Baconer carcase competitions

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Baconer carcase competitions

Cover Page Footnote
Grateful appreciation and acknowledgment is extended to Mr. M. Cullity, Superintendent of Dairying, who has cojudged this competition on 11 occasions, and to the other judges, to Mr. B. Murphy, W.A. representative of the Australian Meat Board for his valuable assistance in compiling the records, to Watsons Foods Pty.Ltd., W.A. Meat Exporters and their staff for the use of their floors and assistance during judging and displaying of the carcases and those officers of the Dairying Division who assisted with measurements of the carcases.
TO further the implementation of its policy to foster the production of high quality bacon, the Australian Meat Board in 1960 again conducted for pig growers in Western Australia, its annual Baconer Carcase Competition.

In previous years, the competition was judged on a basis of 6 zones but for the Competition in 1960, for the first time it was judged on a State wide basis.

The response from pig raisers in submitting entries in 1960 was very good as there were 102 entries judged; this constituted a record. The previous record number of entries was in 1958 when 86 carcases were judged.

Judging, was carried out, as in previous years, under the Smithfield System of
Carcase Appraisal at Watsons Food Pty. Ltd., Spearwood.

To qualify for entry, the pig had to be sired by a pure-bred boar (sows could be cross-bred) with a dressed carcase weight between 120 lb. and 160 lb. The treatment of the entries was carried out at the works of Watsons Food Pty. Ltd., Spearwood, and Thomas Borthwicks & Sons (Australasia) Ltd., Albany, between 1st June and 2nd September. Each competitor was allowed to make two entries—one carcase in each entry. A total of £150 in prize money was provided by the Australian Meat Board and Certificates of Merit were awarded to entries scoring 60 points and over.

THE SCALE OF POINTS

Judging of the Competition was carried out under a modification of the Smithfield System (breeders points only) as devised by Messrs. H. R. Davidson, John Hammond, Jos B. Swain and Nevil L. Wright.

The points for the Competition were as follows:

(a) By Inspection—
- Hams—well filled and fine boned 8
- Shoulders—light 7
- Streak—thick, full of lean meat 12

(b) By Measurement—
- "Eye muscle" of Loin—thick 28
- Back fat thickness—correct proportion 20
- Body length—in proportion to weight 20
- Leg Length—short 5

Total 100

(a) By Inspection: For these photographic scales are used.

Hams (8 marks)—The bone should be fine and the ham well filled out with lean meat, the space between the legs being U-rather than V-shaped. The hams to be judged are compared with the photographic scale of hams (Fig. No. 1) which shows the shape for maximum (8), minimum (1) and intermediate (4) marks, to be awarded.

Shoulders (7 marks)—These should be light in proportion to the rest of the carcass for it is a low-priced part. (In judging the shoulders are matched against a photographic scale of the shoulders (Fig. No. 2) which shows the shape for maximum (7), minimum (1) and intermediate (4) marks, to be awarded.)
Streak (12 marks)—Not only should the belly be thick, but it should contain a high proportion of lean meat. Comparison with the photographic scale (Fig. 3) is made. The maximum marks (12) are given for a streak which is both thick and full of lean meat. The minimum marks (1) are given either for one which is thin, or for one which is thick but which contains a high proportion of fat. Illustrations of intermediate marks (6) in each case are also shown.

(b) **By Measurement:** Measurement in millimeters rather than in inches has been adopted for the sake of greater accuracy and the avoidance of fractions. From tables the marks corresponding to any particular measurement can be read off. In the case of thickness of eye muscle and length of body, the highest marks are given for the maximum measurement, and in the case of the length of leg for the minimum measurement. For thickness of fat, on the other hand, as for suitability of carcase weight, the highest marks are awarded for an optimum measurement.

"Eye Muscle" of Loin (28 marks)—The thickness is measured half way along its width. This gives the best measure of the thickness of lean meat throughout the carcase. Different carcases vary much more in the thickness than in the width of the muscle, so the thickness has been selected as the index of meat.
Back Fat Thickness (20 marks)—This is measured one and a half inches for baconers from the middle line, with one point of the callipers at the edge of the “eye muscle” and the other just on the inner layer of the skin. This gives a better measure of the amount of fat in the carcass than does the measurement of the fat at the shoulder, for it is the last part of the back fat to develop. Fat differs from all other points for marking, inasmuch as for each weight group of carcass there is an optimum requirement of back fat; there can be too little as well as too much. Consequently the scale for converting measurements to marks unlike the others, is extended on both sides of the optimum.

The list of prize winners of the 1960 Competition is as follows:

<table>
<thead>
<tr>
<th>Place</th>
<th>Points</th>
<th>Entrants</th>
<th>Breed</th>
<th>Place</th>
<th>Points</th>
<th>Entrants</th>
<th>Breed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>92</td>
<td>A. K. Stirling &amp; Co., Kendenup</td>
<td>Berkshire x Large White</td>
<td>2nd</td>
<td>86</td>
<td>L. R. Poad, Dardanup</td>
<td>Berkshire x Large Black</td>
</tr>
<tr>
<td>3rd</td>
<td>83</td>
<td>Mrs. E. M. Monk, Pindelly</td>
<td>Berkshire x Large White</td>
<td>4th</td>
<td>82</td>
<td>J. Thompson, Jnr., Bramley</td>
<td>Berkshire x Large White</td>
</tr>
<tr>
<td>6th</td>
<td>81</td>
<td>W. G. Burgess, Burgess Siding</td>
<td>Berkshire x Large White</td>
<td>6th</td>
<td>80</td>
<td>R. D. Baskford, Northcliffe</td>
<td>Tamworth x Berkshire</td>
</tr>
<tr>
<td>5th</td>
<td>80</td>
<td>A. F. Paterson, Ambergate</td>
<td>Berkshire x Large White</td>
<td>7th</td>
<td>79</td>
<td>Earl Bros., Cowaramup</td>
<td>Berkshire x Large White</td>
</tr>
<tr>
<td>3rd</td>
<td>78</td>
<td>Mrs. V. J. Clews, Cowaramup</td>
<td>Berkshire x Large White</td>
<td>5th</td>
<td>78</td>
<td>R. L. Poad, Dardanup</td>
<td>Berkshire x Large Black</td>
</tr>
<tr>
<td>9th</td>
<td>75</td>
<td>L. J. Newing, Tambellup</td>
<td>Berkshire x Large White</td>
<td>9th</td>
<td>75</td>
<td>J. L. and D. Eastford, Northcliffe</td>
<td>Tamworth x Berkshire</td>
</tr>
<tr>
<td>5th</td>
<td>75</td>
<td>C. L. Balithorpe, Pinjarra</td>
<td>Large White x Berkshire</td>
<td>9th</td>
<td>75</td>
<td>A. F. Paterson, Ambergate</td>
<td>Large White</td>
</tr>
</tbody>
</table>

The minimum points for any one point is 90 and the maximum 100. The points for entries of Berkshire Sires are 80 as a base.

The highest scores for different measurements are:

- Highest back fat score: 76
- Lowest back fat score: 66
- Highest eye muscle: 79
- Lowest eye muscle: 71
- Highest chilled wt.: 87
- Lowest chilled wt.: 71

**Chart No. 1**

**W.A. BACONER CARCASE COMPETITION, 1960—AVERAGE SCORE ACCORDING TO BREEDS**

<table>
<thead>
<tr>
<th>Breed</th>
<th>No. of Entries</th>
<th>Highest Score</th>
<th>Lowest Score</th>
<th>Av. Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire x Large Black x Berkshire</td>
<td>3</td>
<td>86</td>
<td>69</td>
<td>77-66</td>
</tr>
<tr>
<td>Berkshire x Large White</td>
<td>8</td>
<td>83</td>
<td>70</td>
<td>76-25</td>
</tr>
<tr>
<td>Berkshire x Berkshire x Large White</td>
<td>2</td>
<td>75</td>
<td>63</td>
<td>77-50</td>
</tr>
<tr>
<td>Berkshire x Tamworth x Berkshire</td>
<td>2</td>
<td>76</td>
<td>63</td>
<td>69-50</td>
</tr>
<tr>
<td>Berkshire x Large White x Berkshire</td>
<td>5</td>
<td>77</td>
<td>60</td>
<td>68-80</td>
</tr>
<tr>
<td>Berkshire</td>
<td>22</td>
<td>92</td>
<td>52</td>
<td>65-51</td>
</tr>
<tr>
<td>Average Berkshire Sire</td>
<td>42</td>
<td>92</td>
<td>52</td>
<td>71-33</td>
</tr>
<tr>
<td>Large White x Berkshire x Large White</td>
<td>15</td>
<td>82</td>
<td>60</td>
<td>71-29</td>
</tr>
<tr>
<td>Large White x Berkshire</td>
<td>9</td>
<td>76</td>
<td>61</td>
<td>69-66</td>
</tr>
<tr>
<td>Large White x Berkshire x Large White</td>
<td>20</td>
<td>79</td>
<td>45</td>
<td>67-90</td>
</tr>
<tr>
<td>Average Large White Sire</td>
<td>51</td>
<td>82</td>
<td>45</td>
<td>69-64</td>
</tr>
<tr>
<td>Landrace x Berkshire x Large White</td>
<td>3</td>
<td>78</td>
<td>62</td>
<td>73-66</td>
</tr>
<tr>
<td>Landrace x Berkshire</td>
<td>5</td>
<td>70</td>
<td>42</td>
<td>68-80</td>
</tr>
<tr>
<td>Average Landrace Sire</td>
<td>8</td>
<td>78</td>
<td>42</td>
<td>66-87</td>
</tr>
<tr>
<td>Tamworth x Berkshire</td>
<td>2</td>
<td>80</td>
<td>78</td>
<td>79-00</td>
</tr>
<tr>
<td>Average Tamworth Sire</td>
<td>2</td>
<td>80</td>
<td>78</td>
<td>79-00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>102</td>
<td>92</td>
<td>42</td>
<td>70-96</td>
</tr>
</tbody>
</table>

**Chart No. 2**

**W.A. BACONER CARCASE COMPETITION, 1960—PERFORMANCE OF BREEDS AND CROSS BREEDS**

<table>
<thead>
<tr>
<th>Breed</th>
<th>Inspection</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire</td>
<td>22</td>
<td>13.87</td>
</tr>
<tr>
<td>Berkshire x Large White</td>
<td>8</td>
<td>14.15</td>
</tr>
<tr>
<td>Berkshire x Large White x Berkshire</td>
<td>5</td>
<td>14.55</td>
</tr>
<tr>
<td>Berkshire x Large Black x Berkshire</td>
<td>3</td>
<td>15.55</td>
</tr>
<tr>
<td>Berkshire x Large White x Berkshire x Berkshire</td>
<td>5</td>
<td>16.55</td>
</tr>
<tr>
<td>Berkshire x Tamworth x Berkshire</td>
<td>2</td>
<td>16.55</td>
</tr>
<tr>
<td>Average Berkshire Sire</td>
<td>42</td>
<td>13.84</td>
</tr>
<tr>
<td>Large White</td>
<td>20</td>
<td>13.84</td>
</tr>
<tr>
<td>Large White x Berkshire</td>
<td>15</td>
<td>14.27</td>
</tr>
<tr>
<td>Large White x Berkshire x Berkshire</td>
<td>15</td>
<td>14.27</td>
</tr>
<tr>
<td>Large White x Large White x Berkshire</td>
<td>5</td>
<td>14.27</td>
</tr>
<tr>
<td>Average large White Sire</td>
<td>51</td>
<td>14.07</td>
</tr>
<tr>
<td>Landrace x Large White</td>
<td>3</td>
<td>14.07</td>
</tr>
<tr>
<td>Landrace x Berkshire</td>
<td>5</td>
<td>14.07</td>
</tr>
<tr>
<td>Average Landrace Sire</td>
<td>8</td>
<td>14.27</td>
</tr>
<tr>
<td>Tamworth x Berkshire</td>
<td>2</td>
<td>13.04</td>
</tr>
<tr>
<td>Average Tamworth Sire</td>
<td>2</td>
<td>13.04</td>
</tr>
</tbody>
</table>
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Body Length (20 marks)—This is measured with a tape measure from the edge of the symphysis pubis bone to the junction of the sternum with the first rib. It gives a measure of the length of the valuable loin joint which can be cut off the carcase. A high proportion of this to the weight of the carcase as a whole increases the value of the carcase for cutting purposes.

Leg Length (5 marks)—This is measured with a tape measure in a straight line from the edge of the symphysis pubis bone to the tip of the toes. When taken in relation to the weight of the carcase it gives a measure of the amount of bone in the carcase.

The judging this year was carried out by Mr. H. Watson of Watsons Foods Pty. Ltd., Mr. R. Anderson, Veterinary Surgeon, Department of Commerce, H. G. Elliott, Dairy Division, Department of Agriculture. Their comments were as follows:

(1) That the general quality of the carcases was good but they were unanimous that they did not come up to the standard of the entries submitted by competitors last year.

(2) That it was very pleasing to see the almost complete absence of overfat carcases and that there has been a trend in this direction over the last few years.

(3) That generally the hams were good, but not up to the standard of the previous year.
(4) That the general appearance and presentation of the carcases was very good.

(5) That there was a tendency as has been the case over the last few years for the shoulder to be on the heavier side.

(6) That the streak in most carcases was good, but a number of entries were penalised for poor finish, having good lean meat with an insufficient layer of fat.

(7) That the eye muscle was good but in many cases was associated with a poor streak.

(8) That the average length of carcases was a little shorter than in the previous two years but was still very good.

(9) That the back fat showed a pleasing improvement and gained higher points than any previous year.

(10) That with regard to leg length, less points were scored than in previous years as the shanks are tending to become longer.

The average age of the pigs entered was 6.1 months with an average dressed weight of 139 lb. which represented an average dressed weight gain per month of 22.4 lb.

Over the years since the commencement of the Baconer Carcase Competitions, certain trends have been observed (see Chart No. 2).

**COMMENTS ON TRENDS SINCE 1948**

1. There has been a pleasing tendency for an increase in body length, consequently there has been a gradual improvement in the overall scores in this section (see Graph No. 1). This tendency for greater body length appears to be a culmination of the policy of many breeders over a number of years.

During the period of the Competition pigs sired by a Large White boar have consistently done well in this section. To date pigs sired by a Landrace boar, only in the Competition for the last 2 years, have not been prominent in this respect, although claims are often made that the Landrace has outstanding body length.

2. The average overall leg length has gradually increased, resulting in a general decline in the average points for this section (see Graph No. 2). As this is an undesirable feature it is suggested that...
more attention could be paid to improvements in this regard, by selection of breeding stock with shorter legs. Over the years the pigs sired by a Large White boar have had the longest legs, but since 1955 there has also been a similar deterioration in pigs sired by a Tamworth.

3. The overall score for the eye muscle has varied considerably from year to year, with very little general improvement. The carcases which had a Berkshire sire have proved to be the most satisfactory in this section.

4. The increase in the average marks awarded for back fat are significant (see Graph No. 1), because it indicates that the majority of competitors are conscious of the necessity for an improved standard of feeding. Generally pigs sired by a Large White boar have showed a slightly lesser tendency to overfatness.

It is pleasing that pigs have been forwarded for slaughter in more satisfactory condition than was the case some years ago because it shows a response to a campaign promoted by the Bacon Curers, Stock Firms and the Department of Agriculture.

5. The shoulders of pigs sired by a Berkshire have been consistently heavier than with any other breeds. Fortunately this is already a well known fact amongst the Berkshire breeders many of whom are selecting their breeding stock from animals which are more desirable in this respect.

6. Carcases sired by either Berkshires or Large Whites have generally had good hams, but since their entry into the Competition in the last 2 years carcases with Landrace sires have been the most outstanding in this section.
7. It is apparent from the figures supplied by competitors that the average age at which the desirable weight has been achieved by the baconers is lower. This corresponds with other evidence which indicates better selection, improved feeding and husbandry. It has been observed that crossbred animals have reached maturity quicker and more economically than pure bred animals.

8. Crossbred Pigs—Since the commencement of the Baconer Carcase Competitions it has been shown that generally crossbred pigs have scored better than the pure bred ones. It is emphasised however, that the sires of carcases entered must be pure-bred, although this need not be so for the dam.

The meat and bone building nutrients in the ration—that is a ration containing a high percentage (18 per cent.) of protein. It has been frequently found that the addition of creepfeed to the piglets diet at an early age (3 weeks or earlier) is most advantageous as a supplement to the sow's milk and results in better weaning piglets.

At all stages it is essential for the protein to be of the right quality. Protein of vegetable origin, such as that obtained from cereal grains and pastures is insufficient and must be supplemented with protein of an animal source, such as skim-milk, meatmeal or whalemeal.

As the pig approaches maturity less emphasis is placed on the skeletal and muscle growth and the protein portion of the diet can be reduced gradually down to 14 per cent. at the baconer stage.

Carcasses from pigs which have been inadequately and incorrectly fed usually score poor points on the appraisal of body length, back fat, shoulders and eye muscle.

There is considerable evidence which shows that the Baconer Carcase Competitions serve a valuable purpose in directing the attention of growers to carcase quality and indicating to their improvements which should be affected. A valuable feature of the competitions are the supply to each competitor of detailed results, and the opportunity of observing the carcases on display during the day of the presentation of the prizes.

Results on an average, have shown that the carcases from a Berkshire sire have been the most satisfactory, and that generally the Berkshire x Large Whites have been amongst the top performances. These findings indicate the wisdom of the Dairying Division of the Department in recommending either the Berkshires, Large Whites, Tamworths or their crosses, for bacon production.

9. Feeding—The ideal baconer has a high lean meat-to-fat ratio, with light shoulders, full hams, strong loins and a lengthy body. It is a well known fact that feeding has an important influence on the growth rate and the quality of the carcase.

During the early growing period it is essential to provide adequate quantities of
ACKNOWLEDGMENTS

Grateful appreciation and acknowledgment is extended to Mr. M. Cullity, Superintendent of Dairying, who has co-judged this competition on 11 occasions, and to the other judges, to Mr. B. Murphy, W.A. representative of the Australian Meat Board for his valuable assistance in compiling the records, to Watsons Foods Pty. Ltd., W.A. Meat Exporters and their staff for the use of their floors and assistance during judging and displaying of the carcases and those officers of the Dairying Division who assisted with measurements of the carcases.

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