The Place Where Animal Lovers Come Together | Fall 2009

Plan Now for Winter Feeding Program

Now is the time to plan your beef herd winter feeding program. Fine-tuning winter feeding management helps optimize performance, but it is also essential for good animal husbandry, according to livestock nutrition and animal health experts with North Carolina State University (NCSU).

10-Point Plan

Matt Poore, PhD, professor and ruminant nutrition specialist with NCSU College of Agriculture and Life Sciences, suggests utilizing this 10-Point Winter Feeding Plan to help assure you have adequate, high quality feed supplies for winter.

1. Analyze hay for feeding value and develop a supplementation program to meet energy, protein and mineral requirements. Based on the feed analysis, rations can be balanced taking into account life cycle phases, season of the year, weight of the cow, and additional needs of older cows or growing heifers.

2. Keep hay or adequate pasture available for cows at all times. Adequate hay or pasture should be available daily, especially during colder months. Feeding enough hay for 3 days just before a predicted storm can prevent the stress of trying to get to cows when roads may be impassable.

3. Body condition scores (BCS) of cows should be recorded every two months during winter and more often during extremely cold or damp conditions. Aim to have most cows in the range of BCS 5 to 7. To improve body condition, consider management techniques that improve feed efficiency, such as early weaning of calves, shelter from wind and rain and prevention of muddy conditions.

4. Ensure there is enough feed on hand for the winter season to feed all cattle. Plan for reasonable contingencies to prevent feed shortages. Once hay inventory and quality is known, extra hay can be purchased if needed and you can plan for an appropriate protein and energy supplement. Remember hay is always less expensive and generally higher in quality if purchased in the fall.

5. Separate heifers, thin cows and older cows from the main herd for feeding purposes and separate lactating cows from dry cows. Thin, old, or small cows and heifers compete poorly for feed when kept with younger and more aggressive cows.

6. Re-group the cattle during the winter as needed so thin cows can be fed separately. Groups based on age, pregnancy status, and body condition scores need to be re-evaluated as winter progresses. Re-grouping will help keep cows in adequate body condition.

7. Cull chronically thin cattle, old cows, and cattle with dental or health problems. Income from cull cows can be significant on cow/calf enterprises, accounting for 15 to 20 percent of gross income. Appropriate preemptive culling may also prevent suffering in aged or debilitated cows.

8. Adjust rations as calving season approaches to provide more energy and protein. As cows enter late stages of pregnancy and begin to calve, dietary adjustments must be made to keep up with changing nutritional requirements.

9. Provide minerals at all times based on requirements for your area. Minerals are a key component of a cattle nutrition program. Forages may provide the energy and protein that a cow needs, but they are almost always deficient in one or more minerals.

10. Provide adequate shelter from wet or cold weather. Purina has designed supplemental feed products to help you economically manage your beef cattle winter nutrition needs in all life stages. Wind and Rain® minerals, for example, have been specifically designed to meet mineral deficiencies based on forage quality and cattle nutritional requirements throughout the year. These minerals provide wind and water resistance and enhance consistent consumption.

Contact your Purina dealer today for more information on these and other beef cattle nutrition programs that can help you fine-tune winter feeding management to your specific situation.

Reference: [1] http://www.ces.ncsu.edu/disaster/ drought/10ptplan.pdf

Nutrition Key in Heifer Reproductive Efficiency

Good nutrition management is a key to reproductive efficiency in heifers. Animal scientists at the University of Georgia Cooperative Extension Service say heifers must be bred to calve at two years of age, and it is critical that they reach 65 percent of estimated mature weight prior to breeding.[1] Nutrition management during this development period can have a great impact on lifetime productivity.

Because heifers require a higher quality diet, they must be fed separate from the mature cow herd. The Georgia animal scientists offer these additional thoughts about proper nutrition for heifer development:

Hay

Heifers are often developed using hay-based diets, but because grass hay will not provide enough energy for them to gain at optimal rates, their diets need to be supplemented with grains, by-product feeds, and/or high quality winter annual pasture. Feeding hay that is greater than 12 percent protein will require an energy supplement that is at least 9 percent or higher in crude protein. High quality hay fed with approximately 0.75 to 1 percent body weight of a dry grain supplement should provide acceptable gains. Because hay quality has such a dramatic impact on daily gains, it should be tested for nutrient content prior to feeding.

Winter annual pastures

Winter annual pastures such as wheat, rye, oats, and ryegrass can provide sufficient nutrients for developing heifers with only a mineral supplement required. Begin supplementation as soon as grazing becomes limited. High levels of protein in winter annual forages can reduce reproductive efficiency. To counter this, cows can be limit-grazed for only a few hours each day; then supplemented with hay.

Corn silage

Corn silage may need a protein supplement to provide adequate gains for heifers. Commonly used feeds to supply additional protein are soybean meal, cottonseed meal, commercial supplements or a high protein by-product feed.

Limit fed grain/by-products

Typical grain-based diets can be limit-fed to develop replacement heifers, but be cautious because heifers will gain too rapidly if allowed free-choice access to a grain-based diet without ingredients to control intake. Limit-fed diets generally consist of 80 percent concentrate, including grain, by-product feeds, and protein supplements. The remainder consists of a roughage source and a mineral supplement.

Accuration Cattle Limiters, with intake modifying technology to control intake, are an excellent choice to develop heifers, and to get first-calf heifers re-bred.

Ionophores

Ionophores have been shown to reduce age at puberty in replacement heifers by 14 to 28 days. Heifers that reach puberty earlier are more likely to breed early in the breeding season and continue producing a calf every 12 months.

Calving to Re-breeding

In most herds, first-calf heifers are the most difficult group to get re-bred. Supplementing to improve body condition scores (BCS) for acceptable pregnancy rates may be necessary. First-calf heifers with a BCS of four at breeding will have pregnancy rates of approximately 50 percent, while those with a BCS of six will have about a 90 percent pregnancy rate.

Even in well-developed heifers, body weight and condition can be rapidly lost after calving. To maintain a high re-breeding rate, you can supplement existing forages or hay, graze winter annual pasture, or early wean the calf.

The total best nutritional solution for your replacement heifers is the culmination of more than 80 years of Purina research. Purina has developed two product lines to specifically meet the needs of your heifers. You can select from either Controlled Intake Systems with IM Intake ModifyingTechnology® or handfed 4-Square® Stocker/Grower Chow products. Your local Purina dealer or your Purina nutritionist can help you develop the proper nutrition program for your situation and production goals.

Reference: [1] http://pubs.caes.uga.edu/caespubs/pubs/PDF/B1343-2.pdf

Fall Cow-Calf Management Reminders

Here are some general cow-calf management reminders for the fall season. This information has been adapted from the "Beef Cow Herd Calendar"[1] developed by the Oklahoma State University Cooperative Extension Service.

October

- Beginning in late October or November, provide supplemental feed for bulls on dry grass according to age and condition.
- Evaluate cows' body condition score (BCS) at weaning. Develop winter nutrition program to have cows at a BCS of six at calving to enhance rebreeding performance.

November

- Check with your Extension office for information on educational meetings about livestock and forage production practices.
- If fall calving, lactating cows need to be in good condition for breeding, a BCS of at least 5.5.
- Treat cattle for lice if needed.
- If spring calving, check the weaned steer and heifer calves regularly to produce desired gains.
- In spring calving enterprises, if culling is not completed in September and October, it should be completed this month.

December

- Check your financial management plan and make appropriate adjustments before the end of the year.
- Monitor the herd continuously for health problems.
- Treat cows for internal parasites if needed.
- If spring calving, identify the purebred herds and test stations at which you want to look for herd sires. Check sale dates and review performance criteria to use.

References: [1] http://osuextra.okstate.edu/pdfs/F-3261web.pdf

Preserving Nutrients in Hay

Take Precautions to Preserve Nutrients in Hay

Proper storage of hay between harvest and feeding is critical for preserving nutrients in the hay and assuring that you have high quality hay to feed your cattle when they need it most during the winter months. The nutrient requirements of cattle are more likely to be met with quality hay that is well stored, according to Mark L. Wahlberg, Extension Animal Scientist, Virginia Tech.

Small square bales, weighing from 40 to 70 pounds, should normally be stored in a barn or other structure with a roof to minimize dry matter losses. Due to the size, shape, and weight of large round bales,storage options are often limited and these may be stored outside.

The outside portion of the big, round bales is most susceptible to weather damage. To protect the hay from substantial loss, water infiltration from the top, sides, and bottom must be prevented. One key to reducing hay storage loss is to break bale contact with the ground, says Wahlberg. He suggests using a gravel base or stacking bales on pallets, poles, or old tires to reduce the risk of moisture coming up from the ground into the bales. Plastic caps, or other means of protecting the top of round bales also helps to reduce losses from moisture.

More Acceptable to Cattle

Wahlberg says that reducing losses from weather damage makes the hay more acceptable to cattle. "Weather-damaged hay is not readily consumed by cattle, and excessive feeding losses can occur as a result of their refusal to eat the damaged hay," he says. Round bales that have been covered are just as readily consumed by cattle as is hay stored inside, Wahlberg points out. "Hay digestibility and dry matter losses are very similar for both inside and outside-covered storage techniques." Wahlberg also recommends giving cattle only as much hay as they will consume in one day to reduce feeding loss and waste. "One way to do this is to match bale size to daily cow requirements." He cites this example: A bale that weighs 750 pounds when it is fed contains enough hay for 30 cows if they require 25 pounds per head per day. If one 750-pound bale is unrolled daily, 30 cows will consume the entire bale with very little waste. However, if a 750-pound bale is unrolled daily for 20 cows, there will be 250 pounds of uneaten hay that will be trampled, spoiled, and wasted.

Purina Helps You Get the Most from Forages

The cattle nutrition experts at Purina realize that home-grown forage is your greatest resource for your beef cattle enterprise.

Although cattle can survive on a diet consisting exclusively of grass or hay, variability of forage quality due to environmental changes, damage in storage and other factors can result in nutrient deficiencies or a lack of consistent nutrition being delivered to the animal.

Purina's beef cattle nutrition programs have been designed to help you extract the most value possible from your forage resources by potentially improving animal performance while enhancing forage utilization. For example Purina Wind and Rain® minerals are specifically designed to meet mineral deficiencies based on forage quality and cattle nutritional requirements throughout the year.

If additional protein and energy are needed before and/or after calving, consider using one of the Intake Modifying Technology products. Accuration®, Sup-R-Block® and Sup-R-Lix® range products can help optimize the use of your forage and meet the cow's needs on a continuous basis, all while providing lower supplement delivery costs.

See your Purina dealer today to discuss these and other cattle nutrition products and programs that meet the specific needs of your beef cattle business.