



Milk Production

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January Milk Production Up 4.7 Percent

Milk production in the 20 major States during January totaled 12.2 billion pounds, up 4.7 percent from production in these same States in January 1999. December revised production, at 11.9 billion pounds was up 4.0 percent from December 1998. The December revision represented an increase of 0.1 percent or 10 million pounds from last months preliminary production estimate.

Production per cow in the 20 major States averaged 1,576 pounds for January, 58 pounds above January 1999.

The number of cows on farms in the 20 major States was 7.76 million head, 69,000 head more than January 1999 and 6,000 head more than December 1999.

1999 Annual Milk Production Up 3.4 Percent from 1998

The annual production of milk for the U.S. during 1999 was 162.7 billion pounds, 3.4 percent above 1998. This was the third consecutive year of increased milk production and a new record high. Revisions to 1998 production decreased the annual total by less than 0.1 percent. Revised 1999 production was also down by less than 0.1 percent from last months publication.

Production per cow in the U.S. averaged 17,771 pounds for 1999, 582 pounds above 1998. Average annual rate of milk production per cow has increased 20 percent since 1990.

The average number of milk cows on farms in the U.S. during 1999 was 9.16 million head, down slightly from 1998. Average number of milk cows was revised down 4,000 head for 1998 and 2,000 head for 1999 from the previous estimate.

Special Note

The U.S. Estimated Milk Production table on page 2 was expanded to include milk cows and milk per cow on a monthly basis.

Included in this issue are tables with Number of Operations, Percent of Inventory, and Percent of Milk Production by Size Group. State level tables were changed from previous years to include South Dakota and Oklahoma. Also, a new U.S. table was included which contains additional breakouts for the largest size groups.

This issue also contains monthly, quarterly, and annual revisions for 1998-1999.

Milk Cows and Production: By Quarter, United States, 1999-2000 ¹

Quarter	Milk Cows ²		Milk Per Cow ³		Milk Production ³		
	1999	2000	1999	2000	1999	2000	Change From 1999
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan-Mar	9,128		4,437		40,505		
Apr-Jun	9,155		4,591		42,029		
Jul-Sep	9,171		4,337		39,771		
Oct-Dec	9,170		4,406		40,406		
Annual	9,156		17,771		162,711		

¹ May not add due to rounding.

² Includes dry cows, excludes heifers not yet fresh.

³ Excludes milk sucked by calves.

Milk Cows and Production: By Month, 20 Selected States, 1999-2000

Month	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
	1999	2000	1999	2000	1999	2000	Change From 1999
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan	7,694	7,763	1,518	1,576	11,679	12,232	4.7
Feb	7,696		1,404		10,804		
Mar	7,713		1,585		12,228		
Apr	7,720		1,554		11,998		
May	7,733		1,610		12,447		
Jun	7,740		1,516		11,737		
Jul	7,751		1,498		11,610		
Aug	7,755		1,487		11,534		
Sep	7,753		1,445		11,200		
Oct	7,746		1,491		11,549		
Nov	7,756		1,459		11,315		
Dec	7,757		1,538		11,928		
Annual	7,735		18,103		140,029		

¹ Includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Estimated Milk Cows and Production: By Month, United States, 1999-2000

Month	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
	1999	2000	1999	2000	1999	2000	Change From 1999
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
Jan	9,121	9,182	1,494	1,554	13,628	14,273	4.7
Feb	9,123		1,382		12,607		
Mar	9,141		1,561		14,270		
Apr	9,143		1,524		13,938		
May	9,157		1,579		14,458		
Jun	9,166		1,487		13,633		
Jul	9,167		1,467		13,444		
Aug	9,174		1,456		13,357		
Sep	9,171		1,414		12,970		
Oct	9,162		1,464		13,412		
Nov	9,174		1,432		13,140		
Dec	9,175		1,510		13,854		
Annual	9,156		17,771		162,711		

¹ Includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

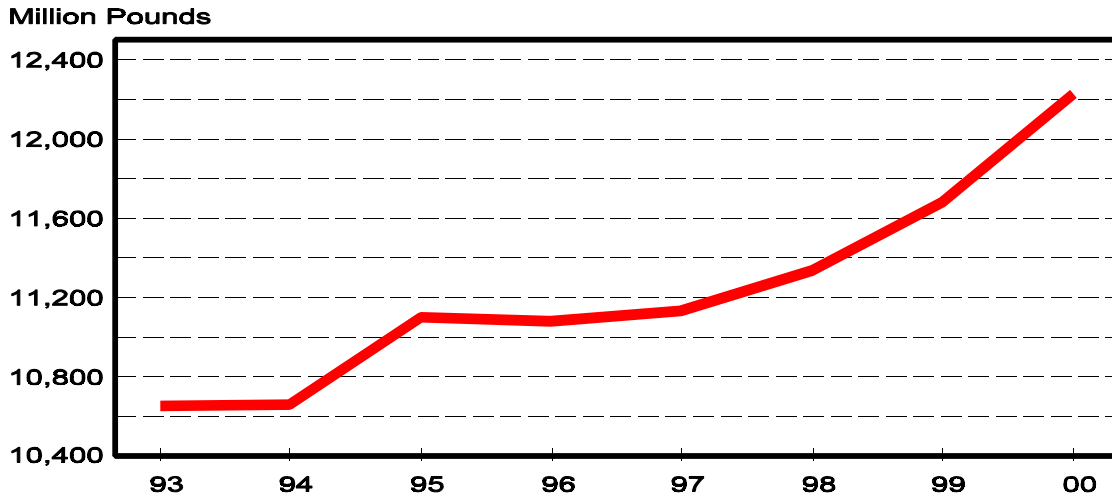
Milk Cows and Production: By State, January 1999-2000

State	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		
	1999	2000	1999	2000	1999	2000	Change From 1999
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
AZ	132	137	1,925	2,020	254	277	9.1
CA	1,444	1,492	1,690	1,815	2,440	2,708	11.0
FL	158	156	1,415	1,410	224	220	-1.8
ID	304	332	1,660	1,740	505	578	14.5
IL	125	120	1,430	1,500	179	180	0.6
IN	137	139	1,360	1,425	186	198	6.5
IA	220	215	1,515	1,555	333	334	0.3
KY	135	130	1,050	1,130	142	147	3.5
MI	291	299	1,520	1,600	442	478	8.1
MN	545	540	1,505	1,535	820	829	1.1
MO	164	158	1,230	1,240	202	196	-3.0
NM	220	237	1,740	1,780	383	422	10.2
NY	702	700	1,430	1,450	1,004	1,015	1.1
OH	260	259	1,430	1,470	372	381	2.4
PA	617	617	1,475	1,520	910	938	3.1
TX	340	350	1,480	1,500	503	525	4.4
VT	162	159	1,410	1,460	228	232	1.8
VA	122	119	1,295	1,395	158	166	5.1
WA	248	246	1,845	1,895	458	466	1.7
WI	1,368	1,358	1,415	1,430	1,936	1,942	0.3
20-State Total	7,694	7,763	1,518	1,576	11,679	12,232	4.7

¹ Includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

**January Milk Production, 1993-2000
20 States**



Milk Cows and Production: By State, December 1998-1999 ¹

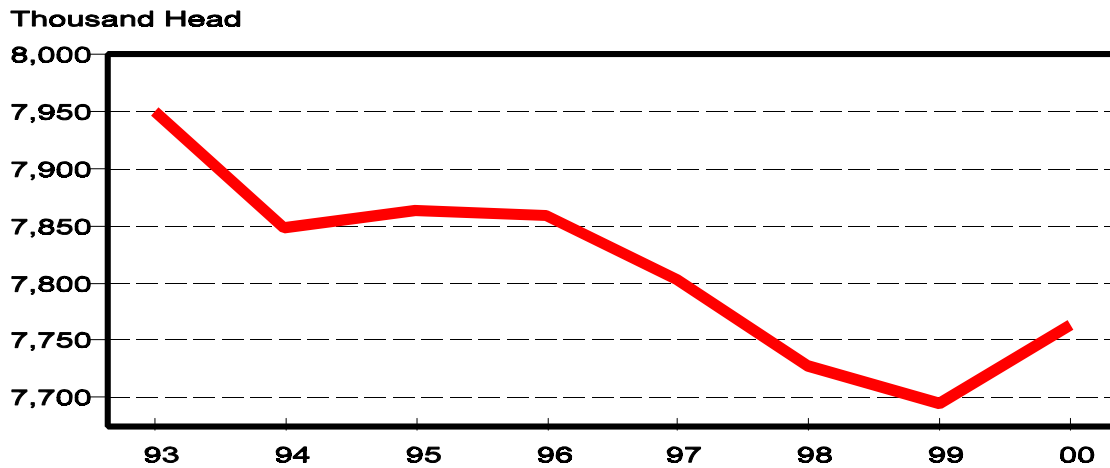
State	Milk Cows ²		Milk per Cow ³		Milk Production ³		
	1998	1999	1998	1999	1998	1999	Change From 1998
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
AZ	132	135	1,795	1,830	237	247	4.2
CA	1,438	1,488	1,655	1,775	2,380	2,641	11.0
FL	157	156	1,325	1,320	208	206	-1.0
ID	301	331	1,660	1,730	500	573	14.6
IL	125	121	1,420	1,430	178	173	-2.8
IN	137	138	1,390	1,355	190	187	-1.6
IA	219	215	1,480	1,495	324	321	-0.9
KY	136	130	1,030	1,070	140	139	-0.7
MI	299	297	1,520	1,550	454	460	1.3
MN	545	540	1,470	1,495	801	807	0.7
MO	165	158	1,200	1,200	198	190	-4.0
NM	218	236	1,715	1,720	374	406	8.6
NY	702	700	1,410	1,440	990	1,008	1.8
OH	261	258	1,420	1,460	371	377	1.6
PA	619	619	1,435	1,480	888	916	3.2
TX	340	350	1,400	1,390	476	487	2.3
VT	162	159	1,400	1,430	227	227	0.0
VA	122	120	1,270	1,400	155	168	8.4
WA	248	246	1,805	1,885	448	464	3.6
WI	1,370	1,360	1,410	1,420	1,932	1,931	-0.1
20-State Total	7,696	7,757	1,491	1,538	11,471	11,928	4.0

¹ 1999 revised.

² Includes dry cows, excludes heifers not yet fresh.

³ Excludes milk sucked by calves.

**January Milk Cows, 1993-2000
20 States**



Milk Cows and Production: United States, 1990-99 ¹

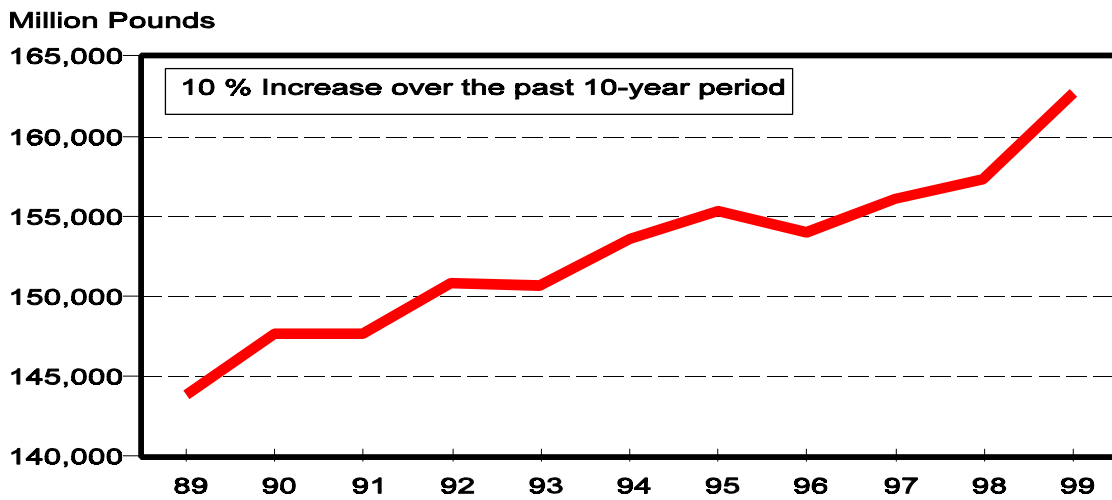
Year	Milk Cows ² <i>1,000 Head</i>	Production per Cow ³		Milk Production ³
		Milk <i>Pounds</i>	Total <i>Million Pounds</i>	
1990	9,993	14,782	147,721	
1991	9,826	15,031	147,697	
1992	9,688	15,570	150,847	
1993	9,581	15,722	150,636	
1994	9,494	16,179	153,602	
1995	9,466	16,405	155,292	
1996	9,372	16,433	154,006	
1997	9,252	16,871	156,091	
1998	9,154	17,189	157,348	
1999	9,156	17,771	162,711	

¹ May not add due to rounding.

² Average number during year, excluding heifers not yet fresh.

³ Excludes milk sucked by calves.

**Milk Production, 1990-1999
United States**



Milk Cows and Production: By State and United States, 1998-1999

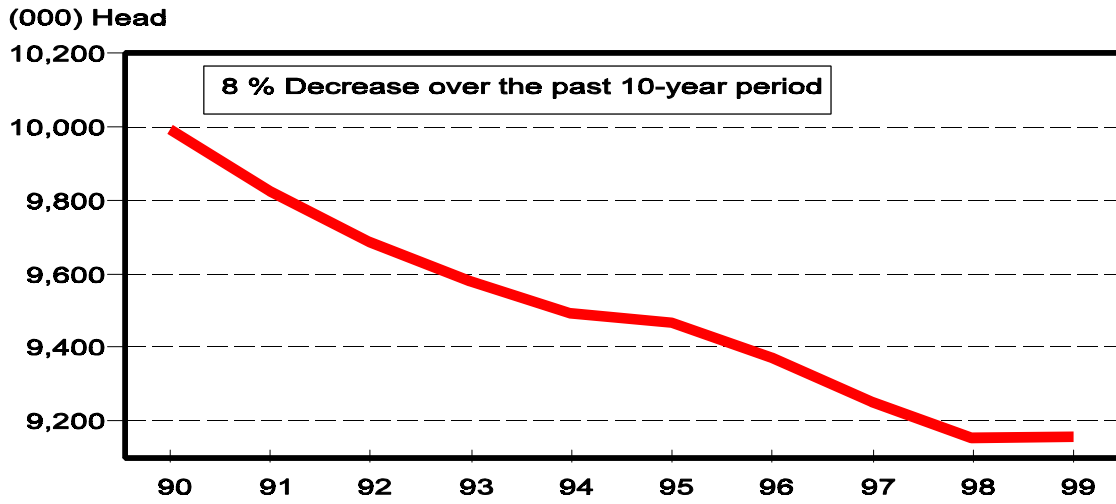
State	Milk Cows ¹		Milk Per Cow ²		Milk Production ²		Change From 1998
	1998	1999	1998	1999	1998	1999	
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
AL	28	27	13,786	13,852	386	374	-3.1
AK	0.9	1.0	15,922	13,580	14.33	13.58	-5.2
AZ	131	134	20,458	21,873	2,680	2,931	9.4
AR	45	42	12,000	12,381	540	520	-3.7
CA	1,420	1,466	19,475	20,788	27,654	30,475	10.2
CO	83	83	20,349	20,819	1,689	1,728	2.3
CT	30	29	17,633	17,931	529	520	-1.7
DE	11.0	11.0	14,818	15,545	163.0	171.0	4.9
FL	160	158	14,606	15,177	2,337	2,398	2.6
GA	93	89	15,452	16,281	1,437	1,449	0.8
HI	8.9	8.6	14,494	13,919	129.0	119.7	-7.2
ID	292	318	19,743	20,292	5,765	6,453	11.9
IL	128	123	16,570	16,496	2,121	2,029	-4.3
IN	136	136	16,103	16,066	2,190	2,185	-0.2
IA	222	217	17,167	17,521	3,811	3,802	-0.2
KS	82	86	16,037	16,221	1,315	1,395	6.1
KY	140	133	12,214	12,368	1,710	1,645	-3.8
LA	63	61	11,921	11,656	751	711	-5.3
ME	41	42	16,585	16,500	680	693	1.9
MD	86	85	15,581	16,059	1,340	1,365	1.9
MA	26	25	16,846	16,800	438	420	-4.1
MI	299	299	17,943	18,244	5,365	5,455	1.7
MN	551	545	16,833	17,391	9,275	9,478	2.2
MS	42	38	13,786	14,526	579	552	-4.7
MO	170	159	13,924	13,962	2,367	2,220	-6.2
MT	18	18	16,167	16,833	291	303	4.1
NE	70	74	15,000	15,392	1,050	1,139	8.5
NV	26	25	19,308	19,880	502	497	-1.0
NH	20	19	16,650	16,895	333	321	-3.6
NJ	19	17	15,368	16,471	292	280	-4.1
NM	217	232	20,065	20,366	4,354	4,725	8.5
NY	701	701	16,762	17,175	11,750	12,040	2.5
NC	75	73	16,680	16,658	1,251	1,216	-2.8
ND	51	49	13,843	14,061	706	689	-2.4
OH	264	260	16,705	17,096	4,410	4,445	0.8
OK	92	92	13,435	13,576	1,236	1,249	1.1
OR	89	89	17,787	18,708	1,583	1,665	5.2
PA	623	616	17,411	17,745	10,847	10,931	0.8
RI	2.1	2.0	15,714	15,500	33.0	31.0	-6.1
SC	25	24	14,960	15,375	374	369	-1.3
SD	102	102	14,069	14,775	1,435	1,507	5.0
TN	105	97	14,295	14,608	1,501	1,417	-5.6
TX	352	345	15,923	16,290	5,605	5,620	0.3
UT	90	92	16,811	17,533	1,513	1,613	6.6
VT	161	160	16,460	16,950	2,650	2,712	2.3
VA	124	121	14,847	15,529	1,841	1,879	2.1
WA	248	247	21,476	22,409	5,326	5,535	3.9
WV	18	18	15,444	15,278	278	275	-1.1
WI	1,369	1,365	16,685	16,902	22,842	23,071	1.0
WY	6.1	6.0	13,082	13,300	79.8	79.8	
US ³	9,154	9,156	17,189	17,771	157,348	162,711	3.4

¹ Average number during year, excluding heifers not yet fresh.

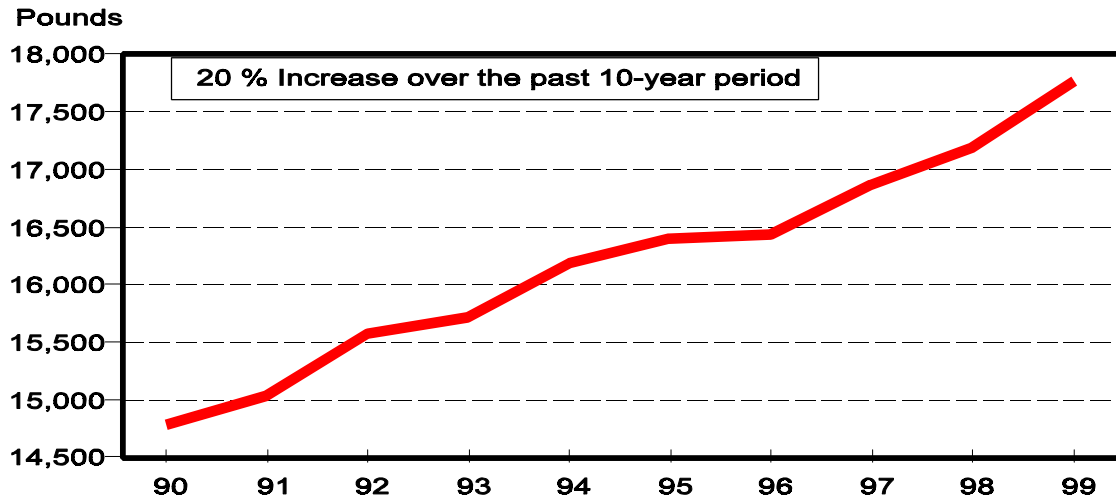
² Excludes milk sucked by calves.

³ May not add due to rounding.

Milk Cows, 1990-1999 United States



Rate per Cow, 1990-1999 United States



Milk Cows: Number by Month, State, and 20 State Total, 1998 ¹

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	
AZ	130	130	130	130	130	131	
CA	1,402	1,406	1,408	1,411	1,413	1,417	
FL	160	160	162	162	162	160	
ID	283	283	283	288	293	293	
IL	130	129	129	129	128	128	
IN	135	134	134	136	137	138	
IA	225	224	224	223	223	222	
KY	145	143	141	141	141	141	
MI	297	296	297	298	299	301	
MN	555	555	555	555	555	555	
MO	175	175	174	173	172	171	
NM	216	216	216	216	217	217	
NY	700	698	697	700	701	701	
OH	265	265	265	265	265	264	
PA	625	625	624	624	623	623	
TX	368	365	362	359	356	353	
VT	163	162	161	160	161	161	
VA	125	125	125	125	125	125	
WA	250	250	249	249	248	247	
WI	1,378	1,376	1,373	1,368	1,368	1,368	
20-Sts	7,727	7,717	7,709	7,712	7,717	7,716	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg. ²
AZ	132	132	132	132	132	132	131
CA	1,420	1,424	1,428	1,432	1,436	1,438	1,420
FL	159	159	158	158	158	157	160
ID	294	296	296	298	299	301	292
IL	127	127	127	126	126	125	128
IN	136	135	136	136	138	137	136
IA	222	222	222	221	221	219	222
KY	141	140	138	137	136	136	140
MI	305	302	299	297	297	299	299
MN	550	550	550	545	545	545	551
MO	170	169	168	167	166	165	170
NM	217	218	219	219	218	218	217
NY	700	701	702	702	702	702	701
OH	264	263	263	262	262	261	264
PA	623	623	623	621	620	619	623
TX	350	347	344	342	341	340	352
VT	162	162	161	161	161	162	161
VA	124	123	123	123	123	122	124
WA	247	247	247	247	247	248	248
WI	1,366	1,366	1,366	1,366	1,368	1,370	1,369
20-Sts	7,709	7,706	7,702	7,692	7,696	7,696	7,708

¹ Includes dry cows, excludes heifers not yet fresh.

² Average based on monthly totals.

Milk Cows: Number by Month, State, and 20 State Total, 1999 ¹

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	
AZ	132	132	132	132	134	134	
CA	1,444	1,447	1,452	1,456	1,459	1,464	
FL	158	158	159	160	160	159	
ID	304	306	309	312	314	317	
IL	125	125	125	124	123	122	
IN	137	136	136	136	136	136	
IA	220	219	218	218	217	217	
KY	135	135	134	134	133	133	
MI	291	292	296	299	303	303	
MN	545	545	545	545	545	545	
MO	164	162	161	160	160	159	
NM	220	223	231	231	232	234	
NY	702	702	700	700	702	702	
OH	260	260	260	260	260	260	
PA	617	615	614	615	615	614	
TX	340	341	342	342	345	346	
VT	162	162	162	161	160	159	
VA	122	122	122	122	122	121	
WA	248	248	249	248	247	247	
WI	1,368	1,366	1,366	1,365	1,366	1,368	
20-Sts	7,694	7,696	7,713	7,720	7,733	7,740	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg. ²
AZ	135	135	135	135	135	135	134
CA	1,467	1,472	1,476	1,480	1,484	1,488	1,466
FL	159	158	157	156	156	156	158
ID	322	324	325	327	329	331	318
IL	122	121	121	121	121	121	123
IN	136	136	135	135	137	138	136
IA	216	216	216	215	215	215	217
KY	132	132	132	131	131	130	133
MI	307	303	299	299	296	297	299
MN	545	550	550	545	545	540	545
MO	157	157	157	158	158	158	159
NM	235	235	235	235	236	236	232
NY	702	702	702	700	700	700	701
OH	260	259	259	259	259	258	260
PA	614	615	616	617	618	619	616
TX	346	346	346	346	348	350	345
VT	159	160	160	159	160	159	160
VA	120	121	121	121	121	120	121
WA	249	247	247	245	245	246	247
WI	1,368	1,366	1,364	1,362	1,362	1,360	1,365
20-Sts	7,751	7,755	7,753	7,746	7,756	7,757	7,735

¹ Includes dry cows, excludes heifers not yet fresh.

² Average based on monthly totals.

**Milk Produced per Cow: by Month,
State, and 20 States, 1998¹**

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	
AZ	1,800	1,660	1,885	1,885	1,945	1,780	
CA	1,675	1,480	1,670	1,640	1,725	1,635	
FL	1,375	1,300	1,420	1,375	1,350	1,170	
ID	1,640	1,490	1,660	1,620	1,680	1,660	
IL	1,400	1,310	1,510	1,490	1,510	1,360	
IN	1,370	1,260	1,410	1,430	1,400	1,340	
IA	1,440	1,320	1,472	1,465	1,520	1,433	
KY	1,035	965	1,105	1,135	1,115	1,000	
MI	1,485	1,370	1,530	1,495	1,565	1,515	
MN	1,420	1,320	1,465	1,435	1,480	1,410	
MO	1,155	1,090	1,240	1,305	1,285	1,135	
NM	1,510	1,480	1,705	1,720	1,795	1,755	
NY	1,380	1,280	1,440	1,420	1,490	1,430	
OH	1,430	1,320	1,480	1,410	1,485	1,420	
PA	1,495	1,365	1,535	1,530	1,550	1,435	
TX	1,340	1,290	1,475	1,490	1,480	1,320	
VT	1,365	1,255	1,405	1,395	1,460	1,395	
VA	1,295	1,175	1,345	1,320	1,310	1,185	
WA	1,745	1,605	1,805	1,790	1,885	1,835	
WI	1,360	1,255	1,410	1,395	1,480	1,435	
20-Sts	1,466	1,347	1,516	1,499	1,556	1,475	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg.
AZ	1,530	1,410	1,440	1,650	1,675	1,795	20,458
CA	1,630	1,595	1,530	1,650	1,595	1,655	19,475
FL	1,140	1,040	985	1,030	1,120	1,325	14,606
ID	1,700	1,720	1,630	1,660	1,600	1,660	19,743
IL	1,320	1,320	1,280	1,340	1,350	1,420	16,570
IN	1,350	1,320	1,260	1,280	1,300	1,390	16,103
IA	1,425	1,403	1,350	1,420	1,410	1,480	17,167
KY	980	985	930	970	965	1,030	12,214
MI	1,545	1,520	1,465	1,485	1,450	1,520	17,943
MN	1,395	1,365	1,315	1,385	1,365	1,470	16,833
MO	1,105	1,055	1,060	1,125	1,125	1,200	13,924
NM	1,730	1,710	1,625	1,680	1,610	1,715	20,065
NY	1,450	1,420	1,350	1,375	1,330	1,410	16,762
OH	1,400	1,380	1,310	1,350	1,310	1,420	16,705
PA	1,460	1,435	1,380	1,415	1,380	1,435	17,411
TX	1,215	1,195	1,145	1,260	1,285	1,400	15,923
VT	1,400	1,370	1,310	1,350	1,315	1,400	16,460
VA	1,185	1,210	1,155	1,205	1,185	1,270	14,847
WA	1,845	1,840	1,775	1,815	1,740	1,805	21,476
WI	1,445	1,425	1,360	1,380	1,325	1,410	16,685
20-Sts	1,470	1,444	1,385	1,444	1,409	1,491	17,501

¹ Excludes milk sucked by calves.

**Milk Produced per Cow: by Month,
State, and 20 States, 1999 ¹**

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	
AZ	1,925	1,835	2,135	2,075	2,060	1,830	
CA	1,690	1,555	1,795	1,770	1,825	1,710	
FL	1,415	1,365	1,540	1,435	1,400	1,290	
ID	1,660	1,490	1,660	1,640	1,710	1,690	
IL	1,430	1,310	1,480	1,430	1,490	1,420	
IN	1,360	1,300	1,380	1,360	1,445	1,340	
IA	1,515	1,380	1,540	1,500	1,550	1,460	
KY	1,050	985	1,110	1,110	1,120	1,000	
MI	1,520	1,405	1,565	1,530	1,600	1,530	
MN	1,505	1,385	1,550	1,505	1,545	1,475	
MO	1,230	1,140	1,310	1,290	1,300	1,140	
NM	1,740	1,615	1,770	1,740	1,805	1,710	
NY	1,430	1,320	1,480	1,460	1,530	1,460	
OH	1,430	1,310	1,450	1,420	1,530	1,450	
PA	1,475	1,375	1,565	1,545	1,605	1,495	
TX	1,480	1,430	1,625	1,545	1,515	1,330	
VT	1,410	1,290	1,440	1,420	1,505	1,445	
VA	1,295	1,205	1,335	1,320	1,345	1,240	
WA	1,845	1,695	1,885	1,870	1,935	1,880	
WI	1,415	1,300	1,465	1,435	1,510	1,440	
20-Sts	1,518	1,404	1,585	1,554	1,610	1,516	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg.
AZ	1,620	1,580	1,550	1,725	1,755	1,830	21,873
CA	1,715	1,770	1,710	1,760	1,715	1,775	20,788
FL	1,190	1,045	1,020	1,025	1,115	1,320	15,177
ID	1,770	1,770	1,700	1,750	1,680	1,730	20,292
IL	1,310	1,280	1,300	1,340	1,330	1,430	16,496
IN	1,325	1,300	1,275	1,325	1,275	1,355	16,066
IA	1,430	1,400	1,395	1,455	1,420	1,495	17,521
KY	985	975	960	1,015	1,005	1,070	12,368
MI	1,555	1,530	1,485	1,520	1,470	1,550	18,244
MN	1,420	1,385	1,335	1,400	1,380	1,495	17,391
MO	1,020	1,000	1,030	1,130	1,130	1,200	13,962
NM	1,690	1,635	1,605	1,685	1,660	1,720	20,366
NY	1,460	1,450	1,380	1,400	1,360	1,440	17,175
OH	1,460	1,440	1,400	1,400	1,370	1,460	17,096
PA	1,470	1,455	1,415	1,450	1,420	1,480	17,745
TX	1,225	1,095	1,125	1,255	1,290	1,390	16,290
VT	1,440	1,430	1,380	1,390	1,345	1,430	16,950
VA	1,185	1,280	1,265	1,315	1,315	1,400	15,529
WA	1,940	1,915	1,855	1,885	1,805	1,885	22,409
WI	1,420	1,410	1,360	1,385	1,340	1,420	16,902
20-Sts	1,498	1,487	1,445	1,491	1,459	1,538	18,103

¹ Excludes milk sucked by calves.

**Milk Production: Total by Month, State,
and 20 States, 1998¹**

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	
AZ	234	216	245	245	253	233	
CA	2,349	2,081	2,352	2,314	2,437	2,317	
FL	220	208	230	223	219	187	
ID	464	422	470	467	492	486	
IL	182	169	195	192	193	174	
IN	185	169	189	194	192	185	
IA	324	296	330	327	339	318	
KY	150	138	156	160	157	141	
MI	441	406	454	446	468	456	
MN	788	733	813	796	821	783	
MO	202	191	216	226	221	194	
NM	326	320	368	372	390	381	
NY	966	893	1,004	994	1,044	1,002	
OH	379	350	392	374	394	375	
PA	934	853	958	955	966	894	
TX	493	471	534	535	527	466	
VT	222	203	226	223	235	225	
VA	162	147	168	165	164	148	
WA	436	401	449	446	467	453	
WI	1,874	1,727	1,936	1,908	2,025	1,963	
20-Sts	11,331	10,394	11,685	11,562	12,004	11,381	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total ²
AZ	202	186	190	218	221	237	2,680
CA	2,315	2,271	2,185	2,363	2,290	2,380	27,654
FL	181	165	156	163	177	208	2,337
ID	500	509	482	495	478	500	5,765
IL	168	168	163	169	170	178	2,121
IN	184	178	171	174	179	190	2,190
IA	316	311	300	314	312	324	3,811
KY	138	138	128	133	131	140	1,710
MI	471	459	438	441	431	454	5,365
MN	767	751	723	755	744	801	9,275
MO	188	178	178	188	187	198	2,367
NM	375	373	356	368	351	374	4,354
NY	1,015	995	948	965	934	990	11,750
OH	370	363	345	354	343	371	4,410
PA	910	894	860	879	856	888	10,847
TX	425	415	394	431	438	476	5,605
VT	227	222	211	217	212	227	2,650
VA	147	149	142	148	146	155	1,841
WA	456	454	438	448	430	448	5,326
WI	1,974	1,947	1,858	1,885	1,813	1,932	22,842
20-Sts	11,329	11,126	10,666	11,108	10,843	11,471	134,900

¹ Excludes milk sucked by calves.

² Total milk production for year.

**Milk Production: Total by Month, State,
and 20 States, 1999 ¹**

State	Jan	Feb	Mar	Apr	May	Jun	
	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	
AZ	254	242	282	274	276	245	
CA	2,440	2,250	2,606	2,577	2,663	2,503	
FL	224	216	245	230	224	205	
ID	505	456	513	512	537	536	
IL	179	164	185	177	183	173	
IN	186	177	188	185	197	182	
IA	333	302	336	327	336	317	
KY	142	133	149	149	149	133	
MI	442	410	463	457	485	464	
MN	820	755	845	820	842	804	
MO	202	185	211	206	208	181	
NM	383	360	409	402	419	400	
NY	1,004	927	1,036	1,022	1,074	1,025	
OH	372	341	377	369	398	377	
PA	910	846	961	950	987	918	
TX	503	488	556	528	523	460	
VT	228	209	233	229	241	230	
VA	158	147	163	161	164	150	
WA	458	420	469	464	478	464	
WI	1,936	1,776	2,001	1,959	2,063	1,970	
20-Sts	11,679	10,804	12,228	11,998	12,447	11,737	
	Jul	Aug	Sep	Oct	Nov	Dec	Annual Total ²
AZ	219	213	209	233	237	247	2,931
CA	2,516	2,605	2,524	2,605	2,545	2,641	30,475
FL	189	165	160	160	174	206	2,398
ID	570	573	553	572	553	573	6,453
IL	160	155	157	162	161	173	2,029
IN	180	177	172	179	175	187	2,185
IA	309	302	301	313	305	321	3,802
KY	130	129	127	133	132	139	1,645
MI	477	464	444	454	435	460	5,455
MN	774	762	734	763	752	807	9,478
MO	160	157	162	179	179	190	2,220
NM	397	384	377	396	392	406	4,725
NY	1,025	1,018	969	980	952	1,008	12,040
OH	380	373	363	363	355	377	4,445
PA	903	895	872	895	878	916	10,931
TX	424	379	389	434	449	487	5,620
VT	229	229	221	221	215	227	2,712
VA	142	155	153	159	159	168	1,879
WA	483	473	458	462	442	464	5,535
WI	1,943	1,926	1,855	1,886	1,825	1,931	23,071
20-Sts	11,610	11,534	11,200	11,549	11,315	11,928	140,029

¹ Excludes milk sucked by calves.

² Total milk production for year.

**Milk Cows and Production: Number and Milk Produced
by Quarter, State, and United States, 1998**

State	Milk Cows ¹				Milk Production ²			
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>
AL	28	28	27	27	109	104	81	92
AK	0.9	0.9	0.9	0.8	3.52	3.67	3.63	3.51
AZ	130	130	132	132	695	731	578	676
AR	49	46	43	42	146	145	129	120
CA	1,405	1,414	1,424	1,435	6,782	7,068	6,771	7,033
CO	83	83	83	83	407	432	429	421
CT	30	30	30	29	136	136	129	128
DE	11.0	11.0	11.0	11.0	44.0	44.4	37.1	37.5
FL	161	161	159	158	658	629	502	548
GA	95	95	93	90	403	381	310	343
HI	9.0	8.8	8.8	8.8	31.5	35.7	32.3	29.5
ID	283	291	295	299	1,356	1,445	1,491	1,473
IL	129	128	127	126	546	559	499	517
IN	134	137	136	137	543	571	533	543
IA	224	223	222	220	950	984	927	950
KS	80	81	82	83	335	345	310	325
KY	143	141	140	136	444	458	404	404
LA	64	63	63	63	216	203	156	176
ME	40	41	42	42	165	173	176	166
MD	87	86	86	86	348	348	320	324
MA	26	26	26	25	109	112	111	106
MI	297	299	302	298	1,301	1,370	1,368	1,326
MN	555	555	550	545	2,334	2,400	2,241	2,300
MS	43	42	41	41	169	157	121	132
MO	175	172	169	166	609	641	544	573
MT	18	18	18	18	72	74	72	73
NE	70	69	69	70	259	263	262	266
NV	26	26	26	26	122	127	127	126
NH	19	20	20	20	83	87	83	80
NJ	19	19	19	19	75	75	72	70
NM	216	217	218	218	1,014	1,143	1,104	1,093
NY	698	701	701	702	2,863	3,040	2,958	2,889
NC	77	76	74	73	332	325	291	303
ND	53	52	50	50	179	181	174	172
OH	265	265	263	262	1,121	1,143	1,078	1,068
OK	92	92	92	92	322	316	294	304
OR	88	89	89	88	384	404	401	394
PA	625	623	623	620	2,745	2,815	2,664	2,623
RI	2.1	2.1	2.1	2.1	8.3	8.6	7.8	8.3
SC	25	25	24	24	105	100	81	88
SD	102	102	102	102	341	362	366	366
TN	108	106	103	101	401	399	344	357
TX	365	356	347	341	1,498	1,528	1,234	1,345
UT	88	90	90	93	361	388	383	381
VT	162	161	162	161	651	683	660	656
VA	125	125	123	123	477	477	438	449
WA	250	248	247	247	1,286	1,366	1,348	1,326
WV	18	18	18	18	71	70	69	68
WI	1,376	1,368	1,366	1,368	5,537	5,896	5,779	5,630
WY	6.2	6.1	6.0	5.9	19.2	20.7	20.4	19.5
US ³	9,175	9,167	9,145	9,128	39,167	40,767	38,513	38,901

¹ Quarterly average includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

³ May not add due to rounding.

**Milk Cows and Production: Number and Milk Produced
by Quarter, State, and United States, 1999**

State	Milk Cows ¹				Milk Production ²			
	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>
AL	27	27	27	27	106	100	78	90
AK	0.9	1.0	1.0	0.9	3.47	3.60	3.48	3.03
AZ	132	133	135	135	778	795	641	717
AR	42	42	42	42	135	138	122	125
CA	1,448	1,460	1,472	1,484	7,296	7,743	7,645	7,791
CO	83	82	83	83	433	420	434	441
CT	29	29	28	28	134	136	126	124
DE	11.0	11.0	11.0	11.0	43.9	43.6	41.0	42.5
FL	158	160	158	156	685	659	514	540
GA	90	90	88	88	400	392	313	344
HI	8.6	8.5	8.6	8.6	30.6	32.5	30.3	26.3
ID	306	314	324	329	1,474	1,585	1,696	1,698
IL	125	123	121	121	528	533	472	496
IN	136	136	136	137	551	564	529	541
IA	219	217	216	215	971	980	912	939
KS	85	86	86	87	350	360	325	360
KY	135	133	132	131	424	431	386	404
LA	62	61	61	61	209	192	145	165
ME	42	42	41	41	173	180	173	167
MD	86	85	85	85	335	353	332	345
MA	25	25	24	24	105	109	104	102
MI	293	302	303	297	1,315	1,406	1,385	1,349
MN	545	545	548	543	2,420	2,466	2,270	2,322
MS	39	38	37	36	160	149	114	129
MO	162	160	157	158	598	595	479	548
MT	18	18	18	18	74	77	76	76
NE	72	73	74	75	277	285	281	296
NV	25	25	25	25	118	128	128	123
NH	19	19	19	19	81	83	79	78
NJ	18	18	17	16	74	74	68	64
NM	225	232	235	236	1,152	1,221	1,158	1,194
NY	701	701	702	700	2,967	3,121	3,012	2,940
NC	73	73	73	73	317	311	289	299
ND	50	49	48	49	176	178	168	167
OH	260	260	259	259	1,090	1,144	1,116	1,095
OK	92	92	92	92	325	317	294	313
OR	88	89	89	89	403	425	423	414
PA	615	615	615	618	2,717	2,855	2,670	2,689
RI	2.0	2.0	2.0	1.9	7.9	8.2	7.7	7.2
SC	24	24	23	23	103	98	79	89
SD	102	102	102	102	367	380	375	385
TN	100	98	95	95	379	373	320	345
TX	341	344	346	348	1,547	1,511	1,192	1,370
UT	91	92	93	93	384	412	412	405
VT	162	160	160	159	670	700	679	663
VA	122	122	121	121	468	475	450	486
WA	248	247	248	245	1,347	1,406	1,414	1,368
WV	18	18	18	18	71	69	66	69
WI	1,367	1,366	1,366	1,361	5,713	5,992	5,724	5,642
WY	5.9	5.9	6.0	6.0	18.9	20.1	21.0	19.8
US ³	9,128	9,155	9,171	9,170	40,505	42,029	39,771	40,406

¹ Quarterly average includes dry cows, excludes heifers not yet fresh.

² Excludes milk sucked by calves.

³ May not add due to rounding.

**Milk Cows: Number of Operations by State
and United States, 1998-1999¹**

State	Operations with Milk Cows	
	1998	1999
	<i>Number</i>	<i>Number</i>
AL	380	340
AK	30	30
AZ	250	250
AR	1,200	1,100
CA	2,700	2,600
CO	900	900
CT	350	350
DE	130	130
FL	650	550
GA	950	850
HI	50	50
ID	1,300	1,200
IL	2,300	2,200
IN	3,300	3,200
IA	4,300	4,000
KS	1,400	1,400
KY	3,400	3,200
LA	800	700
ME	700	700
MD	1,100	1,100
MA	450	450
MI	4,000	3,700
MN	9,700	9,100
MS	600	550
MO	4,300	4,100
MT	700	650
NE	1,400	1,400
NV	150	150
NH	300	300
NJ	350	350
NM	500	500
NY	8,700	8,200
NC	1,100	1,000
ND	1,200	1,200
OH	5,900	5,700
OK	2,100	2,000
OR	1,000	900
PA	11,200	11,000
RI	40	40
SC	300	260
SD	1,800	1,700
TN	2,000	1,800
TX	3,200	2,800
UT	900	820
VT	1,900	1,800
VA	1,800	1,700
WA	1,300	1,200
WV	800	700
WI	23,000	22,000
WY	300	300
US	117,180	111,220

¹ An operation is any place having one or more head of milk cows, excluding cows used to nurse calves, on hand at any time during the year.

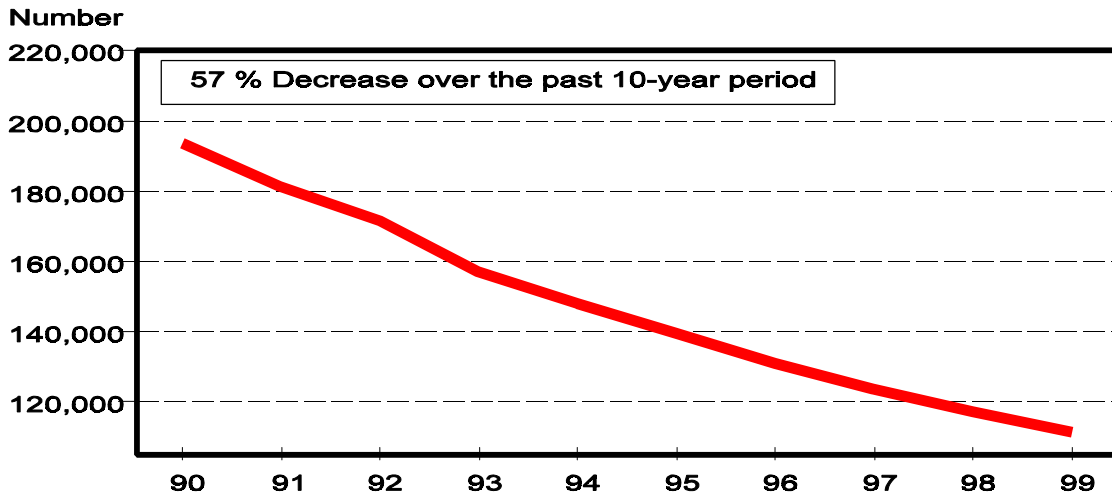
Milk Cows: Number of Operations by Size Group, Selected States, and United States, 1998-1999 ^{1 2}

State	Operations Having					
	1-29 Head		30-49 Head		50-99 Head	
	1998	1999	1998	1999	1998	1999
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
AZ	130	120			10	10
CA	420	380	90	70	110	70
CO	600	630	30	20	50	45
FL	400	300	10	10	32	40
GA	500	400	20	20	100	110
ID	350	300	140	120	250	250
IL	500	490	460	450	960	900
IN	1,900	1,700	520	600	560	550
IA	1,200	1,000	1,200	1,100	1,400	1,400
KY	1,500	1,400	670	600	900	900
MD	230	230	180	170	420	410
MI	950	1,000	900	700	1,100	1,000
MN	1,600	1,500	3,500	3,200	3,500	3,300
MO	1,900	1,800	780	800	990	890
NM	350	330			5	5
NY	1,600	1,400	1,800	1,600	3,500	3,200
NC	530	500	60	45	200	180
OH	2,900	2,800	880	810	1,400	1,400
OK	1,400	1,300	130	130	300	270
OR	550	430	30	30	110	90
PA	2,300	2,300	3,800	3,700	3,800	3,800
SD	800	800	350	290	420	330
TN	950	800	210	200	440	500
TX	1,500	1,300	200	190	400	380
UT	340	260	60	50	165	190
VT	190	130	320	320	900	870
VA	760	600	100	150	450	480
WA	450	410	45	50	145	120
WI	4,300	4,000	7,300	6,900	8,900	8,400
Oth Sts	5,100	4,500	1,700	1,600	2,500	3,000
US	36,200	33,110	25,485	23,925	34,017	33,090

See footnotes at end of table.

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**Milk Cow Operations, 1990-1999
United States**



Milk Cows: Number of Operations by Size Group, Selected States, and United States, 1998-1999^{1 2} (continued)

State	Operations Having					
	100-199 Head		200-499 Head		500+ Head	
	1998	1999	1998	1999	1998	1999
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
AZ	10	10	20	20	80	90
CA	270	250	750	730	1,060	1,100
CO	80	70	90	80	50	55
FL	38	40	75	70	95	90
GA	190	190	110	100	30	30
ID	240	210	180	170	140	150
IL	330	300	50	55		5
IN	270	300	40	40	10	10
IA	390	410	105	80	5	10
KY	280	250	45	45	5	5
MD	220	230	45	50	5	10
MI	810	750	205	200	35	50
MN	800	750	260	290	40	60
MO	570	540	60	70		
NM	10	15	20	20	115	130
NY	1,300	1,400	390	480	110	120
NC	220	190	75	70	15	15
OH	600	570	110	110	10	10
OK	220	240	40	50	10	10
OR	170	200	110	120	30	30
PA	1,050	930	235	255	15	15
SD	170	210	40	40	20	30
TN	300	200	90	90	10	10
TX	500	390	400	370	200	170
UT	190	180	120	110	25	30
VT	350	320	115	130	25	30
VA	380	340	100	120	10	10
WA	280	240	255	250	125	130
WI	1,950	2,000	490	610	60	90
Oth Sts	1,720	1,390	530	600	80	60
US	13,908	13,115	5,155	5,425	2,415	2,555

¹ An operation is any place having one or more head of milk cows, excluding cows used to nurse calves, on hand at any time during the year.

² Missing data combined with other size groups.

Milk Cows: Percent of Inventory by Size Group, Selected States, and United States, 1998-1999^{1,2}

State	Inventory on Operations Having					
	1-29 Head		30-49 Head		50-99 Head	
	1998	1999	1998	1999	1998	1999
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
AZ	0.4	0.3			0.5	0.4
CA	0.1	0.1	0.3	0.2	0.7	0.4
CO	1.4	1.4	1.4	0.8	4.2	2.8
FL	0.5	0.5	0.2	0.2	1.5	1.8
GA	3.0	0.5	1.0	1.0	8.0	9.5
ID	0.7	0.6	1.8	1.4	6.0	5.5
IL	4.0	3.8	11.0	12.0	46.0	43.0
IN	14.0	12.0	18.0	20.0	31.0	28.0
IA	8.0	6.0	18.0	17.0	38.0	40.0
KY	8.0	8.0	18.0	16.0	40.0	42.0
MD	2.5	2.5	6.9	6.9	36.0	34.0
MI	4.5	5.0	10.5	8.0	25.0	23.0
MN	5.8	5.3	22.0	21.0	40.0	38.0
MO	7.0	6.0	16.0	18.0	33.0	30.0
NM	0.4	0.3			0.2	0.2
NY	2.5	2.0	10.5	10.0	34.0	31.0
NC	1.5	1.8	2.5	2.2	17.0	18.0
OH	12.0	11.0	12.5	13.0	35.0	34.0
OK	6.3	4.4	5.7	5.6	22.0	19.0
OR	1.0	0.7	1.3	1.3	9.7	8.0
PA	4.5	5.0	25.0	25.0	37.0	38.0
SD	5.5	4.5	13.0	10.5	28.0	21.0
TN	3.0	2.5	6.4	6.2	28.0	36.0
TX	0.8	1.0	2.0	2.0	8.2	8.0
UT	1.5	1.0	2.5	2.0	13.0	14.0
VT	1.0	0.7	9.0	9.3	34.0	32.0
VA	6.0	3.5	3.0	4.0	26.0	26.0
WA	0.4	0.3	0.7	0.8	3.9	2.9
WI	4.8	4.5	21.0	20.0	43.0	40.0
Oth Sts	4.0	3.0	8.0	8.0	25.0	28.0
US	3.5	3.1	10.5	10.1	24.2	23.2

See footnotes at end of table.

--continued

Milk Cows: Percent of Inventory by Size Group, Selected States, and United States, 1998-1999^{1 2}(continued)

State	Inventory on Operations Having					
	100-199 Head		200-499 Head		500+ Head	
	1998	1999	1998	1999	1998	1999
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
AZ	1.4	0.8	5.7	4.5	92.0	94.0
CA	3.4	3.3	17.5	17.0	78.0	79.0
CO	12.0	9.0	30.0	22.0	51.0	64.0
FL	3.8	3.5	15.0	15.0	79.0	79.0
GA	28.0	31.0	31.0	30.0	29.0	28.0
ID	11.5	9.5	19.0	17.0	61.0	66.0
IL	29.0	28.0	10.0	11.0		2.2
IN	25.0	27.0	7.0	7.5	5.0	5.5
IA	22.0	23.0	12.0	10.0	2.0	4.0
KY	24.0	23.0	8.0	9.0	2.0	2.0
MD	34.0	35.0	13.0	14.0	7.6	7.6
MI	32.0	32.0	18.0	18.0	10.0	14.0
MN	16.0	15.0	12.0	14.0	4.2	6.7
MO	36.0	36.0	8.0	10.0		
NM	0.7	1.0	2.7	2.5	96.0	96.0
NY	26.0	27.0	15.0	17.0	12.0	13.0
NC	37.0	36.0	27.0	27.0	15.0	15.0
OH	27.0	27.0	11.0	12.0	2.5	3.0
OK	30.0	33.0	12.0	14.0	24.0	24.0
OR	25.0	26.0	34.0	36.0	29.0	28.0
PA	22.0	19.0	9.5	11.0	2.0	2.0
SD	21.0	27.0	9.5	10.0	23.0	27.0
TN	37.0	28.0	20.0	21.0	5.6	6.3
TX	20.0	17.0	29.0	32.0	40.0	40.0
UT	25.0	24.0	37.0	35.0	21.0	24.0
VT	26.0	25.0	20.0	20.0	10.0	13.0
VA	38.0	36.0	22.0	25.0	5.0	5.5
WA	16.0	14.0	32.0	30.0	47.0	52.0
WI	18.0	18.0	10.0	13.0	3.2	4.5
Oth Sts	32.0	28.0	19.0	20.0	12.0	13.0
US	19.3	18.4	15.5	16.3	27.0	28.9

¹ Percents reflect average distributions of various probability surveys conducted during the year but are based primarily on beginning-of-year and mid-year surveys.

² Missing data combined with other size groups.

Milk Production: Percent of Production by Size Group, Selected States, and United States, 1998-1999^{1 2}

State	1-29 Head		30-49 Head		50-99 Head	
	1998	1999	1998	1999	1998	1999
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
AZ	0.1	0.1			0.3	0.3
CA	0.1	0.1	0.2	0.1	0.6	0.4
CO	1.0	1.0	1.0	1.0	3.0	2.0
FL	0.1	0.1	0.1	0.1	1.9	1.4
GA	1.0	0.5	1.0	0.5	6.0	8.0
ID	0.5	0.4	1.0	1.0	4.5	4.1
IL	3.0	2.7	10.0	10.0	45.0	43.0
IN	12.0	10.0	15.0	18.0	34.0	28.0
IA	3.5	4.0	16.0	16.0	38.0	40.0
KY	6.0	5.0	16.0	14.0	39.0	43.0
MD	2.2	2.2	4.8	6.3	34.0	32.0
MI	3.0	4.0	8.0	7.0	23.0	21.0
MN	4.2	4.0	19.0	18.0	41.0	38.0
MO	5.5	5.0	12.0	15.0	33.0	30.0
NM	0.2	0.1			0.2	0.1
NY	1.5	1.5	9.5	8.5	30.0	27.0
NC	0.3	0.4	1.7	1.6	15.0	16.0
OH	9.0	7.0	10.0	11.0	36.0	34.0
OK	5.0	3.3	5.0	4.7	21.0	17.0
OR	1.0	0.5	1.0	1.0	6.0	6.5
PA	3.5	3.5	22.0	23.0	36.0	39.0
SD	4.0	3.3	11.0	8.7	25.0	19.0
TN	1.7	1.4	5.1	4.6	27.0	35.0
TX	0.3	0.4	1.2	1.1	6.5	6.5
UT	1.0	1.0	2.0	2.0	11.0	12.0
VT	1.0	0.5	8.0	8.5	35.0	30.0
VA	3.0	2.0	3.0	3.5	28.0	27.0
WA	0.4	0.2	0.8	0.6	3.8	2.2
WI	3.4	3.0	20.0	19.0	42.0	39.0
Oth Sts	1.7	1.5	6.8	6.5	26.0	26.0
US	2.3	2.0	8.9	8.5	22.4	20.9

See footnotes at end of table.

--continued

Milk Production: Percent of Production by Size Groups, Selected States, and United States, 1998-1999^{1,2}(continued)

State	100-199 Head		200-499 Head		500+ Head	
	1998	1999	1998	1999	1998	1999
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
AZ	0.8	0.6	5.8	4.5	93.0	94.5
CA	3.1	3.4	18.0	16.0	78.0	80.0
CO	11.0	7.0	30.0	22.0	54.0	67.0
FL	2.9	2.4	14.0	15.0	81.0	81.0
GA	27.0	29.0	33.0	31.0	32.0	31.0
ID	10.0	8.5	18.0	16.0	66.0	70.0
IL	31.0	30.0	11.0	12.0		2.3
IN	25.0	28.0	8.0	9.0	6.0	7.0
IA	24.0	24.0	16.0	11.0	2.5	5.0
KY	27.0	26.0	10.0	10.0	2.0	2.0
MD	37.0	35.0	14.0	16.0	8.0	8.5
MI	33.0	32.0	21.0	19.0	12.0	17.0
MN	18.0	16.0	12.0	16.0	5.8	8.0
MO	40.0	38.0	9.5	12.0		
NM	0.6	0.6	2.0	2.2	97.0	97.0
NY	29.0	28.0	17.0	20.0	13.0	15.0
NC	42.0	38.0	26.0	28.0	15.0	16.0
OH	29.0	30.0	13.0	14.0	3.0	4.0
OK	30.0	34.0	13.0	14.0	26.0	27.0
OR	25.0	24.0	35.0	36.0	32.0	32.0
PA	23.0	20.0	13.0	12.0	2.5	2.5
SD	22.0	27.0	11.0	11.0	27.0	31.0
TN	39.0	29.0	21.0	23.0	6.2	7.0
TX	18.0	15.0	31.0	32.0	43.0	45.0
UT	25.0	23.0	38.0	35.0	23.0	27.0
VT	25.0	25.0	21.0	22.0	10.0	14.0
VA	40.0	37.0	21.0	25.0	5.0	5.5
WA	16.0	12.0	32.0	30.0	47.0	55.0
WI	20.0	20.0	11.0	14.0	3.6	5.0
Oth Sts	32.0	30.0	22.0	20.0	11.5	16.0
US	19.2	17.9	16.8	16.9	30.4	33.8

¹ Percents reflect average distributions of various probability surveys conducted during the year but are based primarily on beginning-of-year and mid-year surveys.

² Missing data combined with other size groups.

Milk Cows: Number of Operations, Percent of Inventory, and Percent of Milk Production by Size Group, United States, 1998-1999¹

State	Operations		Percent of Inventory		Percent of Production	
	1998	1999	1998	1999	1998	1999
	<i>Number</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
1-29	36,200	33,110	3.5	3.1	2.3	2.0
30-49	25,485	23,925	10.5	10.1	8.9	8.5
50-99	34,017	33,090	24.2	23.2	22.4	20.9
100-199	13,908	13,115	19.3	18.4	19.2	17.9
200-499	5,155	5,425	15.5	16.3	16.8	16.9
500-999	1,500	1,600	10.0	11.0	11.1	12.6
1,000-1,999	680	700	9.6	10.0	10.9	11.9
2,000+	235	255	7.4	7.9	8.4	9.3
Total	117,180	111,220	100.0	100.0	100.0	100.0

¹ An operation is any place having one or more head of milk cows, excluding cows used to nurse calves, on hand at any time during the year. Percents reflect average distributions of various probability surveys conducted during the year but are based primarily on beginning-of-year and mid-year surveys.

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 October-December estimate will not be above or below the current estimate of 9.17 million head by more than 1.3 percent. Chances are 9 out of 10 that the difference will not exceed 2.3 percent.

Reliability of October-December Milk Estimates ¹

Item	Root Mean Square Error	90% Confidence Level		Difference Between First and Latest Estimates			Quarters	
				Average	Smallest	Largest	First Above Latest	First Below Latest
Milk Production	<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>
	0.6	1.1	444	187	1	385	10	0
All Milk Cows	<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>
	1.3	2.3	211	103	2	195	9	1

¹ Based on records for the past 10 October-December quarters.

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The next "Milk Production" report will be released at 3 p.m. ET on March 16, 2000.

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