Alfalfa's Role in a Grain Crop Operation

by Marisol Berti, North Dakota State University

Dennis Bower of Galesburg, ND, is mainly a grain crop grower. He farms 550 acres of corn, 400 acres of soybean, 300 acres of dry beans (navy), 250 acres of sunflowers and 50 acres of winter wheat. He also grows between 100-200 acres of alfalfa every year – sold as cash hay to dairy farmers in Minnesota and a feedlot in North Dakota. This year, Dennis only has 100 acres of alfalfa, however, he plans to seed an additional 70 acres next spring. While Dennis works alone most of the time, he hires a couple of extra hands to help during the busiest times of the summer and at harvest.

His soils are mainly sandy-loam, allowing for good drainage, with an occasional low spot too wet to plant. Bower generally seeds his alfalfa after soybean, then follows four years of alfalfa with corn or sunflower, taking advantage of the nitrogen credits from the previous year's alfalfa. Incorporating alfalfa into his grain operation not only keeps him busy throughout the summer, but, "it is a crop that is easy to manage and is very profitable," says Bower.

Bower plants his alfalfa with an air seeder, mixing the seed with granular fertilizer, then compacting it with a roller. This provides good establishment without the need for a companion crop. He uses a seeding rate of ~16 lbs/ac of alfalfa and fertilizes the crop with 200 lbs of 8:38:16 prior to planting. He also adds 15 lbs of sulfur annually. Sulfur deficiency is becoming more common, especially in his sandier soils. Every year Bower fertilizes with dry or liquid fertilizer before the first spring cutting and foliar fertilizes after the first cutting. No major disease or insect problems are observed, but every so often Bower has to spray for leafhoppers.
Dennis harvests his alfalfa twice in the seeding year and three times in the following production years. His average yields range from 3.5-4 tons/ac, with the occasional bumper crop ranging from 4.5-5 tons/ac. While his best hay has a Relative Feed Value (RFV) of ~195, his average tends to be right around 165. The highest quality hay is reserved for dairies, while the lowest goes to beef cattle operations. Primarily he sells his alfalfa in medium-square bales (3x3') to dairies in Minnesota and a feedlot in North Dakota near his farm. The average price paid for his hay is $120/ton, although his highest quality hay sells for about $140/ton.

When asked about Roundup Ready® alfalfa, he says, "while I haven't tried it yet, I think it will offer clear advantages, particularly with weed control during the seeding year." He's willing to pay for technology and is hopeful he'll get the opportunity to incorporate it on his farm. While Bower is aware of the potential development of glyphosate-resistant weeds, he feels that using the full rate and rotating herbicides can minimize that potential problem.

Bower has been an MFA member since 2005. He is representative of farmers in his area - well-organized, hardworking and takes pride in his work.