

### Cut Your Forage Production Costs in 2010

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2009 was one of the most difficult years for American dairy farmers. A significant loss in U.S. dairy exports combined with decreased domestic demand due to the status of the economy resulted in a price crash that will affect agriculture for several years. Adding to the pain of low milk prices, input costs were higher than normal. Dairy farms lost around \$720.00/cow on average in 2009, a figure that is not easily recovered. The good news is the dairy industry has rebounded from similar situations in 2000, 2002, and 2006. Although the recent economic situation is worse than previous episodes, history shows that the dairy economy runs in cycles and when supply levels meet demand, a recovery can be expected. 2010 already looks more promising from a price and input standpoint.

It is no surprise that dairy producers are looking for methods to cut costs during challenging times. One area that will likely be discussed is forage production. Most producers are well aware of the positive health and production benefits associated with feeding high forage diets, but nonetheless, different cost saving options can be discussed, as well as the consequences of implementing these options.

The following are topics that have surfaced during on-farm discussions since last fall regarding planning for 2010:

- **Fertility** – With high fertilizer prices and the possibility of seeing very few short term effects, reduced fertilization is something that is being considered. With alfalfa, keep in mind that K and P are removed at high rates from the soil. Depending on a soil analysis, producers may be able to cut back application rates for several years, realizing that this approach depletes soil fertility levels instead of maintaining or improving them. This means it will be necessary in the future to increase application rates to return fertility levels to optimum. Another topic is starter fertilizer use in corn silage. According to some crop consultants, in dairy areas where heavy manure applications have placed soil fertility in the high range, it is possible to eliminate or reduce the rate of starter fertilizer and realize a yield loss less than the cost of the fertilizer. However, it is vital to have recent soil analysis results and to consult with an agronomist prior to making this decision.
- **Crop Rotation** – The big question is: *Should a marginal alfalfa stand be left in one more year?* According to research from UW-Extension, the average profitability of an alfalfa stand declines rapidly after the 3rd year of production. With this in mind, and the fact that corn following alfalfa requires no supplemental N and boasts a 10-15% yield increase, it would not be advisable to stretch the stand an extra year. Some exceptions do apply such as areas where alfalfa establishment is difficult.
- **Seed Costs** – “Differences between alfalfa varieties are hard to see, can cheap seed come close to the same result in yield as higher priced seed?” The answer is: No, unless there is absolutely no environmental stress acting on the stand. Thus, Vernal and variety not stated (VNS) alfalfas cannot hold up to top released varieties. When looking at the University of Wisconsin Alfalfa Yield Trials from 2006-2009, there is a 21.2% average annual yield difference between the best and worst varieties in full production years. Considering an average annual yield of 5 tons on a DM basis, this amounts to an average difference of 1.06 dry tons/year. According to Steve Orloff, farm advisor and director for the University of California Cooperative Extension in Siskiyou County, it takes less than one-tenth of a ton yield increase annually to pay for a \$2/lb increase in seed price. Although the input savings of cheap alfalfa seed may be attractive, the return on investment after just one year can be significantly lower.
- **Stand Establishment** – Some producers have considered cutting establishment costs, such as utilizing no-till in areas where tillage is typical due to heavy soils, making one less pass with a roller, or using airflow fertilizer equipment to increase the speed and reduce travel time during seeding. The importance of stand establishment and how it will affect the productivity of the stand during its lifecycle needs to be considered. An alfalfa field in its establishment year will typically yield about 55% of the first full production year. With this in mind, the seeding year presents a huge opportunity for yield improvement. Be sure that changes to adopted establishment protocol do not have long term negative effects to alfalfa production.
- **Machinery Costs** – Looking at history, machinery costs rarely decrease from year to year. A large portion of the cost of forage production results from the initial cost of machinery and the subsequent depreciation. Forage producers, and especially dairy producers, are looking at combining equipment lines to share this cost. Another option is hiring a custom harvester to remove the debt load of owning a total forage equipment line. Maintaining the ability to harvest high quality forage needs to be considered when making this decision. *If machinery upgrades were planned for 2010, can they be put off another year and not inhibit harvesting efficiency?*

Many factors need to be considered when cutting the cost of forage production. The above topics will hopefully inspire some discussion. Good luck to all in 2010 and remember that higher prices are on the way. All dairy farmers should be saluted for their resilience and innovation during these difficult economic times.

#### References:

Blake, Cary (2010) *Inputs and Alfalfa Costs*. Western Farm Press. January 11th

Undersander, Dan (2008) *Value of Short Rotations for Alfalfa Profitability*. UW-Extension

Wiersma, Barnett, and Feuerstein *What is the “Cost” of Seeding Low-Cost Alfalfa Seed? Focus on Forage – Vol 2: No. 7.*

Figure 1. Alfalfa costs and returns by stand age.

