



**RESEARCH
 PROTOCOLS**

Inclusion of Oats in Finishing Beef Rations

Objective: Evaluate the performance of finisher cattle when fed a total mixed ration (TMR) including oats compared to a standard TMR ration without oats.

Hypothesis: Cattle fed a ration including oats will perform equally and experience decreased morbidity rates compared to cattle fed a standard TMR.

Projected Start Date: July 2020

Couser Cattle Company (Bill Couser) will:

- Formulate TMRs with rolled oats
- Submit feed samples for a complete nutritional analysis before feeding cattle
- Randomly assign cattle into 6 pens, comprising 3 replications. Each group of 3 pens holds 500 head of cattle; each pen will contain approximately 166 cattle. Keep groups as even as possible in size and weight.
- Feed cattle in the treatment group a TMR comprised of 25% oats.
- *Measure and collect the following data:*
 - Record group weights on day 1 (arrival), day 90 (implanting), and day 200 (transport to market) on a per pen basis.
 - Record any health concerns or veterinary treatment (incidences of acidosis, antibiotic administration, etc.) on a per pen basis.
 - Record observations while managing the feed bunk (i.e., thriftiness, appearance, feed intake and palatability of feed) on a per pen basis.
 - Record amount of feed fed to each pen and number of days on feed in order to calculate feed efficiency.
 - Track costs of each ration.
 - Obtain carcass yields and grades for individual carcasses from Nebraska Beef for the control and treatment groups after harvest (if possible). In order to make comparisons, the control and treatment cattle and carcasses must be kept separate during transport and harvest.

Paired Comparison (each pair of pens constitutes one replication)						
Rep 1	Rep 2	Rep 3		Rep 1	Rep 2	Rep 3
Corn / Soy (control – 500 hd)				Corn / Soy / Oats (25%) (treatment – 500 hd)		

Practical Farmers of Iowa (PFI) will:

- Support Bill Couser in designing and conducting the feeding trial.
- Monitor progress of trial and provide support when needed.
- Review data with Bill Couser to include in a project research summary.
- PFI will compensate Bill \$ 550 for trial participation and \$ 57,146.76 for bushels of oats (cattle feed).

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