1-1-1966

Baby beef production in W.A

D J. Barker

Follow this and additional works at: https://researchlibrary.agric.wa.gov.au/journal_agriculture4

Part of the Agricultural Economics Commons, Beef Science Commons, and the Nutritional Epidemiology Commons

Recommended Citation
Available at: https://researchlibrary.agric.wa.gov.au/journal_agriculture4/vol7/iss11/3

This article is brought to you for free and open access by Research Library. It has been accepted for inclusion in Journal of the Department of Agriculture, Western Australia, Series 4 by an authorized administrator of Research Library. For more information, please contact jennifer.heathcote@agric.wa.gov.au, sandra.papenfus@agric.wa.gov.au.
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
BABY BEEF PRODUCTION IN W.A.

By D. J. BARKER, (B.V.Sc., M.R.C.V.S.), Beef Research Officer

BABY beef should be marketed at about 500-600 lb. liveweight at less than 12 months old, and should be in prime condition to be sought after by the trade.

This means that the animal should have grown rapidly and without check, this being just as important as the "type," whether of pure beef breed or beef-dairy cross. A properly grown animal reaching 500-600 lb. in 8-9 months kills out at 60 per cent, or more, and gives a well-finished carcass, not over-fat, which commands a ready sale on the local market.

Market Prices

However, when we examine the fluctuations of market prices for baby beef (see figure), we find that in December we are selling our produce on a falling market. For instance in 1965 from $27 to $30.50 per 100 lb. deadweight in August the price declined steadily until the middle of November ($26 to $29 per 100 lb.). Then the decline accelerated by the end of December to $23 to $26 per 100 lb. and, after steadying in January, continued to fall to the lowest point for the year of $22.50 to $26 per 100 lb. in early February. (These are Midland saleyard prices).

At levels ruling in December good prices can nevertheless be obtained for good quality baby beef which has been produced at low cost. Thus a 600 lb. light weight steer calf, killing out at 360 lb. dead weight at $25.00 per 100 lb. in December shows a return of $90.00 less freight and commission. The same calf, if grown fast enough to finish in mid-November, would, at $27.50 per 100 lb. have shown a return of $99.00.

Seasonal Influences

The seasonal nature of pasture growth in this State has an important bearing upon cost and efficiency of production at different times of the year. This is now well-recognised. In general the pattern is one of increasing production from July to November, a slight fall to the end of December, and thereafter a more rapid fall to March-April. From then on, pastures remain poor in feeding quality until July, after the break of the season. The timing of this pattern varies, of course, from district to district, but the basic sequence of events is the same for all the districts of the South-Western Division. We should therefore attempt to co-ordinate our production, so that the periods when stock are making their greatest demands for feed occur at the times when the pasture is best able to supply it. This policy also results in better control of pastures in their most prolific growth stages (spring and early summer), improving utilisation and lessening deterioration. Marketing in December fits this pattern of production most closely, the calves being on a rising plane of nutrition throughout their growing lives.
TREND OF PASTURE AVAILABILITY IN S.W. DIVISION

PASTURE QUALITY

PASTURE QUANTITY

WET SAPPY GROWTH

GOOD SPRING AND EARLY SUMMER GROWTH

DRY RESIDUES

GROWTH RATE
LB. PER DAY

+2

+1

BIRTH

WEANED

1965
MAY
JUNE
JULY
AUG
SEP
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
1966

DIAGRAMMATIC ILLUSTRATION OF THE WAY IN WHICH CATTLE GROWTH RATE Follows THE AVAILABILITY AND QUALITY OF PASTURE

Top: The trend of pasture growth in the South-West Division of Western Australia, and its value as fodder for cattle
Bottom: Growth rate trend of crossbred male calf in the agricultural areas during 1965/66

498
Farmers are confidentially advised to contact directly

Gerald's Electric
177A Murray St., next to Aherns—in lane upstairs. Tel. 23 4589

Some examples of the 20,000 items we stock:

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eski portable ice boxes</td>
<td>£2.19</td>
</tr>
<tr>
<td>Frypans, 11 in., latest model pull out plug</td>
<td>£8.18</td>
</tr>
<tr>
<td>Vitamisers, best brand</td>
<td>£16.10</td>
</tr>
<tr>
<td>Juice extractors, with auto pulp ejector</td>
<td>£15.18</td>
</tr>
<tr>
<td>Kettle</td>
<td>£4.00</td>
</tr>
<tr>
<td>Shavers, top brand</td>
<td>£5.19</td>
</tr>
<tr>
<td>Electric drill, best quality hairdryers in carrying case, hood, comb</td>
<td>£7.19</td>
</tr>
<tr>
<td>Fans, 12 in. gyro, 5 year guarantee</td>
<td>£6.50</td>
</tr>
<tr>
<td>Ladies' shavers</td>
<td>£5.19</td>
</tr>
<tr>
<td>Toasters, fully auto, pop up</td>
<td>£7.19</td>
</tr>
<tr>
<td>Fridge, 12 cu. ft.</td>
<td>£26.50</td>
</tr>
<tr>
<td>Record players, 4-speed</td>
<td>£13.10</td>
</tr>
<tr>
<td>Stereograms, wonderful tone</td>
<td>£25.19</td>
</tr>
<tr>
<td>Transistor radio, with earphone</td>
<td>£6.19</td>
</tr>
<tr>
<td>Radios, 8 transistor, powerful</td>
<td>£14.19</td>
</tr>
<tr>
<td>Radios, 10 transistor, 4 band, world rec.</td>
<td>£37.00</td>
</tr>
<tr>
<td>Car radios, fixed, best Aust. make</td>
<td>£26.00</td>
</tr>
<tr>
<td>Refrigerator, 12 cu. ft. auto</td>
<td>£112.00</td>
</tr>
<tr>
<td>Refrigerators, 15 cu. ft. 2 door, 2 temp.</td>
<td>£158.10</td>
</tr>
<tr>
<td>Washers, wringer type</td>
<td>£59.10</td>
</tr>
<tr>
<td>Washers, twin tub, heater, pump and filter</td>
<td>£69.00</td>
</tr>
<tr>
<td>Sewing machine, fully auto.</td>
<td>£37.00</td>
</tr>
<tr>
<td>Sewing machine, str. sewer</td>
<td>£26.00</td>
</tr>
<tr>
<td>Electric stove, full size</td>
<td>£42.00</td>
</tr>
<tr>
<td>Electric hotplate and oven unit, 5 hr. timer</td>
<td>£77.00</td>
</tr>
<tr>
<td>T.V., 25 in., best brand, bonded tube</td>
<td>£101.00</td>
</tr>
<tr>
<td>T.V., 23 in., top make</td>
<td>£85.00</td>
</tr>
</tbody>
</table>

Country coupon: I would like more information about

Name ______________________ Address ______________________

Gerald's Electric 177A Murray St., Perth Tel. 23 4589

Please mention the "Journal of Agriculture of W.A." when writing to advertisers.
POTASH FOR PASTURES

PASTURES need CLOVERS and clovers need POTASH. On potash deficient soils, clovers lack vigour and do not respond to super phosphate, and are choked-out by weeds and grasses. For best results, clovers need both POTASH and SUPER.

TRY POTASH YOURSELF
Test your pastures with a simple POTASH strip trial. Run a strip of muriate of potash at 1-2 cwt/acre when top-dressing with super.

POTASH PAYS WITH PASTURES
Large areas of Australian pastures are regularly top-dressed with super, and potash. For better quality pastures, more vigorous clover growth, fewer weeds and more production, add potash to your regular super top-dressing.

For further advice consult your local Department of Agriculture Officer.
POTASH (AUSTRALASIA) PTY. LTD., BOX 3843, G.P.O., SYDNEY.
Although the market price looks more attractive in the July to August period, the difficulty of producing a high quality product at that time of year is a real factor to be taken into account when contemplating such a project.

**Growth Rate**

Overall growth rates currently being obtained range, during the March to December period, from 0.95 to 2.17 lb. per day for heifers, and from 0.91 to 2.4 lb. per day for steer calves. These figures are herd averages, not growth rates of individual calves. None of the herds received supplementary feeding except for hay in the early winter months. Since growth rate is reflected in carcass quality, it is easily seen that while some herds can readily produce good quality baby beef, others will find it impossible under existing conditions of husbandry.

After December, all growth rates fall off rapidly and the quality of the calves falls accordingly.

**Locality**

Herd average growth rates of steer calves of more than 2 lb. per day over the March-December period have been recorded in shires as widely dispersed as Albany, Serpentine and Wongan-Ballidu in 1965. Since this can be considered to be the approximate minimum level required to produce prime quality baby beef, it is reasonable to suggest that these and some intervening areas may well be potentially suitable for baby beef production. 1965 was a very good season and whether all these areas will always be able to show such good results remains to be seen.

Conditions will vary, not only from district to district but also from property to property and from paddock to paddock. As our knowledge of soil and pasture management and husbandry practices increases, so will we be in a position to iron out many of the differences existing at present, and to realise the full potential of land in areas at present producing well below their ultimate capacity.

**Calving Dates**

If our object is to produce animals of 550-600 lb. live weight in mid-November, after having grown at about 2 lb. per day, it follows that they must be born some 250 days previously (allowing for 70 lb. weight at birth), that is, in early March.

At this time of year, the paddock feed will not support high milk production levels. However, by judicious use of silage, hay or other supplements, depending upon the nature of the paddock feed, an adequate yield is readily maintained to supply the requirements of the young calf.

Once the season breaks, the calves are old enough to begin to make use of pasture feed, which is at first best supplemented with hay, owing to the low dry matter content of pasture at this stage. As the winter progresses into spring, pasture improves in quality and quantity along with the calves' demands. By the time feed begins to deteriorate in summer, the steers have been marketed and the heifer calves, if required as future breeders, will be well enough developed to cope with the dry feed available over the summer months. If they are to be large enough to mate at 15 months old (up to 700 lb. live weight varying with breed and type) they must show an average live weight increase of 1 lb. per day from December to June, and this cannot be achieved if they have not had a good start and are not well adjusted to paddock feed before the summer really gets under way. Late-born herd replacements only make late-calvers themselves, and extend the calving spread of the whole herd.

We cannot afford to ignore the effect of this production pattern upon the condition of the cows themselves, but again we find that we are matching seasonal pasture growth to the demands of production. In the early stages of lactation, if March calving occurs, much of the dam's yield comes "off her back," and some quite high weight losses are recorded. However, if the heifers are in good condition when they calve down, this does not harm them at all, and in all herds recorded this loss of weight had been more than regained by December. What we have done, in effect, is to make use of the cows' ability to conserve their own feed in the form of body reserves which can be drawn upon when required.

If the calf is weaned or sold in November or December, there is still paddock feed available of sufficient quality and quantity to maintain the dam's condition.
Depending upon local pastures, some supplementary feeding may be necessary in the last month or two of pregnancy. Any attempt to replace condition in the later stages of pregnancy by heavy grain feeding is more likely to result in oversize calves and difficult births. The way to avoid the necessity for this is to make sure that the cows calve early enough to have time to regain condition up to December and are thereafter kept on good maintenance rations. Certainly, if the cow loses much weight in late pregnancy, she will have mortgaged her reserves for the early lactation stages, and the next year’s calf will suffer.

Calving Spread

At this point it is relevant to mention the length of time over which calving should spread, and for a number of reasons this should be kept as short as possible—preferably not more than two months.

Firstly, later born calves will have difficulty in reaching baby beef weight by the time the feed cuts out. Even if they reach suitable weights by January or February their growth rates (and therefore carcass quality and killing out percentage) will have fallen during the last month or two. This, coupled with the fact that market prices are falling at that time of year, means that total returns for the late-born are lower than for the early-born calf.

Secondly, if late calvers continue to suckle into January or February, there is insufficient feed available in the paddock to replace body reserves depleted earlier. This depletion occurs in early lactation with good cows even when feed is relatively plentiful, as they are unable to eat enough to satisfy their own and their rapidly-growing calves’ demands.

Thirdly, management problems and labour requirements increase greatly with lengthening calving spread. More time has to be spent supervising calving if losses are to be avoided, the number of musterings required for drafting for sale and weaning is increased, the herd may have to be subdivided when the earlier-born calves are weaned, and hand feeding of later-born calves throughout the summer may be necessary to maintain body-weight, and perhaps even life.

Fourthly, if any form of selection or culling on performance is to be carried out, the herd must calve within a limited period or no true basis of comparison between individuals will be obtained. Differences in growth rates attributed to genetic potential and dam’s milking qualities may be due to some completely different factor such as seasonal or pasture conditions.

All in all, a prolonged calving spread means that no co-ordinated plan of production can be put into effect, efficiency of usage of resources is reduced and profits decrease accordingly.

An objection frequently raised to short calving periods is that the bull may not be able to get all the herd in-calf in so short a period. But if a bull is fit and fertile and has no more than 30-35 cows to serve, this should be no problem, and is in practice frequently achieved. Fewer cows should be allowed to each bull under 3 years or over 7 years old, or whose virility is doubtful due to lameness, condition, or health. The extra investment in bulls is more than justified by the extra profits made.

To reduce an extended calving spread, or to bring a late calving herd forward, the bull should be put in to the herd when calving is well under way and taken out again a month earlier each year, until the desired objective is attained. This will result in some cows gaining a little time each year and others not getting in-calf some years. These latter cows should be culled if suitable early-calving replacements are available, or they may be held over to miss one year and calve in line with the rest of the herd in subsequent years if they are exceptionally good performers. The long-term importance of the system justifies the use of fairly drastic measures to achieve it.

Purchased replacement stock should be unmated heifers and bulls, because thereby the likelihood of introduction of infectious diseases such as vibriosis is greatly reduced. Diseases affecting fertility or calving percentage can cause large economic losses and are well worth taking pains to avoid. The above measures, coupled with inoculation against Brucella abortus (contagious abortion), will greatly help protect against three of the major scourges that can affect cattle in this way.
Type of Stock

Under this heading it is not enough to consider breed differences alone, because there is such wide variation between the individuals within a breed. Whatever breed of cattle is used, certain capabilities are essential for good performance.

The type of cow best suited to baby beef rearing is the big-framed animal that can carry plenty of reserves, transmit good growth potential to her offspring, of deep belly to utilise coarse fodder efficiently, and with plenty of width across loins and hind-quarters, where the best beef cuts are found. However good the conformation of the cow, though, she will not be an economical proposition if she cannot produce enough milk to enable her calf to fulfil his genetic promise. We do not expect, or want, a large pendulous udder on a beef type cow, but a good udder should run well up between the backs of the hind legs and forward under the belly. A baby beef animal should go straight from his mother to sale at about 8-9 months old, and thus the milking ability of the dam is of vital importance to the producer.

A bull that has grown rapidly himself, on paddock feed, passes on a good deal of this ability to his offspring, as growth rate is a highly heritable factor. His own mother's milking ability will also be reflected, but to a lesser extent, in his heifer calves. It can readily be seen then that choice of bull is a highly important factor in herd improvement and commercial operation.

First and second calvers will not produce as well as they do for their third and fourth calves, and after 10 years old they may well begin to tail off. Cows frequently do well for some years after this, though.

The above recommendations are not intended to be the last word on baby beef production methods in the State, but are intended as a sound and practicable guide, of ready application by most farmers in appropriate districts. Other systems are used but do not usually make the best use of available resources and frequently show lower profit margins. Again, some especially favoured properties may have useful acreages of summer moist land or other special features enabling other systems to be used successfully.
Set up your ‘Kilval’ barrier... and keep aphids on the outer.

You need ‘Kilval’ for positive control of aphids—the M&B product used with great success by market gardeners and apple growers.

For four years ‘Kilval’ has been the established control for woolly aphid in apple. Now progressive market gardeners rely on ‘Kilval’ for protection from aphids in cauliflowers, cabbages, brussel sprouts and potatoes.

Spray ‘Kilval’ when aphids first appear on your crop.

‘Kilval’ has many advantages. Since it is only moderately toxic, hazards to the operator are greatly reduced. ‘Kilval’ has no unpleasant odour. And ‘Kilval’ is made by M&B—the name primary producers respect.

Act now. Turn to ‘Kilval’ for positive protection against aphids.

‘KILVAL’

TRADE MARK BRAND

For additional information contact the distributors:
May and Baker (Australia) Pty. Ltd. (Inc. N.S.W.)
P.O. Box 41, Footscray, W.11, Victoria.

Please send me detailed information on ‘KILVAL’ for
[ ] Vegetables  [ ] Apples & Pears  [ ] Ornamentals.
NAME
ADDRESS

[ ] Tick if for school project.

Please mention the "Journal of Agriculture of W.A." when writing to advertisers