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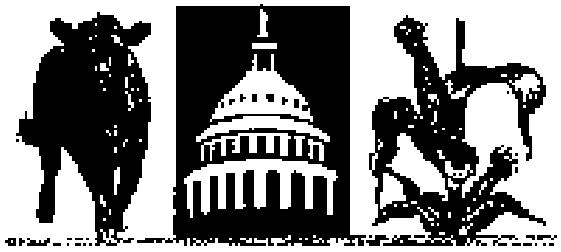
ECONOMIC AND POLICY UPDATE



Vol. 10 No. 7 July 28, 2010

http://www.ca.uky.edu/agecon/index.php?p=209

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In this issue:

Late Summer Nitrogen Applications to Pastures: Will they Pay this Year?

We are close to the point where many livestock producers would normally apply nitrogen to tall fescue pastures to boost production levels and stockpile for fall and winter grazing. Since there are many factors that will impact the profitability of this practice, the question at hand is: Under what set of conditions will applying nitrogen to pastures pay this year?

To help answer this question, the cost of stockpiling was compared to the cost of feeding hay on a per day basis. Each additional grazing day resulting from nitrogen applications will save the farmer from feeding hay. However, this needs to be compared against the cost of the nitrogen applications. The trick is to figure out at what point adding additional grazing days would become more expensive than feeding hay.

The price of nitrogen was evaluated on an elemental basis between $.40-.60 per unit ($270-400 per ton ammonium nitrate), with application rates of 40 and 80 units/acre. Three response rates (low, medium, and high) were evaluated corresponding to various soil moisture conditions. The application cost for spreading the nitrogen was set at $5/acre.

Farm size and management practices were set at typical Kentucky conditions: 30 cow herd with late winter/early spring calving. Waste rates were estimated at 35% for both hay feeding and grazing. Machinery and labor costs were estimated at $.06 and $.25 per cow-day for grazing and hay feeding respectively. P and K from the hay were assumed to be recycled back into pastures at a 50% rate at $.40/lb for P_2O_5 and $.40/lb for K_2O.

A range of hay prices were evaluated to determine which prices, if any, would result in profitable nitrogen applications this year. In general, good opportunities for applying nitrogen and stockpiling exist in mostly pure fescue stands (stands with few weeds and clover). Significant savings are possible where hay is priced at $60/ton in areas with average soil moisture conditions (medium response rate), and $40/ton in areas with ideal soil moisture conditions (high response rate).

Few cost saving opportunities exist in the mixed fescue-clover stands. Assuming a $.60/unit effective price, hay prices need to be above $60/ton before significant savings occur in these stands with ideal soil moisture conditions (high response rate). Applying Nitrogen with a low or medium response resulted in a loss with all the price scenarios evaluated. Additionally, any potential savings in the fescue-clover stands need to be balanced against the potential loss of clover due to N applications. As a consequence, the general consensus among

agronomists that reviewed these results is that mixed fescue-clover stands would not be good candidates for N applications this summer.

Producers should also be aware that, even with volatilization losses factored, there may be instances where urea will be a better option than ammonium nitrate this year depending on their relative prices. For more detailed results, consult the publication "Profitability of Nitrogen Applications for Stockpiling Tall Fescue Pastures – 2010 Guide" http://www.ca.uky.edu/cmspubsclass/files/extensionpubs/departmentseries/ext-2009-09.pdf (Greg Halich)

2010 Dairy Markets are a Mixed Bag

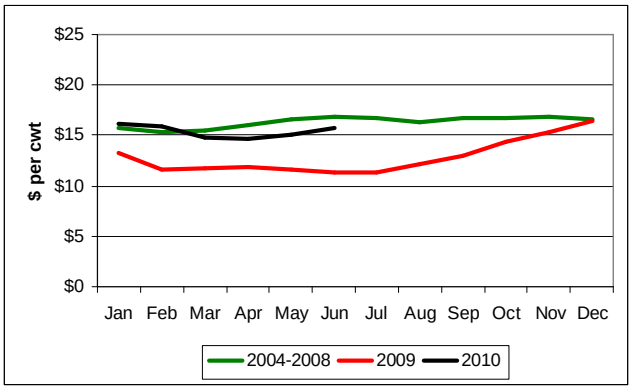
The year 2009 was definitely one of the most challenging that dairy producers have had to manage. The US All Milk price was in the $11 to $13 per hundredweight range for most of the spring and summer. Not surprisingly, US dairy producers reduced cow numbers in response to the lower prices. In fact, around 200,000 cows were removed through three rounds of Cooperatives Working Together (CWT) dairy herd retirements (www.cwt.coop). The prospect of lower production levels supported relatively better prices over the winter.

Dairy cow numbers seemed to level off in the first two quarters of 2010. And, at the same time, productivity started picking up. While there are fewer cows in production in 2010, milk per cow has increased more than enough to offset the reduction in cows. The net effect has actually been higher milk production levels – something not anticipated at the beginning of the year. So, while farm level milk prices have been $3 to $4 higher than 2009, they have been hampered somewhat by higher production.

While the supply side is crucial, it is also important to understand the demand side of the milk price equation. The weak economy was a major factor in driving milk prices to the low 2009 levels. While the domestic market remains fairly soft, the export market has improved considerably and explains the stronger prices we are seeing now. Most analysts are projecting milk prices to be $1 to $2 higher in the third and fourth quarters, which is largely consistent with the futures market.

The outlook is further complicated by uncertainty about future dairy herd retirements. CWT has accepted bids to remove another 34,000 dairy cows from production this summer. This represents a little less than one half of one percent of the dairy herd. Additional retirements are possible if milk prices stay at their current levels. However, the strength of domestic dairy demand remains the wild card as we move forward and will likely have a larger impact than changes in production levels. (Kenny Burdine)

US All Milk Price



KFBM Records Confirm 2009 was Tough Year for Dairy Producers

Kentucky Farm Business Analysis (KFBM) records confirm what was discussed in the previous article; 2009 was a tough year for dairy producers. The average Net Farm Income (NFI) for all KFBM dairy farms was $14,588, an 82% decrease from 2008. NFI on a per cow basis for the three different herd sizes can be seen below. It was interesting that the mid-sized dairies showed the highest NFI per cow. In a normal year, producers should strive for NFI in the range of $400-600 per cow.

Table 1. Net Farm Income

	Net Farm Income (NFI)	NFI per cow
< 100 cows	($10,210)	($169.60)
100-199 cows	$46,663	$358.95
200+ cows	$8,658	$23.41
Average	$14,588	$81.50

Gross Farm Returns (GFR) decreased 4% from 2008, averaging $445,763, while net management returns averaged -$90,858. Even the high third of cooperating dairy farms were unable to show positive management returns during 2009. Management returns, on a per cow basis, were negative across all herd sizes as well, as shown in table 2. Management returns need to be positive for the long-term health and stability of the farm.

Table 2. Management Returns

	Management Returns (MR)	MR per cow
< 100 cows	($68,080)	($1131)
100-199 cows	($62,342)	($480)
200+ cows	($147,850)	($400)
Average	($90,858)	($508)

Low milk prices were the main factor in the low NFI. Milk prices averaged $14.88/cwt, a 29% decrease from the 2008 average of $21.10. For the average cooperating dairy to breakeven in 2009, milk price needed to be $16.74/cwt. Using the average milk production, this equates to a $361/cow deficit. The decrease in milk income, coupled with high feed and other input costs, created a very difficult year. Operating Expenses averaged $390,169 compared to $351,746 in 2008, an 11% increase.

The average cooperating dairy managed 179 cows, an increase of 31 from 2008. Breeding cattle prices dropped and more cattle were purchased in 2009, resulting in an increase in herd size. Herds with over 200 cows averaged an increase of 63 head in 2009. This increase in herd size was not consistent with overall Kentucky dairy cow inventory.

Milk production averaged 19,407 pounds per cow, a 940 pound increase from 2008. Dairies with over 200 cows had milk production of 19,994, while dairies with less than 100 cows averaged 17,410 pounds per cow. At the average milk price of $14.88/cwt, milk sales per cow averaged $2,888, compared to the 2008 average of $3,897, a decrease of over $1,000 per cow.

As the US dairy herd is being trimmed, milk production continues to grow. While prices have recovered from 2008, they are not at levels likely to encourage much expansion. It is important for dairies to monitor input costs throughout 2010 in order to recover from losses experienced in 2009.

2009 Burley Tobacco Cost of Production Project

In 2009, a project was initiated to collect cost of production data from Kentucky burley tobacco growers. This article will summarize the data collected from the 21 farms that participated in the project. The table below provides summary statistics for the participating farms. Six of the twenty-one farms reported yield losses sufficient to trigger crop insurance payments, but insurance proceeds were not included in the analysis so that the tobacco enterprise alone could be evaluated.

Summary Statistics for Cooperating Farms

	Min	Max	Avg
Number of Acres	4.75	176	63.41
Yield Per Acre	539	3240	2268
Sales Price ($/lb)	$1.69	$1.87	$1.76
Gross Return ($/Ac)	$911	$6071	$4,008
Return to Capital, Op Labor and Mgt. ($/lb)	($0.77)	$0.74	$0.22

Farms were grouped according to the number of tobacco acres produced. The “small farm” category consisted of farms ranging from 4.75 acres to 33 acres; there were 6 farms labeled “small”. The “medium farm” category contained farms with 39 to 80 acres of tobacco, with 9 farms in this category. Finally, there were 6 farms in the “large” category, varying from 90 to 176 acres of tobacco.

The average sale price of $1.76 per pound (minimum was $1.69 per pound) reflected a relatively good quality crop. This compares to the USDA reported average Kentucky burley price of $1.70 per pound for the 2009 crop. Farm productivity was also very good; average yield was around 2,300 pounds per acre (compared to the state average of 2,150). Five farms reported yields less than 1,700 pounds per acre as a result of weather related problems, including two of the six farms in the “Large” category. The average net return to capital, operator labor, and management was $0.22

per pound which indicates that, on average, the farms included in this study were able to pay all variable (cash) costs, account for fixed costs, and then have $0.22 cents/lb to pay for their own labor and management and reinvest back into the farming operation. The farm that reported a loss of $0.77 per pound as Net Returns to Capital, Operator Labor and Management started with 90 acres of tobacco but due to weather problems, only harvested and sold 60 acres. A financial summary, as well as some highlighted results, can be seen below.

Comparison of Cooperating Tobacco Farms by Farm Size

	"Small" farms	**"Medium" Farms**	**"Large" Farms**
	N=6	N=9	N=6
	5 to 33 acres	39 to 80 acres	90 to 176 acres
Pounds Per Acre (lbs/ac)	2397	2367	1998
Price Per Pound ($/lb)	$1.79	$1.77	$1.74
Gross Returns Per acre ($/ac)	$4,258	$4,195	$3,486
Total Variable Costs ($/lb)	$1.18	$1.31	$1.39
Return Above Variable Costs ($/lb)	$0.60	$0.45	$0.34
Total Fixed Costs ($/lb)	$0.30	$0.20	$0.18
Total Costs ($/lb)	$1.48	$1.51	$1.57
Return to Capital, Op. Labor & Mgt ($/lb)	$0.30	$0.26	$0.16

Highlights of Results:

- As farm size increased, total variable costs increased and total fixed costs decreased on a per pound basis. The inverse relationship of farm size and fixed cost per unit are expected.
- As farm size increased, quality (as measured by average sales price) and yield decreased. As farm size increases, one can speculate that larger tobacco farms end up sacrificing quality for total farm quantity. (Again, two of the six large farms had weather related problems that resulted in significantly reduced yields compared to an average production year.)
- As farm size increased, labor per unit increased as one would expect given that larger farms are more likely to use labor programs such as the H-2a program. Labor as a percent of total variable costs was much lower for the smaller farms (40%) than it was for the medium farms (48%) and large farms (47%).
- Small farms spent more per pound on lime and fertilizer than the larger sized farm.
- Small farms paid less when renting land and barns compared to the larger sized farms.
- Small farms had higher net returns to capital, operator labor, management primarily due to higher prices received and lower per unit labor costs.

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