

Milk Production



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November Milk Production

Milk production in the 21 major States during November totaled 10.3 billion pounds, 3 percent more than production in these same States in November 1991. October revised production at 10.6 billion pounds, was 3 percent above October 1991.

Production per cow in the 21 major States averaged 1,244 pounds for November, 52 pounds more than November 1991.

The number of cows on farms in the 21 major States was 8.26 million head, 73,000 head less than November 1991 but was 6,000 more than October 1992.

During the July-September period, the 21 major States produced 32.0 billion pounds of milk, 84.9 percent of the U.S. production. If producers in the remaining 29 States not surveyed monthly followed the same pattern as the 21 States, the U.S. production would be 12.1 billion pounds for November 1992.

For information, call Daniel Buckner (202) 720-4448. Office hours are 8:00 a.m. to 4:30 p.m. ET.

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Milk Cows and Production: By Quarter, United States, 1991-92

Month	Milk Cows <u>1/</u>		Milk Per Cow <u>2/</u>		Milk Production <u>2/</u>		1992 as % of 1991
	1991	1992	1991	1992	1991	1992	
	---- 1,000 ----		---- Pounds ----		Million Pounds		Percent
Jan-Mar	10,101	9,858	3,705	3,850	37,425	37,958	101
Apr-Jun	9,999	9,851	3,864	3,966	38,633	39,067	101
Jul-Sep	9,940	9,845	3,647	3,829	36,255	37,694	104
Oct-Dec	9,918		3,651		36,212		
Annual	9,990		14,867		148,526		

1/ Includes dry cows. Excludes heifers not yet fresh.

2/ Excludes milk sucked by calves.

Milk Cows and Production: By State, October 1991-92 1/

State	Milk Cows <u>2/</u>		Milk Per Cow <u>3/</u>		Milk Production <u>3/</u>		1992 as % of 1991
	1991	1992	1991	1992	1991	1992	
	---- 1,000 ----		Pounds		Million Pounds		Percent
CA	1,157	1,158	1,535	1,620	1,776	1,876	106
FL	177	181	1,040	1,060	184	192	104
ID	178	186	1,380	1,430	246	266	108
IL	188	183	1,230	1,300	231	238	103
IN	144	144	1,290	1,330	186	192	103
IA	303	308	1,150	1,180	348	363	104
KY	191	184	920	985	176	181	103
MD	104	100	1,105	1,160	115	116	101
MI	340	340	1,275	1,330	434	452	104
MN	680	655	1,125	1,190	765	779	102
MO	224	228	1,045	1,090	235	249	106
NY	755	753	1,180	1,235	891	930	104
NC	98	96	1,270	1,305	124	125	101
OH	336	322	1,130	1,240	380	399	105
PA	672	650	1,260	1,290	847	839	99
TN	196	191	930	970	182	185	102
TX	374	376	1,135	1,210	424	455	107
VT	164	164	1,205	1,250	198	205	104
VA	140	135	1,205	1,260	169	170	101
WA	235	251	1,590	1,625	374	408	109
WI	1,690	1,645	1,140	1,185	1,927	1,949	101
21 State:							
Total	8,346	8,250	1,224	1,281	10,212	10,569	103

1/ 1991 and 1992 revised.

2/ Includes dry cows. Excludes heifers not yet fresh.

3/ Excludes milk sucked by calves.

Milk Cows and Production: By Month, 21 Selected States, 1991-92

Month	Milk Cows <u>1/</u>		Milk Per Cow <u>2/</u>		Milk Production <u>2/</u>		
	1991	1992	1991	1992	1991	1992	1992 as % of 1991
	---- 1,000 ----		Pounds		Million Pounds		Percent
Jan	8,510	8,296	1,251	1,288	10,645	10,684	100
Feb	8,484	8,273	1,169	1,237	9,922	10,230	103
Mar	8,460	8,262	1,310	1,343	11,084	11,092	100
Apr	8,416	8,254	1,297	1,316	10,918	10,866	100
May	8,396	8,262	1,339	1,363	11,240	11,258	100
Jun	8,372	8,260	1,262	1,316	10,567	10,868	103
Jul	8,353	8,259	1,254	1,324	10,472	10,939	104
Aug	8,358	8,265	1,239	1,301	10,352	10,756	104
Sep	8,350	8,254	1,189	1,248	9,927	10,300	104
Oct	8,346	8,250	1,224	1,281	10,212	10,569	103
Nov	8,329	8,256	1,192	1,244	9,926	10,273	103
Dec	8,322		1,252		10,418		
Annual	8,392		14,977		125,683		

1/ Includes dry cows. Excludes heifers not yet fresh.

2/ Excludes milk sucked by calves.

Milk Cows and Production: By State, November 1991-92

State	Milk Cows <u>1/</u>		Milk Per Cow <u>2/</u>		Milk Production <u>2/</u>		
	1991	1992	1991	1992	1991	1992	1992 as % of 1991
	---- 1,000 ----		Pounds		Million Pounds		Percent
CA	1,158	1,159	1,495	1,570	1,731	1,820	105
FL	176	182	1,100	1,120	194	204	105
ID	178	186	1,300	1,370	231	255	110
IL	187	182	1,190	1,250	223	228	102
IN	144	143	1,250	1,270	180	182	101
IA	303	308	1,130	1,180	342	363	106
KY	191	186	885	955	169	178	105
MD	104	100	1,095	1,130	114	113	99
MI	340	340	1,220	1,260	414	428	103
MN	675	655	1,120	1,175	756	770	102
MO	220	230	1,025	1,060	225	244	108
NY	756	753	1,155	1,210	873	911	104
NC	98	96	1,270	1,300	124	125	101
OH	335	322	1,090	1,200	365	386	106
PA	670	655	1,240	1,260	831	825	99
TN	197	191	890	960	175	183	105
TX	374	378	1,130	1,195	423	452	107
VT	164	164	1,190	1,220	195	200	103
VA	140	135	1,195	1,250	167	169	101
WA	236	251	1,525	1,560	360	392	109
WI	1,683	1,640	1,090	1,125	1,834	1,845	101
21 State:							
Total	8,329	8,256	1,192	1,244	9,926	10,273	103

1/ Includes dry cows. Excludes heifers not yet fresh.

2/ Excludes milk sucked by calves.

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. About 20,000 producers are sampled in January and data are collected from about 10,000 respondents. There are about 7,300 respondents in each of the remaining quarters. Generally, all larger producers and a sample of smaller 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, January 1, February 1, etc. Toward the end of the data collection period, statisticians review mail returns to ensure that each size group is adequately represented. If additional reports are needed in some size groups, statisticians obtain these by telephone.

Estimation Procedures: Each state statistician prepares their estimate by plotting survey estimates and averages on time series charts. The individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

Revision Policy: Milk production, rate per cow, and number of cows are subject to revision the following month for monthly States or the following quarter for the quarterly States. Normally Federal Market Order sales are the main reason for revisions, however not all orders have data available in time for this revision. A second revision is made in February each year based on additional administrative data. In the event that some additional changes are necessary, a third revision is made in February the following year. Estimates are again reviewed after data for the five-year Census of Agriculture, conducted by the Department of Commerce are available.

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 milk cow inventory estimates over the past 10 quarters is 0.6 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 9.84 million head by more than 0.6 percent, or about 59,000 head. Chances are 9 out of 10 that the difference will not exceed 1.0 percent, or about 98,000 head (the 90 percent confidence level).

Reliability of July-September Milk Estimates 1/

Item	Root Mean Square Error	90% Confidence Level	Difference Between First and Final Estimates <u>1/</u>			Number of Quarters		
			Average	Smallest	Largest	First Above Final	First Below Final	
	- Percent -		----- Mil Lbs. -----			- Number -		
Milk Production	0.7	1.2	452	-158	0	-538	1	8
			----- 1,000 Head -----					
All Milk Cows	0.6	1.0	98.5	-43	0	-135	0	9

1/ Based on records for the past 10 July-September quarters.

The next "Milk Production" report will be released on January 14, 1993, at 3:00 p.m. ET.

