

IMPACT



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Hay Production Program has Positive Impacts on Camas County Producers

The Situation

Camas County is agriculturally based producing alfalfa hay (43,100 harvested acres) and cereal grains (14,800 harvested acres). Many producers grow certified organic hay and grain. Camas County is located at a high elevation (5,100 feet). The average annual precipitation is 14 to 20 inches, and the average growing season is 60 to 80 days. The majority of acreage (87%) is non-irrigated. In dry land situations, timing of harvest is critical, especially under drought conditions. Normal dry land yields in the county (1-2 tons/acre) have dropped as much as 50% (from 1 to 0.5 tons/acre) in recent years due to drought. This can cost producers a potential income of \$35 per acre if hay fields are not harvested at the optimal quality for their target market. Considering the environmental limitations, it is essential for growers to identify which alfalfa varieties will produce better under Camas County's diverse growing conditions and which will achieve production goals. Growers also need to gain knowledge on a variety of management practices and understanding of new technologies in order to sustain production.

Our Response

The Camas County Extension Hay Program includes four types of educational activities:

1) alfalfa variety field trial, 2) field tour, 3) winter hay schools, and 4) alfalfa quality watch survey.

Cindy Kinder, Camas County Extension Educator in cooperation with Glenn Shewmaker, University of

Idaho Extension Forage Specialist, and area landowner and grower Bill Simon, coordinated an alfalfa variety trial for four years (2000-2003) in order to provide growers practical information on alfalfa varieties and understand how varieties produce under Camas County's growing conditions. A field tour was conducted in July of 2000. The tour, planned by Cindy Kinder, was organized to inform growers of the varieties of alfalfa hay that were grown in the local trial. Interested producers attended the tour and had the opportunity to meet with state extension specialists and ask questions. Multiple joint winter hay schools were conducted in Blaine and Camas Counties in 2001, 2002, and 2003. Cindy Kinder, Jo Ann Robbins, former Blaine County Extension Educator, and Ron Thaumert, Blaine County Extension Educator, organized the schools. Topics were presented by a variety of people including Idaho Department of Environmental Quality, Idaho Power, University of Idaho Extension Educators & Specialists, Idaho Department of Water Resources and Idaho Department of Agriculture. The schools were held in order to increase knowledge of local growers about hay production management. Topics covered in the winter hay schools included: local variety trial update, irrigation timing and efficiency, niche markets, Idaho's water adjudication process, weed management, harvest management, hay qualities, pesticide record keeping, soil nutrient balancing, Round-up ready alfalfa, Idaho certified weed free hay program, and Idaho organic program policies and procedures. The alfalfa quality watch survey conducted 1999 through 2002 included 10 fields; 5 irrigated and 5 dry land across the Camas Prairie.

These fields were monitored weekly for crude protein and acid detergent fiber (ADF) content. The University of California Hay stick was used to predict forage quality and samples were evaluated using Near Infrared Reflectance Spectroscopy (NIRS).

Program Outcomes

The Camas County Alfalfa Hay Production Program had many positive impacts on local growers. Establishing the variety trials for growers in Camas County allowed them to determine varieties that could achieve local production goals. The field tour provided hands on opportunity in understanding the relationships between environmental growing factors and varieties of alfalfa hay in the field trial. The quality watch survey indicated to producers that harvesting management is very critical. The four-year study found that crude protein in alfalfa decreased by 1.5% and ADF increased by 2.5% each week. This weekly change in quality has the potential to decrease the value of hay by at least \$30/ton if the fields were not harvested at the proper time for the target market.

Participants in the winter hay schools stated the information provided to them the past three years was useful. Eighty percent stated they tried to implement at least one of a variety of management practices conveyed. Producers stated they implemented some form of production management including:

- Weed Management (20%)—knowledge of pesticide availability and use for specific weeds.
- Irrigation (40%)—became more aware of and monitored soil water content and timing of early season irrigation.
- Markets (20%)—understanding low potassium hay markets.
- Organic Production (40%)—use of new products and changes in the state organic program.

Producers also stated that for the most part the new practices were successful on their operation. One producer stated in a survey of the winter schools that the new technology he learned about and implemented allowed him to “better schedule (his) early season irrigation.” Another producer stated that he followed up on the low potassium hay market after learning about the program and he was able to

sell 70% of his crop to that market. Currently there is a \$10-20 difference between feeder hay and low potassium hay. This could have increased farm income by \$10,000 per year for the average producer in the county. These kinds of changes can help growers sustain and improve their production and bottom line.

Future:

Future programming efforts for Camas County producers will include the continuation of the winter school that will provide information on disease control, weed management and organic production, a 2004 field tour of the variety trial and possible studies looking at carbohydrate (sugar) content in hay grown at high elevations.

For More Information

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