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September Milk Production up 1.6 Percent

Milk production in the 24 major States during September totaled 17.5 billion pounds, up 1.6 percent from September 2021. August revised production, at 18.2 billion pounds, was up 1.8 percent from August 2021. The August revision represented an increase of 13 million pounds or 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 1,961 pounds for September, 26 pounds above September 2021.

The number of milk cows on farms in the 24 major States was 8.93 million head, 19,000 head more than September 2021, but 2,000 head less than August 2022.

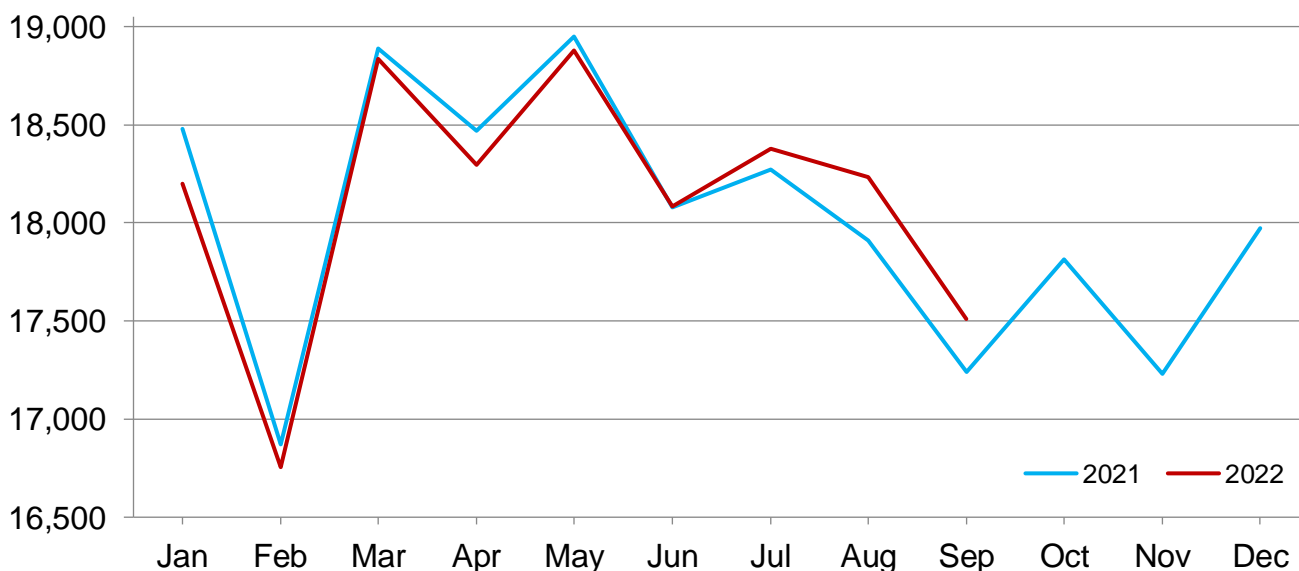
July-September Milk Production up 1.2 Percent

Milk production in the United States during the July - September quarter totaled 56.5 billion pounds, up 1.2 percent from the July - September quarter last year.

The average number of milk cows in the United States during the quarter was 9.41 million head, unchanged from the April - June quarter, but 29,000 head less than the same period last year.

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		Change from 2021
	2021	2022	2021	2022	2021	2022	
	(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	9,413	5,914	6,004	55,836	56,512	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		Change from 2021
	2021	2022	2021	2022	2021	2022	
	(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	8,928	1,935	1,961	17,239	17,510	1.6
October	8,892		2,003		17,812		
November	8,888		1,939		17,232		
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		Change from 2021
	2021	2022	2021	2022	2021	2022	
	(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	9,411	1,916	1,943	18,018	18,282	1.5
October	9,387		1,984		18,623		
November	9,382		1,920		18,015		
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: September 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	198	1,790	1,810	347	358	3.2
California	1,719	1,723	1,905	1,910	3,275	3,291	0.5
Colorado	199	206	2,135	2,140	425	441	3.8
Florida	105	94	1,475	1,440	155	135	-12.9
Georgia	82	92	1,670	1,680	137	155	13.1
Idaho	651	657	2,070	2,100	1,348	1,380	2.4
Illinois	82	80	1,650	1,670	135	134	-0.7
Indiana	189	186	1,900	1,900	359	353	-1.7
Iowa	225	237	1,995	1,995	449	473	5.3
Kansas	170	175	1,915	1,945	326	340	4.3
Michigan	438	427	2,195	2,235	961	954	-0.7
Minnesota	461	453	1,870	1,915	862	867	0.6
New Mexico	300	284	1,930	1,970	579	559	-3.5
New York	628	625	2,000	2,055	1,256	1,284	2.2
Ohio	254	250	1,760	1,770	447	443	-0.9
Oregon	125	124	1,710	1,710	214	212	-0.9
Pennsylvania	473	468	1,690	1,705	799	798	-0.1
South Dakota	161	186	1,920	1,910	309	355	14.9
Texas	625	655	1,985	2,055	1,241	1,346	8.5
Utah	94	94	1,905	1,905	179	179	-
Vermont	120	117	1,725	1,770	207	207	-
Virginia	72	69	1,590	1,635	114	113	-0.9
Washington	264	257	1,975	2,005	521	515	-1.2
Wisconsin	1,278	1,271	2,030	2,060	2,594	2,618	0.9
24-State Total	8,909	8,928	1,935	1,961	17,239	17,510	1.6

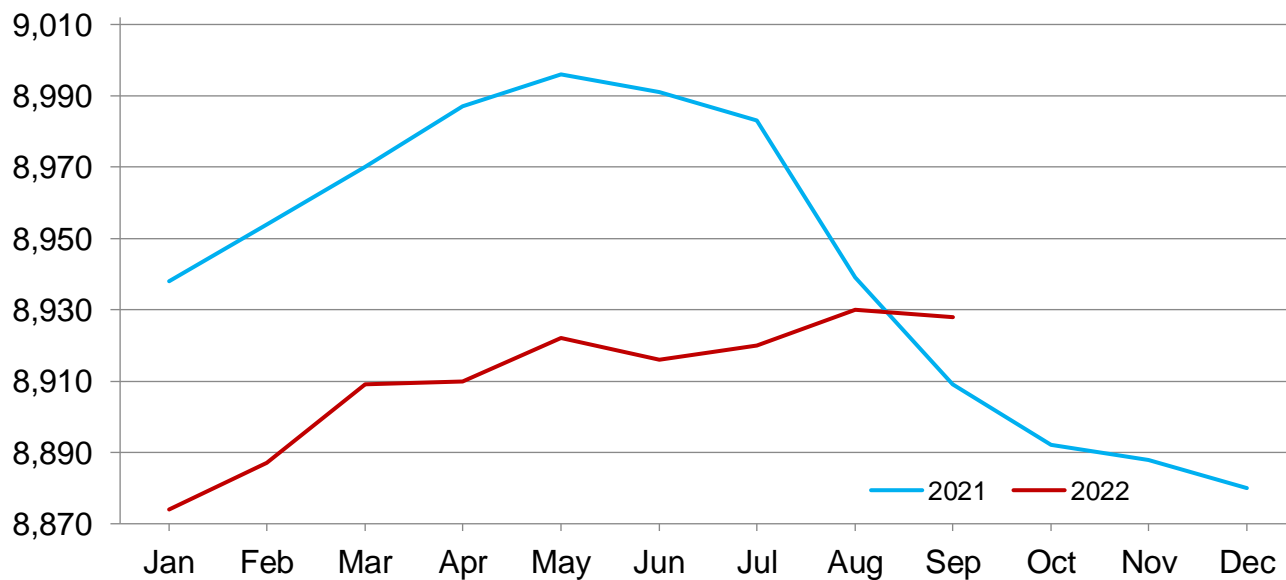
- Represents zero.

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: August 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	196	198	1,825	1,845	358	365	2.0
California	1,719	1,723	1,970	2,010	3,386	3,463	2.3
Colorado	200	206	2,220	2,215	444	456	2.7
Florida	106	95	1,540	1,545	163	147	-9.8
Georgia	82	93	1,730	1,750	142	163	14.8
Idaho	651	657	2,170	2,205	1,413	1,449	2.5
Illinois	82	80	1,720	1,730	141	138	-2.1
Indiana	192	186	1,940	1,950	372	363	-2.4
Iowa	225	238	2,055	2,070	462	493	6.7
Kansas	170	174	1,985	2,000	337	348	3.3
Michigan	442	427	2,290	2,325	1,012	993	-1.9
Minnesota	461	453	1,940	1,985	894	899	0.6
New Mexico	311	287	1,955	2,050	608	588	-3.3
New York	628	624	2,075	2,130	1,303	1,329	2.0
Ohio	258	250	1,850	1,860	477	465	-2.5
Oregon	124	124	1,770	1,775	219	220	0.5
Pennsylvania	475	468	1,750	1,785	831	835	0.5
South Dakota	160	185	1,980	1,990	317	368	16.1
Texas	625	655	2,035	2,115	1,272	1,385	8.9
Utah	95	94	1,990	1,990	189	187	-1.1
Vermont	120	117	1,780	1,830	214	214	-
Virginia	72	69	1,625	1,675	117	116	-0.9
Washington	267	255	2,030	2,035	542	519	-4.2
Wisconsin	1,278	1,272	2,110	2,145	2,697	2,728	1.1
24-State Total	8,939	8,930	2,004	2,042	17,910	18,231	1.8

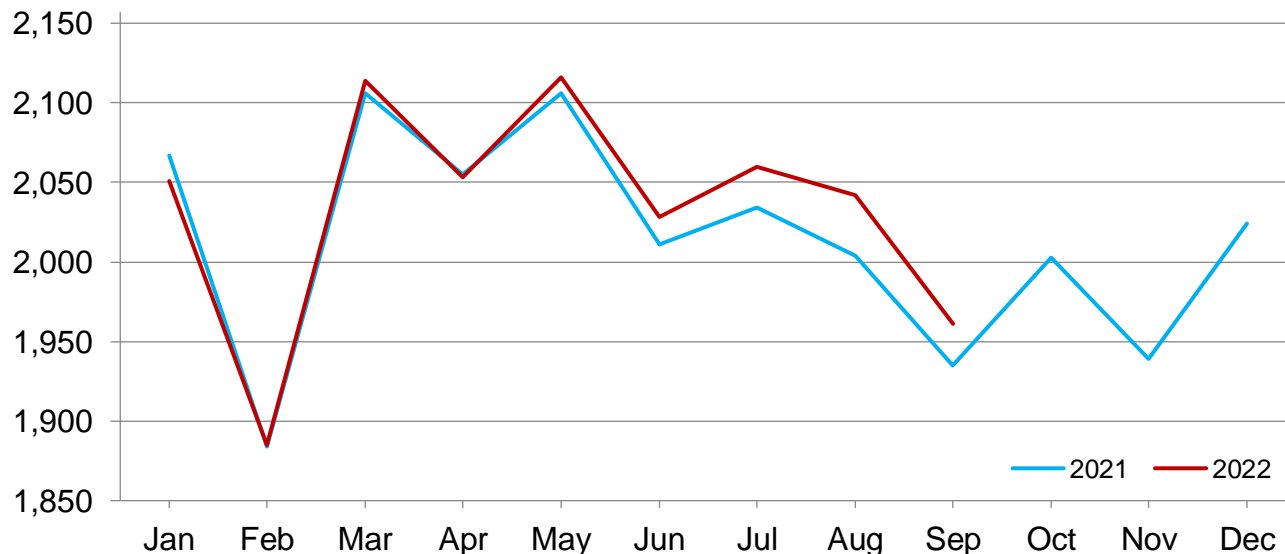
- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Per Cow - 24 Selected States

Pounds



Milk Cows and Production – States and United States: Revised April - June 2021 and 2022

[May not add due to rounding]

State	April - June milk cows ¹		April - June milk production ²		Change from 2021
	2021	2022	2021	2022	
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	3.0	2.5	11.0	9.0	-18.2
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	201.0	200.0	1,287.0	1,277.0	-0.8
Arkansas	5.0	4.5	17.0	13.0	-23.5
California	1,719.0	1,722.0	10,821.0	10,754.0	-0.6
Colorado	205.0	206.0	1,337.0	1,347.0	0.7
Connecticut	19.0	18.5	113.0	111.0	-1.8
Delaware	3.0	2.8	14.0	12.9	-7.9
Florida	110.0	98.0	579.0	517.0	-10.7
Georgia	82.0	92.0	462.0	519.0	12.3
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	654.0	654.0	4,210.0	4,220.0	0.2
Illinois	83.0	80.0	462.0	446.0	-3.5
Indiana	196.0	186.0	1,186.0	1,129.0	-4.8
Iowa	228.0	233.0	1,405.0	1,454.0	3.5
Kansas	174.0	173.0	1,040.0	1,046.0	0.6
Kentucky	46.0	46.0	242.0	251.0	3.7
Louisiana	9.5	9.0	35.0	32.0	-8.6
Maine	27.0	26.0	149.0	144.0	-3.4
Maryland	43.0	41.0	229.0	216.0	-5.7
Massachusetts	10.0	9.5	52.0	49.0	-5.8
Michigan	445.0	427.0	3,061.0	2,973.0	-2.9
Minnesota	462.0	452.0	2,656.0	2,627.0	-1.1
Mississippi	7.5	7.0	29.0	26.0	-10.3
Missouri	72.0	68.0	283.0	263.0	-7.1
Montana	11.0	10.0	62.0	57.0	-8.1
Nebraska	58.0	58.0	359.0	359.0	-
Nevada	33.0	32.0	213.0	203.0	-4.7
New Hampshire	10.5	10.0	58.0	56.0	-3.4
New Jersey	4.4	4.3	24.0	23.0	-4.2
New Mexico	330.0	291.0	2,094.0	1,845.0	-11.9
New York	629.0	622.0	3,987.0	3,980.0	-0.2
North Carolina	40.0	39.0	239.0	239.0	-
North Dakota	15.0	14.0	86.0	81.0	-5.8
Ohio	260.0	250.0	1,447.0	1,402.0	-3.1
Oklahoma	40.0	40.0	181.0	186.0	2.8
Oregon	126.0	127.0	673.0	679.0	0.9
Pennsylvania	475.0	467.0	2,613.0	2,579.0	-1.3
Rhode Island	0.5	0.5	2.6	2.6	-
South Carolina	9.0	9.0	42.0	43.0	2.4
South Dakota	154.0	178.0	889.0	1,036.0	16.5
Tennessee	29.0	27.0	136.0	130.0	-4.4
Texas	622.0	644.0	3,971.0	4,197.0	5.7
Utah	97.0	94.0	576.0	560.0	-2.8
Vermont	119.0	118.0	655.0	647.0	-1.2
Virginia	73.0	70.0	380.0	369.0	-2.9
Washington	275.0	262.0	1,687.0	1,592.0	-5.6
West Virginia	5.0	5.0	19.0	20.0	5.3
Wisconsin	1,274.0	1,273.0	8,016.0	8,062.0	0.6
Wyoming	8.5	9.5	55.7	60.3	8.3
Other States ³	0.9	1.0	1.3	1.3	-
United States	9,503.0	9,413.0	58,147.0	57,845.0	-0.5

- 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 July - September 2021 and 2022

[May not add due to rounding]

State	July - September milk cows ¹		July - September milk production ²		
	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	2.5	2.5	8.0	7.0	-12.5
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	196.0	198.0	1,082.0	1,098.0	1.5
Arkansas	4.5	4.0	13.0	10.0	-23.1
California	1,719.0	1,723.0	10,099.0	10,278.0	1.8
Colorado	201.0	206.0	1,321.0	1,354.0	2.5
Connecticut	19.0	18.5	105.0	106.0	1.0
Delaware	3.0	2.6	12.1	11.0	-9.1
Florida	106.0	95.0	493.0	436.0	-11.6
Georgia	82.0	93.0	425.0	485.0	14.1
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	652.0	657.0	4,193.0	4,291.0	2.3
Illinois	82.0	80.0	423.0	414.0	-2.1
Indiana	193.0	186.0	1,119.0	1,082.0	-3.3
Iowa	226.0	237.0	1,382.0	1,457.0	5.4
Kansas	171.0	174.0	1,008.0	1,036.0	2.8
Kentucky	45.0	45.0	212.0	220.0	3.8
Louisiana	9.0	8.5	25.0	23.0	-8.0
Maine	26.0	26.0	141.0	139.0	-1.4
Maryland	42.0	40.0	209.0	203.0	-2.9
Massachusetts	9.5	9.5	48.0	47.0	-2.1
Michigan	442.0	427.0	3,005.0	2,944.0	-2.0
Minnesota	461.0	453.0	2,655.0	2,665.0	0.4
Mississippi	7.0	6.5	22.0	19.0	-13.6
Missouri	70.0	67.0	237.0	227.0	-4.2
Montana	11.0	10.0	61.0	57.0	-6.6
Nebraska	58.0	57.0	351.0	348.0	-0.9
Nevada	33.0	32.0	203.0	203.0	-
New Hampshire	10.5	10.0	56.0	54.0	-3.6
New Jersey	4.2	4.3	21.0	21.0	-
New Mexico	311.0	286.0	1,829.0	1,740.0	-4.9
New York	629.0	624.0	3,895.0	3,949.0	1.4
North Carolina	39.0	39.0	217.0	215.0	-0.9
North Dakota	15.0	14.0	85.0	81.0	-4.7
Ohio	257.0	250.0	1,410.0	1,375.0	-2.5
Oklahoma	38.0	38.0	157.0	162.0	3.2
Oregon	125.0	124.0	658.0	658.0	-
Pennsylvania	474.0	468.0	2,483.0	2,478.0	-0.2
Rhode Island	0.5	0.5	2.5	2.5	-
South Carolina	9.0	9.0	35.0	36.0	2.9
South Dakota	160.0	184.0	939.0	1,084.0	15.4
Tennessee	28.0	27.0	119.0	119.0	-
Texas	625.0	653.0	3,816.0	4,112.0	7.8
Utah	95.0	94.0	562.0	554.0	-1.4
Vermont	120.0	117.0	640.0	636.0	-0.6
Virginia	72.0	69.0	351.0	346.0	-1.4
Washington	267.0	257.0	1,613.0	1,567.0	-2.9
West Virginia	5.0	5.0	18.0	18.0	-
Wisconsin	1,278.0	1,272.0	8,020.0	8,081.0	0.8
Wyoming	8.5	9.5	56.4	62.2	10.3
Other States ³	0.9	0.9	1.3	1.3	-
United States	9,442.0	9,413.0	55,836.0	56,512.0	1.2

- 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 0.1 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 56.5 billion pounds by more than 0.1 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	0.1	0.3	63	7	215	13	7
All milk cows	0.1	0.2	9	1	26	15	5

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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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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- 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.

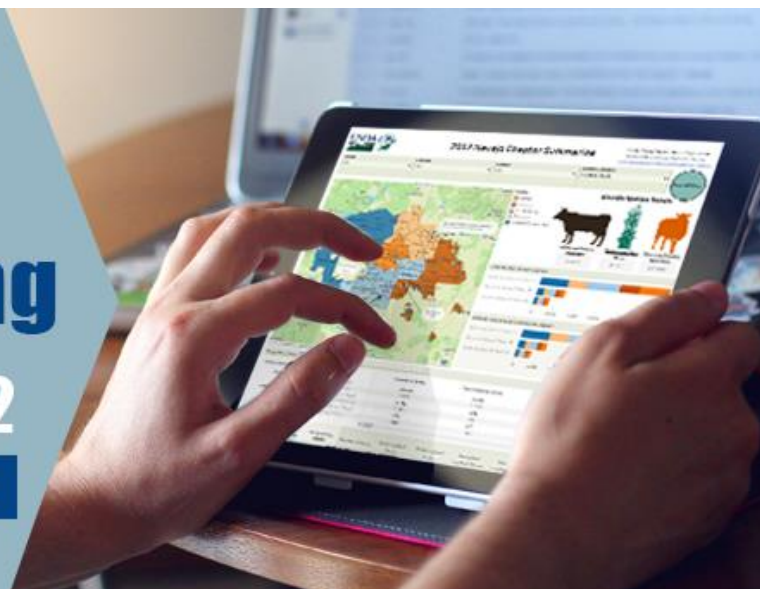
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2022 USDA Fall Virtual Data Users' Meeting

November 15, 2022

FREE AND OPEN TO THE PUBLIC



USDA Fall Data Users' Meeting

Virtual Meeting

November 15, 2022

12:00 – 3:30 p.m. ET

USDA's National Agricultural Statistics Service (NASS) will hold an open forum for users of U.S. domestic and international agriculture data. NASS is organizing the 2022 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 provide updates on recent and pending changes in statistical and information programs important to agriculture, answer questions, and welcome comments and input from data users. Registration details will be coming soon.