Feedlot Quality Assurance
National Animal Health Monitoring System

The beef industry has become increasingly active in efforts to assure quality products. The 1991 National Beef Quality Audit identified an opportunity cost of $282.00 per steer or heifer slaughtered due to quality defects. In a proactive effort to improve quality, quality assurance programs have been launched in all segments of the beef industry across the United States.

The USDA’s National Animal Health Monitoring System (NAHMS) contacted producers with feedlots of less than 1,000 head capacity by telephone and visited producers with larger feedlots from the 13 primary cattle feeding states in the fall of 1994. The cattle inventory in the 13 states was approximately 85 percent of the national inventory as of January 1, 1994, and the 13 states fed in excess of 85 percent of the total cattle fed for slaughter in the United States. Large capacity feedlots comprised 4 percent of feedlots, but accounted for 83.3 percent of total feedlot inventory for the 13 states as of January 1, 1994. During the Cattle on Feed Evaluation (COFE), 913 small-capacity and 498 large-capacity feedlot producers responded to interview questions about operation management and health of their animals.

Concerns about quality and food safety have had impacts on cattle feeders. Because of significant industry efforts, prevalence of injection site blemishes in top sirloin butts of cattle have decreased over time (Figure 1). No doubt, a large percentage of the reduction in prevalence of injection site blemishes has been due to increased awareness through industry-sponsored quality assurance programs and management changes like those shown in Figure 2. Twenty-seven percent of small feedlots and 83.1 percent of larger feedlots reported some change in injection practices (i.e., site, route) in the previous 5 years based on quality assurance or food safety concerns.

---

2 Arizona, California, Colorado, Idaho, Illinois, Iowa, Kansas, Minnesota, Nebraska, Oklahoma, South Dakota, Texas, and Washington.
three-quarters of large feedlots reported a change in, or development of, quality assurance training for feedlot workers. For small feedlots, only 15.7 percent reported similar actions. However, since many small feedlots have only a single worker (the owner), implementation or changes to a quality assurance training program may have been irrelevant.

The hide is the single most valuable by-product of the cattle industry. Hide value can be affected by a variety of conditions such as lice, grubs, flies, environment (mud and manure), and management factors such as branding. In the case of branding, loss of value for the hide is dependent upon the brand location. A $10.00 loss in value is commonly associated with side or rib brands, and a $5.00 loss is common for hides with brands in other locations.

The 1994 National Animal Health Monitoring System's study, the Beef Cow/Calf Health and Productivity Audit, showed that an estimated 12.2 percent of beef operations branded unweaned calves and 37.6 percent of all calves born on beef operations were hide branded prior to weaning.

From the COFE, 11.2 percent of small-capacity producers and 42.9 percent of large-capacity producers reported hide branding some animals placed on feed. The most common location for branding in the feedlot was the upper rear leg or hip. Over one-third of large feedlots brand some cattle in this location (Figure 3). Though many of the larger feedlots branded some cattle placed in those feedlots, overall, only about 20 percent of all cattle placed in feedlots were branded at the

feedlot. Most of the cattle branded in large feedlots were branded on the upper hip (15.4 percent of those placed). Less than 2 percent of cattle placed were branded in each of the other locations.

<table>
<thead>
<tr>
<th>Percent of Feedlot Operations* with 1,000 or More Head That Brand</th>
<th>Percent of Cattle Placed on Those Operations Branded by Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Operations</td>
<td>Percent of Cattle</td>
</tr>
<tr>
<td>Shoulder</td>
<td>Upper Rear</td>
</tr>
<tr>
<td>Shoulder</td>
<td>Side</td>
</tr>
<tr>
<td>9.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>

*For operations that hide brand.

NAHMS collaborators included the National Agricultural Statistics Service (USDA), State and Federal Veterinary Medical Officers, and the National Veterinary Services Laboratories (USDA:APHIS:VS).

Other COFE information is available on the following topics: Branding, Mexican-origin cattle, and environmental management. Study results on beef cow/calf, dairy cattle, and swine are also available. For more information contact:

Centers for Epidemiology and Animal Health
USDA:APHIS:VS, Attn. NAHMS
2150 Centre Ave., Bldg. B, MS 2E7
Fort Collins, CO 80526-8117
(970) 494-7000
NAHMSweb@aphis.usda.gov

N169.1194