

## **Silvercrest Holsteins of Big Stone City, South Dakota**

*by Amy Kruse, SDSU Cooperative Extension Service*

Silvercrest Holsteins is owned and operated by Bill and Raynelle Mueller and family of Big Stone City, South Dakota. They own 130 head of registered Holstein cows and replacement heifers, with a rolling herd average of 21,000 pounds. They utilize 225 acres of cropland with 50 acres being dedicated to alfalfa.

The quality of the alfalfa is a high priority and in order to keep alfalfa production at a maximum, Bill rotates a new field of alfalfa in every five years. He works the seed bed with a multi-weeder before planting and seeds 18-19 pounds per acre of an alfalfa/orchardgrass mix. A press drill is used to keep the seed as close to the top as possible; Bill uses a target date of April 10-15 for seeding new alfalfa. No pre-seeding weed treatment is used and the first cutting of a new field is chopped for haylage to control any weeds that might emerge.

When it is time for harvest, the Muellers use a target of 1-5% bloom for cutting hay. Haylage is used in a Total Mixed Ration (TMR) for the milking herd and the Muellers hire a custom chopper and have the haylage bagged. Hay is also baled in big square bales for the young heifers and milking herd ration and big round bales are used for the older heifers and dry cows. The Muellers use a New Holland 16' Haybine with a spread windrow and New Holland D1000 2 X 3 Big Square baler. Bill has used Pioneer 1155 hay preservative for the big square bales and Pioneer 1177 for the haylage.

Every field is sampled as harvested to determine protein and relative feed value for formulating rations. When harvesting hay, time is of the essence and some years pose more of a challenge than others as hay that is rained on or cut at later stage of bloom will lose crude protein and relative feed value. Bill targets 165-175 RFV as higher values can cause digestive problems and lower values require supplementation in the ration. The higher quality hay is fed to the milking herd and young heifers to achieve maximum growth and production.

Storage of harvested hay is also important in order to minimize quality losses from exposure to the elements. Baled hay is removed from the field as quickly as possible and stored in a hayshed. Any overflow of bales are stored outside with a bottom of old tires and covered with plastic and canvas tarp to protect from the elements.

Bill and Raynelle have 35 years of experience with dairy cattle and Bill has designed his barn to maximize cow comfort and production. The Mueller's have 3 grown children that have been very active in the operation through 4-H, FFA and shared ownership of cows. The Mueller family understands the value of cow comfort, genetics and quality feeds for rations to maximize milk production. Raising high quality forages is an essential component of their operation.