

HREC Advisory Board Meeting Report

July 10, 2018

Janna Kincheloe, NDSU Extension Livestock Specialist

Winter Cow Feeding Trial – The 2017 drought reduced forage availability for winter feeding and presented an opportunity to evaluate animal performance and costs in a drylot situation. Cows were shipped to a feedlot in Java, SD and assigned to one of two treatment groups:

- 1) Full feed forage-based diet (80% wheat straw, 10% bromegrass/alfalfa hay, 7% corn silage, and 3% protein supplement) – COF ~ \$1.90/hd/d
- 2) Limit-fed grain-based diet (50% corn, 22% modified distillers grains, 22% wheat straw, 5% protein supplement, and 1% limestone) – COF ~ \$1.54/hd/d

Treatment diets began during mid-gestation (~d 135) and were continued until approximately 30 days prior to calving. Both diets were formulated to maintain cow body condition. Weights and body condition scores from the beginning, mid-point, and end of the feeding period were used to determine the influence of winter feeding method on cow performance. At the end of the treatment period, cows were managed as a common group with no further treatments applied. At weaning, calves will be shipped to a research feedlot and will receive a standard finishing diet using an Insentec system to monitor individual feed and water intake.

	Weight 12/11/17	BCS 12/11/17	Weight 1/8/18	BCS 1/18/18	Weight 3/14/18	BCS 3/14/18	Weight Change (Final – Start)	BCS Change
Full feed	1620	6.5	1534	6.5	1503	5.8	-117	-0.7
Limit fed	1576	6.3	1550	6.5	1588	6.5	12	0

We are requesting ~ \$70,000 from the South Dakota Beef Industry Council to determine the effect of gestational energy source on offspring postweaning performance, feed intake and efficiency, carcass ultrasound and evaluation, and meat quality and sensory characteristics. We should know by mid-August regarding funding.

USDA Beginning Farmer Rancher Development Program (BFRDP) Grant (~\$600,000 requested) – Project summary attached; “should” be receiving notification any day now.....

Invited speaker for beef cattle nutrition program in Buffalo, SD – This program covered basic ruminant nutrition and physiology along with some ration balancing and trouble-shooting basics. We are currently working on plans to build off this program and develop agent training in basic beef cattle digestion/physiology in MT, WY, SD, and ND.

Recorded invited presentation on fly control for “Cattlemen’s Conversations” - Facebook and YouTube based forum for producer education

Planned and facilitated multi-state “Minerals for Livestock Producers” Meetings – This program was developed collaboratively with SDSU Extension and was initiated with face-to-face meetings in May in both North and South Dakota. Topics for the first meeting were basic mineral requirements, how to

monitor mineral consumption, and forage sampling for mineral analysis. Ranch visits will be conducted within the next month for all participants, and we will follow up with a second face-to-face meeting in September. Our objective is to evaluate and formulate mineral supplementation programs on an individual basis based on forage sampling and performance goals.

4-H Market Animal Workshops – Worked with local agents to plan, facilitate and conduct workshops for ~ 75 4-H members with market animal projects across the state. Workshop topics focused on animal selection, nutritional management, quality assurance, showmanship, ethics, and carcass quality.



2017 post-weaning calf feeding trial data summary and analysis (“Effects of TM injection with or without vaccine on performance and morbidity of beef calves”) – Injectable mineral sources have been suggested to be beneficial during a period of increased stress or metabolic need to allow for rapid increases in trace mineral status and liver storage of minerals. There is a lack of data evaluating the use of injectable trace minerals with or without standard vaccines in weaning protocols.

Three weeks prior to weaning, calves were randomly assigned to one of four treatment groups: 1) Vaccination with Multimin 90 (VAC-90); 2) Vaccination without Multimin 90 (VAC); 3) No vaccination with Multimin 90 (NOVAC-90); and 4) No vaccination or Multimin 90 (CON). Each treatment had 4 pen reps. with 4 calves per pen for a total of 64 calves on trial.

Dosage of MULTIMIN 90 followed recommended product dosage guidelines of 1 mL per 100 lbs. of body weight. Calves only received one dose of MULTIMIN 90 (at pre-weaning). All calves received Ultrabac 7/Somubac at pre-weaning, and Somubac at weaning; however, only VAC and VAC-90 calves received Bovi-Shield Gold One Shot at these times.

Calves were weighed and blood samples were collected at pre-weaning, weaning, and at the end of the ~40 day feeding period. Serum samples will be used to determine presence of antibody titers for BVD Type II and BRSV. Future analysis will include mineral screening if funding is available. Animal performance, feed intake data, and titer data will be summarized and published in the 2018 North Dakota Beef Report.

Project Summary

Title: Beginning Livestock Entrepreneurs of North Dakota (BLEND)

PD: Kincheloe, Janna	Institution: North Dakota State University
CO-PD: Dhuyvetter, John	Institution: North Dakota State University
CO-PD: Ellingson, Julie	Institution: North Dakota Stockmen's Association
CO-PD: Hoppe, Karl	Institution: North Dakota State University
CO-PD: Meehan, Miranda	Institution: North Dakota State University
CO-PD: Schmidt, Richard	Institution: North Dakota State University
CO-PD: Stokka, Gerald	Institution: North Dakota State University
CO-PD: Wardner, Nicole	Institution: North Dakota State University

The proposed project is an intensive educational program for beginning livestock producers that will include a range of learning and outreach activities focused on financial and business management, marketing, leadership, and production topics. The BLEND program addresses the primary goal of BFRDP to help beginning ranchers improve their success through knowledge, skills, and tools needed to make informed decisions and enhance sustainability. Participants from 50 operations across the state will be organized into small groups (Producer Learning Communities) facilitated by NDSU County Extension Agents. Statewide and local workshops will include livestock production, natural resource stewardship, marketing, finance, and leadership topics. Enrollment in the ND Farm Business Management program will provide participants with a business analysis and instruction on financial, enterprise, and marketing management. A structured mentoring program will be developed in cooperation with the North Dakota Stockmen's Association. Mentors will participate in program events and work individually with mentees to help them navigate barriers to entry in the livestock industry and complete a resource inventory and business and marketing plans. Study tours will broaden participants' knowledge of the livestock industry through meetings with industry groups and organizations and exposure to various segments of the industry, from seedstock to consumer. The long-term objective of this project is for each producer to develop and maintain a sustainable, thriving, and profitable livestock business. By fully participating and engaging in this program, producers will be able to achieve business and personal goals, benefitting rural communities as well as state and local economies.

* Other collaborating organizations not on PD list: North Dakota Stockmen's Association, Bank of North Dakota, Farm Credit Services of Mandan, AgCountry Farm Credit Services, North Dakota Farmers Union

* Percent (%) of total federal funds requested that are allocated to NGO/CBO/SAEOs: 36%

* % of budget allocated to military veterans: 0%

* % of budget allocated to socially-disadvantaged audiences: 0%

* List of previous BFRDP projects that PD/co-PDs have led (PD name and award no. for each):
Olson, K.C., award 2015-70017-23893