

OSU Extension

Beef Industry Tour 2013: A Visit to The Dalles

Fara Brummer, Central Oregon Livestock Agent

On Tuesday December 10th, a group of interested livestock producers gathered at the Shilo Inn to greet the Beef Industry Tour and listen to talks by Oregon State University faculty and University of Florida faculty. The tour focus was: *Beef Cattle Nutrition and Health*.

There is some new and really exciting research going on here in the Northwest which can give you some better tools as cattle producers. There is also really good information from Florida (yes – it's a little far and a little warm, but don't forget Florida is home to the Deseret Ranch – the nation's largest cow calf production ranch and it is also in the top ten states for beef cattle production numbers).

This will be the first of four articles on the talks given at the Beef Industry Tour. The presentations can also be viewed in their entirety on the Oregon State University Beef Cattle website: beefcattle.ans.oregonstate.edu/

Session One: Energy and Protein Supplementation for Cow-

Calf Systems

David Bohnert, Director, Eastern Oregon Agricultural Research Station, Burns. Ruminant Nutritionist and Extension Specialist

Dr. Bohnert started out by talking about forage being the staple of cattle diets. Forage is affected by 1) Quality 2) Intake or how much the animal consumes and 3) digestibility or how much nutrition can actually be gleaned from that forage. These vary depending on the time of year in our range based systems. How can we make the most of our range grasses with respect to beef cattle nutrition?

Protein Supplementation: Protein is a vital need for growing, reproducing, and lactating cattle. Our range grasses are mostly cool season grasses (also called C3 grasses) which are different than warm season grasses (also called C4 grasses), the latter being prevalent in the Midwest. Research from the OSU Agricultural Experiment Station in Burns has shown that our range grasses ebb and flow with respect to protein

content depending on time of year and rainfall. Typically, our range grass protein levels are highest in the spring and wane with the hot weather, sometimes "greening up" and providing a flush of protein in the fall, if there is fall moisture.

Research on warm season grasses has shown that protein supplementation directly affects intake by an average increase of 40%. However, this is not true of our cool season grasses. Protein supplementation will not increase intake, as Dr. Bohnert has discovered. So our primary reason for providing protein supplementation for cattle is when our range grasses fall below adequate protein levels in the summer and winter. Protein supplements can be hay such as alfalfa or a lick tub type supplement.

Dr. Bohnert discussed the value of supplementing with alfalfa as a protein source infrequently, that is every third day or so when feeding. This can save labor and time, and the value for the ruminant is just the same. He also discussed the value of using protein supplements such as urea wisely as an NPN (non protein

nitrogen). **Care must be taken when using urea. It must be balanced with enough energy and roughage in the cattle diet or it can be toxic.**

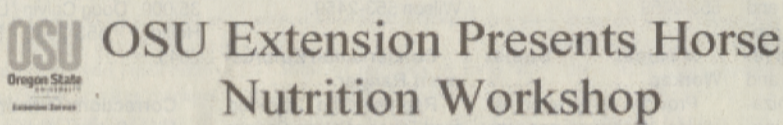
Energy Supplementation: Energy is vital to growing and reproducing cattle as well. However, starch based supplements at 0.5% or higher in the cattle diet will reduce forage intake and digestibility and fiber based supplements should only be offered at 0.8% or less of the diet. An example of a starch based supplement is grain. In contrast with feeding supplemental protein, **in frequent energy supplementation has actually been shown to reduce performance**, therefore if you are using either a starch or fiber based supplement, it should be fed daily. Dr. Bohnert stated that there is limited information examining the effect of energy supplementation with our cool season grasses. However, we know that as range grasses mature, their energy content will also decrease. As energy availability decreases, performance of range beef cattle will also decrease.

In conclusion, Dr. Bohnert said that our C3 range based forage at its low quality stage will limit beef cattle performance due to low energy & metabolizable protein. Adding starch based supplements with urea (NPN) can elicit similar responses in the cow compared with natural proteins. **Care has to be taken when using urea though as it can cause disruption in the rumen and even death if it is not balanced with enough starch and roughage.**

Cost is always the bottom line too, so Dr. Bohnert added that "Supplementation should optimize forage utilization while economically meeting performance expectations".

A handy tool for evaluating the cost of your current cattle feed costs and comparing it with other options is the OSU Cowculator, an EXCEL based program that is available free of charge at beefcattle.ans.oregonstate.edu/html/forage/Forage.htm

For more information, please contact your local Extension office, visit our Beef Cattle website, or contact me directly at (541) 410-1247




OSU Extension Presents Horse Nutrition Workshop

Date: Thursday - January 16th, 2014
Time: 5:00-8:30p.m.
Location: OSU Extension Basement

Topics Include:

- Equine Digestive System
- Nutrition for the performance horse
- Equine Parasite Control

For more information please contact the Warm Springs OSU Extension office at 541-553-3238



Save Time Using Your Freezer

Cook foods now—use later!

Basic Freezing Steps:

1. **Cook the food.** See the table on the right for foods that freeze well. Plain cooked pasta does not freeze well.
2. **Cool the food.**
3. **Pack the food** in small amounts. Use freezer containers or freezer plastic bags. Leave space at the top of container or bag.
4. **Write the name of the food and date** on the container.
5. **Place container** in the freezer (0°F).
6. **Thaw foods** in the refrigerator before reheating. Or use a microwave on defrost setting in a microwave-safe container. Frozen vegetables can be cooked without thawing.
7. **Heat foods** to 165°F. Use a food thermometer to check the temperature.

Kids Can...

- help peel potatoes for

- Quick Black Bean Mexican Soup (below)
- help pack cooked food for freezing.
 - wash a veggie for the family dinner.

Freezer Storage Times

- Applesauce ---8 to 10 months
 - Dried Beans, cooked ---Up to 3 months
 - Fruit, Veggies ---6 to 12 months
 - Meat --- 1 to 2 months
 - Soup, stock --- 4 to 6 months
- Make mealtime a family time.** Family meals help kids learn to make healthy choices, try new foods and make strong family connections. Here are some tips:

- Eat together often.
- Let everyone help.
- Let kids make healthy choices.
- Turn off the television, phone and other distractions.
- Talk to each other.

Message brought to you by the Nutrition Council of Oregon.

Monthly Hero Checklist

- Freeze a cooked food to be used later.
- Have kids help freeze foods using the Basic

Quick Black Bean Mexican Soup

- Ingredients
- 1 tablespoon **vegetable oil**
 - 1 small **onion** chopped (about 1 cup)
 - 4 cloves **garlic**, minced
 - 1 can (14-15 ounces) diced **tomatoes**
 - 4 cups cooked or canned **black beans** (with liquid)
 - 2 **potatoes**, peeled and diced
 - 4 cups **water**
 - 1/2 cup fresh **cilantro**, chopped
 - 1 tablespoon **cumin**
 - 1/3 cup **lime juice** or juice from 1 lime **hot sauce** to taste

Directions

1. Heat oil in a large pot over medium-high heat. Sauté the onion for 2 minutes. Add the garlic

- and tomatoes and cook for 2 minutes. Stir often.
2. Add the beans, potatoes and water. Bring to a boil; then reduce to low-medium heat. Cook slowly, covered for 20 minutes.
3. Add the cilantro, cumin, lime juice and hot pepper sauce. Stir well, and cook for 10 minutes. Serve hot.
4. Refrigerate leftovers within 2 hours.

Notes Try topping soup with non-fat sour cream, chopped cilantro and baked tortilla chips.

When soup is ready, serve half as a family meal and put the other half in a freezer container. Follow the **Basic Freezing Steps** on the front.

ORGANIC TRAINING

for agricultural professionals

January 7-8	Salem
January 23-24	Medford
January 27-28	Pendleton
January 30-31	Redmond

Register Today

For questions or registration information, contact Ben Bowers, Organic Conservation Specialist,

Email: Benjamin.Bowers@por.usda.gov

Phone: (503) 580-4767

Training Agenda:

- ✓ Implementation of nutrient management (590); cover crops (340); buffers on organic operations
- ✓ NRCS pest management assistance for organic operations
- ✓ Resources on working with transitioning producers
- ✓ Soil Health
- ✓ A farm field visit and case study
- ✓ Earn NRCS Job Approval Authority (JAA) for Inventory and Evaluation for 340 and 590

These trainings are a collaborative effort between USDA NRCS, Oregon Tilth, Northwest Center for Alternatives to Pesticides, NCAT-ATTRA, and Oregon State University with funding provided by the Western Sustainable Agriculture Research and Education Program (WSARE).

