

MARKETING SERVICE

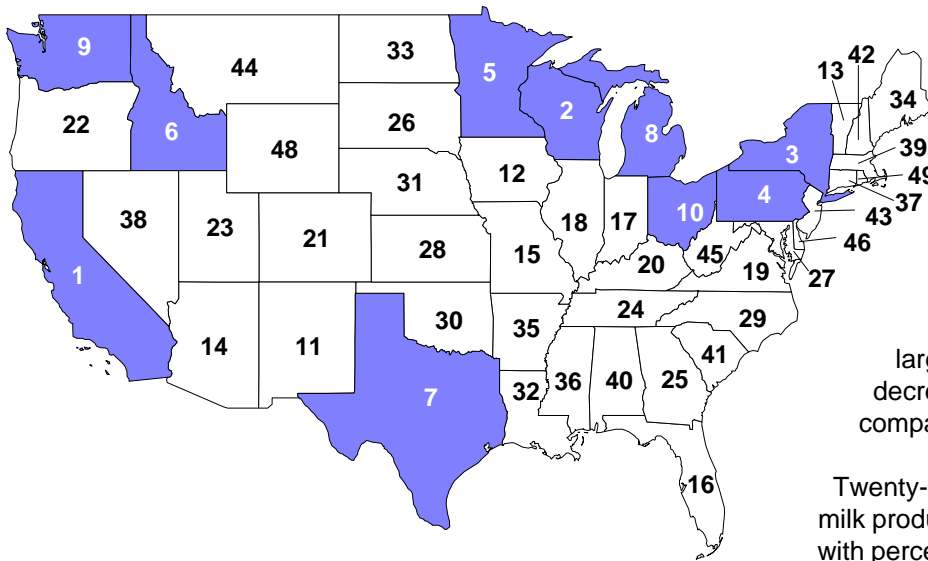
BULLETIN

1998 Milk Production

A record 157.4 billion pounds of milk was produced in the U.S. during 1998 -- a 0.9% increase compared with the previous year's record production of 156.1 billion pounds. Comparing 1998 with 1990, milk production in the U.S. has

increased by 9.1 billion pounds, a gain of 6.2%. Idaho and Delaware recorded the largest annual percentage gains, with milk production increasing by 11.0% and 10.2%, respectively. These were the only states to post double digit percentage increases comparing 1998 with 1997. New Mexico registered an annual milk production increase of 8.6%, and was the only other state to post an increase of more than 5.0%. Seven states reported annual decreases of 5.0% or more, with Mississippi's decrease of 8.7% the largest milk production loss. The

1998 Milk Production Ranking Top Ten States Highlighted



other states posting declines of more than 5.0% were Alabama (-7.7%), Tennessee (-6.7%), South Carolina (-5.8%), Kentucky (-5.8%), Florida (-5.7%), and Louisiana (-5.4%).

The map to the left details state ranking in milk production for 1998. The top ten milk producing states have been shaded. The graphics on page 4 depict the states with the largest percentage increases and decreases in milk production comparing 1998 with 1990.

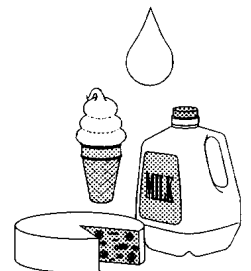
Twenty-seven states registered annual milk production increases during 1998, with percentage increases averaging 2.8%. The remaining twenty-three

states posted production decreases, with percentage decreases averaging 3.6%. Nine states recorded decreases in milk production of 4% or more during 1998, while only six states registered gains of more than 4%. Comparing 1998 with 1990, 19 states recorded milk production increases, led by New Mexico's 185.7% gain. The average percentage increase for these states was 30.8%; however, only six states posted increases larger than the 19-state average. These six were New Mexico (+185.7%), Idaho (+95.5%), Arizona (+62.9%), Nevada (+42.1%), Delaware (+32.6%), and California (+31.8%). Colorado (+27.7%), Washington (+21.3%), Utah (+19.4%), Vermont (+14.2%), Maine (+10.7%), and New Hampshire (+10.6%) were the remaining states that posted double digit percentage increases compared with 1990.

Thirty-one states recorded production declines between 1990 and 1998, with an average percentage decline of 14.6%. Sixteen of these states recorded decreases greater than the average percentage loss. These states were:

Wyoming	-36.0%	North Dakota	-35.7%	Tennessee	-31.7%	Illinois	-24.8%
Alabama	-24.8%	Kentucky	-24.2%	Mississippi	-22.7%	Missouri	-22.1%
Nebraska	-21.9%	Arkansas	-21.8%	Louisiana	-20.1%	North Carolina	-17.2%
New Jersey	-17.0%	South Dakota	-16.4%	South Carolina	-16.3%	Alaska	-14.7%

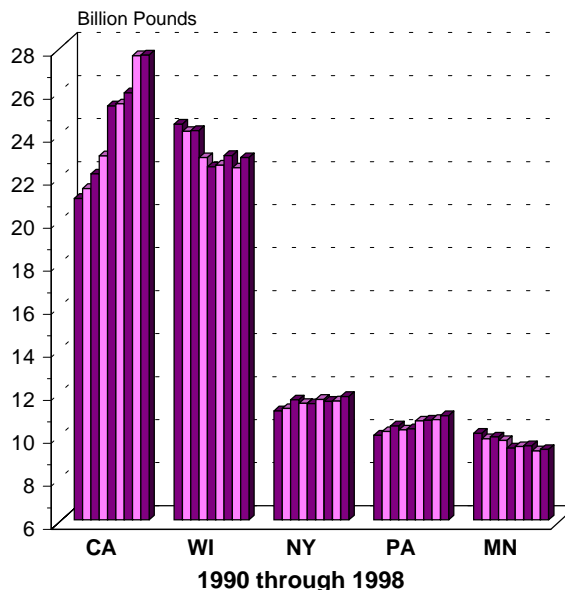
February 1999



The graph at the right depicts annual milk production over the last nine years for the nation's top five milk producing states. During 1998 all five states recorded annual production increases, led by Wisconsin's gain of 2.1%. New York posted a gain of 1.8% followed by Pennsylvania and Minnesota with increases of 1.7% and 0.7%, respectively. California posted the smallest increase among the top five milk producing states with a gain of only 0.1% compared with 1997. However, California was the only state to record a production increase each year during this period -- increasing production by 31.8% compared with 1990. Pennsylvania (+9.2%) and New York (+6.1%) also posted increases compared with 1990, while Wisconsin (-6.4%) and Minnesota (-7.5%) both recorded a decline in milk production.

The map on page 6 provides a ranking of states based on milk production per cow. California, Idaho, Michigan, and Washington are the only states ranked in the top ten in both total milk production and milk production per cow. California and Pennsylvania are the only states among the top five with production per cow above the 1998 national average of 17,192 pounds.

Annual Milk Production Top Five Dairy States



1998 Per Capita Milk Production

Per capita milk production is a data series examined semi-annually in this Bulletin. A comparison of this series to per capita consumption data may reflect the aggregate supply and demand balance for individual states and regions throughout the U.S. The table on page 7 details and compares per capita milk production by state for 1998, 1997, and 1990. This table lists the states in descending order based on 1998 per capita production. The states with per capita production of more than 600 pounds are inside the shaded area of the table. Five of the top ten states in total production are also in the top ten in per capita production. These five are Wisconsin, Pennsylvania, Minnesota, Idaho, and Washington.

Per capita production for 1998 was down 0.5 pounds (-0.1%) compared with 1997. Twenty states reported annual per capita increases during 1998, the largest being Idaho with a gain of 9.2%. Delaware (+8.9%) and New Mexico (+7.7%) were the only other states with increases of more than 5 percent. Mississippi recorded the largest per capita production decline during 1998, with a loss of 9.4%. Nine additional states posted declines of 5 percent or more. These include: Alabama (-8.3%); Tennessee (-7.7%); Florida (-7.2%); South Carolina (-7.0%); Kentucky (-6.4%); Nevada (-6.1%); Louisiana (-5.7%); Georgia (-5.4%); and Alaska (-5.1%).

Per capita production for the U.S. declined by 13.8 pounds, or 2.3%, between 1990 and 1998. Fourteen states recorded increases in per capita milk production during this time frame, led by New Mexico's gain of 149.2%. Wyoming, Tennessee, and North Dakota recorded the largest decreases, with per capita production falling by 39.6%, 38.6, and 35.6%, respectively. Fourteen additional states posted declines of 20 percent or more compared with 1990, while nine more states reported decreases between 10 and 20 percent.

The map on the top of page 3 depicts per capita milk production by state for 1998. The 300 and 600-pound levels of per capita production are arbitrary divisions selected for the categories used in this map. These levels reflect average annual fluid and total per capita dairy consumption, plus reserve requirements. A cursory analysis of regional milk supply conditions can be performed by examining the shading patterns prevalent in the individual regions.

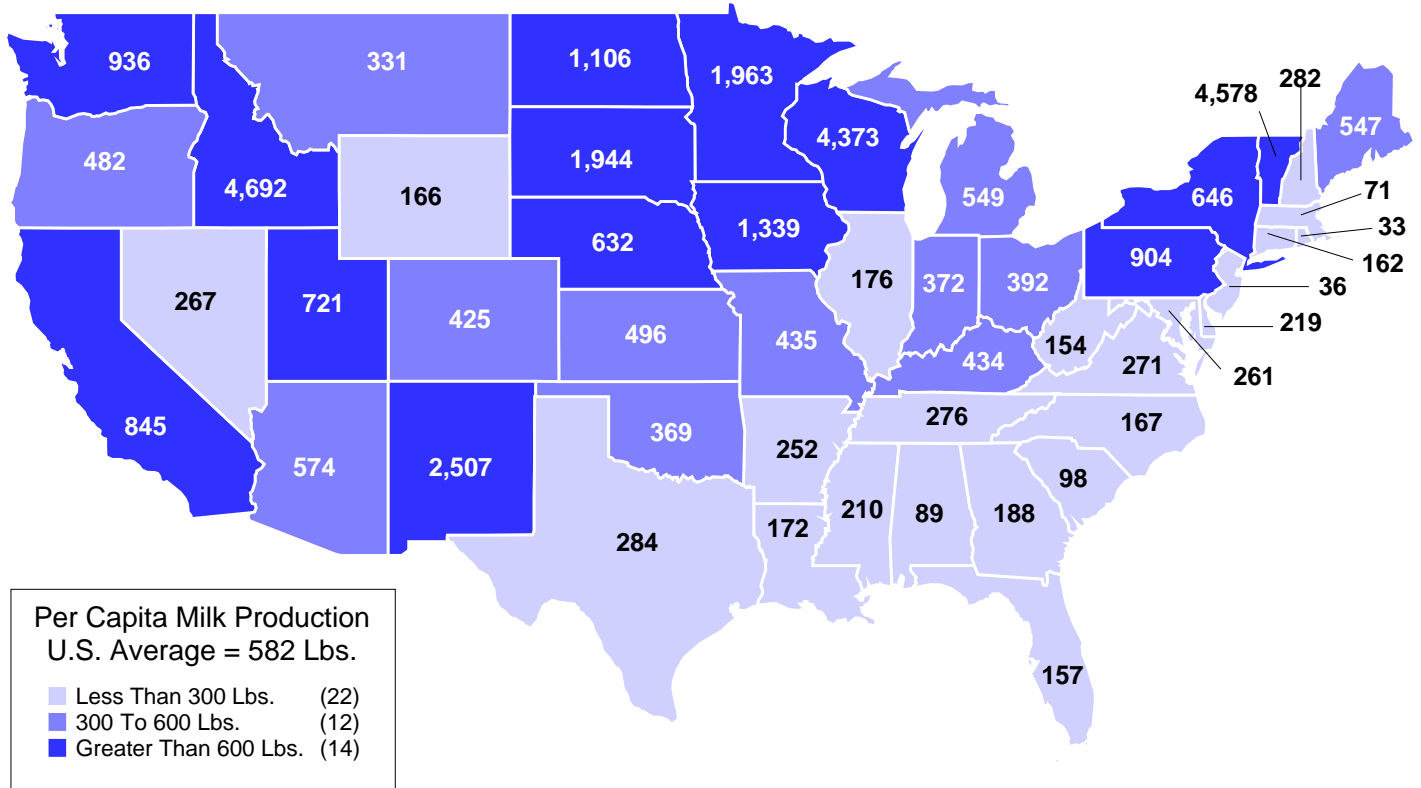
The map at the bottom of page 3 displays the percentage change in per capita milk production by state between 1990 and 1998. The data represented by this map reflects changes in production combined with population changes that have transpired since 1990. The West and Northeast regions are dominated by states with increases in milk production per capita, while the remainder of the states posted decreases. The graphics on page 5 depict the states with the largest percentage increases/decreases from 1990 to 1998.

The graph on page 6 provides a ranking of the top five milk producing states in total milk production, production per cow, and production per capita. The graph on the last page of this Bulletin depicts milk production per capita for the U.S. over the last 19 years.

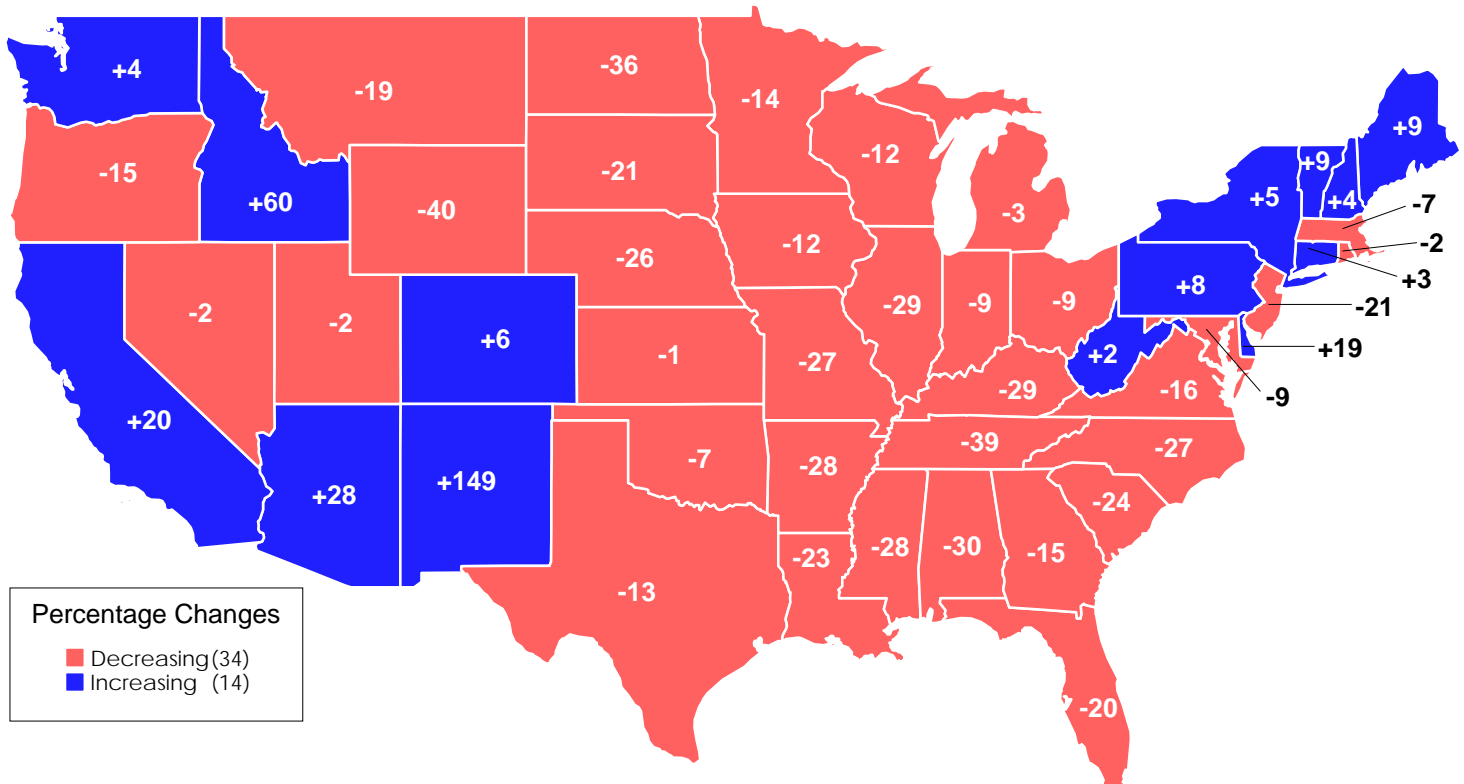
Percentage Of 1998 U.S. Totals

	Milk Production	Population Estimate
California	17.53	12.09
Wisconsin	14.51	1.93
New York	7.46	6.72
Pennsylvania	6.89	4.44
Minnesota	5.89	1.75
5-State Total	52.28	26.93

1998 Per Capita Milk Production

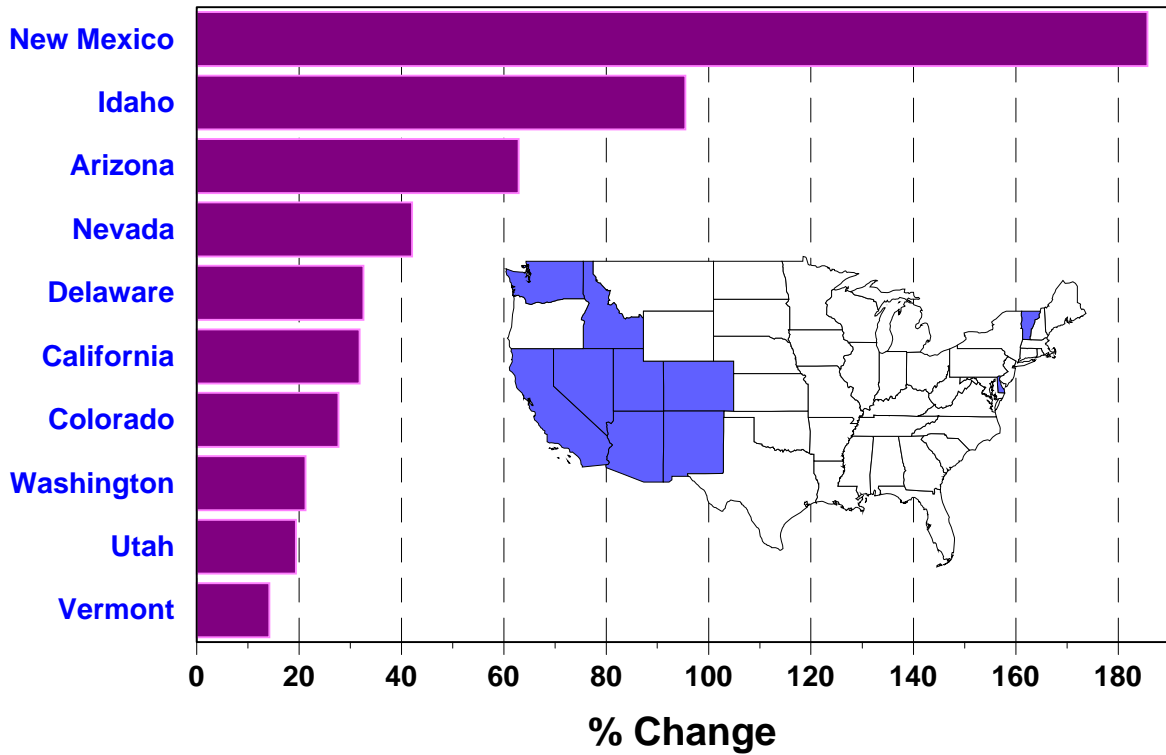


Percent Change In Per Capita Milk Production 1998 vs 1990

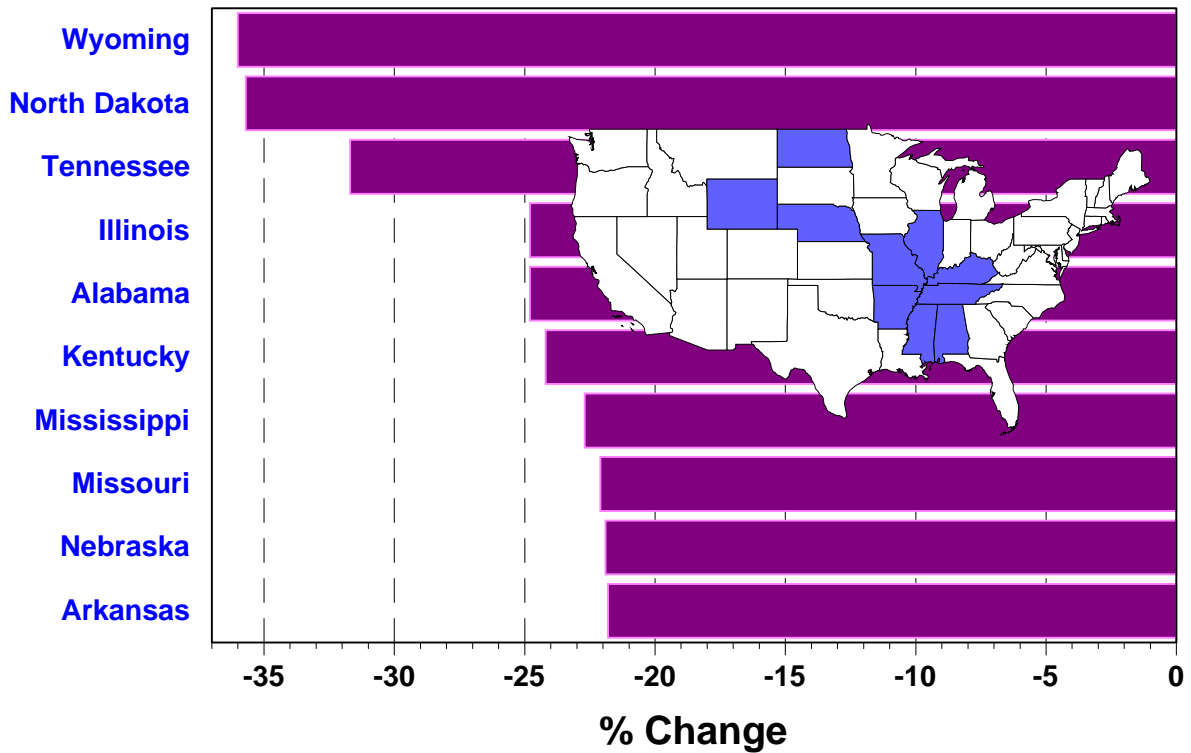


U.S. Milk Production: 1998 vs 1990

Largest Production Increases

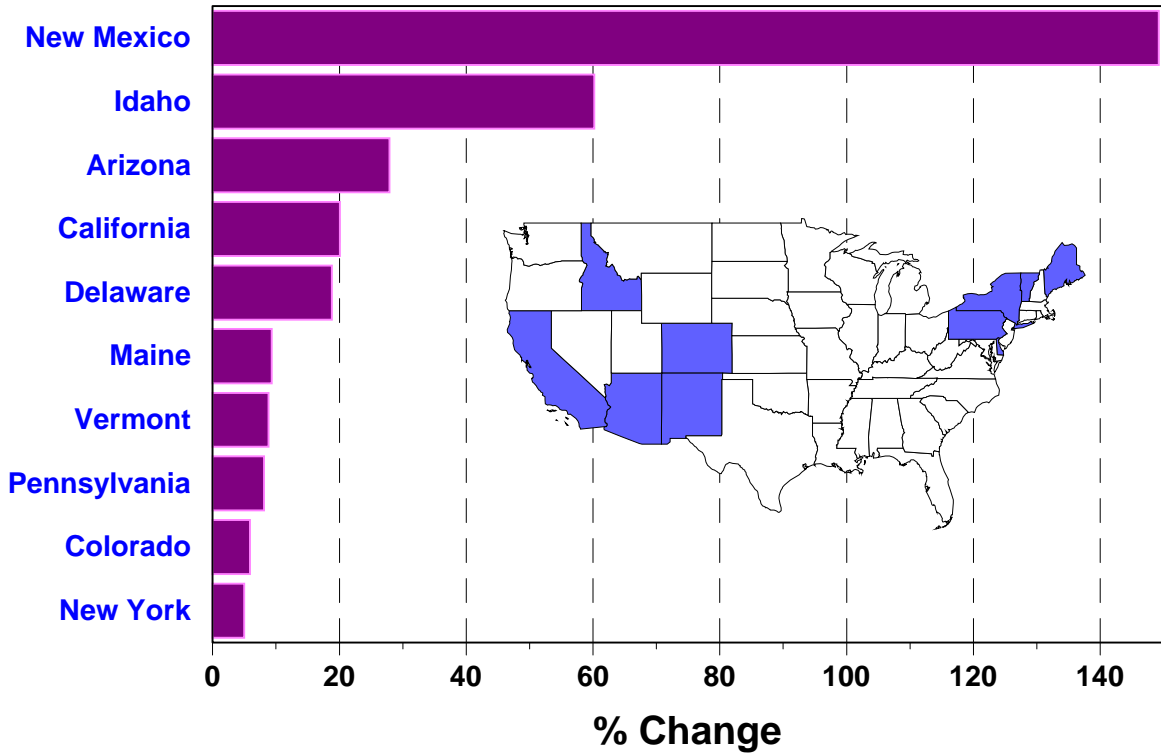


Largest Production Decreases

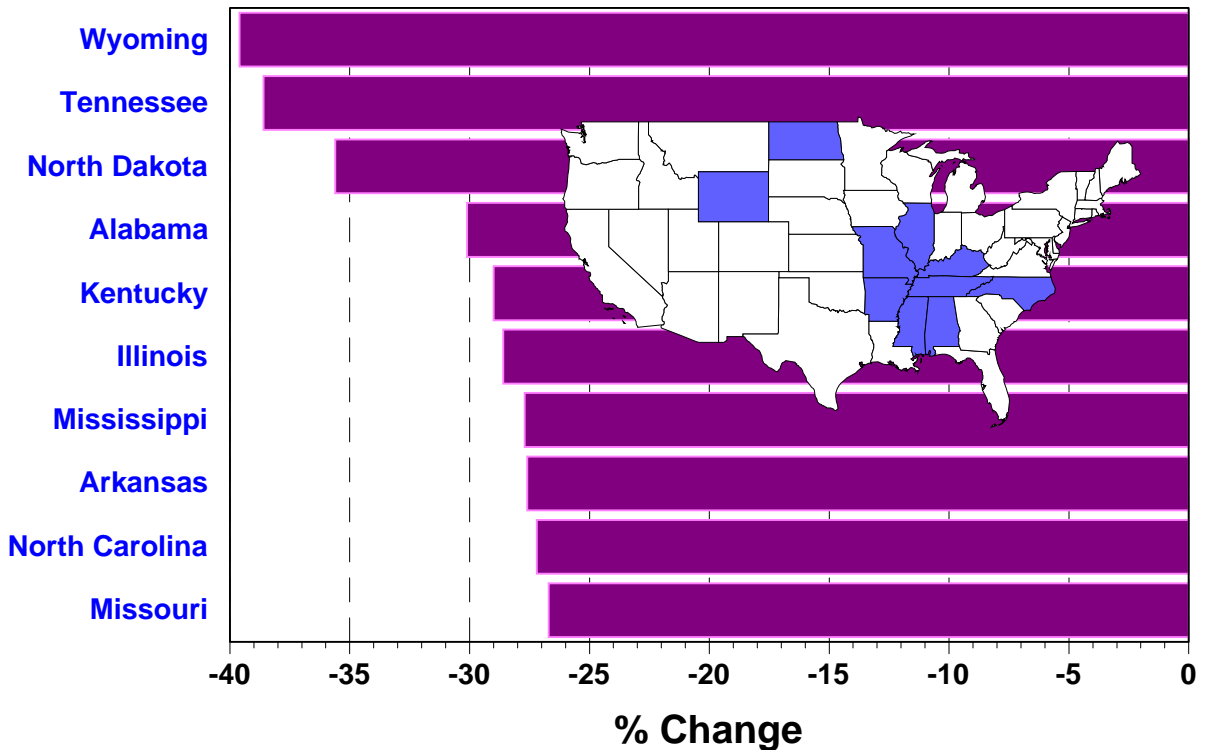


U.S. Per Capita Milk Production: 1998 vs 1990

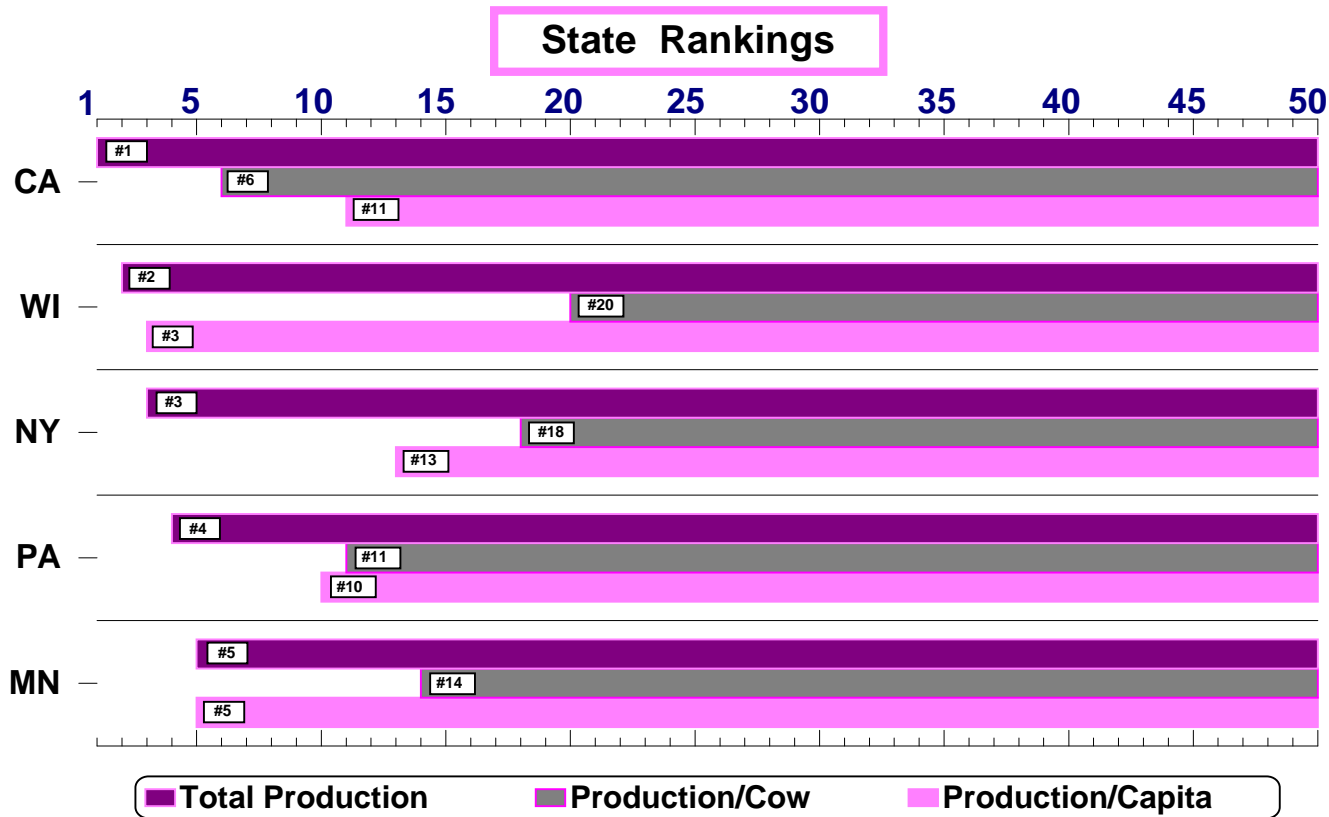
Largest Per Capita Increases



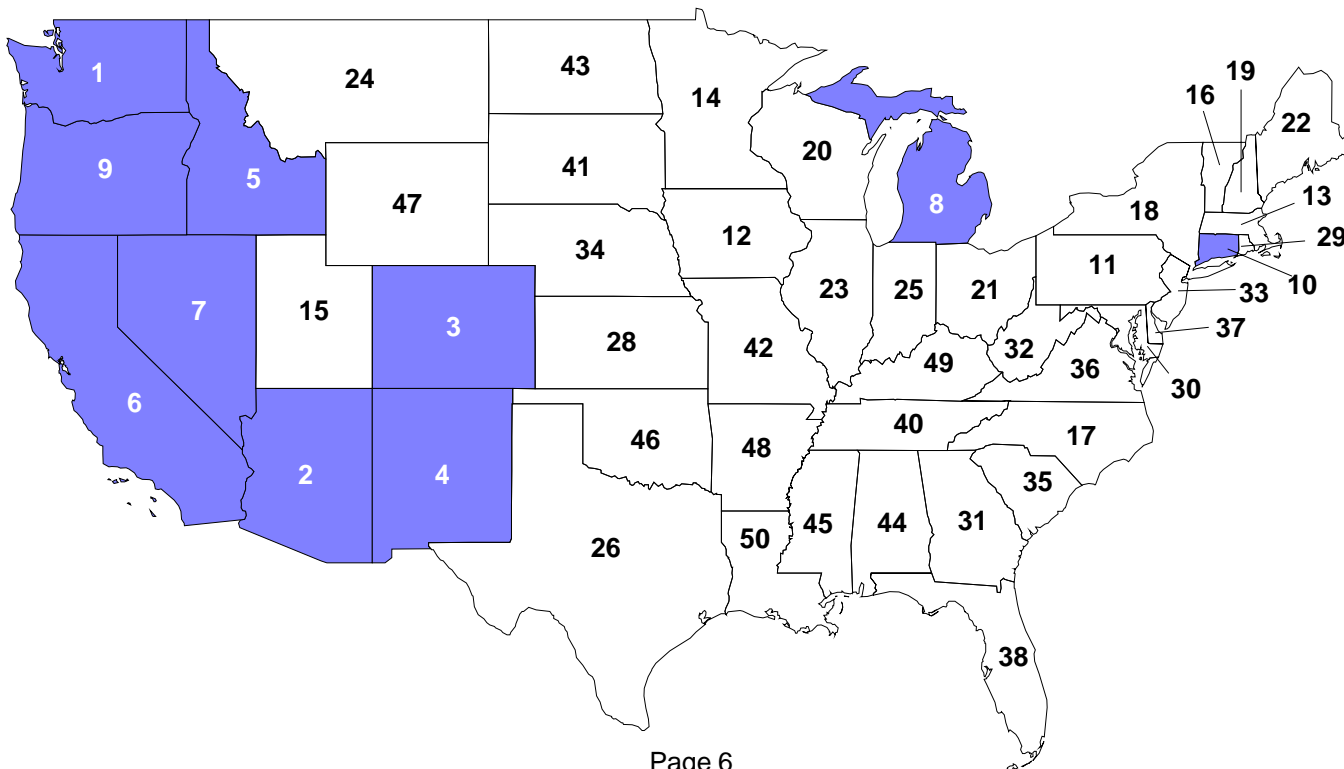
Largest Per Capita Decreases



1998 Milk Production - Top 5 States



1998 Milk Production Per Cow Ranking Top Ten States Highlighted



Per Capita Milk Production

1998 versus 1997 & 1990 - By State

States	Per Capita Milk Production			Change In Per Capita Milk Production			
	1998	1997 (Revised)	1990	1998 vs 1997		1998 vs 1990	
				Pounds	Percent	Pounds	Percent
1 Idaho	4,692.0	4,295.8	2,929.3	396.2	9.2	1,762.7	60.2
2 Vermont	4,577.9	4,417.0	4,207.8	160.9	3.6	370.1	8.8
3 Wisconsin	4,372.9	4,300.5	4,988.0	72.4	1.7	(615.1)	(12.3)
4 New Mexico	2,506.7	2,326.6	1,005.9	180.1	7.7	1,500.8	149.2
5 Minnesota	1,962.8	1,964.8	2,292.2	(2.0)	(0.1)	(329.4)	(14.4)
6 South Dakota	1,944.0	1,876.0	2,465.5	68.0	3.6	(521.5)	(21.2)
7 Iowa	1,339.1	1,293.8	1,524.4	45.3	3.5	(185.3)	(12.2)
8 North Dakota	1,106.2	1,112.4	1,718.8	(6.2)	(0.6)	(612.6)	(35.6)
9 Washington	936.1	944.9	902.5	(8.8)	(0.9)	33.6	3.7
10 Pennsylvania	903.8	887.7	835.9	16.1	1.8	67.9	8.1
11 California	845.1	857.1	703.9	(12.0)	(1.4)	141.2	20.1
12 Utah	720.6	745.8	735.4	(25.2)	(3.4)	(14.8)	(2.0)
13 New York	645.9	635.4	615.1	10.5	1.7	30.8	5.0
14 Nebraska	631.5	627.6	852.1	3.9	0.6	(220.6)	(25.9)
15 Arizona	574.0	585.1	448.8	(11.1)	(1.9)	125.2	27.9
16 Michigan	549.1	553.2	563.0	(4.1)	(0.7)	(13.9)	(2.5)
17 Maine	546.5	533.1	500.0	13.4	2.5	46.5	9.3
18 Kansas	496.4	494.0	502.5	2.4	0.5	(6.1)	(1.2)
19 Oregon	482.3	496.4	566.8	(14.1)	(2.8)	(84.5)	(14.9)
20 Missouri	435.2	436.7	594.1	(1.5)	(0.3)	(158.9)	(26.7)
21 Kentucky	434.4	464.2	611.6	(29.8)	(6.4)	(177.2)	(29.0)
22 Colorado	425.3	431.4	401.6	(6.1)	(1.4)	23.7	5.9
23 Ohio	391.6	394.4	430.3	(2.8)	(0.7)	(38.7)	(9.0)
24 Indiana	372.4	373.2	410.5	(0.8)	(0.2)	(38.1)	(9.3)
25 Oklahoma	369.3	376.0	395.8	(6.7)	(1.8)	(26.5)	(6.7)
26 Montana	330.5	335.7	406.7	(5.2)	(1.5)	(76.2)	(18.7)
27 Texas	283.7	297.5	326.1	(13.8)	(4.6)	(42.4)	(13.0)
28 New Hampshire	281.8	279.8	272.3	2.0	0.7	9.5	3.5
29 Tennessee	276.4	299.5	450.5	(23.1)	(7.7)	(174.1)	(38.6)
30 Virginia	271.1	275.8	323.8	(4.7)	(1.7)	(52.7)	(16.3)
31 Nevada	266.8	284.1	273.0	(17.3)	(6.1)	(6.2)	(2.3)
32 Maryland	261.0	260.3	287.2	0.7	0.3	(26.2)	(9.1)
33 Arkansas	251.7	251.7	347.6	0.0	0.0	(95.9)	(27.6)
34 Delaware	219.3	201.3	184.6	18.0	8.9	34.7	18.8
35 Mississippi	210.4	232.1	290.8	(21.7)	(9.3)	(80.4)	(27.6)
36 Georgia	188.0	198.7	222.3	(10.7)	(5.4)	(34.3)	(15.4)
37 Illinois	176.1	183.7	246.7	(7.6)	(4.1)	(70.6)	(28.6)
38 Louisiana	171.9	182.4	222.7	(10.5)	(5.8)	(50.8)	(22.8)
39 North Carolina	167.0	175.5	229.5	(8.5)	(4.8)	(62.5)	(27.2)
40 Wyoming	165.9	174.6	274.7	(8.7)	(5.0)	(108.8)	(39.6)
41 Connecticut	161.6	155.8	156.7	5.8	3.7	4.9	3.1
42 Florida	156.5	168.7	195.2	(12.2)	(7.2)	(38.7)	(19.8)
43 West Virginia	153.5	146.5	150.5	7.0	4.8	3.0	2.0
44 Hawaii	108.1	103.2	136.2	4.9	4.7	(28.1)	(20.6)
45 South Carolina	97.5	104.8	128.2	(7.3)	(7.0)	(30.7)	(23.9)
46 Alabama	88.7	96.7	127.0	(8.0)	(8.3)	(38.3)	(30.2)
47 Massachusetts	71.3	71.0	76.6	0.3	0.4	(5.3)	(6.9)
48 New Jersey	36.0	37.1	45.5	(1.1)	(3.0)	(9.5)	(20.9)
49 Rhode Island	33.4	32.3	33.9	1.1	3.4	(0.5)	(1.5)
50 Alaska	23.2	24.6	30.5	(1.4)	(5.7)	(7.3)	(23.9)
U.S. Totals	582.5	583.0	596.3	(0.5)	(0.1)	(13.8)	(2.3)

Data Sources:

Milk production Data: [Milk Production](#), February 1999, National Agricultural Statistics Service, Agriculture Statistics Board, USDA.

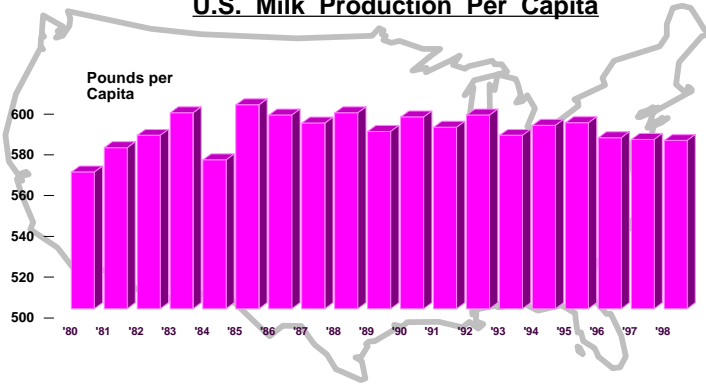
Population Data: [Estimates of the Population of States: Annual Time Series, July 1, 1990 to July 1, 1998](#),

Population Estimates Program, Population Division, US Bureau of the Census, Department of Commerce.

A comparison of Blend Prices for milk of 3.5% butterfat content is provided for selected Federal milk marketing orders:

	Jan 1999	Dec 1998	Jan 1998
Southeast (Zone 7)	\$19.07	\$18.70	\$15.46
Chicago Regional (Zone I)	16.77	17.02	13.62
Greater Kansas City	18.53	17.92	14.76
Indiana	17.77	17.12	14.33
Iowa (Zone I)	16.66	16.69	13.64
Southwest Plains (Zone I)	18.15	18.05	14.68
Central Illinois (Zone I)	17.94	17.63	14.39
Southern Illinois - Eastern Missouri (Base Zone)	17.94	17.56	14.31

U.S. Milk Production Per Capita



An **Agricultural Marketing Outreach Workshop** will be held at the Agricenter International in Memphis (TN) on March 24-26, 1999. The workshop is a joint effort between USDA and Southern University and A & M College of Baton Rouge (LA). The hands-on workshop is to help limited resource farmers maximize their economic potential through alternative crop selection, efficient production techniques, and innovative marketing methods. More information may be obtained from Orlando Phelps by phone: 225-771-3660 or e-mail: orlando_phelps @usda.gov or at <http://marketingoutreach.usda.gov> on the internet.

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