Milk Production

ISSN: 1949-1557

Released June 21, 2024, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

May Milk Production down 0.7 Percent

Milk production in the 24 major States during May totaled 18.9 billion pounds, down 0.7 percent from May 2023. April revised production, at 18.3 billion pounds, was down 0.4 percent from April 2023. The April revision represented a decrease of 27 million pounds or 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 2,122 pounds for May, 3 pounds below May 2023.

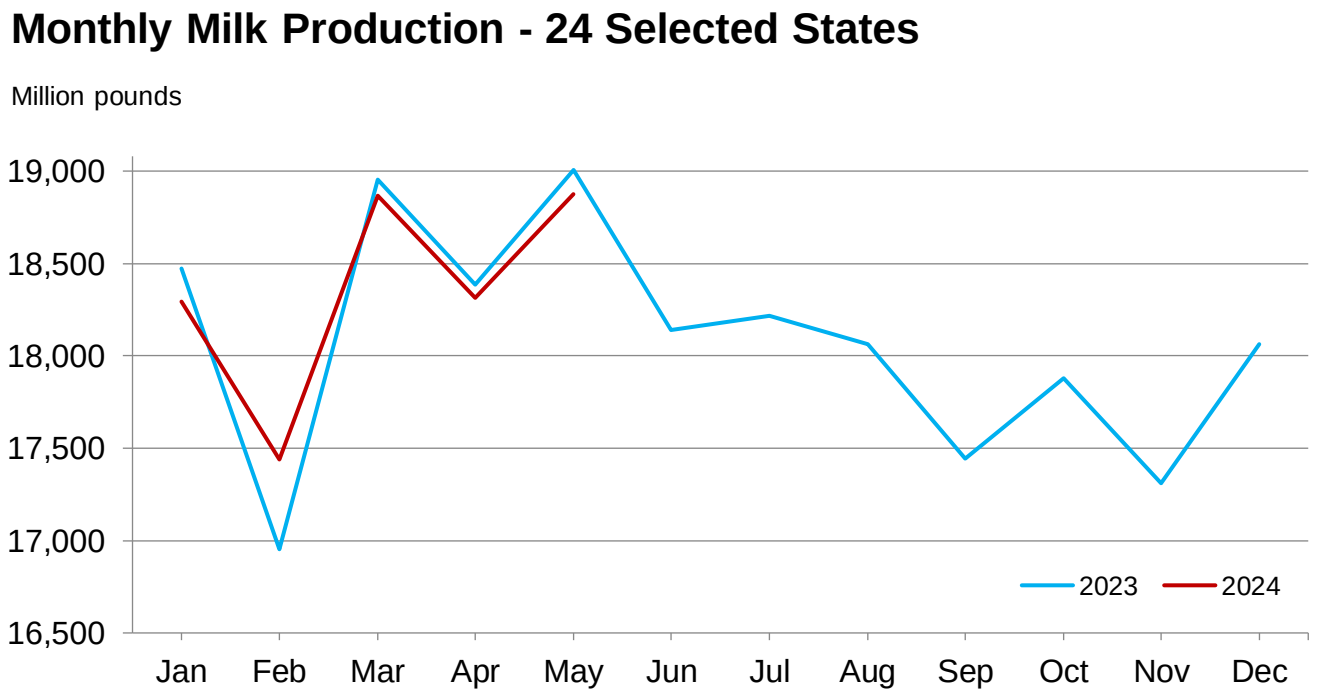
The number of milk cows on farms in the 24 major States was 8.89 million head, 52,000 head less than May 2023, but 5,000 head more than April 2024.

May Milk Production in the United States down 0.9 Percent

Milk production in the United States during May totaled 19.7 billion pounds, down 0.9 percent from May 2023.

Production per cow in the United States averaged 2,105 pounds for May, 3 pounds below May 2023.

The number of milk cows on farms in the United States was 9.35 million head, 68,000 head less than May 2023, but 5,000 head more than April 2024.



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	9,338	6,035	6,100	56,837	56,964	0.2
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	8,892	2,118	2,122	18,956	18,865	-0.5
April	8,941	8,888	2,056	2,061	18,386	18,314	-0.4
May	8,945	8,893	2,125	2,122	19,006	18,875	-0.7
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	9,348	2,100	2,105	19,811	19,681	-0.7
April	9,414	9,345	2,040	2,043	19,204	19,095	-0.6
May	9,418	9,350	2,108	2,105	19,852	19,680	-0.9
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.

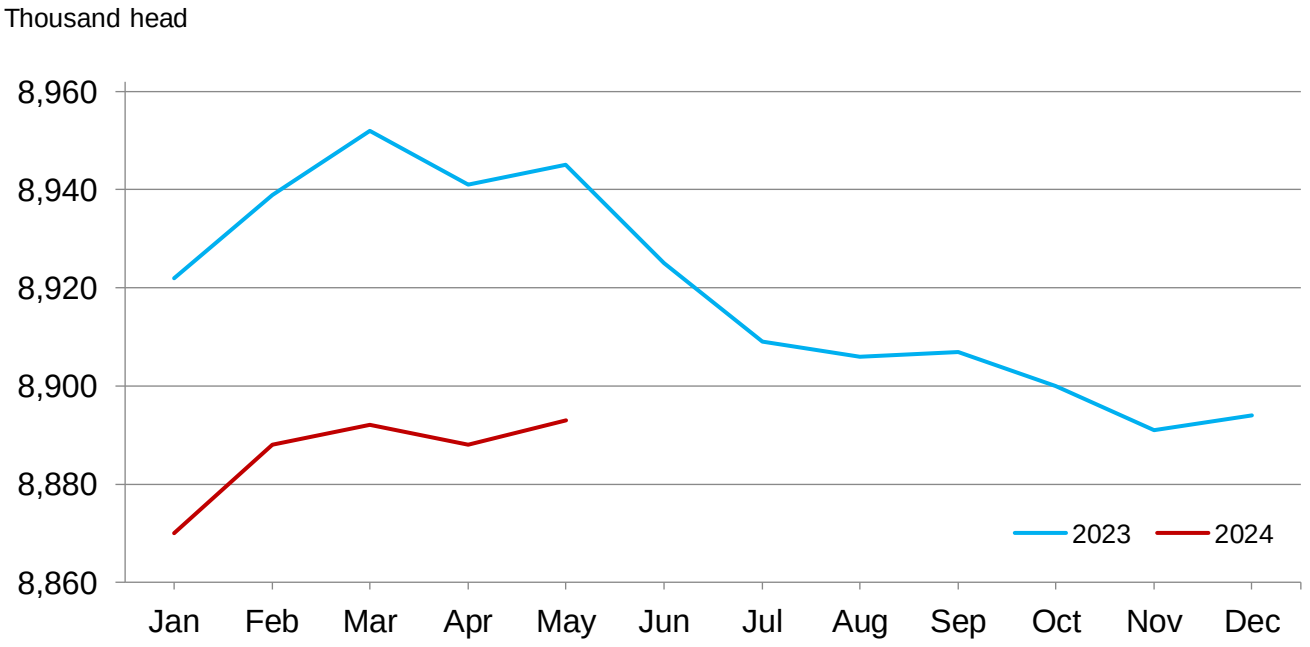
Milk Cows and Production – 24 Selected States: May 2023 and 2024

[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	198	193	2,190	2,190	434	423	-2.5
California	1,715	1,709	2,125	2,100	3,644	3,589	-1.5
Colorado	206	203	2,235	2,235	460	454	-1.3
Florida	94	102	1,820	1,850	171	189	10.5
Georgia	93	85	1,950	1,950	181	166	-8.3
Idaho	670	669	2,215	2,205	1,484	1,475	-0.6
Illinois	79	78	1,915	1,930	151	151	-
Indiana	189	189	2,070	2,055	391	388	-0.8
Iowa	240	243	2,135	2,150	512	522	2.0
Kansas	179	173	2,055	2,070	368	358	-2.7
Michigan	436	438	2,400	2,390	1,046	1,047	0.1
Minnesota	454	446	1,995	2,020	906	901	-0.6
New Mexico	280	238	2,160	2,170	605	516	-14.7
New York	630	630	2,225	2,220	1,402	1,399	-0.2
Ohio	252	255	1,945	1,935	490	493	0.6
Oregon	122	118	1,830	1,830	223	216	-3.1
Pennsylvania	466	465	1,855	1,840	864	856	-0.9
South Dakota	193	212	1,975	1,980	381	420	10.2
Texas	645	643	2,240	2,240	1,445	1,440	-0.3
Utah	91	90	2,030	2,035	185	183	-1.1
Vermont	118	115	1,890	1,870	223	215	-3.6
Virginia	67	67	1,845	1,840	124	123	-0.8
Washington	258	260	2,095	2,100	541	546	0.9
Wisconsin	1,270	1,272	2,185	2,205	2,775	2,805	1.1
24-State Total	8,945	8,893	2,125	2,122	19,006	18,875	-0.7

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

Monthly Milk Cows - 24 Selected States



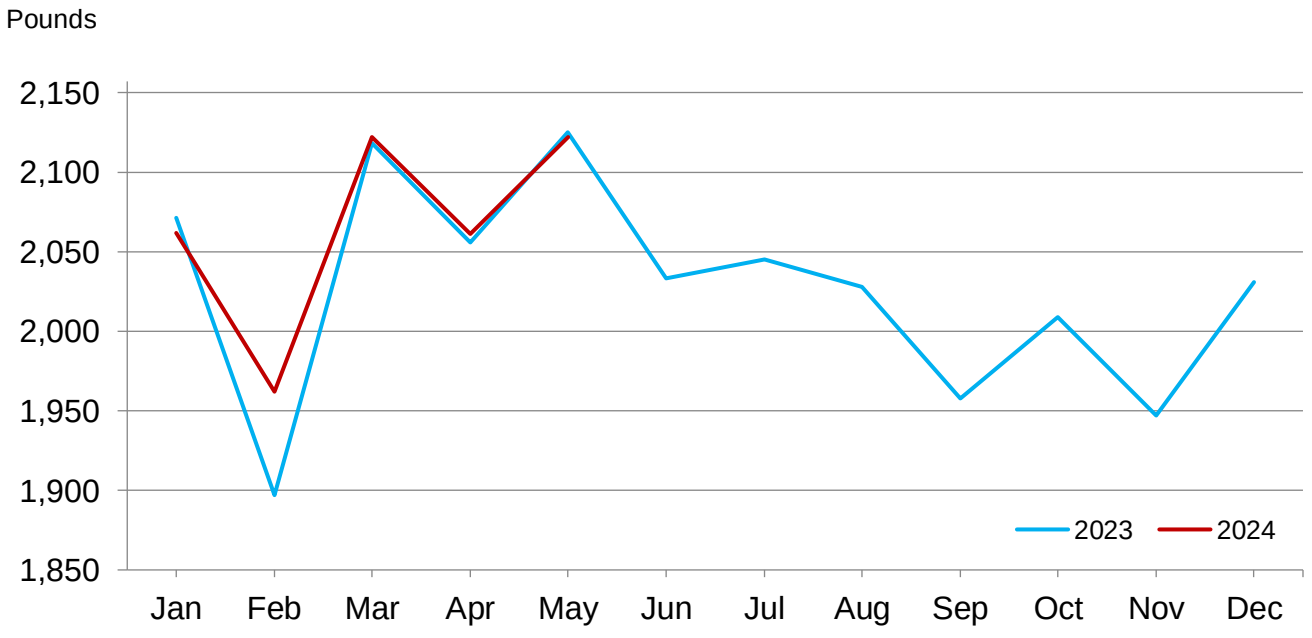
Milk Cows and Production – 24 Selected States: April 2023 and 2024

[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	196	193	2,185	2,180	428	421	-1.6
California	1,717	1,708	2,060	2,070	3,537	3,536	(Z)
Colorado	205	203	2,165	2,170	444	441	-0.7
Florida	92	102	1,805	1,875	166	191	15.1
Georgia	92	85	1,960	1,965	180	167	-7.2
Idaho	669	669	2,105	2,110	1,408	1,412	0.3
Illinois	79	79	1,860	1,880	147	149	1.4
Indiana	189	189	2,010	1,995	380	377	-0.8
Iowa	239	243	2,065	2,095	494	509	3.0
Kansas	180	173	2,000	1,980	360	343	-4.7
Michigan	436	438	2,310	2,305	1,007	1,010	0.3
Minnesota	454	446	1,925	1,945	874	867	-0.8
New Mexico	282	235	2,135	2,120	602	498	-17.3
New York	630	630	2,130	2,140	1,342	1,348	0.4
Ohio	252	255	1,875	1,880	473	479	1.3
Oregon	125	118	1,770	1,765	221	208	-5.9
Pennsylvania	466	465	1,835	1,815	855	844	-1.3
South Dakota	189	212	1,895	1,900	358	403	12.6
Texas	645	640	2,190	2,135	1,413	1,366	-3.3
Utah	90	90	1,930	1,940	174	175	0.6
Vermont	118	115	1,820	1,800	215	207	-3.7
Virginia	67	67	1,800	1,825	121	122	0.8
Washington	261	261	2,035	2,040	531	532	0.2
Wisconsin	1,268	1,272	2,095	2,130	2,656	2,709	2.0
24-State Total	8,941	8,888	2,056	2,061	18,386	18,314	-0.4

(Z) Less than half of the unit shown.
[1] Includes dry cows. Excludes heifers not yet fresh.
[2] Excludes milk sucked by calves.

Monthly Milk Per Cow - 24 Selected States



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 18.9 billion pounds by more than 0.3 percent. Chances are 9 out of 10 that the difference will not exceed 0.4 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	0.4	37	5	101	9	15
All Milk cows	0.1	0.1	5	0	14	5	15

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
Kim DaPra – Milk Production and Milk Cows ..... (512) 501-3266
Donnie Fike – Dairy Products ..... (202) 690-3347
Anthony Fischer – Hogs and Pigs ..... (202) 720-3106
Suzanne Richards – Sheep and Goats ..... (202) 720-4448

Access to NASS Reports

For your convenience, you may access NASS reports and products the following ways:

- All reports are available electronically, at no cost, on the NASS web site: www.nass.usda.gov.
- Both national and state specific reports are available via a free e-mail subscription. To set-up this free subscription, visit www.nass.usda.gov and click on "National" or "State" in upper right corner above "search" box to create an account and select the reports you would like to receive.
- Cornell's Mann Library has launched a new website housing NASS's and other agency's archived reports. The new website, https://usda.library.cornell.edu. All email subscriptions containing reports will be sent from the new website, https://usda.library.cornell.edu. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: https://usda.library.cornell.edu/help. You should whitelist notifications@usda-esmis.library.cornell.edu in your email client to avoid the emails going into spam/junk folders.

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers, employees, and applicants for employment on the basis of race, color, national origin, age, disability, sex, gender identity, religion, reprisal, and where applicable, political beliefs, marital status, familial or parental status, sexual orientation, or all or part of an individual's income is derived from any public assistance program, or protected genetic information in employment or in any program or activity conducted or funded by the Department. (Not all prohibited bases will apply to all programs and/or employment activities.)

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form (PDF), found online at www.ascr.usda.gov/filing-program-discrimination-complaint-usda-customer, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov.