In the presence of abundant feed, producers will often retain cattle after they reach marketable condition in order to utilize the surplus pasture. This usually occurs when a better than normal spring is experienced and the cost of buying in more stock is prohibitive.

The main concern with this practice is the effect it may have on carcase composition and thus value. However, Broadbent (1976) showed that retaining cattle for 15 weeks resulted in more fat deposition but no change in lean content and market acceptability.

As part of a larger study into alternative beef production systems an opportunity arose to obtain some local data on the effect of retaining cattle on carcase composition. The study was run at Elliott Research Station in N.W. Tasmania between 1982 and 1984. One system involved the running of two replicates of Hereford Angus cross weaners set stocked on pasture at 1.9 cattle per hectare.

In both the 1982 and 1983 seasons the steers reached marketable condition (carcase weight 180-200 kg, 12/13 rib fat 6-8 mm) in October. One of the two replicates of 12 steers was sold in October while the other replicate was retained until February (16 weeks later).

Carcase data obtained from the steers sold in October was used to estimate the carcase weight and fat cover of the retained steers at that time. This data was then used to estimate the carcase composition of the steers using equations derived by Phillips et al. (1982). Similarly the same equations were used to estimate the carcase composition of the steers in February based on their actual carcase weight and fat cover.

The average of the two seasons results are presented in Table 1.

Table 1 Estimated carcase composition (%) of Hereford Angus cross steers

<table>
<thead>
<tr>
<th></th>
<th>Weight (kg)</th>
<th>Cuts + mince</th>
<th>Trim</th>
<th>Bone</th>
<th>Waste fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>188.0</td>
<td>60.4</td>
<td>12.9</td>
<td>21.9</td>
<td>5.0</td>
</tr>
<tr>
<td>February</td>
<td>240.7</td>
<td>58.9</td>
<td>14.5</td>
<td>21.1</td>
<td>5.8</td>
</tr>
</tbody>
</table>

The small reduction (1.5%) in saleable yield for the retained steers is in itself unlikely to adversely affect carcase value supporting the finding of Broadbent (1976). However, price per kilogram will be significantly affected by supply and demand at the time of sale and also by the market niche as determined by carcase weight and fat. If the price per kilogram in October is no more than 20% above the expected February price this practice would be uneconomic.


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