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June Milk Production up 3.2 Percent

Milk production in the 24 major States during June totaled 18.1 billion pounds, up 3.2 percent from June 2020. May revised production, at 19.0 billion pounds, was up 4.9 percent from May 2020. The May revision represented an increase of 12 million pounds or 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 2,011 pounds for June, 27 pounds above June 2020.

The number of milk cows on farms in the 24 major States was 9.00 million head, 161,000 head more than June 2020, but 1,000 head less than May 2021.

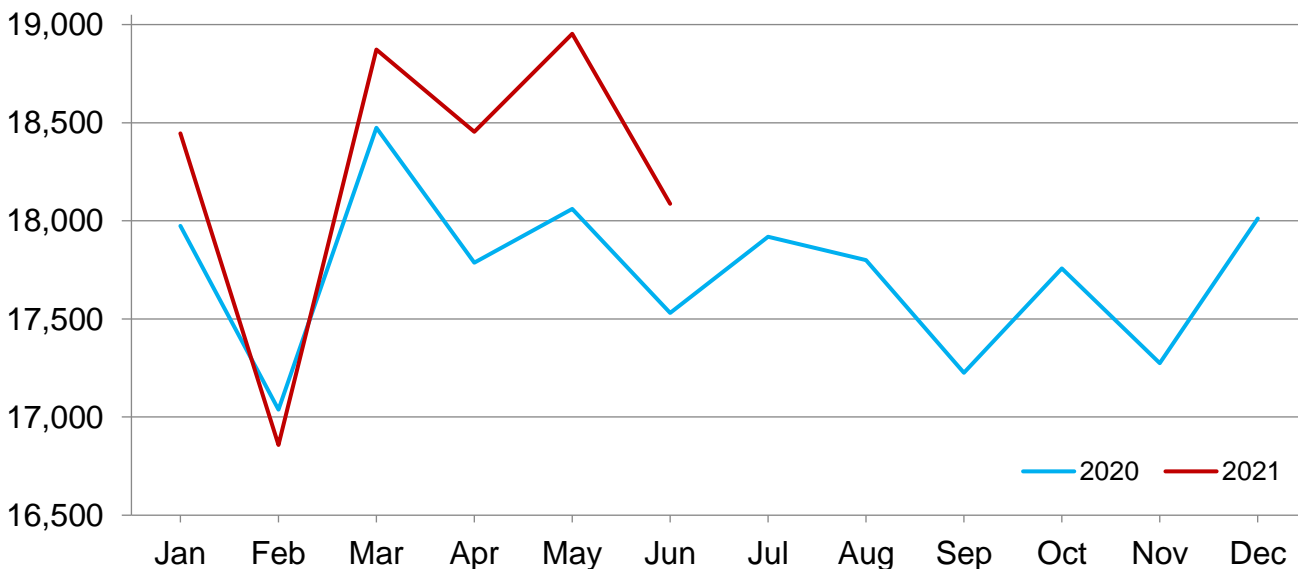
April-June Milk Production up 3.7 Percent

Milk production in the United States during the April - June quarter totaled 58.1 billion pounds, up 3.7 percent from the April - June quarter last year.

The average number of milk cows in the United States during the quarter was 9.51 million head, 47,000 head more than the January - March quarter, and 141,000 head more than the same period last year.

Monthly Milk Production - 24 Selected States

Million pounds



Milk Cows and Production by Quarter - United States: 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	9,505	5,988	6,117	56,070	58,140	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	8,995	1,984	2,011	17,530	18,092	3.2
July	8,854		2,024		17,919		
August	8,857		2,010		17,799		
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	9,508	1,968	1,994	18,414	18,955	2.9
July	9,372		2,001		18,756		
August	9,374		1,988		18,632		
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: June 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	198	2,015	2,025	403	401	-0.5
California	1,721	1,721	1,950	2,010	3,356	3,459	3.1
Colorado	197	206	2,150	2,155	424	444	4.7
Florida	111	110	1,675	1,685	186	185	-0.5
Georgia	81	82	1,765	1,815	143	149	4.2
Idaho	640	654	2,105	2,135	1,347	1,396	3.6
Illinois	83	83	1,795	1,800	149	149	-
Indiana	180	196	2,000	1,990	360	390	8.3
Iowa	217	228	2,030	2,010	441	458	3.9
Kansas	168	175	1,915	1,965	322	344	6.8
Michigan	428	445	2,280	2,280	976	1,015	4.0
Minnesota	442	462	1,915	1,890	846	873	3.2
New Mexico	327	326	1,980	2,070	647	675	4.3
New York	626	630	2,040	2,090	1,277	1,317	3.1
Ohio	253	260	1,840	1,840	466	478	2.6
Oregon	124	126	1,765	1,745	219	220	0.5
Pennsylvania	482	475	1,775	1,780	856	846	-1.2
South Dakota	136	156	1,895	1,895	258	296	14.7
Texas	590	624	2,030	2,055	1,198	1,282	7.0
Utah	96	97	1,955	1,985	188	193	2.7
Vermont	123	119	1,740	1,805	214	215	0.5
Virginia	74	73	1,700	1,655	126	121	-4.0
Washington	278	275	2,030	1,995	564	549	-2.7
Wisconsin	1,257	1,274	2,040	2,070	2,564	2,637	2.8
24-State Total	8,834	8,995	1,984	2,011	17,530	18,092	3.2

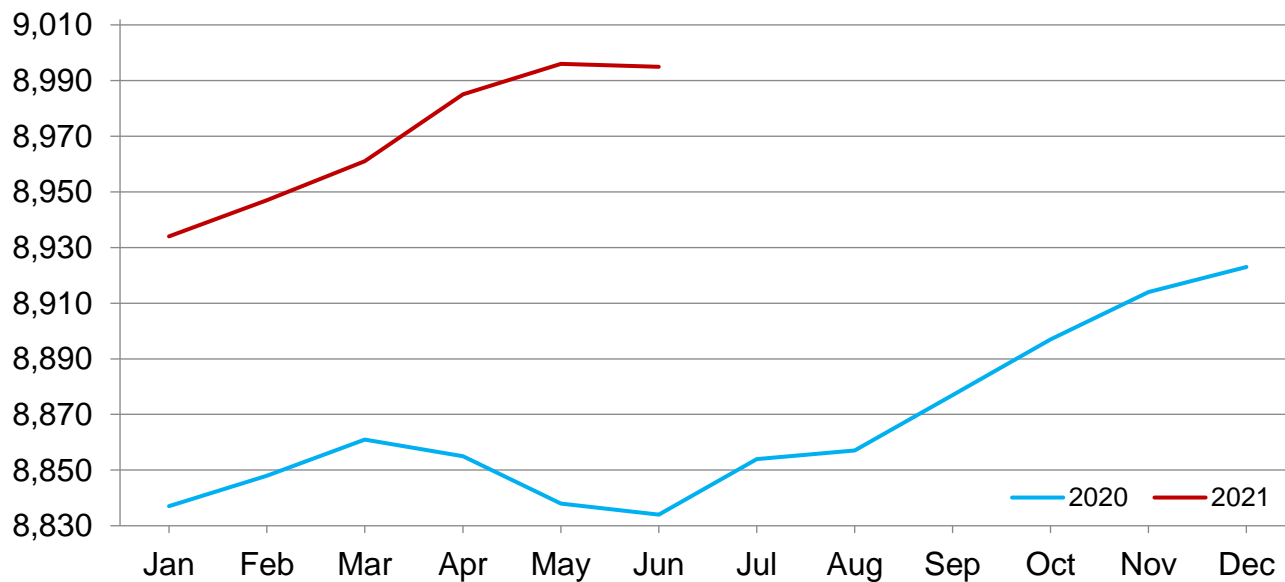
- Represents zero.

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: May 2020 and 2021

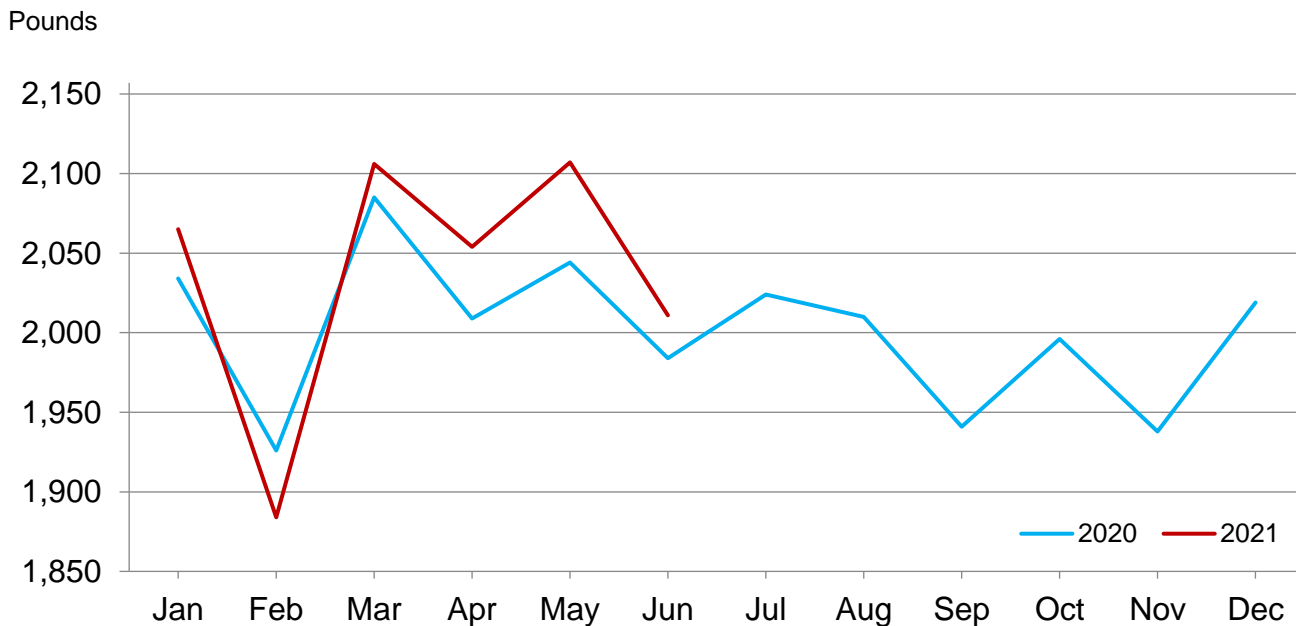
[May not add due to rounding]

	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	198	2,145	2,180	429	432	0.7
California	1,721	1,721	2,070	2,170	3,562	3,735	4.9
Colorado	196	206	2,220	2,225	435	458	5.3
Florida	113	110	1,770	1,770	200	195	-2.5
Georgia	82	82	1,855	1,890	152	155	2.0
Idaho	643	654	2,165	2,205	1,392	1,442	3.6
Illinois	82	83	1,875	1,890	154	157	1.9
Indiana	176	196	2,030	2,050	357	402	12.6
Iowa	217	228	2,095	2,095	455	478	5.1
Kansas	168	175	1,970	2,040	331	357	7.9
Michigan	428	445	2,310	2,335	989	1,039	5.1
Minnesota	443	462	1,930	1,960	855	906	6.0
New Mexico	328	330	2,030	2,140	666	706	6.0
New York	626	630	2,075	2,155	1,299	1,358	4.5
Ohio	253	260	1,880	1,890	476	491	3.2
Oregon	125	126	1,825	1,830	228	231	1.3
Pennsylvania	483	475	1,815	1,880	877	893	1.8
South Dakota	134	154	1,940	1,960	260	302	16.2
Texas	590	622	2,075	2,175	1,224	1,353	10.5
Utah	96	97	2,000	2,030	192	197	2.6
Vermont	123	119	1,780	1,870	219	223	1.8
Virginia	75	73	1,770	1,785	133	130	-2.3
Washington	279	276	2,105	2,100	587	580	-1.2
Wisconsin	1,257	1,274	2,060	2,145	2,589	2,733	5.6
24-State Total	8,838	8,996	2,044	2,107	18,061	18,953	4.9

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 January - March 2020 and 2021

[May not add due to rounding]

State	January - March milk cows ¹		January - March milk production ²		
	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	4.0	3.0	14.0	12.0	-14.3
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	198.0	197.0	1,292.0	1,266.0	-2.0
Arkansas	5.0	5.0	18.0	17.0	-5.6
California	1,723.0	1,720.0	10,587.0	10,663.0	0.7
Colorado	193.0	203.0	1,253.0	1,310.0	4.5
Connecticut	19.5	19.0	114.0	112.0	-1.8
Delaware	3.8	3.0	19.0	14.5	-23.7
Florida	116.0	109.0	639.0	587.0	-8.1
Georgia	82.0	80.0	476.0	463.0	-2.7
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	646.0	651.0	3,996.0	3,995.0	-
Illinois	82.0	83.0	459.0	461.0	0.4
Indiana	176.0	193.0	1,036.0	1,138.0	9.8
Iowa	217.0	224.0	1,344.0	1,373.0	2.2
Kansas	170.0	174.0	1,017.0	1,047.0	2.9
Kentucky	49.0	47.0	251.0	239.0	-4.8
Louisiana	10.0	10.0	39.0	38.0	-2.6
Maine	27.0	27.0	151.0	146.0	-3.3
Maryland	42.0	43.0	225.0	230.0	2.2
Massachusetts	10.0	10.0	51.0	50.0	-2.0
Michigan	427.0	441.0	2,891.0	2,978.0	3.0
Minnesota	445.0	460.0	2,481.0	2,624.0	5.8
Mississippi	8.5	8.0	37.0	32.0	-13.5
Missouri	77.0	72.0	275.0	260.0	-5.5
Montana	12.0	11.0	64.0	61.0	-4.7
Nebraska	59.0	59.0	367.0	362.0	-1.4
Nevada	31.0	31.0	190.0	189.0	-0.5
New Hampshire	11.0	10.5	61.0	58.0	-4.9
New Jersey	4.7	4.4	26.0	24.0	-7.7
New Mexico	333.0	335.0	2,114.0	2,099.0	-0.7
New York	626.0	626.0	3,830.0	3,836.0	0.2
North Carolina	41.0	40.0	239.0	239.0	-
North Dakota	14.5	15.0	80.0	82.0	2.5
Ohio	253.0	260.0	1,395.0	1,425.0	2.2
Oklahoma	42.0	40.0	200.0	178.0	-11.0
Oregon	127.0	125.0	660.0	647.0	-2.0
Pennsylvania	483.0	475.0	2,606.0	2,565.0	-1.6
Rhode Island	0.6	0.5	2.7	2.5	-7.4
South Carolina	11.0	9.5	55.0	45.0	-18.2
South Dakota	129.0	144.0	740.0	816.0	10.3
Tennessee	31.0	29.0	145.0	135.0	-6.9
Texas	587.0	616.0	3,714.0	3,851.0	3.7
Utah	97.0	95.0	555.0	544.0	-2.0
Vermont	124.0	120.0	672.0	641.0	-4.6
Virginia	76.0	74.0	398.0	381.0	-4.3
Washington	281.0	278.0	1,701.0	1,653.0	-2.8
West Virginia	6.0	5.0	23.0	19.0	-17.4
Wisconsin	1,260.0	1,264.0	7,630.0	7,814.0	2.4
Wyoming	6.5	8.0	40.0	52.0	30.0
Other States ³	1.0	0.8	1.4	1.7	21.4
United States	9,378.0	9,458.0	56,174.0	56,776.0	1.1

- 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 April - June 2020 and 2021

[May not add due to rounding]

State	April - June milk cows ¹		April - June milk production ²		
	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	3.5	3.0	12.0	11.0	-8.3
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	200.0	198.0	1,263.0	1,262.0	-0.1
Arkansas	5.0	5.0	18.0	17.0	-5.6
California	1,721.0	1,721.0	10,420.0	10,840.0	4.0
Colorado	196.0	206.0	1,278.0	1,346.0	5.3
Connecticut	19.0	19.0	110.0	113.0	2.7
Delaware	3.8	3.0	18.7	14.0	-25.1
Florida	113.0	110.0	594.0	579.0	-2.5
Georgia	82.0	82.0	449.0	461.0	2.7
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	643.0	654.0	4,091.0	4,213.0	3.0
Illinois	82.0	83.0	456.0	462.0	1.3
Indiana	177.0	196.0	1,067.0	1,182.0	10.8
Iowa	218.0	228.0	1,343.0	1,401.0	4.3
Kansas	168.0	175.0	984.0	1,052.0	6.9
Kentucky	48.0	46.0	253.0	243.0	-4.0
Louisiana	10.0	9.5	37.0	35.0	-5.4
Maine	27.0	27.0	152.0	151.0	-0.7
Maryland	42.0	43.0	223.0	228.0	2.2
Massachusetts	10.0	10.0	51.0	52.0	2.0
Michigan	428.0	445.0	2,930.0	3,066.0	4.6
Minnesota	443.0	462.0	2,524.0	2,654.0	5.2
Mississippi	8.5	8.0	36.0	29.0	-19.4
Missouri	76.0	72.0	301.0	283.0	-6.0
Montana	11.5	11.0	64.0	62.0	-3.1
Nebraska	59.0	59.0	364.0	361.0	-0.8
Nevada	31.0	33.0	195.0	204.0	4.6
New Hampshire	11.0	10.5	60.0	58.0	-3.3
New Jersey	4.7	4.4	25.0	24.0	-4.0
New Mexico	328.0	330.0	2,006.0	2,094.0	4.4
New York	626.0	629.0	3,856.0	3,986.0	3.4
North Carolina	41.0	40.0	229.0	236.0	3.1
North Dakota	14.5	15.0	82.0	86.0	4.9
Ohio	253.0	260.0	1,408.0	1,447.0	2.8
Oklahoma	42.0	40.0	194.0	177.0	-8.8
Oregon	125.0	126.0	667.0	672.0	0.7
Pennsylvania	483.0	475.0	2,616.0	2,613.0	-0.1
Rhode Island	0.5	0.5	2.7	2.5	-7.4
South Carolina	10.5	9.0	52.0	42.0	-19.2
South Dakota	134.0	154.0	765.0	885.0	15.7
Tennessee	30.0	29.0	142.0	136.0	-4.2
Texas	590.0	622.0	3,655.0	3,971.0	8.6
Utah	96.0	96.0	567.0	575.0	1.4
Vermont	123.0	119.0	656.0	655.0	-0.2
Virginia	75.0	73.0	391.0	380.0	-2.8
Washington	279.0	276.0	1,719.0	1,689.0	-1.7
West Virginia	6.0	5.0	23.0	19.0	-17.4
Wisconsin	1,258.0	1,274.0	7,673.0	8,014.0	4.4
Wyoming	7.5	8.5	46.5	55.7	19.8
Other States ³	0.9	0.9	1.2	1.3	8.3
United States	9,364.0	9,505.0	56,070.0	58,140.0	3.7

(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 58.1 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	57	4	215	13	7
All milk cows	0.1	0.2	9	0	26	16	2

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
Logan Hartley – 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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