

Milk Production



**United States
Department of
Agriculture**

Washington, D.C.

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July Milk Production Up 1 Percent

Milk production in the 21 major States during July totaled 11.0 billion pounds, 1 percent above production in these same States in July 1993. June revised production, at 11.0 billion pounds was 1 percent more than June 1993.

Production per cow in the 21 major States averaged 1,368 pounds for July, 22 pounds above July 1993.

The number of cows on farms in the 21 major States was 8.03 million head, 81,000 head less than July 1993 and 9,000 head less than June 1994.

During the April-June period, the 21 major States produced 33.5 billion pounds of milk, 83.8 percent of the U.S. production. If the remaining 29 States not surveyed monthly followed the same pattern as the 21 States, the U.S. production would be 13.1 billion for July 1994.

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Milk Cows and Production: By Quarter, United States, 1993-94

Quarter	Milk Cows <u>1/</u>		Milk per Cow <u>2/</u>		Milk Production <u>2/</u>		1994 as % of 1993
	1993	1994	1993	1994	1993	1994	
	---- 1,000 ----		Pounds		Million Pounds		Percent
Jan-Mar	9,773	9,612	3,848	3,921	37,608	37,692	100
Apr-Jun	9,727	9,638	4,052	4,146	39,411	39,960	101
Jul-Sep	9,675		3,862		37,364		
Oct-Dec	9,644		3,792		36,571		
Annual	9,705		15,554		150,954		

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

2/ Excludes milk sucked by calves.

Milk Cows and Production: By Month, 21 Selected States, 1993-94

Month	Milk Cows <u>1/</u>		Milk per Cow <u>2/</u>		Milk Production <u>2/</u>		1994 as % of 1993
	1993	1994	1993	1994	1993	1994	
	---- 1,000 ----		Pounds		Million Pounds		Percent
Jan	8,219	8,042	1,305	1,323	10,728	10,637	99
Feb	8,193	8,018	1,209	1,222	9,908	9,802	99
Mar	8,173	8,005	1,353	1,384	11,060	11,079	100
Apr	8,148	8,014	1,341	1,377	10,927	11,038	101
May	8,139	8,021	1,402	1,428	11,410	11,452	100
Jun	8,130	8,038	1,346	1,368	10,940	10,998	101
Jul	8,110	8,029	1,346	1,368	10,913	10,984	101
Aug	8,098		1,306		10,573		
Sep	8,090		1,253		10,138		
Oct	8,069		1,280		10,331		
Nov	8,065		1,239		9,994		
Dec	8,054		1,299		10,461		
Annual	8,124		15,680		127,383		

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

2/ Excludes milk sucked by calves.

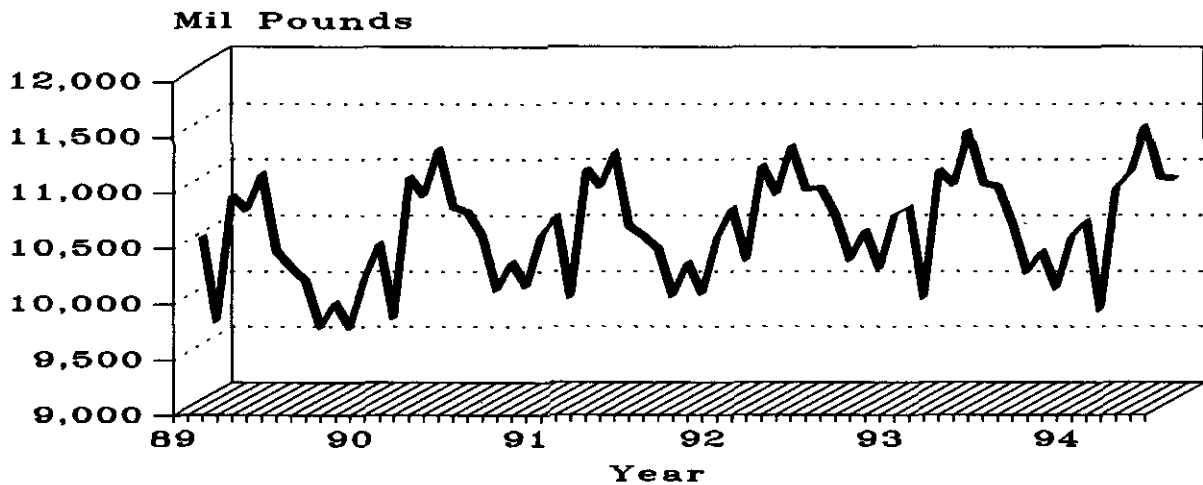
Milk Cows and Production: By State, July 1993-94

State	Milk Cows <u>1/</u>		Milk per Cow <u>2/</u>		Milk Production <u>2/</u>		1994 as % of 1993
	1993	1994	1993	1994	1993	1994	
	---- 1,000 ----		Pounds		Million Pounds		Percent
CA	1,181	1,219	1,690	1,765	1,996	2,152	108
FL	178	178	1,110	1,180	198	210	106
ID	192	207	1,510	1,600	290	331	114
IL	176	175	1,280	1,270	225	222	99
IN	145	143	1,360	1,340	197	192	97
IA	294	287	1,170	1,170	344	336	98
KY	178	167	985	970	175	162	93
MD	97	93	1,145	1,170	111	109	98
MI	339	335	1,380	1,400	468	469	100
MN	650	620	1,270	1,275	826	791	96
MO	223	220	1,080	980	241	216	90
NY	744	731	1,320	1,320	982	965	98
NC	94	91	1,225	1,285	115	117	102
OH	304	298	1,275	1,290	388	384	99
PA	649	650	1,345	1,310	873	852	98
TN	183	163	950	1,040	174	170	98
TX	386	398	1,255	1,225	484	488	101
VT	161	159	1,310	1,290	211	205	97
VA	131	129	1,185	1,125	155	145	94
WA	260	262	1,675	1,730	436	453	104
WI	1,545	1,504	1,310	1,340	2,024	2,015	100
21 State:							
Total	8,110	8,029	1,346	1,368	10,913	10,984	101

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

2/ Excludes milk sucked by calves.

Milk Production, 1989-1994 21 States

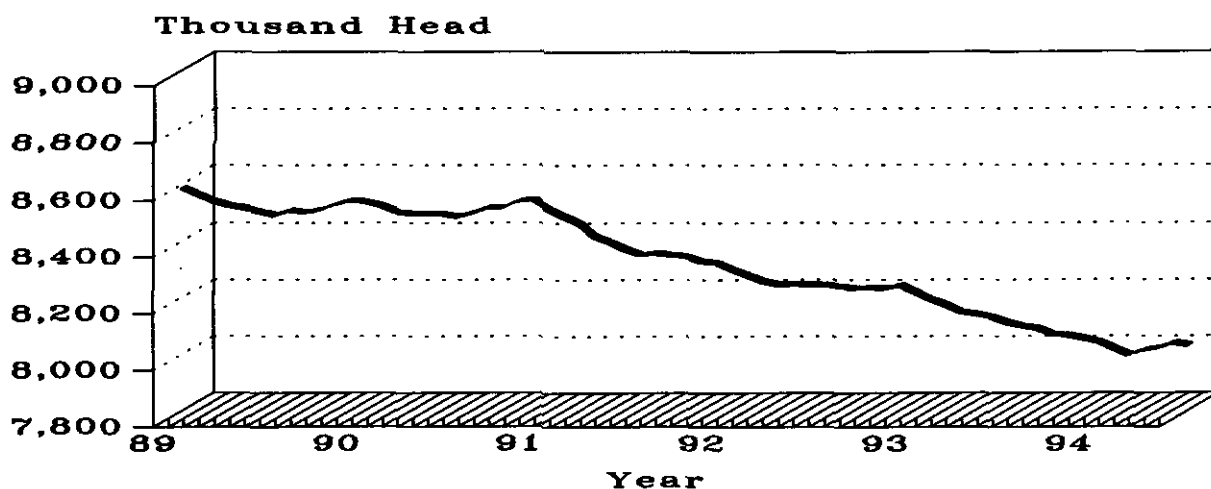


Milk Cows and Production: By State, June 1993-94 ^{1/}

State	Milk Cows ^{2/}		Milk per Cow ^{3/}		Milk Production ^{3/}		1994 as % of 1993
	1993	1994	1993	1994	1993	1994	
	----- 1,000 -----		Pounds		Million Pounds		Percent
CA	1,179	1,218	1,620	1,735	1,910	2,113	111
FL	177	178	1,175	1,245	208	222	107
ID	190	206	1,450	1,560	276	321	116
IL	178	176	1,280	1,280	228	225	99
IN	145	145	1,360	1,280	197	186	94
IA	295	287	1,140	1,150	336	330	98
KY	178	169	1,015	975	181	165	91
MD	99	93	1,190	1,195	118	111	94
MI	339	337	1,360	1,420	461	479	104
MN	650	625	1,320	1,305	858	816	95
MO	223	220	1,105	1,010	246	222	90
NY	743	734	1,345	1,340	999	984	98
NC	94	91	1,245	1,330	117	121	103
OH	304	300	1,280	1,235	389	371	95
PA	647	650	1,355	1,335	877	868	99
TN	185	165	990	1,040	183	172	94
TX	385	398	1,275	1,260	491	501	102
VT	161	159	1,335	1,320	215	210	98
VA	132	130	1,205	1,145	159	149	94
WA	258	262	1,630	1,695	421	444	105
WI	1,568	1,495	1,320	1,330	2,070	1,988	96
21 State:							
Total	8,130	8,038	1,346	1,368	10,940	10,998	101

^{1/} 1993 and 1994 revised. ^{2/} Includes dry cows. Excludes heifers not yet fresh. ^{3/} Excludes milk sucked by calves.

All Milk Cows, 1989-1994 21 States



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 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, conducted by the Department of Commerce, 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 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 0.5 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 9.64 million head by more than 0.5 percent, or about 48,000 head. Chances are 9 out of 10 that the difference will not exceed 0.8 percent, or about 77,100 head (the 90 percent confidence level).

Reliability of April-June 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	0.5	1.0	400	155	0	394	6	3	
			----- 1,000 Head -----						
All Milk Cows	0.5	0.8	77	36	5	94	9	1	

1/ Based on records for the past 10 April-June quarters.

