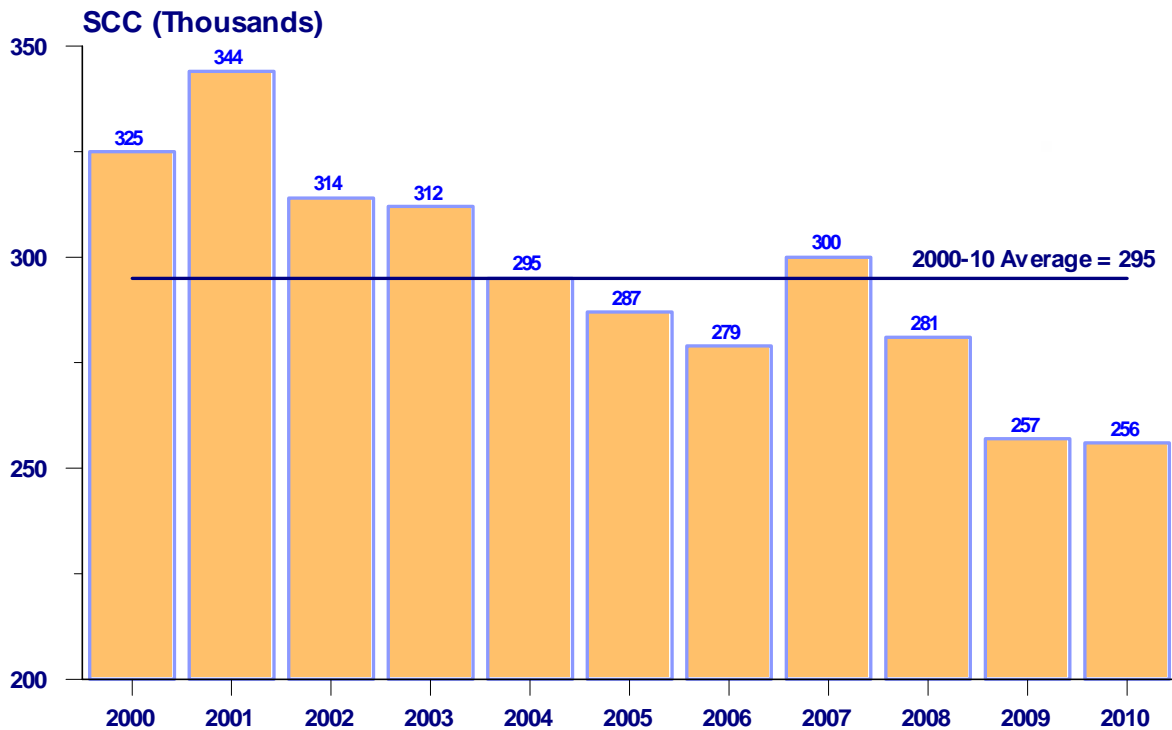


# MARKETING SERVICE

B U L L E T I N

## Producer Milk Somatic Cell Counts Central Federal Milk Order



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A well-known and widely-used standard for producer milk quality is the somatic cell count (SCC). SCC is a measure of the total number of cells\* per milliliter in milk, and lower counts are indicative of higher quality. Somatic cells enable animals to fight infection and ensure good health, and all milk naturally contains some somatic cells. Although high SCCs can affect dairy product manufacturing yields, milk flavor and product shelf life, they generally are not a food safety or public health issue. The federal SCC regulatory limit is 750,000, except in California which has a maximum of 600,000 cells per milliliter. The SCC limit in many other major dairy countries is 400,000.

Four of the current 10 Federal Milk Orders (FMOs) adjust milk payments to producers based on the SCC in raw milk. The benchmark SCC for this adjustment is 350,000, with positive payments for SCCs below that level and negative adjustments for milk with higher counts. Price adjustments are made on a per hundredweight basis for every 1,000 SCC variation from the 350,000 standard. The magnitude of the SCC adjustment varies monthly based on the wholesale price of cheese.

The Central Order is one of the four FMOs that utilize a SCC price adjustment. The graph on this page displays yearly average SCCs for the Central FMO since its inception in 2000. As

\* SCC is primarily composed of leukocytes, or white blood cells, that are produced by a cow's immune system to fight an inflammation in the mammary gland.



indicated by this graph, SCCs have decreased significantly since the early years of the order's existence. With a couple of notable exceptions, the annual SCC for the Central Order has exhibited a persistent downward trend, averaging 295,000 over the eleven years depicted in the graph on page one. The annual SCC has been at or below the 11-year average during six of the past 7 years, and it has been less than the previous year in eight of the ten years since 2000.

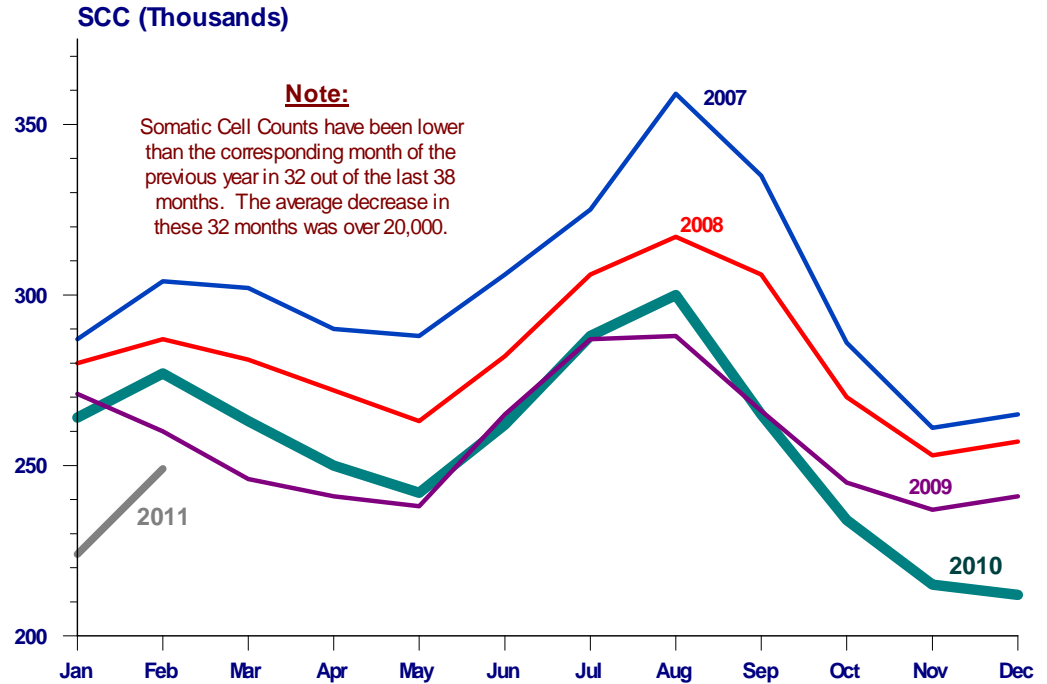
The top graph on this page depicts Central Order monthly SCCs for January 2007 through February 2011. This graph highlights the extent of the downward trend in SCCs over the past several years. SCCs have

been lower than the corresponding month of the previous year in 32 of the 38 months depicted by this graph. During these 32 months, the average decrease compared with the previous year was over 20,000. Conversely, the average year-to-year increase in the remaining six months was less than 8,000.

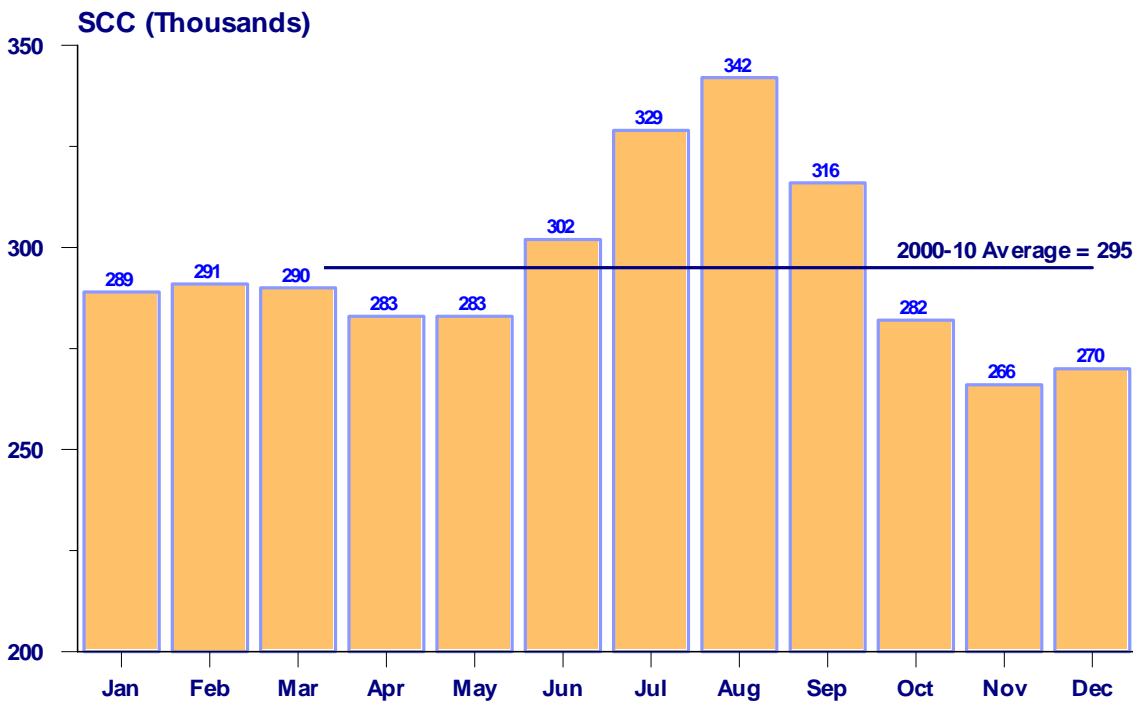
Central Order monthly average SCCs for 2000 through 2010 are depicted by the bottom graph on this page. A distinct seasonal pattern is evident from the information presented in this graph, along with the top graph on

this page. SCCs have been higher than the 11-year average during the summer months of June through September, substantially so during July and August. The lowest monthly average SCCs have been recorded during the fall and early winter months of October through December. The 11-year average for August is the highest of any month at 342,000, while the lowest is attributable to November with a 266,000 SCC average.

## Producer Milk Somatic Cell Counts Central Federal Milk Order



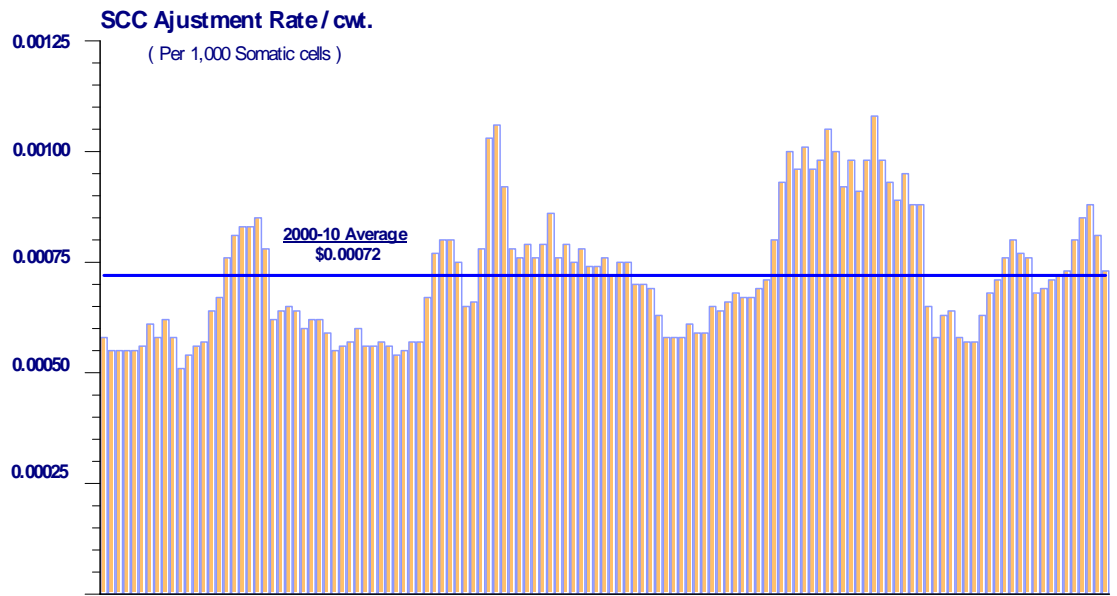
## 2000 - 2010 Monthly Average SCCs Central Federal Milk Order



The top graph on this page details the monthly SCC adjustment rate for January 2000 through December 2010. Milk payments to Central Order producers are adjusted for counts above and below 350,000, and these adjustments are made on a per hundredweight basis for each 1,000 SCC variation. The adjustment rate averaged \$0.00072 during the time frame depicted by this graph, ranging from a low of 0.00051 to a high of 0.00108.

# SCC Monthly Adjustment Rates

## Central Federal Milk Order

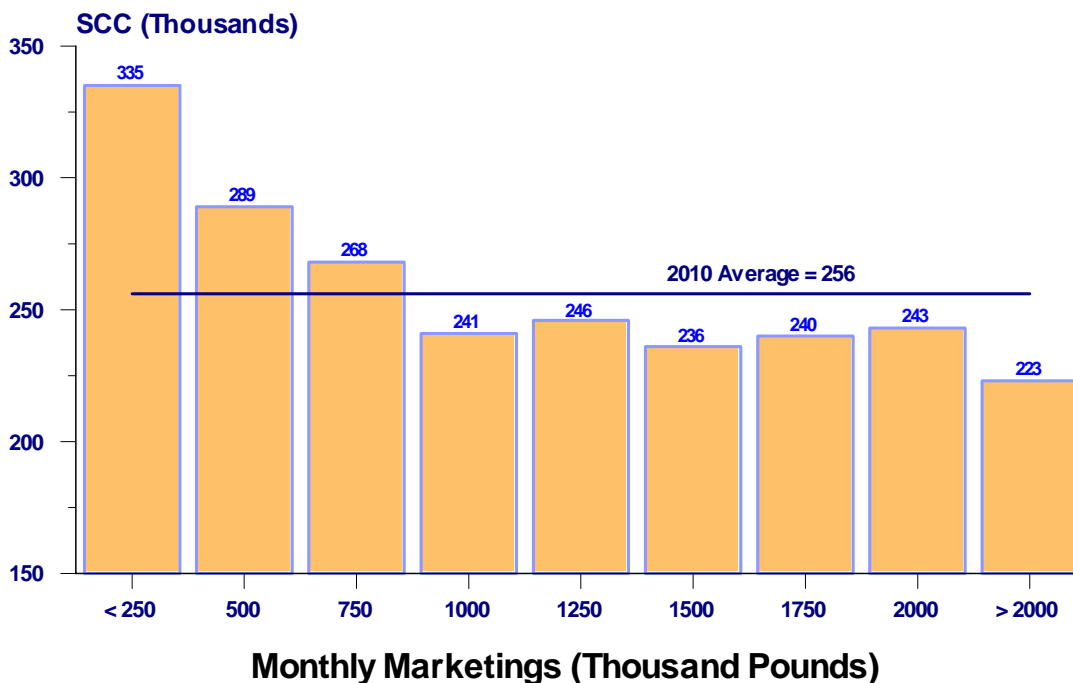


January 2000 through December 2010

The lower graph on this page depicts 2010 weighted average SCCs for Central Order producers grouped by marketing size category. The categories used in this graph increase in 250,000 pound increments up to 2,000,000 per month - all marketings above that size are grouped together. This graph represents Central Order data only; therefore, the marketings represented in each size category do not necessarily correspond to overall farm size, since producers often have marketings on more than one FMO during any given month. With that caveat in mind, the data in this graph indicates a relatively steep decline in SCC corresponding with increasing size

# 2010 SCC by Marketing Size Categories

## Central Federal Milk Order



category up to 1,000,000 pounds per month.

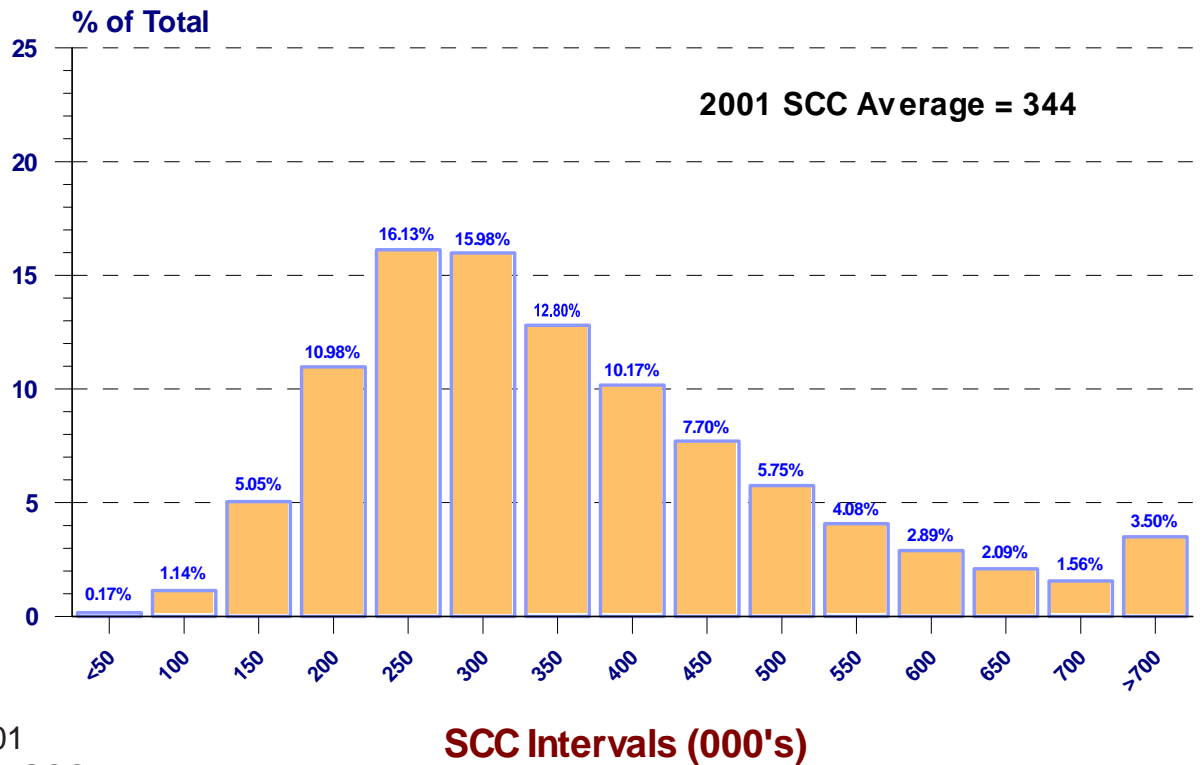
Although there is no distinct trend evident in SCCs above the 750,000 pound category, all categories above that level have SCCs below the 2010 average of 256,000.

The two graphs on page 4 represent annual SCC data for the Central Order for 2001 and 2010. These two years were chosen since they represent the highest and lowest annual average SCCs.

## 2001 Annual Milk Marketings By SCC Central Federal Milk Order

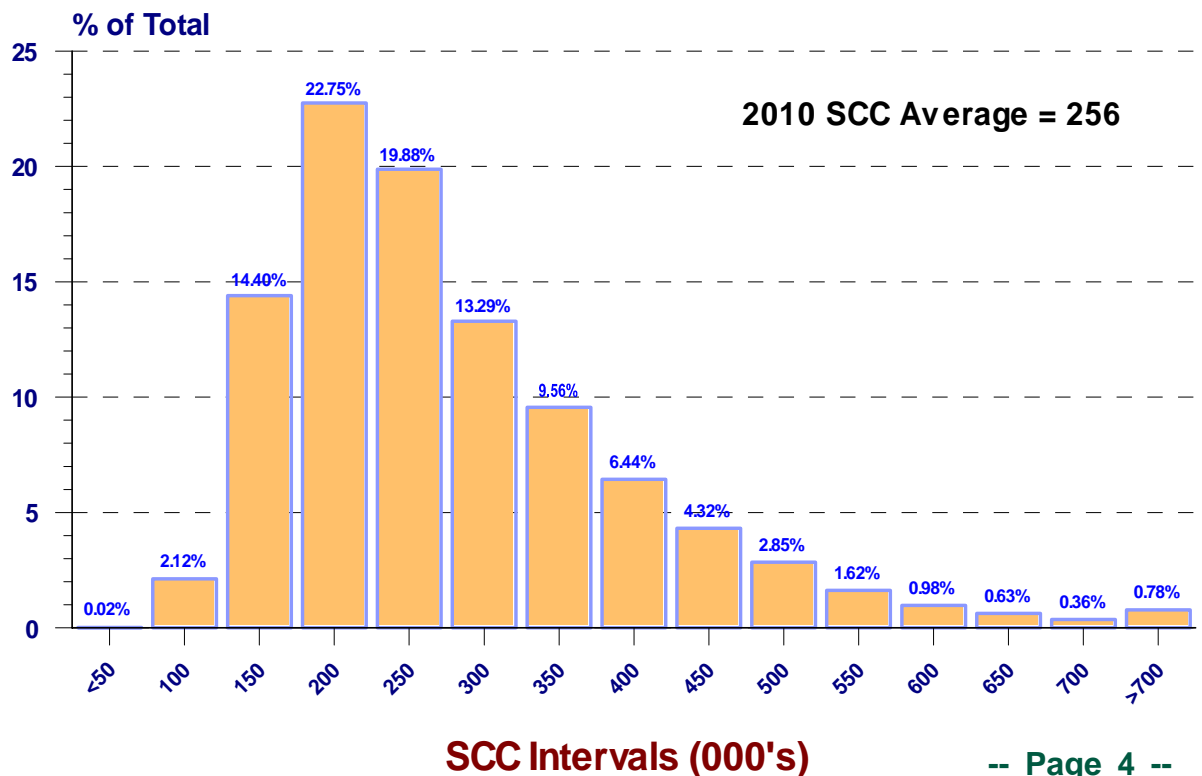
These graphs depict the percentage of the order marketing total represented by each SCC category. The categories in this graph increase in 50,000 count increments up to 700,000. All marketings above the 700,000 level are grouped together in the largest SCC category.

The count for 2001 was the highest yearly average recorded for the Central Order at 344,000. As the top graph on this page indicates, over 37% of the marketings in 2001 were above the 350,000 SCC level. Conversely, less than 18% of the marketings corresponded with SCCs of 200,000 or less.



## 2010 Annual Milk Marketings By SCC Central Federal Milk Order

The 2010 data represented in the lower graph on this page depicts a much different distribution of marketings by SCC category. During 2010, marketings corresponding with SCCs above 350,000 represented less than 18% of the Central Order total, while those associated with SCCs of 200,000 or less comprised over 39% of the yearly total.



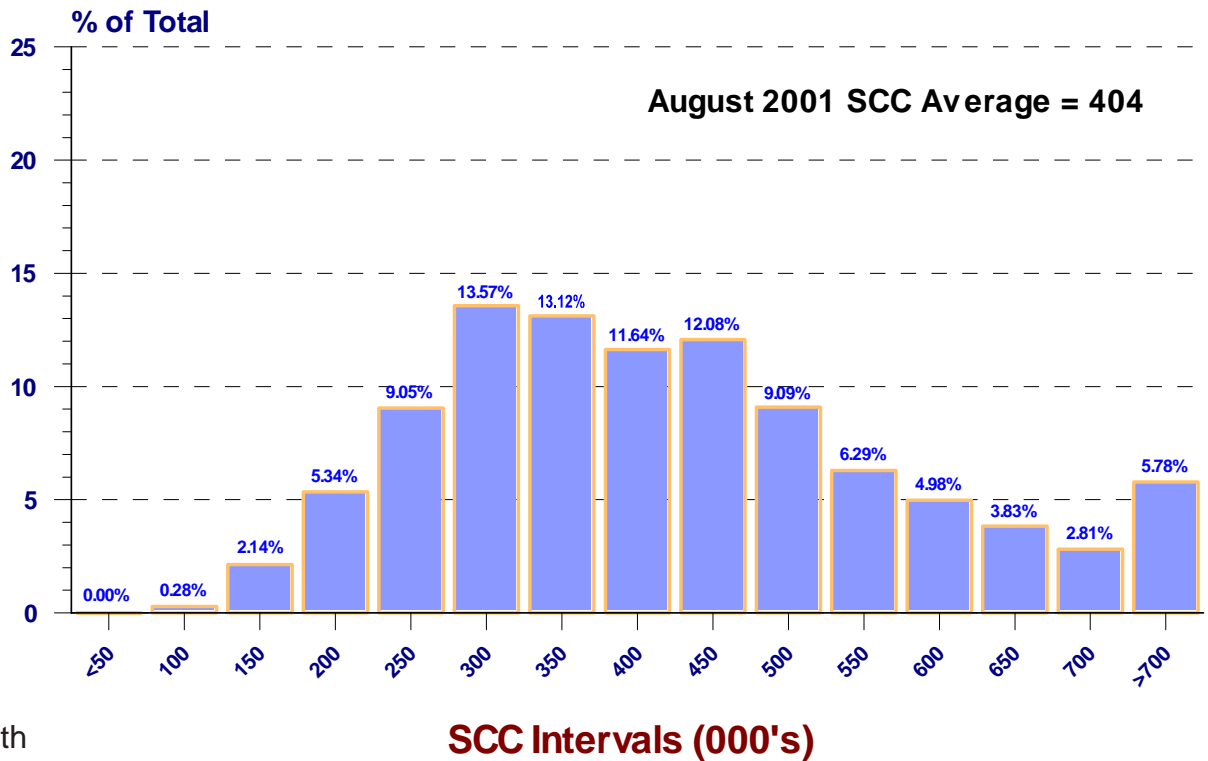
## August 2001 Milk Marketings By SCC

### Central Federal Milk Order

The two graphs on this page depict SCC data for August 2001 and December 2010. These two months were chosen because they represent the all-time highest and lowest individual months for the Central Order in regard to SCC.

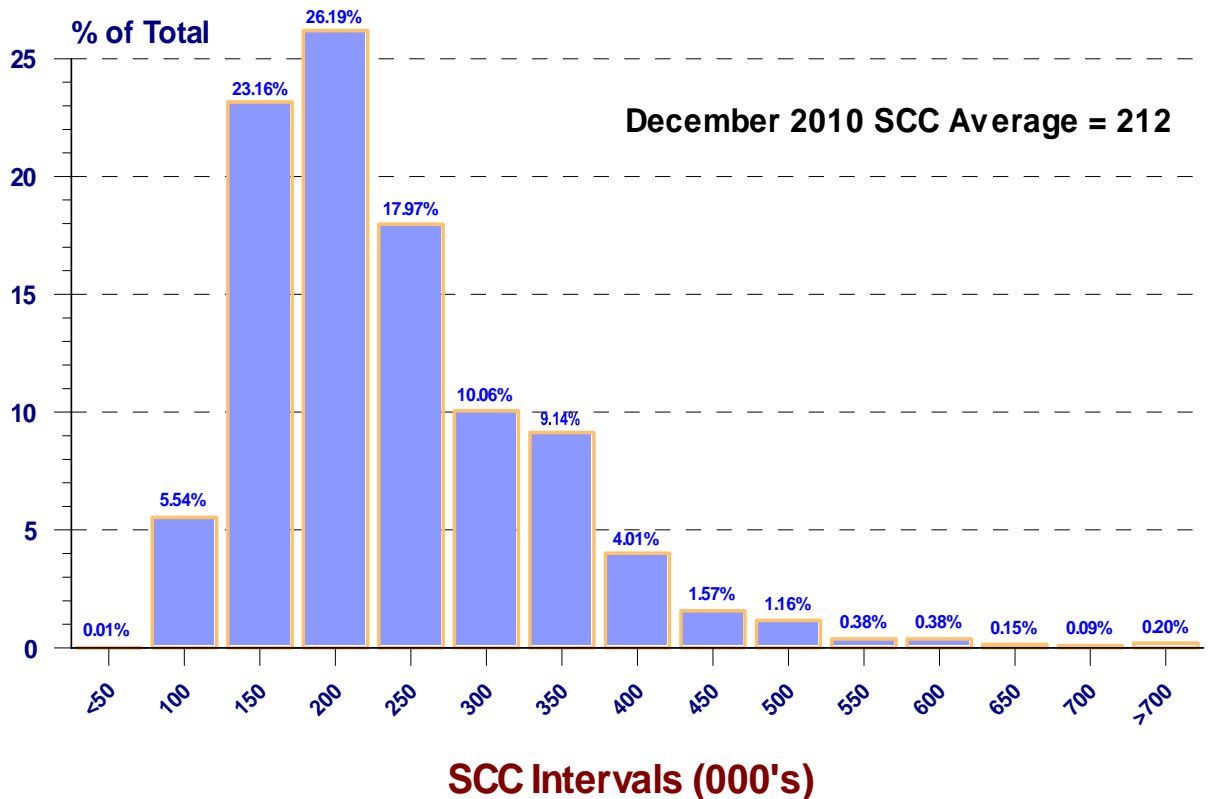
A cursory examination of these two graphs indicates vastly different SCC distributions. More than 56% of the August 2001 marketings corresponded with SCCs above 350,000, compared with less than 8% during December 2010. Comparing marketings associated with SCCs of 200,000 or less, the August 2001 data indicates less than 8% in that grouping. Conversely, nearly 55% of the December 2010 marketings corresponded with SCCs of 200,000 or less.

In summary, the graphs in this bulletin indicate a significant improvement in Central Order milk quality as measured by the SCC levels in raw milk marketings.



## December 2010 Milk Marketings By SCC

### Central Federal Milk Order



	Statistical Uniform Price		Producer Price Differential		Class I Utilization	
	Feb '11	Jan '11	Feb '11	Jan '11	Feb '11	Jan '11
Northeast	18.75	17.01	1.75	3.53	42.55	42.51
Appalachian	19.58	18.31	-----	-----	68.58	69.75
Florida	21.38	20.32	-----	-----	84.24	83.93
Southeast	19.60	18.01	-----	-----	65.16	64.85
Upper Midwest	17.23	14.12	0.23	0.64	13.23	13.09
<b>Central</b>	<b>17.50</b>	<b>15.31</b>	<b>0.50</b>	<b>1.83</b>	<b>34.10</b>	<b>35.00</b>
Mideast	17.68	15.78	0.68	2.30	41.47	44.63
Pacific Northwest	17.78	15.57	0.78	2.09	28.89	28.35
Southwest	18.42	16.24	1.42	2.76	37.26	39.58
Arizona	18.18	16.23	-----	-----	32.43	32.30

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