cdfa

California

Cost of Production

2008 ANNUAL

Where Are We Headed?

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This publication was prepared in the Division of Marketing Services, Dairy Marketing Branch by:

Cost of Production Unit Staff

Mike Francesconi, Supervisor
David DaSilva
Carl Matz
Mirek Wilczek
Richard Walker
Cindy (Davis) Prentice

In Cooperation With:

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Department of Food and Agriculture
A.G. Kawamura, Secretary
Dairy Marketing Branch
1220 N Street, Sacramento, CA 95814
(916) 341-5988 / www.cdfa.ca.gov/dairy

Introduction

Introduction

The Dairy Marketing Branch, Cost of Production Unit (COP) is pleased to present the twelfth edition of the California Cost of Production Annual Summary. The 2008, Annual Summary includes information vital to the California dairy industry. Producers need as many tools as possible to make sound management decisions and the information in this summary provides some of these tools.

Food & Agricultural Code

Under the California Food and Agricultural Code 62062, the Department of Food and Agriculture (Department) must consider the cost of producing market milk in determining appropriate minimum prices.

Cost of Production Collection Methods

The Department's COP collects and summarizes cost data from California dairy farms. The Department has been collecting and reporting changes in milk production cost information since 1955 and is the only state in the U.S. that has an impartial government agency reporting comprehensive milk production cost information. Although the Department has the legal authority to collect cost of milk production from "Grade A" dairy farms, dairy producers find the study and resulting comparisons valuable and cooperate in the cost studies voluntarily. Milk Production Cost Auditors specializing in cost accounting and other accounting procedures conduct the cost studies. Auditors review dairy farm financial records on-site and work with dairy management to perform a compilation of dairy expenditures. This information is provided primarily as a service to those participating in the cost studies, in order for them to compare the results of their operations with the information presented on the accompanying schedules. All published data is subject to revision.

New Reports & Information Available on Website

COP Secure Website

The COP has developed a secure website called the "Cost of Production Unit Document Library." The secure website allows participants to access their financial information that is compiled into reports labeled Feedback, Cost Comparison, and other specialized reports. This site has been developed to make sure that confidential and personal information will not be compromised. Each participant received a username and password to access the secure website.

This website has been created to provide information in a timely manner and to store historical information. A link is located at the Department's Dairy Marketing Branch website that will take you to the Document Library. This link for the website is located at http://www.cdfa.ca.gov/dairy/, click on cost of production and a link for the secure website will be at this location.

COP Public Documents

The COP is always looking for ways to provide valuable information to the dairy industry. In 2008, the Department began posting quarterly and annual cost of production reports to the Dairy Marketing Branch website. To access these reports go to the homepage website address http://www.cdfa.ca.gov/dairy/ then under the Dairy Marketing tab, click on Cost of Production.

The Cost of Production in 2008

California Dairy Industry, 2008

The California dairy industry seems to be at a crossroads. Our cover depicts many different roads producers took in 2008, to deal with high feed prices, declining milk prices, finding a home for all their milk, environmental regulations and many other issues.

California dairy producers did what they do best, produce more milk. Despite all the issues producers were challenged with, milk production grew by 1.3 percent in 2008, compared to a year ago. This increase in milk production is due to a greater output of milk per cow and more cows milking in 2008, compared to 2007. The average mailbox price that producers received for their milk was $16.17 per hundredweight (cwt.) of milk. In December the mailbox price decreased to $12.83 cwt., a level at which most producers were unable to cover their cost of production. The cost of production was on an upward spike as feed commodities increased in price. At the same time, fuel prices reached an all time high in the middle of the year. This meant everything that was hauled on or off the dairy increased the cost of doing business. In addition, producers were obligated to spend more time and money dealing with environmental compliance for air and water.

Milk Production

California responded to higher than average pool prices in the first six months of 2008 with strong and steady milk production. For the third year in a row, all 12 months of 2008 recorded over three billion pounds in milk production, with an annual total milk production again surpassing 40 billion pounds. The month of March recorded the highest level ever of milk production for a single month in California, at 3.64 billion pounds. Shortly after, California's milk production reached a breaking point, as plants and producers were frantically searching for homes for excess milk production. Reducing the milk supply became the overriding issue facing the dairy industry and the cooperatives and other processing plants initiated production base caps for their producers.

Thirty-four counties contributed to the state's milk production; however, the bulk of the milk production (69.5 percent) was recorded by Tulare, Merced, Stanislaus, Kings and Kern counties. Five of the last six months of 2008 recorded a net decrease in milk production when compared to the same time period in 2007. Consequently, the 12-month 2008 milk production growth compared to 2007 was the lowest since 2003, at 1.3 percent, with the last five-years averaging an overall 3.1 percent milk production growth.

Other factors affecting the slowed milk production were: the continued decrease in the number of dairies in the state; another Cooperatives Working Together (CWT) herd retirement buyout; skyrocketing feed prices; and the continuing pressure of environmental regulation concerns (which forced some producers to limit the size of their herds).

Milk Prices

The 12-month average mailbox milk price was $16.17 per hundredweight (low: $12.83, high: $17.97), down 7.8 percent from the average prices paid to producers in 2007. Throughout the first half of the year, the continued strong world prices for dairy products, partially influenced by the drought conditions in Australia and New Zealand, played a role in the demand for U.S. dairy products. Inventories of nonfat dry milk and butter in both the U.S. and European Union were reduced to very low levels, coupled with the steady cheese demand . . . until mid-year when everything started to change. By year-end, the dairy product export market was all but non-existent, the commodity prices were at or near their USDA support price levels, nonfat dry milk and butter were being purchased by

the Commodity Credit Corporation, and class prices were nearing historic lows. The government purchase of the commodities was an example of the national market imbalance of milk supply and dairy product demand.

Other news of interest in 2008

Hearings

On July 1, 2008, the Department held a public hearing to consider changes in the transportation allowances as provided in the Pooling Plan for Market Milk (Pool Plan), changes in the transportation credits as provided in the Stabilization and Marketing Plans for Market Milk for the Northern California and Southern California Marketing Areas (Stab Plan), and technical amendments to the Pool Plan. The results of this hearing were to: add a definition for the Dairy Accounting System to the Pool Plan; account for the actual solids-not-fat pounds in calculating the Pool; implement the PC Miler® Program for calculating distances for transportation allowances; and make numerous changes to the transportation allowance and credit rates.

On October 30 and 31, 2008, the Department held a public hearing to consider amendments to the Stab Plans regarding proposed changes to the Class 1, 2, and 3 pricing formulas. The results of this hearing were to: decrease the Class 1 price approximately $0.35/cwt.; decrease the Class 2 and 3 prices approximately $0.26/cwt.; and make adjustments to the Class 2 and 3 solids-not-fat differentials.

Dry Whey Committee

The California State Board of Food and Agriculture, under the direction of the Secretary, assembled members of the California dairy industry to form a Dry Whey Committee (Committee) focusing on reviewing the whey factor used in the formula to establish the minimum Class 4b (milk used to make cheese and dry whey products) farm milk price. The Committee was comprised of seven producer representatives and seven processor representatives. The Committee was charged with the task of providing recommendations to the Secretary on developing a whey pricing system that reflected the world markets while fostering financial equity for the dairy producer and dairy processor. The Secretary sought a long-term

method that was market-based and would signal a proper value for whey that allows both California producers and processors to earn a favorable return from their investments. The Committee concluded its meetings in mid-2008 with the following two recommendations for the Secretary: continue in the near term with the current fixed whey factor of

$0.25 cents per cwt. in the Class 4b formula and; 2) explore for the future, in conjunction with the California Legislature, modifications to the milk pricing system such as those presented in one of the alternatives (#4) during the meetings.

Cooperatives Working Together (CWT), is a voluntary, producer-funded, national program that has been in existence since 2003. According to CWT the purpose of this program is to strengthen milk prices and bring stability. They attempt to do this through herd retirement and export assistance programs. In 2008, CWT conducted two herd retirement rounds removing 1.4 million pounds of future milk production, a result of retiring 75,215 milk cows and 1,220 bred heifers in 2008. In 2008, the first herd retirement was announced in June and field audits concluded in September. The second round of herd retirement was announced in October and the field audits concluded in February of 2009.

The Milk Income Loss Contract (MILC) Program, administered by the Farm Service Agency (FSA), compensates dairy producers when domestic milk prices fall below a specified level. The 2008 Farm Bill authorized MILC through September 30, 2012. FSA computes MILC payments on a monthly basis when the Boston Class I milk price falls below $16.94 per cwt. and includes a dairy feed ration adjustment factor. Previous MILC payouts did not include the feed ration adjustment factor. In 2008 there were no payouts from the MILC as milk prices were above the Boston Class 1 price of $16.94. To learn all the details on rules and restrictions for who is

eligible, for payment calculation, eligible pounds of production, and other criteria, contact your FSA county office or go online at: http://www.fsa.usda.gov; click on Price Support.

Environmental issues and Regulations

Air Issues

In April of 2008, producers located in the San Joaquin Valley, milking 1,000 cows or more, had to comply with new rules established in 2006. The air rules are enforced by the California Air Resource Board (CARB) under Rule 4570. The San Joaquin Valley includes the eight counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the valley air basin portion of Kern. The rule requires that facilities choose from a variety of mitigation measures, generally concentrating on feed and waste management practices, with the goal of reducing volatile organic compounds, ammonia, and methane. It calls for compliance testing and recordkeeping requirements for all facilities. In 2008 the Fifth Appellate District Court threw out the Central Valley's dairy emissions control rule saying it was wrongly imposed. In November 2008, the appellate court ruled that the air district had failed to asses the rule's impact on public health.

This ruling is based on a lawsuit filed in July 2006 by the Association

of Irritated Residents, challenging the rule on a number of substantive issues and one procedural matter regarding the staff report on the public health impact. This ruling is on appeal by the San Joaquin Valley Air Pollution Control District, so at this time Rule 4570's future is in limbo.

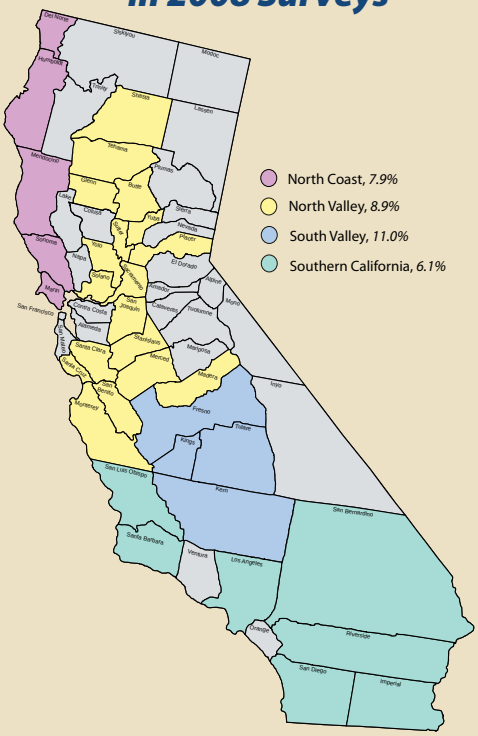
Water Issues

In 2007, the Central Valley Regional Water Quality Control Board (Region 5) sent all existing dairies new rules called the Waste Discharge Requirements (WDR's) for water quality regulations. Rather than requiring dairies to implement the entire WDR's in a single year, producers are allowed to implement the permit with "deliverables" to be submitted to the regional board over the five year life of the permit. On July 1, 2008, producers were required to submit an annual report; the following is an outline of what had to be submitted:

Annual Report
Annual Report Form Attachments
Annual Facility Assessment
Manure Tracking Manifests (2007 Calendar Year)
Source Well/Tile Drain Sampling Results (Nov 3, 2007 samples)
Discharge Monitoring Results/Reports (2007 Calendar Year)
Nutrient Management Plan
Statement of Completion
Process Wastewater Written Agreements
Waste Management Plan
Facility Information Summary
Map-Updated
Operation and Maintenance Plan
Identification of Backflow Problems
Proposed Interim Facility Modifications – Storage Capacity Y Nitrogen Balance

Many producers relied on consultants to conduct the sampling of wells, meet required assessments, and fill out the Annual Report. Whether a producer took his own water samples or filled out his own report, there were certain areas that needed to be certified by a trained professional. An example; a trained professional must sign off on the identification of backflow problems on the dairy facility and submit a proposed remediation plan. The cost for implementing WDR's will increase in the future as the first phases were geared toward taking samples and filling out reports. Future phases will have producers investing in infrastructure to be in compliance.

Cost of Production Survey Areas, Percent of Dairy Farms Participating in 2008 Surveys



(Grey areas not included in the survey areas)

- The Milk Production Cost Unit was established in 1955 to conduct financial reviews of individual dairy farms. The Unit collects and calculates milk production costs from the financial records of Grade A dairy farms throughout California.
- In 2008, 172 dairy farms (9.3%) in California were surveyed on a quarterly basis.

The Cost of Production in 2008

California Cost of Production

The California Production Cost Summary illustrates that the cost of production increased by 18.6 percent (without return on investment and return on management) per cwt. of milk compared to a year ago. The main reason for the cost of production increase is higher prices for feed commodities. Compared to 2007, the total feed cost per cwt. of milk increased by 25.3 percent to $9.82. This meant that feed cost accounted for 60 percent of the total cost of producing milk. To control escalating feed costs producers had their nutritionists change ration recipes several times throughout the year to find the least-cost-ration, while trying not to compromise milk production. As feed prices increased and milk income decreased in 2008, there was less money for other costs associated with operating the dairy (see page 29 for detailed feed cost summary).

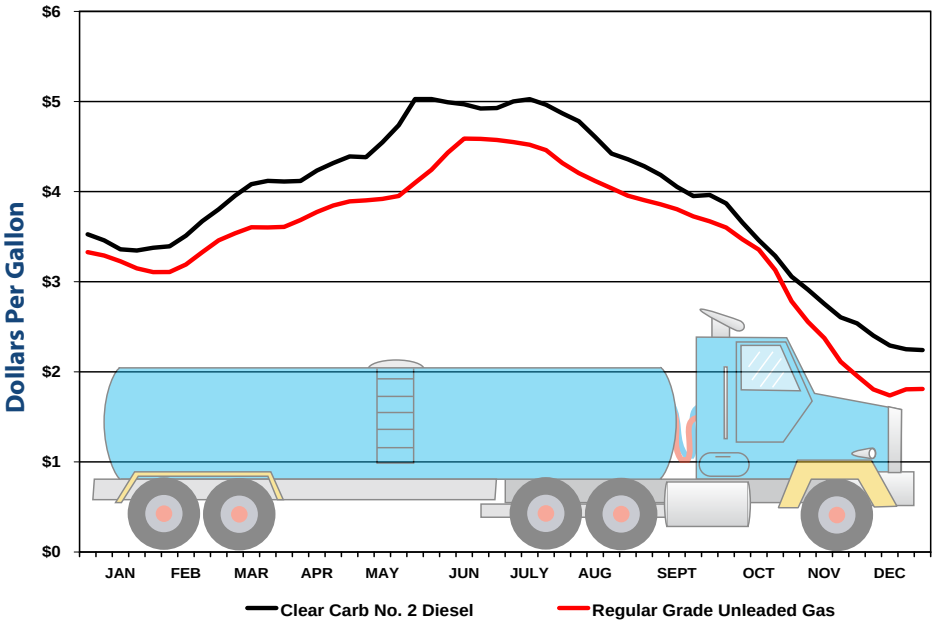
All other cost categories increased compared to a year ago, but none had as much of an impact as feed on total cost. Labor shows a continuing trend of higher hourly wages for both milkers and outside workers. In January, 2008 minimum wage increased from $7.50 to $8.00 per hour, which is one of the reasons why labor cost increased by 3.3 percent (see page 36 for detailed labor cost summary). There were two categories within operating costs that increased significantly, miscellaneous and fuel costs. Producers have had to deal with additional costs for meeting environmental regulations. Additional costs of meeting environmental regulations are reflected in the cost comparison under miscellaneous costs, which increased by 22 percent, from a year ago.

Fuel and oil costs increased by 31 percent, partly due to No. 2 Diesel selling at the beginning of the year for an average of $3.40 per gallon, then by mid July prices peaked at over $5.00 a gallon. As a result, everything from the cost of supplies to the cost of hauling milk increased. Milk hauling costs mirrored fuel prices, increasing by 9.8 percent, from a year ago.

Total replacement cost also increased for a variety of reasons. The cull rate was 37 percent, an increase of 3 percent, from a year ago. The increase in the cull rate results in higher replacement costs, since fresh heifers are more expensive than the cows they replace. Due to the normal milk production cycles for the summer and fall months, when milk production per cow decreased, many producers purchased fresh heifers to maintain milk production at their production base, to maximize revenue. Also, producers were receiving less money for drop calves, which did not offset the replacement cost as much as last year.

The majority of cooperatives restricted their members to an established production base. Any member exceeding their production base was assessed a penalty for handling the surplus milk. Proprietary plants that have direct shippers held their members

Fuel Prices for Diesel and Gasoline[1] - 2008



1 Energy Information Administration Offical Energy Statistics from U.S. Government

to their contracted production. The shippers that exceeded their contract amount were either assessed a penalty or had to find a different home for excess milk. Charges for handling the excess milk were deducted from milk checks, resulting in a lower mailbox price. The restrictions in milk production resulted in very few producers increasing herd size.

California Production Cost Areas

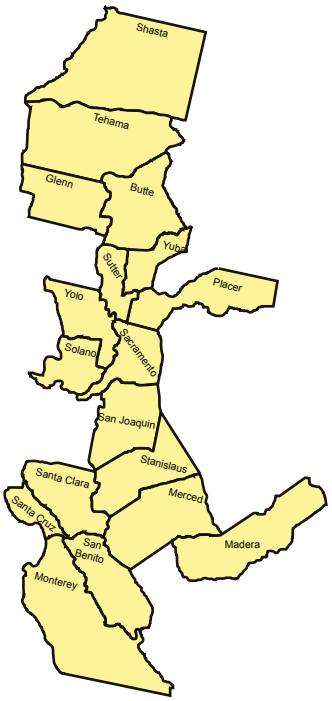
The Department breaks down cost of production into four geographical regions called North Coast, North Valley, South Valley, and Southern California. Since California is such a long state, in terms of distance from north to south, each area has its own unique way of dairying due to climate differences and feed availability. There is one thing they all had in common in 2008: each area's cost of doing business increased, on average, by 18 percent compared to 2007. The following are unique issues that pertain to each area.

North Coast – As a result of higher feed prices for grain commodities producers fed less grains and chose to depend more on pasture and other home grown feeds. The growth in the number of organic milk producers in the North Coast seems to have slowed. The processors in this area are not looking to add new organic producers as they have all the organic milk needed. This area is unique in that most of the dairies are small compared to the California average size dairy and they have use of pasture which makes them ideal candidates for organic production. This area also has a large consumer base that favors organic milk.

The number of dairies and number of cows have remained fairly stable in the last year. The only change is a slight drop in herds in the Humboldt area and this was due to Humboldt Creamery not accepting Grade B milk starting in 2008. As a result, some producers chose to get out of the dairy business, rather than convert to Grade A.

If you are a Grade A milk producer and are interested in participating in the Cost of Milk Production Survey that is administered by the Dairy Marketing Branch, please see the contact information on page 54.

North Valley – The North Valley had its share of challenges, most noticeable is the loss of many dairies throughout the valley. This area lost 60 dairy operations in 2008. The two counties with the highest loss of dairy farms were Stanislaus at 29 and Merced at 15. The cost of production was not the only challenge for dairy producers in this region; quite often they were worrying about having a processing home for their milk production.



On June 30, 2008, HP Hood ended contracts with over 20 producers in the greater Sacramento area. Then, just a few months later in November, several more producers lost their contracts with Foster Farms.

North Valley area producers, who receive water through canals to irrigate crops, have faced cutbacks on water delivery in the last two years due to below normal rainfall. Madera County farmers who receive water from the Friant Dam, located near Fresno, will have to give up 15 to 20 percent of their water supply by sending it down the San Joaquin River, which flows into the Delta. This is the result of a lawsuit settlement brought on by environmental activist groups.

North Valley producers have had to spend considerable time and money on issues related to complying with environmental regulation for water and air.

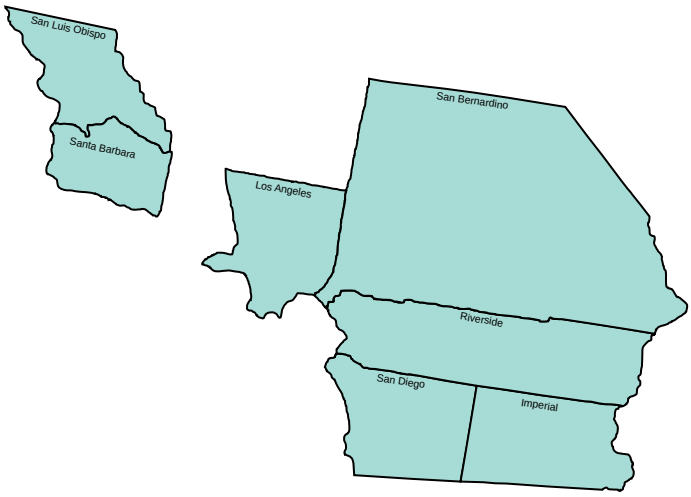
South Valley – The South Valley area is comprised of the four counties of Fresno, Tulare, Kings, and Kern. These four counties combined lost 20 dairies

with Kings County alone losing half of those 20 dairies. Since January 2008, seven cows from three Fresno County herds have been diagnosed with bovine tuberculosis (TB). Approximately 377,000 cattle have been TB tested; two herds were depopulated with over 8,000 cattle eliminated, and over $20 million spent on this investigation. One herd is on a test and removal program.

Water continues to be a critical element to any farming or dairying future. Many farmers have deepened their existing wells and some have started drilling new water wells, which will go deeper than the previous existing well. Irrigation district water continues to be very important for the long term viability of many dairies in the area. A major concern for producers and farmers is that the limited availability of water for the 2009 season will impact the availability of alfalfa hay (especially on the Westside) and may lead to farmers fallowing ground that is normally productive acreage. Due to water availability and water conservation, traditional row or field crop ground is being taken out and replaced with permanent crops such as pistachios and almonds which can use drip irrigation instead of flood irrigation. Farmers located in the counties of Fresno, Tulare, and Kern receiving water from the Friant Dam, will also have to give up 15 to 20 percent of their water supply (As mentioned in North Valley).

New dairy sites were nearly non-existent. High land prices and the complicated dairy permitting process, including environmental concerns, nearly shut down any plans for new dairies. Some dairy producers purchased land to grow feed and/or meet environmental requirements. South Valley producers have also had to spend considerable time and money on issues related to complying with environmental regulations for water and air.

Southern California – In the early 1980's, Southern California was home to the largest milk shed in California. Since that time, dairy facilities and total milk production have left this area as development for housing encroached onto dairy land. In 2008, Southern California recorded a loss of 14 dairies from the previous year that represented a 4 percent loss of milk production. Since 1999, Southern California milk production has declined by 47 percent and dairy facilities have declined by 53 percent. During the housing boom, many producers in this area had entered into long term escrows for their land. As final payments became due over the last year on many of these escrows, the land speculators just walked away. There are some companies still interested in purchasing

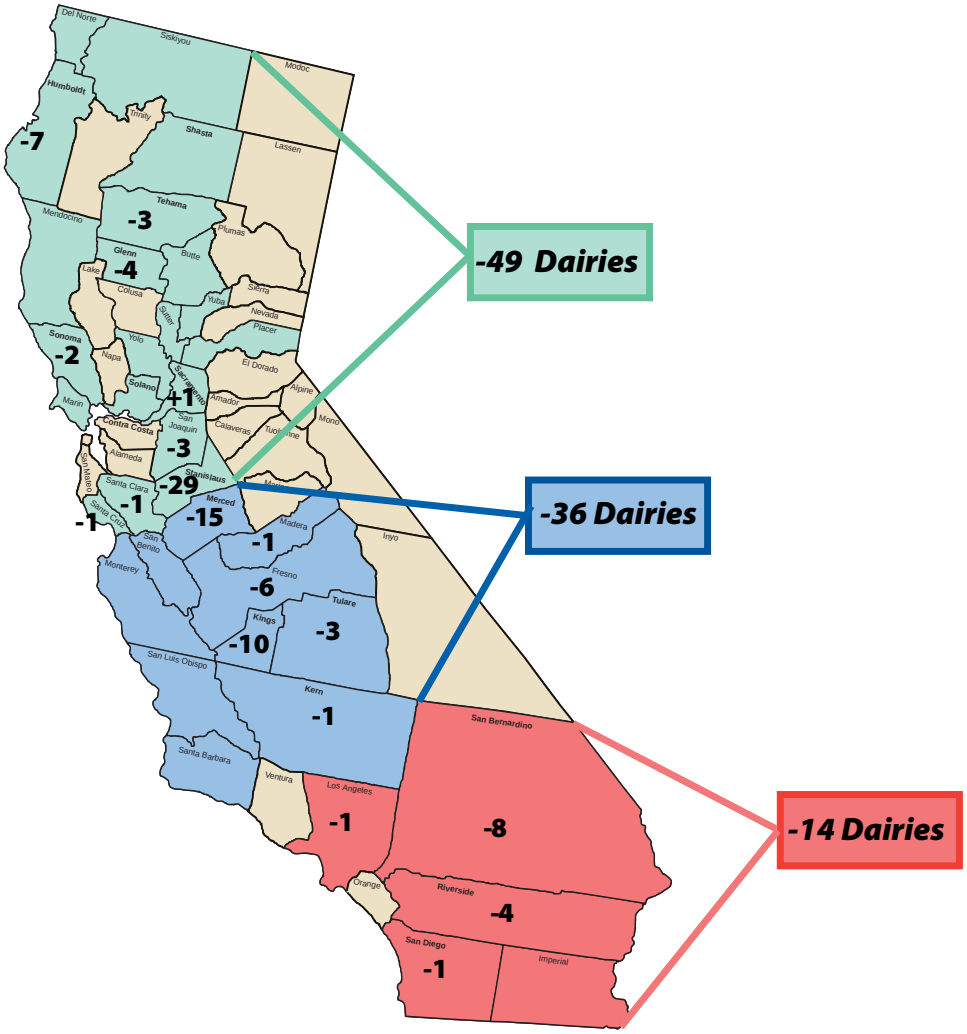


the land but the terms have changed. The new purchasing agreements are for longer term escrows and a lower price per acre.

One of the biggest stories in 2008 was the Hallmark Westland Meat Co. located in Chino having to close due to animal mistreatment and processing downer cows. The USDA issued its biggest recall ever, recalling 143 million pounds of frozen beef. The effect on the dairy producers was that they were charged for any cows that went down at the auction yard. Dairy producers began sending cows to auction earlier than normal because of the long haul to the beef processing facilities in the central valley and Arizona.

California's Changing Landscape

California's Rapidly Changing Dairy Landscape . . .
2008 Total Number of Dairies Shows a Decline of 99 Dairies . . .



Sources: CDFA Milk and Dairy Food Safety and Dairy Marketing Branches

Data subject to change.

The dairy landscape in California is rapidly changing with the loss of 99 dairies in 2008, as shown on the map. Dairies in California continue to relocate to other states or are shutting down completely. In 2008 (compared to 2007), all three highlighted areas experienced a net loss in the overall number of dairies.

Stanislaus County recorded the largest decrease of ***29*** dairies, followed by Merced County, showing a decline of ***15*** dairies. Sacramento was the only county recording an increase in the number of dairies, adding ***1*** dairy to its total.

The northern California region (green shaded area) showed the largest change in the number of dairies, recording a net loss of ***49*** dairies.

The Valley region (blue shaded area) showed a net loss of ***36*** dairies, following last year's net loss of only ***4*** dairies.

The southern California region (red shaded area) continues to lose dairies, with a loss of ***14*** dairies, however, that was a loss of ***4*** less dairies than recorded in 2007.

California Production Cost Summary

Cost Comparison Summary

(All Costs in Dollars Per Hundredweight)

Total Feed Costs	$9.82
Total Hired Labor Costs	$1.57
Total Replacement Costs	$1.64
Total Operating Costs	$2.92
Total Milk Marketing Costs	$0.54
Total Cost ($/cwt)	**$16.48**
Allowance: Return on Investment	$1.33
Allowance: Return on Management	$0.67
Total All Costs and Allowances	**$18.48**

** Data totals may not add up to column figures due to rounding.*

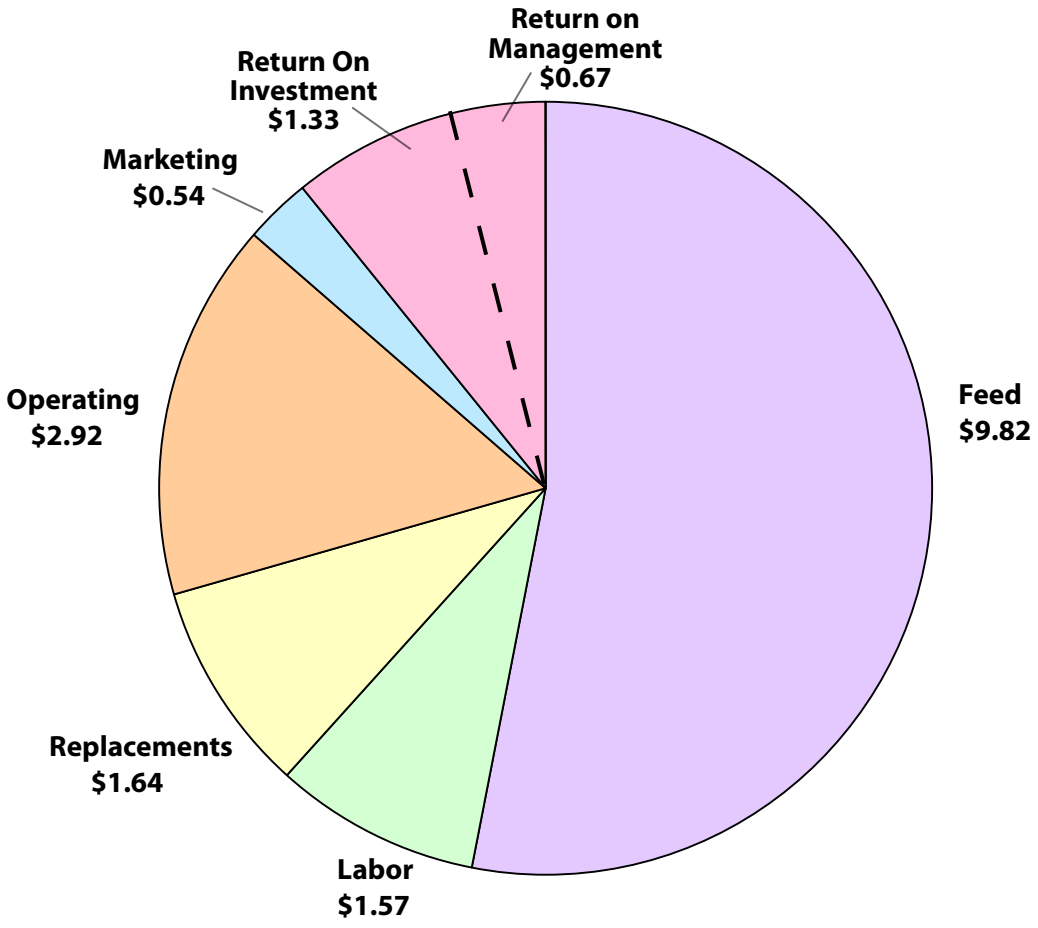
Milk Production Costs

The Cost Comparison Summary is used to monitor the cost of production on dairy farms. A summary is published for each of the four production areas, based on monthly cost of production data. The comparison provides a statewide weighted average of all costs and allowances for each month.

In addition to reporting costs for feed, labor, operating, replacements and marketing, the Cost Comparison Summary includes an allowance for return on management and return on investment. The return on investment is based on the Moody's Baa Corporate Bond Index that is published monthly. The California Legislature has established statutes requiring the Secretary to consider relevant economic factors, including the cost of management and a reasonable return on investment, when establishing minimum prices (Food and Agricultural Code, Section 62062).

Cost Comparison Summary, 2008

(Cost per Hundredweight)



California Production Cost Summary

California Production Cost Summary, 2008

All costs: per cow per month, unless noted 2008	2007 Average	North Coast	North Valley	South Valley	Southern California	2008 Average	Percent Change
Number of Herds	166	15	72	63	7	157	
Feed Costs							
a. Dry Roughage	$37.92	$59.54	$42.87	$48.64	$64.70	$48.10	26.9%
b. Wet Feed & Wet Roughage	$25.57	$11.45	$34.87	$34.28	$18.64	$32.63	27.6%
c. Concentrates	$69.61	$91.80	$86.52	$87.78	$80.76	$86.84	24.8%
d. Minerals & Supplements	$6.67	$1.99	$7.63	$8.63	$7.31	$7.98	19.7%
e. Pasture	$0.79	$26.92	$1.84	$0.00	$0.00	$1.37	72.8%
Total Feed Costs	**$140.55**	**$191.70**	**$173.72**	**$179.32**	**$171.41**	**$176.92**	**25.9%**
Total Feed Costs ($/cwt.)	**$7.84**	**$12.84**	**$9.63**	**$9.86**	**$9.61**	**$9.82**	**25.3%**
Total Feed Costs (% of total Cost)	**56.1%**	**63.6%**	**59.6%**	**59.4%**	**59.1%**	**59.6%**	
Total Hired Labor	**$27.17**	**$33.20**	**$29.59**	**$26.83**	**$29.22**	**$28.21**	**3.8%**
Total Hired Labor Costs ($/cwt.)	**$1.52**	**$2.22**	**$1.64**	**$1.47**	**$1.64**	**$1.57**	**3.3%**
Total Labor Costs (% of total cost)	**10.9%**	**11.0%**	**10.1%**	**8.9%**	**10.1%**	**9.5%**	
Herd Replacement	**$37.24**	**$30.84**	**$39.39**	**$43.44**	**$41.74**	**$41.48**	**11.4%**
Less: Calf. Income ($/cow/month)	**$12.96**	**$12.83**	**$12.25**	**$11.82**	**$11.80**	**$12.00**	**-7.4%**
Total Herd Replacement	**$24.28**	**$18.01**	**$27.14**	**$31.61**	**$29.94**	**$29.48**	**21.4%**
Total Replacement Costs ($/cwt.)	**$1.35**	**$1.21**	**$1.50**	**$1.74**	**$1.68**	**$1.64**	**20.8%**
Total Replacement Costs (% of total cost)	**9.7%**	**10.2%**	**13.5%**	**14.4%**	**14.4%**	**9.9%**	
Operating Costs							
a. Utilities	$5.08	$7.53	$5.57	$5.06	$5.12	$5.31	4.7%
b. Supplies	$8.83	$9.05	$9.84	$9.66	$7.65	$9.55	8.1%
c. Veterinary & Medicine	$7.10	$4.99	$7.37	$6.97	$5.69	$6.96	-2.0%
d. Outside Services	$3.59	$2.71	$4.08	$3.85	$3.74	$3.89	8.5%
e. Repairs & Maintenance	$5.94	$7.18	$6.80	$6.97	$6.08	$6.84	15.2%
f. Miscellaneous	$1.77	$1.71	$1.68	$2.56	$1.93	$2.16	22.2%
g. Bedding & Manure Haul	$1.39	$2.75	$1.35	$1.32	$2.48	$1.46	5.4%
h. Fuel & Oil	$2.78	$4.38	$3.35	$3.92	$3.13	$3.65	31.3%
i. Interest Expense	$2.38	$0.67	$0.88	$1.80	$2.00	$1.45	-39.2%
j. R E Lease Expense	$2.82	$1.56	$2.56	$4.02	$5.55	$3.54	25.7%
k. Depreciation	$5.82	$4.78	$5.92	$6.58	$3.33	$6.02	3.5%
l. Taxes & Insurance	$1.70	$1.64	$1.80	$1.74	$1.78	$1.76	3.6%
Total Operating Costs	**$49.20**	**$48.95**	**$51.18**	**$54.45**	**$48.47**	**$52.61**	**6.9%**
Total Operating Costs ($/cwt.)	**$2.74**	**$3.28**	**$2.84**	**$2.99**	**$2.72**	**$2.92**	**6.4%**
Total Operating Costs (% of total costs)	**19.7%**	**16.2%**	**17.5%**	**18.0%**	**16.7%**	**17.7%**	
Milk Marketing Costs							
a. Hauling	$5.90	$6.69	$6.71	$6.13	$7.62	$6.48	9.8%
b. State Assessments	$2.31	$2.32	$2.38	$2.36	$2.39	$2.37	2.5%
c. Federal Assessments & Misc. Ded.	$0.94	$0.72	$0.92	$1.01	$0.93	$0.96	2.1%
Total Milk Marketing Costs	**$9.16**	**$9.73**	**$10.02**	**$9.50**	**$10.94**	**$9.81**	**7.2%**
Total Milk Marketing Costs ($/cwt.)	**$0.51**	**$0.65**	**$0.56**	**$0.52**	**$0.61**	**$0.54**	**6.7%**
Total Milk Marketing Costs (% of total costs)	**3.7%**	**3.2%**	**3.4%**	**3.1%**	**3.8%**	**3.3%**	
Total Cost ($/Cow/Month)	**$250.35**	**$301.59**	**$291.65**	**$301.71**	**$289.98**	**$297.03**	**18.6%**
Total Cost ($/cwt)	**$13.96**	**$20.21**	**$16.18**	**$16.58**	**$16.26**	**$16.48**	**18.1%**
Return on Investment and Management							
a. Allowance: Return on Investment ($/cwt.)	$1.09	$1.58	$1.31	$1.35	$1.06	$1.33	22.0%
b. Allowance: Return on Management ($/cwt.)	$0.72	$0.71	$0.68	$0.67	$0.68	$0.67	-6.9%
Total Costs and Allowances ($/cwt)	**$15.77**	**$22.50**	**$18.17**	**$18.60**	**$18.00**	**$18.48**	**17.2%**
Milk Production Data							
a. Milk Sold/Total Cow/Month/ (cwt.)	17.93	14.92	18.03	18.19	17.83	18.02	0.5%
b. Lbs Milk Sold/milk cow/day	68.41	57.23	68.57	69.02	66.83	68.37	-0.1%
f. Fat Test %	3.72%	3.80%	3.83%	3.66%	3.52%	3.72%	
g. SNF Test %	8.83%	8.87%	8.88%	8.81%	8.73%	8.83%	
Related Data							
l. Total Cows	1,148	300	1,050	1,682	1,203	1,239	19.7%
m. Average Total Investment per Cow	$2,827	$2,757	$2,914	$3,079	$2,113	$2,931	3.7%
Milk Volume Percentages	100.00%	2.55%	36.92%	52.32%	8.21%	100.00%	

California 5-Year Production Cost Summary

California 5-Year Production Cost Summary

All costs: per cow per month, unless noted	2004 Average	2005 Average	2006 Average	2007 Average	2008 Average
Number of Herds	196	180	179	166	157
Feed Costs					
a. Dry Roughage	$30.17	$31.66	$32.60	$37.92	$48.10
b. Wet Feed & Wet Roughage	$17.64	$20.18	$21.76	$25.57	$32.63
c. Concentrates	$55.91	$58.53	$59.42	$69.61	$86.84
d. Minerals & Supplements	$6.47	$6.38	$6.54	$6.67	$7.98
e. Pasture	$0.42	$0.49	$0.50	$0.79	$1.37
Total Feed Costs	**$110.62**	**$117.24**	**$120.83**	**$140.55**	**$176.92**
Total Feed Costs ($/cwt.)	**$6.31**	**$6.59**	**$6.84**	**$7.84**	**$9.82**
Total Feed Costs (% of total Cost)	**49.5%**	**49.1%**	**54.1%**	**56.1%**	**59.6%**
Total Hired Labor	**$26.84**	**$27.46**	**$26.93**	**$27.17**	**$28.21**
Total Hired Labor Costs ($/cwt.)	**$1.53**	**$1.54**	**$1.53**	**$1.52**	**$1.57**
Total Labor Costs (%of total cost)	**12.0%**	**11.5%**	**12.1%**	**10.9%**	**9.5%**
Herd Replacement	**$29.11**	**$32.54**	**$34.94**	**$37.24**	**$41.48**
Less: Calf. Income ($/cow/month)	**$14.00**	**$17.44**	**$15.41**	**$12.96**	**$12.00**
Total Herd Replacement	**$15.11**	**$15.10**	**$19.53**	**$24.28**	**$29.48**
Total Replacement Costs ($/cwt.)	**$0.86**	**$0.85**	**$1.11**	**$1.35**	**$1.64**
Total Replacement Costs (% of total cost)	**7.5%**	**7.0%**	**8.7%**	**9.7%**	**9.9%**
Total Operating Costs	**$41.44**	**$45.92**	**$47.00**	**$49.20**	**$52.61**
Total Operating Costs ($/cwt.)	**$2.36**	**$2.58**	**$2.66**	**$2.74**	**$2.92**
Total Operating Costs (% of total costs)	**20.5%**	**21.4%**	**21.1%**	**19.7%**	**17.7%**
Milk Marketing Costs					
a. Hauling	$4.86	$5.26	$5.62	$5.90	$6.48
b. State Assessments	$2.35	$2.35	$2.35	$2.31	$2.37
c. Federal Assessments & Misc. Ded.	$0.95	$0.95	$0.94	$0.94	$0.96
Total Milk Marketing Costs	**$8.16**	**$8.55**	**$8.90**	**$9.16**	**$9.81**
Total Milk Marketing Costs ($/cwt.)	**$0.47**	**$0.48**	**$0.50**	**$0.51**	**$0.54**
Total Milk Marketing Costs (% of total costs)	**4.0%**	**3.6%**	**4.0%**	**3.7%**	**3.3%**
Total Cost ($/Cow/Month)	**$202.17**	**$214.27**	**$223.19**	**$250.35**	**$297.03**
Total Cost ($/cwt)	**$11.53**	**$12.05**	**$12.64**	**$13.96**	**$16.48**
Milk Production Data					
a. Milk Sold/Total Cow/Month/ (cwt.)	17.54	17.78	17.66	17.93	18.02
b. Lbs Milk Sold/milk cow/day	66.74	67.68	67.17	68.41	68.37
c. Gross Milk Receipts ($/cwt.)	$14.94	$14.15	$11.83	$18.33	$17.14
d. Mailbox Price ($/cwt.)	$14.79	$13.95	$11.58	$17.82	$16.66
f. Fat Test %	3.70%	3.70%	3.72%	3.72%	3.72%
g. SNF Test %	8.80%	8.81%	8.83%	8.83%	8.83%
h. Lbs Fat Sold/milk cow/month	75.1	76.1	76.1	77.4	77.5
i. Lbs SNF Sold/milk cow/month	178.7	181.3	180.3	183.8	184.2
j. Percent Quota	N/A	N/A	32.1%	30.5%	29.2%
Related Data					
a. Percent Dry Cows	14%	14%	13%	14%	14%
b. Yearly Cull Rate	35%	34%	32%	34%	37%
c. Avg. Value (/Drop Bull Calf)	$102.78	$135.28	$108.58	$44.46	$11.40
d. Milk Cow Alfalfa Hay Price ($/ton)	$142.87	$163.79	$169.17	$187.25	$235.96
e. Grain, Mnrls & Splmnts ($/ton)	$161.65	$163.57	$172.55	$211.61	$271.04
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.7	29.6	29.7	28.4	27.7
g. Milkers ($/hr with benefits & taxes)	$13.19	$13.33	$13.29	$13.70	$13.91
h. Total Labor ($/hr)	N/A	N/A	$13.80	$14.30	$14.60
i. Milk Cow Feed Costs ($/Cow/Day)	$3.92	$4.15	$4.26	$4.98	$6.23
j. Milk Cow Feed Costs ($/cwt.)	$5.87	$6.13	$6.35	$7.28	$9.12
k. Milk Cows	817	866	914	989	1,070
l. Total Cows	946	1,002	1,058	1,148	1,239
m. Average Total Investment per Cow	N/A	N/A	$2,788	$2,827	$2,931

California Quarterly Production Cost Summary

California Quarterly Production Cost Summary

All costs: per cow per month, unless noted	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	2008 Average
Number of Herds	166	159	159	157	
Feed Costs					
a. Dry Roughage	$42.69	$45.92	$50.79	$52.63	$48.10
b. Wet Feed & Wet Roughage	$28.92	$31.94	$32.97	$36.97	$32.63
c. Concentrates	$85.45	$91.03	$87.80	$84.03	$86.84
d. Minerals & Supplements	$6.71	$7.41	$8.59	$8.59	$7.98
e. Pasture	$0.56	$2.13	$1.85	$1.85	$1.37
Total Feed Costs	**$164.33**	**$178.43**	**$181.98**	**$184.07**	**$176.92**
Total Feed Costs ($/cwt.)	**$8.98**	**$9.59**	**$10.37**	**$10.43**	**$9.82**
Total Feed Costs (% of total Cost)	**58.5%**	**59.4%**	**60.4%**	**60.2%**	**59.6%**
Total Hired Labor	**$27.25**	**$28.17**	**$28.32**	**$28.76**	**$28.21**
Total Hired Labor Costs ($/cwt.)	**$1.49**	**$1.51**	**$1.61**	**$1.63**	**$1.57**
Total Labor Costs (%of total cost)	**9.7%**	**9.4%**	**9.4%**	**9.4%**	**9.5%**
Herd Replacement	**$41.65**	**$42.22**	**$41.59**	**$40.39**	**$41.48**
Less: Calf Income ($/Cow/Month)	**$12.66**	**$11.04**	**$13.72**	**$10.22**	**$12.00**
Total Herd Replacement	**$28.99**	**$31.18**	**$27.87**	**$30.17**	**$29.48**
Total Replacement Costs ($/cwt.)	**$1.58**	**$1.68**	**$1.59**	**$1.71**	**$1.64**
Total Replacement Costs (% of total cost)	**10.3%**	**10.4%**	**9.3%**	**13.2%**	**9.9%**
Total Operating Costs	**$50.70**	**$52.39**	**$53.12**	**$53.19**	**$52.61**
Total Operating Costs ($/cwt.)	**$2.77**	**$2.82**	**$3.03**	**$3.01**	**$2.92**
Total Operating Costs (%of total costs)	**18.0%**	**17.4%**	**17.6%**	**17.4%**	**17.7%**
Milk Marketing Costs					
a. Hauling	$6.39	$6.65	$6.60	$6.36	$6.48
b. State Assessments	$2.25	$2.48	$2.35	$2.37	$2.37
c. Federal Assessments & Misc. Ded.	$0.99	$1.01	$0.93	$0.92	$0.96
Total Milk Marketing Costs	**$9.63**	**$10.15**	**$9.89**	**$9.64**	**$9.81**
Total Milk Marketing Costs ($/cwt.)	**$0.53**	**$0.55**	**$0.56**	**$0.55**	**$0.54**
Total Milk Marketing Costs (% of total costs)	3.4%	3.4%	3.3%	3.2%	3.3%
Total Cost ($/Cow/Month)	**$280.90**	**$300.33**	**$301.17**	**$305.84**	**$297.03**
Total Cost ($/cwt)	**$15.34**	**$16.14**	**$17.17**	**$17.33**	**$16.48**
Milk Production Data					
a. Milk Sold/Total Cow/Month/ (cwt.)	18.31	18.60	17.54	17.64	18.02
b. Lbs Milk Sold/milk cow/day	69.07	70.79	66.62	67.04	68.37
c. Gross Milk Receipts ($/cwt)	$17.90	$17.65	$17.60	$15.32	$17.14
d. Mailbox Price ($/cwt)	$17.50	$17.10	$17.05	$14.99	$16.66
f. Fat Test %	3.80%	3.67%	3.63%	3.78%	3.72%
g. SNF Test %	8.87%	8.81%	8.77%	8.90%	8.83%
h. Lbs Fat Sold/milk cow/month	80	79	74	78	77
i. Lbs SNF Sold/milk cow/month	186	189	179	183	184
j. Percent Quota	28%	28%	30%	29%	29%
Related Data					
a. Percent Dry Cows	13%	13%	14%	14%	14%
b. Yearly Cull Rate	34%	36%	36%	36%	37%
c. Avg. Value (/Drop Bull Calf)	$8.56	$10.90	$13.82	$12.12	$11.40
d. Milk Cow Alfalfa Hay Price ($/ton)	$208.63	$233.38	$251.54	$250.78	$235.96
e. Grain, Mnrls & Splmnts ($/ton)	$254.21	$278.34	$284.88	$280.53	$271.04
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.73	28.28	26.84	27.21	27.71
g. Milkers ($/hr with benefits & taxes)	$13.67	$13.81	$13.92	$13.97	$13.91
h. Total Labor ($/hr)	$14.34	$14.50	$14.65	$14.71	$14.60
i. Milk Cow Feed Costs ($/Cow/Day)	$5.82	$6.31	$6.37	$6.47	$6.23
j. Milk Cow Feed Costs ($/cwt.)	$8.44	$8.91	$9.57	$9.64	$9.12
k. Milk Cows	1,051	1,058	1,066	1,077	1,070
l. Total Cows	1,204	1,222	1,243	1,256	1,239
m. Average Total Investment per Cow	$2,851	$2,872	$2,897	$2,948	$2,931

North Coast Cost Comparison

North Coast Production Cost Summary, 2008

All costs: per cow per month, unless noted	2007 Average	Organic	Conventional	2008 Average	Percent Change
Number of Herds	15	7	8	15	
Feed Costs					
a. Dry Roughage	$49.14	$60.70	$58.77	$59.54	21.2%
b. Wet Feed & Wet Roughage	$7.08	$15.66	$8.68	$11.45	61.8%
c. Concentrates	$77.08	$105.73	$82.62	$91.80	19.1%
d. Minerals & Supplements	$1.93	$2.04	$1.96	$1.99	3.1%
e. Pasture	$20.78	$32.20	$23.45	$26.92	29.6%
Total Feed Costs	**$156.00**	**$216.32**	**$175.47**	**$191.70**	**22.9%**
Total Feed Costs ($/cwt.)	**$10.48**	**$16.23**	**$10.98**	**$12.84**	**22.6%**
Total Feed Costs (% of total Cost)	**60.1%**	**68.6%**	**60.0%**	**63.6%**	
Total Hired Labor	**$30.16**	**$29.15**	**$35.87**	**$33.20**	**10.1%**
Total Hired Labor Costs ($/cwt.)	**$2.03**	**$2.19**	**$2.24**	**$2.22**	**9.8%**
Total Labor Costs (%of total cost)	**11.6%**	**9.2%**	**12.3%**	**11.0%**	
Herd Replacement	**$30.16**	**$27.67**	**$32.93**	**$30.84**	**2.3%**
Less: Calf. Income ($/cow/month)	**$12.06**	**$13.02**	**$12.71**	**$12.83**	**6.4%**
Total Herd Replacement	**$18.09**	**$14.65**	**$20.23**	**$18.01**	**-0.5%**
Total Replacement Costs ($/cwt.)	**$1.22**	**$1.10**	**$1.27**	**$1.21**	**-0.7%**
Total Replacement Costs (%of total cost)	**7.0%**	**8.8%**	**11.3%**	**10.2%**	
Total Operating Costs	**$46.00**	**$47.97**	**$49.59**	**$48.95**	**6.41%**
Total Operating Costs ($/cwt.)	**$3.09**	**$3.60**	**$3.10**	**$3.28**	**6.17%**
Total Operating Costs (%of total costs)	**17.7%**	**15.2%**	**16.9%**	**16.2%**	
Milk Marketing Costs					
a. Hauling	$6.12	$4.39	$8.21	$6.69	9.3%
b. State Assessments	$2.30	$2.13	$2.45	$2.32	1.1%
c. Federal Assessments & Misc. Ded.	$0.77	$0.55	$0.83	$0.72	-6.3%
Total Milk Marketing Costs	**$9.18**	**$7.08**	**$11.48**	**$9.73**	**6.0%**
Total Milk Marketing Costs ($/cwt.)	**$0.62**	**$0.53**	**$0.72**	**$0.65**	**5.7%**
Total Milk Marketing Costs (% of total costs)	**3.5%**	**2.2%**	**3.9%**	**3.2%**	
Total Cost ($/Cow/Month)	**$259.43**	**$315.16**	**$292.64**	**$301.59**	**16.25%**
Total Cost ($/cwt)	**$17.42**	**$23.65**	**$18.31**	**$20.21**	**15.98%**
Milk Production Data					
a. Milk Sold/Total Cow/Month/ (cwt.)	14.89	13.32	15.98	14.92	0.2%
b. Lbs Milk Sold/milk cow/day	57.82	51.51	60.94	57.23	-1.0%
c. Gross Milk Receipts ($/cwt)	$20.79	$27.17	$17.66	$21.03	1.2%
d. Mailbox Price ($/cwt)	$20.50	$27.31	$17.11	$20.73	1.1%
f. Fat Test %	3.85%	3.92%	3.74%	3.80%	
g. SNF Test %	8.87%	8.87%	8.87%	8.87%	
h. Lbs Fat Sold/milk cow/month	68	62	69	66	-1.9%
i. Lbs SNF Sold/milk cow/month	156	139	165	155	-0.7%
j. Percent Quota	53%	52%	56%	54%	
Related Data					
a. Percent Dry Cows	15%	15%	14%	14%	
b. Yearly Cull Rate	36%	28%	39%	34%	
c. Avg. Value (/Drop Bull Calf)	$37.94	$12.60	$13.71	$13.27	-65.0%
d. Milk Cow Alfalfa Hay Price ($/ton)	$199.20	$286.50	$231.13	$250.90	26.0%
e. Grain, Mnrls & Splmnts ($/ton)	$308.18	$490.29	$307.00	$392.53	27.4%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	21.48	16.98	21.05	19.45	-9.5%
g. Milkers ($/hr with benefits & taxes)	$12.56	$13.42	$12.22	$12.68	1.0%
h. Total Labor ($/hr)	$12.54	$13.59	$12.45	$12.82	2.3%
i. Milk Cow Feed Costs ($/Cow/Day)	$5.00	$6.85	$5.52	$6.04	20.8%
j. Milk Cow Feed Costs ($/cwt.)	$8.65	$13.30	$9.05	$10.56	22.0%
k. Milk Cows	263	216	291	256	-2.6%
l. Total Cows	311	255	339	300	-3.6%
m. Average Total Investment per Cow	$2,558	$2,910	$2,657	$2,757	7.8%

North Valley Cost Comparison

North Valley Producton Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Average	Under 400	401 700	701 1200	1201 Plus	2008 Average	Percent Change
Number of Herds	76	17	22	13	20	72	
Feed Costs							
a. Dry Roughage	$34.11	$44.81	$41.90	$45.17	$42.37	$42.87	25.7%
b. Wet Feed & Wet Roughage	$27.92	$27.97	$32.35	$35.64	$35.96	$34.87	24.9%
c. Concentrates	$70.48	$91.31	$94.33	$93.89	$82.13	$86.52	22.8%
d. Minerals & Supplements	$8.33	$3.90	$7.69	$9.94	$7.36	$7.63	-8.4%
e. Pasture	$0.69	$1.80	$7.37	$3.07	$0.06	$1.84	165.9%
Total Feed Costs	**$141.54**	**$169.79**	**$183.63**	**$187.70**	**$167.87**	**$173.72**	**22.7%**
Total Feed Costs ($/cwt.)	**$7.84**	**$9.70**	**$10.27**	**$10.55**	**$9.24**	**$9.63**	**22.9%**
Total Feed Costs (% of total Cost)	**56.8%**	**56.7%**	**59.9%**	**60.9%**	**59.4%**	**59.6%**	
Total Hired Labor	**$29.15**	**$37.04**	**$30.80**	**$31.72**	**$28.06**	**$29.59**	**1.5%**
Total Hired Labor Costs ($/cwt.)	**$1.61**	**$2.12**	**$1.72**	**$1.78**	**$1.54**	**$1.64**	**1.6%**
Total Labor Costs (% of total cost)	**11.7%**	**12.4%**	**10.1%**	**10.3%**	**9.9%**	**10.1%**	
Herd Replacement	**$35.73**	**$37.91**	**$40.78**	**$39.59**	**$39.09**	**$39.39**	**10.2%**
Less: Calf. Income ($/cow/month)	**$12.93**	**$11.31**	**$12.03**	**$11.81**	**$12.51**	**$12.25**	**-5.3%**
Total Herd Replacement	**$22.80**	**$26.61**	**$28.75**	**$27.78**	**$26.59**	**$27.14**	**19.0%**
Total Replacement Costs ($/cwt.)	**$1.26**	**$1.52**	**$1.61**	**$1.56**	**$1.46**	**$1.50**	**19.1%**
Total Replacement Costs (% of total cost)	**9.1%**	**12.7%**	**13.3%**	**12.8%**	**13.8%**	**13.5%**	
Total Operating Costs	**$46.20**	**$52.51**	**$52.91**	**$50.71**	**$50.72**	**$51.18**	**10.78%**
Total Operating Costs ($/cwt.)	**$2.56**	**$3.00**	**$2.96**	**$2.85**	**$2.79**	**$2.84**	**10.90%**
Total Operating Costs (% of total costs)	**18.5%**	**17.5%**	**17.3%**	**16.4%**	**17.9%**	**17.5%**	
Milk Marketing Costs							
a. Hauling	$6.25	$9.78	$6.95	$7.25	$6.24	$6.71	7.4%
b. State Assessments	$2.35	$2.72	$2.46	$2.40	$2.33	$2.38	1.5%
c. Federal Assessments & Misc. Ded.	$0.95	$0.97	$0.91	$0.91	$0.92	$0.92	-3.1%
Total Milk Marketing Costs	**$9.55**	**$13.47**	**$10.31**	**$10.56**	**$9.49**	**$10.02**	**4.9%**
Total Milk Marketing Costs ($/cwt.)	**$0.53**	**$0.77**	**$0.58**	**$0.59**	**$0.52**	**$0.56**	**5.0%**
Total Milk Marketing Costs (% of total costs)	**3.8%**	**4.5%**	**3.4%**	**3.4%**	**3.4%**	**3.4%**	
Total Cost ($/Cow/Month)	**$249.24**	**$299.41**	**$306.40**	**$308.47**	**$282.73**	**$291.65**	**17.02%**
Total Cost ($/cwt)	**$13.81**	**$17.10**	**$17.13**	**$17.34**	**$15.55**	**$16.18**	**17.14%**
Milk Production Data							
a. Milk Sold/Total Cow/Month/ (cwt.)	18.05	17.51	17.89	17.79	18.18	18.03	-0.1%
b. Lbs Milk Sold/milk cow/day	68.95	66.46	68.39	67.66	69.04	68.57	-0.5%
c. Gross Milk Receipts ($/cwt)	$18.62	$17.36	$17.71	$18.22	$17.29	$17.51	-6.0%
d. Mailbox Price ($/cwt)	$18.16	$16.53	$17.40	$17.89	$17.54	$17.52	-3.6%
f. Fat Test %	3.81%	3.75%	3.75%	3.76%	3.88%	3.83%	
g. SNF Test %	8.87%	8.81%	8.84%	8.83%	8.92%	8.88%	
h. Lbs Fat Sold/milk cow/month	80	76	78	78	82	80	0.0%
i. Lbs SNF Sold/milk cow/month	186	179	184	182	188	186	0.0%
j. Percent Quota	35%	50%	36%	42%	26%	31%	
Related Data							
a. Percent Dry Cows	14%	14%	14%	14%	14%	14%	
b. Yearly Cull Rate	33%	37%	36%	37%	38%	38%	
c. Avg. Value (/Drop Bull Calf)	$42.55	$13.82	$11.96	$11.55	$8.51	$9.83	-76.9%
d. Milk Cow Alfalfa Hay Price ($/ton)	$189.38	$223.38	$231.87	$241.34	$236.43	$235.61	24.4%
e. Grain, Mnrls & Splmnts ($/ton)	$219.90	$272.72	$319.03	$299.20	$249.18	$285.11	29.7%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.99	26.68	26.90	27.43	27.56	27.38	-5.5%
g. Milkers ($/hr with benefits & taxes)	$14.58	$14.93	$14.82	$13.93	$15.10	$14.83	1.7%
h. Total Labor ($/hr)	$14.93	$14.92	$14.81	$14.61	$15.69	$15.29	2.4%
i. Milk Cow Feed Costs ($/Cow/Day)	$5.03	$6.02	$6.34	$6.60	$5.96	$6.12	21.7%
j. Milk Cow Feed Costs ($/cwt.)	$7.30	$9.06	$9.27	$9.76	$8.63	$8.93	22.4%
k. Milk Cows	755	214	490	790	2,024	905	19.8%
l. Total Cows	878	248	571	916	2,345	1,050	19.6%
m. Average Total Investment per Cow	$2,673	$3,005	$2,891	$2,973	$2,897	$2,914	9.0%

South Valley Cost Comparison

South Valley Production Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Average	Under 1000	1001 1400	1401 2100	2101 Plus	2008 Average	Percent Change
Number of Herds	68	17	15	15	16	63	
Feed Costs							
a. Dry Roughage	$38.37	$50.15	$48.20	$48.34	$48.61	$48.64	26.7%
b. Wet Feed & Wet Roughage	$26.49	$33.56	$32.68	$31.72	$36.35	$34.28	29.4%
c. Concentrates	$69.48	$85.97	$80.53	$87.57	$90.93	$87.78	26.3%
d. Minerals & Supplements	$5.86	$6.60	$8.79	$9.97	$8.33	$8.63	47.3%
e. Pasture	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	
Total Feed Costs	**$140.20**	**$176.28**	**$170.20**	**$177.60**	**$184.21**	**$179.32**	**27.9%**
Total Feed Costs ($/cwt.)	**$7.80**	**$10.94**	**$9.99**	**$9.99**	**$9.55**	**$9.86**	**26.4%**
Total Feed Costs (% of total Cost)	**55.8%**	**61.7%**	**58.2%**	**60.1%**	**59.1%**	**59.4%**	
Total Hired Labor	**$25.61**	**$25.22**	**$27.48**	**$23.54**	**$28.66**	**$26.83**	**4.8%**
Total Hired Labor Costs ($/cwt.)	**$1.42**	**$1.57**	**$1.61**	**$1.32**	**$1.49**	**$1.47**	**3.6%**
Total Labor Costs (% of total cost)	**10.2%**	**8.8%**	**9.4%**	**8.0%**	**9.2%**	**8.9%**	
Herd Replacement	**$38.30**	**$38.85**	**$43.23**	**$39.46**	**$46.61**	**$43.44**	**13.4%**
Less: Calf. Income ($/cow/month)	**$13.08**	**$10.58**	**$11.18**	**$11.14**	**$12.69**	**$11.82**	**-9.6%**
Total Herd Replacement	**$25.23**	**$28.27**	**$32.04**	**$28.32**	**$33.92**	**$31.61**	**25.3%**
Total Replacement Costs ($/cwt.)	**$1.40**	**$1.76**	**$1.88**	**$1.59**	**$1.76**	**$1.74**	**23.9%**
Total Replacement Costs (% of total cost)	**10.0%**	**13.6%**	**14.8%**	**13.4%**	**14.9%**	**14.4%**	
Total Operating Costs	**$51.69**	**$47.57**	**$54.10**	**$56.58**	**$55.00**	**$54.45**	**5.33%**
Total Operating Costs ($/cwt.)	**$2.87**	**$2.95**	**$3.17**	**$3.18**	**$2.85**	**$2.99**	**4.11%**
Total Operating Costs (% of total costs)	**20.6%**	**16.6%**	**18.5%**	**19.1%**	**17.6%**	**18.0%**	
Milk Marketing Costs							
a. Hauling	$5.38	$5.46	$5.54	$6.18	$6.47	$6.13	14.0%
b. State Assessments	$2.28	$2.20	$2.24	$2.31	$2.46	$2.36	3.4%
c. Federal Assessments & Misc. Ded.	$0.95	$0.91	$1.07	$0.98	$1.03	$1.01	6.5%
Total Milk Marketing Costs	**$8.61**	**$8.57**	**$8.86**	**$9.47**	**$9.95**	**$9.50**	**10.3%**
Total Milk Marketing Costs ($/cwt.)	**$0.48**	**$0.53**	**$0.52**	**$0.53**	**$0.52**	**$0.52**	**9.1%**
Total Milk Marketing Costs (% of total costs)	**3.4%**	**3.0%**	**3.0%**	**3.2%**	**3.2%**	**3.1%**	
Total Cost ($/Cow/Month)	**$251.34**	**$285.92**	**$292.68**	**$295.51**	**$311.75**	**$301.71**	**20.04%**
Total Cost ($/cwt)	**$13.98**	**$17.75**	**$17.17**	**$16.62**	**$16.16**	**$16.58**	**18.66%**
Milk Production Data							
a. Milk Sold/Total Cow/Month/ (cwt.)	17.98	16.11	17.04	17.78	19.30	18.19	1.2%
b. Lbs Milk Sold/milk cow/day	68.56	62.28	64.46	67.79	72.78	69.02	0.7%
c. Gross Milk Receipts ($/cwt)	$17.99	$16.77	$16.96	$16.85	$16.60	$16.73	-7.0%
d. Mailbox Price ($/cwt)	$17.43	$16.21	$16.39	$16.26	$15.62	$15.95	-8.5%
f. Fat Test %	3.68%	3.72%	3.81%	3.73%	3.57%	3.66%	
g. SNF Test %	8.82%	8.82%	8.85%	8.79%	8.81%	8.81%	
h. Lbs Fat Sold/milk cow/month	77	71	75	77	79	77	0.0%
i. Lbs SNF Sold/milk cow/month	184	168	174	182	195	185	0.9%
j. Percent Quota	23%	20%	19%	28%	24%	24%	
Related Data							
a. Percent Dry Cows	14%	15%	13%	14%	13%	14%	
b. Yearly Cull Rate	35%	33%	41%	35%	40%	38%	
c. Avg. Value (/Drop Bull Calf)	$47.05	$11.99	$10.56	$12.46	$15.47	$13.59	-71.1%
d. Milk Cow Alfalfa Hay Price ($/ton)	$186.64	$234.70	$236.32	$240.77	$235.21	$236.64	26.8%
e. Grain, Mnrls & Splmnts ($/ton)	$204.19	$272.23	$250.67	$259.51	$253.88	$259.41	27.0%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.35	25.93	26.98	28.81	29.29	28.42	0.2%
g. Milkers ($/hr with benefits & taxes)	$12.67	$11.68	$12.96	$12.21	$13.71	$12.97	2.4%
h. Total Labor ($/hr)	$13.47	$12.02	$13.97	$12.97	$14.56	$13.80	2.4%
i. Milk Cow Feed Costs ($/Cow/Day)	$4.98	$6.38	$6.01	$6.30	$6.50	$6.35	27.5%
j. Milk Cow Feed Costs ($/cwt.)	$7.27	$10.24	$9.33	$9.29	$8.93	$9.20	26.6%
k. Milk Cows	1,426	563	1,056	1,497	2,734	1,454	1.9%
l. Total Cows	1,654	664	1,218	1,741	3,144	1,682	1.7%
m. Average Total Investment per Cow	$3,047	$2,627	$3,282	$3,081	$3,105	$3,079	1.0%

Southern California Cost Comparison

Southern California Production Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Average	2008 Average	Percent Change
Number of Herds	8	7	
Feed Costs			
a. Dry Roughage	$47.86	$64.70	35.2%
b. Wet Feed & Wet Roughage	$15.57	$18.64	19.7%
c. Concentrates	$64.42	$80.76	25.4%
d. Minerals & Supplements	$5.95	$7.31	22.7%
e. Pasture	$0.00	$0.00	
Total Feed Costs	**$133.81**	**$171.41**	**28.1%**
Total Feed Costs ($/cwt.)	**$7.41**	**$9.61**	**29.7%**
Total Feed Costs (% of total Cost)	**54.3%**	**59.1%**	
Total Hired Labor	**$27.42**	**$29.22**	**6.6%**
Total Hired Labor Costs ($/cwt.)	**$1.52**	**$1.64**	**7.9%**
Total Labor Costs (%of total cost)	**11.1%**	**10.1%**	
Herd Replacement	**$39.27**	**$41.74**	**6.3%**
Less: Calf. Income ($/cow/month)	**$12.65**	**$11.80**	**-6.7%**
Total Herd Replacement	**$26.62**	**$29.94**	**12.5%**
Total Replacement Costs ($/cwt.)	**$1.47**	**$1.68**	**13.9%**
Total Replacement Costs (% of total cost)	**10.8%**	**14.4%**	
Total Operating Costs	**$47.68**	**$48.47**	**1.64%**
Total Operating Costs ($/cwt.)	**$2.64**	**$2.72**	**2.91%**
Total Operating Costs (% of total costs)	**19.4%**	**16.7%**	
Milk Marketing Costs			
a. Hauling	$7.55	$7.62	0.8%
b. State Assessments	$2.35	$2.39	1.8%
c. Federal Assessments & Misc. Ded.	$0.93	$0.93	0.0%
Total Milk Marketing Costs	**$10.83**	**$10.94**	**1.0%**
Total Milk Marketing Costs ($/cwt.)	**$0.60**	**$0.61**	**2.2%**
Total Milk Marketing Costs (% of total costs)	**4.4%**	**3.8%**	
Total Cost ($/Cow/Month)	**$246.36**	**$289.98**	**17.70%**
Total Cost ($/cwt)	**$13.65**	**$16.26**	**19.17%**
Milk Production Data			
a. Milk Sold/Total Cow/Month/ (cwt.)	18.05	17.83	-1.2%
b. Lbs Milk Sold/milk cow/day	68.39	66.83	-2.3%
c. Gross Milk Receipts ($/cwt)	$18.44	$16.88	-8.5%
d. Mailbox Price ($/cwt)	$17.93	$16.07	-10.3%
f. Fat Test %	3.55%	3.52%	
g. SNF Test %	8.75%	8.73%	
h. Lbs Fat Sold/milk cow/month	74	72	-3.0%
i. Lbs SNF Sold/milk cow/month	182	178	-2.2%
j. Percent Quota	46%	46%	
Related Data			
a. Percent Dry Cows	13%	13%	
b. Yearly Cull Rate	34%	34%	
c. Avg. Value (/Drop Bull Calf)	$38.84	$3.96	-89.8%
d. Milk Cow Alfalfa Hay Price ($/ton)	$178.40	$228.59	28.1%
e. Grain, Mnrls & Splmnts ($/ton)	$192.55	$244.10	26.8%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	27.85	27.19	-2.4%
g. Milkers ($/hr with benefits & taxes)	$16.61	$16.14	-2.9%
h. Total Labor ($/hr)	$17.15	$17.18	0.2%
i. Milk Cow Feed Costs ($/Cow/Day)	$4.69	$6.00	28.1%
j. Milk Cow Feed Costs ($/cwt.)	$6.85	$8.98	31.1%
k. Milk Cows	905	1,053	16.3%
l. Total Cows	1,043	1,203	15.3%
m. Average Total Investment per Cow	$2,226	$2,113	-5.1%

Jersey Herds Summary

California Jersey herds experienced the same economic conditions in 2008 as the Holstein herds, in terms of higher feed costs. One advantage Jersey herds had is their mailbox price was less than one percent lower than 2007, while Holstein herds average mailbox price declined by 7.4 percent. The reason Jersey mailbox price stayed almost flat from a year ago is most of the milk produced went to cheese plants that paid a premium for the high test milk. Jersey herds were not immune from the base programs implemented by some cooperatives and proprietary plants.

Feed was the most volatile cost this year. Jersey herds in 2008, experienced feed costs that increased by 21.4 percent on a dollar per ton basis while Holstein herds increased by 25.7 percent. Consumption of grains, minerals, and supplements remained about the same for both breeds, compared to last year. The surprise is that the Jersey herds increased production per cow by 1.87 pounds of milk, whereas Holstein herds only increased production by .51 pounds of milk. When measuring income after feed cost for 2008, Jersey herds have a $3.05 per hundredweight of milk advantage over Holstein herds.

Based on CDFA Sample of Dairies	Holstein	Jersey
Milk Production Per Milk Cow, Per Day	71.39	55.31
Fat Test Percentage	3.60	4.61
Solids-Not-Fat Test Percentage	8.78	9.25

The average size of the Jersey herds on our survey increased in total cows in 2008. This was due to change in our sample of Jersey herds. Most herds did not grow due to the base plans in place by their processing plants, except for some who were in expansion mode before the base plans were started and the plants allowed them to complete their current projects.

Jersey Herd Comparison

California Jersey Production Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Average	2008 Average	Percent Change
Number of Herds	16	14	
Feed Costs			
a. Dry Roughage	$31.50	$38.68	22.8%
b. Wet Feed & Wet Roughage	$19.99	$25.52	27.7%
c. Concentrates	$60.22	$75.26	25.0%
d. Minerals & Supplements	$9.08	$7.71	-15.1%
e. Pasture	$0.99	$0.68	-31.7%
Total Feed Costs	**$121.78**	**$147.84**	**21.4%**
Total Feed Costs ($/cwt.)	**$8.87**	**$10.30**	**16.0%**
Total Feed Costs (% of total Cost)	**56.3%**	**58.9%**	
Total Hired Labor	**$25.42**	**$24.84**	**-2.3%**
Total Hired Labor Costs ($/cwt.)	**$1.85**	**$1.73**	**-6.6%**
Total Labor Costs (% of total cost)	**11.8%**	**9.9%**	
Herd Replacement	**$29.11**	**$31.80**	**9.3%**
Less: Calf. Income ($/cow/month)	**$10.87**	**$10.87**	**0.0%**
Total Herd Replacement	**$18.24**	**$20.94**	**14.8%**
Total Replacement Costs ($/cwt.)	**$1.33**	**$1.46**	**9.7%**
Total Replacement Costs (% of total cost)	**8.4%**	**12.7%**	
Total Operating Costs	**$44.61**	**$50.59**	**13.41%**
Total Operating Costs ($/cwt.)	**$3.25**	**$3.52**	**8.39%**
Total Operating Costs (% of total costs)	**20.6%**	**20.1%**	
Milk Marketing Costs			
a. Hauling	$3.78	$4.27	12.9%
b. State Assessments	$1.74	$1.85	6.4%
c. Federal Assessments & Misc. Ded.	$0.72	$0.76	5.2%
Total Milk Marketing Costs	**$6.24**	**$6.87**	**10.2%**
Total Milk Marketing Costs ($/cwt.)	**$0.45**	**$0.48**	**5.3%**
Total Milk Marketing Costs (% of total costs)	**2.9%**	**2.7%**	
Total Cost ($/Cow/Month)	**$216.28**	**$251.08**	**16.09%**
Total Cost ($/cwt)	**$15.76**	**$17.49**	**10.95%**
Milk Production Data			
a. Milk Sold/Total Cow/Month/ (cwt.)	13.72	14.36	4.6%
b. Lbs Milk Sold/milk cow/day	53.44	55.31	3.5%
c. Gross Milk Receipts ($/cwt)	$20.18	$18.42	-8.7%
d. Mailbox Price ($/cwt)	$19.91	$19.79	-0.6%
f. Fat Test %	4.67%	4.61%	
g. SNF Test %	9.24%	9.25%	
h. Lbs Fat Sold/milk cow/month	76	78	2.4%
i. Lbs SNF Sold/milk cow/month	150	156	3.9%
j. Percent Quota	5%	3%	
Related Data			
a. Percent Dry Cows	16%	15%	
b. Yearly Cull Rate	30%	32%	
c. Avg. Value (/Drop Bull Calf)	$2.53	$0.79	-68.6%
d. Milk Cow Alfalfa Hay Price ($/ton)	$196.11	$242.32	23.6%
e. Grain, Mnrls & Splmnts ($/ton)	$228.42	$257.79	12.9%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	25.24	25.42	0.7%
g. Milkers ($/hr with benefits & taxes)	$14.09	$14.00	-0.7%
h. Total Labor ($/hr)	$14.96	$15.02	0.4%
i. Milk Cow Feed Costs ($/Cow/Day)	$4.34	$5.26	21.3%
j. Milk Cow Feed Costs ($/cwt.)	$8.12	$9.52	17.2%
k. Milk Cows	1,103	1,474	33.7%
l. Total Cows	1,306	1,732	32.6%
m. Average Total Investment per Cow	$2,892	$2,914	0.8%

Holstein Herds Summary

The vast majority of California herds consist of one breed, the Holstein cow. Since the number of Holstein cows is so great, not surprisingly the Holstein Cost Comparison is very similar to the Statewide Cost Comparison. Milk volume is still the driving force behind the Holstein breed. The Holstein Comparison shows an advantage in monthly milk production, butterfat and solids-not-fat pounds per cow as compared to other herd types.

When compared to Jersey herds, Holsteins produce more pounds of fat and solids-not-fat per cow, per month. The fact that the Holstein produces more solids, by itself does not mean that Holstein herds are more profitable to milk. There are other things to consider like feed conversion, investment per cow, etc. that are not addressed.

Other advantages Holstein breeders have is more value in their day old calves as compared to Jersey herds. They also have a broader selection of genetics to choose from that many of the other breeds do not.

Based on CDFA Sample of Dairies	Holstein	Jersey
Milk Production Per Milk Cow, Per Day	71.39	55.31
Butter Fat Lbs. Per Milk Cow, Per Month	78.48	77.75
Solids-Not-Fat Lbs. Per Milk Cow, Per Month	191.14	155.98

In 2008, the cost of production for Holstein herds increased by 17 percent over the previous year. This is mainly due to higher feed costs.

Holstein Herd Comparison

California Holstein Production Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Average	Holstein 1-750	Holstein 751-1200	Holstein 1200 Plus	2008 Average	Percent Change
Number of Herds	130	48	21	49	118	
Feed Costs						
a. Dry Roughage	$38.94	$49.09	$48.20	$49.35	$49.16	26.2%
b. Wet Feed & Wet Roughage	$26.75	$30.67	$35.32	$35.37	$34.74	29.9%
c. Concentrates	$71.88	$97.47	$85.83	$88.07	$89.02	23.8%
d. Minerals & Supplements	$6.06	$6.68	$8.22	$8.39	$8.14	34.3%
e. Pasture	$0.66	$2.56	$0.00	$0.00	$0.34	-48.5%
Total Feed Costs	**$144.30**	**$186.46**	**$177.57**	**$181.18**	**$181.40**	**25.7%**
Total Feed Costs ($/cwt.)	**$7.73**	**$10.03**	**$9.81**	**$9.49**	**$9.60**	**24.2%**
Total Feed Costs (% of total Cost)	**56.0%**	**59.8%**	**58.3%**	**59.5%**	**59.4%**	
Total Hired Labor	**$27.41**	**$32.86**	**$31.37**	**$27.37**	**$28.63**	**4.5%**
Total Hired Labor Costs ($/cwt.)	**$1.47**	**$1.77**	**$1.73**	**$1.43**	**$1.52**	**3.2%**
Total Labor Costs (%of total cost)	**10.6%**	**10.5%**	**10.3%**	**9.0%**	**9.4%**	
Herd Replacement	**$38.61**	**$40.14**	**$43.30**	**$44.30**	**$43.61**	**13.0%**
Less: Calf. Income ($/cow/month)	**$13.40**	**$11.86**	**$11.84**	**$12.37**	**$12.23**	**-8.7%**
Total Herd Replacement	**$25.20**	**$28.29**	**$31.46**	**$31.93**	**$31.38**	**24.5%**
Total Replacement Costs ($/cwt.)	**$1.35**	**$1.52**	**$1.74**	**$1.67**	**$1.66**	**23.0%**
Total Replacement Costs (%of total cost)	**9.8%**	**12.9%**	**14.2%**	**14.5%**	**14.3%**	
Total Operating Costs	**$51.27**	**$52.42**	**$53.79**	**$54.00**	**$53.76**	**4.86%**
Total Operating Costs ($/cwt.)	**$2.75**	**$2.82**	**$2.97**	**$2.83**	**$2.84**	**3.57%**
Total Operating Costs (%of total costs)	**19.9%**	**16.8%**	**17.7%**	**17.7%**	**17.6%**	
Milk Marketing Costs						
a. Hauling	$5.99	$7.96	$6.98	$6.67	$6.88	14.8%
b. State Assessments	$2.40	$2.64	$2.42	$2.45	$2.47	3.1%
c. Federal Assessments & Misc. Ded.	$0.99	$0.96	$0.97	$1.04	$1.02	3.4%
Total Milk Marketing Costs	**$9.38**	**$11.56**	**$10.37**	**$10.16**	**$10.37**	**10.6%**
Total Milk Marketing Costs ($/cwt.)	**$0.50**	**$0.62**	**$0.57**	**$0.53**	**$0.55**	**9.2%**
Total Milk Marketing Costs (% of total costs)	**3.6%**	**3.7%**	**3.4%**	**3.3%**	**3.4%**	
Total Cost ($/Cow/Month)	**$257.56**	**$311.58**	**$304.56**	**$304.63**	**$305.55**	**18.63%**
Total Cost ($/cwt)	**$13.80**	**$16.76**	**$16.82**	**$15.95**	**$16.17**	**17.17%**
Milk Production Data						
a. Milk Sold/Total Cow/Month/ (cwt.)	18.66	18.59	18.11	19.10	18.90	1.2%
b. Lbs Milk Sold/milk cow/day	70.88	70.56	68.68	72.03	71.39	0.7%
c. Gross Milk Receipts ($/cwt)	$18.11	$17.03	$17.02	$16.69	$16.78	-7.4%
d. Mailbox Price ($/cwt)	$17.56	$16.34	$16.35	$15.95	$16.05	-8.6%
f. Fat Test %	3.62%	3.64%	3.68%	3.59%	3.60%	
g. SNF Test %	8.78%	8.79%	8.76%	8.78%	8.78%	
h. Lbs Fat Sold/milk cow/month	78	78	77	79	78	0.0%
i. Lbs SNF Sold/milk cow/month	189	189	183	193	191	1.0%
j. Percent Quota	33%	41%	42%	29%	32%	
Related Data						
a. Percent Dry Cows	13%	14%	14%	13%	13%	
b. Yearly Cull Rate	35%	37%	36%	37%	37%	
c. Avg. Value (/Drop Bull Calf)	$50.32	$12.86	$11.97	$13.58	$13.28	-73.6%
d. Milk Cow Alfalfa Hay Price ($/ton)	$186.83	$231.65	$231.74	$235.50	$234.40	25.5%
e. Grain, Mnrls & Splmnts ($/ton)	$219.03	$280.99	$258.39	$253.16	$265.41	21.2%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.63	28.46	27.62	28.76	28.57	-0.2%
g. Milkers ($/hr with benefits & taxes)	$13.36	$13.64	$13.93	$13.66	$13.69	2.5%
h. Total Labor ($/hr)	$14.02	$13.82	$14.86	$14.45	$14.41	2.8%
i. Milk Cow Feed Costs ($/Cow/Day)	$5.10	$6.57	$6.31	$6.39	$6.40	25.5%
j. Milk Cow Feed Costs ($/cwt.)	$7.20	$9.31	$9.19	$8.87	$8.97	24.6%
k. Milk Cows	1,034	370	853	2,008	1,136	9.9%
l. Total Cows	1,194	428	986	2,310	1,309	9.6%
m. Average Total Investment per Cow	$2,947	$2,924	$2,796	$3,045	$2,996	1.7%

Crossbred, Mixed-and-Other Herds Summary

This is the second year that the Cost of Production Unit has produced a cost comparison for crossbred herds and mixed-and-other herds. Having two years of information provides the opportunity to compare how costs have changed between years. The herds are defined as follows:

Most Crossbred Herds: herds that crossbreed a large percentage of Holstein cows with Montbeliarde, Swedish Red, or Red Dane breeds.

Most Mixed Herds: herds that milk a mixture of Holstein and Jersey cows, includes herds that are milking breeds other than Jersey or Holstein. Most herds in this category have a high percentage of Jersey cows.

Established crossbred herds find that they have a surplus of replacement animals. Many have been selling replacement heifers, routinely, throughout the year. These sales do not show in the yearly cull rate, as replacement heifers are not considered part of the herd until they freshen. The cull rate of 30 percent has not changed over the last two years and is significantly lower than the Holstein cull rate of 37 percent. Crossbreds have the lowest average replacement cost at $1.17 per hundredweight, second only to Jerseys at $1.46 per hundredweight of milk. This information supports the crossbred breeder's claim of longer cow life, higher conception rates, and higher calf survival rates than other herd types. Another interesting comparison is pounds of milk sold per milk cow per day. Crossbreds are producing an average 68.58 pounds of milk per day as compared to Holsteins producing an average 71.39 pounds per day. When compared to Holsteins, crossbreds have higher solids tests. As these herds mature over the next few years, it will be interesting to see if these scenarios stay true.

Based on CDFA Sample of Dairies	Crossbred	Holstein
Pounds of Milk Sold Per Milk Cow, Per Day	68.58	71.39
Fat Test Percentage	3.84	3.60
Solids-Not-Fat Test Percentage	8.93	8.78

Mixed-and-Other herds benefit in producing milk that has higher components. Mixed herds averaged 3.96 percent fat, 9.02 percent solids-not-fat, and gross milk receipts of $17.31 per hundredweight of milk, second only to Jersey herds.

Based on CDFA Sample of Dairies	Mixed	Jersey
Pounds of Milk Sold Per Milk Cow, Per Day	58.62	55.31
Fat Test Percentage	3.96	4.61
Solids-Not-Fat Test Percentage	9.02	9.25

Crossbred, Mixed-and-Other Herds Comparison

California Crossbred, Mixed-and-Other Herds Production Cost Comparison, 2008

All costs: per cow per month, unless noted	2007 Xbred	2008 Xbred	Percent Change	2007 Mixed & Other	2008 Mixed & Other	Percent Change
Number of Herds	7	7		7	6	
Feed Costs						
a. Dry Roughage	$27.86	$35.94	29.0%	$28.91	$43.47	50.4%
b. Wet Feed & Wet Roughage	$29.92	$37.65	25.8%	$29.12	$33.96	16.6%
c. Concentrates	$68.76	$80.56	17.9%	$57.51	$74.53	29.6%
d. Minerals & Supplements	$7.25	$9.81	-24.2%	$9.23	$8.89	-3.7%
e. Pasture	$2.53	$3.81	50.8%	$0.05	$0.43	
Total Feed Costs	**$136.32**	**$167.77**	**23.1%**	**$124.83**	**$161.27**	**29.2%**
Total Feed Costs ($/cwt.)	**$7.56**	**$9.58**	**26.7%**	**$8.23**	**$10.64**	**29.2%**
Total Feed Costs (% of total Cost)	**57.4%**	**60.6%**		**56.3%**	**60.5%**	
Total Hired Labor	**$29.53**	**$30.43**	**3.1%**	**$21.64**	**$24.56**	**13.5%**
Total Hired Labor Costs ($/cwt.)	**$1.64**	**$1.74**	**6.1%**	**$1.43**	**$1.62**	**13.5%**
Total Labor Costs (%of total cost)	**12.4%**	**11.0%**		**9.8%**	**9.2%**	
Herd Replacement	**$27.92**	**$31.89**	**14.2%**	**$38.91**	**$38.44**	**-1.2%**
Less: Calf. Income ($/cow/month)	**$13.31**	**$11.30**	**-15.1%**	**$10.11**	**$9.67**	**-4.3%**
Total Herd Replacement	**$14.61**	**$20.58**	**40.9%**	**$28.80**	**$28.76**	**-0.1%**
Total Replacement Costs ($/cwt.)	**$0.81**	**$1.17**	**45.1%**	**$1.90**	**$1.90**	**0.0%**
Total Replacement Costs (%of total cost)	**6.1%**	**11.5%**		**13.0%**	**14.4%**	
Total Operating Costs	**$46.87**	**$47.20**	**0.69%**	**$38.50**	**$42.76**	**11.04%**
Total Operating Costs ($/cwt.)	**$2.60**	**$2.69**	**3.68%**	**$2.54**	**$2.82**	**11.08%**
Total Operating Costs (%of total costs)	**19.7%**	**17.0%**		**17.4%**	**16.1%**	
Milk Marketing Costs						
a. Hauling	$7.04	$7.70	9.3%	$5.32	$6.06	13.9%
b. State Assessments	$2.32	$2.31	-0.3%	$1.98	$2.09	6.0%
c. Federal Assessments & Misc. Ded.	$0.93	$0.90	-3.1%	$0.84	$0.85	0.5%
Total Milk Marketing Costs	**$10.29**	**$10.91**	**6.0%**	**$8.14**	**$9.01**	**10.6%**
Total Milk Marketing Costs ($/cwt.)	**$0.57**	**$0.62**	**9.2%**	**$0.54**	**$0.59**	**10.6%**
Total Milk Marketing Costs (% of total costs)	**4.3%**	**3.9%**		**3.7%**	**3.4%**	
Total Cost ($/Cow/Month)	**$237.62**	**$276.89**	**16.53%**	**$221.92**	**$266.36**	**20.02%**
Total Cost ($/cwt)	**$13.17**	**$15.80**	**19.99%**	**$14.64**	**$17.57**	**20.06%**
Milk Production Data						
a. Milk Sold/Total Cow/Month/ (cwt.)	18.04	17.52	-2.9%	15.16	15.16	0.0%
b. Lbs Milk Sold/milk cow/day	69.56	68.58	-1.4%	59.30	58.62	-1.1%
c. Gross Milk Receipts ($/cwt)	$18.40	$17.11	-7.0%	$18.75	$17.31	-7.7%
d. Mailbox Price ($/cwt)	$17.91	$16.48	-8.0%	$18.50	$17.31	-6.5%
f. Fat Test %	3.80%	3.84%		4.05%	3.96%	
g. SNF Test %	8.91%	8.93%		9.01%	9.02%	
h. Lbs Fat Sold/milk cow/month	80	80	0.0%	73	71	-3.0%
i. Lbs SNF Sold/milk cow/month	188	187	-0.9%	163	161	-0.8%
j. Percent Quota	18%	16%		20%	12%	
Related Data						
a. Percent Dry Cows	15%	16%		16%	15%	
b. Yearly Cull Rate	30%	29%		36%	35%	
c. Avg. Value (/Drop Bull Calf)	$55.82	$15.87	-71.6%	$37.14	$8.66	-76.7%
d. Milk Cow Alfalfa Hay Price ($/ton)	$183.91	$226.69	23.3%	$188.85	$233.25	23.5%
e. Grain, Mnrls & Splmnts ($/ton)	$208.65	$267.03	28.0%	$200.42	$252.66	26.1%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	28.28	26.80	-5.2%	26.23	26.36	0.5%
g. Milkers ($/hr with benefits & taxes)	$14.29	$14.56	2.0%	$12.89	$12.48	-3.1%
h. Total Labor ($/hr)	$15.19	$15.25	0.4%	$13.55	$13.76	1.5%
i. Milk Cow Feed Costs ($/Cow/Day)	$4.84	$6.02	24.4%	$4.52	$5.82	28.8%
j. Milk Cow Feed Costs ($/cwt.)	$6.95	$8.77	26.2%	$7.62	$9.93	30.3%
k. Milk Cows	747	760	1.8%	851	590	-30.7%
l. Total Cows	876	908	3.6%	1,013	696	-31.3%
m. Average Total Investment per Cow	$2,641	$2,713	2.7%	$2,427	$2,730	12.5%

California 3X vs. 2X Milk Production Schedules

California producers often consider different management practices to gain a competitive advantage and improve their profit margins. One option may be to change from two times per day milking (2X) to three times per day milking (3X). This year, we have the opportunity to compare dairy facilities utilizing two different milking schedules and compare the trends developing over the past two years. Since 3X is implemented to promote higher milk production, it only makes sense to compare these two milking schedules based on milk production per hundred pounds, rather then on a per cow basis.

Increases in feed costs along with decreasing milk prices tested the sustainability of the relationships and trends from 2007 to 2008. The total cost to produce milk, has changed only 0.3 percent. In the feed costs category, the dairies on 3X are feeding more wet feed (silage, haylage, etc.,) and spend approximately 15 to 17 percent more on these feeds than dairies on 2X. Dairies that milk 3X feed almost two more pounds of grain mix than 2X. Higher milk production; actually decreases total feed cost per hundred pounds of milk by 7.1 percent, replacement costs by 7.5 percent, and milk marketing costs by 2.1 percent. Operating costs are comparable for both types of milkings. Labor is the only cost category which is significantly higher for 3X as opposed to 2X. Higher quantity of labor required results in a net effect of higher cost by 6.3 percent for 3X. Overall, the total cost per hundred pounds of milk favors dairies milking 3X, by 4.6 percent.

California 3X vs. 2X Milk Production Comparison

California Holstein 3X vs. 2X Milking Production Cost Comparison, 2008

All costs: per cow per month, unless noted	3X 2008	2X 2008	Percent Diff 2008 3X vs. 2X	Percent Diff 2007 3X vs. 2X
Number of Herds	16	101		
Feed Costs				
a. Dry Roughage	$48.50	$49.05	-1.1%	-0.6%
b. Wet Feed & Wet Roughage	$38.92	$33.83	15.0%	18.2%
c. Concentrates	$90.95	$88.54	2.7%	1.8%
d. Minerals & Supplements	$9.26	$7.89	17.3%	24.1%
e. Pasture	$0.00	$0.43		
Total Feed Costs	**$187.63**	**$179.75**	**4.4%**	**4.8%**
Total Feed Costs ($/cwt.)	**$9.06**	**$9.75**	**-7.1%**	**-6.2%**
Total Feed Costs (% of total Cost)	**58.2%**	**59.7%**		
Total Hired Labor	**$32.87**	**$27.53**	**19.4%**	**15.7%**
Total Hired Labor Costs ($/cwt.)	**$1.59**	**$1.49**	**6.3%**	**3.5%**
Total Labor Costs (%of total cost)	**10.2%**	**9.1%**		
Herd Replacement	**$45.28**	**$43.20**	**4.8%**	**5.7%**
Less: Calf. Income ($/cow/month)	**$12.93**	**$12.06**	**7.3%**	**4.0%**
Total Herd Replacement	**$32.35**	**$31.14**	**3.9%**	**6.6%**
Total Replacement Costs ($/cwt.)	**$1.56**	**$1.69**	**-7.5%**	**-4.7%**
Total Replacement Costs (%of total cost)	**14.0%**	**14.3%**		
Total Operating Costs	**$58.53**	**$52.55**	**11.4%**	**8.9%**
Total Operating Costs ($/cwt.)	**$2.83**	**$2.85**	**-0.8%**	**-2.6%**
Total Operating Costs (%of total costs)	**18.1%**	**17.5%**		
Milk Marketing Costs				
a. Hauling	$7.32	$6.73	8.7%	3.7%
b. State Assessments	$2.66	$2.43	9.4%	8.8%
c. Federal Assessments & Misc. Ded.	$1.18	$0.98	20.1%	19.1%
Total Milk Marketing Costs	**$11.15**	**$10.14**	**10.0%**	**6.6%**
Total Milk Marketing Costs ($/cwt.)	**$0.54**	**$0.55**	**-2.1%**	**-4.6%**
Total Milk Marketing Costs (% of total costs)	**3.5%**	**3.4%**		
Total Cost ($/Cow/Month)	**$322.53**	**$301.10**	**7.1%**	**7.0%**
Total Cost ($/cwt)	**$15.57**	**$16.32**	**-4.6%**	**-4.3%**
Milk Production Data				
a. Milk Sold/Total Cow/Month/ (cwt.)	20.71	18.44	12.3%	11.8%
b. Lbs Milk Sold/milk cow/day	78.27	69.67	12.3%	11.5%
c. Gross Milk Receipts ($/cwt)	$16.52	$16.84	-1.9%	-2.1%
d. Mailbox Price ($/cwt)	$15.86	$16.10	-1.5%	-1.9%
f. Fat Test %	3.53%	3.63%		
g. SNF Test %	8.76%	8.78%		
h. Lbs Fat Sold/milk cow/month	84	77	9.5%	9.4%
i. Lbs SNF Sold/milk cow/month	209	187	12.0%	11.1%
j. Percent Quota	24%	34%		
Related Data				
a. Percent Dry Cows	13%	13%		
b. Yearly Cull Rate	40%	37%		
c. Avg. Value (/Drop Bull Calf)	$14.75	$12.87	14.6%	2.7%
d. Milk Cow Alfalfa Hay Price ($/ton)	$232.91	$234.84	-0.8%	0.7%
e. Grain, Mnrls & Splmnts ($/ton)	$262.67	$265.41	-1.0%	-0.4%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	30.11	28.21	6.8%	4.8%
g. Milkers ($/hr with benefits & taxes)	$13.13	$13.88	-5.4%	-6.5%
h. Total Labor ($/hr)	$13.73	$14.65	-6.3%	-4.6%
i. Milk Cow Feed Costs ($/Cow/Day)	$6.64	$6.34	4.8%	5.1%
j. Milk Cow Feed Costs ($/cwt.)	$8.49	$9.10	-6.7%	-5.7%
k. Milk Cows	1,675	1,058	58.3%	74.6%
l. Total Cows	1,930	1,219	58.4%	74.1%
m. Average Total Investment per Cow	$2,996	$2,998	-0.1%	1.1%

Organic Herds Comparison

The number of organic herds participating in the Cost of Production survey has increased from eight dairies in 2007 to twelve in 2008. The demand for organic milk is close to matching the supply, as most organic processors are no longer seeking new organic producers. The organic milk price is normally contracted at a higher rate than the required minimum milk price, plus they have the opportunity to earn quality premiums.

Organic total feed costs increased by 12.8 percent. Grain mixes fed averaged $512 per ton, an increase of 28.4 percent compared to 2007. Milk cow alfalfa hay averaged $280 per ton, an increase of 18.2 percent, from last year. However, at year end the value of organic hay was over $300 per ton. Higher feed prices for grain commodities resulted in producers adjusting feed rations with less grains fed and depending more on pasture and other home grown feeds. These changes contributed to a decrease in pounds of milk produced per cow per day by five percent compared to a year ago. In November and December 2008, the spot prices for conventional feed commodities were on a downward trend from record highs, but organic feed prices did not decline.

The total cost to produce organic milk increased by average of 21.3 percent to $24.88 per hundred pounds of milk. The statewide average cost to produce a hundred pounds of milk increased by 18.1 percent to $16.48.

Organic Herd Comparison, 2008

All costs: per cow per month, unless noted	2007 Organic	2008 Organic	Percent Change
Number of Herds	8	12	
Feed Costs			
a. Dry Roughage	$48.22	$50.82	5.4%
b. Wet Feed & Wet Roughage	$11.57	$21.14	82.7%
c. Concentrates	$97.78	$102.46	4.8%
d. Minerals & Supplements	$2.51	$3.33	32.7%
e. Pasture	$25.37	$31.53	24.3%
Total Feed Costs	**$185.45**	**$209.28**	**12.8%**
Total Feed Costs ($/cwt.)	**$13.82**	**$16.42**	**18.8%**
Total Feed Costs (% of total Cost)	**67.4%**	**66.0%**	
Total Hired Labor	**$27.16**	**$29.50**	**8.6%**
Total Hired Labor Costs ($/cwt.)	**$2.02**	**$2.31**	**14.4%**
Total Labor Costs (% of total cost)	**9.9%**	**9.3%**	
Herd Replacement	**$28.17**	**$38.13**	**35.4%**
Less: Calf. Income ($/cow/month)	**$13.72**	**$13.54**	**-1.3%**
Total Herd Replacement	**$14.45**	**$24.60**	**70.2%**
Total Replacement Costs ($/cwt.)	**$1.08**	**$1.93**	**79.2%**
Total Replacement Costs (% of total cost)	**5.3%**	**12.0%**	
Total Operating Costs	**$42.50**	**$49.23**	**15.82%**
Total Operating Costs ($/cwt.)	**$3.17**	**$3.86**	**21.93%**
Total Operating Costs (% of total costs)	**15.4%**	**15.5%**	
Milk Marketing Costs			
a. Hauling	$2.90	$2.09	-27.9%
b. State Assessments	$1.98	$1.86	-5.9%
c. Federal Assessments & Misc. Ded.	$0.68	$0.56	-18.4%
Total Milk Marketing Costs	**$5.56**	**$4.51**	**-18.9%**
Total Milk Marketing Costs ($/cwt.)	**$0.41**	**$0.35**	**-14.6%**
Total Milk Marketing Costs (% of total costs)	**2.0%**	**1.4%**	
Total Cost ($/Cow/Month)	**$275.13**	**$317.12**	**15.26%**
Total Cost ($/cwt)	**$20.50**	**$24.88**	**21.34%**
Milk Production Data			
a. Milk Sold/Total Cow/Month/ (cwt.)	13.42	12.75	-5.0%
b. Lbs Milk Sold/milk cow/day	52.16	49.57	-5.0%
c. Gross Milk Receipts ($/cwt)	$23.69	$25.26	6.6%
d. Mailbox Price ($/cwt)	$23.97	$26.41	10.2%
f. Fat Test %	3.84%	3.90%	
g. SNF Test %	8.88%	8.89%	
h. Lbs Fat Sold/milk cow/month	61	59	-3.3%
i. Lbs SNF Sold/milk cow/month	141	134	-4.6%
j. Percent Quota	25%	26%	
Related Data			
a. Percent Dry Cows	15%	16%	
b. Yearly Cull Rate	25%	34%	
c. Avg. Value (/Drop Bull Calf)	$47.39	$12.02	-74.6%
d. Milk Cow Alfalfa Hay Price ($/ton)	$236.96	$280.04	18.2%
e. Grain, Mnrls & Splmnts ($/ton)	$399.35	$512.90	28.4%
f. Grain, Mnrls. & Splmnts. (lbs/mc/day)	19.30	16.28	-15.6%
g. Milkers ($/hr with benefits & taxes)	$11.79	$13.53	14.8%
h. Total Labor ($/hr)	$12.14	$13.82	13.8%
i. Milk Cow Feed Costs ($/Cow/Day)	$5.96	$6.54	9.9%
j. Milk Cow Feed Costs ($/cwt.)	$11.42	$13.20	15.6%
k. Milk Cows	299	368	23.3%
l. Total Cows	353	437	23.7%
m. Average Total Investment per Cow	$2,684	$2,809	4.7%

Feed Cost Summary

Most feed commodity prices reached all time highs during 2008. The main causes were high prices for crude oil and the U.S. renewable fuel policy. Congress mandated billions of bushels of corn to be converted to ethanol production, causing a dramatic shift in prices for all feed commodities. Higher corn prices encouraged farmers to increase corn acreage. The shift to corn production resulted in a shortage of other commodities fed by dairy producers, which has resulted in higher prices for all grain commodities. This inter-relationship between corn and other commodities resulted in the total feed cost for California dairies in 2008, to increase by 25.3 percent per hundredweight (cwt.) of milk, compared to a year ago. The practice of using corn for ethanol production began expanding in 2006, since then the total feed cost per cwt. of milk has increased from $6.84 to $9.82, an increase of 43.5 percent.

In December of 2007, deliveries of rolled corn to California dairies reached prices of over $200 per ton and remained there until October of 2008. The corn price peaked at over $300 per ton in June and July. Premium alfalfa hay delivered in 2008, consistently sold in the $235 to $275 per ton range, falling below $200 per ton starting in November. Most other commodities followed the same pattern (see graph below). The byproducts market for distiller's grain, bakery, various pulps, and off quality hay also increased in value. In an effort to control escalating feed costs, dairy producers and/or nutritionists were

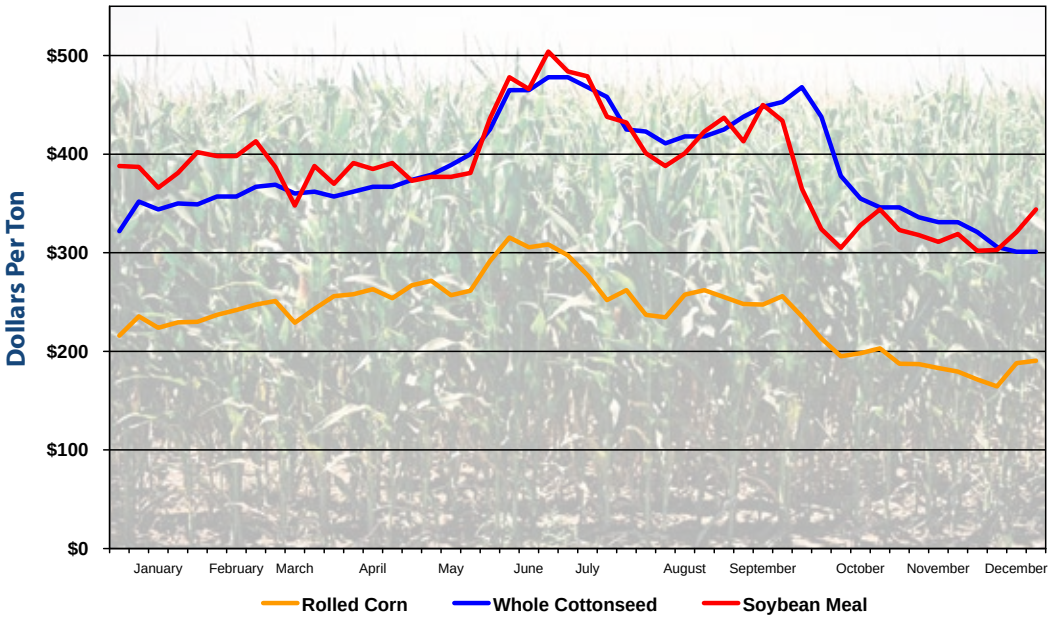
changing feed rations, as frequently as weekly or daily depending upon availability of feed byproducts.

As new ethanol plants in Oakley, Stockton, and Keys began production in 2008, producers thought they would have a steady supply of wet corn distillers. The supply of wet corn distillers was short lived, as the crude oil market bubble popped and the value of corn remained high. Ethanol plants shut down throughout the valley, as it became unprofitable to produce ethanol.

Producers will feel the impact of this volatile price ride for feed commodities well into 2009. Many producers purchased hay and contracted grains in 2008, near the peak of the market. As a result, higher feed cost will carry into the next calendar year. To minimize the results of unfavorable contracts producers often "blend" the contracted commodity with spot market purchases lowering the average price per ton.

In 2008, total feed costs represented 59.6 percent of the total cost of producing a cwt. of milk. The impact of high feed prices is visible in the relationship of feed cost as a percentage of the mailbox price. In 2007, feed cost represented 44 percent of the mailbox price, in 2008 feed represented 59 percent of the mailbox price. However, when looking just at the fourth quarter feed cost for 2008, feed represented 70 percent of the mailbox price.

California Spot Prices for Corn, Whole Cottonseed, and Soybean Meal - 2008[1]

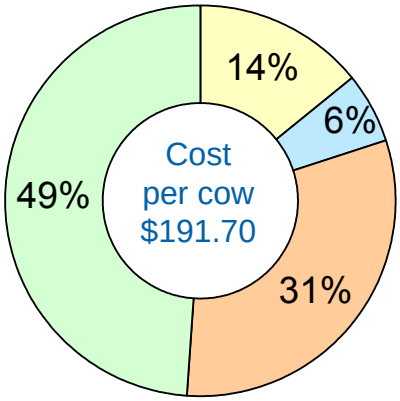


[1] JD Heiskell & Co. Inc. Weekly Price List Delivered to Tulare/Pixley Area

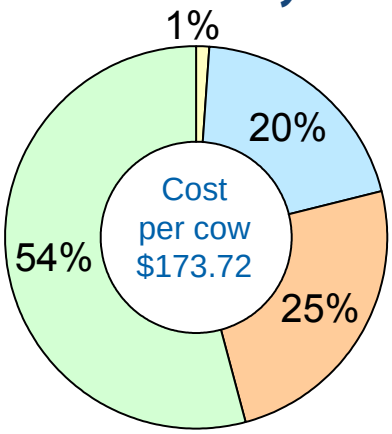
Cost of Feed Per Cow

Average Monthly Cost of Feed Per Cow and Percentage by Feed Category, 2008 (Feed Costs Based on Milk Cows & Dry Cows)

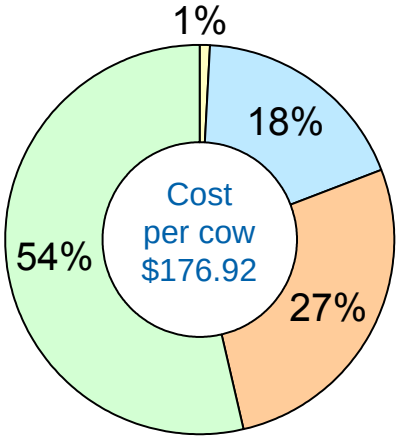
North Coast



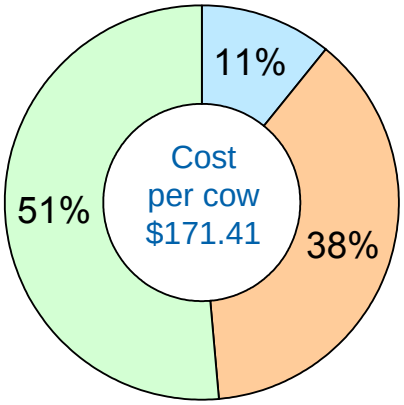
North Valley



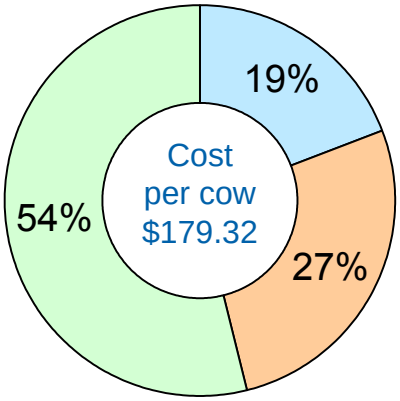
State Average



Southern California



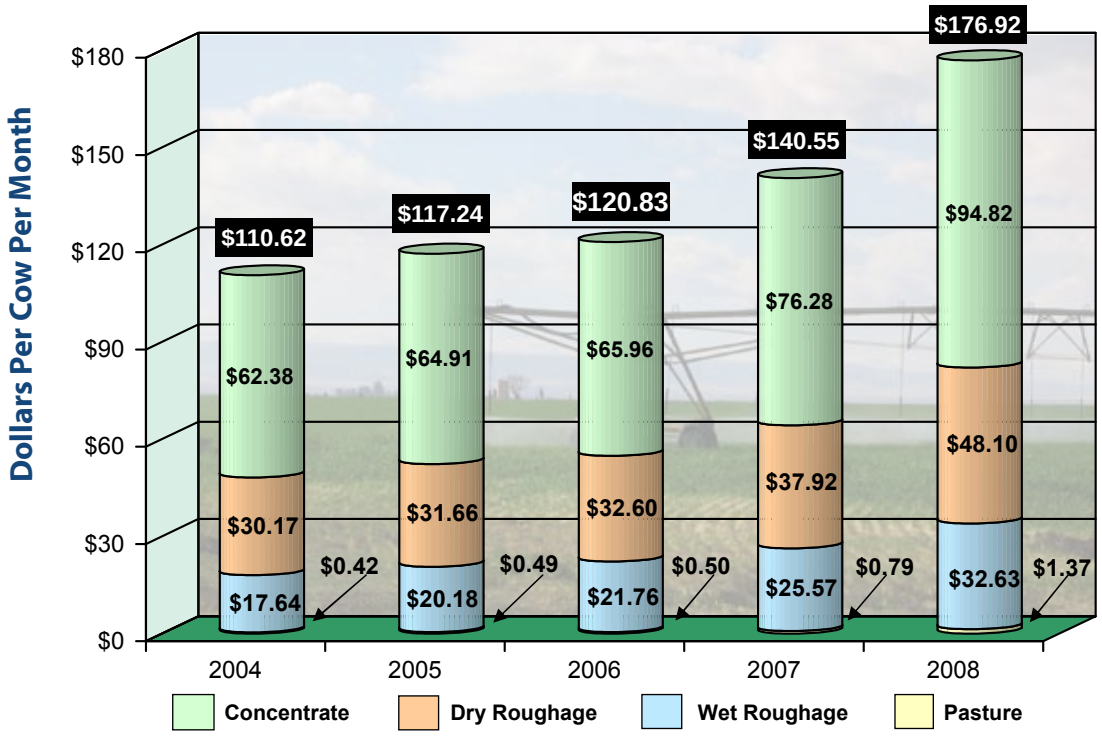
South Valley



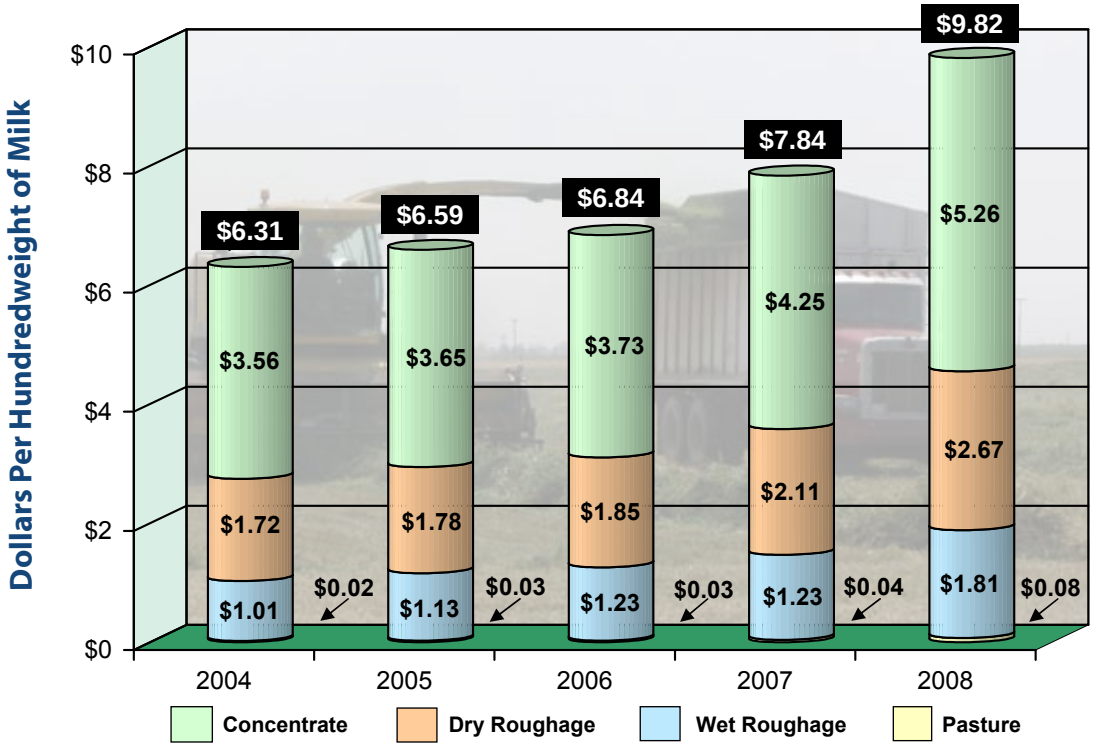
Concentrate | Dry Roughage | Wet Roughage | Pasture

Total Feed Costs

Total Feed Costs Per Cow, Per Month [1/]
California, 2004-2008



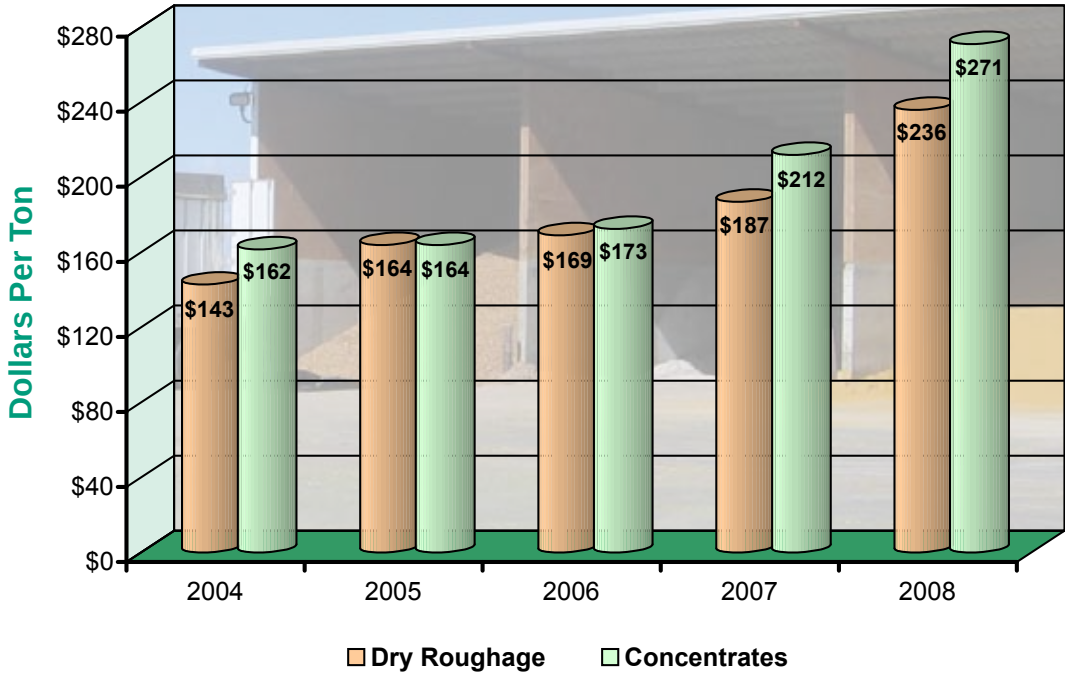
Total Feed Cost Per Hundredweight of Milk [1/]
California, 2004-2008



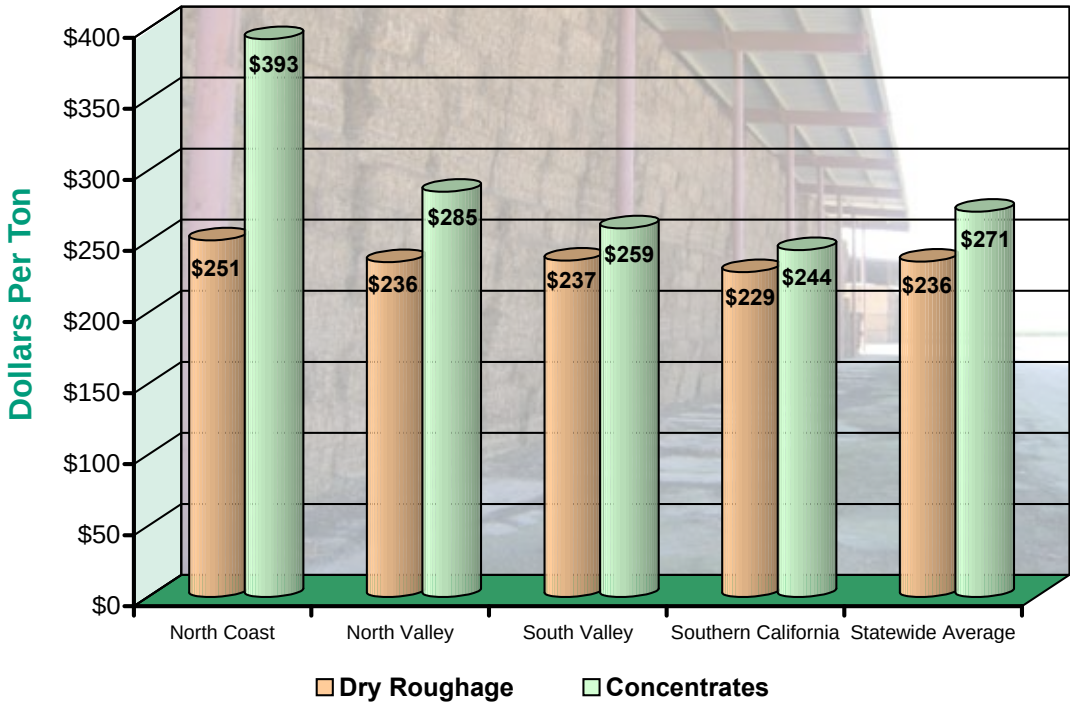
[1/] Includes feed costs for both milk cows and dry cows.

Dry Roughage and Concentrate

Dry Roughage and Concentrate Costs , California, 2004-2008



Dry Roughage and Concentrate Costs, California, by Area, 2008

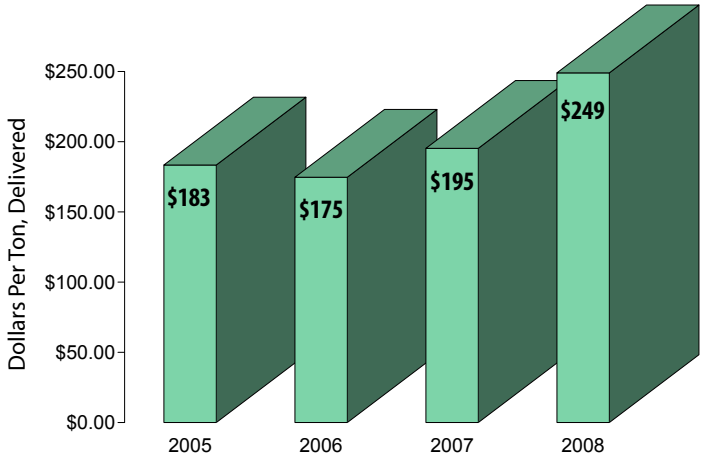


Average Premium Alfalfa Hay Prices

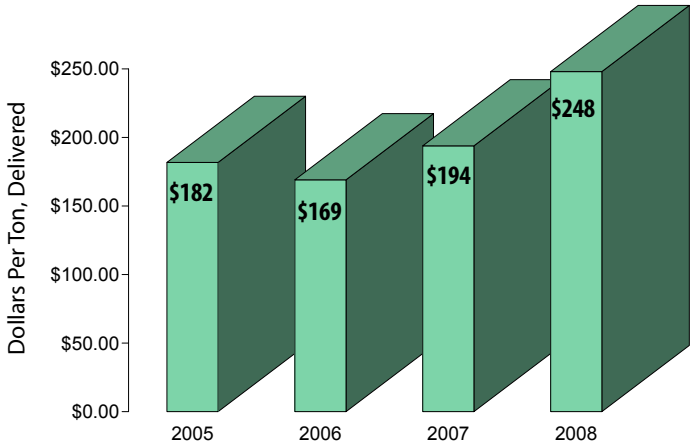
Premium Alfalfa Hay, California, Selected Areas, 2005-2008

Premium Alfalfa: *Early maturity, i.e., pre-bloom in legumes and pre head in grass hays, extra leafy and fine stemmed-factors indicative of a high nutritive content. Hay is green and free of damage.*

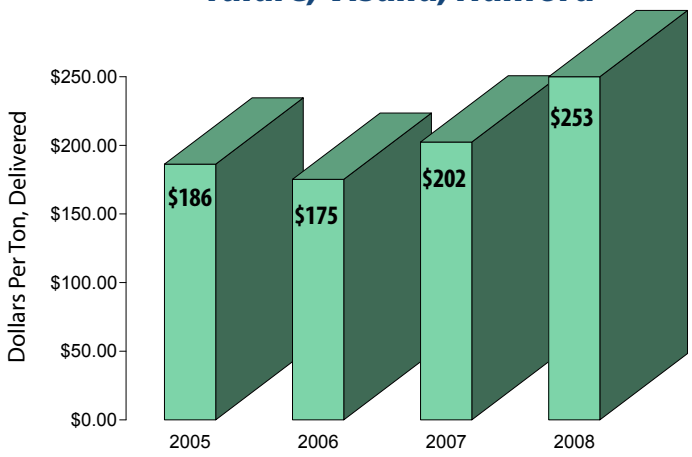
Petaluma



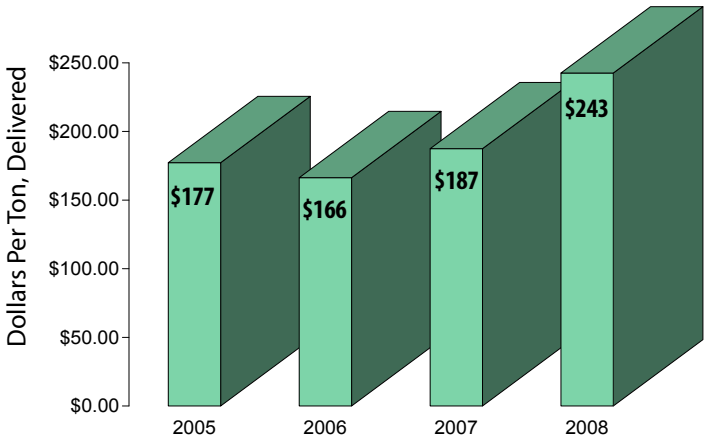
Escalon, Modesto, Turlock



Tulare, Visalia, Hanford



Chino Valley, Los Angeles



Alfalfa Guidelines (for domestic livestock use and not more than 10% grass)

Quality	ADF	NDF	*RFV	**TDN-100%	**TDN-90%	CP
Supreme	<27	<34	>185	>62	>55.9	>22
Premium	27-29	34-36	170-185	60.5-62	54.5-55.9	20-22
Good	29-32	36-40	150-170	58-60	52.5-54.5	18-20
Fair	32-35	40-44	130-150	56-58	50.5-52.5	16-18
Utility	>35	>44	<130	<56	<50.5	<16

*RFV calculated using the Wis/Minn formula. **TDN calculated using the western formula. Quantitative factors are approximate, and many factors can affect feeding value. Values based on 100 % dry matter (TDN showing both 100% & 90%). Guidelines are to be used with visual appearance and intent of sale (usage).

Source: USDA, Agricultural Marketing Services, Livestock and Grain Market News, 2008 Alfalfa Hay California Market Summary.

Measuring Feed Cost

Should We Measure Feed Cost Per Cow Per Day or Per Hundredweight of Milk Produced?

By Luis A. Rodriguez, Ph.D, PAS, Zinpro Performance Minerals

Typically, in publishing the Cost of Production Annual, all the data and analyses are compiled by Department staff. In preparing the 2008 annual, we had the opportunity to work with Dr. Luis A. Rodriguez, Ph.D (in dairy nutrition), to examine more closely the cost of production data and the relationship between feed costs and milk yields. The analysis by Dr. Rodriguez is being included in this year's annual because it provides dairy stakeholders unique perspective on the relationship between the cost of feed and the cost of producing milk. This information may be especially helpful to dairy producers as they try to cope with high feed prices in order to help ensure profitability of the dairy.

Over time, frequent milk price peaks and valleys have become repetitive trends in the dairy industry. Extreme market volatility has resulted in many dairy owners putting a renewed emphasis on cutting costs, whenever and wherever possible. Cutting costs is generally a good idea, provided milk yield (milk produced per cow) is not sacrificed. Any cost-cutting, management, or feeding decision that lowers milk yield is likely to decrease the profitability of the herd. Reducing milk output in the herd has direct consequences on the financial position of many areas of the dairy operation.

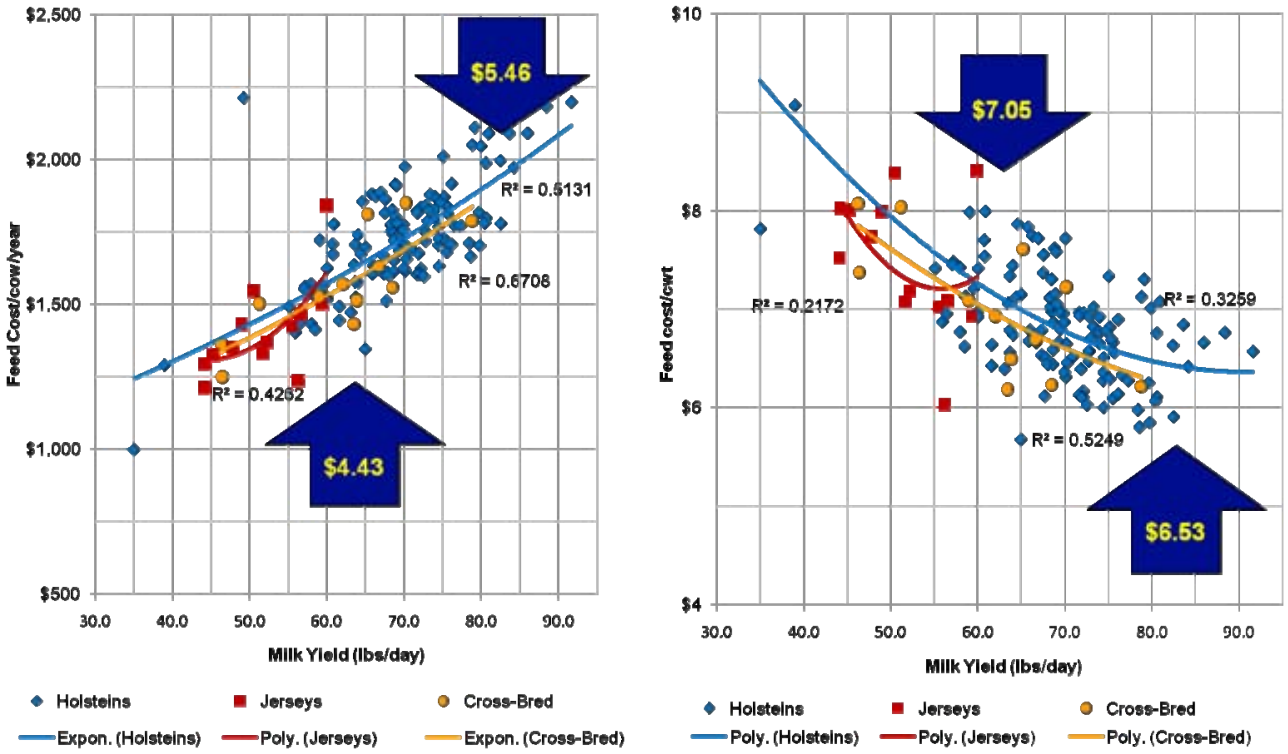
During low milk price years, dairy owners rely heavily on nutritionists to recommend measures to reduce feed cost per cow per day. Milk yield, solid components, herd health, reproductive performance and other factors are affected by nutrients ingested by the cow. Nutritional advisors are always striving to determine how to reduce feed cost without sacrificing herd performance. Using the California Department of Food and Agriculture cost of production data (2007), an analysis was done comparing the cost of production and other economic variables to find financial trends that could lead to improved profitability for California dairy producers. As an indicator of profitability, the relationship between feed cost per cow per year and feed cost per hundredweight (cwt.) was examined.

PROFITABILTY OF CALIFORNIA DAIRIES

Figure 1

Feed Cost/Cow and Feed Cost/cwt By Milk Yield

Each Dot Represents a Dairy



As milk production increases: Feed Cost/cow/year increases but cost /cwt of milk decreases

Measuring Feed Cost

As expected, regardless of breed, higher milk yields were accompanied by greater feed cost per cow per year (see Figure 1). Holstein herds producing 60 to 65 pounds of milk per day had an average feed cost of $1,618 per cow per year. Herds producing greater than 80 pounds of milk per day had an average feed cost of $1,995 per cow per year. This is equivalent to an average cost of $4.43 and $5.46 per cow per day, respectively. Jersey herds producing less than 50 pounds of milk per day had an average feed cost of $3.62 per cow per day and herds producing greater than 55 pounds per day had an average feed cost of $4.09 per cow per day. The highest producing herds for each breed were generally the most expensive herds to feed, on a cost per cow basis.

However, when analyzing feed costs per cwt. of milk produced, the highest producing herds had the lowest feed cost per cwt. Holstein herds producing 60 to 65 pounds of milk per day had an average feed cost of $7.05 per cwt., while Holstein herds producing greater than 80 pounds of milk per day had an average feed cost of $6.53 per cwt. Jersey herds producing less than 50 pounds of milk per day had an average feed cost of $7.86 per cwt., while Jersey herds producing greater than 55 pounds of milk per day had an average feed cost of $7.09 per cwt. The higher the milk yield the lower the feed cost of producing a cwt. of milk.

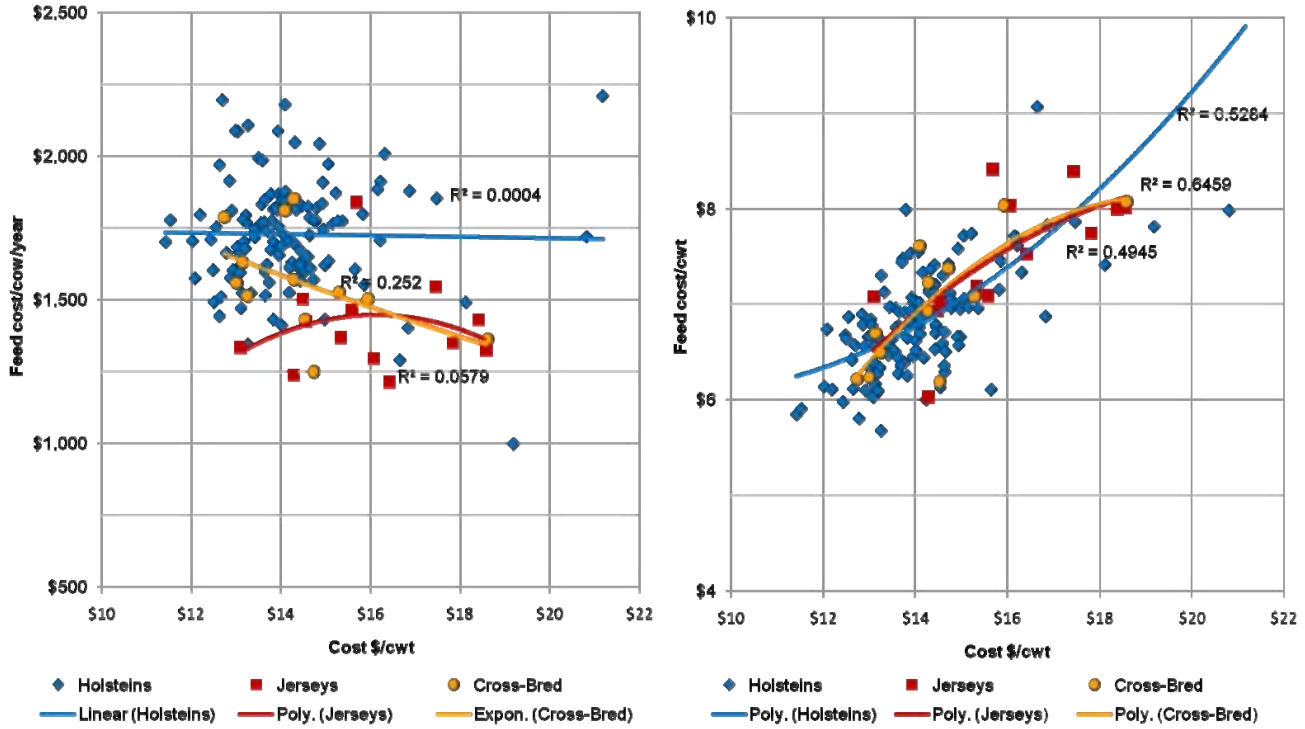
There was a strong relationship for all breeds between feed cost per cwt. and total cost of production per cwt. The lowest feed cost per cwt. resulted in the lowest total cost of production per cwt., while the lowest feed cost per cwt. was obtained at the highest milk yields. When milk prices are low, it is not uncommon to see dairies focus on reducing feed cost per cow as a means to reduce total cost. This analysis suggests no relationship exists when comparing feed cost per cow, per year, and total cost per cwt. of milk produced (see Figure 2).

Milk yield is a very important part of the profitability equation. When making a decision to change feed rations, during high or low milk prices, one should take into consideration how this decision affects milk production. The trends found in this analysis indicate that herds with higher milk yield have the lowest feed cost per cwt. Focusing strictly on reducing feed cost per cow, or the total cost of producing milk per cow will compromise the dairy's financial position, if that decision sacrifices milk yield.

Figure 2

Feed Cost/Cow and Feed Cost/cwt By Total Cost/Cwt

Each Dot Represents a Dairy



No relationship – Feed Cost/cow and Cost/cwt but positive relationship when compared by cwt of milk

Labor Cost Summary

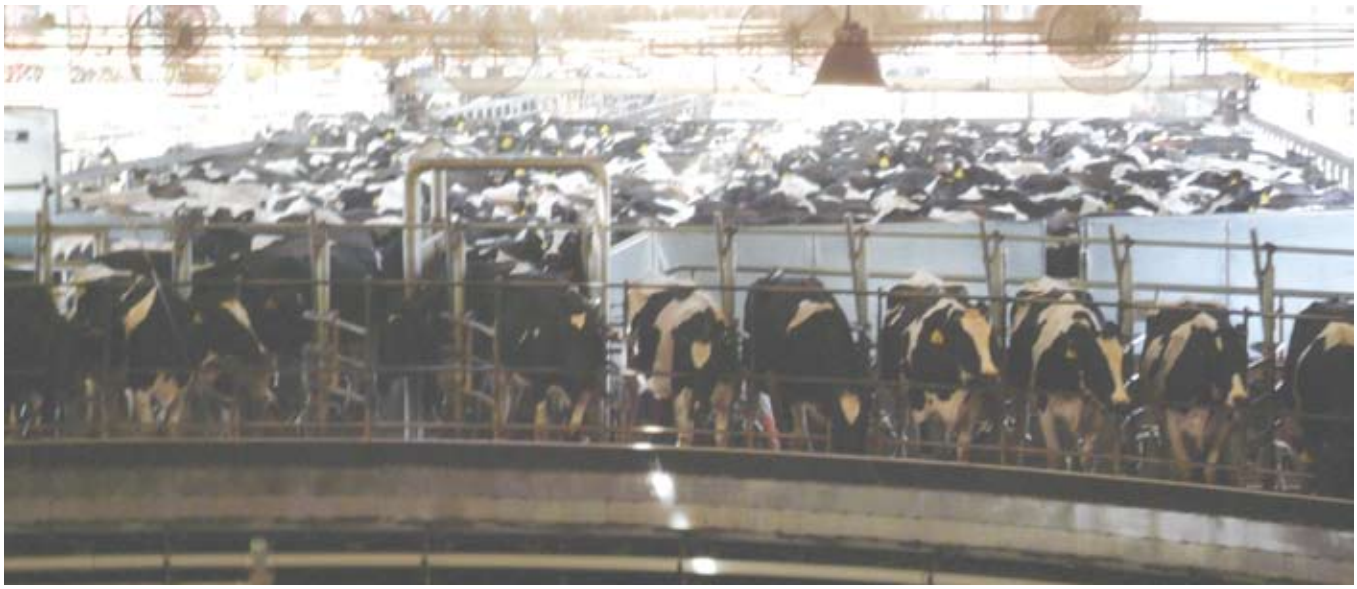
The drop in milk income and higher production costs in 2008 had several producers considering ways to cut labor costs. Examples of cutting costs were relying on family labor for jobs such as feeding cows, feeding calves, and relief milking. Ironically, with the downturn in the economy there were many potential employees looking for work at dairies. In contrast, back in 2006 the dairy industry was finding it difficult to attract qualified labor, due to the housing boom of prior years.

The California dairy industry continues to deal with labor issues such as wage settlements, labor lawsuits, and union negotiations. Immigration issues continued to be in the forefront as well. The I-9 compliance issue (checking to insure the legal status against the social security number) was emphasized.

In 2008, milk sold per person, per month, decreased by 1.4 percent and revenue generated per person decreased by 7.7 percent. This is a result of lower milk prices and the restriction of milk production.

Labor shows a continuing trend of higher hourly wages for both milkers and outside workers. Ten years ago (1998), hired milker wages were $10.84 per hour (the minimum wage at that time was $5.75). In 2008, the hired milker wages were $13.73 per hour (the current minimum wage is $8.00) which is nearly a 27 percent increase. The minimum wage increase from 1998 to 2008 was 39 percent, clearly the driving force in the upward trend of hourly wages. In January, 2008 minimum wage increased from $7.50 to $8.00 per hour, which is one of the reasons hourly wages increased by 2.6 percent.

Employee benefits (perquisites) decreased by seven percent for hired milkers and nine percent for hired labor. Many producers and employees prefer higher cash wages, rather than health insurance, housing, or other non-cash benefits. Health insurance premiums and the cost of housing continue to increase.



Labor Cost Comparison

Labor Comparison, by Cost of Production Area, 2008

AVERAGES	2007 Statewide Average	North Coast	North Valley	South Valley	Southern California	2008 Statewide Average	Percent Change
CASH WAGE / HIRED MILKER	$2,304	$2,036	$2,423	$2,429	$2,930	$2,435	5.71%
PERQUISITES / HIRED MILKER /1	$322	$426	$409	$227	$249	$299	-7.04%
TOTAL WAGE / HIRED MILKER 2/	$3,079	$2,889	$3,303	$3,098	$3,792	$3,193	3.70%
HOURS / MONTH / HIRED MILKER	230	228	223	239	235	233	1.24%
HOURLY CASH WAGE / HIRED MILKER	$10.02	$8.94	$10.88	$10.17	$12.47	$10.47	4.42%
HOURLY PERQUISITES / HIRED MILKER 1/	$1.40	$1.87	$1.84	$0.95	$1.06	$1.29	-8.17%
HOURLY WAGE / HIRED MILKER 2/	$13.40	$12.68	$14.83	$12.97	$16.14	$13.73	2.43%
CASH WAGE / HIRED LABOR	$2,678	$2,172	$2,724	$2,927	$3,501	$2,828	5.59%
PERQUISITES / HIRED LABOR 1/	$445	$391	$481	$333	$367	$404	-9.20%
TOTAL WAGE / HIRED LABOR 2/	$3,644	$3,012	$3,733	$3,778	$4,596	$3,759	3.16%
HOURS / MONTH / HIRED LABOR	240	231	236	247	242	242	0.84%
HOURLY CASH WAGE / HIRED LABOR	$11.18	$9.38	$11.52	$11.83	$14.47	$11.70	4.71%
HOURLY PERQUISITES / HIRED LABOR 1/	$1.86	$1.69	$2.04	$1.35	$1.52	$1.67	-9.96%
HOURLY WAGE / HIRED LABOR 2/	$15.21	$13.01	$15.79	$15.27	$19.00	$15.56	2.30%
CASH WAGE / ALL HIRED	$2,445	$2,093	$2,561	$2,605	$3,134	$2,591	5.97%
TOTAL WAGE / ALL HIRED 2/	$3,293	$2,941	$3,500	$3,339	$4,079	$3,418	3.80%
HOURLY CASH WAGE / ALL HIRED	$10.47	$9.13	$11.18	$10.77	$13.20	$10.97	4.76%
HOURLY WAGE / ALL HIRED 2/	$14.10	$12.82	$15.29	$13.80	$17.18	$14.47	2.61%
HOURS / COW / MONTH / ALL HIRED	1.88	2.59	1.94	1.94	1.70	1.95	3.26%
CASH COST / COW / MONTH / ALL HIRED	$19.73	$23.63	$21.65	$20.94	$22.45	$21.34	8.17%
COST / COW / MONTH / ALL HIRED 2/	$26.57	$33.20	$29.59	$26.83	$29.22	$28.16	5.95%
NUMBER COWS / HIRED MILKER	199	153	219	192	217	202	1.07%
NUMBER COWS / HIRED LABOR	327	210	258	352	391	305	-6.74%
NUMBER COWS / ALL MILKERS & LABOR 3/	124	88	118	124	139	121	-2.01%
MILK SOLD / PERSON / MONTH (LBS.) 3/	221,705	130,983	212,909	225,941	247,977	218,546	-1.43%
REVENUE GENERATED / PERSON / MONTH 3/	$40,549	$27,550	$37,270	$37,801	$41,848	$37,415	-7.73%

1/ Includes Fair Market Value For Housing Supplied By Employer, Health Insurance, Meat, Etc.

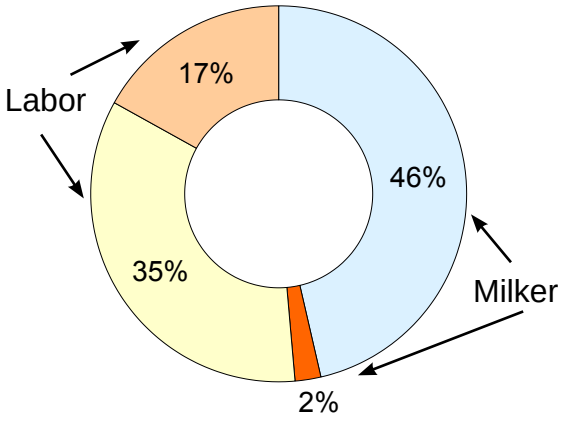
2/ Includes Cash Wages, Perquisites, and Employment Taxes (FICA, Worker's Compensation,Unemployment Insurance) Paid by Employer

3/ Includes All Dairy Workers, Hired and Family

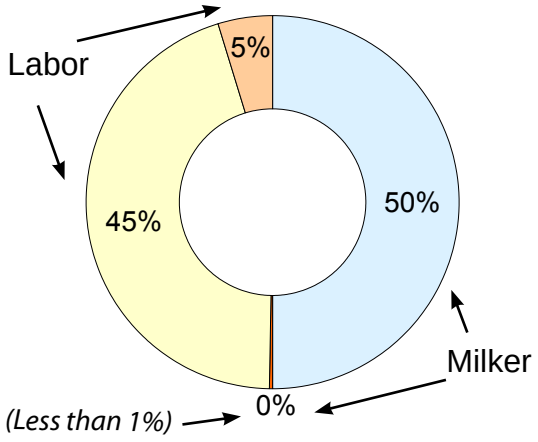
Labor Costs, by Area

Labor Cost Percentage, 2008

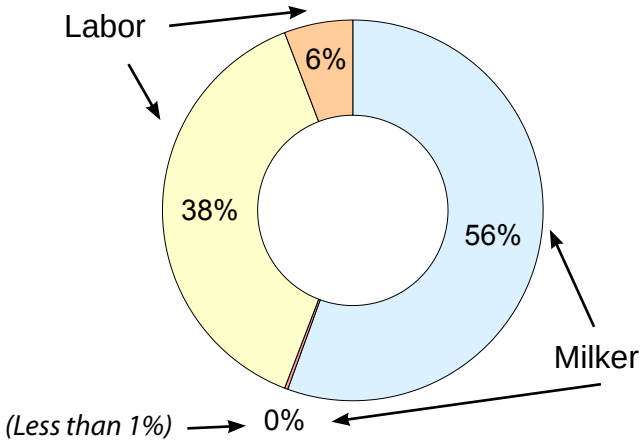
North Coast



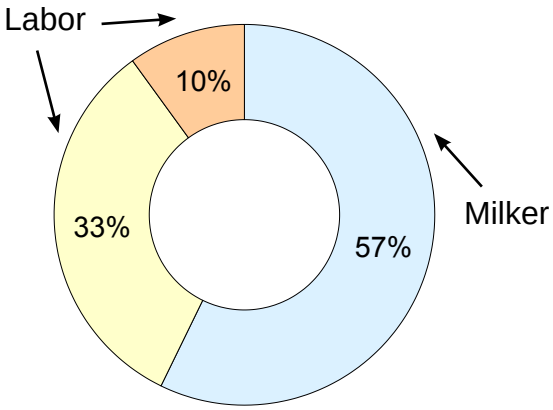
North Valley



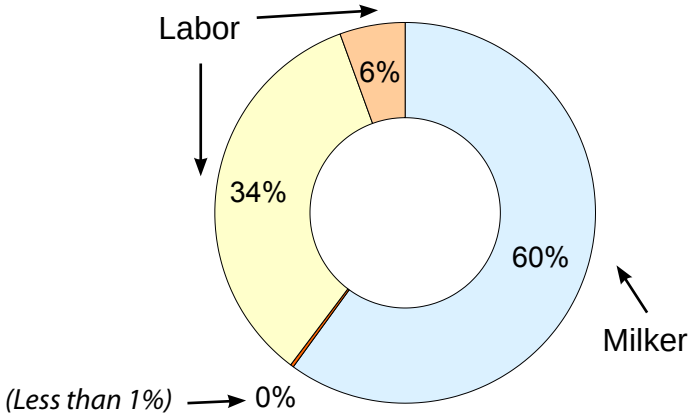
State Average



Southern California



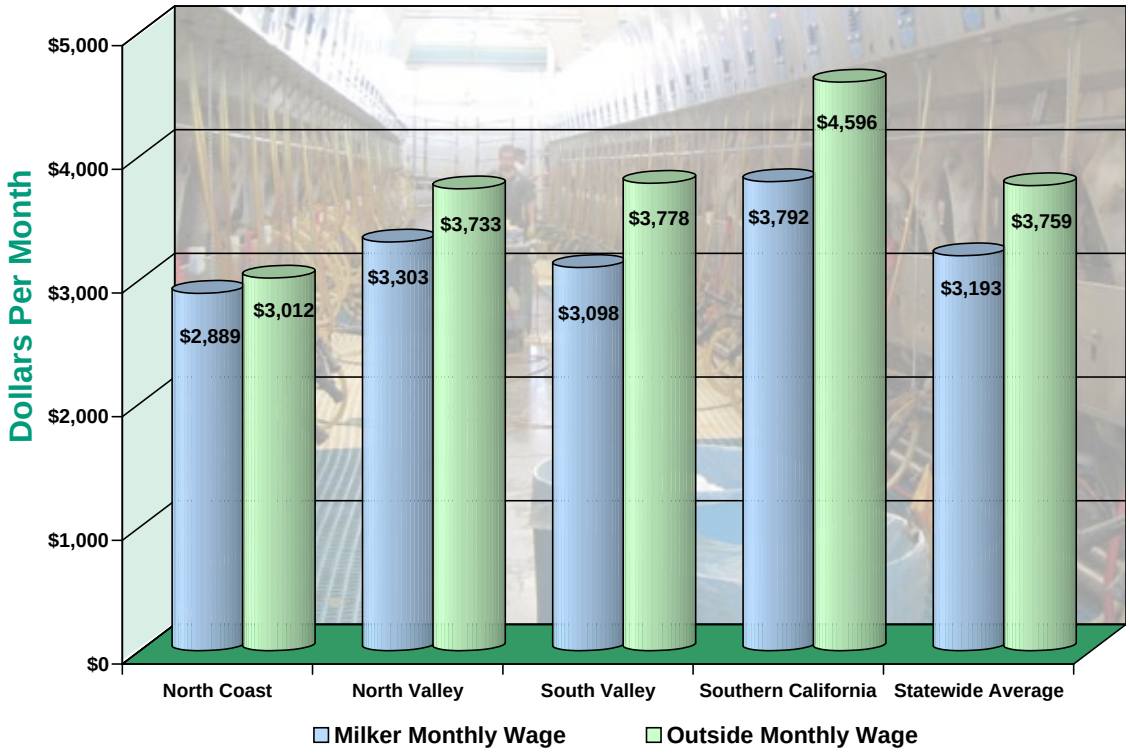
South Valley



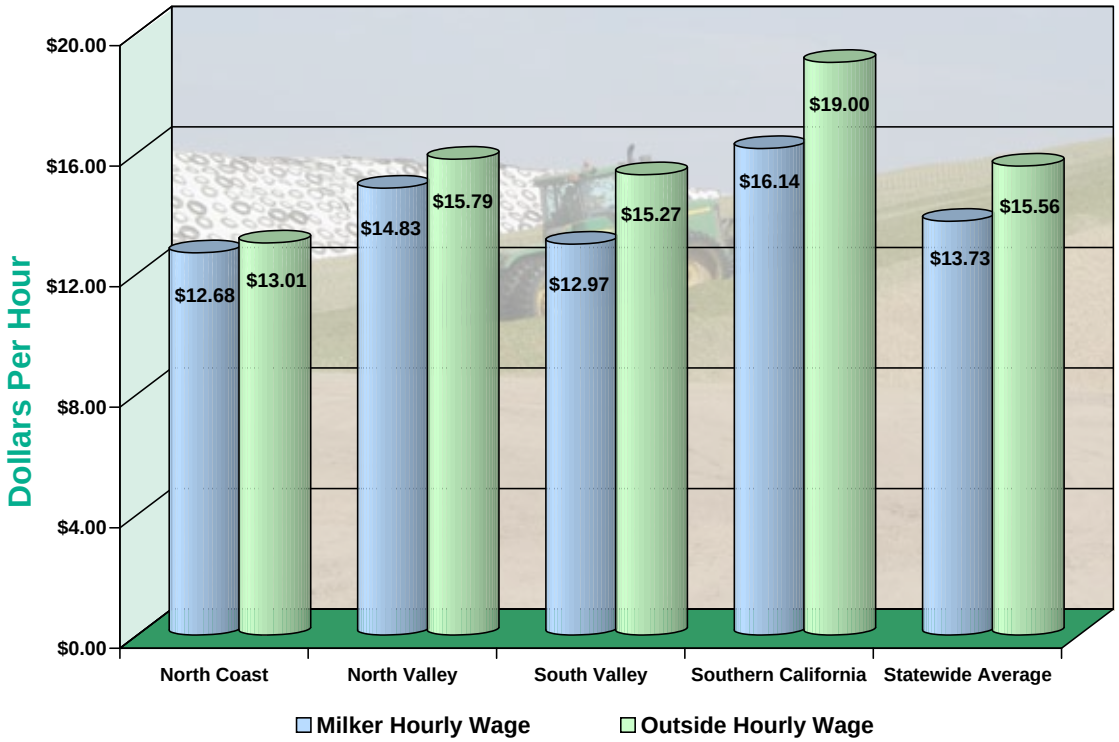
Hired Milker | Family Milker | Hired Labor | Family Labor

Average Milker and Outside Labor Wages

Average Milker and Outside Labor Monthly Wages Including Benefits and Employer Taxes California Cost of Production Areas, 2008



Average Milker and Outside Labor Hourly Wages Including Benefits and Employer Taxes California Cost of Production Areas, 2008



County Dairy Statistics

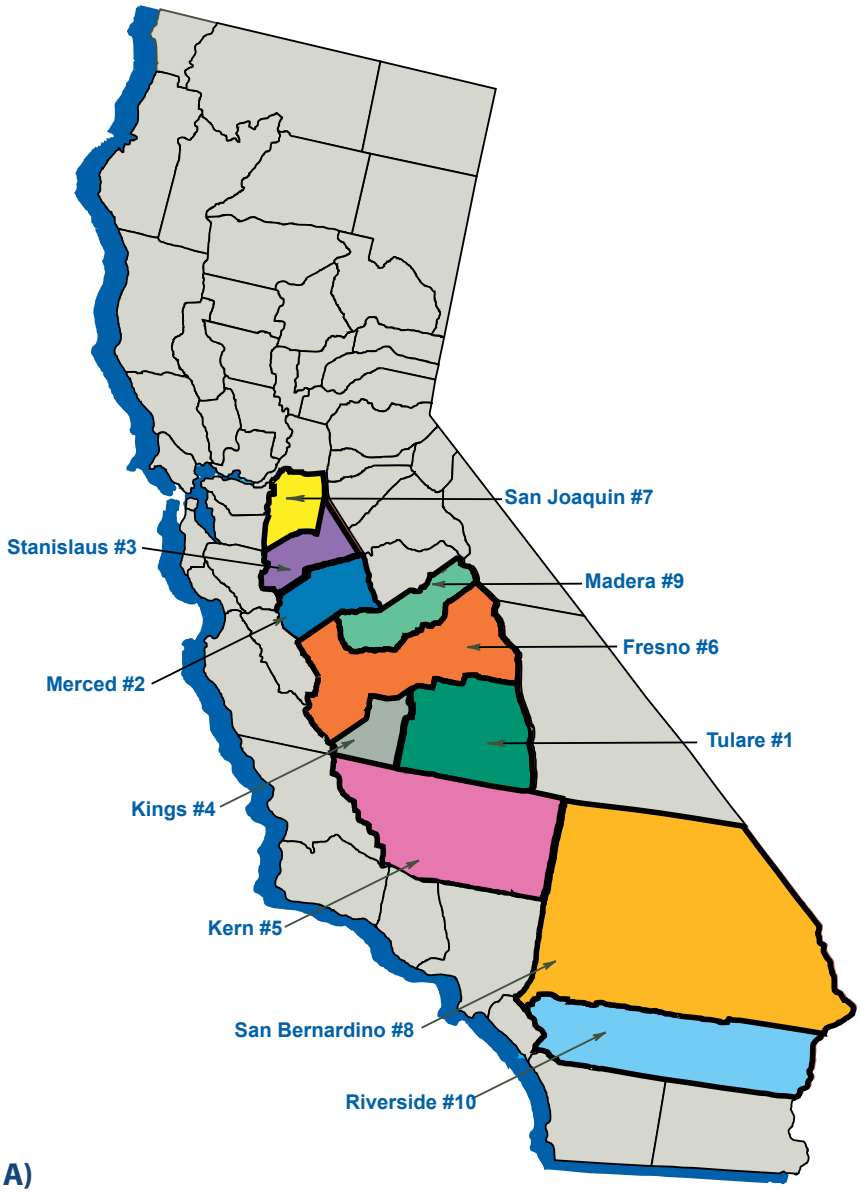
Commercial Production of Bulk Milk, Average Milk Fat, and Solids-Not Fat Test, Number of Cows and Heifers that have Calved on Farms, Number of Dairies, and Average Number of Cows per Dairy in California, by County and Region, 2008

County and Region [1/]	Milk Production (1,000 Pounds)	Average Milk Fat Test	Average Solids-Not-Fat Test	Number of Cows	Number of Dairies [2/]	Average Number Cows/Dairy
Butte	5,691	4.25	9.15	257	3	86
Del Norte	68,945	4.08	8.91	4,340	9	482
Fresno	2,708,732	3.65	8.82	120,299	109	1,104
Glenn	428,146	3.62	8.81	19,356	46	421
Humboldt	242,449	4.20	9.00	15,260	70	218
Kern	3,865,883	3.63	8.76	176,643	54	3,271
Kings	4,029,445	3.67	8.78	183,809	156	1,178
Madera	1,765,412	3.65	8.84	79,810	56	1,425
Marin	201,966	3.60	8.88	10,203	27	378
Mendocino [3/]					2	
Merced	5,876,437	3.72	8.86	265,660	297	894
Monterey	32,059	3.73	8.85	1,449	3	483
Placer [3/]					1	
Sacramento	368,555	3.72	8.82	16,662	39	427
San Benito	14,028	3.86	8.85	634	4	159
San Joaquin	2,460,434	3.70	8.81	111,231	127	876
Santa Cruz [3/]					1	
Shasta [3/]					1	
Siskiyou	15,085	3.73	8.81	682	3	227
Solano	95,837	3.74	8.76	4,333	3	1,444
Sonoma	539,635	3.74	8.89	27,262	69	395
Stanislaus	4,054,977	3.70	8.82	183,316	272	674
Sutter [3/]					1	
Tehama	88,554	4.02	9.04	4,003	15	267
Tulare	10,797,823	3.69	8.81	493,383	329	1,500
Yolo	50,412	4.08	8.95	2,279	3	760
Yuba	68,506	3.91	8.90	3,097	4	774
Northern California	**37,840,225**	**3.69**	**8.81**	**1,726,903**	**1,704**	**1,013**
Imperial	143,164	3.99	8.89	7,547	4	1,887
Los Angeles [3/]				2,107	1	
Riverside	1,101,607	3.59	8.76	51,326	37	1,387
San Bernardino	1,897,400	3.52	8.75	88,404	99	893
San Diego	81,658	3.48	8.70	3,805	5	761
San Luis Obispo [3/]				240	1	
Santa Barbara [3/]				2,414	1	
Southern California	**3,325,890**	**3.57**	**8.76**	**155,843**	**148**	**1,053**
STATE TOTALS	**41,166,115**	**3.68**	**8.81**	**1,882,746**	**1,852**	**1,017**

[1/] Counties omitted have no reported milk production. Data includes total milk sold, excludes milk used on ranch.
[2/] Number of dairies source is Milk and Dairy Food Safety Branch.
[3/] Not published, but included in total.

Top Counties Profile, 2008

- *The top ten milk producing counties for 2008 produced 94 percent of the state's total milk production.*
- *Tulare leads the state in Grade A milk production and Merced leads the state in Grade B milk production for 2008.*
- *If Tulare County were a state, it would rank fourth in milk production in the U.S.*
- *The top ten milk producing counties accounted for 83 percent of the state's total number of dairies and 93 percent of the state's total number of cows.*



Market Milk Production (Grade A)

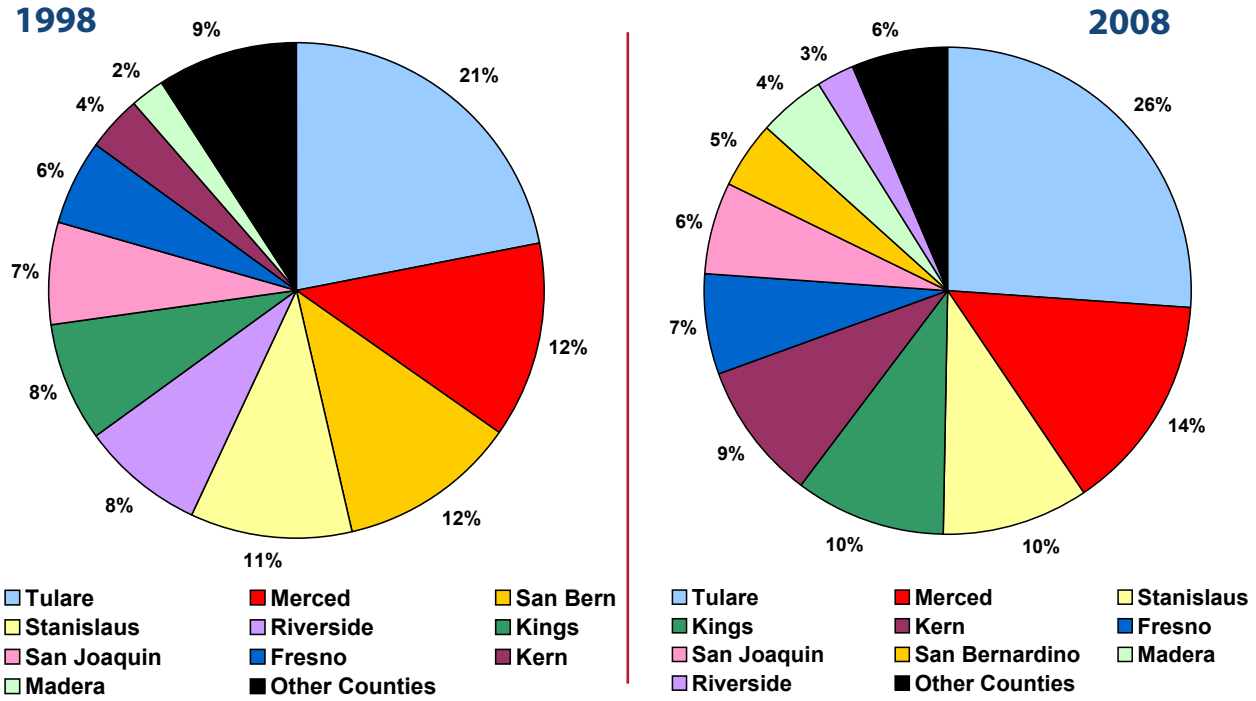
County (by rank)	Pounds of Milk Produced in 2008 (in thousand pounds)	% Change from 2007
Tulare	10,587,837	2.35%
Merced	5,636,507	4.41%
Stanislaus	4,043,113	2.26%
Kings	4,017,927	4.45%
Kern	3,863,001	1.90%
Fresno	2,705,710	0.02%
San Joaquin	2,458,817	0.81%
San Bernardino	1,897,227	-2.24%
Madera	1,699,593	6.05%
Riverside	1,101,199	-5.71%

Manufacturing Milk Production (Grade B)

County (by rank)	Pounds of Milk Produced in 2008 (in thousand pounds)	% Change from 2007
Merced	239,930	-33.23%
Tulare	209,986	-12.89%
Madera	65,819	-12.93%
Humboldt	41,155	-26.96%
Yolo	39,562	-4.93%

Top Milk Producing Counties

Top Ten Milk Producing Counties, 1998 vs. 2008



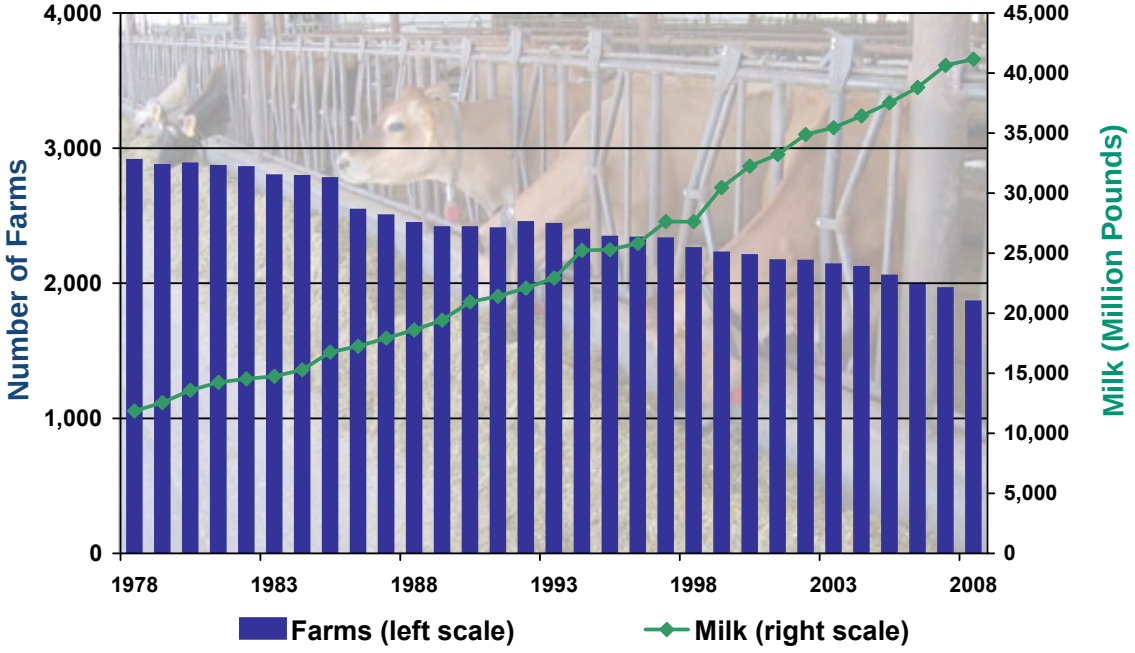
The counties for both 1998 and 2008 are designated in the same color. Tulare has remained the top milk producing county in California and would rank as the fourth largest producing state in the U.S. As the pie charts display, the "other counties" category share of milk production continues to decrease.

Profile of Top Ten Dairy Counties, 2008

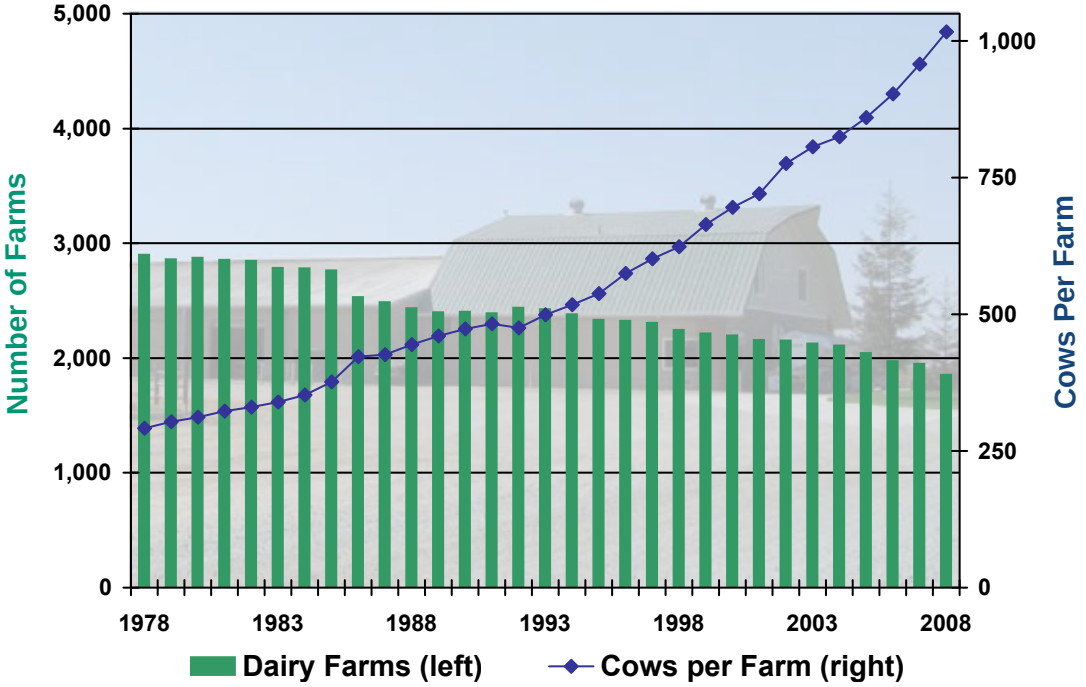
County	Million Pounds of Milk	Number of Dairies	Number of Cows (Thousands)	Number of Cows Per Farm	Gallons of Milk Per Cow/Per Day
Tulare	10,798	329	493	1,500	6.96
Merced	5,876	297	266	894	7.02
Stanislaus	4,055	272	183	674	7.04
Kings	4,029	156	184	1,178	6.96
Kern	3,866	54	177	3,271	6.94
Fresno	2,709	109	120	1,104	7.17
San Joaquin	2,460	127	111	876	7.04
San Bernardino	1,897	99	88	893	6.85
Madera	1,765	56	80	1,425	7.01
Riverside	1,102	37	51	1,387	6.86
10-County Total	**38,557**	**1,536**	**1,753**	**1,320 (Average)**	**6.98 (Average)**
Percent of State Totals	**94%**	**83%**	**93%**		

Dairy Farms in California

Dairy Farms and Milk Production California, 1978-2008

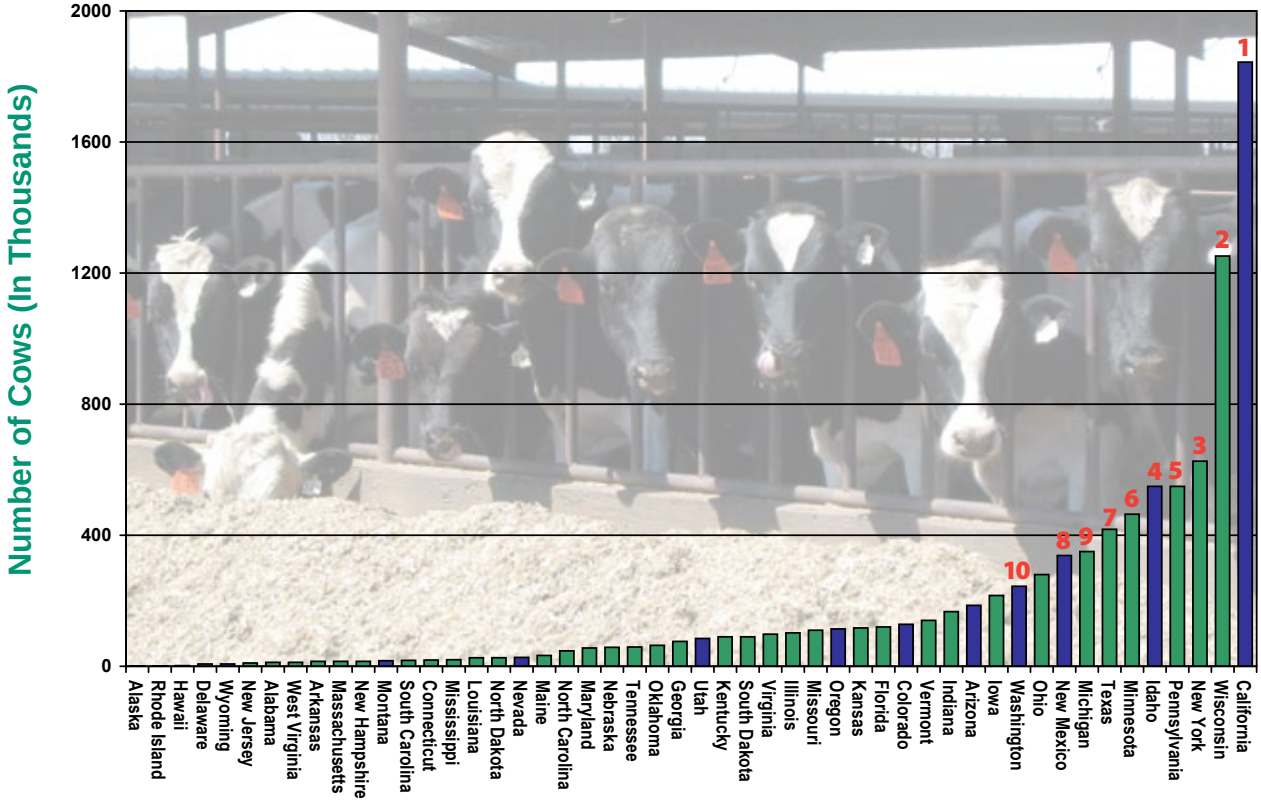


Number of Farms and Cows Per Farm California, 1978-2008



U.S. Milk Cows, Milk Per Cow

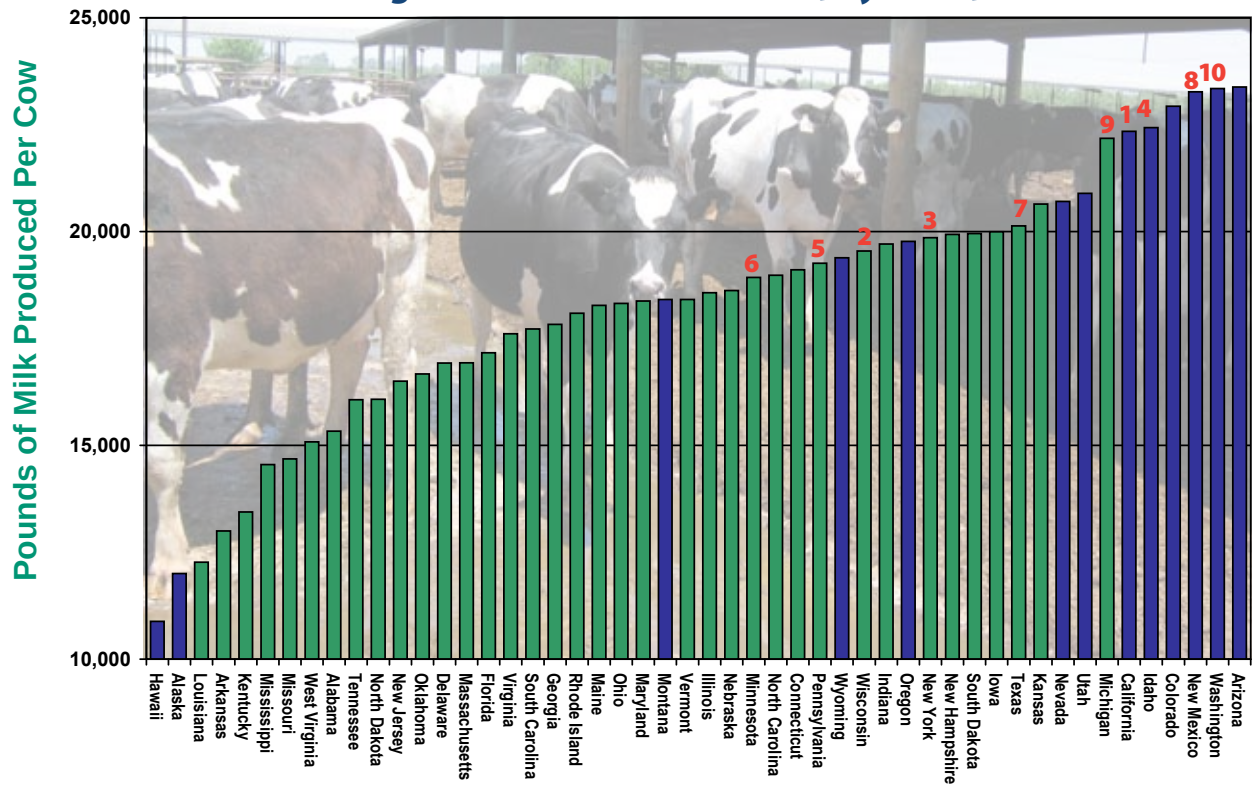
Number of Dairy Cows, by State, 2008



Blue bars indicate states from the Western Region

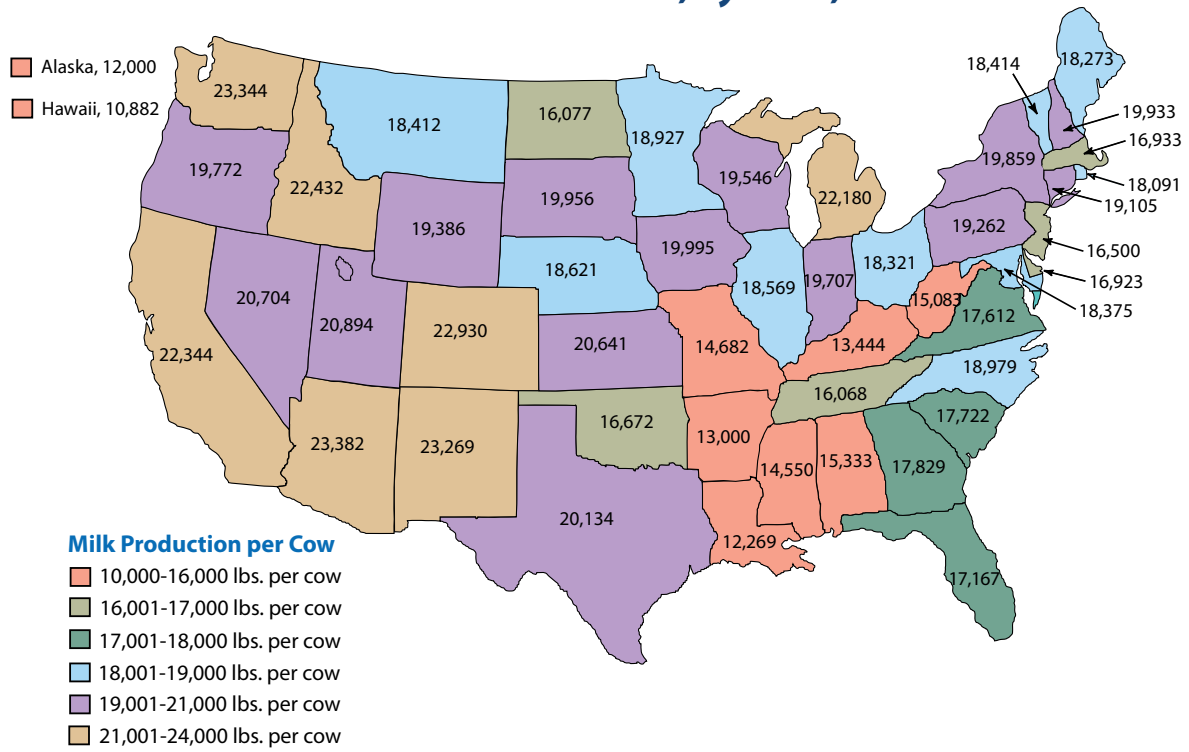
Red number indicates top ten ranking in U.S. milk production

Average Pounds of Milk Per Cow, by State, 2008

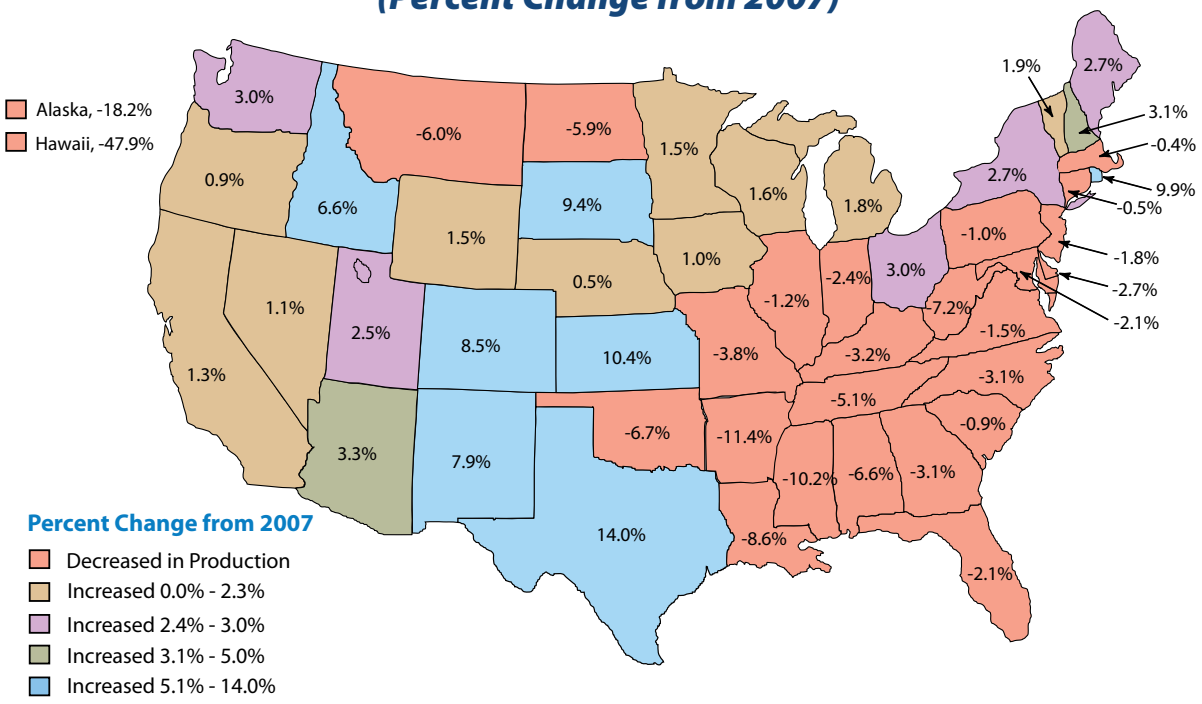


U.S. Milk Cows / Production

Milk Production Per Cow, by State, 2008



Milk Production by State, 2008 (Percent Change from 2007)



U.S. Mailbox Milk Prices

The California Department of Food and Agriculture began publishing California mailbox milk prices in 1998. Mailbox price is defined as the net price received by dairy producers for milk. The mailbox price includes all payments received for milk sold and deducts costs associated with marketing the milk. It does not matter whether a California producer is shipping milk to either a cooperative or a proprietary plant. The mailbox price will be comparable.

The Department uses the same criteria to calculate the mailbox price that USDA uses to calculate mailbox prices for Federal Milk Marketing Orders.

Total Receipts
- Adjusted gross
- Quality payments
- Component premiums
- Yield premiums
- Seasonal bonuses
- Monthly distribution of cooperative earnings
- Direct contracts

Marketing Costs and Adjustments
- Haul and stop charges
- Cooperative dues
- Equity deductions
- Federal assessments
- State assessments
- Inspection fees
- Lab fees

Total Receipts less Marketing Costs & Assessments = Mailbox Price

* Please note, annual "thirteenth checks" are not included in the mailbox price.

2008 Mailbox Milk Prices for Selected Reporting Areas in Federal Milk Orders & California

Reporting Areas	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
					Dollars Per Hundredweight							
California	**$17.97**	**$17.05**	**$16.04**	**$15.88**	**$16.79**	**$17.35**	**$17.19**	**$16.25**	**$16.29**	**$15.75**	**$14.67**	**$12.83**
New England States	$21.78	$20.09	$18.56	$18.94	$18.51	$19.61	$20.34	$19.53	$19.34	$18.64	$18.19	$16.18
New York	$20.74	$19.01	$17.52	$17.91	$17.50	$18.49	$19.39	$18.54	$18.28	$17.33	$17.03	$15.14
Eastern Pennsylvania	$21.30	$19.62	$17.94	$18.44	$18.00	$18.97	$19.85	$19.09	$18.85	$17.86	$17.68	$15.63
Appalachian States	$22.21	$21.26	$18.84	$20.21	$19.25	$20.23	$22.36	$21.05	$20.66	$19.38	$19.39	$16.58
Southeast States	$22.94	$21.70	$19.36	$20.48	$20.29	$21.10	$23.53	$22.36	$21.76	$19.91	$20.26	$17.39
Southern Missouri	$21.15	$19.77	$17.91	$18.96	$17.97	$19.00	$20.85	$19.58	$19.16	$17.80	$18.11	$15.54
Florida	$23.87	$22.63	$20.26	$21.64	$21.80	$22.31	$24.98	$24.33	$23.73	$23.96	$21.70	$18.61
Western Pennsylvania	$21.14	$19.71	$18.26	$18.69	$18.23	$19.23	$19.87	$18.92	$18.77	$18.30	$18.00	$15.92
Ohio	$21.18	$19.70	$18.28	$18.59	$18.23	$19.05	$19.83	$19.08	$18.92	$18.42	$18.30	$16.32
Indiana	$21.23	$19.98	$18.47	$18.79	$18.18	$19.02	$20.03	$18.99	$18.68	$17.94	$18.08	$15.83
Michigan	$19.99	$19.11	$17.79	$18.05	$17.58	$18.57	$19.23	$18.49	$18.25	$17.54	$17.32	$15.74
Wisconsin	$20.79	$18.85	$18.86	$18.11	$18.87	$20.22	$19.14	$18.22	$17.78	$18.53	$17.53	$16.63
Minnesota	$20.71	$19.19	$18.75	$18.34	$19.31	$20.12	$19.11	$18.08	$18.38	$18.38	$17.32	$16.39
Iowa	$20.42	$19.07	$18.08	$18.15	$18.10	$19.12	$19.16	$18.22	$17.96	$17.90	$17.13	$15.52
Illinois	$21.03	$19.32	$18.32	$18.37	$18.19	$19.33	$19.47	$18.50	$18.11	$17.97	$17.44	$15.76
Corn Belt States	$19.97	$18.45	$17.35	$17.80	$17.56	$18.42	$18.66	$18.05	$17.80	$17.37	$16.85	$15.20
Western Texas	$19.53	$17.43	$16.70	$17.20	$16.90	$17.91	$18.24	$17.74	$17.03	$16.89	$16.33	$14.45
New Mexico	$18.83	$16.45	$15.94	$16.33	$16.04	$17.01	$17.13	$16.71	$16.06	$16.00	$15.44	$14.00
Northwest States	$19.59	$17.80	$16.60	$17.17	$16.87	$17.91	$18.51	$17.86	$17.26	$16.54	$16.38	$14.55
All Federal Order Areas	$20.70	$19.03	$18.01	$18.19	$18.09	$19.11	$19.43	$18.58	$18.25	$17.94	$17.42	$16.12

California Annual Weighted Average Mailbox Milk Prices

2007: $17.54/cwt. **2008: $16.17/cwt.** **Percent Change from 2007: *7.8* % Decrease**

Average Prices Paid to Producers

Average Prices Paid Producers in California For All Bulk Milk (Grade A and Grade B), by Month, 2004-2008 [1/2/]

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Average
	Dollars Per Hundredweight												
2004	11.94	12.55	14.63	17.29	17.63	16.26	13.85	13.64	14.27	14.01	15.18	15.17	14.70
2005	14.87	14.14	14.03	14.08	13.47	13.38	13.77	13.47	14.32	14.31	13.62	13.68	13.93
2006	13.17	11.86	11.31	10.91	10.73	10.71	10.46	10.92	11.79	11.97	12.47	12.73	11.59
2007	12.93	13.57	14.33	15.32	17.29	19.66	20.45	20.57	20.65	20.36	21.18	20.17	18.04
2008	18.48	17.63	16.80	16.60	17.48	18.03	17.86	16.87	16.90	16.34	15.20	13.38	16.80

[1/] Prices are F.O.B. plant, at actual test.
[2/] Includes in-state pool shipments and California milk shipped into Federal Milk Marketing Orders. Excludes bonuses and premiums.

Average Prices Paid Producers in California For Market Milk (Grade A), by Month, 2004-2008 [1/2/]

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Average
	Dollars Per Hundredweight												
2004	11.94	12.55	14.61	17.26	17.62	16.26	13.86	13.64	14.27	14.00	15.16	15.16	14.69
2005	14.86	14.12	14.01	14.06	13.46	13.35	13.75	13.44	14.29	14.29	13.60	13.65	13.91
2006	13.13	11.83	11.29	10.89	10.72	10.70	10.44	10.90	11.75	11.94	12.44	12.70	11.56
2007	12.90	13.54	14.30	15.29	17.23	19.59	20.42	20.57	20.65	20.39	21.17	20.16	18.02
2008	18.47	17.60	16.77	16.57	17.43	17.99	17.83	16.86	16.88	16.30	15.17	13.34	16.77

[1/] Prices are F.O.B. plant, at actual test.
[2/] Includes in-state pool shipments and California milk shipped into Federal Milk Marketing Orders. Excludes bonuses and premiums and exempt production.

Average Prices Paid Producers in California For Manufacturing Milk (Grade B), by Month, 2004-2008 [1/]

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Average
	Dollars Per Hundredweight												
2004	11.94	12.57	16.20	19.30	18.10	16.23	13.43	14.04	14.49	14.50	15.97	15.50	15.19
2005	15.52	14.95	14.64	14.94	13.98	14.47	14.67	14.39	15.51	15.25	14.48	14.89	14.81
2006	14.85	13.23	12.28	11.67	11.36	11.46	11.03	11.54	13.15	12.99	13.98	14.02	12.63
2007	14.03	14.58	15.39	16.43	19.32	22.03	21.71	20.59	20.69	19.43	21.68	20.77	18.89
2008	18.82	19.26	18.44	18.31	20.19	20.64	19.11	17.75	18.35	18.73	17.11	15.58	18.52

[1/] Prices are F.O.B. plant, at actual test.

Quota Summary

California Grade A milk producers are paid based on a system of quota and non-quota prices (pool prices). California's milk pooling system dates to 1968, when each producer with a market milk license was assigned a production base and Class 1 quota based on historical milk production during 1966 or 1967. Prior to 1968, market milk producers contracted with fluid handlers for specific volumes of milk. Since 1968, additional quota was made available to both new and existing producers. The amount of new quota allocated was based on increases in statewide Class 1 sales. Allocations to existing producers was according to the ratio of quota to production base. Specifically, to promote equity among producers, quota was allocated to "equalize" producers at a quota production base ratio of 95 percent. However, due to stagnant growth in Class 1 sales, equalization was occuring very slowly, and in 1978 a blanket allocation of new quota was made to equalize all producers holding production bases at that time. The Quota Reform legislation in 1993 introduced a fixed price differential of $1.70/cwt. between "quota" and "overbase" prices which changed the method of determining pool prices.

Quota and its associated base have always been freely transferable on the open market and can move anywhere in the state. A fairly active market exists for quota. Transactions are monitored by the Milk Pooling Branch which also oversees all pool operations. Quota selling prices are quoted on a per pound of solids-not-fat basis per day (formerly fat prior to the $1.70 spread). Quota prices are related primarily to the difference between quota and overbase prices. For 2008, statewide quota holdings were valued at about 1.2 billion.

Producers can sell market milk without owning any quota. In this case, however, they receive the overbase price. In 2008, approximately 60% of all market milk producers held quota.

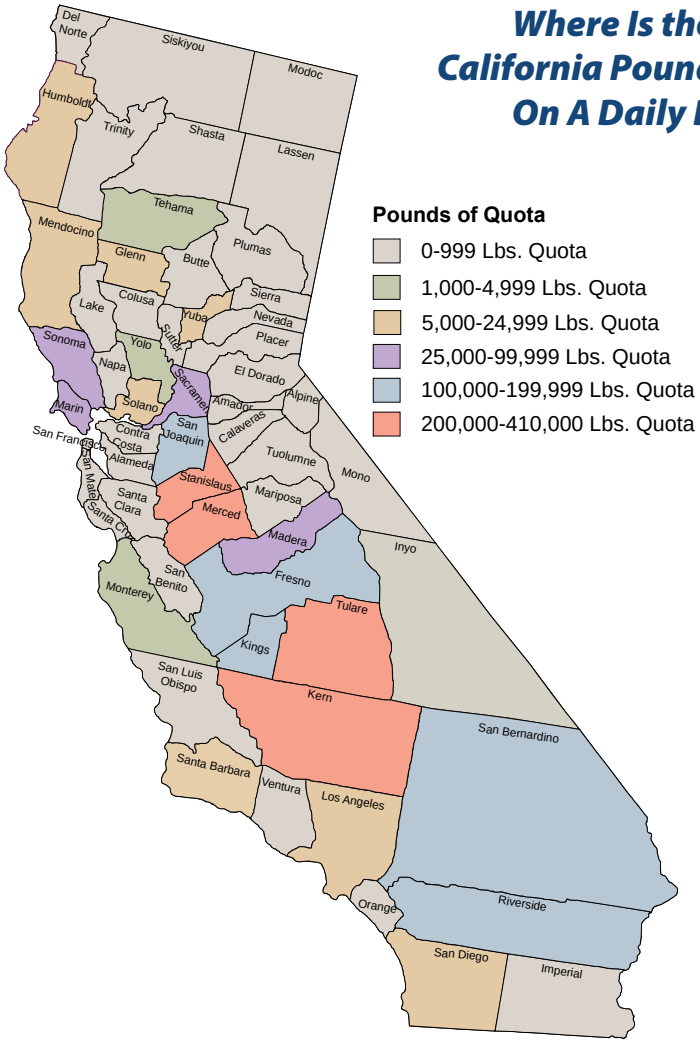
Summary of Quota Transfers, 2008

Effective 1st of the month	No. of Sellers	No. of Buyers	No. of Sales at 100%	Sales Without Cows			Total Quota Fat Transferred	Total Quota SNF Transferred	Average Ratio
				Low	Avg.	High			
January	3	2	3	$490	$502	$520	3,128	7,754	2.48
February	3	2	3	$515	$527	$535	454	1,124	2.48
March	4	6	4	$500	$513	$520	3,449	8,519	2.47
April	3	4	3	$505	$528	$538	1,981	4,659	2.35
May	6	6	6	$510	$530	$540	3,683	9,166	2.49
June	4	5	4	$540	$540	$540	2,987	7,331	2.45
July	4	8	3	$530	$539	$540	2,747	6,670	2.43
August	7	8	6	$540	$544	$550	9,351	23,072	2.47
September	4	5	3	$540	$545	$550	1,562	3,727	2.39
October	2	2	2	$535	$538	$540	322	727	2.26
November	7	7	6	$530	$545	$570	5,308	12,592	2.37
December	9	13	8	$520	$556	$570	5,454	13,314	2.44
TOTAL	56	68	51	$521	$534	$543	40,425	98,655	2.44

* The average ratio is the relation of total quota fat to total quota SNF

Where Is the Quota?

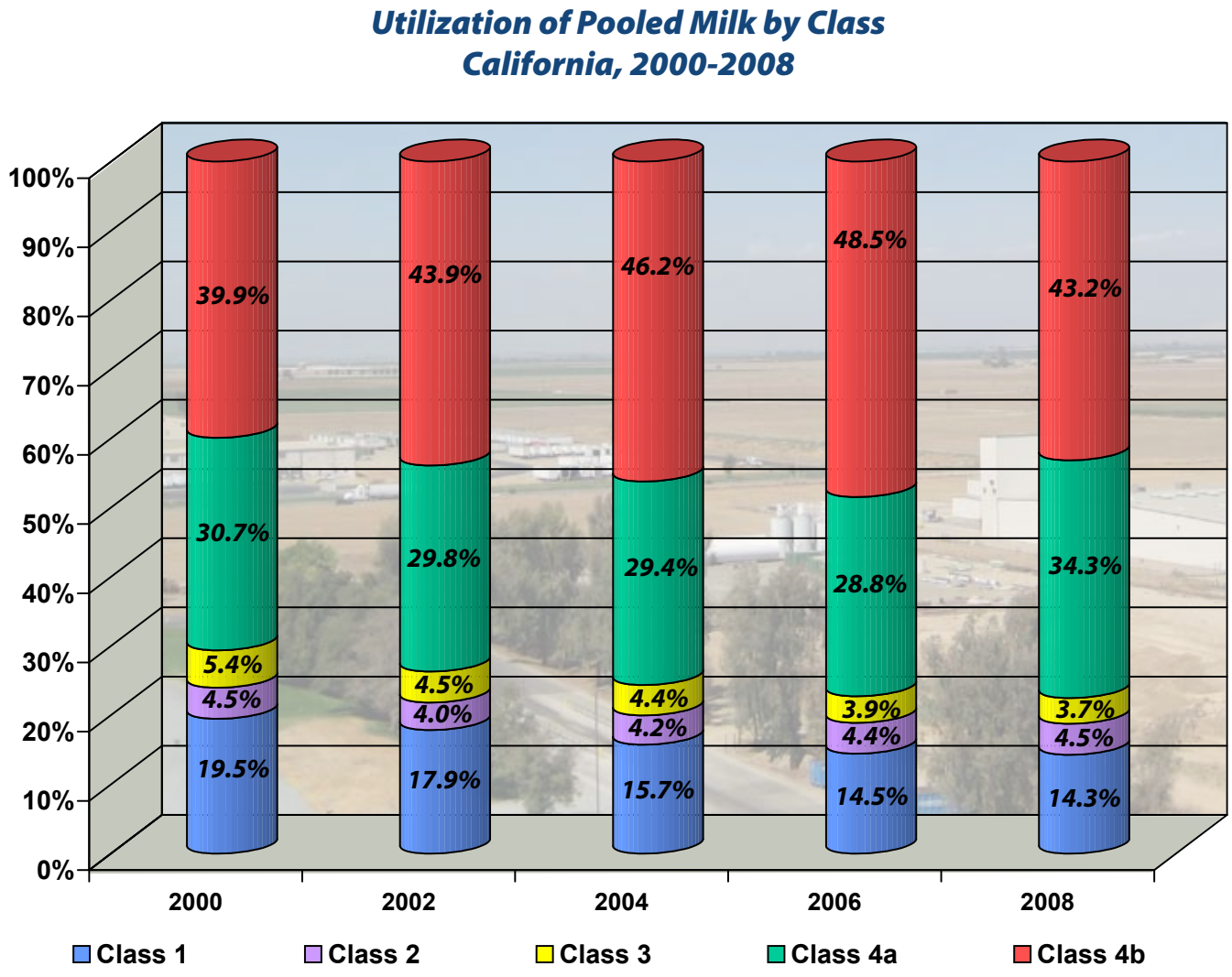
Where Is the Quota in California? California Pounds of Solids-Not-Fat Quota On A Daily Basis, December 2008



Annual Summary of Quota Transfers, 1999-2008

Year	No. of Sellers	No. of Buyers	Sales at 100%	Average Sales Without Cows	Total Quota Fat Transferred	Total Quota SNF Transferred
1999	63	93	51	$392	31,663	77,278
2000	73	110	55	$410	29,600	71,276
2001	58	92	40	$421	22,179	54,321
2002	53	64	39	$445	18,047	43,612
2003	80	103	53	$455	37,917	93,151
2004	72	108	62	$457	31,580	77,498
2005	65	79	48	$478	24,715	60,243
2006	52	75	41	$501	26,107	63,249
2007	77	93	70	$495	31,060	75,367
2008	56	68	51	$534	40,425	98,654

Pool Milk Utilization



Between 2000 and 2008:

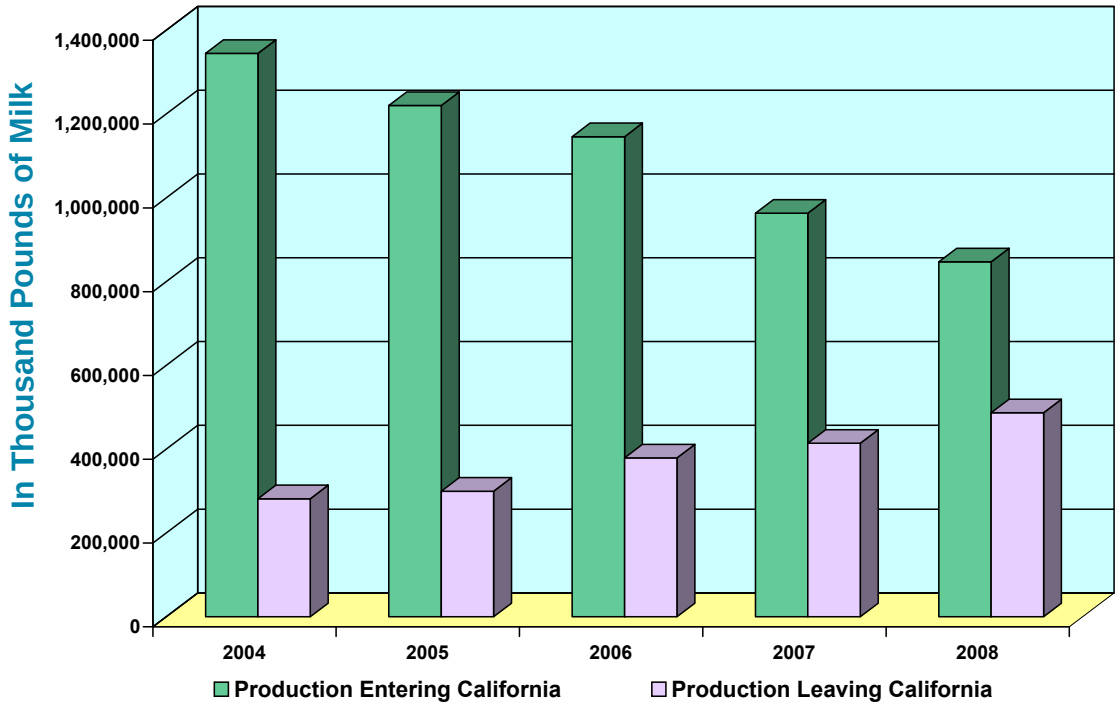
- Utilization of Class 4a has moved from approximately 1,205 million pounds to 1,697 million pounds on a total solids basis, an increase of 41 percent.
- Utilization of Class 4b has moved from approximately 1,566 million pounds to 2,134 million pounds on a total solids basis, an increase of 36 percent.
- Utilization of all market milk has moved from approximately 3,924 million pounds to 4,942 million pounds on a total solids basis, an increase of 26 percent.
- In total, Class 4a and 4b accounted for 77 percent of all milk available on a total solids basis in 2008.
- Class 1 representation of total milk, on a total solids basis, continued to decline, dropping from 19.5 percent in 2000 to 14.3 percent in 2008.

Net Milk Available in California

California Commercial Milk Production, Production Entering, Production Leaving, Net Milk Available, in Thousand Pounds, 2004-2008

Year	California Milk Production	Production Entering California	Production Leaving California	Net Milk Available in California
2004	36,427,964	1,344,585	281,539	37,491,010
2005	37,521,450	1,220,251	299,443	38,442,258
2006	38,792,168	1,145,694	378,958	39,558,904
2007	40,646,097	963,038	414,020	41,195,115
2008	41,166,115	847,054	486,799	41,526,370

California Milk Production Entering California, Leaving California, 2004-2008



CALIFORNIA DAIRY PRODUCER ASSESSMENT RATES

2008	POOL ADMIN FEE RATE (CWT)	MKT. MILK ADMIN. FEE RATE (CWT)	MFG. MILK ADMIN. FEE RATE (CWT)	DAIRY COUNCIL CLASS 1% QUOTA FAT	DAIRY COUNCIL CLASS 1% QUOTA SNF	DAIRY COUNCIL CLASS 1 RATE (CWT)	DAIRY COUNCIL OTHER MILK RATE (CWT)	MKT ORDER (MKT) RATE (CWT)	MKT ORDER (MFG) RATE (CWT)	MILK & DAIRY FOOD SAFETY (CWT)
Jan	0	0.008	0.012	41.77%	77.67%	0.0150	0.0060	0.1000	0.1000	0.0008
Feb	0	0.008	0.012	40.17%	74.86%	0.0150	0.0060	0.1000	0.1000	0.0008
Mar	0	0.008	0.012	39.05%	72.60%	0.0150	0.0060	0.1000	0.1000	0.0008
Apr	0.011	0.008	0.012	39.25%	74.44%	0.0150	0.0060	0.1000	0.1000	0.0008
May	0.011	0.008	0.012	38.26%	72.87%	0.0150	0.0060	0.1000	0.1000	0.0008
June	0.011	0.008	0.012	38.14%	69.93%	0.0150	0.0060	0.1000	0.1000	0.0008
July	0.011	0.008	0.012	39.73%	70.81%	0.0150	0.0060	0.1000	0.1000	0.0008
Aug	0.011	0.008	0.012	38.10%	71.22%	0.0150	0.0060	0.1000	0.1000	0.0008
Sept	0.011	0.008	0.012	38.97%	75.03%	0.0150	0.0060	0.1000	0.1000	0.0008
Oct	0.011	0.008	0.012	39.36%	76.80%	0.0150	0.0060	0.1000	0.1000	0.0008
Nov	0.011	0.008	0.012	37.66%	71.81%	0.0150	0.0060	0.1000	0.1000	0.0008
Dec	0.011	0.008	0.012	40.14%	73.84%	0.0150	0.0060	0.1000	0.1000	0.0008

Milk Pooling Administration Fee: (.011 cents per hundredweight) - Funds used to administer the functions of the Milk Pooling Branch. Functions include:

- Pool and distribute milk revenue
- Establish the monthly quota and overbase prices
- Administer the registration and transfer of quota holdings
- Audit monthly reports of California plants to verify receipts and usage

Market Milk Administration Fee: (.008 cents per hundredweight on Grade A milk) - Funds used to administer the functions of the Dairy Marketing Branch. Functions include:

- Establish the minimum farm price for milk
- Manage the Milk Producers Security Trust Fund
- License all milk handlers in the State
- Production and manufacturing cost audits
- California dairy industry statistics

- This assessment was suspended for part of 2007 due to sufficient operating reserves.

Manufacturing Milk Administration Fee: (.012 cents per hundredweight on Grade B milk) - Funds used for the same purpose as Market Milk Administration Fee above.

Dairy Council Fee (DCC): (Class 1 milk .015 cents per hundredweight, other milk .006 cents per hundredweight)- Funds used to administer the functions of the Dairy Council. This program's function is to provide nutrition education materials that show the role of dairy products in a balanced diet.

California Milk Advisory Board Fee (CMAB): (Market milk, 10 cents per hundredweight) - Funds used to administer the functions of the California Milk Advisory Board. This program is involved in advertising, promotion and research. This program promotes all dairy products, with a current emphasis on cheese.

California Manufacturing Milk Advisory Board Fee (CMMAB): (Manufacturing milk, 10 cents per hundredweight on Grade B milk). This program is similar to CMAB but does not promote fluid milk products because fluid milk products cannot contain Grade B milk.

Milk and Dairy Foods Safety Fee: (.0008 cents per hundredweight) - Funds used for the testing of milk fat, solids not fat and the weighing and sampling of market milk delivered to handlers by producers.

National Dairy Promotion and Research Board (NDPRB): (.05 cents per hundredweight on all milk) - Funds used to administer the functions of the NDPRB, a federal program. This program conducts promotions and research activities on behalf of all United States dairy farmers. (not shown in table above)

Appendix A

Glossary of Terms

Production Cost Comparison (Cost Comp) is a comprehensive report pertaining solely to the dairy enterprise. This information includes all costs and activities related only to milking and dry (total) cows. It does not include information relating to calf raising, heifer raising and other farming enterprises. The Cost Comp is designed to provide a constructive tool for better decision–making and to closely reflect the actual cost of producing milk. **All costs are based on a per cow/per month basis, unless otherwise noted.**

Number of Herds – number of herds in each size category.

Feed Costs - All feed costs attributed to the dairy enterprise.

a) Dry Roughage – All forages low in moisture content and high in fiber (e.g.) alfalfa hay, oat hay and almond hulls.
b) Wet Feed and Wet Roughage – All forages high in moisture content (e.g.) Wet Feed: brewers' malt, wet whey, wet citrus and cull vegetables. Wet Roughage: haylage, earlage, corn silage, and green chop.
c) Concentrates – Products relatively high in energy and low in fiber, including grains, milled by-products, and protein product (e.g.) rolled corn or barley, whole cottonseed, dried distillers grain and custom premixes.
d) Mineral & Supplements – Micro or macro minerals and any vitamins and feed additives that improve feed efficiency (e.g.) molasses and bicarbonate.
e) Pasture – Includes any grazing on land that contains pasture grasses or legumes.

Total Feed Costs – Total of above line items, (a) through (e)

Total Feed Costs/Cwt - Total Feed cost per cow, divided by the total monthly hundredweight of milk shipped per cow.

Total Hired Labor – Comprises all paid labor attributed to the dairy enterprise.

- Salaried and hourly labor total includes gross wages earned by hired milkers, pushers, feeders, and outside workers plus employer taxes and perquisites (e.g.) Employer Taxes: workers compensation insurance, unemployment insurance, and social security; Perquisites: house, utilities, health insurance.

Total Hired Labor Costs/Cwt - Total labor cost per cow, divided by the total monthly hundredweight of milk shipped per cow.

Herd Replacement – A twelve–month rolling average of the number and value of cows entering the herd, minus the total receipts for the same number of cows culled and dead.

Less: Calf Income - Income from the sale of day old calves.

Total Herd Replacement Costs - Herd replacement cost less calf income.

Total Replacement Costs/Cwt - Total herd replacement cost per cow, divided by the total monthly hundredweight of milk shipped per cow.

Operating Costs

a) Utilities – Includes electricity, natural gas, garbage, telephone, water, etc.
b) Supplies – Includes products needed for producing milk (e.g.) soaps, iodine, hoses, office supplies, A.I. expenses, etc.
c) Veterinary and Medicine – All costs for veterinary work, medicine and supplies, including rBST.
d) Outside Services – Hired services (e.g.) accountant, nutritionist, hoof trimmer, DHIA or private testing, etc.
e) Repairs and Maintenance – All repairs and maintenance of equipment and structures used by the dairy enterprise (e.g.) milking parlor, free-stalls, corrals, feedwagons, etc.
f) Miscellaneous – Any other operating costs not covered above (e.g.) County or state permits, regulatory fees, branding fees, subscriptions, producer association fees, etc.
g) Bedding & Manure Haul – Cost incurred to scrape corrals and haul manure, may include any dirt or filler to maintain corrals and free-stalls.
h) Fuel & Oil – Fuel and oil used by the dairy enterprise.
i) Interest – Interest expense paid on outstanding short term loans for operating costs.
j) Lease Expense – Expense for leasing dairy facility.
k) Depreciation – Straight–line depreciation on any owned equipment or buildings used by the dairy enterprise, less a salvage value.
l) Taxes & Insurance – Tax expense due on owned real and personal property. Insurance for public liability, property damage, fires and storm coverage.

Total Operating Costs– Total of above line items, (a) through (l).

Total Operating Costs/Cwt - Total operating cost per cow, divided by the total monthly hundredweight of milk shipped per cow.

Milk Marketing Costs – Hauling charges, mandatory assessments and miscellaneous deductions.

a) Hauling – Fees paid to haul milk from ranch to plant, plus any stop charges.
b) State Assessments – Dairy Marketing, Milk Pooling, Milk & Dairy Foods Control, Dairy Council and Milk Advisory Board, plus county health inspections.
c) Federal Assessments and Misc. Deductions – National Dairy Promotion and any permits or third party component testing.

Total Milk Marketing Costs – Total of above line items, (a) through (c).

Total Milk Marketing Cost/Cwt – Total marketing cost per cow, divided by the total monthly hundredweight of milk shipped per cow.

Total Cost/Cow/Month – Total of above line items, divided by total cows.

Total Cost /Cwt. – Total costs, divided by the total monthly hundredweight of milk shipped per cow.

Milk Production Data

a) Milk Sold/Total Cow/Month (cwt) – Total hundredweight of milk shipped for the month, divided by total cows.

Milk Production Cost Comparison - (Continued)

b) Lbs. Milk Sold/Milk Cow/Day – Total pounds of milk shipped, divided by number of milk cows.
c) Gross Milk Receipts (cwt) – Blend price based on California's Pool Price Announcement, minus regional quota adjuster (RQA), plus any transportation allowances. It does not include any quality or yield bonuses.
d) Mailbox Price ($/cwt) – Total receipts (receipts includes gross dollars, quality payments, component premiums, yield premiums, seasonal bonuses, monthly distribution of cooperative earnings) less marketing costs and assessments.
e) Mailbox Price less Total Costs (cwt.) – Mailbox price plus marketing cost less total cost.
f) Fat Test % – Total pounds of fat shipped, divided by total pounds of milk shipped for the month.
g) SNF Test % – Total pounds of solids–not–fat shipped, divided by total pounds of milk shipped for the month.
h) Fat Sold/Milk Cow/Month (lb.) – Total pounds of fat shipped, divided by total milk cows.
i) SNF Sold/Milk Cow/Month (lb.) – Total pounds of solids–not–fat shipped, divided by total milk cows.
j) Percent Quota – Total pounds of quota solids-not-fat produced divided by total pounds of solids-not-fat shipped.

Related Data

a) Percent Dry Cows – Total number of dry cows, divided by total cows.
b) Yearly Cull Rate – Twelve–month total of cows leaving the herd, divided by total cows.
c) Average Value per Drop Bull Calf – Total value of bull calves, divided by total bull calves.
d) Milk Cow Alfalfa Hay Price ($/ton) – Average blend price of alfalfa hay fed to milking cows.
e) Grain, Minerals & Supplements ($/ton) – Total grain, mineral/supplement costs, divided by total tons fed to milking cows.
f) Grain Minerals & Supplements (lb./mc day) – Total pounds of grain, minerals and supplements fed, divided by total milking cows, divided by the number of days in month.
g) Milkers ($/hr) – Average hourly wage received by milkers, plus employer taxes and perquisites.
h) Total labor ($/hr) – Average hourly wage received by all hired employees, plus employer taxes and perquisites.
i) Milk Cow Feed Costs per Day – Total feed costs for milking cows, divided by number of milking cows, divided by the number of days in the month.
j) Milk Cow Feed Costs per Cwt. – Total feed costs for milking cows, divided by total hundredweight of milk shipped.
k) Milk Cows – Number of lactating cows in herd.
l) Total Cows – Number of lactating and dry cows in herd.
m) Average Investment per Cow – Total investment for land, buildings, equipment and cows, divided by total cows.

Cost of Production Staff

Cost of Production Unit Supervisor
Mike Francesconi
Phone: (916) 341-5988
Email: mfrancesconi@cdfa.ca.gov

South Valley Area
Carl Matz
Phone: (559) 733-5166
Email: cmatz@cdfa.ca.gov

North Valley/South Valley Areas
Mirek Wilczek
Phone: (916) 341-5988
Email: mwilczek@cdfa.ca.gov

North Coast and
North Valley Areas
Cindy Prentice
Phone: (916) 341-5988
Email: cprentice@cdfa.ca.gov

North Coast and
North Valley Areas
Richard Walker
Phone: (916) 341-5988
Email: rwalker@cdfa.ca.gov

Southern California and
South Valley Areas
David DaSilva
Phone: (916) 341-5988
Email: ddasilva@cdfa.ca.gov

California Dairy Industry Contacts

California Department of Food and Agriculture
1220 N Street, Sacramento, CA 95814
Homepage Website: http:www.cdfa.ca.gov/dairy
Email address: dairy@cdfa.ca.gov

Office of the Secretary
A.G. Kawamura, *Secretary*, 654-0433
Will Brown, *Undersecretary,* 654-0321
Dr. Richard Breitmeyer, DVM, *State Veterinarian*, 651-6870

ANIMAL HEALTH AND FOOD SAFETY SERVICES
Dr. Annette Whiteford, DVM, *Director*, 654-0881, Fax 653-4249

Animal Health Branch
Kent Fowler, DVM, *Chief,* 654-1447, Fax 653-2215

District Veterinarians
Redding: Charles Palmer, DVM, (530) 225-2140
Modesto: David Willoughby, DVM, (209) 491-9350
Tulare: Melanie Swartz, DVM, (559) 685-3500
Ontario: David Kerr, DVM, (909) 947-4462

Environmental Programs
Ken Trott, Director, 657-4956
Rolf Frankenbach, Air Quality, 651-9446
Eddie Hard, Water Quality, 653-0873

Livestock Identification Branch
Greg Lawley, Chief, 654-0889, Fax 653-5190

Regional Administrators
Northern California: John Romano (530) 347-5721
North Central California: John Romano, (209) 491-9345
South Central California: Richard Wright, (559) 685-3505
Southern California: Wayne Williams, (909) 923-8721

Meat & Poultry Inspection Branch
Dennis Thompson, DVM, Chief, 654-0504, Fax 654-2608

District Veterinarians
Sacramento: Doug Hepper, DVM, 654-0504
Fresno: Herbert Radigtsch, DVM, (559) 233-7318
Ontario: Namara Garbaba, DVM, (909) 773-0079

Area Code is (916) unless otherwise noted.

Milk & Dairy Food Safety Branch
Stephen Beam, *Chief,* **653-0773, Fax 654-7512**

Dairy Program Coordinator
Kristen Dahl, 654-1981

Licensing
Facilities, Vacant, 654-0916
Personal Licenses, Ashley Cornejo, 654-0785

Regional Administrators
Stockton: George Salsa, (209) 466-7186
Oakland: John Macy, (510) 622-4810
Fresno: David Krall, (559) 445-5506
Ontario: Vacant (909) 923-9929

MARKETING SERVICES
Vacant, *Director*, 445-5055, Fax 445-2655

Dairy Marketing Branch
David K. Ikari, *Chief,* **341-5988, Fax 341-6697**

California Dairy Statistics Service
Karen Dapper, 341-5988, Fax 341-6697

Economics/Pricing
Candace Gates, 341-5988, Fax 341-6697

Production Cost Unit
Mike Francesconi, 341-5988, Fax 341-6697

Manufacturing Cost Audits
Venetta Reed, 341-5988, Fax 341-6697

Enforcement & Unlawful Practices
David Ikari, 341-5988, Fax 341-6697

Milk Pooling Branch
John Lee, *Chief,* 341-5901, Fax 341-5995

Pool Operations
Don Shippelhoute, 341-5901, Fax 341-5995

Pool Audits
Nancy Hartman, Dan Roderick, Marlene Wride, Sunday Ikenador, 341-5901, Fax 341-5995

Producer Security Assurance, Licenses/Bonds
John Bressett, 341-5901, Fax 341-5995

Marketing Branch
Robert Maxie, *Chief*, 341-6005, Fax 341-6826
Dennis Manderfield, Glenn Yost

Dairy Marketing Branch
California Department of Food and Agriculture
1220 N Street
Sacramento, CA 95814-5621
www.cdfa.ca.gov/dairy