

5-Step Process to Evaluate Winter Feeding Programs

by Greg Lardy, North Dakota State University

STEP 1. INVENTORY FEEDS ON HAND AND SAMPLE FOR NUTRIENT ANALYSIS

This step is the most straightforward part of the process. It should be done with enough attention to detail and precision to generate meaningful information. Some of the items which should be included:

1. The number of acres of each of the following available to use for winter grazing:
 - a. dormant native range or other perennial forages
 - b. annual forages
 - c. crop residues such as corn stalks, soybean stubble, small grain stubble, etc.
2. An inventory of all harvested forages including hays and silages with a description of the forage and an estimate of the amount (e.g., number and average weight of bales and tons of silage)
3. An inventory of all grains, byproducts and other feeds currently on hand (in bushels or tons)

A useful reference for estimating the amount of various feeds in stacks, silos and bins can be found at: www.ag.ndsu.edu/pubs/ansci/livestoc/as1282w.htm. With a little effort and a little time spent measuring, accurate estimates of the amount of feedstuffs in various types of storage can easily be determined.

Nutrient analysis is important, especially for harvested forages. Determining grazed forage nutrient quality is difficult. However, most university extension specialists will have an idea of what to expect with local grazing resources.

STEP 2. INVENTORY CURRENT HERD NUMBERS

Inventory number of animals and number of days, weeks or months each group is intended to be fed. Possible categories: mature cows-2nd trimester of pregnancy; mature cows-3rd trimester of pregnancy; mature cows-early lactation; bred heifers-2nd trimester of pregnancy; bred heifers-3rd trimester of pregnancy; first calf heifers, early lactation; yearling heifers; herd bulls; and weaned calves. The information can be broken down into more specific categories for greater accuracy, however, the above categories should offer a good ballpark estimate of nutrient needs.

An often overlooked step is estimating cow body condition and determining the number of cows which need to receive a better quality diet going into the winter in order to calve at a body condition score (BCS) of five the following spring. It is easier to take steps in the fall, than in January, to manage body condition. Remember younger cows (two- and three-year old cows) should be in a BCS of six at calving time to account for their increased nutrient requirements.

STEP 3. IDENTIFY RESOURCES FOR SPECIFIC GROUPS

Decide which animals should get higher quality feedstuffs and when they should receive it. Determine which animals can afford to lose weight or condition by utilizing the poor quality forages on hand.

In general, mature cows in mid-gestation and in moderate-good condition will be one group that will not require special treatment. If supplies of good quality forages are tight, late gestation cows, thin cows and young cows should get better quality forages. This step can be done on a piece of paper or a computer spreadsheet. The spreadsheet offers advantages because it can easily incorporate formulas to do the necessary calculations.

STEP 4. IDENTIFY SUPPLY OR NUTRIENT DEFICIENCIES

In most cases this requires the use of either a ration balance program or access to a bulletin or book with nutrient requirements for each class of animal. Nutrient requirement tables can be found at: <http://www.ag.ndsu.edu/pubs/ansci/beef/eb74w.htm>. For those without ration balancing software, an easy-to-use spreadsheet template can be found at: <http://www.ansi.okstate.edu/exten/cowculator/>.

In this step, the goal is to develop a list of animal groups which are short of forage nutrients and to calculate the total pounds, tons or acres needed to overcome these deficiencies.

STEP 5. IDENTIFY ECONOMICAL ALTERNATIVE FOR FILLING GAPS/DEFICIENCIES

This may be simple for good planners or those who have had an exceptional year for growing good quality forages. This should involve some planning and thought regarding the current market outlook for supplemental feeds and whether or not that feed should be purchased now or later. Each individual situation will be different.

SUMMARY

Fall is the preferred time to go through this simple planning exercise to get a head start on winter feeding programs and prepare for any contingencies that may arise. By preparing now, a more pleasant and profitable winter feeding season will surely follow.