

# Overview of Cull Cow Beef Quality Issues<sup>1</sup>

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## Introduction

The non-fed beef cattle market (cattle that are not managed through traditional feedlot finishing systems) is comprised primarily of “cull” cows and bulls. “Cull” cattle are those that are sold from a herd for lack of performance, lack of resources, or genetic improvement (Figure 1). Typically, cattle are culled from the herd because they fail to reproduce or raise a calf each year. Additionally, cattle are culled because they are older or because they have some type of injury or defect that prevents them from being productive.



Figure 1. A cow that is thin and did not produce a calf is a candidate to enter the non-fed beef market as a cull cow.

Credits: Matt Hersom, UF/IFAS

In the United States, cull cattle can be a valuable source of income to producers, sometimes comprising up to 16%–20% of an operation’s annual sales. Additionally, cows and bulls that are sold to the non-fed market (cull beef animals and dairy cows) supply approximately one-third of our nation’s beef. About one-half of the products derived from cull animals are used in the form of whole muscle cuts (i.e., fillets and roast beef) or value-added products (i.e., beef jerky and precooked dinners)—not just ground beef as most producers and consumers think. Cattle producers should make marketing decisions that will improve the economic returns, meat quality, and welfare status of their cull cattle.

When cattle producers fail to market cattle in a timely fashion or when they sell cattle that are disabled, emaciated, or exhibiting signs of defects, they do the beef industry and themselves a disservice. Cull cows and bulls that are visibly injured or in poor condition are severely discounted by beef processors. These cattle lack value because they incur added costs, such as special handling and residue testing. Furthermore, these cattle are at a much higher risk for being condemned and create negative public perception.

## Reasons for This Publication Series

Although all defects pose some type of liability and quality concern for the beef industry, not all are food safety issues. A large number of defects are visible defects that will not necessarily impact the safety or wholesomeness of our

1. This document is AN307, one of a series of the Animal Sciences Department, UF/IFAS Extension. Original publication date December 2014. For more articles in the *Cull Cow Beef Quality Issues* series, go to [http://edis.ifas.ufl.edu/topic\\_series\\_cull\\_cow\\_beef\\_quality\\_issues](http://edis.ifas.ufl.edu/topic_series_cull_cow_beef_quality_issues). Visit the EDIS website at <http://edis.ifas.ufl.edu>.
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nation's beef supply. However, defects in cull animals create public perception concerns that can cause consumers to question the welfare practices and reputation of the beef industry. While public perception concerns may not equate to food safety concerns, perception is often reality and these public perceptions must be dealt with seriously. Furthermore, the non-fed market severely discounts or refuses to buy cull cattle with defects, because of the economic and logistical complications these animals pose to the harvesting segment of the industry. As a result, cattle producers that do not follow Beef Quality Assurance guidelines or market their cull cattle in a timely fashion receive far less money for their culls compared to producers that monitor and market their cattle in a responsible fashion. Over the past two decades, the beef industry has been conducting audits to identify defects present in the non-fed beef market. According to recent audits the industry has lost up to \$70 per marketed cow or bull due to product-quality defects.

To address liability and food safety concerns, this series of articles will discuss some of these quality defects, how to prevent them, and how to address them when they appear in cattle. The following topics are discussed:

- Injection Sites and Abscesses (<http://edis.ifas.ufl.edu/an308>)
- Horns, Ocular Squamous Cell Carcinoma, and Lumpy Jaw (<http://edis.ifas.ufl.edu/an309>)
- Bruising, Condemnation, and Foreign Objects (<http://edis.ifas.ufl.edu/an310>)
- Cow Condition and Muscling (<http://edis.ifas.ufl.edu/an311>)
- Hide Defects, Contamination, and Non-Ambulatory Cattle (<http://edis.ifas.ufl.edu/an312>)