             | 1,360                     | 1,435         | 1,874                        | 1,963                 | 4.7              |
| 20-State Total | 7,728                  | 7,709             | 1,466                     | 1,523         | 11,327                       | 11,742                | 3.7              |

<sup>1</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

**January Milk Production, 1993-1999  
20 States**



**Milk Cows and Production: By State, December 1997-98<sup>1</sup>**

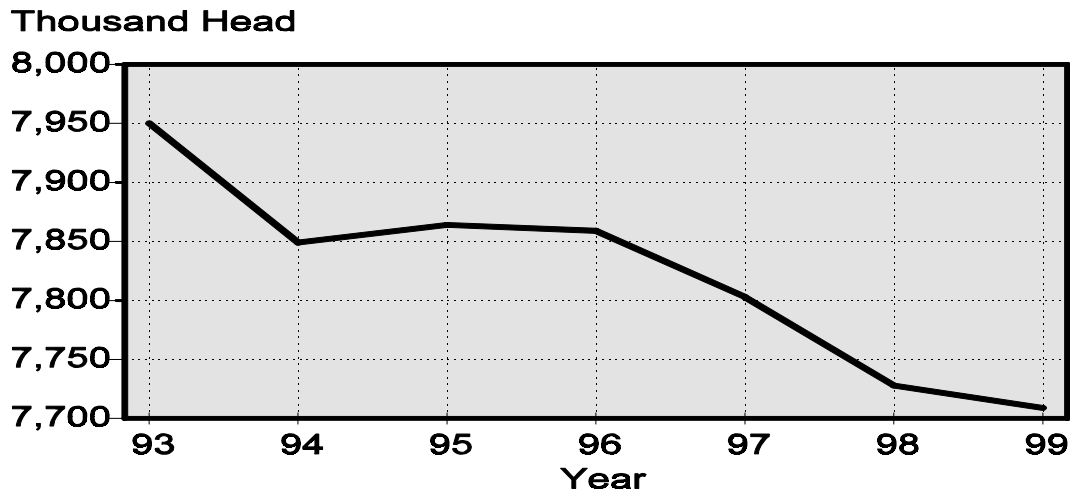
| State          | Milk Cows <sup>2</sup> |                   | Milk per Cow <sup>3</sup> |               | Milk Production <sup>3</sup> |                       | Change From 1997 |
|----------------|------------------------|-------------------|---------------------------|---------------|------------------------------|-----------------------|------------------|
|                | 1997                   | 1998              | 1997                      | 1998          | 1997                         | 1998                  |                  |
|                | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>Pounds</i>             | <i>Pounds</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Percent</i>   |
| AZ             | 130                    | 132               | 1,710                     | 1,795         | 222                          | 237                   | 6.8              |
| CA             | 1,400                  | 1,439             | 1,645                     | 1,650         | 2,303                        | 2,374                 | 3.1              |
| FL             | 160                    | 157               | 1,315                     | 1,320         | 210                          | 207                   | -1.4             |
| ID             | 280                    | 301               | 1,620                     | 1,660         | 454                          | 500                   | 10.1             |
| IL             | 130                    | 125               | 1,380                     | 1,420         | 179                          | 178                   | -0.6             |
| IN             | 135                    | 137               | 1,375                     | 1,390         | 186                          | 190                   | 2.2              |
| IA             | 225                    | 230               | 1,395                     | 1,505         | 314                          | 346                   | 10.2             |
| KY             | 145                    | 136               | 985                       | 1,030         | 143                          | 140                   | -2.1             |
| MI             | 301                    | 299               | 1,473                     | 1,525         | 443                          | 456                   | 2.9              |
| MN             | 560                    | 545               | 1,365                     | 1,475         | 764                          | 804                   | 5.2              |
| MO             | 175                    | 165               | 1,080                     | 1,200         | 189                          | 198                   | 4.8              |
| NM             | 212                    | 218               | 1,595                     | 1,715         | 338                          | 374                   | 10.7             |
| NY             | 700                    | 702               | 1,360                     | 1,400         | 952                          | 983                   | 3.3              |
| OH             | 266                    | 261               | 1,375                     | 1,400         | 366                          | 365                   | -0.3             |
| PA             | 625                    | 619               | 1,430                     | 1,435         | 894                          | 888                   | -0.7             |
| TX             | 370                    | 340               | 1,280                     | 1,400         | 474                          | 476                   | 0.4              |
| VT             | 162                    | 162               | 1,360                     | 1,420         | 220                          | 230                   | 4.5              |
| VA             | 125                    | 122               | 1,290                     | 1,270         | 161                          | 155                   | -3.7             |
| WA             | 250                    | 248               | 1,720                     | 1,805         | 430                          | 448                   | 4.2              |
| WI             | 1,382                  | 1,370             | 1,325                     | 1,410         | 1,831                        | 1,932                 | 5.5              |
| 20-State Total | 7,733                  | 7,708             | 1,432                     | 1,489         | 11,073                       | 11,481                | 3.7              |

<sup>1</sup> 1998 revised.

<sup>2</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>3</sup> Excludes milk sucked by calves.

**January Milk Cows, 1993-1999  
20 States**



**Milk Cows and Production: United States, 1989-98 <sup>1</sup>**

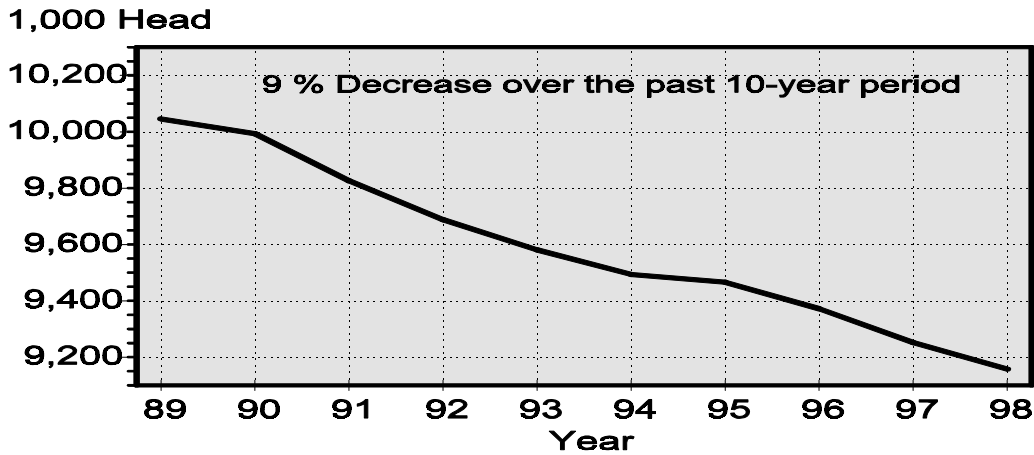
| Year | Milk Cows <sup>2</sup><br><i>1,000 Head</i> | Production per Cow <sup>3</sup> |                                | Milk Production <sup>3</sup> |
|------|---|---------------------------------|--------------------------------|------------------------------|
|      |   | Milk<br><i>Pounds</i>           | Total<br><i>Million Pounds</i> |                              |
| 1989 | 10,046                                      | 14,323                          | 143,893                        |                              |
| 1990 | 9,993                                       | 14,782                          | 147,721                        |                              |
| 1991 | 9,826                                       | 15,031                          | 147,697                        |                              |
| 1992 | 9,688                                       | 15,570                          | 150,847                        |                              |
| 1993 | 9,581                                       | 15,722                          | 150,636                        |                              |
| 1994 | 9,494                                       | 16,179                          | 153,602                        |                              |
| 1995 | 9,466                                       | 16,405                          | 155,292                        |                              |
| 1996 | 9,372                                       | 16,433                          | 154,006                        |                              |
| 1997 | 9,252                                       | 16,871                          | 156,091                        |                              |
| 1998 | 9,158                                       | 17,192                          | 157,441                        |                              |

<sup>1</sup> May not add due to rounding.

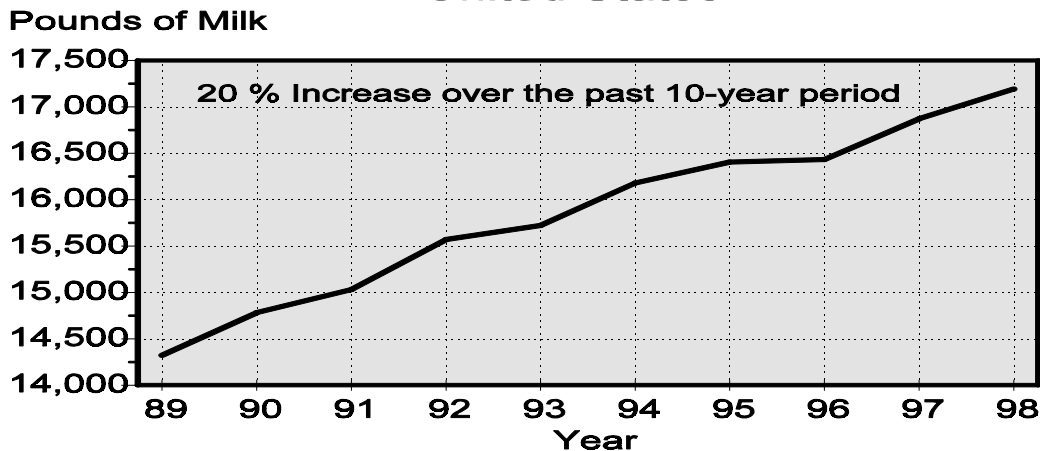
<sup>2</sup> Average number during year, excluding heifers not yet fresh.

<sup>3</sup> Excludes milk sucked by calves.

**Milk Cows, 1989-1998  
United States**



**Rate per Cow, 1989-1998  
United States**



**Milk Cows and Production: By State and United States, 1997-98**

| State           | Milk Cows <sup>1</sup> |                   | Milk Per Cow <sup>2</sup> |               | Milk Production <sup>2</sup> |                       | Change<br>From<br>1997<br><br>Percent |
|-----------------|------------------------|-------------------|---------------------------|---------------|------------------------------|-----------------------|---------------------------------------|
|                 | 1997                   | 1998              | 1997                      | 1998          | 1997                         | 1998                  |                                       |
|                 | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>Pounds</i>             | <i>Pounds</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> |                                       |
| AL              | 31                     | 28                | 13,484                    | 13,786        | 418                          | 386                   | -7.7                                  |
| AK              | 0.9                    | 0.9               | 16,667                    | 15,922        | 15.00                        | 14.33                 | -4.5                                  |
| AZ              | 127                    | 131               | 20,976                    | 20,458        | 2,664                        | 2,680                 | 0.6                                   |
| AR              | 53                     | 49                | 11,981                    | 13,041        | 635                          | 639                   | 0.6                                   |
| CA              | 1,391                  | 1,420             | 19,829                    | 19,442        | 27,582                       | 27,607                | 0.1                                   |
| CO              | 84                     | 83                | 19,988                    | 20,349        | 1,679                        | 1,689                 | 0.6                                   |
| CT              | 30                     | 30                | 16,967                    | 17,633        | 509                          | 529                   | 3.9                                   |
| DE              | 10.0                   | 11.0              | 14,800                    | 14,827        | 148.0                        | 163.1                 | 10.2                                  |
| FL              | 160                    | 160               | 15,475                    | 14,588        | 2,476                        | 2,334                 | -5.7                                  |
| GA              | 97                     | 93                | 15,340                    | 15,452        | 1,488                        | 1,437                 | -3.4                                  |
| HI              | 9.1                    | 8.9               | 13,516                    | 14,494        | 123                          | 129                   | 4.9                                   |
| ID              | 272                    | 292               | 19,092                    | 19,743        | 5,193                        | 5,765                 | 11.0                                  |
| IL              | 133                    | 128               | 16,564                    | 16,570        | 2,203                        | 2,121                 | -3.7                                  |
| IN              | 137                    | 136               | 15,978                    | 16,154        | 2,189                        | 2,197                 | 0.4                                   |
| IA              | 230                    | 223               | 16,057                    | 17,188        | 3,693                        | 3,833                 | 3.8                                   |
| KS              | 81                     | 82                | 15,864                    | 15,915        | 1,285                        | 1,305                 | 1.6                                   |
| KY              | 148                    | 140               | 12,264                    | 12,214        | 1,815                        | 1,710                 | -5.8                                  |
| LA              | 66                     | 63                | 12,030                    | 11,921        | 794                          | 751                   | -5.4                                  |
| ME              | 41                     | 41                | 16,146                    | 16,585        | 662                          | 680                   | 2.7                                   |
| MD              | 86                     | 86                | 15,419                    | 15,581        | 1,326                        | 1,340                 | 1.1                                   |
| MA              | 26                     | 26                | 16,692                    | 16,846        | 434                          | 438                   | 0.9                                   |
| MI              | 306                    | 300               | 17,680                    | 17,970        | 5,410                        | 5,391                 | -0.4                                  |
| MN              | 569                    | 551               | 16,186                    | 16,833        | 9,210                        | 9,275                 | 0.7                                   |
| MS              | 47                     | 42                | 13,489                    | 13,786        | 634                          | 579                   | -8.7                                  |
| MO              | 177                    | 170               | 13,345                    | 13,924        | 2,362                        | 2,367                 | 0.2                                   |
| MT              | 19                     | 18                | 15,526                    | 16,167        | 295                          | 291                   | -1.4                                  |
| NE              | 69                     | 70                | 15,072                    | 15,000        | 1,040                        | 1,050                 | 1.0                                   |
| NV              | 26                     | 25                | 18,346                    | 18,640        | 477                          | 466                   | -2.3                                  |
| NH              | 20                     | 20                | 16,400                    | 16,700        | 328                          | 334                   | 1.8                                   |
| NJ              | 21                     | 19                | 14,238                    | 15,368        | 299                          | 292                   | -2.3                                  |
| NM              | 202                    | 217               | 19,856                    | 20,065        | 4,011                        | 4,354                 | 8.6                                   |
| NY              | 699                    | 701               | 16,495                    | 16,748        | 11,530                       | 11,740                | 1.8                                   |
| NC              | 79                     | 75                | 16,506                    | 16,800        | 1,304                        | 1,260                 | -3.4                                  |
| ND              | 56                     | 51                | 12,732                    | 13,843        | 713                          | 706                   | -1.0                                  |
| OH              | 270                    | 264               | 16,352                    | 16,629        | 4,415                        | 4,390                 | -0.6                                  |
| OK              | 92                     | 92                | 13,576                    | 13,435        | 1,249                        | 1,236                 | -1.0                                  |
| OR              | 90                     | 89                | 17,889                    | 17,787        | 1,610                        | 1,583                 | -1.7                                  |
| PA              | 629                    | 623               | 16,951                    | 17,411        | 10,662                       | 10,847                | 1.7                                   |
| RI              | 2.0                    | 2.1               | 15,950                    | 15,714        | 31.9                         | 33.0                  | 3.4                                   |
| SC              | 26                     | 25                | 15,269                    | 14,960        | 397                          | 374                   | -5.8                                  |
| SD              | 105                    | 102               | 13,181                    | 14,069        | 1,384                        | 1,435                 | 3.7                                   |
| TN              | 113                    | 105               | 14,239                    | 14,295        | 1,609                        | 1,501                 | -6.7                                  |
| TX              | 378                    | 352               | 15,259                    | 15,923        | 5,768                        | 5,605                 | -2.8                                  |
| UT              | 91                     | 90                | 16,923                    | 16,811        | 1,540                        | 1,513                 | -1.8                                  |
| VT              | 160                    | 161               | 16,250                    | 16,801        | 2,600                        | 2,705                 | 4.0                                   |
| VA              | 125                    | 124               | 14,864                    | 14,847        | 1,858                        | 1,841                 | -0.9                                  |
| WA              | 253                    | 248               | 20,968                    | 21,476        | 5,305                        | 5,326                 | 0.4                                   |
| WV              | 18                     | 18                | 14,778                    | 15,444        | 266                          | 278                   | 4.5                                   |
| WI              | 1,393                  | 1,369             | 16,057                    | 16,685        | 22,368                       | 22,842                | 2.1                                   |
| WY              | 6.6                    | 6.1               | 12,697                    | 13,082        | 83.8                         | 79.8                  | -4.8                                  |
| US <sup>3</sup> | 9,252                  | 9,158             | 16,871                    | 17,192        | 156,091                      | 157,441               | 0.9                                   |

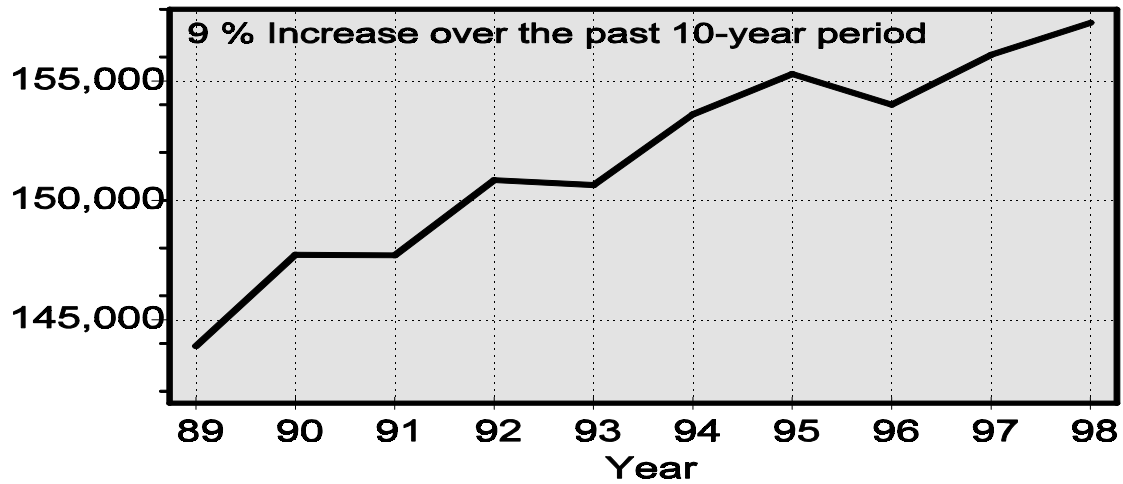
<sup>1</sup> Average number during year, excluding heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

<sup>3</sup> May not add due to rounding.

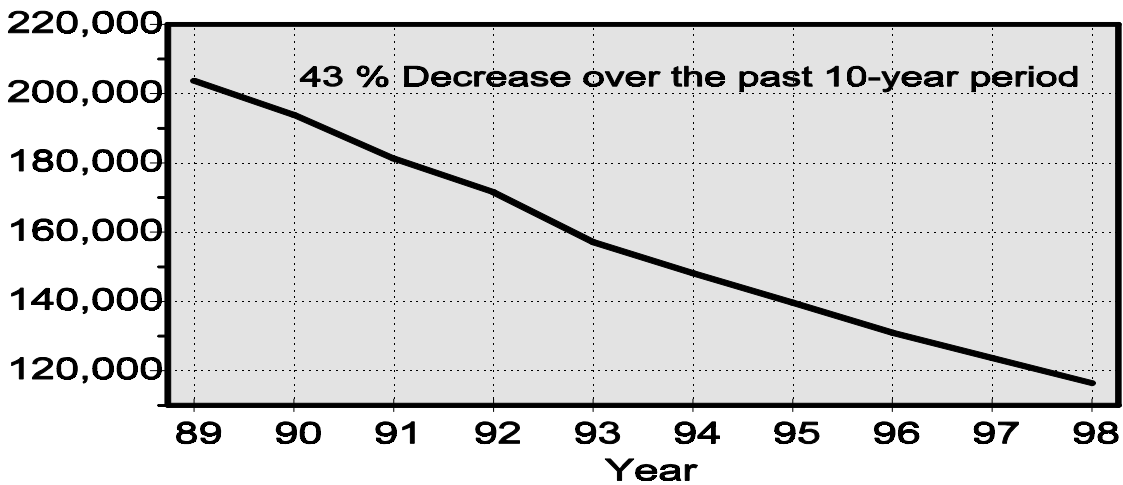
## Milk Production, 1989-1998 United States

Million Pounds



## Milk Cow Operations, 1989-1998 United States

Number



**Milk Cows: Number by Month, State, and 20 State Total, 1997<sup>1</sup>**

| State  | Jan               | Feb               | Mar               | Apr               | May               | Jun               |                          |
|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|
|        | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> |                          |
| AZ     | 122               | 123               | 125               | 127               | 128               | 128               |                          |
| CA     | 1,382             | 1,384             | 1,385             | 1,387             | 1,389             | 1,390             |                          |
| FL     | 159               | 160               | 162               | 162               | 162               | 161               |                          |
| ID     | 268               | 267               | 264               | 265               | 268               | 269               |                          |
| IL     | 135               | 134               | 134               | 133               | 133               | 133               |                          |
| IN     | 140               | 139               | 139               | 138               | 138               | 137               |                          |
| IA     | 235               | 234               | 233               | 232               | 231               | 230               |                          |
| KY     | 150               | 150               | 149               | 148               | 148               | 148               |                          |
| MI     | 311               | 310               | 306               | 306               | 308               | 310               |                          |
| MN     | 580               | 575               | 575               | 575               | 570               | 570               |                          |
| MO     | 180               | 179               | 179               | 179               | 178               | 177               |                          |
| NM     | 197               | 197               | 199               | 199               | 200               | 200               |                          |
| NY     | 700               | 700               | 700               | 698               | 698               | 698               |                          |
| OH     | 275               | 274               | 274               | 273               | 272               | 271               |                          |
| PA     | 632               | 632               | 631               | 631               | 630               | 629               |                          |
| TX     | 390               | 387               | 385               | 382               | 380               | 378               |                          |
| VT     | 159               | 159               | 158               | 159               | 160               | 161               |                          |
| VA     | 125               | 124               | 124               | 125               | 125               | 124               |                          |
| WA     | 255               | 255               | 254               | 254               | 255               | 254               |                          |
| WI     | 1,408             | 1,404             | 1,400             | 1,395             | 1,393             | 1,392             |                          |
| 20-Sts | 7,803             | 7,787             | 7,776             | 7,768             | 7,766             | 7,760             |                          |
|        | Jul               | Aug               | Sep               | Oct               | Nov               | Dec               | Annual Avg. <sup>2</sup> |
| AZ     | 128               | 128               | 129               | 130               | 130               | 130               | 127                      |
| CA     | 1,391             | 1,392             | 1,394             | 1,395             | 1,397             | 1,400             | 1,391                    |
| FL     | 161               | 160               | 159               | 159               | 159               | 160               | 160                      |
| ID     | 273               | 276               | 278               | 278               | 280               | 280               | 272                      |
| IL     | 133               | 132               | 131               | 131               | 131               | 130               | 133                      |
| IN     | 137               | 137               | 136               | 136               | 135               | 135               | 137                      |
| IA     | 229               | 228               | 227               | 226               | 226               | 225               | 230                      |
| KY     | 148               | 147               | 147               | 147               | 146               | 145               | 148                      |
| MI     | 309               | 308               | 304               | 303               | 301               | 301               | 306                      |
| MN     | 570               | 570               | 565               | 560               | 560               | 560               | 569                      |
| MO     | 177               | 177               | 176               | 176               | 176               | 175               | 177                      |
| NM     | 201               | 203               | 205               | 207               | 209               | 212               | 202                      |
| NY     | 698               | 698               | 697               | 699               | 699               | 700               | 699                      |
| OH     | 270               | 269               | 268               | 267               | 266               | 266               | 270                      |
| PA     | 628               | 627               | 627               | 626               | 625               | 625               | 629                      |
| TX     | 376               | 374               | 373               | 371               | 371               | 370               | 378                      |
| VT     | 160               | 161               | 162               | 161               | 162               | 162               | 160                      |
| VA     | 124               | 124               | 125               | 125               | 125               | 125               | 125                      |
| WA     | 253               | 252               | 252               | 251               | 251               | 250               | 253                      |
| WI     | 1,392             | 1,390             | 1,390             | 1,388             | 1,385             | 1,382             | 1,393                    |
| 20-Sts | 7,758             | 7,753             | 7,745             | 7,736             | 7,734             | 7,733             | 7,760                    |

<sup>1</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Average based on monthly totals.



**Milk Cows: Number by Month, State, and 20 State Total, 1998<sup>1</sup>**

| State  | Jan               | Feb               | Mar               | Apr               | May               | Jun               |                          |
|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|
|        | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> |                          |
| AZ     | 130               | 130               | 130               | 130               | 130               | 131               |                          |
| CA     | 1,402             | 1,405             | 1,408             | 1,410             | 1,414             | 1,417             |                          |
| FL     | 160               | 160               | 162               | 162               | 162               | 160               |                          |
| ID     | 283               | 283               | 283               | 288               | 293               | 293               |                          |
| IL     | 130               | 129               | 129               | 129               | 128               | 128               |                          |
| IN     | 135               | 134               | 134               | 136               | 137               | 137               |                          |
| IA     | 225               | 224               | 224               | 223               | 223               | 222               |                          |
| KY     | 145               | 143               | 141               | 141               | 141               | 141               |                          |
| MI     | 298               | 296               | 297               | 298               | 299               | 303               |                          |
| MN     | 555               | 555               | 555               | 555               | 555               | 555               |                          |
| MO     | 175               | 175               | 174               | 173               | 172               | 171               |                          |
| NM     | 216               | 216               | 216               | 216               | 217               | 217               |                          |
| NY     | 700               | 698               | 697               | 700               | 701               | 701               |                          |
| OH     | 265               | 265               | 265               | 265               | 265               | 264               |                          |
| PA     | 625               | 625               | 624               | 624               | 623               | 623               |                          |
| TX     | 368               | 365               | 362               | 359               | 356               | 353               |                          |
| VT     | 163               | 162               | 161               | 162               | 162               | 162               |                          |
| VA     | 125               | 125               | 125               | 125               | 125               | 125               |                          |
| WA     | 250               | 250               | 249               | 249               | 248               | 247               |                          |
| WI     | 1,378             | 1,376             | 1,373             | 1,368             | 1,368             | 1,368             |                          |
| 20-Sts | 7,728             | 7,716             | 7,709             | 7,713             | 7,719             | 7,718             |                          |
|        | Jul               | Aug               | Sep               | Oct               | Nov               | Dec               | Annual Avg. <sup>2</sup> |
| AZ     | 132               | 132               | 132               | 132               | 132               | 132               | 131                      |
| CA     | 1,421             | 1,426             | 1,429             | 1,432             | 1,436             | 1,439             | 1,420                    |
| FL     | 159               | 159               | 158               | 158               | 158               | 157               | 160                      |
| ID     | 294               | 296               | 296               | 298               | 299               | 301               | 292                      |
| IL     | 127               | 127               | 127               | 126               | 126               | 125               | 128                      |
| IN     | 136               | 135               | 136               | 137               | 138               | 137               | 136                      |
| IA     | 222               | 222               | 222               | 221               | 221               | 230               | 223                      |
| KY     | 141               | 140               | 134               | 137               | 136               | 136               | 140                      |
| MI     | 305               | 304               | 301               | 300               | 298               | 299               | 300                      |
| MN     | 550               | 550               | 550               | 545               | 545               | 545               | 551                      |
| MO     | 170               | 169               | 168               | 167               | 166               | 165               | 170                      |
| NM     | 217               | 218               | 219               | 219               | 218               | 218               | 217                      |
| NY     | 700               | 701               | 702               | 702               | 702               | 702               | 701                      |
| OH     | 264               | 263               | 263               | 262               | 262               | 261               | 264                      |
| PA     | 623               | 623               | 623               | 621               | 620               | 619               | 623                      |
| TX     | 350               | 347               | 344               | 342               | 341               | 340               | 352                      |
| VT     | 161               | 160               | 161               | 160               | 161               | 162               | 161                      |
| VA     | 124               | 123               | 123               | 123               | 123               | 122               | 124                      |
| WA     | 247               | 247               | 247               | 247               | 247               | 248               | 248                      |
| WI     | 1,366             | 1,366             | 1,366             | 1,366             | 1,368             | 1,370             | 1,369                    |
| 20-Sts | 7,709             | 7,708             | 7,701             | 7,695             | 7,697             | 7,708             | 7,710                    |

<sup>1</sup> Includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Average based on monthly totals.

**Milk Produced per Cow: By Month,  
State, and 20 States, 1997<sup>1</sup>**

| State  | Jan           | Feb           | Mar           | Apr           | May           | Jun           |             |
|--------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
|        | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> |             |
| AZ     | 1,965         | 1,855         | 2,095         | 1,985         | 1,920         | 1,760         |             |
| CA     | 1,575         | 1,465         | 1,705         | 1,700         | 1,740         | 1,665         |             |
| FL     | 1,520         | 1,445         | 1,530         | 1,455         | 1,430         | 1,265         |             |
| ID     | 1,500         | 1,360         | 1,550         | 1,560         | 1,670         | 1,660         |             |
| IL     | 1,390         | 1,270         | 1,490         | 1,480         | 1,480         | 1,390         |             |
| IN     | 1,320         | 1,195         | 1,330         | 1,325         | 1,400         | 1,360         |             |
| IA     | 1,340         | 1,195         | 1,375         | 1,335         | 1,385         | 1,350         |             |
| KY     | 1,055         | 965           | 1,100         | 1,120         | 1,155         | 1,020         |             |
| MI     | 1,480         | 1,370         | 1,520         | 1,485         | 1,540         | 1,490         |             |
| MN     | 1,375         | 1,280         | 1,420         | 1,370         | 1,450         | 1,415         |             |
| MO     | 1,144         | 1,022         | 1,190         | 1,235         | 1,275         | 1,147         |             |
| NM     | 1,675         | 1,555         | 1,735         | 1,705         | 1,760         | 1,695         |             |
| NY     | 1,370         | 1,260         | 1,420         | 1,400         | 1,465         | 1,435         |             |
| OH     | 1,375         | 1,295         | 1,420         | 1,390         | 1,460         | 1,385         |             |
| PA     | 1,400         | 1,315         | 1,470         | 1,450         | 1,495         | 1,430         |             |
| TX     | 1,390         | 1,305         | 1,460         | 1,415         | 1,400         | 1,245         |             |
| VT     | 1,350         | 1,250         | 1,400         | 1,360         | 1,405         | 1,390         |             |
| VA     | 1,270         | 1,175         | 1,317         | 1,280         | 1,315         | 1,220         |             |
| WA     | 1,720         | 1,590         | 1,800         | 1,780         | 1,845         | 1,795         |             |
| WI     | 1,315         | 1,210         | 1,355         | 1,330         | 1,420         | 1,410         |             |
| 20-Sts | 1,426         | 1,321         | 1,492         | 1,469         | 1,524         | 1,466         |             |
|        | Jul           | Aug           | Sep           | Oct           | Nov           | Dec           | Annual Avg. |
| AZ     | 1,655         | 1,460         | 1,395         | 1,555         | 1,600         | 1,710         | 20,976      |
| CA     | 1,715         | 1,700         | 1,620         | 1,685         | 1,620         | 1,645         | 19,829      |
| FL     | 1,160         | 1,040         | 1,005         | 1,105         | 1,160         | 1,315         | 15,475      |
| ID     | 1,710         | 1,690         | 1,590         | 1,610         | 1,550         | 1,620         | 19,092      |
| IL     | 1,380         | 1,380         | 1,320         | 1,340         | 1,310         | 1,380         | 16,564      |
| IN     | 1,355         | 1,330         | 1,315         | 1,345         | 1,295         | 1,375         | 15,978      |
| IA     | 1,365         | 1,355         | 1,320         | 1,345         | 1,315         | 1,395         | 16,057      |
| KY     | 1,000         | 1,010         | 960           | 975           | 940           | 985           | 12,264      |
| MI     | 1,490         | 1,500         | 1,430         | 1,465         | 1,415         | 1,473         | 17,680      |
| MN     | 1,385         | 1,315         | 1,250         | 1,295         | 1,255         | 1,365         | 16,186      |
| MO     | 1,096         | 1,051         | 1,006         | 1,045         | 1,017         | 1,080         | 13,345      |
| NM     | 1,710         | 1,650         | 1,555         | 1,625         | 1,570         | 1,595         | 19,856      |
| NY     | 1,425         | 1,400         | 1,330         | 1,345         | 1,290         | 1,360         | 16,495      |
| OH     | 1,375         | 1,350         | 1,290         | 1,325         | 1,285         | 1,375         | 16,352      |
| PA     | 1,420         | 1,410         | 1,360         | 1,410         | 1,370         | 1,430         | 16,951      |
| TX     | 1,165         | 1,120         | 1,095         | 1,180         | 1,180         | 1,280         | 15,259      |
| VT     | 1,400         | 1,390         | 1,310         | 1,320         | 1,280         | 1,360         | 16,250      |
| VA     | 1,200         | 1,215         | 1,190         | 1,230         | 1,210         | 1,290         | 14,864      |
| WA     | 1,850         | 1,790         | 1,710         | 1,730         | 1,640         | 1,720         | 20,968      |
| WI     | 1,415         | 1,400         | 1,305         | 1,320         | 1,250         | 1,325         | 16,057      |
| 20-Sts | 1,466         | 1,439         | 1,370         | 1,412         | 1,363         | 1,432         | 17,180      |

<sup>1</sup> Excludes milk sucked by calves.

**Milk Produced per Cow: By Month,  
State, and 20 States, 1998<sup>1</sup>**

| State  | Jan           | Feb           | Mar           | Apr           | May           | Jun           |             |
|--------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
|        | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> | <i>Pounds</i> |             |
| AZ     | 1,800         | 1,660         | 1,885         | 1,885         | 1,945         | 1,780         |             |
| CA     | 1,670         | 1,480         | 1,665         | 1,640         | 1,720         | 1,635         |             |
| FL     | 1,375         | 1,300         | 1,415         | 1,375         | 1,350         | 1,170         |             |
| ID     | 1,640         | 1,490         | 1,660         | 1,620         | 1,680         | 1,660         |             |
| IL     | 1,400         | 1,310         | 1,510         | 1,490         | 1,510         | 1,360         |             |
| IN     | 1,370         | 1,260         | 1,430         | 1,410         | 1,420         | 1,340         |             |
| IA     | 1,440         | 1,320         | 1,472         | 1,465         | 1,520         | 1,433         |             |
| KY     | 1,035         | 965           | 1,105         | 1,135         | 1,115         | 1,000         |             |
| MI     | 1,480         | 1,370         | 1,530         | 1,495         | 1,560         | 1,515         |             |
| MN     | 1,420         | 1,320         | 1,465         | 1,435         | 1,490         | 1,425         |             |
| MO     | 1,155         | 1,090         | 1,240         | 1,305         | 1,285         | 1,135         |             |
| NM     | 1,510         | 1,480         | 1,705         | 1,720         | 1,795         | 1,755         |             |
| NY     | 1,380         | 1,280         | 1,440         | 1,420         | 1,490         | 1,430         |             |
| OH     | 1,430         | 1,310         | 1,460         | 1,470         | 1,485         | 1,420         |             |
| PA     | 1,495         | 1,365         | 1,535         | 1,530         | 1,550         | 1,435         |             |
| TX     | 1,340         | 1,290         | 1,475         | 1,490         | 1,480         | 1,320         |             |
| VT     | 1,385         | 1,285         | 1,430         | 1,405         | 1,480         | 1,420         |             |
| VA     | 1,295         | 1,175         | 1,345         | 1,320         | 1,310         | 1,185         |             |
| WA     | 1,745         | 1,605         | 1,805         | 1,790         | 1,885         | 1,835         |             |
| WI     | 1,360         | 1,255         | 1,410         | 1,395         | 1,480         | 1,435         |             |
| 20-Sts | 1,466         | 1,347         | 1,515         | 1,501         | 1,556         | 1,477         |             |
|        | Jul           | Aug           | Sep           | Oct           | Nov           | Dec           | Annual Avg. |
| AZ     | 1,530         | 1,410         | 1,440         | 1,650         | 1,675         | 1,795         | 20,458      |
| CA     | 1,625         | 1,590         | 1,530         | 1,650         | 1,590         | 1,650         | 19,442      |
| FL     | 1,140         | 1,040         | 990           | 1,030         | 1,115         | 1,320         | 14,588      |
| ID     | 1,700         | 1,720         | 1,630         | 1,660         | 1,600         | 1,660         | 19,743      |
| IL     | 1,320         | 1,320         | 1,280         | 1,340         | 1,350         | 1,420         | 16,570      |
| IN     | 1,350         | 1,320         | 1,260         | 1,300         | 1,300         | 1,390         | 16,154      |
| IA     | 1,425         | 1,403         | 1,350         | 1,420         | 1,410         | 1,505         | 17,188      |
| KY     | 980           | 985           | 955           | 970           | 965           | 1,030         | 12,214      |
| MI     | 1,540         | 1,535         | 1,460         | 1,505         | 1,460         | 1,525         | 17,970      |
| MN     | 1,400         | 1,360         | 1,305         | 1,375         | 1,355         | 1,475         | 16,833      |
| MO     | 1,105         | 1,055         | 1,060         | 1,125         | 1,125         | 1,200         | 13,924      |
| NM     | 1,730         | 1,710         | 1,625         | 1,680         | 1,610         | 1,715         | 20,065      |
| NY     | 1,450         | 1,420         | 1,350         | 1,380         | 1,320         | 1,400         | 16,748      |
| OH     | 1,350         | 1,350         | 1,310         | 1,350         | 1,310         | 1,400         | 16,629      |
| PA     | 1,460         | 1,435         | 1,380         | 1,415         | 1,380         | 1,435         | 17,411      |
| TX     | 1,215         | 1,195         | 1,145         | 1,260         | 1,285         | 1,400         | 15,923      |
| VT     | 1,430         | 1,420         | 1,365         | 1,380         | 1,335         | 1,420         | 16,801      |
| VA     | 1,185         | 1,210         | 1,155         | 1,205         | 1,185         | 1,270         | 14,847      |
| WA     | 1,845         | 1,840         | 1,775         | 1,815         | 1,740         | 1,805         | 21,476      |
| WI     | 1,445         | 1,425         | 1,360         | 1,380         | 1,325         | 1,410         | 16,685      |
| 20-Sts | 1,468         | 1,443         | 1,386         | 1,446         | 1,407         | 1,489         | 17,501      |

<sup>1</sup> Excludes milk sucked by calves.

**Milk Production: Total by Month, State,  
and 20 States, 1997 <sup>1</sup>**

| State  | Jan                   | Feb                   | Mar                   | Apr                   | May                   | Jun                   |                           |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|
|        | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> |                           |
| AZ     | 240                   | 228                   | 262                   | 252                   | 246                   | 225                   |                           |
| CA     | 2,177                 | 2,028                 | 2,361                 | 2,358                 | 2,417                 | 2,314                 |                           |
| FL     | 242                   | 231                   | 248                   | 236                   | 232                   | 204                   |                           |
| ID     | 402                   | 363                   | 409                   | 413                   | 448                   | 447                   |                           |
| IL     | 188                   | 170                   | 200                   | 197                   | 197                   | 185                   |                           |
| IN     | 185                   | 166                   | 185                   | 183                   | 193                   | 186                   |                           |
| IA     | 315                   | 280                   | 320                   | 310                   | 320                   | 311                   |                           |
| KY     | 158                   | 145                   | 164                   | 166                   | 171                   | 151                   |                           |
| MI     | 460                   | 425                   | 465                   | 454                   | 474                   | 462                   |                           |
| MN     | 798                   | 736                   | 817                   | 788                   | 827                   | 807                   |                           |
| MO     | 206                   | 183                   | 213                   | 221                   | 227                   | 203                   |                           |
| NM     | 330                   | 306                   | 345                   | 339                   | 352                   | 339                   |                           |
| NY     | 959                   | 882                   | 994                   | 977                   | 1,023                 | 1,002                 |                           |
| OH     | 378                   | 355                   | 389                   | 379                   | 397                   | 375                   |                           |
| PA     | 885                   | 831                   | 928                   | 915                   | 942                   | 899                   |                           |
| TX     | 542                   | 505                   | 562                   | 541                   | 532                   | 471                   |                           |
| VT     | 215                   | 199                   | 221                   | 216                   | 225                   | 224                   |                           |
| VA     | 159                   | 146                   | 163                   | 160                   | 164                   | 151                   |                           |
| WA     | 439                   | 405                   | 457                   | 452                   | 470                   | 456                   |                           |
| WI     | 1,852                 | 1,699                 | 1,897                 | 1,855                 | 1,978                 | 1,963                 |                           |
| 20-Sts | 11,130                | 10,283                | 11,600                | 11,412                | 11,835                | 11,375                |                           |
|        | Jul                   | Aug                   | Sep                   | Oct                   | Nov                   | Dec                   | Annual Total <sup>2</sup> |
| AZ     | 212                   | 187                   | 180                   | 202                   | 208                   | 222                   | 2,664                     |
| CA     | 2,386                 | 2,366                 | 2,258                 | 2,351                 | 2,263                 | 2,303                 | 27,582                    |
| FL     | 187                   | 166                   | 160                   | 176                   | 184                   | 210                   | 2,476                     |
| ID     | 467                   | 466                   | 442                   | 448                   | 434                   | 454                   | 5,193                     |
| IL     | 184                   | 182                   | 173                   | 176                   | 172                   | 179                   | 2,203                     |
| IN     | 186                   | 182                   | 179                   | 183                   | 175                   | 186                   | 2,189                     |
| IA     | 313                   | 309                   | 300                   | 304                   | 297                   | 314                   | 3,693                     |
| KY     | 148                   | 148                   | 141                   | 143                   | 137                   | 143                   | 1,815                     |
| MI     | 460                   | 462                   | 435                   | 444                   | 426                   | 443                   | 5,410                     |
| MN     | 789                   | 750                   | 706                   | 725                   | 703                   | 764                   | 9,210                     |
| MO     | 194                   | 186                   | 177                   | 184                   | 179                   | 189                   | 2,362                     |
| NM     | 344                   | 335                   | 319                   | 336                   | 328                   | 338                   | 4,011                     |
| NY     | 995                   | 977                   | 927                   | 940                   | 902                   | 952                   | 11,530                    |
| OH     | 371                   | 363                   | 346                   | 354                   | 342                   | 366                   | 4,415                     |
| PA     | 892                   | 884                   | 853                   | 883                   | 856                   | 894                   | 10,662                    |
| TX     | 438                   | 419                   | 408                   | 438                   | 438                   | 474                   | 5,768                     |
| VT     | 224                   | 224                   | 212                   | 213                   | 207                   | 220                   | 2,600                     |
| VA     | 149                   | 151                   | 149                   | 154                   | 151                   | 161                   | 1,858                     |
| WA     | 468                   | 451                   | 431                   | 434                   | 412                   | 430                   | 5,305                     |
| WI     | 1,970                 | 1,946                 | 1,814                 | 1,832                 | 1,731                 | 1,831                 | 22,368                    |
| 20-Sts | 11,377                | 11,154                | 10,610                | 10,920                | 10,545                | 11,073                | 133,314                   |

<sup>1</sup> Excludes milk sucked by calves.

<sup>2</sup> Total milk production for year.

**Milk Production: Total by Month, State,  
and 20 States, 1998 <sup>1</sup>**

| State  | Jan                   | Feb                   | Mar                   | Apr                   | May                   | Jun                   |                           |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------|
|        | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> |                           |
| AZ     | 234                   | 216                   | 245                   | 245                   | 253                   | 233                   |                           |
| CA     | 2,341                 | 2,079                 | 2,344                 | 2,312                 | 2,432                 | 2,317                 |                           |
| FL     | 220                   | 208                   | 229                   | 223                   | 219                   | 187                   |                           |
| ID     | 464                   | 422                   | 470                   | 467                   | 492                   | 486                   |                           |
| IL     | 182                   | 169                   | 195                   | 192                   | 193                   | 174                   |                           |
| IN     | 185                   | 169                   | 192                   | 192                   | 195                   | 184                   |                           |
| IA     | 324                   | 296                   | 330                   | 327                   | 339                   | 318                   |                           |
| KY     | 150                   | 138                   | 156                   | 160                   | 157                   | 141                   |                           |
| MI     | 441                   | 406                   | 454                   | 446                   | 466                   | 459                   |                           |
| MN     | 788                   | 733                   | 813                   | 796                   | 827                   | 791                   |                           |
| MO     | 202                   | 191                   | 216                   | 226                   | 221                   | 194                   |                           |
| NM     | 326                   | 320                   | 368                   | 372                   | 390                   | 381                   |                           |
| NY     | 966                   | 893                   | 1,004                 | 994                   | 1,044                 | 1,002                 |                           |
| OH     | 379                   | 347                   | 387                   | 390                   | 394                   | 375                   |                           |
| PA     | 934                   | 853                   | 958                   | 955                   | 966                   | 894                   |                           |
| TX     | 493                   | 471                   | 534                   | 535                   | 527                   | 466                   |                           |
| VT     | 226                   | 208                   | 230                   | 228                   | 240                   | 230                   |                           |
| VA     | 162                   | 147                   | 168                   | 165                   | 164                   | 148                   |                           |
| WA     | 436                   | 401                   | 449                   | 446                   | 467                   | 453                   |                           |
| WI     | 1,874                 | 1,727                 | 1,936                 | 1,908                 | 2,025                 | 1,963                 |                           |
| 20-Sts | 11,327                | 10,394                | 11,678                | 11,579                | 12,011                | 11,396                |                           |
|        | Jul                   | Aug                   | Sep                   | Oct                   | Nov                   | Dec                   | Annual Total <sup>2</sup> |
| AZ     | 202                   | 186                   | 190                   | 218                   | 221                   | 237                   | 2,680                     |
| CA     | 2,309                 | 2,267                 | 2,186                 | 2,363                 | 2,283                 | 2,374                 | 27,607                    |
| FL     | 181                   | 165                   | 156                   | 163                   | 176                   | 207                   | 2,334                     |
| ID     | 500                   | 509                   | 482                   | 495                   | 478                   | 500                   | 5,765                     |
| IL     | 168                   | 168                   | 163                   | 169                   | 170                   | 178                   | 2,121                     |
| IN     | 184                   | 178                   | 171                   | 178                   | 179                   | 190                   | 2,197                     |
| IA     | 316                   | 311                   | 300                   | 314                   | 312                   | 346                   | 3,833                     |
| KY     | 138                   | 138                   | 128                   | 133                   | 131                   | 140                   | 1,710                     |
| MI     | 470                   | 467                   | 439                   | 452                   | 435                   | 456                   | 5,391                     |
| MN     | 770                   | 748                   | 718                   | 749                   | 738                   | 804                   | 9,275                     |
| MO     | 188                   | 178                   | 178                   | 188                   | 187                   | 198                   | 2,367                     |
| NM     | 375                   | 373                   | 356                   | 368                   | 351                   | 374                   | 4,354                     |
| NY     | 1,015                 | 995                   | 948                   | 969                   | 927                   | 983                   | 11,740                    |
| OH     | 356                   | 355                   | 345                   | 354                   | 343                   | 365                   | 4,390                     |
| PA     | 910                   | 894                   | 860                   | 879                   | 856                   | 888                   | 10,847                    |
| TX     | 425                   | 415                   | 394                   | 431                   | 438                   | 476                   | 5,605                     |
| VT     | 230                   | 227                   | 220                   | 221                   | 215                   | 230                   | 2,705                     |
| VA     | 147                   | 149                   | 142                   | 148                   | 146                   | 155                   | 1,841                     |
| WA     | 456                   | 454                   | 438                   | 448                   | 430                   | 448                   | 5,326                     |
| WI     | 1,974                 | 1,947                 | 1,858                 | 1,885                 | 1,813                 | 1,932                 | 22,842                    |
| 20-Sts | 11,314                | 11,124                | 10,672                | 11,125                | 10,829                | 11,481                | 134,930                   |

<sup>1</sup> Excludes milk sucked by calves.

<sup>2</sup> Total milk production for year.

**Milk Cows and Production: Number and Milk Produced  
by Quarter, State, and United States, 1997**

| State           | Milk Cows <sup>1</sup> |                   |                   |                   | Milk Production <sup>2</sup> |                       |                       |                       |
|-----------------|------------------------|-------------------|-------------------|-------------------|------------------------------|-----------------------|-----------------------|-----------------------|
|                 | Jan-Mar                | Apr-Jun           | Jul-Sep           | Oct-Dec           | Jan-Mar                      | Apr-Jun               | Jul-Sep               | Oct-Dec               |
|                 | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> |
| AL              | 31                     | 31                | 31                | 29                | 117                          | 113                   | 88                    | 100                   |
| AK              | 0.9                    | 0.9               | 0.9               | 0.9               | 3.47                         | 3.77                  | 3.96                  | 3.80                  |
| AZ              | 123                    | 128               | 128               | 130               | 730                          | 723                   | 579                   | 632                   |
| AR              | 54                     | 53                | 52                | 51                | 170                          | 164                   | 151                   | 150                   |
| CA              | 1,384                  | 1,389             | 1,392             | 1,397             | 6,566                        | 7,089                 | 7,010                 | 6,917                 |
| CO              | 85                     | 85                | 84                | 83                | 426                          | 438                   | 420                   | 395                   |
| CT              | 29                     | 29                | 30                | 30                | 127                          | 129                   | 125                   | 128                   |
| DE              | 10.0                   | 10.0              | 10.0              | 10.0              | 38.3                         | 38.5                  | 34.4                  | 36.8                  |
| FL              | 160                    | 162               | 160               | 159               | 721                          | 672                   | 513                   | 570                   |
| GA              | 97                     | 97                | 96                | 96                | 412                          | 395                   | 324                   | 357                   |
| HI              | 9.5                    | 9.1               | 8.9               | 8.9               | 32.2                         | 33.2                  | 29.9                  | 27.7                  |
| ID              | 266                    | 267               | 276               | 279               | 1,174                        | 1,308                 | 1,375                 | 1,336                 |
| IL              | 134                    | 133               | 132               | 131               | 558                          | 579                   | 539                   | 527                   |
| IN              | 139                    | 138               | 137               | 135               | 536                          | 562                   | 547                   | 544                   |
| IA              | 234                    | 231               | 228               | 226               | 915                          | 941                   | 922                   | 915                   |
| KS              | 82                     | 82                | 81                | 80                | 330                          | 340                   | 300                   | 315                   |
| KY              | 150                    | 148               | 147               | 146               | 467                          | 488                   | 437                   | 423                   |
| LA              | 68                     | 67                | 65                | 65                | 224                          | 216                   | 170                   | 184                   |
| ME              | 40                     | 41                | 41                | 41                | 162                          | 170                   | 169                   | 161                   |
| MD              | 86                     | 86                | 86                | 86                | 335                          | 340                   | 320                   | 331                   |
| MA              | 26                     | 27                | 26                | 26                | 108                          | 113                   | 108                   | 105                   |
| MI              | 309                    | 308               | 307               | 302               | 1,350                        | 1,390                 | 1,357                 | 1,313                 |
| MN              | 577                    | 572               | 568               | 560               | 2,351                        | 2,422                 | 2,245                 | 2,192                 |
| MS              | 48                     | 47                | 47                | 44                | 183                          | 174                   | 135                   | 142                   |
| MO              | 179                    | 178               | 177               | 176               | 602                          | 651                   | 557                   | 552                   |
| MT              | 19                     | 19                | 19                | 18                | 74                           | 76                    | 75                    | 70                    |
| NE              | 69                     | 70                | 69                | 69                | 257                          | 262                   | 260                   | 261                   |
| NV              | 26                     | 26                | 26                | 26                | 115                          | 120                   | 120                   | 122                   |
| NH              | 20                     | 20                | 20                | 20                | 83                           | 84                    | 81                    | 80                    |
| NJ              | 21                     | 21                | 20                | 20                | 76                           | 79                    | 73                    | 71                    |
| NM              | 198                    | 200               | 203               | 209               | 981                          | 1,030                 | 998                   | 1,002                 |
| NY              | 700                    | 698               | 698               | 699               | 2,835                        | 3,002                 | 2,899                 | 2,794                 |
| NC              | 79                     | 79                | 78                | 78                | 333                          | 346                   | 307                   | 318                   |
| ND              | 59                     | 57                | 54                | 53                | 183                          | 188                   | 175                   | 167                   |
| OH              | 274                    | 272               | 269               | 266               | 1,122                        | 1,151                 | 1,080                 | 1,062                 |
| OK              | 93                     | 93                | 92                | 91                | 321                          | 319                   | 302                   | 307                   |
| OR              | 92                     | 91                | 89                | 88                | 391                          | 418                   | 413                   | 388                   |
| PA              | 632                    | 630               | 627               | 625               | 2,644                        | 2,756                 | 2,629                 | 2,633                 |
| RI              | 2.0                    | 2.1               | 2.0               | 2.0               | 8.2                          | 8.5                   | 7.6                   | 7.6                   |
| SC              | 26                     | 26                | 26                | 25                | 111                          | 106                   | 86                    | 94                    |
| SD              | 106                    | 106               | 104               | 102               | 339                          | 357                   | 350                   | 338                   |
| TN              | 115                    | 114               | 112               | 110               | 426                          | 426                   | 377                   | 380                   |
| TX              | 387                    | 380               | 374               | 371               | 1,609                        | 1,544                 | 1,265                 | 1,350                 |
| UT              | 92                     | 93                | 91                | 89                | 374                          | 406                   | 394                   | 366                   |
| VT              | 159                    | 160               | 161               | 162               | 635                          | 665                   | 660                   | 640                   |
| VA              | 124                    | 125               | 124               | 125               | 468                          | 475                   | 449                   | 466                   |
| WA              | 255                    | 254               | 252               | 251               | 1,301                        | 1,378                 | 1,350                 | 1,276                 |
| WV              | 19                     | 18                | 18                | 18                | 65                           | 67                    | 66                    | 68                    |
| WI              | 1,404                  | 1,393             | 1,391             | 1,385             | 5,448                        | 5,796                 | 5,730                 | 5,394                 |
| WY              | 6.7                    | 6.7               | 6.6               | 6.4               | 21.4                         | 22.1                  | 21.1                  | 19.2                  |
| US <sup>3</sup> | 9,299                  | 9,273             | 9,236             | 9,200             | 38,859                       | 40,574                | 38,627                | 38,031                |

<sup>1</sup> Quarterly average includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

<sup>3</sup> May not add due to rounding.

**Milk Cows and Production: Number and Milk Produced  
by Quarter, State, and United States, 1998**

| State           | Milk Cows <sup>1</sup> |                   |                   |                   | Milk Production <sup>2</sup> |                       |                       |                       |
|-----------------|------------------------|-------------------|-------------------|-------------------|------------------------------|-----------------------|-----------------------|-----------------------|
|                 | Jan-Mar                | Apr-Jun           | Jul-Sep           | Oct-Dec           | Jan-Mar                      | Apr-Jun               | Jul-Sep               | Oct-Dec               |
|                 | <i>1,000 Head</i>      | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>1,000 Head</i> | <i>Million Pounds</i>        | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Million Pounds</i> |
| AL              | 28                     | 28                | 27                | 27                | 109                          | 104                   | 81                    | 92                    |
| AK              | 0.9                    | 0.9               | 0.9               | 0.8               | 3.52                         | 3.67                  | 3.63                  | 3.51                  |
| AZ              | 130                    | 130               | 132               | 132               | 695                          | 731                   | 578                   | 676                   |
| AR              | 51                     | 49                | 48                | 46                | 164                          | 167                   | 154                   | 154                   |
| CA              | 1,405                  | 1,414             | 1,425             | 1,436             | 6,764                        | 7,061                 | 6,762                 | 7,020                 |
| CO              | 83                     | 83                | 83                | 83                | 407                          | 432                   | 429                   | 421                   |
| CT              | 30                     | 30                | 30                | 30                | 136                          | 136                   | 128                   | 129                   |
| DE              | 11.0                   | 11.0              | 11.0              | 11.0              | 44.0                         | 44.4                  | 37.4                  | 37.3                  |
| FL              | 161                    | 161               | 159               | 158               | 657                          | 629                   | 502                   | 546                   |
| GA              | 95                     | 95                | 93                | 90                | 403                          | 381                   | 310                   | 343                   |
| HI              | 9.0                    | 8.8               | 8.8               | 8.8               | 31.5                         | 35.7                  | 32.3                  | 29.5                  |
| ID              | 283                    | 291               | 295               | 299               | 1,356                        | 1,445                 | 1,491                 | 1,473                 |
| IL              | 129                    | 128               | 127               | 126               | 546                          | 559                   | 499                   | 517                   |
| IN              | 134                    | 137               | 136               | 137               | 546                          | 571                   | 533                   | 547                   |
| IA              | 224                    | 223               | 222               | 224               | 950                          | 984                   | 927                   | 972                   |
| KS              | 80                     | 81                | 82                | 83                | 335                          | 345                   | 305                   | 320                   |
| KY              | 143                    | 141               | 138               | 136               | 444                          | 458                   | 404                   | 404                   |
| LA              | 64                     | 63                | 63                | 63                | 216                          | 203                   | 156                   | 176                   |
| ME              | 40                     | 41                | 42                | 42                | 165                          | 173                   | 176                   | 166                   |
| MD              | 87                     | 86                | 86                | 86                | 348                          | 348                   | 324                   | 320                   |
| MA              | 26                     | 26                | 26                | 25                | 109                          | 112                   | 111                   | 106                   |
| MI              | 297                    | 300               | 303               | 299               | 1,301                        | 1,371                 | 1,376                 | 1,343                 |
| MN              | 555                    | 555               | 550               | 545               | 2,334                        | 2,414                 | 2,236                 | 2,291                 |
| MS              | 43                     | 42                | 41                | 41                | 169                          | 157                   | 121                   | 132                   |
| MO              | 175                    | 172               | 169               | 166               | 609                          | 641                   | 544                   | 573                   |
| MT              | 18                     | 18                | 18                | 18                | 72                           | 74                    | 72                    | 73                    |
| NE              | 70                     | 69                | 69                | 70                | 259                          | 263                   | 262                   | 266                   |
| NV              | 25                     | 25                | 25                | 25                | 113                          | 120                   | 118                   | 115                   |
| NH              | 19                     | 20                | 21                | 20                | 83                           | 87                    | 85                    | 79                    |
| NJ              | 19                     | 19                | 19                | 19                | 75                           | 75                    | 72                    | 70                    |
| NM              | 216                    | 217               | 218               | 218               | 1,014                        | 1,143                 | 1,104                 | 1,093                 |
| NY              | 698                    | 701               | 701               | 702               | 2,863                        | 3,040                 | 2,958                 | 2,879                 |
| NC              | 77                     | 76                | 74                | 73                | 332                          | 325                   | 291                   | 312                   |
| ND              | 53                     | 52                | 50                | 50                | 179                          | 181                   | 174                   | 172                   |
| OH              | 265                    | 265               | 263               | 262               | 1,113                        | 1,159                 | 1,056                 | 1,062                 |
| OK              | 92                     | 92                | 92                | 92                | 322                          | 316                   | 294                   | 304                   |
| OR              | 88                     | 89                | 89                | 88                | 384                          | 404                   | 401                   | 394                   |
| PA              | 625                    | 623               | 623               | 620               | 2,745                        | 2,815                 | 2,664                 | 2,623                 |
| RI              | 2.1                    | 2.1               | 2.1               | 2.0               | 8.3                          | 8.6                   | 8.3                   | 7.8                   |
| SC              | 25                     | 25                | 24                | 24                | 105                          | 100                   | 81                    | 88                    |
| SD              | 102                    | 102               | 102               | 102               | 341                          | 362                   | 366                   | 366                   |
| TN              | 108                    | 106               | 103               | 101               | 401                          | 399                   | 344                   | 357                   |
| TX              | 365                    | 356               | 347               | 341               | 1,498                        | 1,528                 | 1,234                 | 1,345                 |
| UT              | 88                     | 90                | 90                | 93                | 361                          | 388                   | 383                   | 381                   |
| VT              | 162                    | 162               | 161               | 161               | 664                          | 698                   | 677                   | 666                   |
| VA              | 125                    | 125               | 123               | 123               | 477                          | 477                   | 438                   | 449                   |
| WA              | 250                    | 248               | 247               | 247               | 1,286                        | 1,366                 | 1,348                 | 1,326                 |
| WV              | 18                     | 18                | 18                | 18                | 71                           | 70                    | 69                    | 68                    |
| WI              | 1,376                  | 1,368             | 1,366             | 1,368             | 5,537                        | 5,896                 | 5,779                 | 5,630                 |
| WY              | 6.2                    | 6.1               | 6.0               | 5.9               | 19.2                         | 20.7                  | 20.4                  | 19.5                  |
| US <sup>3</sup> | 9,176                  | 9,171             | 9,149             | 9,137             | 39,164                       | 40,821                | 38,519                | 38,937                |

<sup>1</sup> Quarterly average includes dry cows, excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

<sup>3</sup> May not add due to rounding.

**Milk Cows: Number of Operations by State  
and United States, 1997-98 <sup>1</sup>**

| State | Operations with Milk Cows |                       |
|-------|---------------------------|-----------------------|
|       | 1997<br><i>Number</i>     | 1998<br><i>Number</i> |
| AL    | 450                       | 380                   |
| AK    | 30                        | 30                    |
| AZ    | 250                       | 250                   |
| AR    | 1,300                     | 1,200                 |
| CA    | 2,800                     | 2,700                 |
| CO    | 900                       | 900                   |
| CT    | 350                       | 350                   |
| DE    | 130                       | 130                   |
| FL    | 650                       | 650                   |
| GA    | 1,000                     | 950                   |
| HI    | 50                        | 50                    |
| ID    | 1,400                     | 1,300                 |
| IL    | 2,400                     | 2,300                 |
| IN    | 3,400                     | 3,300                 |
| IA    | 4,500                     | 4,300                 |
| KS    | 1,500                     | 1,400                 |
| KY    | 3,600                     | 3,400                 |
| LA    | 900                       | 800                   |
| ME    | 700                       | 700                   |
| MD    | 1,100                     | 1,100                 |
| MA    | 450                       | 450                   |
| MI    | 4,200                     | 4,000                 |
| MN    | 10,500                    | 9,700                 |
| MS    | 650                       | 600                   |
| MO    | 4,500                     | 4,300                 |
| MT    | 750                       | 700                   |
| NE    | 1,500                     | 1,400                 |
| NV    | 150                       | 150                   |
| NH    | 300                       | 300                   |
| NJ    | 350                       | 300                   |
| NM    | 600                       | 500                   |
| NY    | 9,000                     | 8,700                 |
| NC    | 1,200                     | 1,100                 |
| ND    | 1,300                     | 1,200                 |
| OH    | 6,000                     | 5,500                 |
| OK    | 2,200                     | 2,100                 |
| OR    | 1,100                     | 1,000                 |
| PA    | 11,300                    | 10,900                |
| RI    | 40                        | 40                    |
| SC    | 350                       | 300                   |
| SD    | 2,000                     | 1,800                 |
| TN    | 2,100                     | 2,000                 |
| TX    | 3,500                     | 3,200                 |
| UT    | 900                       | 900                   |
| VT    | 2,000                     | 1,900                 |
| VA    | 1,800                     | 1,800                 |
| WA    | 1,400                     | 1,300                 |
| WV    | 800                       | 800                   |
| WI    | 25,000                    | 23,000                |
| WY    | 350                       | 300                   |
| US    | 123,700                   | 116,430               |

<sup>1</sup> An operation is any place having one or more milk cows, excluding cows used to nurse calves, on hand at any time during the year.



**Milk Cows: Number of Operations by Size Group, Selected States, and United States, 1997-98 <sup>1</sup>**

| State   | Operations Having |               |               |               |               |               |
|---------|-------------------|---------------|---------------|---------------|---------------|---------------|
|         | 1-29 Head         |               | 30-49 Head    |               | 50-99 Head    |               |
|         | 1997              | 1998          | 1997          | 1998          | 1997          | 1998          |
|         | <i>Number</i>     | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| AZ      | 130               | 130           |               |               | 10            | 10            |
| CA      | 500               | 420           | 90            | 90            | 120           | 110           |
| CO      | 610               | 600           | 40            | 30            | 50            | 50            |
| FL      | 400               | 400           | 10            | 10            | 30            | 32            |
| GA      | 520               | 500           | 20            | 20            | 120           | 100           |
| ID      | 400               | 350           | 160           | 140           | 270           | 250           |
| IL      | 530               | 500           | 500           | 460           | 1,000         | 960           |
| IN      | 1,900             | 1,900         | 550           | 520           | 630           | 560           |
| IA      | 1,300             | 1,200         | 1,200         | 1,200         | 1,500         | 1,400         |
| KY      | 1,600             | 1,500         | 700           | 670           | 940           | 900           |
| MD      | 220               | 230           | 180           | 180           | 425           | 420           |
| MI      | 1,100             | 950           | 900           | 900           | 1,100         | 1,100         |
| MN      | 1,900             | 1,600         | 3,800         | 3,500         | 3,700         | 3,500         |
| MO      | 1,900             | 1,900         | 830           | 780           | 1,100         | 990           |
| NM      | 440               | 350           |               |               | 10            | 5             |
| NY      | 1,700             | 1,600         | 1,900         | 1,800         | 3,600         | 3,500         |
| NC      | 600               | 530           | 65            | 60            | 210           | 200           |
| OH      | 3,100             | 2,600         | 800           | 830           | 1,400         | 1,400         |
| OR      | 590               | 550           | 40            | 30            | 140           | 110           |
| PA      | 2,400             | 2,200         | 3,800         | 3,700         | 3,800         | 3,700         |
| TN      | 1,000             | 950           | 260           | 210           | 440           | 440           |
| TX      | 1,600             | 1,500         | 200           | 200           | 400           | 400           |
| UT      | 320               | 340           | 70            | 60            | 165           | 165           |
| VT      | 200               | 190           | 410           | 320           | 920           | 900           |
| VA      | 770               | 750           | 90            | 100           | 440           | 450           |
| WA      | 540               | 450           | 70            | 45            | 130           | 145           |
| WI      | 4,600             | 4,300         | 8,500         | 7,300         | 9,400         | 8,900         |
| Oth Sts | 8,200             | 7,200         | 2,100         | 2,000         | 3,800         | 3,580         |
| US      | 39,070            | 35,690        | 27,285        | 25,155        | 35,850        | 34,277        |

See footnotes at end of table.

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**Milk Cows: Number of Operations by Size Group, Selected States, and United States, 1997-98 <sup>1</sup> (continued)**

| State   | Operations Having |               |               |               |               |               |
|---------|-------------------|---------------|---------------|---------------|---------------|---------------|
|         | 100-199 Head      |               | 200-499 Head  |               | 500+ Head     |               |
|         | 1997              | 1998          | 1997          | 1998          | 1997          | 1998          |
|         | <i>Number</i>     | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> | <i>Number</i> |
| AZ      | 10                | 10            | 20            | 20            | 80            | 80            |
| CA      | 290               | 270           | 750           | 750           | 1,050         | 1,060         |
| CO      | 70                | 80            | 80            | 90            | 50            | 50            |
| FL      | 40                | 38            | 75            | 75            | 95            | 95            |
| GA      | 200               | 190           | 110           | 110           | 30            | 30            |
| ID      | 250               | 240           | 190           | 180           | 130           | 140           |
| IL      | 320               | 330           | 50            | 50            |               |               |
| IN      | 260               | 270           | 50            | 40            | 10            | 10            |
| IA      | 420               | 390           | 75            | 105           | 5             | 5             |
| KY      | 300               | 280           | 55            | 45            | 5             | 5             |
| MD      | 220               | 220           | 49            | 45            | 6             | 5             |
| MI      | 850               | 810           | 215           | 205           | 35            | 35            |
| MN      | 850               | 800           | 230           | 260           | 20            | 40            |
| MO      | 600               | 570           | 70            | 60            |               |               |
| NM      | 10                | 10            | 20            | 20            | 120           | 115           |
| NY      | 1,300             | 1,300         | 400           | 390           | 100           | 110           |
| NC      | 230               | 220           | 80            | 75            | 15            | 15            |
| OH      | 580               | 550           | 110           | 110           | 10            | 10            |
| OR      | 200               | 170           | 100           | 110           | 30            | 30            |
| PA      | 1,100             | 1,050         | 190           | 235           | 10            | 15            |
| TN      | 300               | 300           | 90            | 90            | 10            | 10            |
| TX      | 600               | 500           | 500           | 400           | 200           | 200           |
| UT      | 210               | 190           | 110           | 120           | 25            | 25            |
| VT      | 350               | 350           | 100           | 115           | 20            | 25            |
| VA      | 390               | 380           | 100           | 110           | 10            | 10            |
| WA      | 290               | 280           | 250           | 255           | 120           | 125           |
| WI      | 2,000             | 1,950         | 450           | 490           | 50            | 60            |
| Oth Sts | 1,800             | 2,000         | 600           | 590           | 100           | 110           |
| US      | 14,040            | 13,748        | 5,119         | 5,145         | 2,336         | 2,415         |

<sup>1</sup> An operation is any place having one or more milk cows, excluding cows used to nurse calves, on hand at any time during the year.

**Milk Cows: Percent of Inventory by Size Group, Selected States, and United States, 1997-98 <sup>1</sup>**

| State   | Inventory on Operations Having |                |                |                |                |                |
|---------|--------------------------------|----------------|----------------|----------------|----------------|----------------|
|         | 1-29 Head                      |                | 30-49 Head     |                | 50-99 Head     |                |
|         | 1997                           | 1998           | 1997           | 1998           | 1997           | 1998           |
|         | <i>Percent</i>                 | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> |
| AZ      | 0.4                            | 0.4            |                |                | 0.5            | 0.5            |
| CA      | 0.1                            | 0.1            | 0.3            | 0.3            | 0.7            | 0.7            |
| CO      | 1.9                            | 1.4            | 1.9            | 1.4            | 4.2            | 4.2            |
| FL      | 0.5                            | 0.5            | 0.2            | 0.2            | 1.3            | 1.5            |
| GA      | 2.1                            | 3.0            | 0.9            | 1.0            | 10.0           | 8.0            |
| ID      | 0.9                            | 0.7            | 2.1            | 1.8            | 6.0            | 5.5            |
| IL      | 4.0                            | 4.0            | 12.0           | 11.0           | 46.0           | 46.0           |
| IN      | 14.0                           | 14.0           | 17.0           | 18.0           | 33.0           | 31.0           |
| IA      | 8.0                            | 8.0            | 18.0           | 18.0           | 40.0           | 38.0           |
| KY      | 8.0                            | 8.0            | 17.0           | 18.0           | 40.0           | 40.0           |
| MD      | 2.5                            | 2.5            | 7.5            | 6.9            | 35.0           | 36.0           |
| MI      | 5.0                            | 4.5            | 11.0           | 10.5           | 24.0           | 25.0           |
| MN      | 6.0                            | 5.8            | 24.0           | 22.0           | 40.0           | 40.0           |
| MO      | 6.1                            | 7.0            | 15.0           | 16.0           | 34.0           | 33.0           |
| NM      | 0.7                            | 0.4            |                |                | 0.4            | 0.2            |
| NY      | 2.5                            | 2.5            | 10.5           | 10.5           | 35.0           | 34.0           |
| NC      | 1.5                            | 1.5            | 2.5            | 2.5            | 17.0           | 17.0           |
| OH      | 12.0                           | 11.0           | 12.0           | 12.5           | 37.0           | 36.0           |
| OR      | 1.2                            | 1.0            | 1.8            | 1.3            | 12.0           | 9.7            |
| PA      | 5.5                            | 4.5            | 25.0           | 25.0           | 37.0           | 37.0           |
| TN      | 2.7                            | 3.0            | 7.3            | 6.4            | 28.0           | 28.0           |
| TX      | 0.8                            | 0.8            | 1.8            | 2.0            | 8.4            | 8.2            |
| UT      | 1.3                            | 1.5            | 2.7            | 2.5            | 13.0           | 13.0           |
| VT      | 1.2                            | 1.0            | 11.0           | 8.0            | 35.0           | 35.0           |
| VA      | 5.0                            | 6.0            | 3.0            | 3.0            | 27.0           | 26.0           |
| WA      | 0.6                            | 0.4            | 1.1            | 0.7            | 3.3            | 3.9            |
| WI      | 4.5                            | 4.8            | 24.0           | 21.0           | 43.0           | 43.0           |
| Oth Sts | 3.5                            | 3.5            | 8.5            | 7.7            | 31.0           | 29.5           |
| US      | 3.5                            | 3.6            | 11.5           | 10.1           | 26.0           | 26.0           |

See footnotes at end of table.

--continued

**Milk Cows: Percent of Inventory by Size Group, Selected States, and United States, 1997-98 <sup>1</sup> (continued)**

| State   | Inventory on Operations Having |                |                |                |                |                |
|---------|--------------------------------|----------------|----------------|----------------|----------------|----------------|
|         | 100-199 Head                   |                | 200-499 Head   |                | 500+ Head      |                |
|         | 1997                           | 1998           | 1997           | 1998           | 1997           | 1998           |
|         | <i>Percent</i>                 | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> |
| AZ      | 1.5                            | 1.4            | 5.6            | 5.7            | 92.0           | 92.0           |
| CA      | 3.4                            | 3.4            | 16.5           | 17.5           | 79.0           | 78.0           |
| CO      | 11.0                           | 12.0           | 28.0           | 30.0           | 53.0           | 51.0           |
| FL      | 4.0                            | 3.8            | 17.0           | 15.0           | 77.0           | 79.0           |
| GA      | 29.0                           | 28.0           | 29.0           | 31.0           | 29.0           | 29.0           |
| ID      | 12.0                           | 12.0           | 19.0           | 19.0           | 60.0           | 61.0           |
| IL      | 28.0                           | 29.0           | 10.0           | 10.0           |                |                |
| IN      | 24.0                           | 25.0           | 8.0            | 7.0            | 4.0            | 5.0            |
| IA      | 23.0                           | 22.0           | 9.0            | 12.0           | 2.0            | 2.0            |
| KY      | 25.0                           | 24.0           | 8.0            | 8.0            | 2.0            | 2.0            |
| MD      | 34.0                           | 34.0           | 13.0           | 13.0           | 8.0            | 7.6            |
| MI      | 33.0                           | 32.0           | 17.0           | 18.0           | 10.0           | 10.0           |
| MN      | 17.0                           | 16.0           | 11.0           | 12.0           | 2.0            | 4.2            |
| MO      | 36.0                           | 36.0           | 8.9            | 8.0            |                |                |
| NM      | 0.7                            | 0.7            | 3.2            | 2.7            | 95.0           | 96.0           |
| NY      | 27.0                           | 26.0           | 14.0           | 15.0           | 11.0           | 12.0           |
| NC      | 38.0                           | 37.0           | 27.0           | 27.0           | 14.0           | 15.0           |
| OH      | 26.0                           | 27.0           | 10.5           | 11.0           | 2.5            | 2.5            |
| OR      | 28.0                           | 25.0           | 30.0           | 34.0           | 27.0           | 29.0           |
| PA      | 23.0                           | 22.0           | 8.0            | 9.5            | 1.5            | 2.0            |
| TN      | 36.0                           | 37.0           | 21.0           | 20.0           | 5.0            | 5.6            |
| TX      | 22.0                           | 20.0           | 28.0           | 29.0           | 39.0           | 40.0           |
| UT      | 29.0                           | 26.0           | 35.0           | 37.0           | 19.0           | 20.0           |
| VT      | 27.0                           | 26.0           | 17.0           | 20.0           | 8.8            | 10.0           |
| VA      | 39.0                           | 38.0           | 21.0           | 22.0           | 5.0            | 5.0            |
| WA      | 18.0                           | 16.0           | 31.0           | 32.0           | 46.0           | 47.0           |
| WI      | 18.0                           | 18.0           | 7.7            | 10.0           | 2.8            | 3.2            |
| Oth Sts | 23.0                           | 25.0           | 24.0           | 22.8           | 10.0           | 11.5           |
| US      | 20.0                           | 20.0           | 14.6           | 15.0           | 24.4           | 25.3           |

<sup>1</sup> Percents reflect average distributions of various probability surveys conducted during the year but are based primarily on beginning-of-year and mid-year surveys.

**Milk Production: Percent of Production by Size Group, Selected States, and United States, 1997-98**

| State   | 1-29 Head      |                | 30-49 Head     |                | 50-99 Head     |                |
|---------|----------------|----------------|----------------|----------------|----------------|----------------|
|         | 1997           | 1998           | 1997           | 1998           | 1997           | 1998           |
|         | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> |
| AZ      | 0.1            | 0.1            |                |                | 0.3            | 0.3            |
| CA      | 0.1            | 0.1            | 0.2            | 0.2            | 0.5            | 0.6            |
| CO      | 1.0            | 1.0            | 1.0            | 1.0            | 3.0            | 3.0            |
| FL      | 0.2            | 0.1            | 0.2            | 0.1            | 1.7            | 1.9            |
| GA      | 1.0            | 1.0            | 1.0            | 1.0            | 8.0            | 6.0            |
| ID      | 0.5            | 0.5            | 1.5            | 1.0            | 5.0            | 4.5            |
| IL      | 3.0            | 2.0            | 10.0           | 10.0           | 46.0           | 46.0           |
| IN      | 12.0           | 12.0           | 15.0           | 15.0           | 36.0           | 34.0           |
| IA      | 4.4            | 3.5            | 18.0           | 16.0           | 40.0           | 38.0           |
| KY      | 6.0            | 6.0            | 15.0           | 16.0           | 40.0           | 39.0           |
| MD      | 2.2            | 2.2            | 4.8            | 4.8            | 34.0           | 34.0           |
| MI      | 3.0            | 3.0            | 8.0            | 8.0            | 23.0           | 23.0           |
| MN      | 4.4            | 4.2            | 21.0           | 19.0           | 41.0           | 41.0           |
| MO      | 6.0            | 5.5            | 14.0           | 11.5           | 29.0           | 34.0           |
| NM      | 0.2            | 0.2            |                |                | 0.2            | 0.2            |
| NY      | 1.5            | 1.5            | 9.5            | 9.5            | 31.0           | 30.0           |
| NC      | 0.3            | 0.3            | 1.7            | 1.7            | 16.0           | 15.0           |
| OH      | 9.0            | 8.0            | 11.0           | 10.0           | 37.0           | 36.0           |
| OR      | 1.0            | 1.0            | 1.0            | 1.0            | 11.0           | 6.0            |
| PA      | 4.0            | 4.0            | 20.0           | 21.0           | 41.0           | 39.0           |
| TN      | 2.0            | 1.7            | 5.8            | 5.1            | 26.0           | 27.0           |
| TX      | 0.2            | 0.2            | 0.8            | 0.8            | 6.0            | 6.0            |
| UT      | 1.0            | 1.0            | 2.0            | 2.0            | 10.0           | 10.0           |
| VT      | 1.0            | 1.0            | 10.0           | 8.0            | 36.0           | 35.0           |
| VA      | 3.0            | 3.0            | 3.0            | 3.0            | 25.0           | 28.0           |
| WA      | 0.4            | 0.4            | 0.8            | 0.8            | 2.8            | 3.8            |
| WI      | 3.5            | 3.1            | 22.0           | 21.0           | 42.0           | 41.0           |
| Oth Sts | 2.5            | 2.3            | 6.5            | 7.1            | 29.0           | 25.4           |
| US      | 2.4            | 2.1            | 9.5            | 7.1            | 23.4           | 24.0           |

**Milk Production: Percent of Production by Size Groups, Selected States, and United States, 1997-98**

| State   | 100-199 Head   |                | 200-499 Head   |                | 500+ Head      |                |
|---------|----------------|----------------|----------------|----------------|----------------|----------------|
|         | 1997           | 1998           | 1997           | 1998           | 1997           | 1998           |
|         | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> | <i>Percent</i> |
| AZ      | 0.9            | 0.8            | 5.7            | 5.8            | 93.0           | 93.0           |
| CA      | 3.2            | 3.1            | 17.0           | 18.0           | 79.0           | 78.0           |
| CO      | 10.0           | 11.0           | 30.0           | 30.0           | 55.0           | 54.0           |
| FL      | 2.9            | 2.9            | 15.0           | 14.0           | 80.0           | 81.0           |
| GA      | 28.0           | 27.0           | 31.0           | 33.0           | 31.0           | 32.0           |
| ID      | 11.0           | 10.0           | 18.0           | 18.0           | 64.0           | 66.0           |
| IL      | 30.0           | 31.0           | 11.0           | 11.0           |                |                |
| IN      | 23.0           | 25.0           | 9.0            | 8.0            | 5.0            | 6.0            |
| IA      | 25.0           | 24.0           | 10.0           | 16.0           | 2.6            | 2.5            |
| KY      | 28.0           | 27.0           | 9.0            | 10.0           | 2.0            | 2.0            |
| MD      | 37.0           | 37.0           | 14.0           | 14.0           | 8.0            | 8.0            |
| MI      | 33.0           | 33.0           | 20.0           | 21.0           | 13.0           | 12.0           |
| MN      | 19.0           | 18.0           | 12.0           | 12.0           | 2.6            | 5.8            |
| MO      | 41.0           | 39.0           | 10.0           | 10.0           |                |                |
| NM      | 0.6            | 0.6            | 2.0            | 2.0            | 97.0           | 97.0           |
| NY      | 29.0           | 29.0           | 16.0           | 17.0           | 13.0           | 13.0           |
| NC      | 41.0           | 42.0           | 26.0           | 26.0           | 15.0           | 15.0           |
| OH      | 28.0           | 29.0           | 12.0           | 13.0           | 3.0            | 4.0            |
| OR      | 27.0           | 25.0           | 32.0           | 35.0           | 28.0           | 32.0           |
| PA      | 23.0           | 22.0           | 10.0           | 11.0           | 2.0            | 3.0            |
| TN      | 37.0           | 39.0           | 23.0           | 21.0           | 6.2            | 6.2            |
| TX      | 19.0           | 19.0           | 30.0           | 31.0           | 44.0           | 43.0           |
| UT      | 30.0           | 28.0           | 38.0           | 39.0           | 19.0           | 20.0           |
| VT      | 25.0           | 25.0           | 19.0           | 21.0           | 9.0            | 10.0           |
| VA      | 41.0           | 40.0           | 23.0           | 21.0           | 5.0            | 5.0            |
| WA      | 18.0           | 16.0           | 32.0           | 32.0           | 46.0           | 47.0           |
| WI      | 21.0           | 21.0           | 8.0            | 10.0           | 3.5            | 3.9            |
| Oth Sts | 26.0           | 30.2           | 22.0           | 20.0           | 14.0           | 15.0           |
| US      | 20.0           | 20.0           | 15.3           | 16.8           | 29.4           | 30.0           |

## Reliability Statement

**Survey Procedures:** Primary data used to determine these estimates were obtained from a sample of producers. Individual States maintain a list of all known milk producers and information on the size of their herd. States use all known sources of producers to ensure that their lists are as complete as possible. Generally, all large producers and a sample of small producers are included in the survey. Questionnaires are mailed to producers near the end of the month to obtain data for the first day of the month. Additional reports are obtained by telephone, as needed, to supplement the mail response.

**Estimation Procedures:** State offices prepare these estimates using survey indications, historic trends, and any available administrative data. Individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

**Revision Policy:** Milk production, rate per cow, and number of cows are subject to revision the following month for monthly States or the following quarter for the quarterly States. Normally, Federal Market Order sales are the main basis for revisions. However, data for all orders are not available in time for this revision. Estimates are again subject to revisions in February each year based on additional administrative data. In the event that additional changes are necessary, a third revision is possible in February the following year. Estimates are again reviewed after data from the five-year Census of Agriculture are available. No revisions are made after that date.

**Reliability:** Since all operations with dairy animals are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplications, and mistakes in reporting, recording, and processing the data. The effects of these errors cannot be measured directly. They are minimized through rigid quality controls in the data collection process and through a careful review of all reported data for consistency and reasonableness.

To assist users in evaluating the reliability of the estimates in this report, the "Root Mean Square Error" is shown for selected items on the next page. The "Root Mean Square Error" is a statistical measure based on past performance and is computed using the differences between first and final estimates. The "Root Mean Square Error" for milk cow inventory estimates over the past 10 quarters is 1.3 percent. This means that chances are 2 out of 3 that the final October-December estimate will not be above or below the current estimate of 9.14 million head by more than 1.3 percent, or about 119,000 head. Chances are 9 out of 10 that the difference will not exceed 2.3 percent, or about 210,000 head (the 90 percent confidence level).

**Reliability of October-December Milk Estimates <sup>1</sup>**

| Item            | Root Mean Square Error | 90% Confidence Level |                       | Difference Between First and Latest Estimates |                       |                       | Quarters           |                    |
|-----------------|------------------------|----------------------|-----------------------|---|-----------------------|-----------------------|--------------------|--------------------|
|                 |                        |                      |                       | Average                                       | Smallest              | Largest               | First Above Latest | First Below Latest |
| Milk Production | <i>Percent</i>         | <i>Percent</i>       | <i>Million Pounds</i> | <i>Million Pounds</i>                         | <i>Million Pounds</i> | <i>Million Pounds</i> | <i>Number</i>      | <i>Number</i>      |
|                 | 0.6                    | 1.1                  | 428                   | 183   | 1                     | 385                   | 10                 | 0                  |
| All Milk Cows   | <i>Percent</i>         | <i>Percent</i>       | <i>1,000 Head</i>     | <i>1,000 Head</i>                             | <i>1,000 Head</i>     | <i>1,000 Head</i>     | <i>Number</i>      | <i>Number</i>      |
|                 | 1.3                    | 2.3                  | 210                   | 102   | 2                     | 195                   | 9                  | 1                  |

<sup>1</sup> Based on records for the past 10 October-December quarters.



## Index

## Page

|  |    |
|--|----|
| Milk Cows and Production: by Quarter, United States, 1998-99 .....   | 2  |
| Milk Cows and Production: by Month, 20 Selected States, 1998-99 .....                                      | 2  |
| Milk Cows and Production: by State, January 1998-99 .....  | 3  |
| Milk Cows and Production: by State, December 1997-98 .....   | 4  |
| Milk Cows and Production: United States, 1989-98 .....   | 5  |
| Estimated Milk Production: United States, 1998-99 .....  | 2  |
| Milk Cows and Production: by State, and United States, 1997-98 .....                                       | 6  |
| Milk Cows: Number by Month, State, and 20 States, 1997 .....   | 8  |
| Milk Cows: Number by Month, State, and 20 States, 1998 .....   | 9  |
| Milk: Produced per Cow by Month, State, and 20 States, 1997 .....  | 10 |
| Milk: Produced per Cow by Month, State, and 20 States, 1998 .....  | 11 |
| Milk Production: Total by Month, State, and 20 States, 1997 .....  | 12 |
| Milk Production: Total by Month, State, and 20 States, 1998 .....  | 13 |
| Milk Cows and Production: Number and Milk Produced<br>by Quarter, State, and United States, 1997 .....     | 14 |
| Milk Cows and Production: Number and Milk Produced<br>by Quarter, State, and United States, 1998 .....     | 15 |
| Milk Cows: Number of Operations, by State,<br>and United States 1996-97 .....                              | 16 |
| Milk Cows: Number of Operations by Size Group, Selected<br>States, and United States, 1997-98 .....        | 17 |
| Milk Cows: Percent of Inventory by Size Group, Selected<br>States, and United States, 1997-98 .....        | 19 |
| Milk Production: Percent of Production by Size Group, Selected<br>States, and United States, 1997-98 ..... | 21 |
| Reliability Statement: Survey and Estimation Procedures,<br>Revision Policy, and Reliability .....         | 23 |

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