

Milk Production



National
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Department of
Agriculture

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September Milk Production up 3 Percent

Milk production in the 21 major States during September totaled 10.5 billion pounds, 3 percent above production in these same States in September 1993. August revised production, at 10.8 billion pounds, was 2 percent more than August 1993.

Production per cow in the 21 major States averaged 1,301 pounds for September, 48 pounds above September 1993.

The number of cows on farms in the 21 major States was 8.04 million head, 54,000 head less than September 1993 but 2,000 head more than August 1994.

During the July-September period, the 21 major States produced 32.3 billion pounds of milk, 84.1 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 pounds for July, 12.9 billion pounds for August, and 12.4 billion pounds for September.

U.S. July-September Milk Up 3 Percent

The quarterly production of milk for the U.S. was 38.4 billion, 3 percent above the July-September period last year. The average number of milk cows in the U.S. during the July-September quarter was 9.66 million head 19,000 head less than the same period last year.

Grain and Other Concentrates

Grain and other concentrates fed to milk cows on October 1, 1994, averaged 18.7 pounds per cow, 0.9 pound more than October 1, 1993.

Value of Grain and Other Concentrates

The value of grain and other concentrates fed to cows on October 1, averaged \$7.87 per hundredweight, \$0.05 less than October 1, 1993.

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

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	9,641	4,052	4,146	39,411	39,973	101
Jul-Sep	9,675	9,656	3,862	3,975	37,364	38,378	103
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	8,030	1,346	1,369	10,913	10,996	101
Aug	8,098	8,034	1,306	1,348	10,573	10,830	102
Sep	8,090	8,036	1,253	1,301	10,138	10,451	103
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.

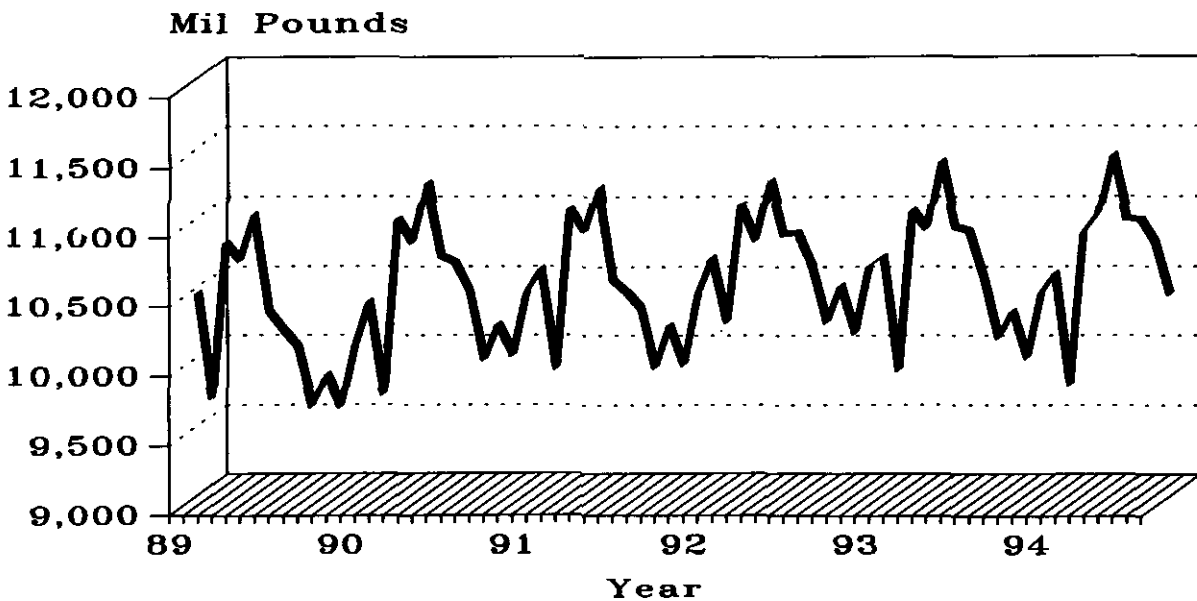
Milk Cows and Production: By State, September 1993-94

State	Milk Cows ^{1/}		Milk per Cow ^{2/}		Milk Production ^{2/}		1994 as % of 1993
	1993	1994	1993	1994	1993	1994	
	1,000		Pounds		Million Pounds		Percent
CA	1,184	1,219	1,620	1,695	1,918	2,066	108
FL	179	176	990	1,025	177	180	102
ID	192	213	1,430	1,520	275	324	118
IL	175	176	1,200	1,270	210	224	107
IN	145	145	1,230	1,250	178	181	102
IA	293	287	1,135	1,150	333	330	99
KY	176	167	940	980	165	164	99
MD	96	92	1,105	1,210	106	111	105
MI	339	335	1,310	1,350	444	452	102
MN	645	620	1,125	1,160	726	719	99
MO	222	218	970	985	215	215	100
NY	749	734	1,225	1,250	918	918	100
NC	93	90	1,205	1,245	112	112	100
OH	302	295	1,230	1,260	371	372	100
PA	651	651	1,225	1,240	797	807	101
TN	182	163	950	1,030	173	168	97
TX	386	400	1,165	1,190	450	476	106
VT	161	160	1,240	1,205	200	193	97
VA	131	129	1,185	1,175	155	152	98
WA	260	263	1,580	1,610	411	423	103
WI	1,529	1,503	1,180	1,240	1,804	1,864	103
21 State Total	8,090	8,036	1,253	1,301	10,138	10,451	103

^{1/} Includes dry cows. Excludes heifers not yet fresh.

^{2/} Excludes milk sucked by calves.

Milk Production, 1989-1994 21 States

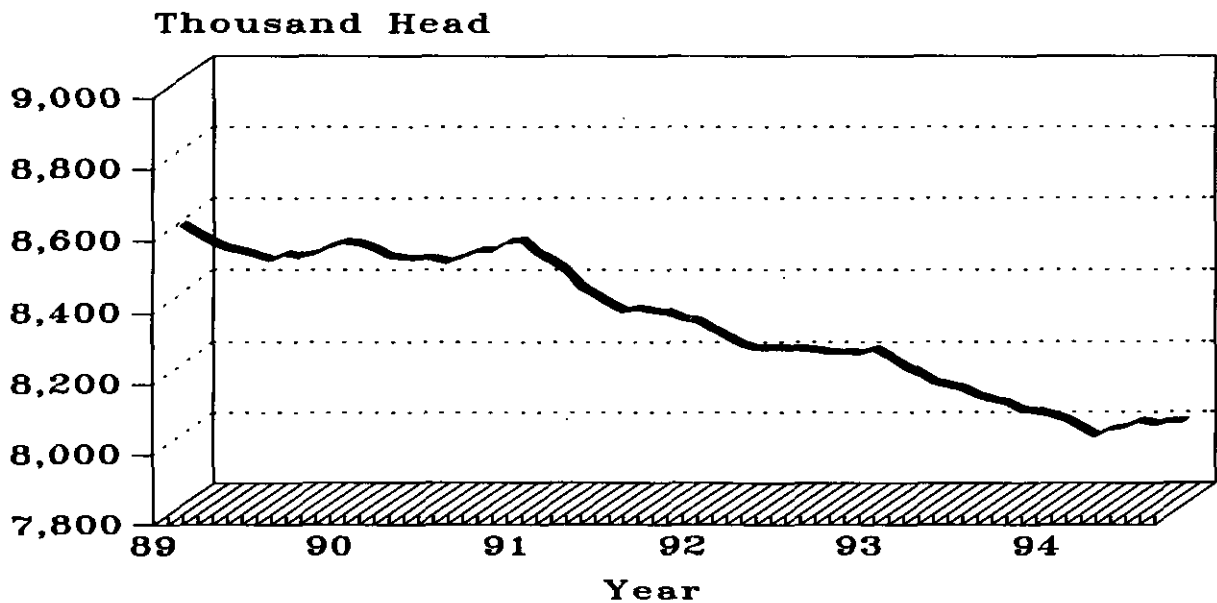


Milk Cows and Production: By State, August 1993-94 ^{1/}

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	1,182	1,219	1,680	1,735	1,986	2,139	108
FL	179	176	1,035	1,075	185	189	102
ID	192	211	1,490	1,590	286	335	117
IL	176	175	1,270	1,270	224	222	99
IN	145	145	1,290	1,330	187	193	103
IA	294	287	1,145	1,170	337	336	100
KY	177	167	990	1,000	175	167	95
MD	97	92	1,165	1,215	113	112	99
MI	339	335	1,350	1,390	458	466	102
MN	645	620	1,190	1,225	768	760	99
MO	223	220	1,015	1,005	226	221	98
NY	751	733	1,260	1,290	946	946	100
NC	94	90	1,200	1,265	113	114	101
OH	303	297	1,245	1,255	377	373	99
PA	649	651	1,295	1,285	840	837	100
TN	182	163	950	1,050	173	171	99
TX	386	398	1,170	1,200	452	478	106
VT	160	159	1,295	1,235	207	196	95
VA	132	129	1,225	1,200	162	155	96
WA	261	263	1,645	1,715	429	451	105
WI	1,531	1,504	1,260	1,310	1,929	1,969	102
21 State Total	8,098	8,034	1,306	1,348	10,573	10,830	102

^{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



Milk Cows and Production: By State and United States
Revised April-June 1993-94

State	Apr-Jun Milk Cows <u>1/</u>		Apr-Jun Milk Production <u>2/</u>		1994 as % of 1993
	1993	1994	1993	1994	
	---- 1,000 ----		-- Million Pounds --		Percent
AL	39	36	137	135	99
AK	0.7	0.7	3.16	3.43	109
AZ	102	120	486	569	117
AR	64	61	204	201	99
CA	1,177	1,211	5,804	6,320	109
CO	80	81	371	400	108
CT	34	33	134	133	99
DE	10.0	10.0	38.6	38.9	101
FL	177	178	675	725	107
GA	100	102	401	426	106
HI	10.9	10.9	38.8	37.6	97
ID	188	203	805	937	116
IL	178	175	687	672	98
IN	144	145	589	578	98
IA	296	286	1,023	993	97
KS	83	77	280	280	100
KY	179	170	569	517	91
LA	80	80	255	254	100
ME	42	40	177	164	93
MD	100	93	366	354	97
MA	30	30	124	119	96
MI	339	338	1,390	1,435	103
MN	650	627	2,604	2,476	95
MS	60	57	205	198	97
MO	223	218	773	725	94
MT	22	21	80	78	98
NE	93	91	294	309	105
NV	20.0	22	90.0	105	117
NH	20	20	85	82	96
NJ	25	24	90	91	101
NM	132	164	660	855	130
NY	745	737	3,005	2,999	100
NC	95	91	382	387	101
ND	73	69	252	228	90
OH	305	301	1,199	1,167	97
OK	98	100	319	330	103
OR	100	100	434	443	102
PA	646	647	2,661	2,641	99
RI	2.3	2.3	8.8	8.3	94
SC	28	28	98	104	106
SD	126	121	426	428	100
TN	188	168	561	555	99
TX	384	397	1,560	1,672	107
UT	83	86	347	369	106
VT	162	159	651	638	98
VA	132	130	506	480	95
WA	257	261	1,271	1,331	105
WV	23	23	70	71	101
WI	1,575	1,490	6,196	5,886	95
WY	7.4	7.1	25.8	24.8	96
US <u>3/</u>	9,727	9,641	39,411	39,973	101

1/ Includes dry cows, excludes heifers not yet fresh.
2/ Excludes milk sucked by calves.
3/ Milk cows will not add due to rounding.

Milk Cows and Production: By State and United States
Preliminary July-September 1993-94

State	Jul-Sep Milk Cows ^{1/}		Jul-Sep Milk Production ^{2/}		1994 as % of 1993
	1993	1994	1993	1994	
	---- 1,000 ----		-- Million Pounds --		Percent
AL	38	36	110	102	93
AK	0.7	0.7	3.13	3.29	105
AZ	104	118	435	472	109
AR	62	61	186	183	98
CA	1,182	1,219	5,900	6,363	108
CO	81	81	373	401	108
CT	33	33	127	124	98
DE	10.0	10.0	34.3	37.5	109
FL	179	176	560	572	102
GA	100	102	334	350	105
HI	10.9	10.5	34.3	33.5	98
ID	192	211	851	994	117
IL	176	175	659	668	101
IN	145	145	562	568	101
IA	294	287	1,014	1,002	99
KS	80	79	260	275	106
KY	177	167	515	493	96
LA	78	79	195	200	103
ME	41	40	167	162	97
MD	97	92	330	332	101
MA	30	30	118	113	96
MI	339	335	1,370	1,387	101
MN	647	620	2,320	2,270	98
MS	58	57	160	157	98
MO	223	219	682	658	96
MT	22	21	78	79	101
NE	90	92	283	317	112
NV	20.0	22.0	89.0	101.2	114
NH	20	20	78	76	97
NJ	25	24	88	91	103
NM	139	171	679	848	125
NY	748	733	2,846	2,829	99
NC	94	90	340	343	101
ND	70	68	235	222	94
OH	303	297	1,136	1,129	99
OK	98	99	309	317	103
OR	100	100	434	455	105
PA	650	651	2,510	2,496	99
RI	2.2	2.2	8	7.7	96
SC	28	28	82	92	112
SD	124	120	408	410	100
TN	182	163	520	509	98
TX	386	399	1,386	1,442	104
UT	81	88	338	377	112
VT	161	159	618	592	96
VA	131	129	472	456	97
WA	260	263	1,276	1,326	104
WV	23	23	68	70	103
WI	1,535	1,504	5,757	5,848	102
WY	7.3	7.2	25.8	25.3	98
U S ^{3/}	9,675	9,656	37,364	38,378	103

^{1/} Includes dry cows, excludes heifers not yet fresh.

^{2/} Excludes milk sucked by calves.

^{3/} Milk cows will not add due to rounding.

Grain and Other Concentrates: Quantity Fed Daily and Value
By State and United States, October 1, 1993-94

State	Grain and Other Concentrates Fed Daily per Milk Cow		Value per 100 Pounds of Concentrate Ration Fed to Milk Cows	
	1993	1994	1993	1994
	Pounds		Dollars	
AL	17.3	17.6	8.30	8.10
AK	19.0	19.5	13.50	13.80
AZ	25.0	23.3	7.60	7.10
AR	17.6	17.4	7.90	8.10
CA	20.5	21.9	7.50	7.80
CO	20.0	22.0	6.70	7.20
CT	16.5	16.0	8.70	8.90
DE	15.8	16.8	8.55	9.10
FL	26.0	25.0	7.30	7.20
GA	20.0	21.1	7.90	7.80
ID	22.0	21.0	6.70	6.60
IL	17.5	18.3	9.00	7.80
IN	17.2	25.5	7.40	8.80
IA	16.8	17.0	7.90	7.50
KS	18.8	18.2	6.65	7.10
KY	16.0	16.6	8.45	8.70
LA	16.5	18.0	8.45	8.25
ME	15.0	16.0	8.80	9.10
MD	14.3	15.9	9.00	9.00
MA	16.0	15.0	8.70	9.00
MI	16.5	16.2	6.75	7.15
MN	16.4	16.4	7.70	7.10
MS	17.4	15.6	8.15	8.30
MO	17.5	17.7	7.70	7.65
MT	16.6	17.3	7.20	7.30
NE	16.3	17.2	7.10	7.70
NV	20.0	21.0	8.50	8.40
NH	17.0	15.5	8.70	8.50
NJ	13.5	14.1	8.80	8.80
NM	25.0	26.0	6.50	6.60
NY	14.3	14.6	9.30	9.10
NC	17.4	17.8	8.90	8.55
ND	15.2	16.1	5.75	5.60
OH	17.8	18.3	7.60	8.30
OK	17.7	20.0	7.60	7.90
OR	18.0	19.0	9.10	9.25
PA	16.7	16.5	9.50	9.10
RI	14.5	15.0	8.20	8.70
SC	18.5	18.5	8.10	7.90
SD	15.7	16.4	6.50	6.55
TN	16.0	17.0	9.20	9.00
TX	21.2	23.4	7.60	7.40
UT	17.4	17.3	7.30	7.10
VT	15.5	15.0	8.50	8.80
VA	15.7	16.0	9.00	8.98
WA	21.0	22.5	7.85	7.80
WV	15.0	14.2	8.80	8.90
WI	16.5	16.6	7.60	7.60
WY	12.0	13.3	6.05	6.35
US	17.8	18.7	7.92	7.87

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 0.6 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 9.66 million head by more than 0.6 percent, or about 58,000 head. Chances are 9 out of 10 that the difference will not exceed 1.1 percent, or about 106,000 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			
			Average	Smallest	Largest	First Above Final	First Below Final		
	- Percent -		----- Mil Lbs. -----			- Number -			
Milk Production	0.7	1.3	499	204	15	538	10	0	
			----- 1,000 Head -----						
All Milk Cows	0.6	1.1	106	46	1	135	10	0	

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

