

## Minimizing Losses Wins - Attention to Alfalfa Harvest & Storage Management Helped Gar-Lin Dairy Win the 2010 MN Milk Producers Association “Producer of the Year”

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How does a 31,000 pound rolling-herd average happen? Attention to details, no doubt. Among other details attended to so well by its 7-person management team, Gar-Lin Dairy Farms Inc. “targets zero loss” in their harvest and storage of high-quality alfalfa.

Is ‘zero loss’ possible? No, but Gar-Lin Dairy sets the bar high (or low, as the case may be) to ensure they do all they can to minimize the potentially costly losses in yield and quality of alfalfa that can so easily build from field to feeding.

**Family Business.** Gar-Lin Dairy is a partnership between two Southeastern Minnesota families that are passionate about dairy farming. ‘Gar-Lin’ refers to Gary and Linda Allen, who took over the farm from Gary’s father in 1970. Son Dean and daughter Dana have become key members of the management team. From 1970 to 2006, the Allens built their herd internally from 40 to 800 cows. In 2006, they partnered with Gene and Phyllis Speltz and their son-in-law Carey Tweeten, expanding to 1,250 cows. Today, they milk 1,650 cows and employ 45 people.

The cows include Holsteins and Holsteins crossed with Montbeliarde, Swedish Red, Jersey and Brown Swiss. The Allens began experimenting with cross breeding about 10 years ago to improve reproductive performance. They are currently participating in a University of Minnesota cross-breeding study.

The farm includes 2,800 acres of cropland sown to alfalfa, corn for silage and grain, peas, winter rye and some forage sorghum. Last year, they had 1,100 acres in alfalfa and 1,000 acres in corn silage. The canning peas, winter rye and forage sorghum help with manure dispersal while providing additional income and dry-cow forage.

**Assisting Alfalfa.** All the alfalfa is ‘fall’-seeded by August 10 following peas and manure incorporation, so no herbicides are needed. In recent years, they have been interseeding festulolium into existing alfalfa stands with a grain drill when the soil is still fairly soft in early spring. They have had good success with this practice, stretching thinning and winter-injured alfalfa stands to four to five high-yielding production years. Stands with substantial grass content go to dry cows. In 2010, their alfalfa fields averaged 5.8 tons DM/ac.

With overall disease resistance foremost in mind, multiple alfalfa varieties are seeded across the farm. These stands are harvested for haylage in late May and every 28 days thereafter for four cuttings per year. Stands eligible for termination are often harvested a fifth time in September. Two 16’ discbines do the cutting and conditioning. Dean likes to be ‘doubled-up’ with two machines so they can keep going even if one cutter goes down. A merger is used to combine five windrows for chopping. Dean would like to experiment with wider swaths down the road, but says the concept does not fit well with their current equipment.

Dean credits a Midwest Forage Association event for learning about a loss-minimizing adjustment they made to their discbines. The existing conditioning units were steel flails. They switched to rubber roll conditioners and have observed less alfalfa leaf loss and faster drying rate, moving them closer to their ‘zero loss’ goal.

**Pack, Pack, Pack.** All haylage and corn silage are stored in piles under plastic and tires. Dean stresses the importance of adequate packing to minimize spoilage; ‘you can never pack it enough.’ They use three pack tractors as they pile, finishing piles before tractors begin to slip. They target 55-60% moisture in haylage and 65% to no more than 68% moisture in corn silage. Propionic acid is applied during chopping and over the top of haylage piles immediately before covering.

Dean stresses that the chopper must be sized to the rate at which you are equipped to pack adequately. With their equipment, they are able to get through 1,100 acres in five to six days per cutting, maximizing the opportunity for consistently high-quality forage.

**Learn and Live.** Gar-Lin Dairy is perhaps the only commercial dairy farm in the state with its own rumen-fistulated cow. She originally served to provide rumen fluid/bugs to sick cows. More recently, however, she provides a ‘lab’ for Dana, with a PhD in ruminant nutrition, to run some tests on potential digestibility differences among corn-silage hybrids, including BMR, grown on their farm.



Dean Allen is an active MFA member. He values the access to new concepts, practices and technology that his MFA membership provides. Gar-Lin Dairy's management team wants to stay abreast of the latest ideas that may fit their current and future needs. Indeed, they are tremendous examples of the importance of teamwork, a passion for dairying and valuing continued learning to maximize their ability to provide high-quality forage to their cows.