## IRRIGATED ALFALFA DIVERSIFIES OPERATION

Kimberly McGraw, Agronomy Extension Educator, South Dakota State University

Louie Fritz operates a farming and beef cow operation near Raymond, SD, 50 miles west of Watertown. In 2001, he took a risk and installed his first irrigation system to diversify his farming and beef operation. This due mainly to lack of moisture frequently limiting production in northeastern South Dakota.

Fritz spent considerable time and effort researching whether or not alfalfa under a pivot irrigation system would work into his operation. With a full pivot of already established alfalfa the first summer, Fritz was able to supply dairy quality alfalfa hay to a dairy farm near Milbank. Hay that did not meet dairy quality standards was used to feed his own beef cattle or sold to another beef producer 15 miles away.

Changes made in his beef operation allowed Fritz to sell most of his alfalfa to dairy producers. After two summers of irrigated alfalfa, Fritz had learned answers to some of the questions he had before he started.

This spring Fritz put in a second irrigation system. He found it difficult to manage his crop rotation plans and consistently supply high quality alfalfa hay to dairy producers with only one irrigation system. His original stand of alfalfa needed to be replaced, as it was over 5 years old and was not producing the types of yield or quality he expected. This summer he will raise 80 acres of alfalfa, rotating 80 acres into corn. Fritz plans to grow corn for one or two years before replanting the field to alfalfa. He will plant the second irrigation pivot to alfalfa this spring. The corn crop will either be sold as a grain crop or utilized as a feed source for his beef operation.

Fritz fertilizes the alfalfa once a year, usually in the fall and has had to do little weed control on well established stands. He plans to rotate the alfalfa with a corn crop every four years. In the past, he

has had informal agreements with producers to buy his hay; this year he will enter into his first formal contract with a dairy producer. The dairy will allow Fritz to make the decisions on when to harvest. He has harvested alfalfa on a 28-day cutting schedule in the past and plans to continue this practice in order to maximize his opportunities to produce dairy quality hay. The dairy producer will take all the alfalfa Fritz can produce, although Fritz will keep a small supply of alfalfa for his own beef operation.

Since putting up the first pivot system three years ago, Fritz has been able to sell enough dairy quality alfalfa hay to make the payments on the irrigation system and have additional income. Last year Fritz figures the irrigated alfalfa grossed enough to make his yearly payment and supply additional income to the farming operation. By implementing these practices, Fritz has diversified his farming and beef cattle operations, which he feels has reduced some of the inherent risks associated with farming.

With three years of raising irrigated alfalfa behind him Fritz admits he has learned from his experience, and still has a lot to learn and many questions yet to answer. He will tell you that diversifying his operation was the right move. The last three years have been drought years for South Dakota and the irrigation system has allowed him to provide hay for dairies and his own beef cattle.

With his second irrigation system not sown to alfalfa yet, Fritz is already considering the possibility of putting up a third system. "To me irrigated alfalfa had to work, it was another way I could diversify my operation and make money. I have been very pleased how things have worked out," Fritz concludes.