PRODUCER INTERVIEW

Achieving Awesome Alfalfa

Attention to Alfalfa from Seeding to Feeding Powers This Central MN Family Dairy Farm

Paul Peterson, University of Minnesota Extension (photos by Brenda Martens)

Scott and Denise Gathje own and operate a 185 acre family dairy farm in Stearns Co., MN, that they bought 16 years ago. A key component of their operation is their 6 children: Joe, age 19 and studying general agriculture at South Dakota State University; Anne, 17; James, 15; Katherine, 13; Gregory, 11, and Jonathan, 8. Scott also does some custom harvesting with his father-in-law, and sells feeder steers at 500 pounds. The Gathjes harvest ~6 tons of alfalfa DM per acre per year thanks to solid management decisions at key times for alfalfa production.

The Gathjes manage 85 Holstein cows (70 milking, 15 dry) in a tie-stall barn. Their acreage is cropped about 50:50 to corn and alfalfa. The corn is harvested for grain, silage, and snaplage. Alfalfa is harvested for baleage, silage, or dry hay. In fall 2010, Scott plowed down 15 acres of alfalfa to seed a tall fescue/orchardgrass mixture. So far, he's been very happy with the results.

Seeding Success

Scott direct-seeds alfalfa in the spring, and "wouldn't do it any other way." He believes good seedbed preparation is essential. Liquid manure and herbicide are applied prior to a May 5 target-seeding date. Final tillage prior to seeding is 2 passes with a spike-toothed harrow to ensure a level, firm seedbed. He seeds 20 lb/acre of a top-performing commercial alfalfa variety in 20 new acres each spring. He's had good success with various companies, as long as one of their best varieties is seeded. Having tried oat nurse crops and air-seeding in the past, Scott now swears by direct seeding.

Fertilization Fundamentals

Scott won't skimp on fertility, but also doesn't rely on just commercial fertilizer for big alfalfa yields. Scott's recipe includes a good dose of liquid dairy manure prior to seeding; then 200 lbs/acre annually of a blend of ammonium sulfate, potash, and micronutrients boron, copper, and zinc. This recipe supports 6 tons of alfalfa DM per acre annually.

Harvesting High-Quality Alfalfa

The Gathjes harvest seeding-year stands 2-3 times per year, and established stands 4 times per year. Scott often achieves his 160 RFQ goal by watching and being in contact with his custom large-square baler and baleage wrapper in advance. His philosophy is simply to be attentive to harvest windows to be ready and able to act quickly. Scott puts some alfalfa up in upright stave silos, but has been frustrated trying to put up dry alfalfa hay. His preferred storage and feeding strategy for high-quality long 'hay' for his operation, particularly from 2nd and 3rd harvests, is big-square tube-line-wrapped baleage. He generally keeps his alfalfa stands for 3-4 years.

Grass is Good

Scott "stuck his neck out" in fall 2010 by plowing up 15 acres of alfalfa and planting a tall fescue/orchardgrass mixture. Part of the field was seeded to brand-name varieties, and the other to locally available unnamed varieties. To date, he hasn't noticed a difference, but he's curious about future results. In 2011, the stand received liquid manure twice, handled traffic well when soil moisture was high, and produced 4 dry-hay crops in both rounds and big squares. His milk cows "love their ~3 lb/day of this grass hay." Dry cows are also fed this hay. Based on this first success, Scott plans to plant more grass for hay in the future.

Corn Concepts

Scott generally uses multi-purpose, high-yielding varieties to provide silage, snaplage, and grain. In 2011, he experimented with a 107-day corn hybrid for snaplage, and was pleased with the results. In the past, he was using mostly early-maturing corn varieties; but with his custom-harvesting operation, the availability of a later-maturity hybrid for snaplage works well.

Gathjes are committed members of the Midwest Forage Association; they attribute that largely to the key information they can access that supports their operation.