

Livestock stewardship: “Pregnancy checking, why should we recommend it?”

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Abstract

The definition of stewardship from Webster’s dictionary is “the careful and responsible management of something entrusted to one’s care”. As livestock stewards, we have a responsibility to manage and utilize the resource of cull animals. Cattle culled from beef and dairy herds fill an important role in meeting the nutritional needs of consumers. Currently the US population consumes approximately 60 lb (27.2 kg) of beef per person each year. Of this, nearly 50% is consumed as ground beef, and one of the primary uses of cull cattle is the production of ground beef. Based on cow-calf budgets the estimate of the income contribution of cull cows to the gross returns are approximately 15%. With proper care, feeding, and good marketing, there is opportunity to increase the market value of cull cows through weight gain, and a change in the grading category to meet the high standards of our food production system, and to provide a more acceptable product to our consumers.

Key words: beef cattle, culling, cow-calf, pregnancy checking

Résumé

La définition de l’intendance dans le dictionnaire Webster se résume à la régie consciencieuse et responsable de ce qu’on nous confie. En tant qu’intendant d’animaux d’élevage, nous avons la responsabilité de gérer et d’utiliser les ressources provenant d’animaux réformés. Les bovins laitiers et de boucherie qui sont réformés remplissent un rôle important en répondant aux besoins nutritionnels des consommateurs. À ce jour, la population des États-Unis consomme annuellement approximativement 60 lb (27.2 kg) de bœuf par personne. Près de la moitié de cette quantité est consommé sous forme de bœuf haché et l’une des principales utilisations des bovins réformés est justement la production de bœuf haché. Se fondant sur les budgets d’élevages de bovins allaitants, la contribution sous forme de revenu des vaches réformées se situe à près de 15% du rendement brut. Avec des soins et une alimentation appropriés et une bonne mise en marché, il est possible d’augmenter la valeur marchande des vaches réformées par l’entremise du gain de poids et d’un changement dans la catégorie

de qualité pour rencontrer les hautes exigences de notre système de production et fournir un produit plus acceptable à nos consommateurs.

Introduction

Cattle culled from our beef and dairy herds fill an important role in meeting the nutritional needs of our US population. Currently, the US population consumes approximately 60 lb (27.2 kg) of beef per person per year.¹ Of this consumption, nearly 50% is consumed as ground beef. One of the primary uses of cull cattle is the production of ground beef. Based on cow-calf budgets, the estimate of the income contribution of cull cows to the gross returns are approximately 15%.² This estimate is based on a 1200-lb (545 kg) cow with a market value of \$0.65/lb. With proper care, feeding and good marketing, the opportunity presents itself to increase the market value through weight gain, a change in grading category, and marketing a more acceptable product to consumers. Thus, livestock veterinarians and producers have a stewardship responsibility to properly feed and care for cull animals, enabling producers to capture the value of these animals and help to ensure they meet the high standards of our food production system.

The veterinary profession has been going through dramatic changes in the kinds of services provided to clients. Services offered include consulting on health, reproduction, nutrition, genetic selection and management, and providing services for artificial insemination, embryo transfer, in vitro fertilization, and ultrasound technology for carcass traits and pregnancy diagnosis. Pregnancy diagnosis, utilizing a skilled veterinarian with a technique known previously as “brown arming”, has been offered as a fee-based service for 60-plus years, and now has in part been enhanced by ultrasound technology, which enables earlier pregnancy detection and management of cull animals. A status symbol of veterinary skill and physical ability is commonly discussed in quantifiable terms, that is, how many cows can be pregnancy checked per hour or per day. We have justified this service by selling to clients the amount of money saved in feed costs by removing these less-fertile cows from the herd inventory. Veterinarians became adept at partial budgeting, showing the financial savings of culling cows early and saving on annual feed costs. At

an annual total cow cost of \$606, with 54% of this cost in the form of feed cost, the feed portion amounts to \$325.³ At an open culling rate of 5%, the savings per cow would be \$16.25. The entire savings would only be realized if the entire yearly feed cost of keeping the cow is charged to the open cows. However, usually by the time the event of pregnancy checking has taken place, with a fiscal cow year of pregnancy check to pregnancy check (using October to October), the only real savings is during the winter feed phase. At a cow/hd/day charge of \$1.66/day (total cow cost, \$606/365) and a winter feeding period of 150 days, then it reasonable to assume this part of feed cost is \$249. Assuming a 5% open culling rate, the savings is now \$12.45 per cow. This is insignificant, but in a herd of 200 cows where most of the feed cost is not a cash outlay, it is usually not enough to sell the idea of early pregnancy checking and feeding cull cows. Turn this equation around and instead of promoting feed cost savings, the discussion with clients may focus on spending more money on feed and increasing the sale value of cull cows.

Beef cull cows are one of the only livestock categories for which pounds of live animal increases along with body condition score; also, the market value (price/pound) increases as the weight and body condition of cows increase. Looking at market data on cull cows, the USDA separates condition scores of dressed market cows into commercial (premium white); utility, which includes breakers and boners; and cutters and canners. This designation is a function of the estimation of percent lean. The commercial category includes those 70 to 80% lean, the utility category includes breakers at 75% lean, boners 85% lean, cutters 90% lean, and canners >90% lean. There are great differences in prices between those percent lean categories. There may be as much as \$20

to \$30/cwt difference in live weight value. The value of the gain is often not included in the value proposition. A cull cow in the category of lean with a low dressing percentage weighing 1200 lb (545 kg) using current market prices has a value of \$70.00/cwt. After 90 days on feed, this same cow, with an average daily gain (ADG) of 3.0 lb (1.36 kg), will weigh 1470 lb (668 kg), will fit in the commercial category, and be worth \$95.00/cwt. This extra 270 lb (123 kg) is worth \$2.06 lb (1470 lb X \$95/cwt = 1396.50) – (1200 lb X \$70/cwt = \$840) / 270 lb = \$2.06 value of gain for each pound added. If assuming a ration cost of \$200/ton (which includes yardage), a cow consuming 30 lb (13.6 kg) dry matter, will generate \$1.06/lb income over feed cost. In a herd with a 5% culling rate in the fall at a time of lowest seasonal cow prices, the value of feeding cull cows becomes very apparent. Instead of saving non-cash costs of \$15.00/cow, we now are spending an additional \$3.00/day for feed for 90 days. This extra investment results in a gross cash revenue of \$560/cow for this scenario. This amounts, with a 5% culling rate, to \$28/cow cash income rather than a non-cash saving of \$15/cow.

The key to this enterprise is to feed cows for at least 60 days or longer to allow cull cows in the leaner categories to achieve the premium white grade. To accomplish the change in grade, the ration needs to be formulated to achieve at least 3.0 lb/hd/day ADG.

Endnotes

¹<http://www.beefusa.org>

²<http://www.ag.ndsu.edu/livestockeconomics/Budgets2013>

³<http://www.ag.ndsu.edu/livestockeconomics/Budgets2013>