

Growing Corn For Grain May INCREASE Your Grain Bill

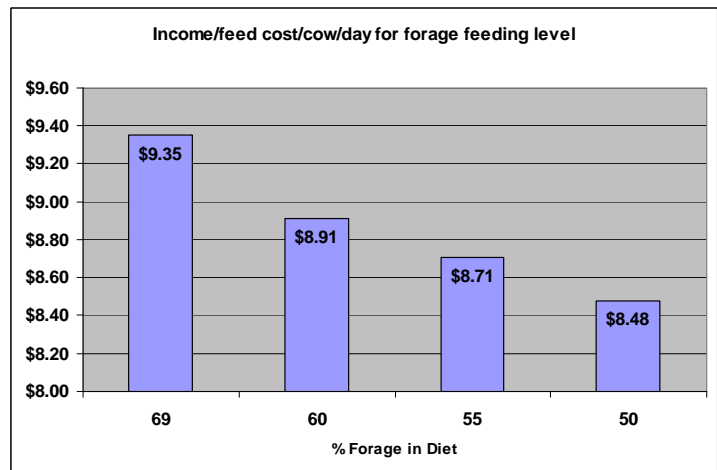
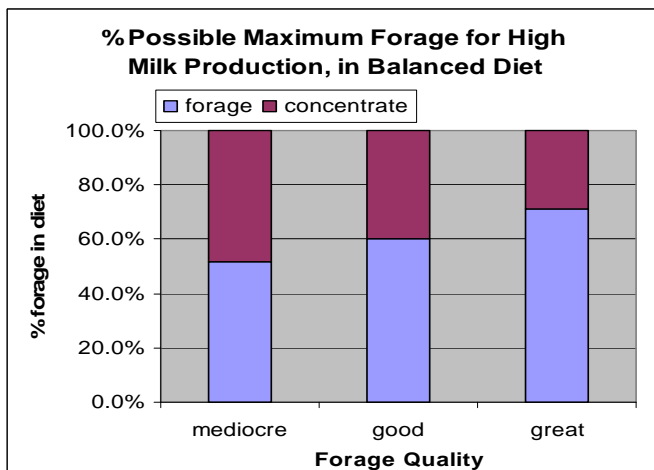
Tom Kilcer, Cornell Cooperative Extension in Rensselaer County

With grain prices spiking upward, there is considerable interest in planting some acreage of corn grain to offset the grain bill. Farmers are buying extra seed and looking at any patch of weeds in their area to rent and plant corn. Unfortunately, for many farms, this may be the WORSE thing they can do, and may actually INCREASE the grain bill. In fact by NOT growing grain corn, a 100 cow farm has the potential to save over \$15,000 on their dairy energy bill.

Are you short or tight on forage from last year? The first priority is to have enough dry matter to feed the cows. Many farms will be rapidly using up their first cutting haylage in order to have something to feed their cows during the summer. Thus, without harvesting extra acres to make up for this use, they will be entering a second winter with a shortage of forage. **FORAGE IS THE FOUNDATION OF THE DAIRY RATION.** As many unfortunately experienced this year, without enough forage, the cost of producing milk can quickly exceed the income from selling milk. We do not want to repeat that another year. You may need extra corn silage acres to off set the shortage from last year. The top managers will target ending the year with 15% more forage than they need to feed the cows.

Are you maximizing the use of forage as a nutrient source? The simplest way of reducing the increasing cost of grain, is to get more of your nutrients from forage. Farms looking to a competitive profit position in Northeast dairying, are feeding at or above 60% forage in their diet (Graph #2 (bottom right)). A number of farms are above 65% forage which is supporting above 80 lbs. of milk/cow. What they have found is that the biggest part of the savings by moving to a higher forage feeding level is more than just grain not needed. They have found that increasing forage increases herd health, which reduces vet bills. Because the cows are healthier, the culling rate is often reduced. This allows excess animals to be sold as dairy, which also adds to the income line. All of this is possible by NOT growing grain corn.

Cautions: you can't go to a high forage diet unless you have enough forage or forage quality (Graph #1 (bottom left)). With new haylage crops you have that opportunity. Going from a low (48% forage in diet) to a moderate high (62% forage in diet) means a **30% INCREASE IN THE AMOUNT OF FOAGE NEEDED.** Do you have the acreage to



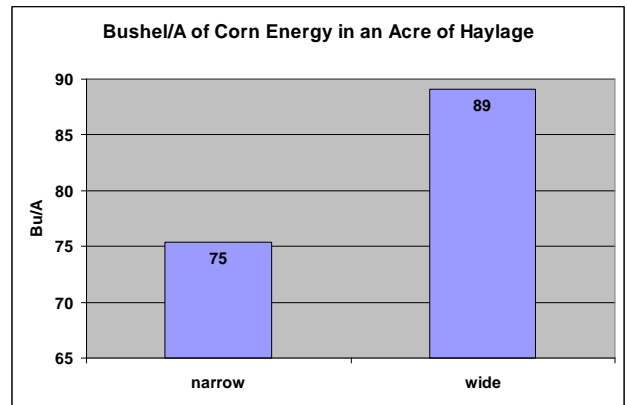
grow and the storage to hold this increase? Moving to a higher forage diet is more profitable than adding acres of corn for grain. The other caution is that high forage is not a quick fix for high grain costs because these changes in diet need to be made slowly over time. Unless you start now you will never get there.

What is the impact of more corn as grain on the forage quality program? The fact of the matter is, many farms over the years, have DECREASED their grain bill by dropping corn grain from their cropping program. They found growing corn for grain took longer to plant and when it was time to start haylage they were not ready. Because their haylage was late, the quality was down and so needed more grain to get the same milk out of the cows; thus more than canceling any savings from growing grain corn. Adding to the loss was the fact that they needed more acreage and so their rotation got longer. This directly hurts the corn yields, increases the cost of growing that corn; and decreases the hay yield and quality - both of which increase the cost of producing milk, and the grain bill. Changing from high quality forage to a mediocre quality full bloom forage as part of a dairy ration for 100 cows on a 305 day lactation means \$21,045 in decreased income over feed cost if you try to maintain the same milk by feeding more grain in a balanced ration. If this

loss only happened on the first cut (you were able to get the other cuts on time) you are still looking at over \$10,000 or 26 acres of energy as corn grain equivalent that you lost out of the haylage because the harvest was late.

What is the effect of using the effort and money put into growing grain to instead get a higher return by switching to the proven concept of wide swathing to make haylage?

Farms that have switched to wide swath haylage last year found that the energy level (Graph #3) of their haylage has improved from .55 Nel to .65 Nel. (some farms have achieved over .70 Nel on some of their forages wide swathed). The increase from .55 to .65 represents \$56 more energy from each acre wide swathed (89bu - 75bu = 14bu x \$4/bu = \$56). A typical 100 cow farm has 275 acres of haycrop which would mean over \$15,000 in increased energy in your haylage and decreased energy cost for the milk that you produce. (\$56x 275 = \$15,400). For a typical 100 bu/a yield this represents not needing to grow 38 acres of corn grain on a 100 cow farm! This savings does not include the higher quality haycrop that is put in storage without getting rained on because wide swathed is chopped the same day it is mowed.



Will you make money growing grain corn? Unless your yields are above the cost of growing grain corn, the process can just be an exercise in futility, or worse, a greater loss of money. Are your soils good enough for corn (planting corn grain on your best soils and corn silage on poorer soils just hides the real monetary loss)? Finally comes the practical part of trying to grow extra corn for grain. Once you are over two years of corn on a field, you will not have enough manure to meet the nitrogen needs. If this happens, you will have to sidedress extra nitrogen, and nitrogen has gone up more than grain prices. Add to that the fact that in our area, the third year of corn has rootworms above threshold. This mean you will either have to buy the more expensive resistant varieties, or use the more expensive insecticide on the seed. Either case means more cost and less money in your pocket.

The cost of dairy energy will be up for several more years. The advantage we have in the Northeast is the ability to produce high quality forage. The legumes and grasses in many cases contain more energy than we could get off of that same acre by growing grain corn. Focusing on your forages; getting that forage quality to the mouth of the cow; and then maximizing its use in the ration, can more than offset the increase in grain prices.

Photo, switching to wide swathed haylage increases the energy in your forage. Average wide swathed haylage has the energy equivalent of almost 90 Bu/A of corn grain while traditional is only 75 bu/a.



In spite of farmer's fantasies, as many experienced last year, not all corn is 200 bu/a.

The painful question is what the cost/bushel of the grain corn in this field? This loss pales in comparison to the impact of delaying haylage harvest in order to plant more corn to save on the grain bill. This loss can quickly exceed \$10,000 on a 100 cow dairy.

