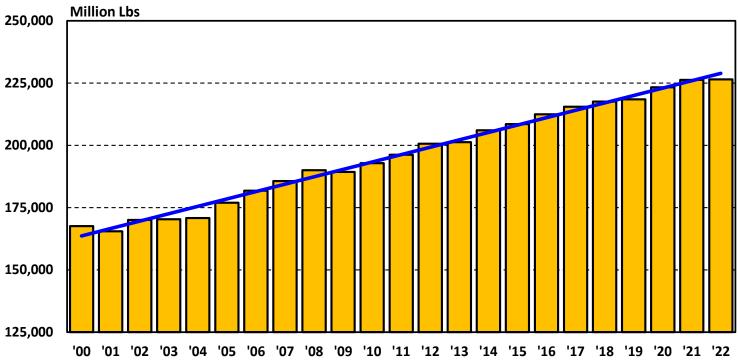


Trends in U.S. Dairy Production

The U.S. dairy industry has undergone significant alterations since the turn of the century. These changes have impacted all elements of the industry, from the farm to the processor and the consumer. Growth and consolidation are two buzzwords that have been applicable to many segments of the industry since 2000. This bulletin will examine some of the changes in milk production trends from 2000 through 2022.

The first five graphs in this bulletin depict milk production, production per cow, the number of cows, the number of herds, and the average number of cows per herd for the U.S. dairy industry. These graphs contain yearly data from 2000 through 2022 along with the trend line for that time-period. The final five graphs in this bulleting depict this data for the eight states in the Central Order for select years from 2000 through 2022.

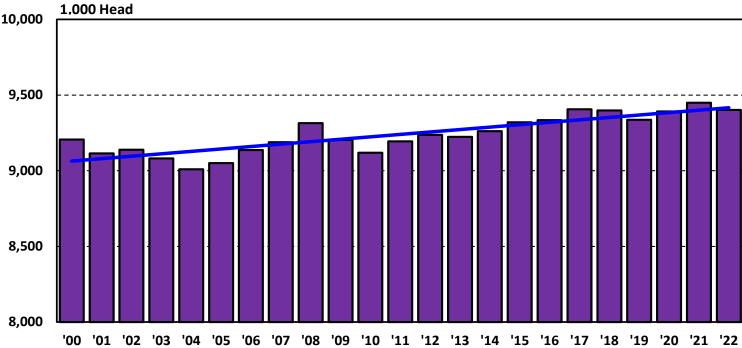


U.S. Milk Production

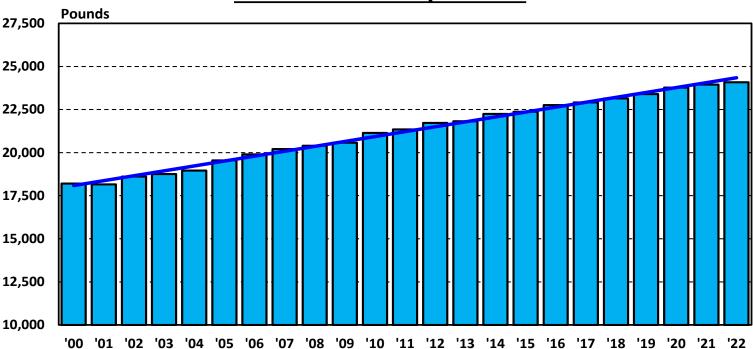
Overall milk production has been trending up over the last 22 years peaking in 2022 at 226.46 billion pounds. On average production increases 1.39% each year and is up 35.15% from 2000. The only years milk production decreased were 2001 (-1.23%) and 2009 (-0.34%). Milk production in 2022 was up 0.07% from 2021 and 8.61% from 2015. For the first 5 years depicted by this graph it stayed relatively consistent only increasing 0.40% on average per year; however, since that time it has been increasing at an average rate of 1.58% per year.

^{*} The source for data in this bulletin is: United States Department of Agriculture, National Agricultural Statistics Service, Milk Production https://usda.library.cornell. edu/concern/publications/h989r321c

U.S. Number of Cows



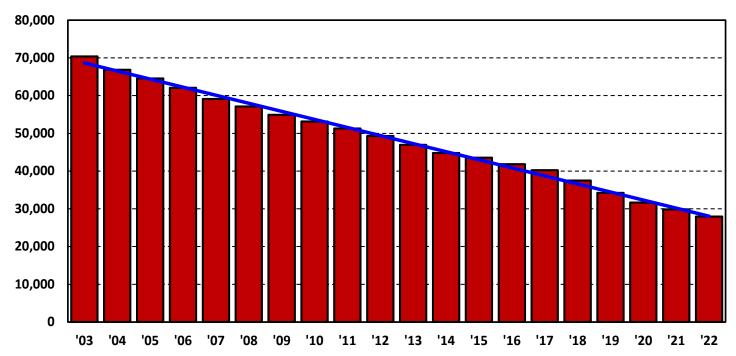
The number of cows hasn't changed drastically over the last 22 years hitting a high of 9.45 million in 2021 and a low of 9.01 million in 2004 with an average of 9.24 million. Compared to 2000 the number of cows in 2022 is only up by 2.13%, registering a slight increasing trend in recent years. The number of cows in 2022 went down by 0.50% compared to 2021 and down 0.04% compared to five years ago. The overall trend seems to be that the number of cows has an ebb and flow to its growth which can be seen in the above graph.



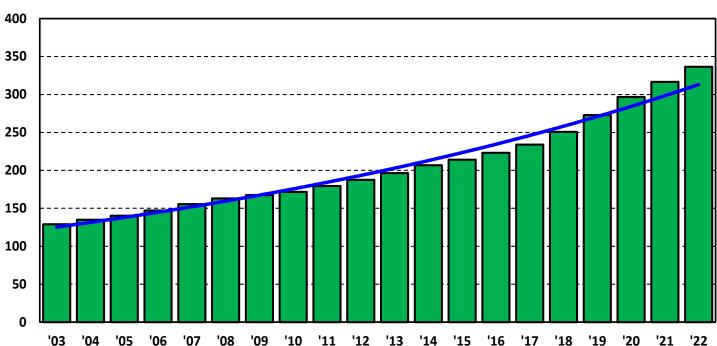
U.S. Production per Cow

Production per cow has increased by 5,886 pounds since 2000 a 32.34% increase. On average milk per cow has gone up by 1.28% every year hitting a high of 24,087 pounds in 2022. Production was up 0.58% in 2022 over the previous year and has gone up by 7.67% compared with 2015. Cows have been making more milk every year with 2001 being the only year that production decreased (0.23%). This increase in production along with the reduction in cows shows why the total production's growth was smaller than usual which is similar to what occured in 2018 and 2019.

U.S. Licensed Herds



Licensed herds have been declining steadily at an average of 4.73% every year. In 2003 there were 70,375 herds while in 2022 there were only 27,932 a reduction of 60.31%. From 2021 to 2022 herds declined by 6.40% and are down 30.55% over the last five years. 2019 also had the largest year over year decrease in herds declining by 3,279 an 8.75% reduction. The rate at which herds have declined has nearly doubled recently from 2003 to 2017 it averaged a 3.92% negative growth rate then jumped to 7.03% from 2018 to 2022.

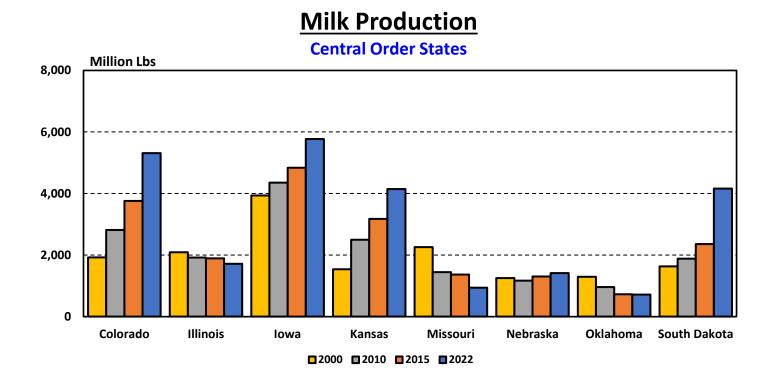


U.S. Avg Dairy Cows per Herd

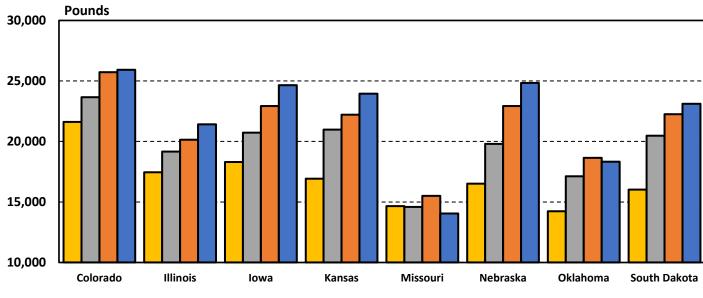
The average cows per herd in 2022 is up 161.24% from 2003 increasing at an average rate of 5.19% each year. From 2003 to 2017 the growth rate was averaging 4.34% but over the last 4 years it's averaged 7.56%. From 2015 to 2022 herd sizes have gone up by 123 cows an increase of 57.48%. 2019 had the largest year over year growth of 9.75% with herds increasing by 24 cows. This increased growth along with a massive reduction in herds, indicates substantial consolidation amongst farms in the dairy industry.

Central Order States

The following graphs depict milk production, production per cow, number of cows, number of herds, and the average number of cows per herd for states in the Central Order. Data for each state is for the years 2000, 2010, 2015 and 2022. A cursory examination of these graphs reveals substantial differences among these states, both in absolute numbers and in overall trends during this period of time. However, the overall trend among most states is increasing production, production per cow, and average number of cows per herd. Conversely, the number of licensed herds has decreased across the board, while the trend in the number of cows varies substantially among these eight states.



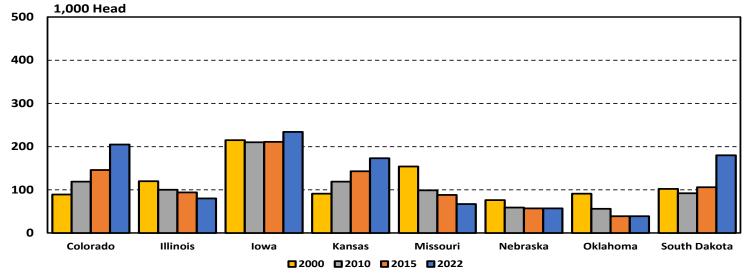
Production per Cow Central Order States



2000 2010 2015 2022

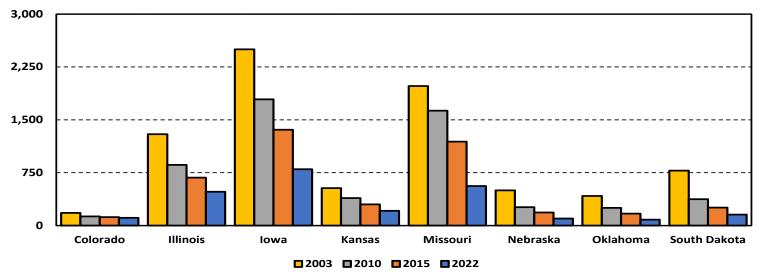
Number of Dairy Cows

Central Order States



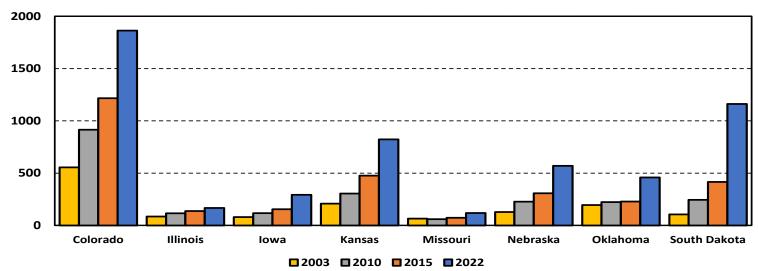
Licensed Dairy Herds





Average Dairy Cows per Herd

Central Order States





United States Department of Agriculture

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FIRST CLASS

	Statistical Uniform Price		Producer Price Differential		Class I Utilization	
	<u>Sep '23</u>	<u>Aug '23</u>	<u>Sep '23</u>	<u>Aug '23</u>	<u>Sep '23</u>	<u>Aug '23</u>
Northeast	20.42	19.43	2.03	2.24	30.03	28.17
Appalachian	21.68	20.13			70.58	73.55
Florida	23.59	21.84			81.52	81.60
Southeast	22.37	20.67			77.94	86.18
Upper Midwest	18.60	17.35	0.21	0.16	5.94	5.71
Central	18.98	17.87	0.59	0.68	27.03	29.63
Mideast	19.38	18.07	0.99	0.88	35.90	38.28
California	19.20	17.96	0.81	0.77	17.19	19.15
Pacific Northwest	19.03	17.97	0.64	0.78	22.54	20.99
Southwest	19.81	18.52	1.42	1.33	26.84	29.28
Arizona	19.71	18.62			29.88	31.88

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