Factors Influencing Rate of Gain, Quantity of Feed Consumed and Carcass' Grade

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PRELIMINARY REPORT

The two lots of heifer calves in this test were selected from 75 range bred heifer calves purchased last fall. The 75 heifers were a uniform group, all of which would be classed as good to choice feeder calves. The 10 heifers in Lot 1 of this test were selected as the least desirable, and the 10 heifers in Lot 2 as the most desirable of the 75 head. The sort was made on the evidences of probable gains and carcass grades as indicated by capacity for feed, chest room, bone, heads, muscling and general appearance.

Experimental Procedure:

The individual heifers in each lot were graded by using a standard feeder chart. The heifers in Lot 1 graded average good, and in Lot 2 low choice. Each heifer was also graded on a chart devised to furnish a record of apparent differences in body capacity, chest room, heads, muscling, bone and general appearance. These means were used to provide a record of the characteristics of each heifer as shown at the start of the test.

The heifers in each lot have received the same kinds of feeds consisting of ground corn, cottonseed meal and silage. Ground limestone has been fed at the rate of 1/10 of a pound per head daily. The amount of corn fed was increased gradually during the first 56 days until they were receiving a full feed of grain. Since that time both lots have been self-fed grain. Silage has been fed twice daily in the amount that the heifers would consume.

Observations To Date:

1. Both lots of heifers have consumed practically the same amount of corn.
2. The heifers in Lot 2 have consumed more silage than the heifers in Lot 1.

When these heifers are marketed the dressing percentage and carcass grade of each individual will be determined. When the trial is completed the following information will be provided for each lot.

1. Average rate of gain made by each heifer.
2. Quantity of feed consumed per 100 pounds of gain.
3. Market grades of the individual carcasses.
4. Dressing percentage of each heifer.
<table>
<thead>
<tr>
<th>Lot Number</th>
<th>Number of Heifers</th>
<th>Average Daily Ration:</th>
<th>Average Initial Weight</th>
<th>Average Final Weight</th>
<th>Average Gain</th>
<th>Feed Cost for 100 Lbs. Gain</th>
<th>Appraised Value per Cwt., May 3, 1947</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>8.51</td>
<td>14.15</td>
<td>1.35</td>
<td>454.00</td>
<td>688.00</td>
<td>17.25</td>
</tr>
</tbody>
</table>

**FEED PRICES:**
- Ground shelled corn, $1.40 per bushel.
- Ground sorghum silage, $0.50 per ton.
- Cottonseed meal, $30.00 per ton.
- Ground limestone, $20.00 per ton.