PERDUE Animal Nutrition

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WEEKLY DAIRY OUTLOOK

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This short weekly newsletter provides you with a summary of current dairy prices, translates product prices into component prices, and summarizes major dairy related news.

Table 1. Spot dairy products prices on Friday November 13th and Friday November 20th, and their implied component prices.

	November 13 2026	November 20 2026	Change	Month to date
CME Cheddar blocks ($/lb)	1.6175	1.5625	-0.0550	1.5825
CME Butter ($/lb)	1.2400	1.2700	+0.0300	1.2583
CME Dry whey ($/lb)	0.9100	0.9200	+0.0100	0.8900
CME Nonfat dry milk ($/lb)	2.0350	2.0650	+0.0300	2.0992
-------	--------	Implied Prices	--------	-------
Butterfat ($/lb)	1.23	1.26	+0.03	1.25
Protein ($/lb)	3.12	2.90	-0.22	2.98
Other solids ($/lb)	0.66	0.67	+0.01	0.64
Nonfat solids ($/lb)	1.78	1.81	+0.03	1.84
Class III ($/cwt)	18.07	17.57	-0.50	17.59
Class IV ($/cwt)	20.25	20.64	+0.39	20.90

Comments

The CME butter cash market was very active last week with 68 loads changing hands. Regardless of this heavy activity, cash butter price didn't move much, although slightly up. Cash cheddar price lost some ground with little cheese being traded (13 loads for the whole week). Cheddar futures were basically unchanged. Cash and futures dry whey prices continued moving upward. Cash NDM was marginally up, whereas futures were down, exhibiting a progressive decline throughout the next 6 months, but remaining at historically record levels. The resulting nonfat solids price of $1.53/lb for April would still be at the 92nd percentile of NFS in the last 5 years.

Table 2. Six-month strip of dairy futures at closing time last Friday, and changes in their 6-month averages from the prior Friday closings[1].

	Cheese ($/lb)	Butter ($/cwt)	Dry Whey ($/cwt)	NFDM ($/cwt)	Class III ($/cwt)	Class IV ($/cwt)
November	1.671	133.000	76.000	206.750	17.74	20.83
December	1.575	133.500	80.000	193.750	17.01	19.71
January	1.550	136.000	79.750	184.500	16.76	19.01
February	1.554	142.000	80.250	181.125	16.78	18.80
March	1.580	149.200	80.500	179.575	17.04	19.20
April	1.601	153.300	81.000	178.625	17.20	19.22
Average	1.589	141.167	79.583	187.388	17.09	19.46
Weekly Change	-0.004	+0.588	+1.313	-2.392	+0.03	-0.26

[1] Futures prices on the Chicago Mercantile Exchange

Based on the next 6-month of futures, the implied 6-month prices of milk components used in Class III and nonfat solids used in Class I, II, and IV pricings, base Class I Skim mover, and base Class I are reported in Table 3. Note that the December base Class I Skim and base Class I Butterfat prices were released on November 18th (the $16.93/cwt in Table 3 for skim, and $1.3641/lb for butterfat, the latter not being reported, but used to calculate the $20.11/cwt for the December base Class I price, which in this instance is not a projection but an actual price since Class I milk is forward priced).

Table 3. Translation of futures dairy product prices into implied futures component prices and Class I Base Skim Mover and base Class I (numbers in italics have already been announced by USDA).

	Butterfat ($/lb)	Protein ($/lb)	Other Solids ($/lb)	Nonfat Solids ($/lb)	Base Class I Skim Mover ($/cwt)	Projected Base Class I ($/cwt)[1]
November	1.34	3.18	0.51	1.81	*(16.03)*	*(20.27)*
December	1.34	2.86	0.55	1.68	*(16.93)*	*(21.11)*
January	1.37	2.75	0.55	1.59	15.64	19.78
February	1.44	2.68	0.55	1.56	14.78	19.07
March	1.53	2.68	0.55	1.54	14.47	19.02
April	1.58	2.69	0.56	1.53	14.33	19.19
Average	1.43	2.81	0.54	1.62	15.36	19.74
Weekly Change	+0.01	-0.02	+0.01	-0.02	-0.16	-0.12

[1] Adding the location specific Class I differential to the Projected Base Class I would give a 'raw' projected Class I price for a given location. It is a 'raw' projection because this does not include any processor assessments and Class I ESL adjustments. Class I is for milk standardized to 3.5% butterfat and 96.5% skim.
See https://www.ams.usda.gov/sites/default/files/media/ProposedClassIDifferentialsMap.pdf for a map of Class I differentials.

- Table 4 reports price quotations for butter, skim milk powder/nonfat dry milk (SMP/NFDM), whole milk powder (WMP), and cheddar from the top three exporting blocks of countries (the European Union taken as a whole) in early-November, and their relative biweekly price changes.

Table 4. World price quotations of 4 major dairy commodities as of November 8, 2026.

	US$/lb			Biweekly Change (%)		
	E.U.	Oceania	U.S.	E.U.	Oceania	U.S.
Butter	2.01	2.10	1.29	-0.8	-3.1	-4.4
SMP/NDM	1.74	1.83	2.18	+4.5	+7.0	+1.0
WMP	1.98	1.75	2.43	+0.7	+5.8	-1.6
Cheddar	1.64	1.84	1.58	+0.2	+3.5	-9.0

Source: DG Agri

- Overseas, the Global Dairy Trade index was unchanged at the GDT auction held November 17th. About 80% of the index is driven by SMP and WMP prices, both of which were up, but prices of butterfat commodities were markedly down. Butterfat prices are so depressed that the price of WMP (i.e., dry skim milk + butterfat) was less than the price of SMP (i.e., just the dry skim milk).
    - Anhydrous milkfat: US$ 2.21/lb - 8.2%
    - Butter: US$ 1.91/lb - 6.5%
    - Cheddar: US$ 2.03/lb - 1.7%
    - Lactose US$ 0.80/lb +0.8%
    - Mozzarella: US$ 1.83/lb - 1.6%

- Skim milk powder: US$ 1.90/lb +2.2%
- Whole milk powder: US$ 1.85/lb +2.7%

- Last week, the USDA released its October *Milk Production* report.

  Revised Data for September 2026. For the 24 major States, the revised ***September*** *milk production* stood at 18.7 billion pounds, up 2.5% from September 2025. The revision represented an *increase* of 40 million pounds, or 0.2% above the preliminary estimate.

  All 50 States, October 2026. For all 50 States in October, estimated milk production stood at 19.930 billion pounds, *up 461 million pounds or +2.37%* from last year. The number of milk cows in the whole country was estimated at 9.745 million head, 179,000 more than at this time last year, and 7,000 more than last month. The estimated year-to-year increase in cow number is much greater than the margin of error for this statistic (i.e., the USDA never goes out to count cows; the statistic is derived from a survey, which inevitably infers an uncertainty, which is estimated at +/- 19,000 head, which implies that the 90% confidence interval is basically +/- 38,000 head). However, this also means that one should be careful at over-interpreting the monthly change in cow number.

  24 Major states, October 2026. Total milk production in the top 24 dairy States was estimated at 19.187 billion pounds**,** *up 461 million pounds (+2.46%)* from October 2025. Twenty of the 24 dairy States reported increased production. The 4 states reporting a milk decline were:

  Arizona (-6.8%), Utah (-3.1%), Vermont (-0.9%), and Washington (-3.3%).

  Seventeen of the 24 States reported a year-to-year increase in cow number: ID, KS, MI, SD, TX and WI each having added 10,000 or more cows.

  For the 24 States, milk per cow averaged 68.48 lbs/d during the month, up 0.39 lb/day from October 2025. The dairy herd in the 24 major States (9.309 million head) was up an estimated 172,000 head from October 2025. Therefore, about 23.9% of the production increase came from improved cow productivity and 76.1% from the increased number of head.

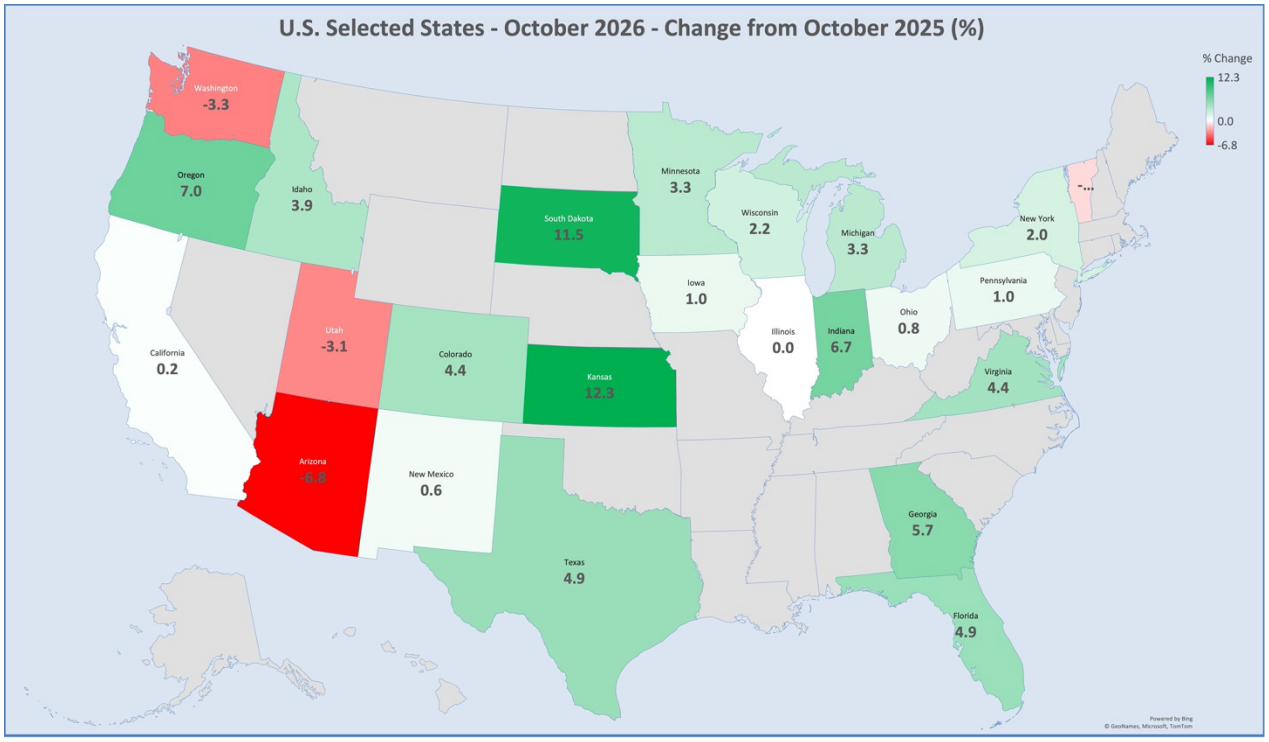
  Relative and absolute changes in milk produced in each of the top 24-States are shown in the next two figures.

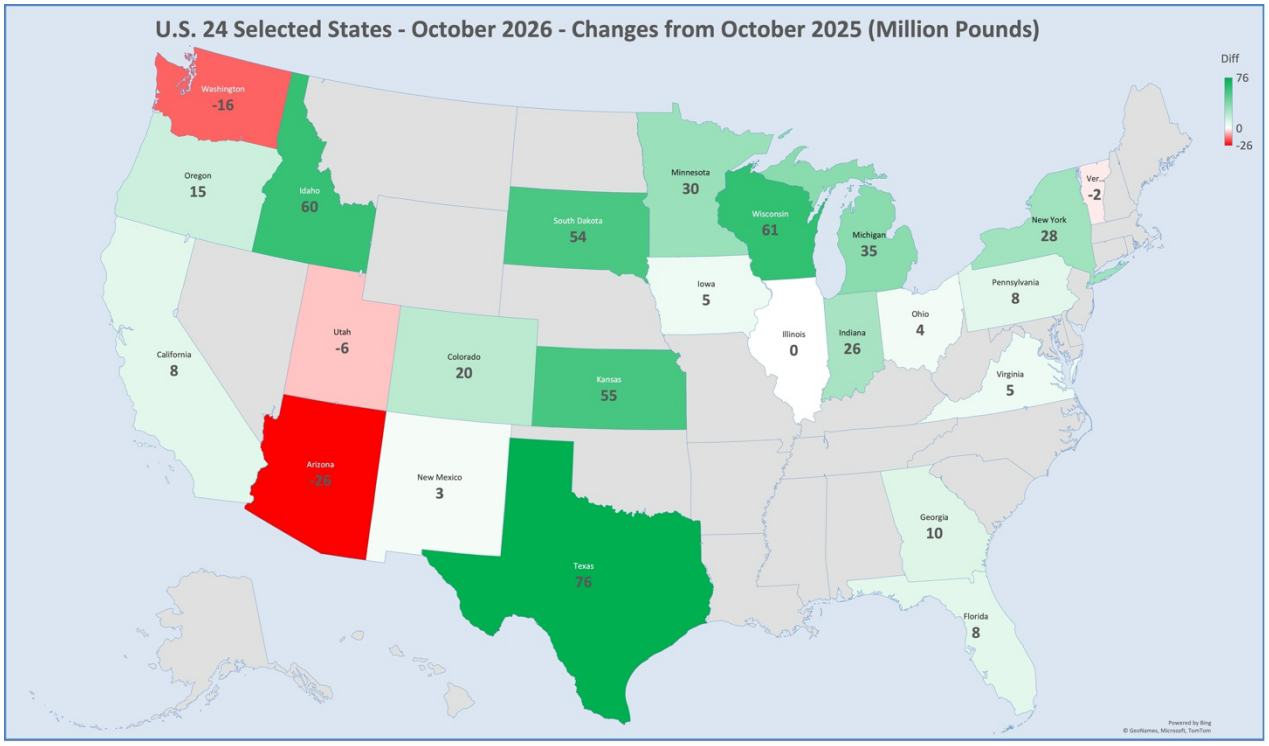
  Regional Summaries, October 2026

  - In the Western states, production was up 35 million pounds y-o-y.
  - In the Central region, production was up 208 million pounds y-o-y.
  - Milk production in the Cornbelt was up 161 million pounds y-o-y.
  - In the Northeast, production was up 34 million pounds y-o-y.
  - In the Mid-Atlantic and Southeast regions, production was up 23 million pounds y-o-y.

  Five largest dairy producing States

  In October, the 5 largest dairy producing States (CA, ID, NY, TX, and WI) accounted for 54.6% of the national milk production. Their combined production (10.886 billion pounds) was up 233 million pounds, or 2.19%.





- In the November 9th newsletter, I wrote that dairy producers are not directly benefiting from the current historically high Class IV prices. I will explain here why that is, although the details are a bit more complicated than what I wrote. But if you understand what is written in the next few paragraphs you will have a general understanding of why producers are not benefiting from the current high Class IV prices.

  Under the rules underlying the FMMOs only Class I milk *must* be pooled. When prices of the other 3 classes fall where one would expect them under the underlying FMMO 'reasoning' (i.e.,

Class I > Class II, > Class III > Class IV, with Class III and Class IV prices being close, say within $1.00/cwt of each other), then it make sense for all handlers to pool the milk used. Currently this is not the case. However, there is a penalty for not pooling milk when a handler wants to re-pool. The rules for this penalty vary across the FMMOs.

I will use the State of California data for the month of September simply because California is the largest butter and nonfat dry milk (NFDM) producing State, and we now have all the necessary data for the month of September.

In September 2026, California produced 3.290 billion pounds of milk. During the same month, 1.942 billion pounds of milk were pooled in the CA marketing area. This leaves around 1.348 billion pounds that were apparently not pooled. The average milk shipped to the pool contained 4.31% butterfat, 3.44% protein, 5.76% other solids, and 9.20% nonfat solids. During the month, California produced 55,554,000 lbs of butter and 61,194,000 lbs of nonfat dry milk for human consumption.

If all the butterfat required to produce the 55.554 million pounds of butter had been sourced directly from milk, this would have required ~45 million pounds of butterfat, equating to 1.044 billion pounds of milk. The reported amount of milk pooled in Class IV was 47.6 million pounds, or only ~ 4.5% of the butterfat required to make the 55.6 million pounds of butter.

If all the solids nonfat required to make the 61.2 million pounds of NFDM had been sourced directly from milk, this would have required 60.6 million pounds of nonfat solids, equating to 658.5 million pounds of milk at 9.2% nonfat solids. The reported amount of milk pooled in Class IV equated to 9.3% of the nonfat solids required to make the 61.2 million pounds of NFDM. In short, there was somewhere between 611 and 996 million pounds of milk used to make butter and powder that was not pooled. The question then is why!

The minimum Class IV milk price (at 3.5% butterfat) in September was $18.94/cwt. The Statistical Uniform Price for 3.5% milk in California during the month (i.e., the weighted average of all the milk pooled across all 4 Classes) was $17.30/cwt. If I am a cooperative producing butter/powder, I can pay $18.94/cwt for this milk if I pool it, or $17.30/cwt if I do not pool it. If I am operating a coherent business entity, guess what I would do… Of course I would not pool this milk, save $1.64/cwt and make tons of money manufacturing and selling butter and NFDM. It is important here to remember that the Class and component prices calculated in the FMMO include a make allowance to the manufacturers of the 4 dairy commodities. That is, the average costs of converting milk to butter and powder are already included in the formulas.

In multiple component pricing FMMOs, California being one of them, producers are *directly* paid for butterfat, protein and other solids. What is not so obvious is that they actually are paid for solids nonfat and not the 3 components for all the milk pooled in Class I, II and IV. This payment is hidden in the calculation of the *Producer Price Differential* – the infamous PPD. The estimated missing Class IV milk translates to a reported PPD for September that was lower than what it would have been if all the milk used to manufacture Class IV products had been pooled. The PPD was lowered by $0.47 to $0.67/cwt. For the whole of CA, this means that the total milk payments for CA milk would have been $15 to $22 million greater had all Class IV been pooled; or $13,000 to $20,000 for the month of September for the average 1,500 cow dairy farm.

I know that all the butterfat used to make butter does not *directly* come from milk: for example, significant amounts of anhydrous butterfat come from surplus butterfat in the milk delivered to Class I handlers (the average butterfat in Class I milk was 2.56% in September). I also know that not all solids nonfat resulting from butter production is processed as nonfat dry milk. As stated earlier, the details are more complicated than what was covered here. But the missing dollars are not insignificant. Some of the missing dollars should find their way back to dairy producers in the form of Coop dividends. But nobody is naïve enough to think that all these dollars will be channeled back to members: bean counters will inevitably retain a share.