Milk Production



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March Milk Production up 0.6 Percent

Milk production in the 24 major States during March totaled 18.9 billion pounds, up 0.6 percent from March 2022. February revised production, at 17.0 billion pounds, was up 1.2 percent from February 2022. The February revision represented an increase of 48 million pounds or 0.3 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 2,116 pounds for March, 3 pounds above March 2022.

The number of milk cows on farms in the 24 major States was 8.95 million head, 44,000 head more than March 2022, and 6,000 head more than February 2023.

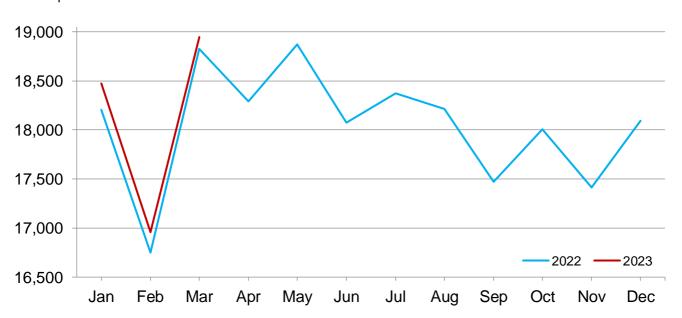
January-March Milk Production up 1.0 Percent

Milk production in the United States during the January - March quarter totaled 56.8 billion pounds, up 1.0 percent from the January - March quarter last year.

The average number of milk cows in the United States during the quarter was 9.42 million head, 20,000 head more than the October - December quarter, and 40,000 head more than the same period last year.

Monthly Milk Production - 24 Selected States





Milk Cows and Production by Quarter - United States: 2022-2023

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

	Milk cows 1		Milk pe	r cow ²	Milk production ²		
Quarter	2022	2023	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March	9,411	9,424	6,000 6,144 5,999 5,944	6,032	56,305 57,822 56,438 55,897	56,842	1.0
Annual	9,402		24,087		226,462		

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

Milk Cows and Production by Month - 24 Selected States: 2022-2023

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

	Milk cows 1		Milk per	r cow ²	Milk production ²		
Month	2022	2023	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	8,876	8,927	2,051	2,069	18,205	18,474	1.5
February	8,885	8,946	1,885	1,896	16,750	16,958	1.2
March	8,908	8,952	2,113	2,116	18,827	18,946	0.6
April	8,908		2,053		18,291		
May	8,921		2,115		18,871		
June	8,915		2,027		18,074		
July	8,920		2,060		18,373		
August	8,927		2,040		18,212		
September	8,927		1,957		17,470		
October	8,931		2,016		18,005		
November	8,924		1,951		17,413		
December	8,918		2,029		18,093		
Annual	8,913		24,300		216,584		

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

Estimated Milk Cows and Production by Month - United States: 2022-2023

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

	Milk cows 1		Milk per	cow ²	Milk production ²		
Month	2022	2023	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,367 9,380 9,404 9,404 9,417 9,413 9,413 9,406 9,406	9,407 9,429 9,435	2,034 1,870 2,096 2,036 2,098 2,010 2,038 2,022 1,939	2,053 1,880 2,099	19,050 17,540 19,715 19,147 19,755 18,920 19,180 19,016 18,242	19,311 17,726 19,805	1.4 1.1 0.5
October November December	9,412 9,404 9,396		1,998 1,934 2,012		18,809 18,184 18,904 226,462		

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

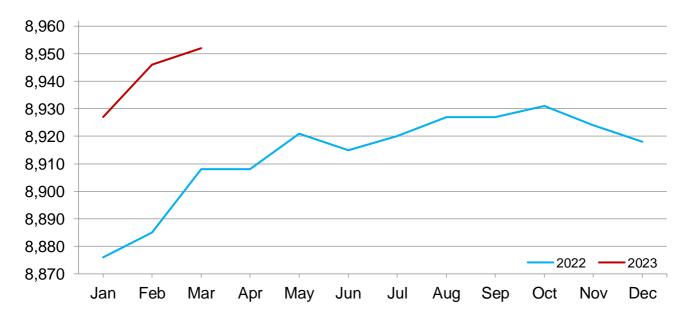
Milk Cows and Production - 24 Selected States: March 2022 and 2023

[May not add due to rounding]

	Milk c	ows 1	Milk per	COW ²		Milk production ²	
State	2022	2023	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	199	194	2,270	2,270	452	440	-2.7
California	1,721	1,722	2,160	2,115	3,717	3,642	-2.0
Colorado	203	203	2,230	2,230	453	453	-
Florida	98	91	1,870	1,900	183	173	-5.5
Georgia	90	92	2,030	2,040	183	188	2.7
Idaho	653	668	2,140	2,155	1,397	1,440	3.1
Illinois	80	79	1,940	1,950	155	154	-0.6
Indiana	187	189	2,065	2,080	386	393	1.8
lowa	229	239	2,125	2,120	487	507	4.1
Kansas	171	179	2,060	2,060	352	369	4.8
Michigan	427	435	2,355	2,380	1,006	1,035	2.9
Minnesota	453	454	1,975	1,995	895	906	1.2
New Mexico	295	281	2,215	2,220	653	624	-4.4
New York	620	630	2,150	2,160	1,333	1,361	2.1
Ohio	250	252	1,920	1,945	480	490	2.1
Oregon	128	125	1,810	1,810	232	226	-2.6
Pennsylvania	467	466	1,870	1,870	873	871	-0.2
South Dakota	177	190	1,945	1,935	344	368	7.0
Texas	640	657	2,245	2,290	1,437	1,505	4.7
Utah	94	92	1,965	1,960	185	180	-2.7
Vermont	118	118	1,870	1,860	221	219	-0.9
Virginia	70	67	1,830	1,865	128	125	-2.3
Washington	265	260	2,080	2,085	551	542	-1.6
Wisconsin	1,273	1,269	2,140	2,155	2,724	2,735	0.4
24-State Total	8,908	8,952	2,113	2,116	18,827	18,946	0.6

Monthly Milk Cows - 24 Selected States

Thousand head



⁻ Represents zero.

1 Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production - 24 Selected States: February 2022 and 2023

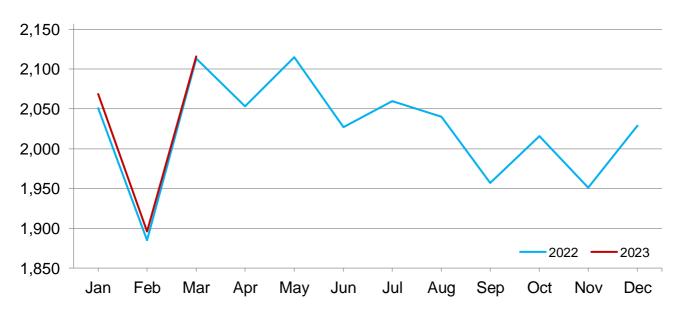
[May not add due to rounding]

	Milk c	cows 1	Milk per	cow ²		Milk production ²	
State	2022	2023	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	196	194	2,010	2,000	394	388	-1.5
California	1,720	1,723	1,925	1,900	3,311	3,274	-1.1
Colorado	202	201	1,990	1,995	402	401	-0.2
Florida	99	91	1,675	1,715	166	156	-6.0
Georgia	89	92	1,820	1,840	162	169	4.3
Idaho	652	668	1,905	1,935	1,242	1,293	4.1
Illinois	80	79	1,720	1,710	138	135	-2.2
Indiana	187	189	1,830	1,845	342	349	2.0
lowa	226	240	1,910	1,915	432	460	6.5
Kansas	170	178	1,850	1,850	315	329	4.4
Michigan	428	435	2,100	2,135	899	929	3.3
Minnesota	453	455	1,775	1,795	804	817	1.6
New Mexico	292	280	1,955	1,955	571	547	-4.2
New York	620	630	1,915	1,950	1,187	1,229	3.5
Ohio	248	252	1,720	1,730	427	436	2.1
Oregon	127	124	1,620	1,620	206	201	-2.4
Pennsylvania	468	466	1,670	1,675	782	781	-0.1
South Dakota	175	189	1,750	1,750	306	331	8.2
Texas	633	655	1,985	2,025	1,257	1,326	5.5
Utah	94	92	1,770	1,770	166	163	-1.8
Vermont	119	118	1,660	1,665	198	196	-1.0
Virginia	71	68	1,615	1,640	115	112	-2.6
Washington	263	257	1,865	1,865	490	479	-2.2
Wisconsin	1,273	1,270	1,915	1,935	2,438	2,457	0.8
24-State Total	8,885	8,946	1,885	1,896	16,750	16,958	1.2

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

Monthly Milk Per Cow - 24 Selected States

Pounds



Milk Cows and Production - States and United States: Revised October - December 2021 and 2022

[May not add due to rounding]

	October - Decemb	er milk cows 1	October - December milk production ²				
State	2021	2022	2021	2022	Change from 2021		
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)		
Alabama	3.0	2.0	8.0	6.0	-25.0		
Alaska	(D)	(D)	(D)	(D)	(NA)		
Arizona	194.0	195.0	1,165.0	1,167.0	0.2		
Arkansas	4.5	3.5	13.0	10.0	-23.1		
California	1,720.0	1,724.0	10,286.0	10,214.0	-0.7		
Colorado	201.0	204.0	1,304.0	1,315.0	0.8		
Connecticut	18.5	18.5	105.0	105.0	-		
Delaware	2.8	2.6	11.4	11.2	-1.8		
Florida	105.0	93.0	511.0	448.0	-12.3		
Georgia	82.0	92.0	449.0	504.0	12.2		
Hawaii	(D)	(D)	(D)	(D)	(NA)		
Idaho	651.0	661.0	4,014.0	4,103.0	2.2		
Illinois	81.0	79.0	426.0	414.0	-2.8		
Indiana	186.0	186.0	1,089.0	1,099.0	0.9		
lowa	225.0	239.0	1,377.0	1,466.0	6.5		
Kansas	169.0	175.0	1,004.0	1,046.0	4.2		
Kentucky	45.0	45.0	214.0	222.0	3.7		
Louisiana	9.0	8.0	28.0	25.0	-10.7		
Maine	26.0	25.0	136.0	134.0	-1.5		
Maryland	41.0	40.0	207.0	205.0	-1.0		
Massachusetts	9.5	9.0	46.0	44.0	-4.3		
Michigan	434.0	430.0	2,908.0	2,937.0	1.0		
Minnesota	461.0	454.0	2,603.0	2,611.0	0.3		
Mississippi	7.0	6.0	23.0	19.0	-17.4		
Missouri	69.0 11.0	65.0 10.0	230.0 59.0	218.0 53.0	-5.2 -10.2		
Montana	58.0	57.0	351.0	356.0			
Nebraska Nevada	32.0	32.0	202.0	192.0	1.4 -5.0		
New Hampshire	10.5	10.0	54.0	52.0	-3.7		
New Jersey	4.2	4.1	21.0	20.0	-4.8		
New Mexico	295.0	282.0	1,782.0	1,705.0	-4.3		
New York	624.0	628.0	3,812.0	3,915.0	2.7		
North Carolina	39.0	39.0	222.0	220.0	-0.9		
North Dakota	15.0	14.0	82.0	77.0	-6.1		
Ohio	250.0	250.0	1,361.0	1,372.0	0.8		
Oklahoma	39.0	39.0	176.0	178.0	1.1		
Oregon	125.0	123.0	644.0	635.0	-1.4		
Pennsylvania	470.0	467.0	2,453.0	2,432.0	-0.9		
Rhode Island	0.5	0.5	2.4	2.4	-		
South Carolina	9.0	9.0	39.0	38.0	-2.6		
South Dakota	166.0	185.0	960.0	1,061.0	10.5		
Tennessee	27.0	26.0	118.0	118.0	-		
Texas	625.0	653.0	3,929.0	4,144.0	5.5		
Utah	94.0	92.0	541.0	525.0	-3.0		
Vermont	120.0	118.0	629.0	633.0	0.6		
Virginia	71.0	68.0	359.0	343.0	-4.5		
Washington	262.0	255.0	1,551.0	1,512.0	-2.5		
West Virginia	5.0	5.0	19.0	18.0	-5.3		
Wisconsin	1,277.0	1,271.0	7,846.0	7,910.0	0.8		
Wyoming	9.0	9.0	56.2	61.0	8.5		
Other States ³	0.9	0.8	1.2	1.1	-8.3		
United States	9,383.0	9,404.0	55,427.0	55,897.0	0.8		

⁻ 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 2022 and 2023

[May not add due to rounding]

May not add due to round	January - March	n milk cows 1	Janua	ary - March milk production	2
State	2022	2023	2022	2023	Change from 2022
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama Alaska	3.0 (D)	2.5 (D)	10.0 (D)	9.0 (D)	-10.0 (NA)
Arizona	196.0	194.0	1,256.0	1,238.0	-1.4
Arkansas	4.5	3.5	13.0	10.0	-23.1
California	1,720.0	1,723.0	10,563.0	10,450.0	-1.1
Colorado Connecticut	202.0 18.0	201.0 18.5	1,300.0 108.0	1,295.0 109.0	-0.4 0.9
Delaware	2.8	2.7	13.0	13.0	0.9 -
Florida	100.0	90.0	534.0	488.0	-8.6
Georgia	89.0	92.0	519.0	540.0	4.0
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	652.0	667.0	4,005.0	4,141.0	3.4
Illinois	80.0	79.0 189.0	442.0 1.103.0	435.0	-1.6
Indiana Iowa	187.0 227.0	240.0	1,103.0	1,124.0 1,470.0	1.9 5.8
Kansas	170.0	177.0	1,013.0	1,055.0	4.1
Kentucky	45.0	46.0	233.0	246.0	5.6
Louisiana	9.0	8.0	33.0	30.0	-9.1
Maine	26.0	25.0	137.0	135.0	-1.5
Maryland	41.0	40.0	218.0	213.0	-2.3
Massachusetts	9.5 428.0	9.0 435.0	48.0 2,888.0	45.0 2,980.0	-6.3 3.2
Michigan Minnesota	454.0	455.0 455.0	2,581.0	2,622.0	1.6
Mississippi	7.0	6.0	26.0	22.0	-15.4
Missouri	68.0	65.0	238.0	226.0	-5.0
Montana	10.5	10.0	57.0	53.0	-7.0
Nebraska	57.0	55.0	352.0	340.0	-3.4
Nevada New Hampshire	32.0 10.5	33.0 10.0	202.0 56.0	190.0 53.0	-5.9 -5.4
New Jersey	4.3	4.1	23.0	22.0	-4.3
New Mexico	294.0	281.0	1,858.0	1,779.0	-4.3
New York	620.0	630.0	3,816.0	3,935.0	3.1
North Carolina	39.0	39.0	238.0	236.0	-0.8
North Dakota Ohio	14.5 249.0	13.0 252.0	80.0 1,370.0	74.0 1,399.0	-7.5 2.1
Oklahoma	40.0	40.0	189.0	190.0	0.5
Oregon	127.0	124.0	657.0	645.0	-1.8
Pennsylvania	468.0	466.0	2,502.0	2,500.0	-0.1
Rhode Island	0.5	0.5	2.5	2.4	-4.0
South Carolina	9.0	9.0	44.0	42.0	-4.5
South Dakota	174.0	189.0	980.0	1,059.0	8.1
Tennessee	27.0 634.0	26.0 654.0	126.0 4,072.0	126.0 4,281.0	5.1
Texas Utah	94.0	92.0	4,072.0 533.0	4,281.0 521.0	-2.3
Vermont	119.0	118.0	635.0	633.0	-0.3
Virginia	71.0	68.0	368.0	358.0	-2.7
Washington	263.0	257.0	1,568.0	1,539.0	-1.8
West Virginia	5.0	5.0	19.0	18.0	-5.3
Wisconsin Wyoming	1,273.0 9.0	1,270.0 9.0	7,829.0 56.1	7,891.0 58.6	0.8 4.5
Other States ³	1.0	0.9	1.3	1.4	7.7
United States	9,384.0	9,424.0	56,305.0	56,842.0	1.0

⁻ Represents zero.

⁽D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

1 Includes dry cows. Excludes heifers not yet fresh

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 56.8 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]

	90 percent		Difference between first and latest estimate					
Item	Root mean square error	confidence	Averege	0 " '	Largest -	Quarters		
	Square crioi	level	Average	Smallest		Below latest	Above latest	
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)	
Milk production	0.2	0.3	67	7	215	12	8	
All milk cows	0.1	0.2	8	0	26	13	6	

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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Sherry Bertramsen – Livestock Slaughter	
Ryan Cowen – Cattle, Cattle on Feed	(202) 720-3040
Donnie Fike – Dairy Products	(202) 690-3347
Anthony Fischer – Hogs and Pigs	
Mike Miller – Milk Production and Milk Cows	(202) 720-3278
Suzanne Richards – Sheep and Goats	(202) 720-4448

Access to NASS Reports

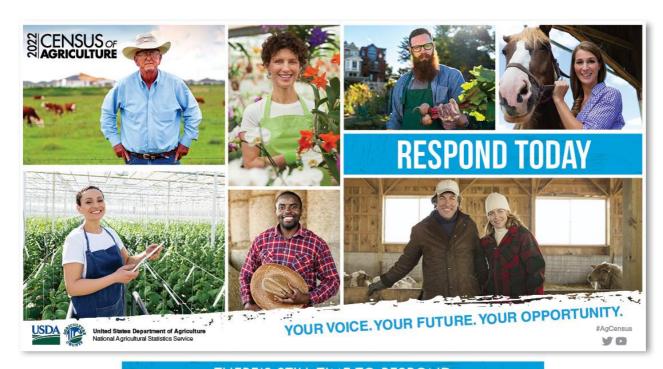
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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

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THERE'S STILL TIME TO RESPOND
TO THE 2022 CENSUS OF AGRICULTURE
nass.usda.gov/AgCensus