

Milk Production



USDA
Washington, D.C.

Released December 15, 1997, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, U.S. Department of Agriculture. For information on "Milk Production" call James Hand at 202-690-3236, office hours 7:00 a.m. to 4:30 p.m. ET.

November Milk Production Up 1.3 Percent

Milk production in the 20 major States during November totaled 10.6 billion pounds, up 1.3 percent from production in these same States in November 1996. October revised production, at 11.0 billion pounds was up 1.4 percent from October 1996.

Production per cow in the 20 major States averaged 1,377 pounds for November, 27 pounds above November 1996.

The number of cows on farms in the 20 major States was 7.72 million head, 51,000 head less than November 1996 and 7,000 head less than October 1997.

Milk Cows and Production: By Quarter, United States, 1996-97

Quarter	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
	1996	1997	1996	1997	1996	1997	Change From 1996
	<i>1,000</i>	<i>1,000</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan-Mar	9,397	9,267	4,156	4,200	39,053	38,922	-0.3
Apr-Jun	9,369	9,254	4,231	4,393	39,638	40,648	2.5
Jul-Sep	9,338	9,245	4,035	4,209	37,674	38,917	3.3
Oct-Dec	9,300		4,083		37,966		
Annual	9,351		16,505		154,331		

¹ Includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production: By Month, 20 Selected States, 1996-97

Month	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
	1996	1997	1996	1997	1996	1997	Change From 1996
	<i>1,000</i>	<i>1,000</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan	7,846	7,757	1,415	1,439	11,103	11,163	0.5
Feb	7,828	7,743	1,348	1,331	10,549	10,309	-2.3
Mar	7,822	7,736	1,469	1,501	11,487	11,611	1.1
Apr	7,818	7,731	1,441	1,481	11,265	11,452	1.7
May	7,816	7,733	1,479	1,532	11,560	11,847	2.5
Jun	7,818	7,738	1,398	1,475	10,926	11,410	4.4
Jul	7,815	7,747	1,400	1,477	10,944	11,443	4.6
Aug	7,802	7,744	1,382	1,450	10,786	11,227	4.1
Sep	7,795	7,736	1,342	1,381	10,459	10,686	2.2
Oct	7,788	7,731	1,391	1,421	10,831	10,986	1.4
Nov	7,775	7,724	1,350	1,377	10,499	10,638	1.3
Dec	7,765		1,418		11,013		
Annual	7,807		16,833		131,422		

¹ Includes dry cows, excludes heifers not yet fresh.

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Estimated Milk Production: United States, 1996-97

Month	By Month			Cumulative		
	1996	1997	Change From 1996	1996	1997	Change From 1996
	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan	13,085	13,133	0.4	13,085	13,133	0.4
Feb	12,431	12,129	-2.4	25,516	25,262	-1.0
Mar	13,537	13,660	0.9	39,053	38,922	-0.3
Apr	13,230	13,411	1.4	52,283	52,333	0.1
May	13,576	13,874	2.2	65,859	66,207	0.5
Jun	12,832	13,363	4.1	78,691	79,570	1.1
Jul	12,809	13,346	4.2	91,500	92,916	1.5
Aug	12,624	13,095	3.7	104,124	106,011	1.8
Sep	12,241	12,471	1.9	116,365	118,482	1.8
Oct	12,714	12,896	1.4	129,079	131,378	1.8
Nov	12,324	12,487	1.3	141,403	143,865	1.7
Dec	12,928			154,331		

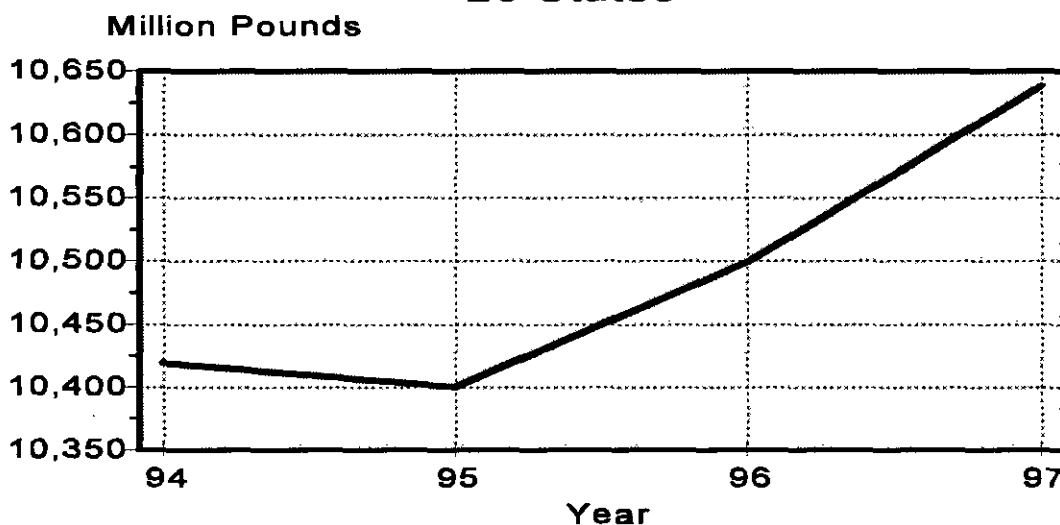
Milk Cows and Production: By State, November 1996-97

Month	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		Change From 1996
	1996	1997	1996	1997	1996	1997	
	<i>1,000</i>	<i>1,000</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
AZ	122	126	1,690	1,645	206	207	0.5
CA	1,269	1,320	1,700	1,730	2,157	2,284	5.9
FL	157	159	1,230	1,195	193	190	-1.6
ID	266	279	1,510	1,540	402	430	7.0
IL	151	145	1,220	1,250	184	181	-1.6
IN	140	140	1,240	1,250	174	175	0.6
IA	250	244	1,260	1,340	315	327	3.8
KY	151	142	980	980	148	139	-6.1
MI	314	300	1,370	1,410	430	423	-1.6
MN	595	575	1,250	1,240	744	713	-4.2
MO	175	167	1,045	1,070	183	179	-2.2
NM	195	205	1,565	1,610	305	330	8.2
NY	700	699	1,270	1,300	889	909	2.2
OH	285	274	1,200	1,260	342	345	0.9
PA	642	640	1,310	1,350	841	864	2.7
TX	395	387	1,205	1,155	476	447	-6.1
VT	155	156	1,310	1,315	203	205	1.0
VA	126	120	1,170	1,260	147	151	2.7
WA	266	260	1,600	1,590	426	413	-3.1
WI	1,421	1,386	1,220	1,245	1,734	1,726	-0.5
20-State Total	7,775	7,724	1,350	1,377	10,499	10,638	1.3

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November Milk Production, 1994-1997
20 States



Milk Cows and Production: By State, October 1996-97 ¹

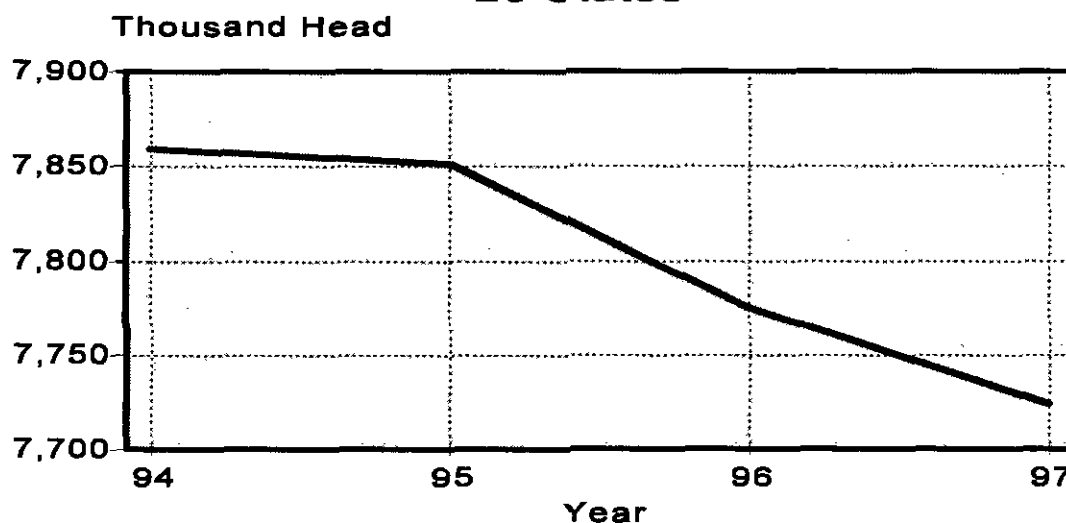
State	Milk Cows ²		Milk per Cow ³		Milk Production ³		Change From 1996
	1996	1997	1996	1997	1996	1997	
	<i>1,000</i>	<i>1,000</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
AZ	122	126	1,620	1,595	198	201	1.5
CA	1,268	1,314	1,750	1,790	2,219	2,352	6.0
FL	156	159	1,160	1,105	181	176	-2.8
ID	265	279	1,580	1,610	419	449	7.2
IL	152	146	1,230	1,280	187	187	0.0
IN	140	140	1,280	1,310	179	183	2.2
IA	250	244	1,280	1,370	320	334	4.4
KY	151	143	1,020	1,000	154	143	-7.1
MI	317	303	1,415	1,460	449	442	-1.6
MN	595	575	1,275	1,275	759	733	-3.4
MO	175	169	1,105	1,075	193	182	-5.7
NM	195	205	1,570	1,640	306	336	9.8
NY	702	699	1,325	1,350	930	944	1.5
OH	285	275	1,250	1,290	356	355	-0.3
PA	645	640	1,345	1,395	868	893	2.9
TX	395	387	1,185	1,135	468	439	-6.2
VT	155	157	1,375	1,370	213	215	0.9
VA	126	120	1,200	1,280	151	154	2.0
WA	266	262	1,675	1,665	446	436	-2.2
WI	1,428	1,388	1,285	1,320	1,835	1,832	-0.2
20-State Total	7,788	7,731	1,391	1,421	10,831	10,986	1.4

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² Includes dry cows, excludes heifers not yet fresh.

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**November Milk Cows, 1994-1997
20 States**



Reliability Statement

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.

Estimation Procedures: State offices prepare these estimates using 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, 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 basis for revisions. However, data for all orders are not available in time for this revision. 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 cow inventory estimates over the past 10 quarters is 1.3 percent. This means that chances are 2 out of 3 that the final July-September estimate will not be above or below the current estimate of 9.25 million head by more than 1.3 percent, or about 120,000 head. Chances are 9 out of 10 that the difference will not exceed 2.3 percent, or about 213,000 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 ¹			Number of Quarters	
		Percent	Estimate	Average	Smallest	Largest	First Above Final	First Below Final
	<i>Percent</i>	<i>Percent</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Number</i>	<i>Number</i>
Milk Production	0.7	1.4	546	255	139	456	10	0
	<i>Percent</i>	<i>Percent</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Number</i>	<i>Number</i>
All Milk Cows	1.3	2.3	213	109	7	179	10	0

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

The next "Milk Production" report will be released at 3 p.m. ET on January 15, 1998.

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Quarter	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
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Annual	7,807		16,833		131,422		

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Estimated Milk Production: United States, 1996-97

Month	By Month			Cumulative		
	1996	1997	Change From 1996	1996	1997	Change From 1996
	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
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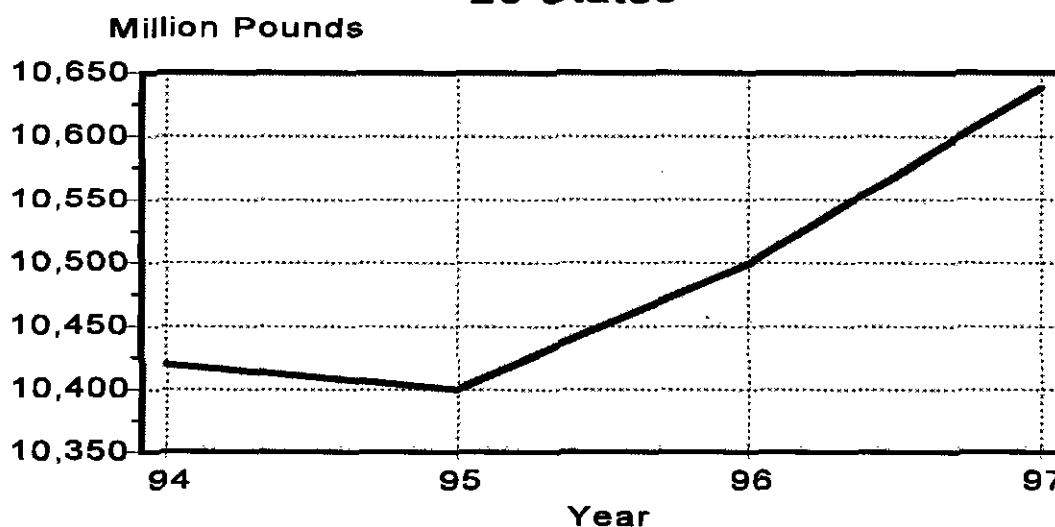
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	1996	1997	1996	1997	1996	1997	
	<i>1,000</i>	<i>1,000</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
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20 States**



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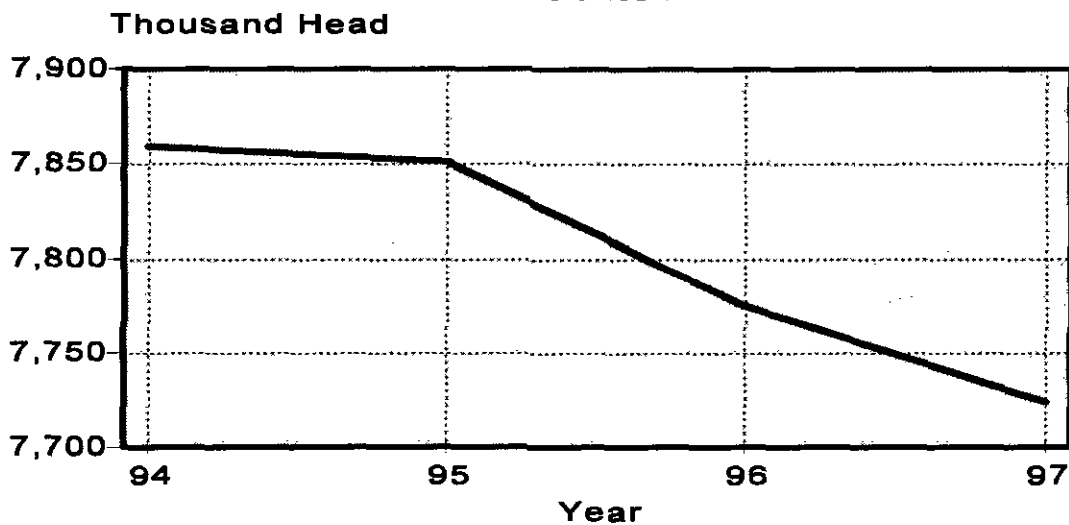
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**November Milk Cows, 1994-1997
20 States**



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Reliability of July-September Milk Estimates ¹

Item	Root Mean Square Error	90% Confidence Level		Difference Between First and Final Estimates ¹			Number of Quarters	
		Percent	Estimate	Average	Smallest	Largest	First Above Final	First Below Final
Milk Production	0.7	1.4	546	255	139	456	10	0
All Milk Cows	1.3	2.3	213	109	7	179	10	0

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

The next "Milk Production" report will be released at 3 p.m. ET on January 15, 1998.

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