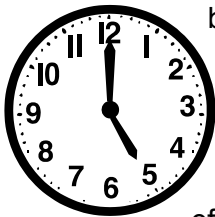


## Managing Dry Cows for Next Year's Calf Crop

Rhonda Gildersleeve, Iowa County UW Extension Agriculture Agent

**Biological Clock:** Think of your cows as employees on your payroll. It is important to keep a schedule that ensures you will get that once-a-year paycheck from their production efforts. As the boss, you set the deadlines for calving, breeding and weaning. You must also provide the nutrition and environmental conditions that the cow needs to maintain herself and produce a healthy calf.



Understanding how a cow's nutritional needs change as the clock ticks toward calving and through the rest of the annual production cycle is important for efficient beef production. With a 9-month gestation period, a cow needs to rebreed and settle within 90 days of calving to stay on a 365 day schedule. After calving, lactation and breeding are the priorities. Her nutritional needs continue to change as her calf grows, is weaned, and then as she moves into the last trimester prior to calving again. Young cows also need extra groceries to finish their own growth. Put your farm's production cycle on a clock to make sure your management meets the cows' needs for optimum production. Below are some management and nutrition reminders for ensuring that your cows can meet their deadlines.

**Body condition scoring (BCS)** during pregnancy check and periodically throughout the year can identify nutritional issues that need to be addressed over the next few months before calving season begins again. Condition scoring is a visual and/or manual appraisal system that assigns a numerical score to each animal according to apparent external fat cover, muscle appearance and skeletal features. Research suggests a strong correlation between condition score and body fat reserves. On a 1 – 9 scale (1=severely emaciated, 9 =very obese), BCS 5 – 6 is the midpoint, or ideal range for body condition. With this type of scale, a 1 unit change in condition score represents about 60 – 90 pounds of weight, depending on frame size. For a thin cow gaining 1 pound per day, we can estimate that it would take an animal at condition score 4 almost 90 days to recover to condition score 5. Use BCS to identify separate feeding groups for thin and/or cows to stretch feed supplies and ensure appropriate nutrition for each group of animals.

Ideally, cows should be in the 5-6 range at two critical points in their production cycle: **at calving and the beginning of the breeding season.** Heifers should be in the 6+ range at these points to account for their extra needs for growth. On the other hand, do not allow cows to get too fat. Maintaining obese cows just wastes feed and may result in other production problems, so it pays to keep an eye on body condition and feed accordingly.

**Nutrient requirements** vary by cow size and milking ability as well as differing during the annual reproductive cycle and age of the animal. Charts 1 and 2 show how total digestible nutrients (TDN) and crude Protein (CP) requirements can vary among groups of animals within a herd.

During early lactation, cows utilize body reserves to support milk production. Lacking other reasons, thin cows in a herd placed on an adequate plane of nutrition are likely to be the best milkers and often wean the heaviest calves. After weaning, they will require a higher plane of nutrition to restore their body reserves prior to calving.

Looking again at Charts 1 & 2, it is clear that the cow's lowest point for nutrient needs comes during the second trimester after the calf is weaned. However, during the third trimester, her nutrient requirements again increase closer to the levels needed after calving. It is a common myth to limit feed cows during the last trimester to keep birth weights low. However, research indicates that while birth weight may be less, dystocia problems do not necessarily decrease under these conditions. In fact, poor nutrition during the last trimester prior to calving can result in even greater problems. Cows with inadequate body condition to support the multiple demands of calving, lactation, breeding and growth if not already at mature body size. Cows calving in at a BCS of 4 or less can have poor colostrum quality, low milk supply, and deliver weak calves that do not easily stand and nurse. These problems at calving often result in higher mortality rates and lighter weaning weights due to a slow start. Poor body condition at calving also lengthens time to first estrus and extends the breeding season.

**An annual pregnancy exam** at weaning decides who gets the opportunity to benefit from your feed and labor for the coming year. Pregnancy testing identifies open cows, estimates calving schedules, and can expose possible breeding problems or reproductive diseases. **It can be used for other routine management practices, such as parasite control, soundness evaluations (teeth, eyes, legs/feet, udders), and some annual vaccinations (check with your veterinarian).**

**Develop a culling strategy** to increase herd profitability and follow your strategy. This year with exceptional cull cow prices and potentially short forage supplies, culling may be easier than in other years. Reasons to cull cows:

- Open
- Soundness (eyes, feet, udders) or health issues
- Extreme age or unthriftiness
- Attitude!
- Outside your desired calving window, or failure to meet other performance standards

Open, unsound, or unthrifty cows are good candidates for the immediate cull market. If you have some thin, lightweight open cows and have the feed and facilities, a 60 day feeding plan that would add 200+ pounds may be profitable. Healthy bred cows that do not fit your herd's management goals can be merchandised to other farmers.

**Breeding replacement heifers to calve 20-30 days earlier** than the mature cows will provide a better chance for young cows catch up in body condition so that they also cycle and conceive during a fixed breeding season in the mature cow herd. Don't forget that replacement heifers also need to receive good nutrition from weaning to breeding age to be cycling and ready to conceive during their yearling year.

**Testing forages and other feedstuffs** is important to be able to estimate the amount of nutrients available in your feed supply. Minerals are also an important consideration and mineral packages may need to change during the various seasons to account for changes in feed quality as well as the animals' requirements.

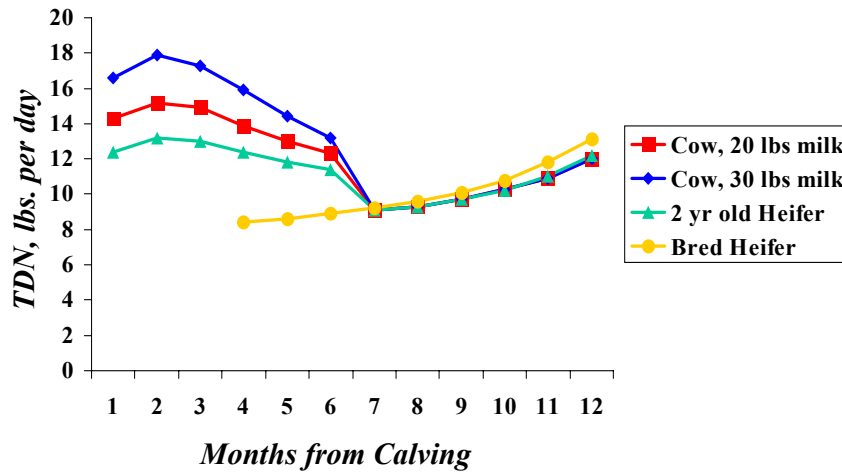


*Please contact our office at 222 North Iowa St., Dodgeville, WI 53533 or telephone (608) 935-0391 for special assistance regarding our programs. Requests are confidential.*

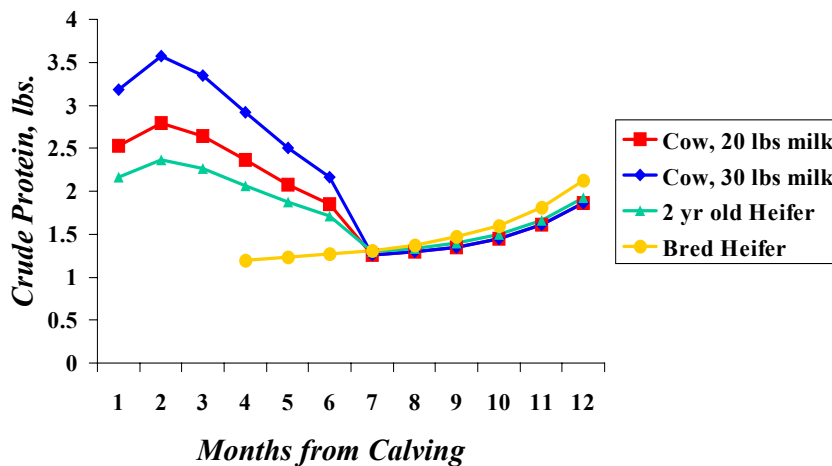
**Extending University research, knowledge and resources to identify and respond to grassroots community educational needs; to improve the quality of life in local communities; to strengthen agriculture, business, families and youth; and to develop leadership, problem-solving and decision-making skills for the citizens of Iowa County. UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA.**

**Charts 1 & 2.** TDN and CP requirements over a year for the following classes of cattle:  
 1000 # cow with peak milk at 20 pounds/day  
 1000 # cow with peak milk at 30 pounds/day  
 2 year old heifer, expected mature weight, 1000 #  
 Bred heifer, expected mature weight, 1000 #

## TDN Requirements



## Crude Protein Requirements



Please contact our office at 222 North Iowa St., Dodgeville, WI 53533 or telephone (608) 935-0391 for special assistance regarding our programs. Requests are confidential.

Extending University research, knowledge and resources to identify and respond to grassroots community educational needs; to improve the quality of life in local communities; to strengthen agriculture, business, families and youth; and to develop leadership, problem-solving and decision-making skills for the citizens of Iowa County. UW-Extension provides equal opportunities in employment and programming, including Title IX and ADA.