



ISSN: 1949-1557

Released October 20, 2020, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

September Milk Production up 2.4 Percent

Milk production in the 24 major States during September totaled 17.2 billion pounds, up 2.4 percent from September 2019. August revised production, at 17.8 billion pounds, was up 1.9 percent from August 2019. The August revision represented an increase of 1 million pounds or less than 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 1,944 pounds for September, 36 pounds above September 2019.

The number of milk cows on farms in the 24 major States was 8.85 million head, 46,000 head more than September 2019, and 6,000 head more than August 2020.

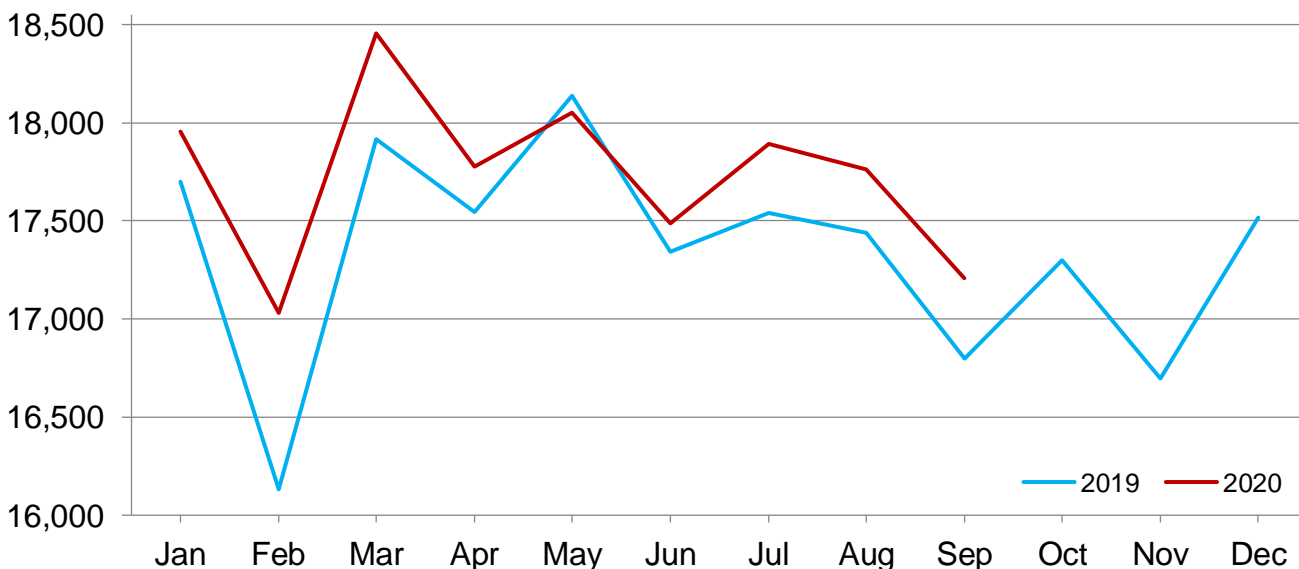
July-September Milk Production up 2.0 Percent

Milk production in the United States during the July - September quarter totaled 55.3 billion pounds, up 2.0 percent from the July - September quarter last year.

The average number of milk cows in the United States during the quarter was 9.36 million head, 1,000 head less than the April - June quarter, but 39,000 head more than the same period last year.

Monthly Milk Production - 24 Selected States

Million pounds



Milk Cows and Production by Quarter - United States: 2019-2020

[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 2019
	2019	2020	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March	9,346	9,374	5,823	5,988	54,423	56,130	3.1
April-June	9,331	9,362	5,971	5,981	55,716	55,997	0.5
July-September	9,322	9,361	5,818	5,910	54,237	55,328	2.0
October-December	9,345		5,779		54,006		
Annual	9,336		23,391		218,382		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production by Month – 24 Selected States: 2019-2020

[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 2019
	2019	2020	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	8,805	8,834	2,010	2,033	17,699	17,956	1.5
February	8,803	8,848	1,833	1,925	16,132	17,031	5.6
March	8,789	8,857	2,038	2,084	17,916	18,455	3.0
April	8,788	8,852	1,996	2,008	17,544	17,778	1.3
May	8,790	8,836	2,063	2,043	18,137	18,049	-0.5
June	8,784	8,827	1,974	1,981	17,342	17,486	0.8
July	8,785	8,840	1,997	2,024	17,542	17,891	2.0
August	8,789	8,845	1,984	2,008	17,439	17,764	1.9
September	8,805	8,851	1,908	1,944	16,796	17,206	2.4
October	8,819		1,962		17,299		
November	8,817		1,894		16,699		
December	8,816		1,987		17,517		
Annual	8,799		23,646		208,062		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month – United States: 2019-2020

[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 2019
	2019	2020	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,354	9,361	1,990	2,015	18,612	18,860	1.3
February	9,352	9,375	1,814	1,908	16,966	17,890	5.4
March	9,333	9,385	2,019	2,065	18,845	19,380	2.8
April	9,332	9,375	1,975	1,992	18,433	18,675	1.3
May	9,333	9,360	2,042	2,025	19,058	18,955	-0.5
June	9,327	9,350	1,954	1,964	18,225	18,367	0.8
July	9,315	9,357	1,973	2,001	18,375	18,725	1.9
August	9,318	9,361	1,960	1,986	18,267	18,595	1.8
September	9,333	9,366	1,885	1,923	17,595	18,008	2.3
October	9,347		1,940		18,135		
November	9,345		1,873		17,506		
December	9,343		1,966		18,365		
Annual	9,336		23,391		218,382		

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production – 24 Selected States: September 2019 and 2020

[May not add due to rounding]

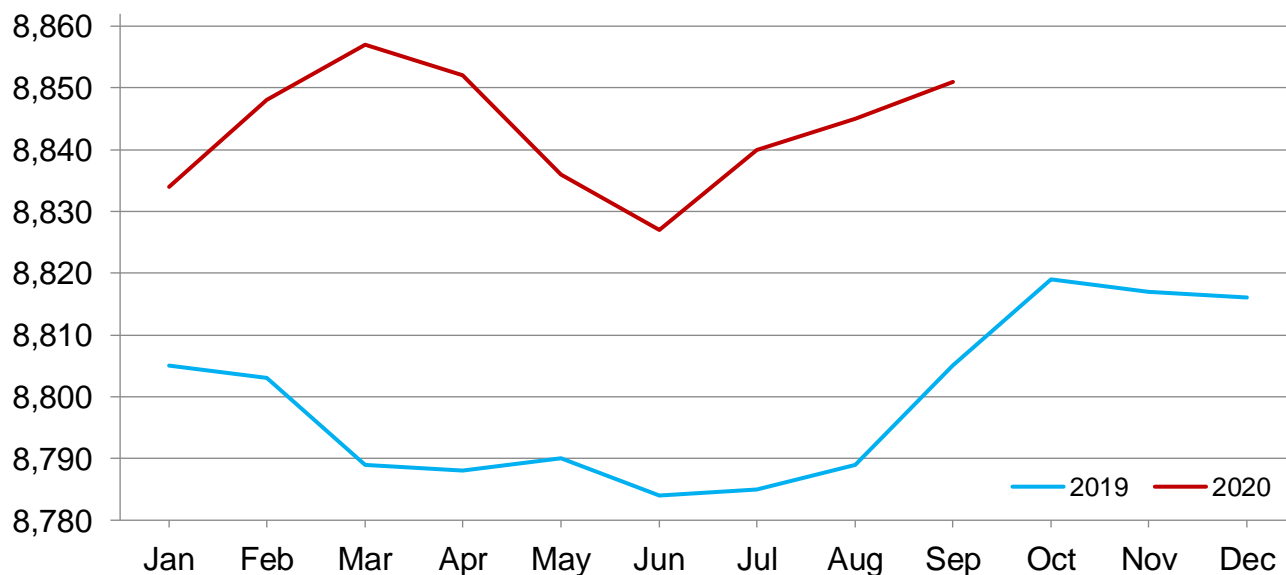
State	Milk cows ¹		Milk per cow ²		Milk production ²		Change from 2019
	2019	2020	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	196	195	1,825	1,795	358	350	-2.2
California	1,725	1,721	1,860	1,925	3,209	3,313	3.2
Colorado	189	199	2,110	2,160	399	430	7.8
Florida	116	111	1,415	1,425	164	158	-3.7
Georgia	80	79	1,640	1,650	131	130	-0.8
Idaho	630	645	2,060	2,070	1,298	1,335	2.9
Illinois	83	83	1,600	1,650	133	137	3.0
Indiana	175	185	1,835	1,890	321	350	9.0
Iowa	217	219	1,970	2,005	427	439	2.8
Kansas	163	171	1,910	1,940	311	332	6.8
Michigan	428	428	2,170	2,220	929	950	2.3
Minnesota	447	442	1,810	1,880	809	831	2.7
New Mexico	329	327	2,030	2,025	668	662	-0.9
New York	627	626	1,970	2,000	1,235	1,252	1.4
Ohio	252	254	1,735	1,800	437	457	4.6
Oregon	124	123	1,700	1,690	211	208	-1.4
Pennsylvania	485	482	1,650	1,690	800	815	1.9
South Dakota	126	139	1,865	1,900	235	264	12.3
Texas	570	598	1,995	2,025	1,137	1,211	6.5
Utah	97	95	1,925	1,925	187	183	-2.1
Vermont	125	120	1,750	1,725	219	207	-5.5
Virginia	74	74	1,555	1,575	115	117	1.7
Washington	281	279	2,005	1,995	563	557	-1.1
Wisconsin	1,266	1,256	1,975	2,005	2,500	2,518	0.7
24-State Total	8,805	8,851	1,908	1,944	16,796	17,206	2.4

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 2019 and 2020

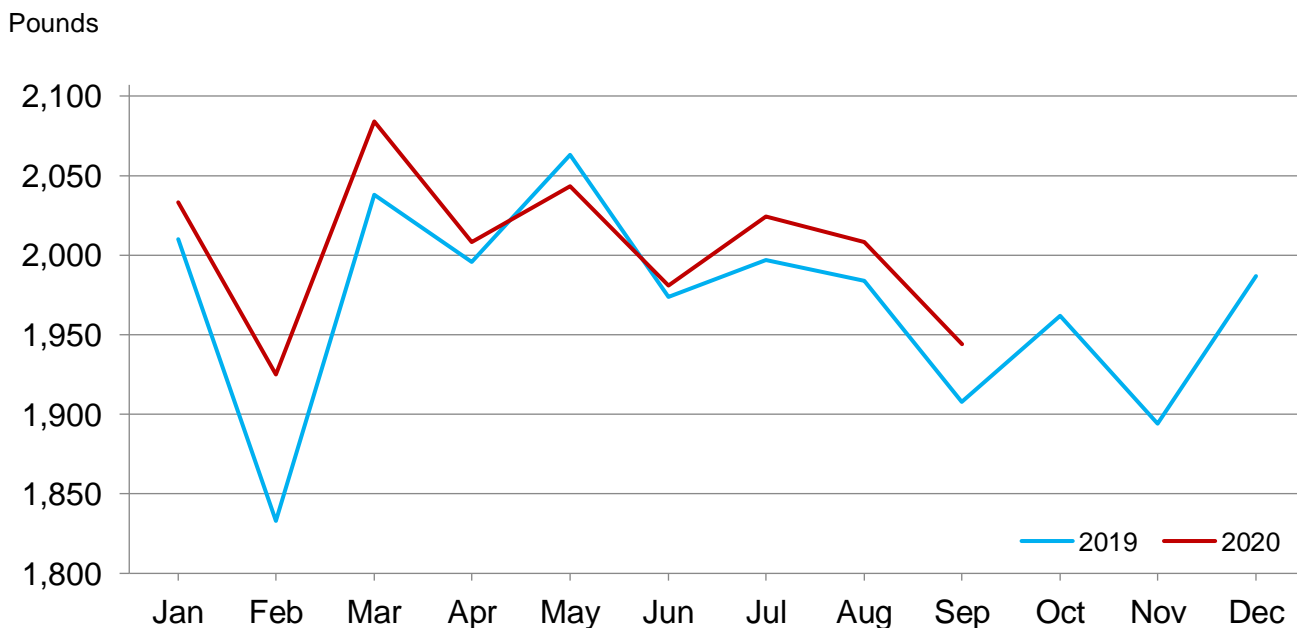
[May not add due to rounding]

	Milk cows ¹		Milk per cow ²		Milk production ²		Change from 2019
	2019	2020	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	195	196	1,860	1,830	363	359	-1.1
California	1,725	1,721	1,925	1,955	3,321	3,365	1.3
Colorado	187	198	2,200	2,225	411	441	7.3
Florida	116	111	1,560	1,570	181	174	-3.9
Georgia	80	80	1,690	1,700	135	136	0.7
Idaho	628	645	2,185	2,190	1,372	1,413	3.0
Illinois	83	83	1,670	1,705	139	142	2.2
Indiana	175	185	1,900	1,970	333	364	9.3
Iowa	217	218	2,030	2,070	441	451	2.3
Kansas	162	170	1,955	1,995	317	339	6.9
Michigan	427	428	2,265	2,310	967	989	2.3
Minnesota	447	442	1,895	1,965	847	869	2.6
New Mexico	326	326	2,085	2,055	680	670	-1.5
New York	627	626	2,050	2,070	1,285	1,296	0.9
Ohio	250	254	1,830	1,865	458	474	3.5
Oregon	124	123	1,780	1,775	221	218	-1.4
Pennsylvania	485	482	1,710	1,745	829	841	1.4
South Dakota	124	138	1,940	1,970	241	272	12.9
Texas	567	593	2,030	2,080	1,151	1,233	7.1
Utah	96	95	1,995	1,975	192	188	-2.1
Vermont	126	121	1,800	1,775	227	215	-5.3
Virginia	74	74	1,590	1,640	118	121	2.5
Washington	281	279	2,090	2,075	587	579	-1.4
Wisconsin	1,267	1,257	2,070	2,080	2,623	2,615	-0.3
24-State Total	8,789	8,845	1,984	2,008	17,439	17,764	1.9

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Per Cow - 24 Selected States



Milk Cows and Production – States and United States: Revised April - June 2019 and 2020

[May not add due to rounding]

State	April - June milk cows ¹		April - June milk production ²		Change from 2019
	2019	2020	2019	2020	
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	5.0	3.5	17.0	12.0	-29.4
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	196.0	197.0	1,217.0	1,231.0	1.2
Arkansas	5.5	5.0	19.0	18.0	-5.3
California	1,726.0	1,722.0	10,330.0	10,416.0	0.8
Colorado	184.0	196.0	1,206.0	1,278.0	6.0
Connecticut	19.5	19.0	108.0	109.0	0.9
Delaware	4.2	3.8	19.2	18.7	-2.6
Florida	115.0	113.0	619.0	594.0	-4.0
Georgia	83.0	82.0	457.0	449.0	-1.8
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	620.0	644.0	3,937.0	4,096.0	4.0
Illinois	84.0	82.0	455.0	455.0	-
Indiana	179.0	177.0	1,061.0	1,060.0	-0.1
Iowa	219.0	218.0	1,344.0	1,343.0	-0.1
Kansas	162.0	168.0	961.0	986.0	2.6
Kentucky	51.0	48.0	252.0	252.0	-
Louisiana	10.5	10.0	37.0	37.0	-
Maine	30.0	27.0	162.0	152.0	-6.2
Maryland	43.0	42.0	217.0	223.0	2.8
Massachusetts	10.5	10.0	49.0	50.0	2.0
Michigan	425.0	428.0	2,920.0	2,919.0	-
Minnesota	448.0	443.0	2,527.0	2,524.0	-0.1
Mississippi	8.5	8.5	34.0	36.0	5.9
Missouri	79.0	76.0	303.0	301.0	-0.7
Montana	11.5	11.5	65.0	64.0	-1.5
Nebraska	58.0	59.0	354.0	364.0	2.8
Nevada	33.0	31.0	195.0	190.0	-2.6
New Hampshire	11.5	11.0	62.0	60.0	-3.2
New Jersey	4.8	4.7	26.0	25.0	-3.8
New Mexico	323.0	328.0	2,103.0	2,006.0	-4.6
New York	627.0	626.0	3,869.0	3,856.0	-0.3
North Carolina	43.0	41.0	236.0	229.0	-3.0
North Dakota	14.5	14.5	83.0	82.0	-1.2
Ohio	249.0	253.0	1,389.0	1,408.0	1.4
Oklahoma	42.0	42.0	192.0	194.0	1.0
Oregon	122.0	124.0	655.0	657.0	0.3
Pennsylvania	493.0	483.0	2,604.0	2,616.0	0.5
Rhode Island	0.7	0.5	2.7	2.6	-3.7
South Carolina	12.0	10.5	55.0	52.0	-5.5
South Dakota	123.0	134.0	694.0	765.0	10.2
Tennessee	32.0	30.0	145.0	142.0	-2.1
Texas	564.0	590.0	3,520.0	3,652.0	3.8
Utah	98.0	96.0	576.0	563.0	-2.3
Vermont	126.0	123.0	687.0	656.0	-4.5
Virginia	75.0	75.0	386.0	391.0	1.3
Washington	278.0	279.0	1,722.0	1,719.0	-0.2
West Virginia	6.0	6.0	23.0	23.0	-
Wisconsin	1,269.0	1,258.0	7,784.0	7,673.0	-1.4
Wyoming	6.0	7.5	36.5	46.5	27.4
Other States ³	1.0	0.9	0.9	1.3	44.4
United States	9,331.0	9,362.0	55,716.0	55,997.0	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 2019 and 2020

[May not add due to rounding]

State	July - September milk cows ¹		July - September milk production ²		
	2019	2020	2019	2020	Change from 2019
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	4.5	3.2	12.0	9.0	-25.0
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	195.0	196.0	1,099.0	1,082.0	-1.5
Arkansas	5.0	5.0	15.0	14.0	-6.7
California	1,725.0	1,721.0	9,920.0	10,146.0	2.3
Colorado	188.0	198.0	1,222.0	1,314.0	7.5
Connecticut	19.0	19.0	104.0	105.0	1.0
Delaware	4.0	3.8	16.2	16.4	1.2
Florida	116.0	111.0	537.0	515.0	-4.1
Georgia	80.0	80.0	409.0	408.0	-0.2
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	628.0	645.0	4,041.0	4,173.0	3.3
Illinois	83.0	83.0	412.0	424.0	2.9
Indiana	175.0	184.0	985.0	1,069.0	8.5
Iowa	217.0	218.0	1,300.0	1,335.0	2.7
Kansas	162.0	170.0	947.0	1,006.0	6.2
Kentucky	49.0	47.0	213.0	216.0	1.4
Louisiana	10.0	9.5	27.0	27.0	-
Maine	29.0	27.0	157.0	147.0	-6.4
Maryland	42.0	41.0	197.0	206.0	4.6
Massachusetts	10.0	10.0	47.0	48.0	2.1
Michigan	427.0	428.0	2,854.0	2,928.0	2.6
Minnesota	447.0	442.0	2,503.0	2,564.0	2.4
Mississippi	8.0	8.5	27.0	28.0	3.7
Missouri	77.0	75.0	258.0	253.0	-1.9
Montana	11.5	11.5	66.0	64.0	-3.0
Nebraska	58.0	59.0	345.0	356.0	3.2
Nevada	33.0	31.0	193.0	190.0	-1.6
New Hampshire	11.0	11.0	59.0	57.0	-3.4
New Jersey	4.8	4.7	24.0	24.0	-
New Mexico	327.0	326.0	2,042.0	1,989.0	-2.6
New York	627.0	626.0	3,805.0	3,847.0	1.1
North Carolina	41.0	40.0	213.0	209.0	-1.9
North Dakota	15.0	14.5	83.0	83.0	-
Ohio	251.0	254.0	1,350.0	1,406.0	4.1
Oklahoma	41.0	41.0	170.0	170.0	-
Oregon	124.0	123.0	656.0	648.0	-1.2
Pennsylvania	485.0	482.0	2,461.0	2,521.0	2.4
Rhode Island	0.7	0.5	2.7	2.7	-
South Carolina	11.0	10.0	45.0	42.0	-6.7
South Dakota	124.0	138.0	711.0	800.0	12.5
Tennessee	31.0	29.0	126.0	126.0	-
Texas	567.0	594.0	3,455.0	3,662.0	6.0
Utah	97.0	95.0	574.0	560.0	-2.4
Vermont	126.0	121.0	674.0	638.0	-5.3
Virginia	74.0	74.0	352.0	361.0	2.6
Washington	281.0	279.0	1,746.0	1,730.0	-0.9
West Virginia	6.0	6.0	22.0	22.0	-
Wisconsin	1,267.0	1,257.0	7,722.0	7,735.0	0.2
Wyoming	6.0	8.0	37.0	50.5	36.5
Other States ³	1.0	0.8	0.9	1.0	11.1
United States	9,322.0	9,361.0	54,237.0	55,328.0	2.0

- 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 55.3 billion pounds by more than 0.1 percent. Chances are 9 out of 10 that the difference will not exceed 0.2 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	0.2	48	3	184	12	8
All milk cows	0.1	0.2	8	0	26	14	4

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
Holly Brenize – Sheep and Goats	(202) 720-0585
Ryan Cowen – Cattle, Cattle on Feed	(202) 720-3040
Mike Miller – Milk Production and Milk Cows	(202) 720-3278
Suzanne Richards – Dairy Products	(202) 720-4448
Seth Riggins – Hogs and Pigs	(202) 720-3106

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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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USDA NASS Data Users' Meeting

Virtual Meeting
Wednesday, October 28, 2020

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 2020 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.

For registration details or additional information about the Data Users' Meeting, see the meeting page on the NASS website (https://www.nass.usda.gov/Education_and_Outreach/Meeting/index.php). Contact Patricia Snipe (NASS) at 202-720-2248 or patricia.snipe@usda.gov for information.