Winter Feeding Areas For Livestock

As we move into colder weather, it is time to think about strategies for winter-feeding of livestock, since it is a necessary part of nearly all operations. Choosing the right location for winter-feeding can improve production and reduce threats to water quality. A poor location for winter-feeding can negatively impact both soil and water quality.

A significant amount of run-off can occur if winter-feeding is conducted around streams, ponds, or other environmentally sensitive areas such as flood plains and creek bottoms. Storm-water runoff from these areas can carry mud and manure into nearby water bodies, creating water quality problems. If these pollutants can be traced to a specific operation, the owner could be subject to fines from regulatory agencies.

To choose a proper location for winter-feeding, producers should follow a few simple steps. First, feed in well-drained locations. These should be areas that don’t allow runoff of mud and manure to drain into neighboring properties, streams or ponds. The farther from surface or ground water resources, the better, as it is less likely for water pollution to occur.

Next, producers should consider using confinement feeding allowing cattle to access a structure or paddock for feeding but then return to a larger pasture. These smaller “sacrifice” pastures reduce the area damaged from winter feeding and can be used as central hubs for multiple pastures as part of a rotational grazing system. Place water and mineral supplements away feeders, so cattle will be enticed to eat at the feeder and then move out and away to water and minerals. This will help lessen the volume of manure at the feeding areas and spread it throughout the fields.

Finally, heavy-use area pads around winter feeding areas are a worthwhile investment and can greatly reduce mud and rutting from tractor and hoof traffic. These pads are constructed using geotextile fabric, crushed stone and dense grade aggregate.

By making these considerations for winter feeding of livestock, producers can greatly reduce the potential to contaminate water resources and can improve production.
Controlling Lice In Cattle

Cattle lice are an external parasite of cattle that continues to rob producers of pounds of gain and ultimately lower marginal returns. However, producers can effectively identify and control these parasites and improve their profitability by following a few simple steps.

During the cold winter months, lice numbers multiply. They are easily spread from one animal to another as the animals crowd together at feeding time. Eventually, the whole herd can become infested, however, usually only a few animals become extremely affected. Infested animals will often rub and scratch excessively in response to the irritation caused by lice.

Biting and sucking lice usually inhibit weight gain or even cause a gradual loss, and can result in louse-induced anemia, and lowered resistance to stresses, such as cold, wet weather. Proper planning and timely intervention can greatly reduce infestations and result in greater profits to the "bottom line".

Both biting and sucking lice can occur in a herd. Usually, only a small number of animals will be heavily infested. There will be a few lice that survive the hot summer months on "carrier" animals, usually bulls or old cows.

A bull's longer, denser coat and heavier neck and shoulders prevent him from grooming efficiently. Self-grooming helps to reduce louse numbers. Nutrition, general health, and reduced effectiveness of the immune system of older cows can predispose them to louse infestations.

Confirm a suspected louse infestation by visual examination of the most symptomatic animals. Look through the hair at points along the neck, head and around the eyes, on the withers, brisket, and shoulders to look for eggs and lice. Sucking lice can occur in patches. They have narrow, pointed heads and tend to remain attached to the animal. Chewing lice are more active and have a wider, triangular head.

There are several control options for lice but the options are fewer at this time of year. We are past the treatment date for cattle grubs, so a systemic insecticide should not be used unless a grub treatment was applied earlier.

A whole animal spray gives the better coverage for effective louse control and is also one of the cheapest treatments. This leaves pour-ons and dusts are much less effective.

Read the label carefully before you buy. You may find different costs for products containing the same concentration of a specific active ingredient, so generic formulations can save you money. Be sure to look at the application rate and method. Some products have an applicator or measuring device to help deliver accurate doses. This is very helpful when dose rates are just a few cc's per head.

Beware of other cautions or restrictions on the label. It is especially important to note the time to wait between applications (two are needed for louse control because the egg or nit stage is not killed) and protective equipment to be used during application.

Ridding your herd of cattle lice can add pounds to your cattle and improve overall efficiency, and in the process help to increase your profitability. So take steps now to control cattle lice this winter in your herd.
Protecting Livestock From Cold Weather

Providing easy access to water, adequate nutrition and some form of shelter are the three most important things you can do to alleviate cold stress to your livestock this winter. Cold stress affects livestock productivity including rate of gain, milk production and reproductive ability and can cause disease problems.

Carefully monitor very young and very old animals that might be less able to tolerate temperature extremes and have weak immune systems. Also, give close observation to heifers and cows as calving time approaches. They have a greater risk of frostbite as the swelling of the udder and teats causes poor circulation.

Dehydration and hypothermia are the two most likely livestock life-threatening conditions for livestock in cold weather. Animals will often drink less water in severely cold conditions, exposing them to the risk of dehydration. Many animals, especially young ones, are not aware of how to break through ice to reach water. Livestock need water as an aid in digestion, and it also produces heat as the fiber from forage breaks down. Make sure your livestock always have plenty of clean water in liquid form. Dirty streams, ponds or tanks are a host for disease organisms. Disease can rapidly spread if animals drink from the same source containing filthy water. If livestock appear to refuse water, thoroughly clean and disinfect the trough or tank. Also, be sure to keep animals clean, as this helps in keeping contaminants out of the water source.

Water temperatures ranging from 40 to 65 degrees Fahrenheit are ideal to ensure adequate livestock intake under cold conditions. The amount of water, needed daily, varies based on the ambient temperature and animal size, stage of production and feed intake. Generally, horses will need eight to 12 gallons of water per day; cows, seven to 12 gallons, and sheep and goats, one to four gallons.

Necropsies have shown that dehydration, not cold, often causes livestock deaths during the winter and early spring.

Prior to severely cold weather, haul extra feed to the feeding area. It’s important to provide extra hay, forage or feed because livestock can use up to twice as many calories to maintain normal body heat under extremely cold conditions. Livestock produce body heat through fiber fermentation, which produces heat while releasing energy. Good quality grass hay or alfalfa are the best source of nutrition for cold weather. Feeding some grain also provides energy to help maintain body temperature.

Lastly, it’s also important to provide some sort of protection for livestock as wet conditions plus wind chill compound to create animal cold stress. Studies have shown that calving success increased by an average two percent when a windbreak protected cows. Windbreaks can provide protection for livestock, especially for young animals. Reducing the wind speed lowers animal stress, improves animal health, reduces the amount of feed needed to maintain body temperature, increases feeding efficiency and increases profitability. A windbreak can be designed to meet needs of the specific livestock operation and established to provide the greatest benefit to your particular operation. Windbreaks can also provide wildlife habitat, and be aesthetically pleasing while screening noise and odors associated with livestock operations. A three-sided shed opening away from prevailing winds can also be used to protect livestock from the cold and wind. Always allow enough room for livestock to enter the shed and to be protected from the wind. Keep clean, dry bedding to provide insulation from the cold wet ground. If you keep animals in a barn, be sure to reduce drafts inside. A low temperature isn’t so cold when the wind speed is lower.
**DECEMBER**

*Spring Calving Herd*

**Begin winter-feeding**
- Divide the herd into groups for winter feeding which may include:
  - Weaned calves
  - First and second-calf heifers and thin cows
  - The remainder of the dry cows that are in good body condition
  - Herd sires
- Feed the lowest quality forage to mature dry cows during early winter.
- Be sure that weaned heifer calves are on “target” and being fed so that they weigh 65% of mature weight by 14 to 15 months of age.
- Prepare for calving
  - Prepare a calving area and equipment:
    - Well-lighted pen bedded with clean straw
    - Facilities to warm chilled calves (warming box, truck cab, heat lamp, etc.)
    - Puller and chains
    - Ear tags and applicator
    - Frozen colostrum or commercial colostrum supplement
    - Oral calf feeder
    - Iodine for calf’s navel
    - Record book
    - Scales (optional)
- Arrange for enough labor to assist during the calving period.
- Mature dry cows’ needs are minimal if they are in the desired body condition (BCS of 5).
- Keep replacement heifer calves gaining enough to reach their “target” weight (65% mature wt.) by the start of the breeding season.

**Fall Calving Herd**

**Breeding season begins**
- Pre-breeding working. Consult your veterinarian about vaccines and health products your herd needs. These may include:
  - Deworming cows
  - Vaccinating cows for Lepto (5-way), IBR, BVD and Vibrio.
  - Vaccinating calves for clostridial diseases (blackleg) and IBR, PI3-BVD-BRSV.
- Dehorn, castrate, and implant and ID calves if not already completed.
- Cows must be fed when the pasture runs out. Cows with calves need 25 to 30 pounds of good quality hay or its equivalent. Supplement with grain, if needed.
- Start breeding cows by December 25 for fall calving to begin in October.
- Observe performance of bulls during breeding season. If the number of cows returning to estrus is large, try to determine the cause and consider changing bulls.
- At beginning of breeding season, record inventory of all cows in each breeding pasture.

**Considerations For All Cattle**
- Record all cow deaths, purchases, sales and movements among pastures.
- Review this year’s calf crop and start plans for next year’s breeding program.
- Plan to attend educational meetings to update your knowledge of beef production.
- Develop criteria for bulls to be purchased and start attending bull sales.

**Forages**
- Continue using stockpiled tall fescue and crop residues as available.
- Continue testing hay for nutrient content.
**JANUARY**

*Spring Calving Herd*

**Calving season begins**
- Supplement with magnesium mineral at least 30 days prior to calving.
- Increase feed to cows that have calves. Grain may be needed if you are feeding lower quality hay (3 to 4 lb for mature cows and about 8 lb for first-calf heifers).
- Have calving equipment and facilities and labor arranged prior to calving (see December).
- Observe cows closely now, since they should begin calving January 1.
- Expect calving difficulty and intervene if:
  - no progress after 90 minutes of labor.
  - Calf is backwards (only the calf’s tail is visible or the dew claws are pointed “up”).
  - Calf’s head and two feet are not visible.
- Identify calf with ear tag and/or tattoo while it is young and easy to handle. Record dam ID and birth date. Commercial male calves should also be castrated and implanted according to product recommendations. Castration and dehorning are less stressful when performed on young animals. Registered calves should be weighed during the first 24 hours.
- Inform tax preparer of sales of un-bred heifers in the breeding pool because they are considered breeding livestock by the IRS.
- Call AI technicians for spring breeding appointments.
- Determine how much you can spend for bulls and/or semen.

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**Fall Calving Herd**

*Breeding season ends*
- Cows nursing calves need 25 to 30 pounds of good quality hay, or its equivalent, throughout the breeding season.
- Remove bulls February 28 to end the breeding season for last calves to be born by December 7.
- Consider creep feeding or creep grazing of small grain pastures to add extra pounds since fall calves need more than just their dam’s milk for maximum growth. Maintain high quality forage for cows for good body condition, milk production, and calf gains.
- Finish castrating, dehorning and implanting.
- Provide clean windbreaks and shelter for young calves.

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**Considerations For All Cattle**
- Feed hay in areas where mud is less of a problem.
- Increase feed provided as the temperature drops.
- Provide clean water at all times. Be aware of the hazards of frozen ponds.

**Forages**
- Prepare for pasture renovation by purchasing seeds, inoculant, etc., and getting equipment ready.
- Determine the need for N fertilization of selected grass pasture fields for early spring growth.
- Access hay quality and inventory.
- Allocate hay feeding based on animal needs and hay quality.
- Determine varieties to be used for renovation.
- Plan pasture utilization strategy (fencing, water, shade).
**FEBRUARY**

*Spring Calving Herd*

**Spring calving continues**

- Watch for calf scours:
  - Give fluids to scouring calves that become dehydrated.
  - Consult your veterinarian for proper diagnosis and treatment.
- Move cows that are approaching calving to a clean pasture.
- Vaccinate calves (should be 6 to 8 weeks of age or older) for clostridial diseases (blackleg) according to label recommendations.
- Separate cows that have calves and increase their feed.
- Continue grass tetany prevention. Cows need 20 grams of magnesium daily or 4 oz/day of a 15% magnesium mineral mix.
- Line up AI sires and/or purchase new bulls as least 30 days before the breeding season - demand performance records and check health history including immunizations. Choose a breed and use EPDs plus visual observation to select the bull that best fits your production and marketing program.
- Evaluate yearling replacement heifers for pelvic area, reproductive tract score, and weight. Heifers should reach their target weight of 65% of expected mature weight by breeding season.

**Fall Calving Herd**

**Breeding season ends**

- Breeding season should end February 28.
- Remove bulls and feed to regain normal weight and condition.
- If economical, provide creep for calves.
- Provide windbreaks or clean shelter for calves.
- Vaccinate heifer calves for Brucellosis according to your veterinarian’s recommendation (optional).
- Consult your veterinarian for proper deworming of the fall calving herd.

**Considerations For All Cattle**

- Begin looking for herd sire replacements that meet herd and farm goals. Yearling bull availability is best in spring.

**Forages**

- Begin pasture renovation with legumes.
- Apply nitrogen fertilizer by mid to late February to promote early grass growth.
- Plan pasture utilization strategy (fencing, water, shade).
- Consider herbicide options such as dormant applications for alfalfa.
**MARCH**

**Spring Calving Herd**

**Prepare for breeding season**

- Line up AI services and/or purchase replacement bulls at least 30 days prior to the start of the breeding season.
- Choose a breed and use EPDs and visual observation to select the bull that best fits your programs production and marketing goals.
- Have a veterinarian perform breeding soundness evaluations on bulls.
- If you are going to use artificial insemination and/or estrus synchronization, make plans now and order needed supplies and semen.
- Make final selection of heifer replacements based on weight, pelvic size, and reproductive tract score.
- Spring or turn-out working is usually scheduled for late April or May. Consult your veterinarian about vaccines and health products your herd needs (see April for suggestions).
- Continue providing magnesium in the mineral mix until daytime temperatures are consistently above 60°F.
- Identify calf with ear tag and/or tattoo while it is young and easy to handle. Record dam ID and birth date. Commercial male calves should also be castrated and implanted according to product recommendations. Castration and dehorning are less stressful when performed on young animals. Registered calves should be weighed during the first 24 hours.
- Begin breeding replacement heifers for head-start calving. Mate to known easy-calving bulls.

**Fall Calving Herd**

**Pre-weaning period**

- Consult your veterinarian about a pre-weaning working of the herd which may include:
  - Vaccinating calves for:
    - IBR-PI3 -BVD-BRSV
    - H. somnus · Clostridial diseases (blackleg)
    - Brucellosis for heifer calves
    - Deworming calves
- Calves intended for feeders should be re-implanted.
- Consider the economics of creep feeding calves with grain or high quality forage.
- Marketing: Make an economic analysis of all marketing options for calves, including selling at auction barn, video and private treaty. Another option is retained ownership, either by backgrounds or sending the calf to the feedlot.

**Considerations For All Cattle**

- Repair fences, equipment and handling facilities.
- Plan new working facilities, if needed.

**Forages**

- Complete renovations by March 15.
- Smooth and re-seed hay feeding areas and heavy traffic areas.
- Control competition from grasses with young clover plants by grazing or mowing as needed.
- Prepare for spring seeding of alfalfa.
- If growth permits, begin grazing.
- Plan and implement grazing system and rotation.
Dates To Remember:

**North Carolina Forage and Grassland Council Winter Conference**

January 26, 2012
Burke County Agricultural Building
12pm - 6pm

**North Carolina Cattlemen’s Association Conference**

February 17-18, 2012
Hickory Metro Convention Center
Hickory, NC

**Burke County Cattlemen’s Association Annual Meeting**

March 8, 2012
Burke County Agricultural Building
6:30pm

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