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Balanced Dairying PRODUCTION

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MANAGING PARLOR PERFORMANCE

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Milking facilities are a major investment of dairy enterprises and your investment return on them can be only as good as your management. Parlor management influences both cow performance and worker efficiency. Common factors affecting milking parlor efficiency include:

- ♦pre-milking hygiene routine
- ♦level of milk production
- ♦milking frequency
- ♦length of milking shift
- ♦number of operators
- ♦parlor type
- ♦parlor mechanization
  - ▸detacher
  - ▸crowd gate
  - ▸rapid exit
- ♦cow grouping strategy

Time and motion studies of work routine times and cow flow identified areas contributing to parlor performance:

1. First cow in to last unit attached. Evaluate this component of parlor time first. Pre-milking hygiene can have a significant effect on cow time in the parlor. There can be a time difference of 10-20% between minimal (strip, wipe, attach) and full (strip, pre-dip, 25 second wait, wipe, attach) pre-milking hygiene routines. If time spent here is too long, evaluate routine and number of people in the parlor.

2. Last unit on to all units off. This measures milking speed for groups of cows. The average time is 5 ½ minutes; however, 3% of the herd may be slow milkers. Save time by putting these cows in the same group, possibly with the first calf heifers or early lactation cows. To identify these cows, look for cows taking 14 minutes and longer in 2x milking and cows taking 12 minutes and longer with 3x milking. Also, cows with bad feet move slow, so you want these groups located close to the barn.

3. Turn time. This is the time it takes to move a batch of cows through the parlor. This varies with groups. High producing cows take longer to get through the parlor than low producing cows.

Milking procedures are described as batch, territorial, or series milking.

♦*Batch milking* is the "all in, all out" concept, where all cows enter, are prepped, and milked as a group. In this manner, turn time is dictated by the slowest milking cow in the group.

♦*Territorial milking* is where one employee milks the cows in the front of the parlor and does not move to help out the employee in the back *territory.*

Entrance time for the employee closest to the holding pen will be high, as will the idle time for the milker in the front since he/she must wait for the back cows to finish milking.

◆*Series milking* is where work routines are designated by job: one employee preps the udders, while another follows and attaches milking units. Series milking is the most efficient method because it keeps the routine methodical, so that each cow gets similar treatment each milking. Series milking also reduces idle time of operators.

Parlor performance can be gauged in several ways, such as cows milked per hour or milk produced per operator. Regardless of the method, parlor routine affects cow production. Optimum time spent in various components of the milking routine are listed below.

Information presented was summarized from meetings conducted by Dennis Armstrong in Stephenville, TX, on January 9, 1997.

Goals

Time component	*Minutes*
First cow in to last unit attached	3-5
Last unit on to all units off	
2x milking	8-11
3x milking	6-9
Turn time	
2x milking	15
3x milking	12
4x milking	10

References

Armstrong, D.V. and A.J. Quick. 1986. Time and Motion to Measure Milking Parlor Performance. J. Dairy Sci. 69:1169.

USING THE FUTURES MARKET TO LOCK IN PROFIT MARGINS

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In a preceding article in **Balanced Dairying Production**, Dr. Ken Stokes presented the basic concepts of managing price risk, also known as price uncertainty. This uncertainty or price volatility, results from changes in market supply and demand.

Dairy producers are well aware of current volatility with both feed and milk prices. Low supply to use ratios for feed grains and oil seeds coupled with drought sent feed prices to some of the highest levels in recent memory.

Milk prices were sluggish until high feed prices and low milk prices drove milk supplies down. The dry hot weather added to the milk production decline. As a result, milk prices shot up. High milk prices pushed up product prices and led processors holding high priced product in storage to sell off inventories. This sell off caused drastic drops in raw milk prices. These price fluctuations are commonplace in a market *regulated* by price. All this is enough to confound the most astute producer.

TRANSFERRING RISK AND LOCKING IN PRICE

The futures market offers a method to transfer some of this price risk to others who are willing to bear the risk. IT offers milk producers a method to lock in the prices for feed and milk. They *set* a price that yields a desired return. The producer is referred to as a hedger. The hedger need not be concerned with how either the cash price or the futures price moves, because both tend to move together. This ensures a gain in one market covers the loss in the other market.

The individual who accepts the risk is called a speculator. A speculator bets against the market hoping to gain windfall profits. Risk represents both the opportunity for profit and the possibility of loss to the speculator.

Many producers feel the futures market is gambling. So is an unhedged price. Producers gamble every day in the *spot* market that cash prices for feed or milk over the next several months will

behave a certain way if they do not lock in a price by hedging or forward contracting.

FORWARD CONTRACTS

The easiest way to *lock in* a forward price is to shop around for a forward contract. Behind every forward contract is a futures contract. Forward contracts are common for feed purchases, but are offered for milk by only a limited number of milk cooperatives. The firm offering forward contracts must offset the risk or lock in a desired profit.

The individual offering a forward price contract has *locked in* a price in the futures market. Forward contracts do not work without the futures market to offset the forward contract risk. Many times, producers feel rushed into a forward contract because of threatened feed price increases or a possible drop in milk prices. However, the dairy producer placing a hedge in the futures market has more control in setting a desired price.

Futures contracts are traded for products that can be standardized. The contract defines, time, place, weight, quantity, quality, and form of the commodity traded. For example, the corn futures are traded for December, March, May, July, and September deliveries of 5,000 bushels of number 2 yellow corn. The contracts are traded on the Chicago Board of Trade. Trading ends seven business days before the last business day of the delivery month.

Fluid milk contracts are traded for February, March, April, June, August, October, and December delivery of 50,000 pounds of Grade A milk at 3.5 percent butterfat. The contracts specify delivery FOB *Madison district*, which includes specific counties in Illinois and Wisconsin, close to Madison, Wisconsin. Milk futures are traded on the Coffee, Sugar and Cocoa Exchange, and the Chicago Mercantile Exchange.

Dairy producers have two objectives for entering the futures market: 1) protect themselves from increasing feed prices and, 2) protect themselves from falling milk prices. Their goal is to guarantee a margin that allows them to cover all cash outflows for a given production period. Outflows include all production expenses, loan payments, family draws, and a charge for replacing capital items. Since milk is harvested every day, but sold on a monthly basis, producers are inclined to protect monthly milk prices.

Protecting feed prices involves planning, but it is not a difficult process. The producer must decide when and what feed commodities to purchase. Futures contracts only exist for corn, oats, soybeans, soybean meal, wheat, canola, and barley. Dairy producers feeding other protein and energy sources, can calculate a basis between the cash price for the commodity and most closely related futures price. For example, the producer could hedge dry distillers grains using the corn futures, and hedge whole cottonseed using soybean futures.

There are two ways to enter the futures market: 1) buying or selling futures contracts, and 2) buying options. Trading futures contracts requires putting up initial margin and potentially meeting margin calls if the market moves against the futures position taken by the hedger. Options are more like price insurance. A producer buys options, without putting up margin money, but the buyer pays an option premium. The risk of loss using options is limited to the size of the option premium.

BASIS

A producer who wants to hedge must understand the basis. To *lock in* input and output prices the producer must determine the basis between the local cash price and the futures contract price. The basis is defined as the **cash price minus the futures price at the time the feed is purchased or milk is sold**.

Calculate the basis for feed FOB the feed delivery point. The basis for milk needs to be calculated at the producer's designated milk market. The gross area price on a producer's milk check is the cash price for milk.

There are three important things to keep in mind when calculating the basis:

1) Use historical price data to calculate the basis.

2) Always calculate the basis to correspond to the time the hedge is lifted or completed. For example, suppose it's January of this year, and the producer wants to hedge 5,000 bushels of corn needed for feed in September. He buys a September corn futures contract in January. In September the hedge is lifted. In other words, the futures contract is sold and 5,000 bushels of corn is purchased. The basis for corn is the average difference between the September cash price FOB delivery point over the past several years and the closing September futures price over the past several years.

3) Basis can be seasonal and cyclical. It may increase or decrease over the production or marketing year and show large changes across years. These seasonal and cyclical changes come from change in supply and demand conditions and, in the case of milk, the apparent change in the cash price that the futures price was following.

Basis tables for grains can be obtained from various sources. Producers will have to create a basis table for milk. Tables 1 and 2 illustrate the process of determining a basis between the milk price at Dallas for the months of December and September and each futures trading closing price at the end of each trading day. As trading continues, enough historical data will accumulate to more accurately calculate an average basis for each month.

For example, suppose milk futures have been traded for ten years. To determine a basis for each month (to illustrate, say December), the producer subtracts the daily futures contract closing price each trading day in the month of December from the December blend price over 10 years and takes an average of the daily basis calculations. As mentioned, milk futures are traded for the even months and March.

If the producer has a computer then the process of calculating a basis can be done quickly. Others can use a columnar ruled accounting pad and a calculator.

TABLE 1: EXAMPLE BASIS CALCULATION USING A DECEMBER FUTURES CONTRACT

DALLAS FMO 126 BLEND PRICE DATE	DALLAS FMO 126 BLEND PRICE	TRADING DATE	CONTRACT YEAR & MONTH	FUTURES TRADING DAILY CLOSE	BASIS WITH NEARBY CONTRACT
Dec 1995	$14.18	12-Dec-95	FEB 1996	$12.30	$1.88
Dec 1995	$14.18	13-Dec-95	FEB 1996	$12.45	$1.73
Dec 1995	$14.18	14-Dec-95	FEB 1996	$12.35	$1.83
Dec 1995	$14.18	15-Dec-95	FEB 1996	$12.20	$1.98
Dec 1995	$14.18	18-Dec-95	FEB 1996	$12.15	$2.03
Dec 1995	$14.18	19-Dec-95	FEB 1996	$12.08	$2.10
Dec 1995	$14.18	20-Dec-95	FEB 1996	$12.25	$1.93
Dec 1995	$14.18	21-Dec-95	FEB 1996	$12.27	$1.91
Dec 1995	$14.18	22-Dec-95	FEB 1996	$12.19	$1.99
Dec 1995	$14.18	27-Dec-95	FEB 1996	$12.15	$2.03
Dec 1995	$14.18	28-Dec-95	FEB 1996	$12.15	$2.03
Dec 1995	$14.18	29-Dec-95	FEB 1996	$12.30	$1.88
Dec 1996	$14.18	02-Dec-96	DEC 1996	$11.65	$3.24
Dec 1996	$14.18	03-Dec-96	DEC 1996	$11.83	$3.06
Dec 1996	$14.18	04-Dec-96	DEC 1996	$11.85	$3.04
Dec 1996	$14.18	05-Dec-96	DEC 1996	$11.88	$3.01
Dec 1996	$14.18	06-Dec-96	DEC 1996	$11.75	$3.14
Dec 1996	$14.18	09-Dec-96	DEC 1996	$11.75	$3.14
Dec 1996	$14.18	10-Dec-96	DEC 1996	$11.63	$3.26
Dec 1996	$14.18	11-Dec-96	DEC 1996	$11.95	$2.94
Dec 1996	$14.18	12-Dec-96	DEC 1996	$11.75	$3.14
Dec 1996	$14.18	13-Dec-96	DEC 1996	$11.55	$3.34
Dec 1996	$14.18	16-Dec-96	DEC 1996	$11.50	$3.39
Dec 1996	$14.18	17-Dec-96	DEC 1996	$11.00	$3.89
Dec 1996	$14.18	18-Dec-96	DEC 1996	$10.97	$3.92
				AVERAGE	$2.63

NOTE: Trading began too late in 1995 to have a December futures contract, so the basis is calculated using February 1996 futures contract.

TABLE 2: EXAMPLE BASIS CALCULATION USING AN OCTOBER FUTURES CONTRACT

DALLAS FMO 126 BLEND PRICE DATE	DALLAS FMO 126 BLEND PRICE	TRADING DATE	CONTRACT YEAR & MONTH	FUTURES TRADING DAILY CLOSE	BASIS WITH NEARBY CONTRACT
SEP 1996	$16.65	03-Sep-96	OCT 1996	$18.61	($1.96)
SEP 1996	$16.65	04-Sep-96	OCT 1996	$19.00	($2.35)
SEP 1996	$16.65	05-Sep-96	OCT 1996	$19.15	($2.50)
SEP 1996	$16.65	06-Sep-96	OCT 1996	$19.03	($2.38)
SEP 1996	$16.65	09-Sep-96	OCT 1996	$19.10	($2.45)
SEP 1996	$16.65	10-Sep-96	OCT 1996	$19.20	($2.55)
SEP 1996	$16.65	11-Sep-96	OCT 1996	$19.10	($2.45)
SEP 1996	$16.65	12-Sep-96	OCT 1996	$19.13	($2.48)
SEP 1996	$16.65	13-Sep-96	OCT 1996	$19.23	($2.58)
SEP 1996	$16.65	16-Sep-96	OCT 1996	$19.40	($2.75)
SEP 1996	$16.65	17-Sep-96	OCT 1996	$19.20	($2.55)
SEP 1996	$16.65	18-Sep-96	OCT 1996	$19.10	($2.45)
SEP 1996	$16.65	19-Sep-96	OCT 1996	$20.25	($3.60)
SEP 1996	$16.65	20-Sep-96	OCT 1996	$19.60	($2.95)
SEP 1996	$16.65	23-Sep-96	OCT 1996	$18.95	($2.30)
SEP 1996	$16.65	24-Sep-96	OCT 1996	$18.74	($2.09)
SEP 1996	$16.65	25-Sep-96	OCT 1996	$18.53	($1.88)
SEP 1996	$16.65	26-Sep-96	OCT 1996	$18.70	($2.05)
SEP 1996	$16.65	27-Sep-96	OCT 1996	$18.65	($2.00)
SEP 1996	$16.65	30-Sep-96	OCT 1996	$17.80	($1.15)
				AVERAGE	($2.37)

CASH FLOW BUDGETS

After determining the basis for the commodities to be hedged, determine the price to be locked in. Then decide what period of time to hedge prices. They may be monthly, quarterly or annual average prices. The locked in prices should allow you to generate enough return over feed to cover cash outflows. This process requires some budgeting. Most producers are familiar with cash flow budgets. (Figure 1 presents a typical cash flow budget.)

Suppose the producer is doing a projected month by month cash flow budget for the upcoming fiscal year. Assume the monthly budget is for three months from now and the dairy producer expects to market 10,500 cwts. of milk. The expected gross milk price is $14.50. Use the previously determined milk basis of $-2.37. To lock in the $14.50 with a hedge, add the basis to the expected gross price to determine the hedging price of $16.87.

The producer expects total outflows for the month to be $122,130. Dividing this value by 10,500 cwts. of expected milk sales yields a break-even cash outflow of $11.63 per cwt. of milk sales. Add the basis to the $11.63 to determine a hedge price of $14.00 to lock in a break-even price .

A milk futures contract represents 50,000 pounds of Grade A milk testing 3.5 percent butterfat. The producer expects to sell 1,050,000 pounds (10,500 cwts.) of milk for the month. This amount represents 21 contracts. The producer's milk normally tests 3.6% butterfat, 3.3% protein and has a somatic cell count of 100,000. If the producer calculates basis using the gross price on the monthly milk price, these quality adjustments are captured in the basis.

In the example, the producer expects to purchase 240 tons of cracked corn and 40 tons of soybean meal. These commodities are traded as futures on the Chicago Board of Trade. Corn futures are traded in bushels. The producer expects to pay

$115 per ton for the corn delivered to the dairy for a total expense of $27,600. Dividing this value by 10,500 cwts. of milk, the expected cost of the corn is $2.63 per cwt. of milk. Dividing 240 tons by 56 pounds per bushel results in 8,571 bushels. Dividing $27,600 by 8,571 bushels results in a price of $3.22 per bushel, with a positive basis of 60 cents, subtract the 60 cents from the $3.22 to determine a hedging price of $2.62 per bushel. Soybean meal is traded on the futures market in tons. The producer repeats the corn price compilation (using soybean meal prices) to arrive at a futures hedging price for soybean meal.

The producer must decide the amounts of corn and soybean meal to be hedged. A futures contract for corn is 5,000 bushels and 100 tons for soybean meal. (Figures 2 and 3 present possible solutions.) The producer decides to purchase 100 tons of soybean meal, 280 tons of corn, and 100 tons of hay (Figure 3). The dairy producer decided to divert the cost of the other 140 tons of hay needed to the following month. The producer determines the break-even milk price is $11.65. By locking in corn and soybean prices, the producer locked in 44% of the expected total cash operating costs, but 69% of the month's expected total feed costs.

Normally, the producer will likely lock in the gross milk price. By subtracting the cost from the gross milk price, the producer determines an expected return of $1.81 per cwt. of milk above outflows. Since the producer feels this is an adequate margin and since a $16.87 milk contract is in the realm of possibility the producer decides to hedge the milk for $16.87.

There are brokerage fees that must be paid and included in the budget. The commodity broker charges a fee for placing an order. The fee is paid at the completion of the entire process of placing and lifting the hedge. Some brokers refer to this transaction as a *round turn*. In other words, if the producer sells a contract then buys it back, or vice versa, the process is referred to as a round turn and the broker charges one fee. Fees vary. One broker may charge $75 for a round turn, another $100. In the example budget, these costs are included in *all other* costs.

Margin calls are a part of the hedging process. If the producer and the lender do not understand margins and margin calls they will panic and fear the worst. Margins and margin calls, are nothing to fear, but need to be part of planning. Lenders in the Midwest grain areas routinely include allowances for margin calls in operating loans.

When opening an account with a broker, the producer puts up margin money for each contract traded. The margins are set by the commodity exchange and the Futures Trading Commission. The amount varies by commodity and by size of the contract. The broker has this information. When a contract goes against the producer's hedge, a margin call is issued and the producer must send in the amount of money asked for in the call. The producer is never out more than the difference between the value of the contract at the time the contract is placed and the time it is lifted. In other words, the opposite transaction is made. For more details concerning margins and margin calls, contact a broker or an Extension Economist.

SUMMING UP

The futures market is a tool the dairy producers can use to handle price risk. While a relatively new concept for most dairy producers, with study and practice most can become familiar and proficient in its use.

The move toward deregulation in milk pricing means dairy producers will face more price variability and uncertainty. The futures market is one mechanism to deal with risk.

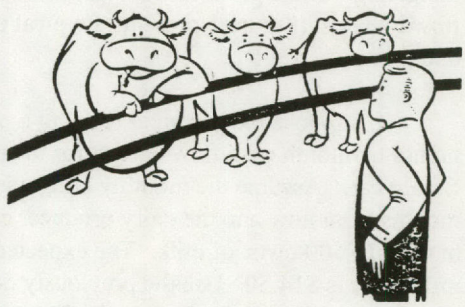


Figure 1: Example Projected Monthly Cash Flow

Inflows	units	amount	$/unit	total dollars	$/cwt of milk			basis	hedge price
Milk	cwts.	10,500	$14.50	$152,250	$14.50			$2.37	$16.87
Cull cows	head	13	$365	$4,745	$0.45				
Cull calves	head	21	$5.00	$105	$0.01				
Total inflows				$141,350	$13.46				

Outflows	units	amount	$/unit	total dollars	$/cwt of milk	bushels	$/bushel	basis	hedge price
Feed (all dairy uses)									
Cracked corn	ton	240	$115.00	$27,600	$2.63	8,571	$3.22	($0.60)	$2.62
Soybean meal	ton	40	$218.00	$8,720	$0.83			($0.75)	$217.25
Alfalfa hay	ton	240	$125.00	$30,000	$2.86				
other feed				$12,000	$1.14				
total feed				$78,320	$7.46				
Other milk pdn costs (including hedging commissions)				$17,000	$1.62				
Utilities				$1,200	$0.11				
Repairs				$5,000	$0.48				
Interest				$1,100	$0.10				
Labor				$14,000	$1.33				
All other (including family draw, principal pmts. and capital replacement costs)				$5,510	$0.52				

	basis	break-even hedge	milk price
Total Outflows	$2.37		$14.00

Net Receipts	$19,220	$1.83

Note: In this example, each basis for corn and soybean meal is positive. The cash price in Texas is higher than the futures price. Subtract the basis from the cash price to determine the futures price for the hedge. In this example, the basis for fluid milk is negative. The futures price is higher than the Texas cash price. Add the basis to the cash price to determine the futures price for the hedge.

Figure 2: Example Projected Monthly Cash Flow

Inflows	units	amount	$/unit	total dollars	$/cwt of milk			basis	hedge price
Milk	cwts.	10,500	$14.50	$136,500	$14.50			$2.37	$14.50
Cull cows	head	13	$365	$4,745	$0.45				
Cull calves	head	21	$5.00	$105	$0.01				
Total cash inflows				$141,350	$13.46				

Outflows	units	amount	$/unit	total dollars	$/cwt of milk				
Feed (all dairy uses)						bushels	$/bushel	basis	hedge price
Cracked corn	ton	280	$115.00	$32,200	$3.07	10,000	$3.22	($0.60)	$2.62
Soybean meal	ton	100	$218.00	$21,800	$2.08			($0.75)	$217.25
Alflafa hay	ton	240	$125.00	$30,000	$2.86				
Other feed				$12,000	$1.14				
Total Feed				$96,000	$9.14				
Other milk pdn costs (including hedging commissions)				$17,000	$1.62				
Utilities				$1,200	$0.11				
Repairs				$5,000	$0.48				
Interest				$1,100	$0.10				
Labor				$14,000	$1.33				
All other (including family drew, principal pmts. and capital replacement charges)				$5,510	$0.52				
								basis	breakeven milk hedge price
Total Outflows				$139,810	$13.32			$2.37	$15.69
Net Receipts				$1,540	$0.15				

Note: In this example, each basis for corn and soybean meal is positive. The cash price in Texas is higher than the futures price. Subtract the basis from the cash price to determine the futures price for the hedge. In this example, the basis for fluid milk is negative. The futures price is higher than the Texas cash price. Add the basis to the cash price to determine the futures price for the hedge.

Figure 3: Example Projected Monthly Cash Flow

Inflows	units	amount	$/unit	total dollars	$/cwt of milk			basis	hedge price
Milk	cwts.	10,500	$14.50	$136,500	$14.50			$2.37	$16.87
Cull cows	head	13	$365	$4,745	$0.45				
Cull calves	head	21	$5.00	$105	$0.01				
Total cash inflows				$141,350	$13.46				

Outflows	units	amount	$/unit	total dollars	$/cwt of milk	bushels	$/bushel	basis	hedge price
Feed (all dairy uses)									
Cracked corn	ton	280	$115.00	$32,200	$3.07	10,000	$3.22	($0.60)	$2.62
Soybean meal	ton	100	$218.00	$21,800	$2.08			($0.75)	$217.25
Alflafa hay	ton	100	$125.00	$12,500	$1.19				
Other feed				$12,000	$1.14				
Total Feed				$78,500	$7.48				
Other milk pdn costs (including hedging commissions)				$17,000	$1.62				
Utilities				$1,200	$0.11				
Repairs				$5,000	$0.48				
Interest				$1,100	$0.10				
Labor				$14,000	$1.33				
All other (including family draw, principal pmts. and capital replacement charges)				$5,510	$0.52				

	basis	breakeven milk price	hedge
Total Outflows	$2.37		$14.02
Net Receipts			

Note: In this example, each basis for corn and soybean meal is positive. The cash price in Texas is higher than the futures price. Subtract the basis from the cash price to determine the futures price for the hedge. In this example, the basis for fluid milk is negative. The futures price is higher than the Texas cash price. Add the basis to the cash price to determine the futures price for the hedge.

EXAMPLE HEDGES

Suppose that today is June 25 but the dairy producer did the budget for the coming September. The producer wants to lock in a corn price of $2.62 and a soybean meal price of $217.25 for feed that will be delivered during September. The producer wants to lock in a milk price of $14.50. The producer takes the following action:

CORN

Date	Action	Futures Price	Producer's Cash Price
Part I, Scenario I			
June 25	Buy 1 Sept corn futures contract	$2.62/bu	$115/ton
Sept 1	Sell 1 Sept corn futures contract	$2.72/bu	$118.57/ton
Sept 1	Buy 280 tons of corn for feed		$118.75/ton
	Gain on futures price	$ .10/bu	$ 3.75/ton
	Net price paid for corn for feed		$ 115/ton
Part I, Scenario II			
June 25	Buy 1 Sept corn futures contract	$2.62/bu	$115/ton
Sept 1	Sell 1 Sept corn futures contract	$2.52/bu	$111.25/ton
Sept 1	Buy 280 tons of corn for feed		$111.25/ton
	Loss on futures price	$ .10/bu	$3.75/ton
	Net price paid for corn for feed		$115/ton

SOYBEAN MEAL

Date	Action	Futures Price	Producer's cash price
Part II, Scenario I			
June 25	Buy 2 Sept soybean meal futures contract	$217.30	$218.05
Sept 1	Sell 2 Sept soybean meal futures contract	$227.30	$228.05
Sept 1	Buy 100 tons of soybean meal as feed		$228.05
	Gain on futures contract sale	$ 10.00	
	Net price paid for feed		$218.05
Part II, Scenario II			
June 25	Buy 2 Sept of soybean meal futures contract	$217.30	$218.05
Sept 1	Sell 2 Sept of soybean meal futures contract	$207.30	$208.05
Sept 1	Buy 100 tons of soybean meal as feed		$208.05
	Loss on futures contract sale	$ 10.00	
	Net price paid for feed		$218.05

MILK PRICE

Date	Action	Futures Price	Producer's Cash Price
Part III, Scenario I			
June 25	Sell 21 October fluid milk contracts	$16.87	$14.50
Sept 1	Buy 21 October fluid milk contracts	$15.87	$13.50
Sept 1	*"Sell"* 10,500 cwts. of milk		$13.50
	Net **gain** on futures contract	$ 1.00	
	Net price received for milk sold		$14.50
Part III, Scenario II			
June 25	Sell 21 October fluid milk contracts	$16.87	$14.50
Sept 1	Buy 21 October fluid contracts	$17.87	$15.50
Sept 1	"Sell" 10,500 cwts. of milk		$15.50
	Net **loss** on futures contract	$ 1.00	
	Net price received for milk sold		$14.50

In each example, there is a situation where the producer ***gains*** on the futures transaction and another where he ***loses***. In each situation, however, the producer pays the *locked in* feed price and receives the *locked in* milk price. The hedge is a tool to help the producer assure a desired target price. The targets were derived from a budget, and they were targets that assured the producer of a desired net cash flow margin. In these examples, hedging did not allow the producer to capture any unexpected windfall gains, but hedging prevented the producer from paying more for inputs or receiving less for milk than targeted. These examples are *perfect* hedges because gains and losses on the futures side offset gains or losses on the cash side. Not all hedges are perfect hedges, but they can ensure the disciplined producer pays or receives prices close to desired targets.

Chancelor to speak at
SOUTHWEST DAIRY FIELD DAY

E. Max Sudweeks
Extension Dairy Specialist

The 1997 Southwest Dairy Field Day has been set for May 8 at the J&I Dairy in Wood County. Featured speaker will be Dr. Barry Thompson, Chancellor of the Texas A&M University System, discussing "Texas Agriculture in the 21st Century". Dr. Thompson plans to spend time after his presentation getting acquainted with producers..

The J&I Dairy, owned and operated by Johannes and Ietjse de Jong and their two sons, Lieuwe and Tjibbe is located outside of Rhonesboro in Wood County. The dairy averages a 650-cow milking herd using free-stall barns, TMR and commodity feeding. Their rolling herd average in 1996 was more than 20,000 pounds of milk.

Throughout the day experts will be posted at various locations at the farm, ready to answer questions or moderate informal discussions among farmers. Dr. Sandra Stokes, Extension dairy specialist, Stephenville will lead a discussion group stationed at the Feeding Program discussion group. Dr. David Kee, Extension agronomist, Commerce, will head the Forages (nutrient management) group and Dr. Ellen Jordan, Extension dairy specialist, Dallas, will lead the animal reproduction group.

Other discussion groups will cover: *Manure for Compost*, *Waste Management*, *Irrigation*, *Grazing Dairies*, *Cost Comparison with Free Stalls*, and *Milk Prices*. Richard Fleming, Milk Market Administrator with the USDA will head the Milk Prices group.

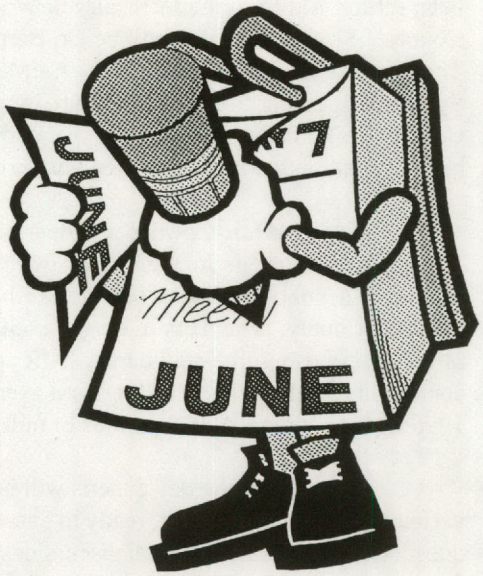
Operators of concentrated animal feeding operations can earn four hours of continuing education units (CEUs) by participating in the Waste Management discussion group. Under current regulations, some operators of concentrated animal feeding operations must complete eight CEU's every two years.

Registration for the event is free and open to the public and begins at 8:00 a.m. Dr. Thompson's keynote opens the program at 9:00 a.m. followed by the informal discussion groups at 10:00. A noon meal is included. After lunch, the discussion group schedule will be repeated.

The de Jong farm is located halfway between Quitman and Gilmer off State Highway 154. The farm is visible from the highway. There will also be signs posted along the entrance to the farm.

CALENDAR OF EVENTS

April 16-18	Texas PDCA Judge's Conference Contact: E.Max Sudweeks (903) 834-6191
May 1-2	Mid-South Ruminant Nutrition Conference Irving, TX Contact: Ellen Jordan, 972-952-9210
May 8	Southwest Dairy Field Day Winnesboro, TX Contact: E. Max Sudweeks 903-834-6191
May 20	Dairy Technical Review : Metabolic Disorder Stephenville, TX Contact: Sandra Stokes (817) 968-4144
June 4	Dairy Cattle Judging Contest 4-H Round-Up College Station, TX
June 5	Dairy Demonstration Contest 4-H Round-Up College Station, TX
June 26-27	South West Milk Marketing Conference San Antonio, TX Contact: Bud Schwart (409) 845-5284



MARK YOUR CALENDARS