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August Milk Production up 1.1 Percent

Milk production in the 24 major States during August totaled 18.0 billion pounds, up 1.1 percent from August 2020. July revised production, at 18.3 billion pounds, was up 2.0 percent from July 2020. The July 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 2,007 pounds for August, 3 pounds below August 2020.

The number of milk cows on farms in the 24 major States was 8.97 million head, 112,000 head more than August 2020, but 20,000 head less than July 2021.

August Milk Production in the United States up 1.1 Percent

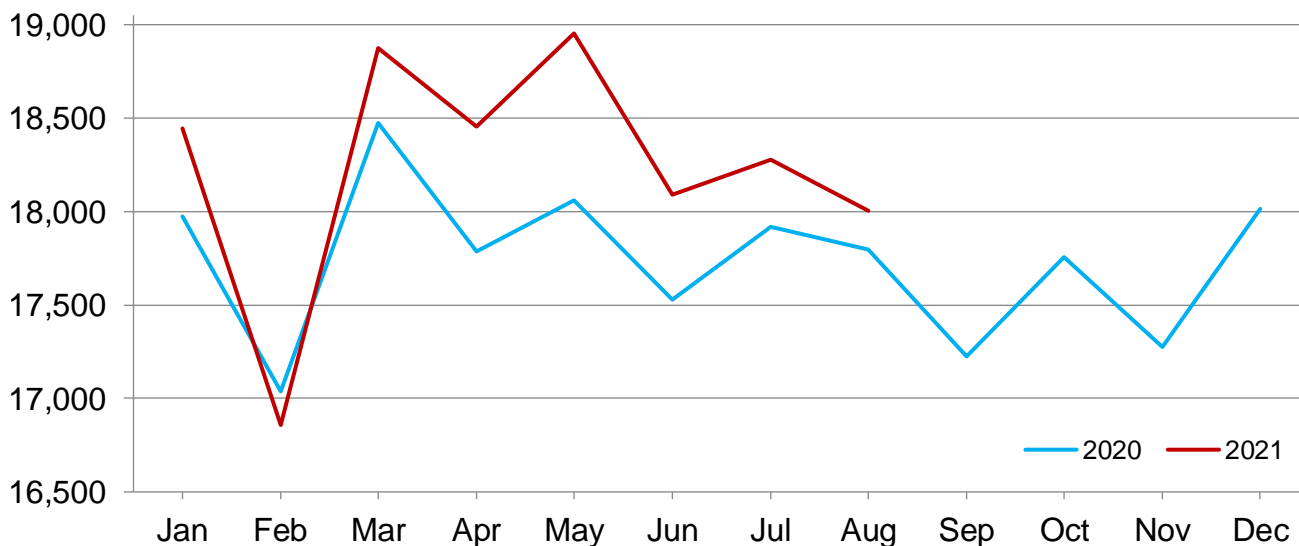
Milk production in the United States during August totaled 18.8 billion pounds, up 1.1 percent from August 2020.

Production per cow in the United States averaged 1,987 pounds for August, 1 pound below August 2020.

The number of milk cows on farms in the United States was 9.48 million head, 106,000 head more than August 2020, but 19,000 head less than July 2021.

Monthly Milk Production - 24 Selected States

Million pounds



Milk Cows and Production by Quarter – United States: 2020-2021

[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		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March	9,378	9,458	5,990	6,003	56,174	56,776	1.1
April-June	9,364	9,503	5,988	6,118	56,070	58,139	3.7
July-September	9,380		5,908		55,419		
October-December	9,429		5,892		55,557		
Annual	9,388		23,777		223,220		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production by Month – 24 Selected States: 2020-2021

[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		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	8,837	8,934	2,034	2,065	17,974	18,446	2.6
February	8,848	8,947	1,926	1,884	17,038	16,858	-1.1
March	8,861	8,961	2,085	2,106	18,474	18,873	2.2
April	8,855	8,985	2,009	2,054	17,787	18,454	3.7
May	8,838	8,996	2,044	2,107	18,061	18,953	4.9
June	8,834	8,993	1,984	2,012	17,530	18,091	3.2
July	8,854	8,989	2,024	2,033	17,919	18,275	2.0
August	8,857	8,969	2,010	2,007	17,799	18,002	1.1
September	8,877		1,941		17,226		
October	8,897		1,996		17,758		
November	8,914		1,938		17,274		
December	8,923		2,019		18,012		
Annual	8,866		24,008		212,852		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month – United States: 2020-2021

[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		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,365	9,445	2,016	2,047	18,877	19,330	2.4
February	9,377	9,458	1,908	1,868	17,895	17,666	-1.3
March	9,391	9,472	2,066	2,088	19,402	19,780	1.9
April	9,377	9,497	1,993	2,035	18,684	19,330	3.5
May	9,360	9,509	2,027	2,088	18,972	19,855	4.7
June	9,355	9,503	1,968	1,995	18,414	18,954	2.9
July	9,372	9,499	2,001	2,013	18,756	19,122	2.0
August	9,374	9,480	1,988	1,987	18,632	18,840	1.1
September	9,395		1,919		18,031		
October	9,414		1,976		18,603		
November	9,432		1,919		18,103		
December	9,442		1,997		18,851		
Annual	9,388		23,777		223,220		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production – 24 Selected States: August 2020 and 2021

[May not add due to rounding]

State	Milk cows ¹		Milk per cow ²		Milk production ²		Change from 2020
	2020	2021	2020	2021	2020	2021	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	200	199	1,850	1,850	370	368	-0.5
California	1,721	1,720	1,960	1,975	3,373	3,397	0.7
Colorado	198	203	2,225	2,225	441	452	2.5
Florida	111	108	1,570	1,545	174	167	-4.0
Georgia	80	82	1,700	1,730	136	142	4.4
Idaho	645	654	2,190	2,185	1,413	1,429	1.1
Illinois	83	82	1,720	1,720	143	141	-1.4
Indiana	189	197	1,970	1,970	372	388	4.3
Iowa	218	226	2,070	2,050	451	463	2.7
Kansas	170	171	1,995	1,995	339	341	0.6
Michigan	428	445	2,320	2,320	993	1,032	3.9
Minnesota	445	461	1,955	1,930	870	890	2.3
New Mexico	326	311	2,055	1,955	670	608	-9.3
New York	626	628	2,070	2,070	1,296	1,300	0.3
Ohio	254	260	1,865	1,860	474	484	2.1
Oregon	124	125	1,775	1,770	220	221	0.5
Pennsylvania	482	475	1,745	1,770	841	841	-
South Dakota	138	160	1,970	1,975	272	316	16.2
Texas	593	625	2,080	2,035	1,233	1,272	3.2
Utah	95	97	1,975	1,995	188	194	3.2
Vermont	121	120	1,775	1,775	215	213	-0.9
Virginia	74	73	1,640	1,620	121	118	-2.5
Washington	279	269	2,075	2,010	579	541	-6.6
Wisconsin	1,257	1,278	2,080	2,100	2,615	2,684	2.6
24-State Total	8,857	8,969	2,010	2,007	17,799	18,002	1.1

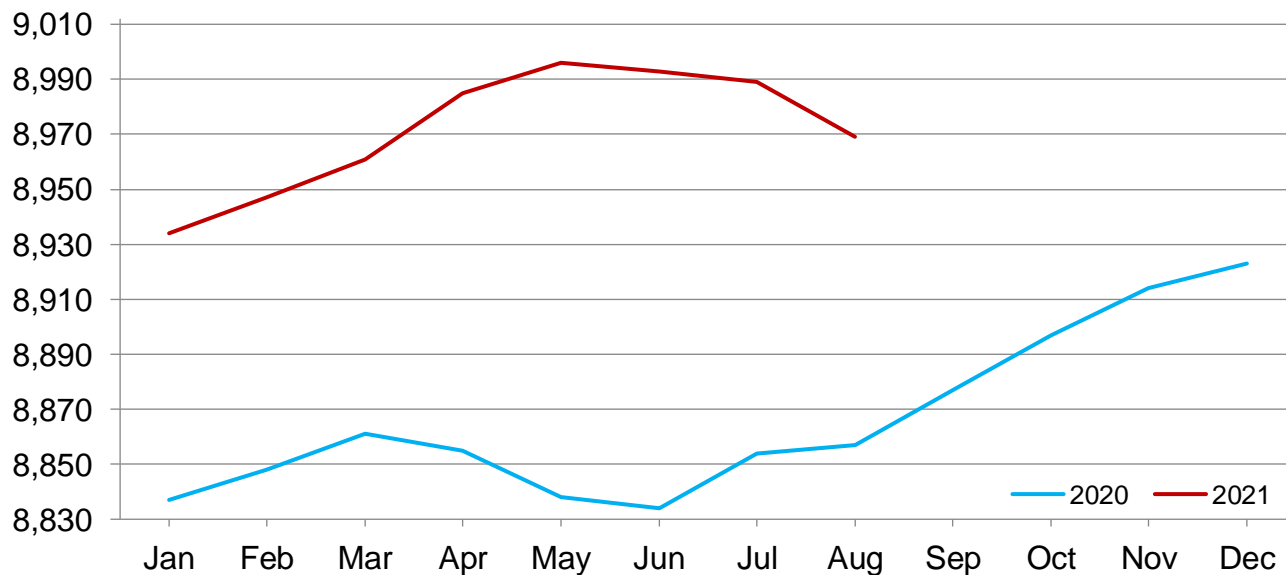
- Represents zero.

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: July 2020 and 2021

[May not add due to rounding]

	Milk cows ¹		Milk per cow ²		Milk production ²		Change from 2020
	2020	2021	2020	2021	2020	2021	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	200	199	1,935	1,930	387	384	-0.8
California	1,721	1,721	2,015	1,995	3,468	3,433	-1.0
Colorado	198	203	2,235	2,225	443	452	2.0
Florida	111	109	1,650	1,610	183	175	-4.4
Georgia	81	82	1,755	1,780	142	146	2.8
Idaho	645	654	2,210	2,190	1,425	1,432	0.5
Illinois	83	83	1,745	1,770	145	147	1.4
Indiana	188	197	1,950	1,970	367	388	5.7
Iowa	218	228	2,040	2,060	445	470	5.6
Kansas	169	172	1,980	2,005	335	345	3.0
Michigan	428	445	2,310	2,320	989	1,032	4.3
Minnesota	445	462	1,940	1,945	863	899	4.2
New Mexico	326	321	2,015	2,000	657	642	-2.3
New York	626	630	2,075	2,120	1,299	1,336	2.8
Ohio	254	260	1,870	1,870	475	486	2.3
Oregon	124	125	1,815	1,800	225	225	-
Pennsylvania	482	475	1,795	1,795	865	853	-1.4
South Dakota	137	159	1,930	1,970	264	313	18.6
Texas	590	625	2,065	2,085	1,218	1,303	7.0
Utah	95	97	1,985	2,010	189	195	3.2
Vermont	122	120	1,770	1,825	216	219	1.4
Virginia	74	73	1,660	1,650	123	120	-2.4
Washington	280	271	2,120	2,035	594	551	-7.2
Wisconsin	1,257	1,278	2,070	2,135	2,602	2,729	4.9
24-State Total	8,854	8,989	2,024	2,033	17,919	18,275	2.0

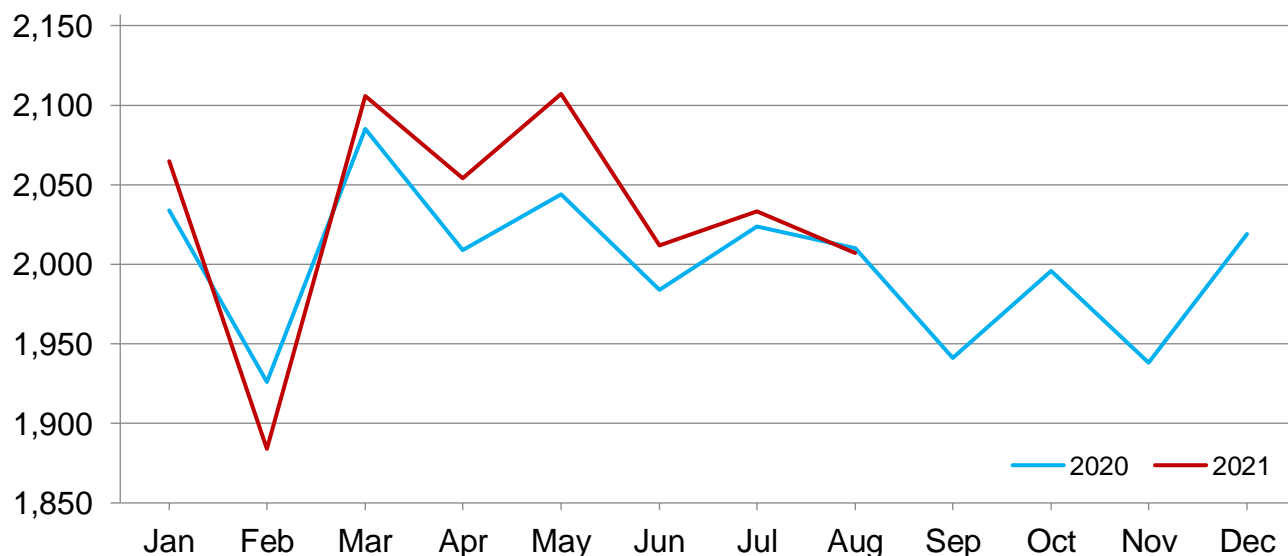
- Represents zero.

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 0.4 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 18.0 billion pounds by more than 0.4 percent. Chances are 9 out of 10 that the difference will not exceed 0.6 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	0.4	0.6	51	0	150	18	5
All Milk cows	0.1	0.2	10	0	26	20	3

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
Logan Hartley-Sanguinett – Sheep and Goats	(202) 690-3236
Mike Miller – Milk Production and Milk Cows	(202) 720-3278
Suzanne Richards – Dairy Products	(202) 720-4448

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- 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.

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USDA Fall Data Users' Meeting

Virtual Meeting

October 13 & 14, 2021

12:00 – 3:00 p.m. ET

USDA's National Agricultural Statistics Service will hold a virtual meeting for users of U.S. domestic and international agriculture data. NASS is organizing the 2021 Fall Data Users' Meeting in cooperation with five other USDA agencies – Agricultural Marketing Service, Economic Research Service, Farm Service Agency, Foreign Agricultural Service, and World Agricultural Outlook Board – and the Census Bureau's Foreign Trade Division. Agency representatives will answer questions and welcome comments and input from data users. Registration details will be coming soon.