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November Milk Production up 1.4 Percent

Milk production in the 24 major States during November totaled 17.5 billion pounds, up 1.4 percent from November 2021. October revised production, at 18.0 billion pounds, was up 1.3 percent from October 2021. The October revision represented a decrease of 18 million pounds or 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 1,956 pounds for November, 17 pounds above November 2021.

The number of milk cows on farms in the 24 major States was 8.94 million head, 48,000 head more than November 2021, and 1,000 head more than October 2022.

November Milk Production in the United States up 1.3 Percent

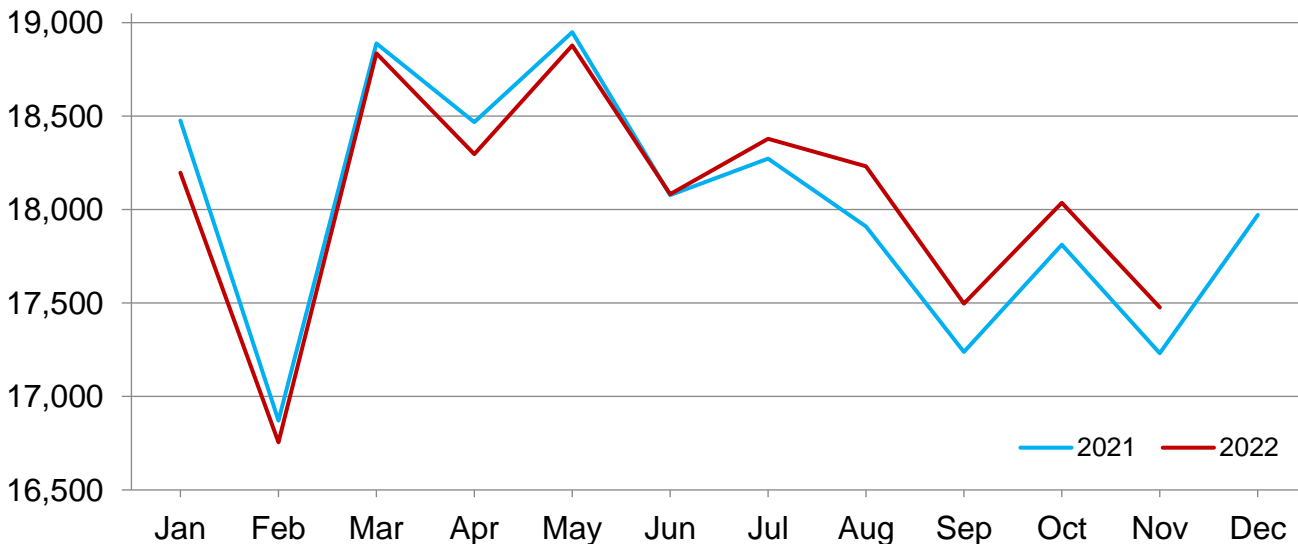
Milk production in the United States during November totaled 18.3 billion pounds, up 1.3 percent from November 2021.

Production per cow in the United States averaged 1,937 pounds for November, 17 pounds above November 2021.

The number of milk cows on farms in the United States was 9.42 million head, 38,000 head more than November 2021, and 1,000 head more than October 2022.

Monthly Milk Production - 24 Selected States

Million pounds



Milk Cows and Production by Quarter – United States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

| Quarter | Milk cows ¹ | | Milk per cow ² | | Milk production ² | | |
|------------------------|------------------------|--------------|---------------------------|----------|------------------------------|------------------|------------------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | Change from 2021 |
| | (1,000 head) | (1,000 head) | (pounds) | (pounds) | (million pounds) | (million pounds) | (percent) |
| January-March | 9,466 | 9,384 | 6,005 | 6,000 | 56,847 | 56,305 | -1.0 |
| April-June | 9,503 | 9,413 | 6,119 | 6,145 | 58,147 | 57,845 | -0.5 |
| July-September | 9,442 | 9,415 | 5,914 | 6,001 | 55,836 | 56,499 | 1.2 |
| October-December | 9,381 | | 5,909 | | 55,428 | | |
| Annual | 9,448 | | 23,948 | | 226,258 | | |

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production by Month – 24 Selected States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

| Month | Milk cows ¹ | | Milk per cow ² | | Milk production ² | | |
|-----------------|------------------------|--------------|---------------------------|----------|------------------------------|------------------|------------------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | Change from 2021 |
| | (1,000 head) | (1,000 head) | (pounds) | (pounds) | (million pounds) | (million pounds) | (percent) |
| January | 8,938 | 8,874 | 2,067 | 2,051 | 18,477 | 18,198 | -1.5 |
| February | 8,954 | 8,887 | 1,884 | 1,885 | 16,871 | 16,755 | -0.7 |
| March | 8,970 | 8,909 | 2,106 | 2,114 | 18,888 | 18,835 | -0.3 |
| April | 8,987 | 8,910 | 2,055 | 2,053 | 18,467 | 18,296 | -0.9 |
| May | 8,996 | 8,922 | 2,106 | 2,116 | 18,949 | 18,878 | -0.4 |
| June | 8,991 | 8,916 | 2,011 | 2,028 | 18,078 | 18,083 | (Z) |
| July | 8,983 | 8,920 | 2,034 | 2,060 | 18,272 | 18,379 | 0.6 |
| August | 8,939 | 8,930 | 2,004 | 2,042 | 17,910 | 18,231 | 1.8 |
| September | 8,909 | 8,933 | 1,935 | 1,959 | 17,239 | 17,497 | 1.5 |
| October | 8,892 | 8,935 | 2,003 | 2,019 | 17,812 | 18,037 | 1.3 |
| November | 8,888 | 8,936 | 1,939 | 1,956 | 17,232 | 17,477 | 1.4 |
| December | 8,880 | | 2,024 | | 17,971 | | |
| Annual | 8,944 | | 24,169 | | 216,166 | | |

(Z) Less than half of the unit shown.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month – United States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

| Month | Milk cows ¹ | | Milk per cow ² | | Milk production ² | | |
|-----------------|------------------------|--------------|---------------------------|----------|------------------------------|------------------|------------------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | Change from 2021 |
| | (1,000 head) | (1,000 head) | (pounds) | (pounds) | (million pounds) | (million pounds) | (percent) |
| January | 9,450 | 9,367 | 2,049 | 2,034 | 19,365 | 19,050 | -1.6 |
| February | 9,466 | 9,380 | 1,868 | 1,870 | 17,685 | 17,540 | -0.8 |
| March | 9,482 | 9,404 | 2,088 | 2,096 | 19,797 | 19,715 | -0.4 |
| April | 9,500 | 9,405 | 2,037 | 2,037 | 19,350 | 19,155 | -1.0 |
| May | 9,507 | 9,419 | 2,088 | 2,098 | 19,855 | 19,763 | -0.5 |
| June | 9,501 | 9,415 | 1,994 | 2,010 | 18,942 | 18,927 | -0.1 |
| July | 9,483 | 9,414 | 2,014 | 2,039 | 19,097 | 19,195 | 0.5 |
| August | 9,438 | 9,413 | 1,984 | 2,022 | 18,721 | 19,035 | 1.7 |
| September | 9,405 | 9,417 | 1,916 | 1,940 | 18,018 | 18,269 | 1.4 |
| October | 9,387 | 9,419 | 1,984 | 2,000 | 18,623 | 18,834 | 1.1 |
| November | 9,382 | 9,420 | 1,920 | 1,937 | 18,015 | 18,250 | 1.3 |
| December | 9,373 | | 2,005 | | 18,790 | | |
| Annual | 9,448 | | 23,948 | | 226,258 | | |

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production – 24 Selected States: November 2021 and 2022

[May not add due to rounding]

| State | Milk cows ¹ | | Milk per cow ² | | Milk production ² | | Change from 2021 |
|----------------------|------------------------|--------------|---------------------------|----------|------------------------------|------------------|------------------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | |
| | (1,000 head) | (1,000 head) | (pounds) | (pounds) | (million pounds) | (million pounds) | (percent) |
| Arizona | 194 | 196 | 1,960 | 1,950 | 380 | 382 | 0.5 |
| California | 1,719 | 1,723 | 1,950 | 1,935 | 3,352 | 3,334 | -0.5 |
| Colorado | 201 | 205 | 2,110 | 2,100 | 424 | 431 | 1.7 |
| Florida | 105 | 94 | 1,590 | 1,585 | 167 | 149 | -10.8 |
| Georgia | 82 | 92 | 1,770 | 1,780 | 145 | 164 | 13.1 |
| Idaho | 651 | 663 | 2,010 | 2,020 | 1,309 | 1,339 | 2.3 |
| Illinois | 81 | 79 | 1,730 | 1,720 | 140 | 136 | -2.9 |
| Indiana | 186 | 186 | 1,890 | 1,920 | 352 | 357 | 1.4 |
| Iowa | 225 | 239 | 1,990 | 2,010 | 448 | 480 | 7.1 |
| Kansas | 168 | 175 | 1,940 | 1,955 | 326 | 342 | 4.9 |
| Michigan | 434 | 430 | 2,170 | 2,225 | 942 | 957 | 1.6 |
| Minnesota | 461 | 454 | 1,835 | 1,880 | 846 | 854 | 0.9 |
| New Mexico | 295 | 282 | 1,960 | 1,960 | 578 | 553 | -4.3 |
| New York | 625 | 628 | 1,980 | 2,035 | 1,238 | 1,278 | 3.2 |
| Ohio | 250 | 250 | 1,770 | 1,790 | 443 | 448 | 1.1 |
| Oregon | 125 | 125 | 1,680 | 1,675 | 210 | 209 | -0.5 |
| Pennsylvania | 470 | 467 | 1,705 | 1,715 | 801 | 801 | - |
| South Dakota | 167 | 186 | 1,880 | 1,870 | 314 | 348 | 10.8 |
| Texas | 625 | 655 | 2,030 | 2,060 | 1,269 | 1,349 | 6.3 |
| Utah | 94 | 93 | 1,875 | 1,865 | 176 | 173 | -1.7 |
| Vermont | 120 | 118 | 1,700 | 1,755 | 204 | 207 | 1.5 |
| Virginia | 71 | 69 | 1,645 | 1,635 | 117 | 113 | -3.4 |
| Washington | 262 | 256 | 1,920 | 1,925 | 503 | 493 | -2.0 |
| Wisconsin | 1,277 | 1,271 | 1,995 | 2,030 | 2,548 | 2,580 | 1.3 |
| 24-State Total | 8,888 | 8,936 | 1,939 | 1,956 | 17,232 | 17,477 | 1.4 |

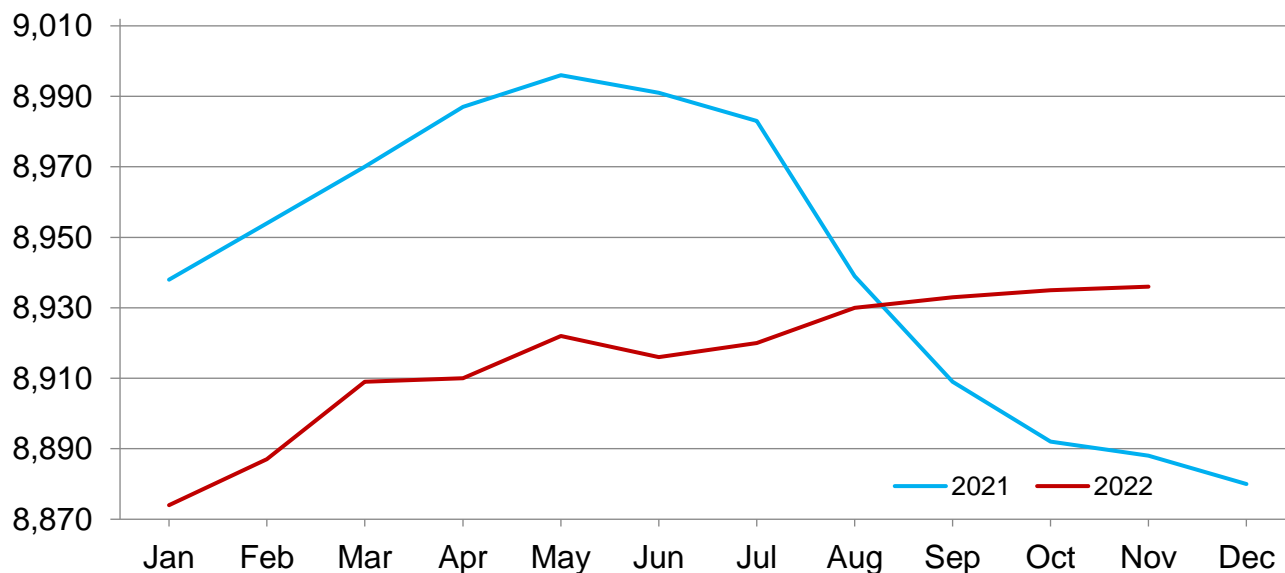
- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Cows - 24 Selected States

Thousand head



Milk Cows and Production – 24 Selected States: October 2021 and 2022

[May not add due to rounding]

| | Milk cows ¹ | | Milk per cow ² | | Milk production ² | | Change from 2021 |
|----------------------|------------------------|--------------|---------------------------|----------|------------------------------|------------------|------------------|
| | 2021 | 2022 | 2021 | 2022 | 2021 | 2022 | |
| | (1,000 head) | (1,000 head) | (pounds) | (pounds) | (million pounds) | (million pounds) | (percent) |
| Arizona | 194 | 196 | 1,960 | 1,950 | 380 | 382 | 0.5 |
| California | 1,719 | 1,723 | 2,005 | 1,980 | 3,447 | 3,412 | -1.0 |
| Colorado | 200 | 205 | 2,180 | 2,170 | 436 | 445 | 2.1 |
| Florida | 105 | 94 | 1,550 | 1,550 | 163 | 146 | -10.4 |
| Georgia | 82 | 92 | 1,780 | 1,810 | 146 | 167 | 14.4 |
| Idaho | 650 | 662 | 2,090 | 2,120 | 1,359 | 1,403 | 3.2 |
| Illinois | 81 | 79 | 1,735 | 1,735 | 141 | 137 | -2.8 |
| Indiana | 186 | 186 | 1,985 | 1,980 | 369 | 368 | -0.3 |
| Iowa | 225 | 239 | 2,050 | 2,065 | 461 | 494 | 7.2 |
| Kansas | 169 | 175 | 1,990 | 2,015 | 336 | 353 | 5.1 |
| Michigan | 435 | 428 | 2,255 | 2,300 | 981 | 984 | 0.3 |
| Minnesota | 461 | 453 | 1,910 | 1,940 | 881 | 879 | -0.2 |
| New Mexico | 298 | 284 | 2,020 | 2,030 | 602 | 577 | -4.2 |
| New York | 628 | 627 | 2,050 | 2,105 | 1,287 | 1,320 | 2.6 |
| Ohio | 251 | 250 | 1,820 | 1,830 | 457 | 458 | 0.2 |
| Oregon | 125 | 125 | 1,760 | 1,755 | 220 | 219 | -0.5 |
| Pennsylvania | 470 | 468 | 1,740 | 1,765 | 818 | 826 | 1.0 |
| South Dakota | 162 | 186 | 1,975 | 1,945 | 320 | 362 | 13.1 |
| Texas | 625 | 655 | 2,105 | 2,150 | 1,316 | 1,408 | 7.0 |
| Utah | 94 | 94 | 1,930 | 1,930 | 181 | 181 | - |
| Vermont | 120 | 117 | 1,760 | 1,810 | 211 | 212 | 0.5 |
| Virginia | 71 | 69 | 1,670 | 1,670 | 119 | 115 | -3.4 |
| Washington | 263 | 257 | 2,010 | 2,025 | 529 | 520 | -1.7 |
| Wisconsin | 1,278 | 1,271 | 2,075 | 2,100 | 2,652 | 2,669 | 0.6 |
| 24-State Total | 8,892 | 8,935 | 2,003 | 2,019 | 17,812 | 18,037 | 1.3 |

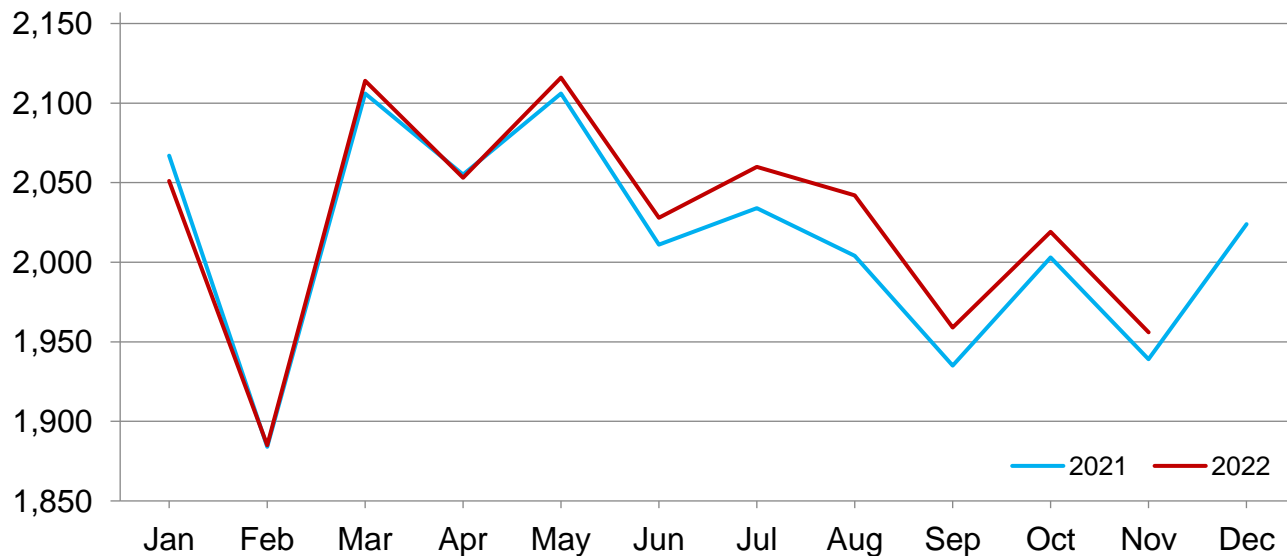
- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Per Cow - 24 Selected States

Pounds



Statistical Methodology

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. Where feasible, States utilize state and federal administrative data to estimate milk production. This eliminates duplication of data gathering by different government agencies such as Agricultural Marketing Service (AMS) Dairy Market News. Indications of milk cow inventory are also obtained in the January Cattle Survey.

Estimation Procedures: Regional Field Offices prepare these estimates by using a combination of 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, milk per cow, and number of milk cows are subject to revision the following month after initial publication for monthly States or the following quarter for the quarterly States. Normally, administrative data from Federal Market Orders, State Departments of Agriculture, or other sources are the main basis for revisions. However, administrative data for all States may not be available in time for these revisions. 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 in the table below. 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 the 24 State milk production estimates over the past 24 months is 0.3 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 17.5 billion pounds by more than 0.3 percent. Chances are 9 out of 10 that the difference will not exceed 0.5 percent.

Reliability of Monthly Milk Production Estimates

[Based on data for the past 24 months]

| Item | Root mean square error | 90 percent confidence level | Difference between first and latest estimate | | | | |
|-----------------------|------------------------|-----------------------------|--|----------|---------|--------------|--------------|
| | | | Average | Smallest | Largest | Months | |
| | | | | | | Below latest | Above latest |
| | (percent) | (percent) | (1,000) | (1,000) | (1,000) | (number) | (number) |
| Milk production | 0.3 | 0.5 | 42 | 3 | 181 | 13 | 11 |
| All Milk cows | 0.1 | 0.2 | 8 | 1 | 30 | 15 | 9 |

Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov.

| | |
|---|----------------|
| Travis Averill, Chief, Livestock Branch | (202) 692-0069 |
| Scott Hollis, Head, Livestock Section | (202) 690-2424 |
| Sherry Bertramsen – Livestock Slaughter | (202) 690-8632 |
| Ryan Cowen – Cattle, Cattle on Feed | (202) 720-3040 |
| Anthony Fischer – Hogs and Pigs | (202) 720-3106 |
| Mike Miller – Milk Production and Milk Cows | (202) 720-3278 |
| Suzanne Richards – Dairy Products | (202) 720-4448 |
| Vacant – Sheep and Goats | (202) 690-3236 |

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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

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