Milk Production

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March Milk Production down 0.9 Percent

Milk production in the 24 major States during March totaled 18.8 billion pounds, down 0.9 percent from March 2023. February revised production, at 17.4 billion pounds, was up 2.9 percent from February 2023. The February revision represented an increase of 82 million pounds or 0.5 percent from last month's preliminary production estimate. Adjusting February production for the additional day due to leap year causes February revised production to be down 0.7 percent on a per day basis.

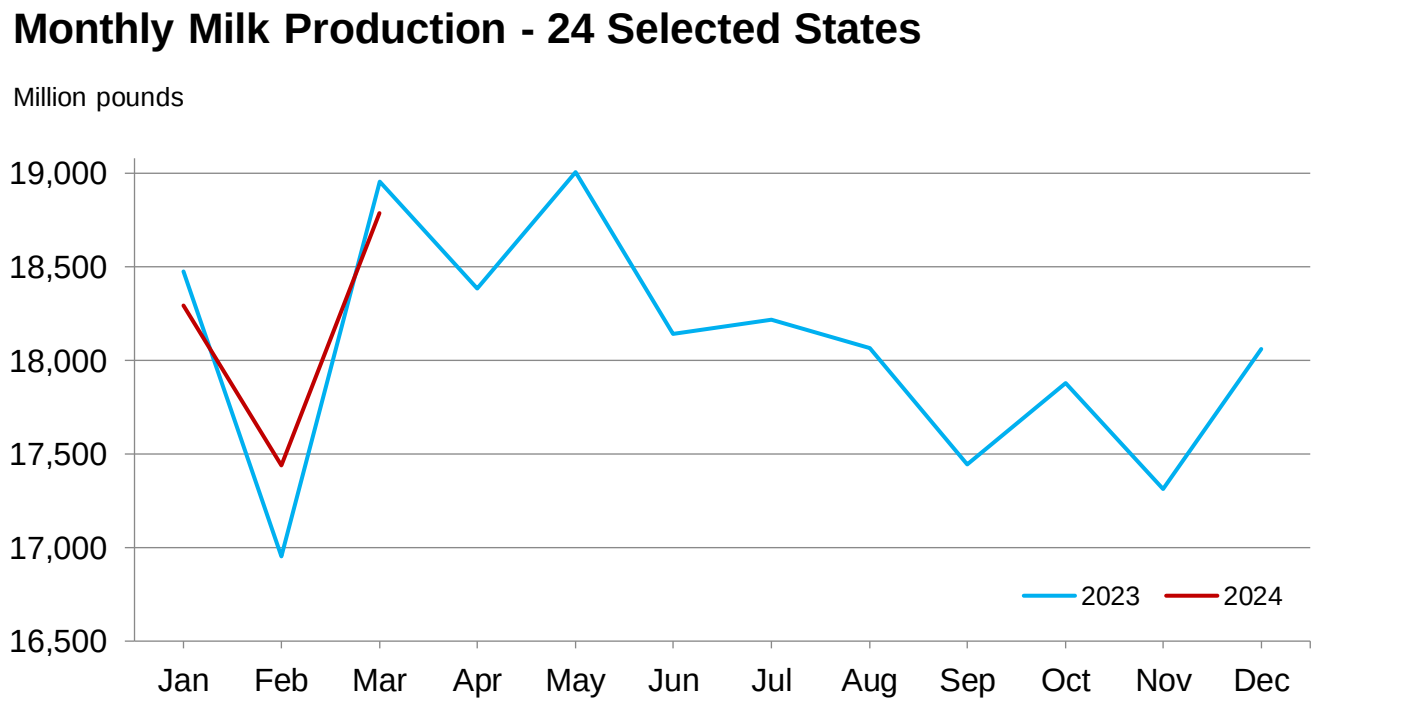
Production per cow in the 24 major States averaged 2,115 pounds for March, 3 pounds below March 2023.

The number of milk cows on farms in the 24 major States was 8.88 million head, 71,000 head less than March 2023, and 7,000 head less than February 2024.

January-March Milk Production up 0.1 Percent

Milk production in the United States during the January - March quarter totaled 56.9 billion pounds, up 0.1 percent from the January - March quarter last year.

The average number of milk cows in the United States during the quarter was 9.33 million head, 16,000 head less than the October - December quarter, and 85,000 head less than the same period last year.



Milk Cows and Production by Quarter – United States: 2023-2024

[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]		
	2023	2024	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March	9,418	9,333	6,035	6,095	56,837	56,886	0.1
April-June	9,410		6,164		58,004		
July-September	9,366		5,978		55,994		
October-December	9,349		5,940		55,529		
Annual	9,386		24,117		226,364		

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.

Milk Cows and Production by Month – 24 Selected States: 2023-2024

[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]		
	2023	2024	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	8,922	8,870	2,071	2,062	18,474	18,294	-1.0
February	8,939	8,888	1,897	1,962	16,953	17,439	2.9
March	8,952	8,881	2,118	2,115	18,956	18,787	-0.9
April	8,941		2,056		18,386		
May	8,945		2,125		19,006		
June	8,925		2,033		18,141		
July	8,909		2,045		18,216		
August	8,906		2,028		18,065		
September	8,907		1,958		17,444		
October	8,900		2,009		17,880		
November	8,891		1,947		17,311		
December	8,894		2,031		18,061		
Annual	8,919		24,318		216,893		

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month – United States: 2023-2024

[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]		
	2023	2024	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,401	9,323	2,054	2,047	19,308	19,088	-1.1
February	9,419	9,342	1,881	1,948	17,718	18,195	2.7
March	9,433	9,335	2,100	2,100	19,811	19,603	-1.0
April	9,414		2,040		19,204		
May	9,418		2,108		19,852		
June	9,397		2,016		18,948		
July	9,368		2,027		18,985		
August	9,365		2,010		18,828		
September	9,366		1,941		18,181		
October	9,355		1,993		18,645		
November	9,345		1,932		18,051		
December	9,348		2,015		18,833		
Annual	9,386		24,117		226,364		

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.

Milk Cows and Production – 24 Selected States: March 2023 and 2024

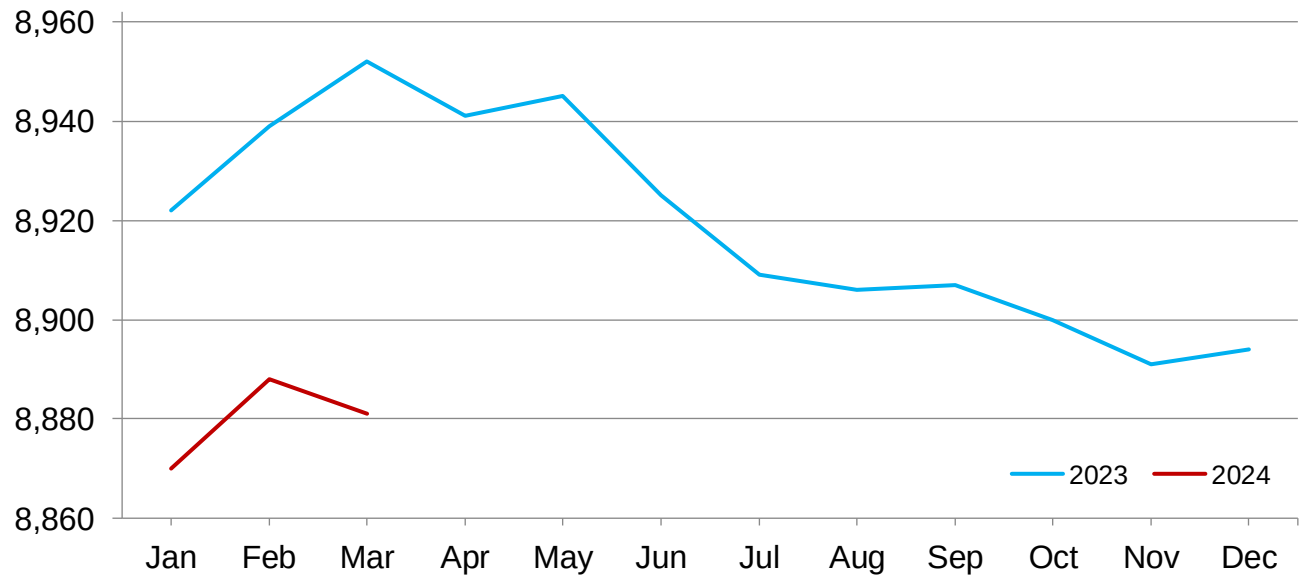
[May not add due to rounding]

State	Milk cows [1]		Milk per cow [2]		Milk production [2]		
	2023	2024	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	194	193	2,270	2,275	440	439	-0.2
California	1,717	1,709	2,120	2,145	3,640	3,666	0.7
Colorado	203	201	2,230	2,230	453	448	-1.1
Florida	92	97	1,900	1,870	175	181	3.4
Georgia	92	87	2,040	2,000	188	174	-7.4
Idaho	669	665	2,160	2,145	1,445	1,426	-1.3
Illinois	79	79	1,930	1,940	152	153	0.7
Indiana	189	190	2,080	2,045	393	389	-1.0
Iowa	240	242	2,130	2,150	511	520	1.8
Kansas	180	175	2,065	2,070	372	362	-2.7
Michigan	435	439	2,380	2,350	1,035	1,032	-0.3
Minnesota	454	446	1,990	1,995	903	890	-1.4
New Mexico	281	240	2,220	2,200	624	528	-15.4
New York	630	630	2,170	2,165	1,367	1,364	-0.2
Ohio	252	254	1,945	1,920	490	488	-0.4
Oregon	126	116	1,820	1,795	229	208	-9.2
Pennsylvania	466	465	1,870	1,870	871	870	-0.1
South Dakota	189	210	1,940	1,945	367	408	11.2
Texas	660	642	2,280	2,225	1,505	1,428	-5.1
Utah	90	90	1,960	1,970	176	177	0.6
Vermont	118	116	1,860	1,845	219	214	-2.3
Virginia	67	67	1,865	1,840	125	123	-1.6
Washington	260	258	2,080	2,080	541	537	-0.7
Wisconsin	1,269	1,270	2,155	2,175	2,735	2,762	1.0
24-State Total	8,952	8,881	2,118	2,115	18,956	18,787	-0.9

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.

Monthly Milk Cows - 24 Selected States

Thousand head

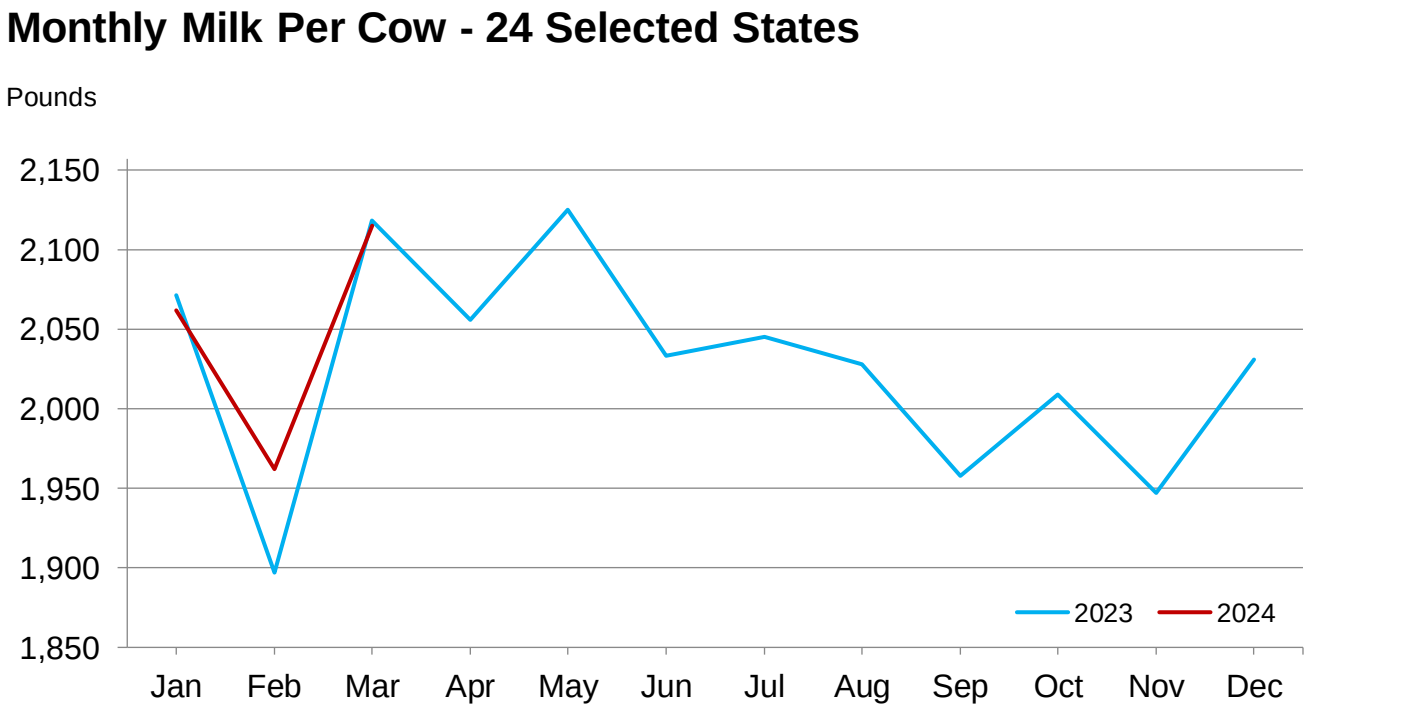


Milk Cows and Production – 24 Selected States: February 2023 and 2024

[May not add due to rounding]

State	Milk cows [1]		Milk per cow [2]		Milk production [2]		
	2023	2024	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	194	193	2,000	2,070	388	400	3.1
California	1,718	1,709	1,905	1,970	3,273	3,367	2.9
Colorado	201	201	1,995	2,070	401	416	3.7
Florida	91	98	1,715	1,750	156	172	10.3
Georgia	92	87	1,840	1,850	169	161	-4.7
Idaho	668	665	1,935	1,970	1,293	1,310	1.3
Illinois	79	79	1,710	1,785	135	141	4.4
Indiana	189	190	1,845	1,870	349	355	1.7
Iowa	240	242	1,915	2,000	460	484	5.2
Kansas	178	174	1,850	1,935	329	337	2.4
Michigan	435	439	2,135	2,200	929	966	4.0
Minnesota	455	448	1,795	1,865	817	836	2.3
New Mexico	280	243	1,955	2,030	547	493	-9.9
New York	630	630	1,950	2,010	1,229	1,266	3.0
Ohio	252	254	1,730	1,785	436	453	3.9
Oregon	124	116	1,620	1,655	201	192	-4.5
Pennsylvania	466	465	1,675	1,710	781	795	1.8
South Dakota	189	210	1,750	1,825	331	383	15.7
Texas	655	645	2,025	2,115	1,326	1,364	2.9
Utah	90	89	1,770	1,830	159	163	2.5
Vermont	118	116	1,665	1,725	196	200	2.0
Virginia	68	67	1,640	1,710	112	115	2.7
Washington	257	258	1,865	1,930	479	498	4.0
Wisconsin	1,270	1,270	1,935	2,025	2,457	2,572	4.7
24-State Total	8,939	8,888	1,897	1,962	16,953	17,439	2.9

[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.



Milk Cows and Production – States and United States: Revised October - December 2022 and 2023

[May not add due to rounding]

State	October - December milk cows [1]		October - December milk production [2]		
	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	2.0	2.0	6.0	5.0	-16.7
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	195.0	200.0	1,167.0	1,199.0	2.7
Arkansas	3.5	2.5	10.0	7.0	-30.0
California	1,720.0	1,710.0	10,217.0	10,015.0	-2.0
Colorado	204.0	197.0	1,315.0	1,277.0	-2.9
Connecticut	18.5	17.5	105.0	104.0	-1.0
Delaware	2.6	2.6	11.2	11.4	1.8
Florida	92.0	99.0	448.0	485.0	8.3
Georgia	92.0	90.0	504.0	487.0	-3.4
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	661.0	663.0	4,103.0	4,068.0	-0.9
Illinois	79.0	79.0	414.0	418.0	1.0
Indiana	186.0	190.0	1,095.0	1,118.0	2.1
Iowa	239.0	239.0	1,466.0	1,460.0	-0.4
Kansas	175.0	176.0	1,045.0	1,045.0	-
Kentucky	45.0	43.0	222.0	211.0	-5.0
Louisiana	8.0	7.0	25.0	22.0	-12.0
Maine	25.0	24.0	134.0	130.0	-3.0
Maryland	40.0	40.0	205.0	210.0	2.4
Massachusetts	9.0	9.0	44.0	43.0	-2.3
Michigan	432.0	439.0	2,936.0	2,980.0	1.5
Minnesota	454.0	450.0	2,606.0	2,577.0	-1.1
Mississippi	6.0	5.5	19.0	16.0	-15.8
Missouri	65.0	60.0	218.0	201.0	-7.8
Montana	10.0	9.0	53.0	50.0	-5.7
Nebraska	57.0	53.0	356.0	326.0	-8.4
Nevada	33.0	32.0	192.0	194.0	1.0
New Hampshire	10.0	9.5	52.0	50.0	-3.8
New Jersey	4.2	4.0	21.0	21.0	-
New Mexico	282.0	255.0	1,705.0	1,528.0	-10.4
New York	630.0	630.0	3,917.0	3,963.0	1.2
North Carolina	39.0	38.0	220.0	217.0	-1.4
North Dakota	14.0	10.5	77.0	60.0	-22.1
Ohio	250.0	255.0	1,372.0	1,406.0	2.5
Oklahoma	39.0	37.0	178.0	167.0	-6.2
Oregon	123.0	120.0	635.0	616.0	-3.0
Pennsylvania	467.0	466.0	2,432.0	2,401.0	-1.3
Rhode Island	0.5	0.5	2.4	2.4	-
South Carolina	9.0	8.0	38.0	35.0	-7.9
South Dakota	185.0	202.0	1,061.0	1,155.0	8.9
Tennessee	26.0	25.0	117.0	114.0	-2.6
Texas	653.0	635.0	4,151.0	4,086.0	-1.6
Utah	92.0	89.0	525.0	510.0	-2.9
Vermont	118.0	116.0	633.0	619.0	-2.2
Virginia	68.0	68.0	343.0	350.0	2.0
Washington	256.0	257.0	1,512.0	1,527.0	1.0
West Virginia	5.0	4.5	18.0	16.0	-11.1
Wisconsin	1,271.0	1,270.0	7,910.0	7,962.0	0.7
Wyoming	9.0	9.0	61.0	62.0	1.6
Other States [3]	0.8	0.8	1.1	1.7	54.5
United States	9,405.0	9,349.0	55,898.0	55,529.0	-0.7

- Represents zero.
(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.
[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.
[3] Other States includes Alaska and Hawaii.

Milk Cows and Production – States and United States: Preliminary January - March 2023 and 2024

[May not add due to rounding]

State	January - March milk cows [1]		January - March milk production [2]		
	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	2.5	2.5	9.0	8.0	-11.1
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	194.0	194.0	1,238.0	1,256.0	1.5
Arkansas	3.0	2.5	10.0	8.0	-20.0
California	1,718.0	1,709.0	10,446.0	10,573.0	1.2
Colorado	201.0	200.0	1,295.0	1,301.0	0.5
Connecticut	18.5	17.5	109.0	107.0	-1.8
Delaware	2.7	2.6	12.8	12.9	0.8
Florida	91.0	98.0	490.0	533.0	8.8
Georgia	92.0	87.0	540.0	504.0	-6.7
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	667.0	664.0	4,146.0	4,115.0	-0.7
Illinois	79.0	79.0	433.0	441.0	1.8
Indiana	189.0	190.0	1,124.0	1,124.0	-
Iowa	240.0	241.0	1,474.0	1,510.0	2.4
Kansas	178.0	174.0	1,058.0	1,050.0	-0.8
Kentucky	46.0	43.0	245.0	224.0	-8.6
Louisiana	8.0	8.0	30.0	29.0	-3.3
Maine	25.0	24.0	135.0	133.0	-1.5
Maryland	40.0	40.0	213.0	219.0	2.8
Massachusetts	9.0	9.0	45.0	45.0	-
Michigan	435.0	439.0	2,984.0	3,016.0	1.1
Minnesota	455.0	448.0	2,616.0	2,604.0	-0.5
Mississippi	6.0	5.5	23.0	19.0	-17.4
Missouri	64.0	60.0	223.0	212.0	-4.9
Montana	9.5	9.0	53.0	51.0	-3.8
Nebraska	55.0	51.0	340.0	314.0	-7.6
Nevada	33.0	32.0	185.0	197.0	6.5
New Hampshire	10.0	9.5	53.0	52.0	-1.9
New Jersey	4.1	4.0	22.0	22.0	-
New Mexico	281.0	241.0	1,779.0	1,532.0	-13.9
New York	630.0	630.0	3,941.0	3,962.0	0.5
North Carolina	39.0	38.0	235.0	229.0	-2.6
North Dakota	13.0	10.0	73.0	58.0	-20.5
Ohio	252.0	254.0	1,399.0	1,422.0	1.6
Oklahoma	41.0	39.0	195.0	188.0	-3.6
Oregon	125.0	116.0	648.0	599.0	-7.6
Pennsylvania	466.0	465.0	2,500.0	2,500.0	-
Rhode Island	0.5	0.5	2.4	2.4	-
South Carolina	8.5	8.0	41.0	39.0	-4.9
South Dakota	188.0	209.0	1,058.0	1,191.0	12.6
Tennessee	26.0	25.0	123.0	118.0	-4.1
Texas	655.0	641.0	4,281.0	4,186.0	-2.2
Utah	90.0	89.0	512.0	514.0	0.4
Vermont	118.0	116.0	634.0	625.0	-1.4
Virginia	68.0	67.0	358.0	359.0	0.3
Washington	257.0	258.0	1,538.0	1,558.0	1.3
West Virginia	4.5	4.0	17.0	15.0	-11.8
Wisconsin	1,270.0	1,270.0	7,891.0	8,045.0	2.0
Wyoming	9.0	9.0	58.6	62.0	5.8
Other States [3]	0.9	0.8	1.4	1.7	21.4
United States	9,418.0	9,333.0	56,837.0	56,886.0	0.1

- Represents zero.
(D) Withheld to avoid disclosing data for individual operations.
(NA) Not available.
[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.
[3] Other States includes Alaska and Hawaii.

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. Indications of milk cow inventory are also obtained in the January Cattle Surveys.

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 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 production estimates over the past 20 quarters is 0.2 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 56.9 billion pounds by more than 0.2 percent. Chances are 9 out of 10 that the difference will not exceed 0.3 percent.

Reliability of Quarterly Milk Production Estimates

[Based on data for the past 20 quarters]

Item	Root mean square error	90 percent confidence level	Difference between first and latest estimate				
			Average	Smallest	Largest	Quarters	
						Below latest	Above latest
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)
Milk production	0.2	0.3	71	0	216	8	11
All milk cows	0.1	0.2	9	1	29	8	12

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.

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Donnie Fike – Dairy Products ..... (202) 690-3347
Anthony Fischer – Hogs and Pigs ..... (202) 720-3106
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