Project 253-4: Wintering and Grazing Yearling Steers

Methods of Wintering Yearling Steers on Bluestem Pasture, 1951-52.

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The object of this test was to compare different protein supplements and methods of feeding them to yearling steers on dry bluestem pasture during the winter. The steers were good to choice quality Hereford yearlings. They were wintered in pastures that were stocked at a normal rate during the previous summer; however, a plentiful supply of dry dead grass was available for each of the lots during the years in which these tests were conducted. From 6 to 10 acres of grass were allowed per steer for the winter. In each year except 1951-52 the steers were purchased in the fall in moderately thin flesh. In 1951-52 the steers were purchased in the spring of 1951 and grazed on...

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8. Daily ration per steer:
   Cottonseed oil meal or pellets .......... 2.01 2.01 2.03
   Salt ................................... .08 .09 .61
   Mineral ................................ .14 .10 .04
   Prairie hay* .......................... 1.28 .38 Free
   Free ................................. Free
   Dry bluestem pasture .................... choice choice choice

9. Feed cost per steer ........................ $19.90 $19.60 $19.89

Phase II—Grazing—April 29 to July 21, 1952—85 days.

10. Initial weight per steer .................. 759 733 717
11. Final weight per steer .................. 929 909 893
12. Gain per steer .......................... 170 176 176
13. Daily gain per steer ..................... 2.00 2.07 2.07

Summary of Phases I and II

14. Initial weight per steer .................. 745 741 746
15. Final weight per steer .................. 929 909 893
16. Gain per steer .......................... 184 168 147
17. Daily gain per steer ..................... 2.00 .73 .64
18. Total feed cost per steer ................. $49.90 $49.60 $49.89
19. Feed cost per 100 lbs. gain .............. $27.11 $29.52 $33.93
20. Appraised value per cwt. ............... $24.00 $24.00 $24.00
21. Loss per steer* ........................ $87.69 $90.79 $96.67

1. Mineral was 2 parts steamed bone meal to 1 part salt.
2. Prairie hay was fed only when snow covered the grass.
3. Feed prices: Cottonseed oil meal or pellets, $100.00 ton; salt, $12.00 ton; mineral, 5.00 cwt.; prairie hay, 15.00 ton; dry bluestem pasture, 75.00 per head per month; bluestem pasture, $30.00 per head for summer season.
4. In computing loss per steer, initial cost was estimated at $35.00 cwt.

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Table 22.—Wintering and Grazing Yearling Steers

Phase I—Wintering—December 7, 1951, to April 29, 1952—144 days.

<table>
<thead>
<tr>
<th>Lot number</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Number of steers per lot</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

3. Management

<table>
<thead>
<tr>
<th>Fed cottonseed oil meal daily</th>
<th>Self-fed cottonseed oil meal and salt of every day</th>
<th>Self-fed cottonseed oil meal and salt mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Initial weight per steer</td>
<td>745 741 746</td>
<td>5. Final weight per steer</td>
</tr>
<tr>
<td>6. Gain or loss per steer</td>
<td>14 -8 -39</td>
<td>7. Daily gain or loss per steer</td>
</tr>
</tbody>
</table>

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bluestem pasture during the summer. In the fall of 1951 when started on this test they carried a moderate amount of flesh. The wintering period of the four-year test extended from mid-December until the latter part of April and averaged 138 days in length. Each lot received a supplement in addition to dry bluestem pasture as follows:

Lots 1 and 4: 2 pounds of soybean pellets per head daily except in 1948-49, Lot 1 received 1 1/2 pounds; in 1951-52 Lot 4 was fed cottonseed cake;

Lots 2 and 5: 4 pounds of soybean pellets per head every other day—average 2 pounds per day—except in 1948-49, Lot 2 received 3 pounds; in 1951-52 Lot 5 was fed cottonseed cake;

Lot 3: 6.8 pounds of alfalfa hay per head daily (ranged from 6.1-7.32 pounds);

Lot 6: Soybean oil meal and salt self-fed; the salt was mixed with the soybean oil meal to limit its consumption and make it possible to self-feed the soybean oil meal. The proportions of soybean oil meal and salt varied from 100 pounds of soybean oil meal and 35 pounds of salt up to 45 pounds of salt per 100 pounds of meal to limit meal consumption to 2 pounds per head daily. In 1951-52 cottonseed oil meal was fed.

The summer grazing period extended from the latter part of April until mid-July and averaged 55 days in length. Following this early-summer grazing period, the steers were relotted and used in summer caking tests until about October 1. This has added about 100-125 pounds to the weight of each steer and is not reported here.

Observations

1. At the close of winter, the steers were in a healthy, strong but thin condition under all methods of wintering tested.

2. Feeding soybean pellets every other day appears to be as satisfactory as feeding every day in these tests as measured by winter and summer gains combined.

3. Neither alfalfa hay nor the self-fed soybean oil meal and salt mixture were quite the equal of soybean pellets fed each day or every other day.


<table>
<thead>
<tr>
<th>Phase I—Wintering (1948-49, 138 days average)</th>
<th>(1949-50, 137 days average)</th>
<th>(1950-51, 135 days average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot number in lot</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Number steers in lot</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Initial weight per steer</td>
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<td>Gain per steer</td>
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<tr>
<td>Gain per steer</td>
<td>0.42</td>
<td>0.42</td>
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</tbody>
</table>

1. Feed prices: Soybean meal or pellets, $3.23 per ton; alfalfa hay, $29.00 per ton; 7.75 per head per month; summer bluestem, $1.38 per head for the season; dry bluestem, $1.00 per ton; mineral, (2 parts steamed bonemeal to 1 part salt), $1.35 per cwt.