



## INTRODUCTION

The Australian systems for marketing cattle, sheep, pigs and their derived meats have been under scrutiny by industry organisations and governments since the early 1970's. There is a widespread consensus that saleyards (central auctions) are used excessively for slaughter cattle and sheep resulting in inefficient pricing and high costs of transport, stress and handling. The pig industry has almost eliminated the need for the saleyard system. A major use of a national description language is as a basis of direct to abattoir, "over-the-hooks" pricing.

An efficient price is one which reflects the forces of supply and demand at a particular point in time and the quality preferences of the buyer. Prices for livestock and meat must reflect buyers changing preferences in order to stimulate rapid changes in production practices on the farm. Although Australian livestock producers are highly competitive internationally, the speed with which new customer requirements are met offers major opportunities for improvement. All livestock industries are competing to provide the customer with tender, tasty product with relatively high muscle to fat ratios. Cattle and sheep producers claim that the current payment system provides no economic incentive to produce greater quality and as a consequence no incentive to adopt much of the new breeding and feeding technology available from research. The Australian Meat and Live-stock Corporation (AMLC) has established changes to the marketing system as its major objective over the next five years.

This paper discusses the evolution of a series of initiatives and strategies that are now being put in place in the Australian industry. The paper focuses particularly on the cattle industry with appropriate reference to sheep and pigs.

## PRINCIPLES AND OBJECTIVES OF A NATIONAL DESCRIPTION LANGUAGE

Efficient marketing involves conducting physical activities at the lowest possible cost, whilst creating prices which accurately reflect the forces of supply and demand and the quality preferences of the buyer.

Applying a national description language (i.e., accurate product description) along the livestock and meat marketing chain is likely to result in significantly lowered costs. For example, livestock shifted directly from the farm to the meatworks and traded on description incur lower costs of transport, stress and bruising when compared to bringing them to a central auction. At the retail level the need to inspect carcasses is also reduced if the buyer has confidence in the description system (i.e., the national language).

A national description language provides a widespread communication vehicle for both buyers and sellers. The system should be precise enough to reflect real differences in consumer value, accurately signalling consumer preferences throughout the marketing chain. For example, if the national language reflects fatness, then meat cuts should be trimmed to customer requirements, carcasses should be trimmed to retailer requirements and producers encouraged to produce livestock to a specific level of fatness.

An accurate and national description language will be especially applicable where a variety of markets are supplied and where the livestock or production environments are particularly heterogeneous. All these circumstances apply in Australia and suggest that a national language would encourage widespread efficiency in processing and specialisation of production for

specific markets. Consequently consumer markets would receive product increasingly refined and tailored to meet their particular requirements.

The need for a national description language is particularly critical where national promotional funds are raised by the industry as a whole. Generic advertisements without association with particular product specifications, have significant limitations on their advertising and promotional effectiveness. In essence, an advertising promise that all beef will please the customer is highly questionable (bearing in mind the great range in quality that can exist) and may lower consumer perceptions rather than raise them. Effective national advertising aligned to particular product specifications, can only be achieved through the establishment of a national description system.

The system also facilitates market reporting and intelligence services which assist buyers and sellers of product and the negotiation of accurate prices at minimal costs.

## National versus Company Languages

The national language has advantages and disadvantages when compared to description languages developed by individual companies (eg., individual company grading systems). For example, a national approach requires differences in company description systems to be suppressed (sometimes at the expense of entrepreneurial and regional differences). National languages are normally centralised and may contain bureaucratic inefficiencies. The national approach may require extensive funding support over long periods to accommodate the conservatism and resistance to change the individual loyalties that local description systems develop.

However, knowledge about description systems can influence market power. For example, a large number of producers selling livestock three or four times a year can be at considerable negotiating disadvantage when attempting to deal with a variety of company grading systems. This problem is accentuated if the language is subjectively applied and unsupervised. Company description systems can encourage long term trading understandings and loyalties with consequential losses in negotiating power for the smaller participants, such as livestock producers versus processors, small retailers versus supermarkets and economically weak processors versus more powerful ones. The Australian processor may be at a considerable disadvantage with his individual company description when attempting to sell into large markets such as Europe, United States and Japan. National specifications can also be used to establish minimum product standards to protect particular markets from abuse or to ensure that a customers' needs are met.

In Australia, the issue of market signals to the producer has been particularly influential. Producers receiving a variety of market signals carried by a proliferation of incompatible company description systems, may be confused and unresponsive to changing their production to meet customer needs.

## Summary

The judgement has been made in Australia that the benefits of establishing a national description language far outweigh the individual company description systems.

The industry has committed itself to a long term program of change which should ultimately yield the benefits outlined earlier. The adopted strategy is gradualist, involving a mixture of industry regulation, encouragement and market forces. This

strategy will evolve over time depending on the economic and political environment.

## **DEVELOPMENT AND ESTABLISHMENT OF AUS-MEAT AND CALM**

### **The Development of AUS-MEAT**

In 1970/71 the Australian Meat Board (AMB) decided to review the Australian beef export grading system. A recommendation was made to the Board that a carcass classification or objective description system would be more suitable than the existing quality grades. Similar proposals were made for sheep in 1973. During the period between 1972 and 1976 significant research was undertaken into obtaining the measurements required for classification in an on-line situation.

In May of 1976 the AMB organised an International Symposium on carcass classification and as a result obtained financial support to test four equipment proposals for objective carcass measurement in a South Australian works.

Since these trials involved both Federal and State funds, Standing Committee on Agriculture established a National Carcass Classification Supervisory Committee (NCCSC). Some significant work was carried out by state authorities during this period of time, particularly that undertaken by the West Australian Department into manual methods of beef carcass measurement and the associated ticketing, and the Tasmanian Department of Agriculture and the Livestock and Meat Authority of Queensland into the conduct of grid trials (ie., producer payment based on a variety of carcass measurements). Also associated with NCCSC were trials of colour strip branding of carcasses of particular qualities. NCCSC assisted the pig industry in the development of the P2 measurement site and training in the use of introsopes.

At the same time, a number of independent reviews, such as the N.S.W. Brewer Report; the Prices Justification Tribunal; the Bureau of Agricultural Economics and the Cozens report called for significant reform in the way meat and livestock were marketed.

In late 1981 a Royal Commission was established into the Australian meat industry which reported its findings in late 1982. As a result the Department of Primary Industry undertook a total review of the export meat regulations. This resulted in development of the Objective Trade Descriptions (OTDE's). These were implemented by regulation in export abattoirs in 1983 by the Department of Primary Industry through its export meat inspection service (EIS).

In late 1984 these export descriptions were further reviewed by a new group appointed by the Minister. The Cameron report proposed a significant deregulation of the OTDE's, with a new specialist organisation for product description being established, under the umbrella of the Australian Meat and Live-stock Corporation (AMLC). The new organisation would be funded by allocations from the AMLC's general slaughter levy income.

All other agencies were asked to transfer responsibility to the new body, including the Export Inspection Service, the various State Departments of Agriculture and Meat Authorities and the AMLC's License Compliance Division. An interim planning committee was established in late 1985 and the new organisation - the Authority for Uniform Specifications of Meat and Livestock (AUS-MEAT) - came into operation in October 1986. Operations commenced on July 1 1987, on which date all export establishments were required to have received AUS-MEAT accreditation if they wished to export red meat. The Pig Industry decided to participate in AUS-MEAT at that time, with its funding being raised through the Australian Pork Corporation.

### **The Development of Computer Aided Livestock Marketing (CALM)**

In the mid 1970's the Australian Meat Research Committee (AMRC) established an investigation into electronic marketing of livestock. The research was intended to devise a system which

eliminated the costs associated with the saleyard while maintaining the competitive advantages of a central auction. The principles involved the establishment of a national descriptive language for livestock and a computer based auction system with corrections for misdescription as detected after slaughter.

A research project was based at the University of New England which subsequently developed into small "commercial" trials known as the New England Livestock Computer Marketing (NELCM) and the Computer Livestock Auction Selling Services (CLASS) system in Western Australia. In 1983, the Livestock and Meat Authority of Queensland also established a series of joint trials with Computer Sciences of Australia to test an electronic auction for cattle on a carcass measurement grid basis. These were known as the QUEST trials.

At the same time, the Australian Pig Industry was pursuing a computerised sale by description for its product. This was an extension of the pig system established in Alberta, Canada and involved various commercial and industry groups, such as Dalgety's, Computer Sciences of Australia, and Livestock Marketing Study Groups, particularly in South Australia and New South Wales.

In 1985, the industry requested the AMLC to establish a national electronic marketing network for livestock, designed to rationalise all the local activities and implement the new system as a viable alternative to saleyards. A separate slaughter levy on cattle and sheep was established and the Pig Industry was invited to participate in the development of the scheme on a "user pays" basis. The new system would use the AUS-MEAT National Language for Description purposes, and would allow prices to be based on liveweight, per head, carcass weight or a carcass weight/fat matrix. Critical to the implementation of the new system was the development of a network of skilled livestock 'assessors', whose proficiency would be essential to the confidence of the meat buyer. The "commercial" launch of the new system - Computer Aided Livestock Marketing (CALM) occurred in July 1987.

## **Conclusions**

It can be seen from the foregoing that two parallel lines of research and review continued for a decade. By the early '80's proposals were well advanced and ready for national implementation. This coincided with the reorganisation of the Australian Meat and Live-stock Corporation in 1984, which adopted the initiatives for national implementation during the 1980's. The Corporation established both CALM and AUS-MEAT as Section 16 committees, permitting a degree of direct industry management of the systems. Conversely, industry commitment to both reforms was partially related to their ability to become involved in the management of the system through the Section 16 committee vehicle.

## **SYSTEMS FOR MARKETING LIVESTOCK AND MEAT**

The physical transfer and pricing of livestock and meat between buyers and sellers in Australia is a classic "snapshot" of free market economics. Approximately 100,000 livestock sellers interact with 400 meat processors who in turn trade carcasses of cartons with large numbers of international importers or 7000 domestic retailers. Trading is often assisted through large numbers of livestock commission agents, wholesalers and meat brokers who provide a range of services.

A variety of pricing mechanisms, bases for payment and systems for product transfer are used. Accurate statistics on relative usage are impossible to obtain and out dated in relatively short periods of time. Many individual buyers and sellers move from system to system, depending on the characteristics of the product and on the relative price environments that exist. This section concentrates only on the major systems for trading livestock and meat.

### Saleyards

Approximately 50 percent of slaughter cattle, 90 percent of sheep (mutton and lambs) and 10 percent of pigs are transferred from the farm to saleyards (central auctions) for public auction, prior to being shipped to abattoirs for slaughtering and processing. The saleyard system dominates marketing choice in Southern Australia. It is regarded as efficient in reflecting the market forces of supply and demand whilst permitting the aggregation of small lots into larger homogeneous groups suitable for individual abattoirs. However, when compared to trading directly with the abattoir, the saleyard involves higher transport and handling costs, and, greater levels of stress with associated reductions of meat quality and additional bruising. Saleyards also require the physical presence of producers or their agents and livestock buyers.

Most importantly, saleyards involve single price auctions for groups (lots) of animals, based either in c/kg liveweight or dollars per head and on a visual assessment of the animal. Saleyards do not involve payment on carcass measurements or assessments. Unlike the "over-the-hooks" system, saleyards do not price individual animals but groups, further reducing pricing efficiency. Extensive research has indicated that pricing in saleyards fails to provide livestock producers with accurate price signals related to customer's meat requirements.

### Over-the-Hooks

Approximately 40 percent of slaughter cattle, 5 percent of sheep and 85 percent of pigs are traded on the basis of carcass weight or a carcass weight/fat matrix, with the animals being shipped directly from the property to the abattoir. The system minimises the costs of transport, handling, bruising and stress, but relies on private negotiation between buyer and seller to establish a market price.

The majority of over-the-hooks prices are based on individual carcass weight with ownership changing at the scales at the end of the slaughter floor. Thus carcass definitions, fat measurement sites and other assessments are critical to buyer-seller price negotiations.

Although the absence of an open auction raises pricing efficiency questions regarding supply and demand, the over-the-hooks system is relatively efficient at paying livestock producers on the basis of consumer signals.

Under the AUS-MEAT accredited abattoir system all producers selling over-the-hooks receive mandatory carcass measurement feedback data and are protected by a national code of practice.

### Paddock Sales

A small proportion of cattle and sheep in Australia are traded on the basis of private negotiations made on the farm. This frequently involves a visual inspection by the buyer, and/or liveweights taken on mutually agreed scales, as the basis of payment. Ownership changes on the property rather than at the abattoir. Because of direct shipment to the abattoir, these systems are operationally efficient, but price livestock inefficiently. If the players are inadequately informed or unskilled in animal assessment, there is a risk that prices will fail to fully reflect market forces or the quality characteristics of the stock.

### Electronic Auctions

The development of CALM has already been discussed. The system is based on an electronic auction of a visual assessment of the stock whilst they remain on the property. This system therefore combines the pricing efficiency benefits of an open auction with the low costs of direct to abattoir transfer. CALM includes four bases for trading; that is cents per kilogram liveweight (L), dollars per head (H), cents per kilogram carcass weight (C), and cents per kilogram carcass/fat matrix (G). Although the CALM system is currently limited to a small percentage of total livestock, its value as a source of market information for over-the-hooks sales and its importance as a vehicle for encouraging livestock producers to shift away from the saleyards should not be underestimated.

### SALES - CALM 1987/88

CAT.		% OF CALM SALES X CAT.	CALM % OF TOTAL AUST MARKET	ESTIMATED NO. FIRST 12 MTHS
PIGS	C	100	1.6	250,000
	H	nil		
	G	nil		
SHEEP	C	95	1.0	557,512
	H	5		
	G	nil		
CATTLE	C	78	1.2	110,626
	H	10		
	G	2		
	L	10		

### Meat Marketing Systems

Australian beef is primarily traded internationally in carton form on the basis of category, weight, cut description, trim or estimated chemical lean content. Cartoned beef is increasing in importance in distribution within Australia at the expense of the more traditional carcass trading systems. Centralised preparation of tray beef (ie., retail ready) is relatively limited at this time.

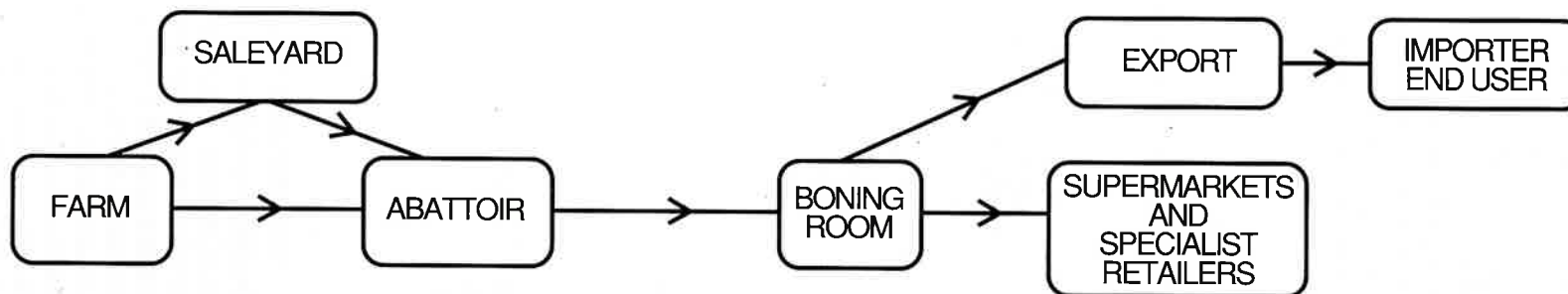
The majority of sheepmeats and pork are sold within Australia in carcass form. Pricing is primarily based on carcass weight and category with fat measurement and other descriptions growing in importance.

For beef carcasses, carcass ticketing is a widespread practice throughout the export industry and increasingly so in the domestic sector. Ticketing is relatively limited in the domestic sheep/pig sector. Carcass strip branding (beef) is one form of description that has grown in importance in the 1980's. In Western Australia a public carcass auction for the meat trade has been in operation for many years.



# AUSTRALIAN MARKETING SYSTEMS FOR CATTLE

**PHYSICAL  
PRODUCT  
TRANSFER**



**PRICING  
MECHANISMS**

SALEYARD  
AUCTION  
LIVEWEIGHT c/Kg  
OR  
PER HEAD

OVER THE HOOKS  
c/Kg LW  
\$PER HEAD  
c/Kg CW  
c/Kg GRID

COMPUTER DESCRIPTION  
AUCTION  
c/Kg LW  
\$PER HEAD  
c/Kg CW  
c/Kg GRID

PRIVATE TREATY  
c/Kg CW  
c/Kg CUT DESCRIPTION  
c/Kg CL CONTENT

W.A. CARCASS AUCTION  
c/Kg CW

**PRICING  
MECHANISMS**

**COMMUNICATION  
SYSTEM**

VERBAL DESCRIPTION  
KILL SHEETS  
FEEDBACK SHEETS  
PRICE GRIDS  
ASSESSMENTS  
MARKET REPORTS

HANDBOOK SPECIFICATIONS & PRODUCT DESCRIPTION  
WRITTEN CONTRACTS  
VERBAL DESCRIPTIONS  
CARTON LABELS  
CARCASS TICKETS  
CARCASS STRIP BRANDS  
MARKET REPORTS

**COMMUNICATION  
SYSTEM**

## THE AUS-MEAT NATIONAL LANGUAGE

In an international context, Australia has extended the concept of objective carcass measurement in cattle further than most meat producing countries. For cattle, sheep and pigs the language includes hot standard carcass weight, sex, dentition, and fat thickness. Bruise scoring and carcass muscle shape are optional additions for cattle, and other meat features, such as marbling, meat and fat colour are used where appropriate.

Discussion here is limited to the major carcass parameters.

### Hot Standard Carcass Weight (HSCW)

Carcass weight affects both slaughtering costs and customer requirements. Liveweight is a poor indication of carcass weight. The gut fill is highly variable and influenced by how long the animal has been off feed, the type of feed and the type of animal. The definition of a carcass needs to be standardised, so as to allow producers and retailers to compare prices from abattoir to abattoir. Competition should ensure that prices reflect real market differences, regardless of the eventual market (eg., export versus domestic).

In Australia, when prices are based on carcass weight, ownership (from producer to processor) changes at the point of weighing, at the end of the slaughtering chain. Carcass trimming is conducted at its lowest operational cost on the slaughter floor. Thus AUS-MEAT has adopted a standard carcass definition for beef and sheep that removes much of the unwanted material (of insignificant commercial value) prior to weighing, on the assumption that competition between abattoirs ensures that producers will be paid equitably. Processors support the definition because it is industrially efficient, and retailers because it eliminates the transport of unwanted material (on the carcass) along the marketing chain. To allow for unusual customer requirements, AUS-MEAT permits producers and processors to negotiate alternative beef and sheep definitions under certain circumstances.

The pig industry has had more difficulties with standard carcass definitions, partially because more significant regional differences existed prior to AUS-MEAT; because of the needs of the smallgoods industry and possibly because less competition for pigs appears to exist in some regions. The current system permits two definitions, but is currently being reviewed by industry organisations.

Carcass chilling causes evaporative weight loss ranging from 0.5 percent to 3.0 percent dependent upon the loading of the chiller, the subcutaneous fat on the carcass and the amount of time that the carcass is left in the chiller. Weight losses of more than 2.0 per cent in an overnight chill suggest serious inefficiencies in chiller operation. Because the variations in weight loss depend on chiller efficiency (rather than producer efficiency) AUS-MEAT has decided that processors should pay for a hot standard carcass weight, with no deductions for chilling.

Ideally scales are electronic with digital reading indicators. Modern technology based on microprocessors can accurately and quickly weigh a carcass to within 0.1kg of its resting weight. Accredited AUS-MEAT abattoirs do not have to maintain electronic scales but must include check weighing procedures in their programmes.

### Carcass Fat Thickness

The fatness of a carcass is a major factor in determining the yield of saleable meat. Excess selvage must be trimmed and sold at low prices as tallow. Fatness is also an indicator of the nutritional status of the animal associated with eating quality and consumer satisfaction.

Trials suggested that a single carcass fat measurement taken on the chain was an effective means of assessing total carcass fatness. Although early cattle research concentrated on

measurement at the 12/13th rib site, it has been shown that hide pullers can cause fat stripping and excessive damage to that site. The P8 measurement position is not damaged to the same extent and has been shown to have similar yield predictive ability as the 12/13th rib site. Operating nationally with two sites is not feasible.

P8 fatness has a poor correlation to the fatness of the 12/13th position, (this is not unexpected, bearing in mind that neither site predicts total fatness perfectly and fat distribution can vary between age groups and breeds) and therefore use of fixed conversion factors between rib and P8 sites is not feasible. AUS-MEAT has selected the P8 as the national site, but is keeping the situation under review.

With regard to sheepmeats, the GR site, established by the New Zealand Producers Board has been adopted by AUS-MEAT. Fat thickness in sheepmeat is usually visually assessed, rather than measured, primarily because of the relatively high chain speeds that exist. Pig carcasses are measured at the P2 site, using introsopes. Trials including the Hennessy Grading Probe, to assess total lean content, are underway in Australia.

### Dentition

Muscle is composed of myofibrillar components, the contractile elements, and structural elements that support them; ie., connective tissue. As the animal ages connective tissue becomes less heat soluble. This means that cuts derived from young animals can be eaten after lesser heat treatments than cuts derived from older animals. A measure of physiological age is therefore a critical part of the language package, particularly in a grass fed production system for cattle and sheep, where age at turnoff is also a factor in economic efficiency.

Age can be estimated by either dentition or by ossification of the bone tissues. Dentition (the time of eruption of both incisors and permanent molars) is however, variable, depending upon breed, sex and perhaps nutrition. Its advantages are that it is relatively simple to use. Ossification is unsuitable where relatively unskilled labour is involved or where the assessment has to be made at chain speed. AUS-MEAT selected dentition rather than ossification, for the national language.

One of the deficiencies of both dentition and ossification techniques is that they cannot be checked once the meat is removed from the carcass. The development of an alternative physiological age test on the meat itself, perhaps based on collagen content, requires detailed research.

Age is of minimal consequence in pig assessment, where intensive grain feeding systems dominate the production chain and economics encourage rapid turnoff from the farm.

### Sex

In cattle and sheep, sex is sometimes the basis of market specifications. Bullmeat for example has better water holding capacity and is therefore in demand as manufacturing product. Under previous systems in Australia a heifer was a female which did not show any signs of lactation and was not in calf. This resulted in innumerable arguments between inspection staff and management as to whether the heifer displayed any signs of lactation. The AUS-MEAT language has established that if the female animal has more than seven permanent incisor teeth, it is automatically a cow regardless of whether it has lactated or been pregnant. If it has less than seven permanent incisors, it is a heifer. Whilst this decision may confuse producers who have been taught that a cow is an animal that has had at least one calf, it is entirely consistent with meat market requirements and scientific knowledge. Age does affect meat quality. Pregnancy does not.

# AUS-MEAT STANDARD CARCASS

## BEEF

TRIMMING IS LIMITED TO:

UDDER, TESTES, OR PENIS

FAT ON VENTRAL  
ABDOMEN INCLUDING  
PRECRURAL FAT

THICK &  
THIN SKIRT

XIPHOID CARTILAGE

EXCESS FAT  
OFF BRISKET  
(To within 1cm of  
underlying muscle)

INTRA-THORACIC  
FAT

FEET  
(Between  
Carpus and  
Metacarpus)

FEET  
(Between the Tarsus  
and Metatarsus)

EXCESS FAT OFF  
TOPSIDE RIM  
(To within 1cm of  
underlying Muscle)

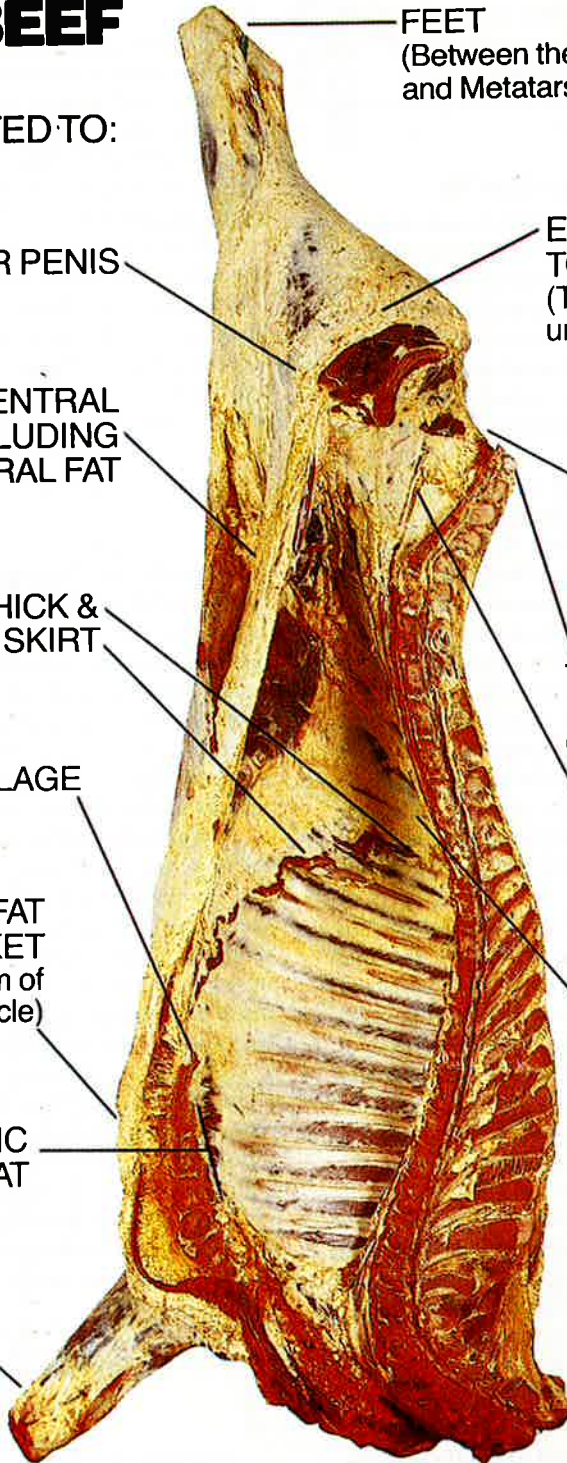
FAT OFF CHANNEL RIM

TAIL  
(Between Sacral and  
coccygeal vertebra)

CHANNEL FAT

KIDNEYS AND  
KIDNEY KNOBS

HEAD  
(Between the Occipital  
bone and the 1st  
cervical vertebra)



**VEAL** As per beef except; that thin skin and channel fat retained in unsplit carcass up to 70kg.

**BUFFALO** As per beef except thick and thin skirts retained.

The AUS-MEAT Standard Carcass applies to all over-the-hooks trading in AUS-MEAT Accredited Abattoirs unless a variation is agreed to by the producer and processor involved. In this case, the term non-standard carcass must be stated on the feedback sheet.

# AUS-MEAT STANDARD CARCASS

## SHEEP

## GOAT

TRIMMING IS LIMITED TO:

FEET  
(Between the Tarsus and Metatarsus)

TESTES, PENIS  
UDDER AND  
COD FAT OR UDDER FAT

TAIL  
(Not longer than  
5 coccygeal vertebrae)

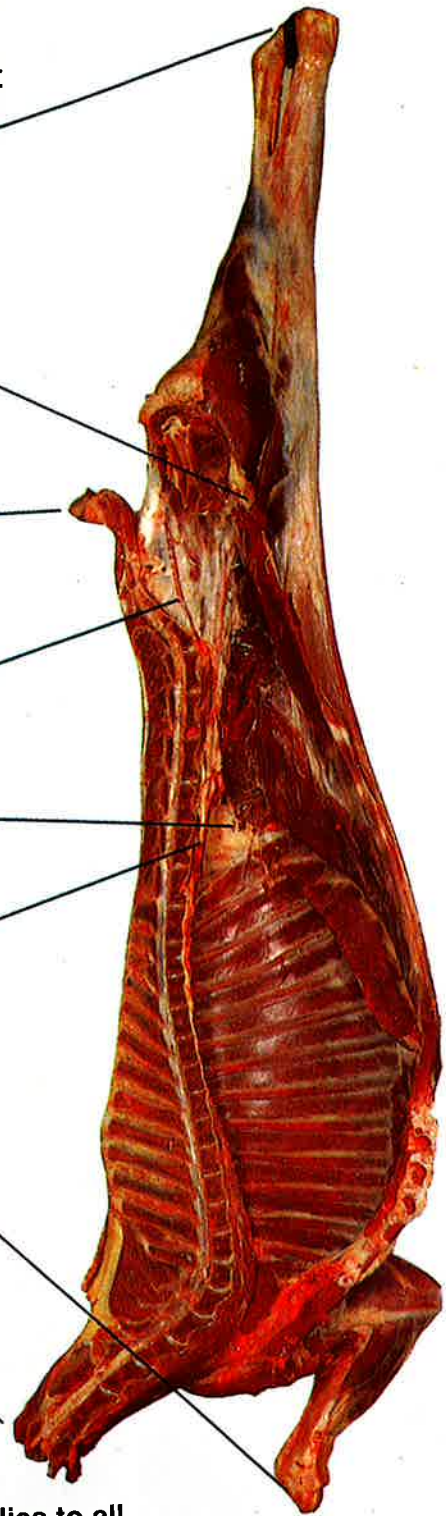
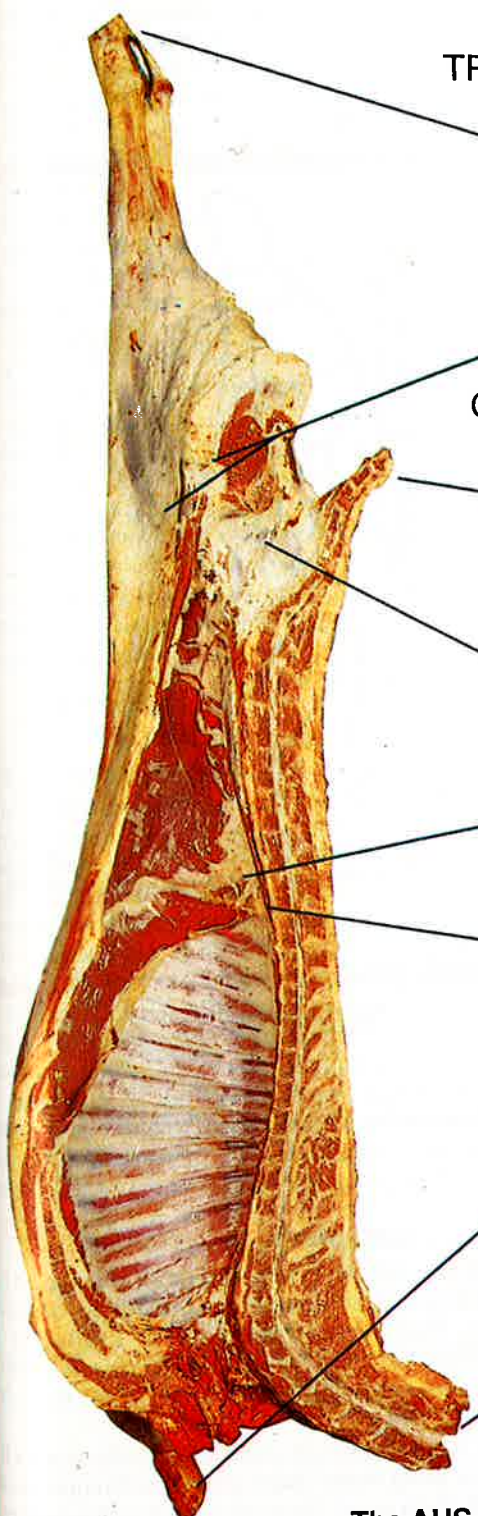
CHANNEL FAT

KIDNEYS  
AND KIDNEY KNOBS

THICK SKIRT

FEET  
(Between Carpus and Metacarpus)

HEAD  
(Between the Occipital  
bone and 1st cervical  
vertebra)



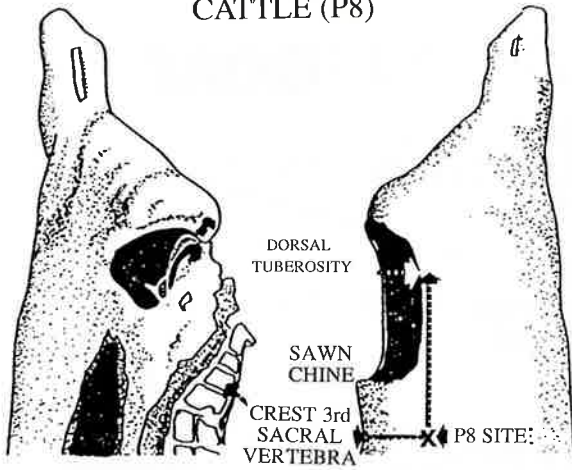
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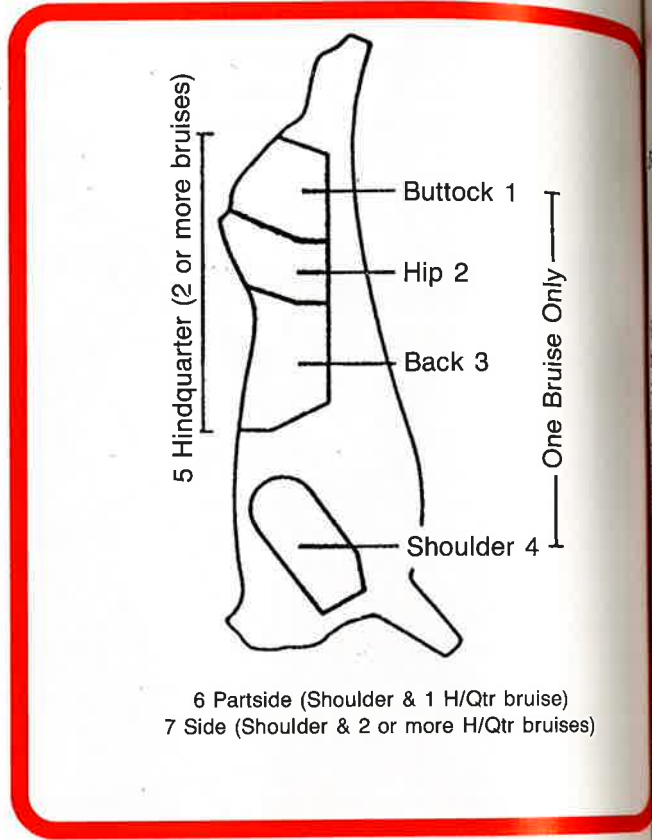
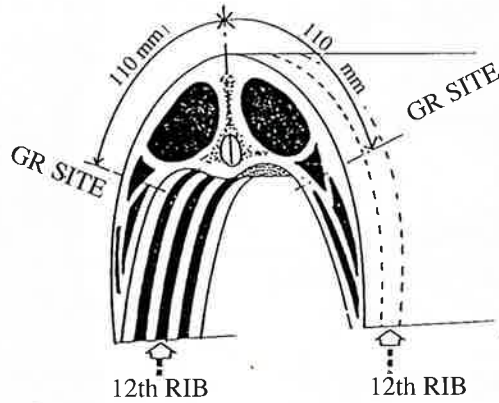
THE SIGN OF GOOD TASTE

**AUS-MEAT FAT MEASUREMENT SITES**

**CATTLE (P8)**



**SHEEP (GR)**

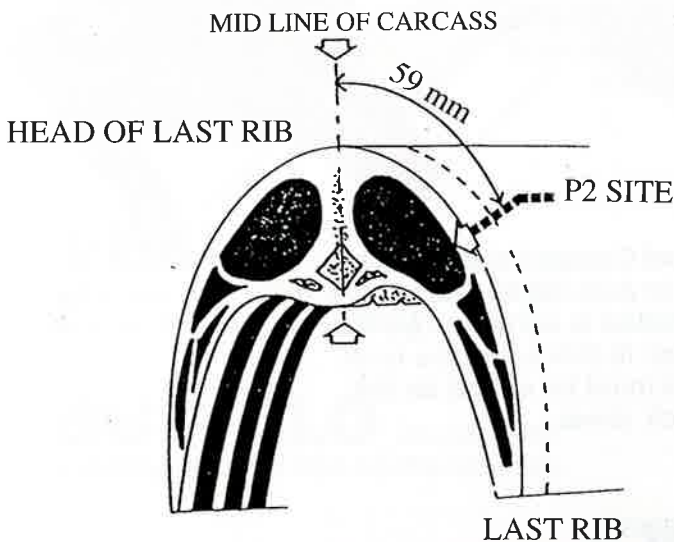


6 Partside (Shoulder & 1 H/Qtr bruise)  
7 Side (Shoulder & 2 or more H/Qtr bruises)

**BRUISE SCORE**

Investigations to develop a similar system for sheepmeats are underway

**PIG (P2)**



**Cattle Muscle Shapes**

The market generally regards animals with a high muscle to bone ratio i.e., good muscle conformation as being highly desirable. Scientists have long argued that yield is unaffected by conformation. The AUS-MEAT muscle scoring system involves five categories assessed visually on the slaughter floor (see attachment).

In order to score the muscle shape objectively, research is being undertaken using video image analysis techniques on the slaughter floor at chain speed. The system involves the capture of a photographic image on screen followed by computer analysis of the shape, size and shadings of that image.



## Primal Cut Specifications

As mentioned previously beef is distributed in carton form in the export market and increasingly in the domestic market. A key feature of the national language is accurate description of primal cuts or meat items on the carton and in contracts.

Primal cut or item descriptions are applied in clear or in cypher according to a nationally approved system which ensures consistency of description from all accredited plants throughout Australia. The mandatory aspects of product descriptions are:

- category descriptions
- cut/item
- chemical lean statements
- net weight
- bone-in or boneless
- type of packaging.

In addition, optional product descriptions may be applied depending on customer requirements which include:

- original carcass weight or fat class cypher
- primal cut weight range or fat depth
- supplementary specifications such as Grain Fed
- number of pieces.

Not only does this national system ensure constant description in Australia but provides an excellent vehicle for specification buyers. It encourages increasing use of carton product as opposed to the more costly carcass distribution system. Ensuring primal cuts are prepared consistently and according to specification is a major part of AUS-MEAT's activities. The Handbook of Australian Meat is the national benchmark for primary cut preparation.



## Summary

The national language is a package of individual carcass or measurements or assessments and is therefore unique internationally. By continuing the various measurements, individual specifications tailored to particular market needs are easily accommodated. The language is relatively objective, permitting its application by employees with limited skills and limited supervision. It has been implemented across Australia with few practical problems.

However the flexibility of the package of measurements and assessments increases the variety of permutations and combinations that have to be communicated. This complexity has proven to be difficult to "sell", particularly to both the producing and retail sectors. There is evidence to suggest that simplifying the system, such as occurs with simple "grades" would be attractive to some industry sectors.

# BEEF CATEGORIES

## FAT DEPTH (in mm) AT P8 SITE

WEIGHT CLASSES BASED ON (HSCW)	FAT CLASS						CARCASS CHARACTERISTICS			
	0-2	3-6	7-9	10-12	13-17	18-22		23-32	33+	
	1	2	-3	+3	-4	+4	5	6		
up to 40.0 kg 40.5 kg to 70.0 kg	VEAL (V)						<ul style="list-style-type: none"> <li>– no permanent incisors</li> <li>– must show characteristics of youthfulness and veal colour</li> </ul>			
70.5 to 90 kg 90.5 to 110 kg 110.5 to 130 kg 130.5 to 150 kg 150.5 to 160 kg And so on up to over 400 kg			YEARLING (Y)						<ul style="list-style-type: none"> <li>– no permanent incisors</li> <li>– females, castrated or entire males (both with no secondary sexual characteristics)</li> <li>Steers may be identified (YS)</li> </ul>	
			YOUNG BEEF (YG)						<ul style="list-style-type: none"> <li>– 1 but no more than 2 permanent incisors</li> <li>– females, castrated or entire males (both with no SSC)</li> <li>Steers may be identified (YGS)</li> </ul>	
				PRIME BEEF (PR)						<ul style="list-style-type: none"> <li>– more than 2 but no more than 7 permanent incisors</li> <li>– females, castrated or entire males (both with no SSC)</li> <li>Steers may be identified (PRS)</li> </ul>
				OX (S)						<ul style="list-style-type: none"> <li>– females with no more than 7 permanent incisors</li> <li>– males, castrated or entire (both with no SSC)</li> </ul>
	STEERS (SS)						<ul style="list-style-type: none"> <li>– castrated or entire males (both with no SSC)</li> <li>– has up to 8 permanent incisors</li> </ul>			
	COW (C)						– females with 8 permanent incisors			
	BULL (B)						– entire or castrated males with secondary sexual characteristics			

DOMESTIC BRANDING SCHEMES	GOLD YEARLING AND YOUNG BEEF	Must be more than 70 kg (HSCW) – must have minimum fat of 4 mm at P8 and muscle score A-B-C.
	PURPLE YEARLING AND YOUNG BEEF	Must be lot fed and more than 70 kg (HSCW) – must have minimum fat of 4 mm at P8 and be muscle score & A-B-C.
	BRONZE PRIME BEEF	Must have minimum fat of 7 mm at P8 and be muscle score A-B-C. Must be more than 70 kg (HSCW).

An example is: 'Yearling Purple, weight class 18-20, fat class 3.' (ie., This would deliver a beef carcass with no permanent incisors, weighing between 160 and 200 kg, with a P8 fat measurement of 7-12 mm and which has been grain fed for a minimum of 70 days.)

# SHEEPMEAT CATEGORIES

## FAT DEPTH (in mm) AT GR SITE

WEIGHT CLASSES BASED ON (HSCW)	0-5	6-10	11-15	16-20	20+	CARCASS CHARACTERISTICS	
	FAT CLASS						
	1	2	3	4	5		
up to 8.0 kg	<b>LAMB (L)</b>						– no permanent incisors – females, castrated or entire males (both with no secondary sexual characteristics) *Young Lambs (YL) and *Ram Lambs (RL) may be identified
8.5 to 10 kg							
10.5 to 12 kg							
12.5 to 14 kg							
14.5 to 16 kg		<b>HOGGET (H)</b>				– 1 but no more than 2 permanent incisors – females, or castrated males with no SSC	
16.5 to 18 kg							
18.5 to 20 kg	<b>MUTTON (M)</b>						– one or more permanent incisors – entire or castrated males with SSC Ewes (E) and Wethers (W) may be identified
20.5 to 22 kg							
22.5 to 24 kg							
24.5 to 26 kg	<b>RAM (R)</b>						– entire males with one or more permanent incisors – entire or castrated males with SSC
over 26 kg							

DOMESTIC  
BRANDING  
SCHEMES

RED

BROWN

Lamb – all fat classes

Selected Hogget – fat classes 2-3-4 only

An example is: 'Selected Hogget, weight class 22, fat class 3'. (ie. This would deliver an ovine carcass which has 1 but not more than 2 permanent incisors, weighing between 20 and 22 kg, and which has a GR fat measurement between 11 and 15 mm.)

\*Young Lambs – first lower jaw molar not to have erupted.

\*Ram Lambs – must be entire males with no secondary sexual characteristics.

# PIGMEAT CATEGORIES

CARCASS CHARACTERISTICS	DESCRIPTION	
– males and females weighing up to 25 kg	SUCKER PORK (SUK)	
– males without secondary sexual characteristics and females without evidence of milk secretion – weighing up to 95 kg (hot standard carcass weight)	PORK (P)	May be identified as light pork (LP) 25 kg – 55 kg (HSCW) or heavy pork (HP) 55 kg – 95 kg (HSCW)
– females with evidence of milk secretion and/or females over 95 kg (HSCW)	SOW PORK (SP)	
– castrated or entire males with SSC and/or males over 95 kg (HSCW)	BOAR PORK (BP)	

Porcine carcass over 25 kg (HSCW) may be classified into weight related fat (P2) classes using the following table:

Weight class ciphers	HSCW (kg)	Fat class (Score) ciphers (mm)				
		1	2	3	4	5
A	25.1-30	up to 6	over 6-9	over 9-12	over 12-16	16 +
B	30.1-35	up to 6	over 6-10	over 10-13	over 13-17	17 +
C	35.1-40	up to 6	over 6-11	over 11-14	over 14-19	19 +
D	40.1-45	up to 6	over 6-12	over 12-15	over 15-20	20 +
E	45.1-50	up to 6	over 6-13	over 13-16	over 16-21	21 +
F	50.1-55	up to 8	over 8-14	over 14-17	over 17-22	22 +
G	55.1-65	up to 8	over 8-15	over 15-18	over 18-23	23 +
H	65.1-75	up to 8	over 8-17	over 17-19	over 19-24	24 +
I	75.1-85	up to 8	over 8-18	over 18-20	over 20-25	25 +
J	85.1-95	up to 8	over 8-19	over 19-22	over 22-26	26 +
K	95.1 +	up to 8	over 8-20	over 20-24	over 24-28	28 +

An example is: hot standard carcass weight 62.5 kg with P2 fat measurement 11 mm would be ciphered as G2.

**THE IMPLEMENTATION AND SUPERVISION OF THE NATIONAL LANGUAGE**

**AUS-MEAT Accreditation**

AUS-MEAT Accreditation is granted to a meat establishment that:

- uses the national description language;
- operates with a total quality control system in place;
- provides mandatory feedback of the language to producers;
- adopts various codes of practice and standards; and
- accepts random visits from Area Managers for monitoring purposes.

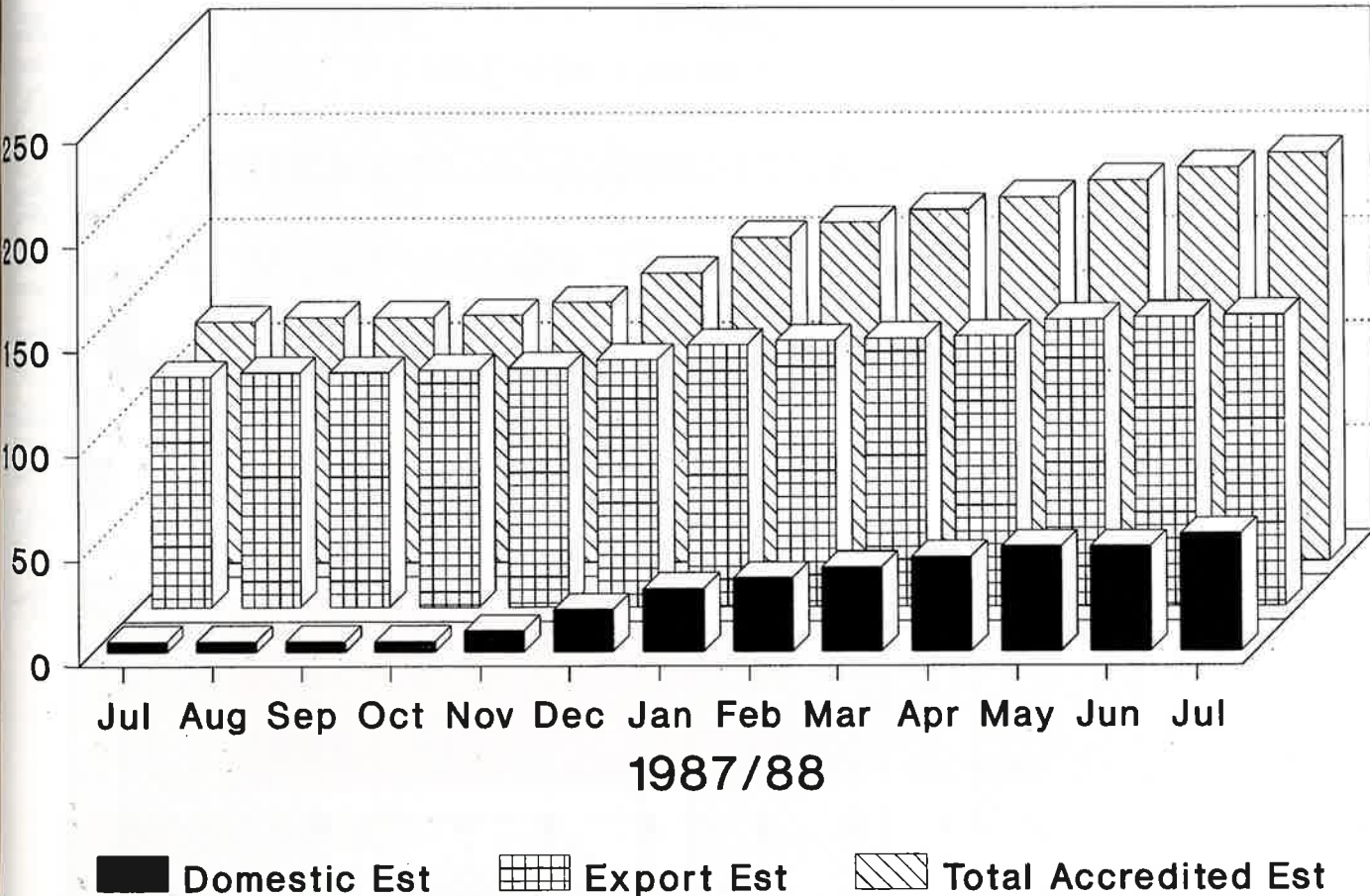
Accreditation was made mandatory for all export establishments from July 1, 1987. Accreditation is voluntary to establishments supplying the domestic market. During the first 12 months of operation, interest in achieving accreditation has

been significant and a majority of cattle, sheep and pigs slaughtered are now covered by the AUS-MEAT system.

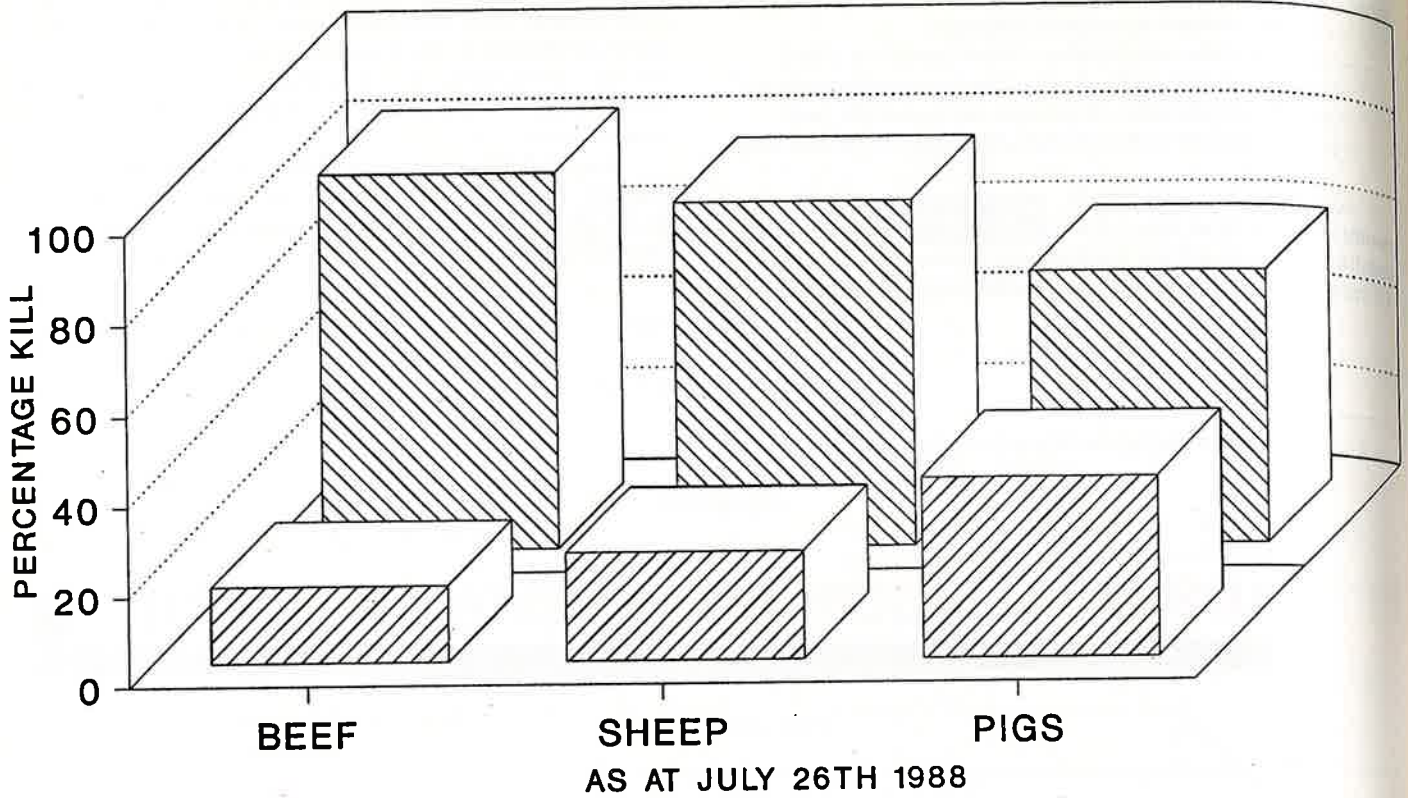
AUS-MEAT Area Managers monitor the system and are involved in the training and accreditation of individual staff (to conduct various measurements and assessments). They complete their random visits to establishments with a detailed Quality Assurance Report for plant management (provided as an industry service). Procedures for downgrading are involved where standards are not maintained. The ultimate penalty is removal of accreditation.

In a parallel programme, AUS-MEAT runs Quality Assurance Industry Training courses in the use and implementation of measurement systems. Accredited export plants require successful attendees on the course as a condition of licence.

**AUS-MEAT ACCREDITED ESTABLISHMENT**

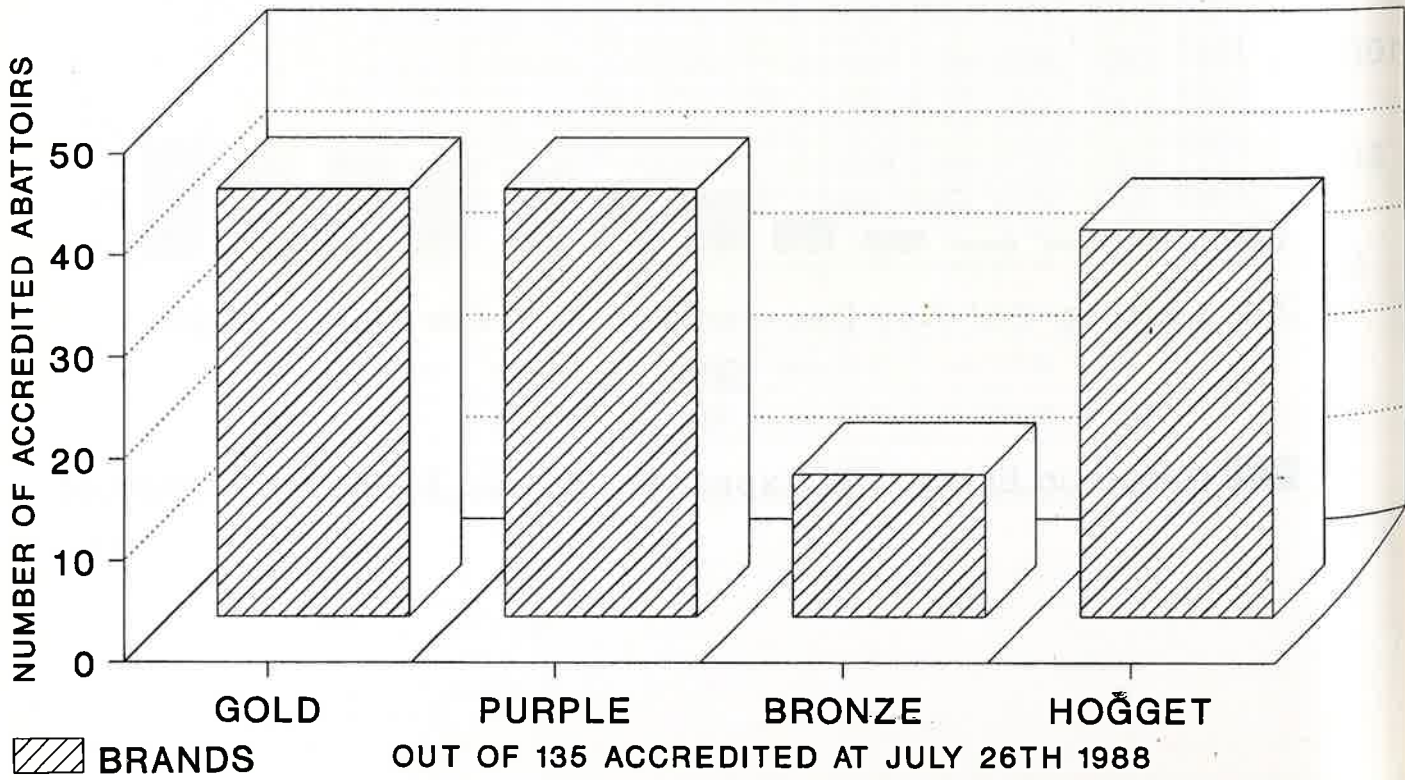


# % STOCK PROCESSED IN AUS-MEAT ABATTOIRS



 NON ACCREDITED    
  ACCREDITED

# AUS-MEAT ABATTOIRS ISSUED WITH AUS-MEAT BRANDS



 BRANDS

# AUS-MEAT DOMESTIC BRAND SPECIFICATIONS (1988)

	GOLD	PURPLE	BRONZE	BROWN								
<b>AGE:</b> →	Young 0-2 teeth (up to 25 months)	Young 0-2 teeth (up to 25 months)	Prime 3-7 teeth (25-45 months)	<b>SELECTED HOGGET</b> 1-2 teeth (12-20 months)  Females and or castrate males with no SSC*  <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>FAT CLASS</th> <th>MEASUREMENT (MM)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>+ 5-10</td> </tr> <tr> <td>3</td> <td>+ 10-15</td> </tr> <tr> <td>4</td> <td>+ 15-20</td> </tr> </tbody> </table>	FAT CLASS	MEASUREMENT (MM)	2	+ 5-10	3	+ 10-15	4	+ 15-20
FAT CLASS	MEASUREMENT (MM)											
2	+ 5-10											
3	+ 10-15											
4	+ 15-20											
<b>SEX:</b> →	Steers, heifers entire males with no SSC*	Steers, heifers entire males with no SSC*	Steers, heifers Steers must not show SSC*									
<b>FAT DEPTH:</b> →	4mm or more	4 mm or more	7 mm or more									
<b>FAT DISTRIBUTION:</b> →	Even	Even and adequate on all primals	Even									
<b>FAT COLOUR:</b> →	No Yellow fat	White or Creamy-White	No Yellow fat									
<b>MUSCLE SHAPE:</b> →	A, B or C	A, B or C	A, B or C									
<b>MEAT COLOUR:</b> →	No dark cutters	Cherry red	No dark cutters									
		<b>SPECIAL CRITERIA FOR PURPLE BRAND</b> Cattle fed for 70 days in an AUS-MEAT registered feedlot, cattle identified by purple delivery docket or purple tail or ear tags.										
	<b>ACCELERATED CONDITIONED</b> by • electrical stimulation or • tender stretch hanging or • vacuum packaging for 7 days (Purple Brand only)											

\*SSC – Secondary Sexual Characteristics.

### **AUS-MEAT Management Information System**

The objective measurements, feedback and ticketing systems involve a great deal of data collection and manipulation. The AMLC's Technical Systems division has significantly lowered the costs of implementation through the development of a national software package available to all AUS-MEAT plants.

This package generates producer feedback sheets, livestock buying grids and pricing schedules for the co-operating processor. It integrates with a commercial carcass ticketing system which transfers the language down the marketing chain to the boning room or retailer.

### **Domestic Carcass Branding**

As a further extension of the language, a set of domestic carcass specifications have been established that identify particular characteristics to the wholesale and retail sectors. The system evolved from a number of State Government initiatives, and has variable adoption levels across Australia. In 1988, the AMLC decided to support the scheme with a significant consumer promotion campaign which should ensure more even supplies of branded product to the Australian consumer. Proposals for an additional brand specification for heavy lean lamb are currently under consideration by AUS-MEAT.

### **Special Market Description Projects**

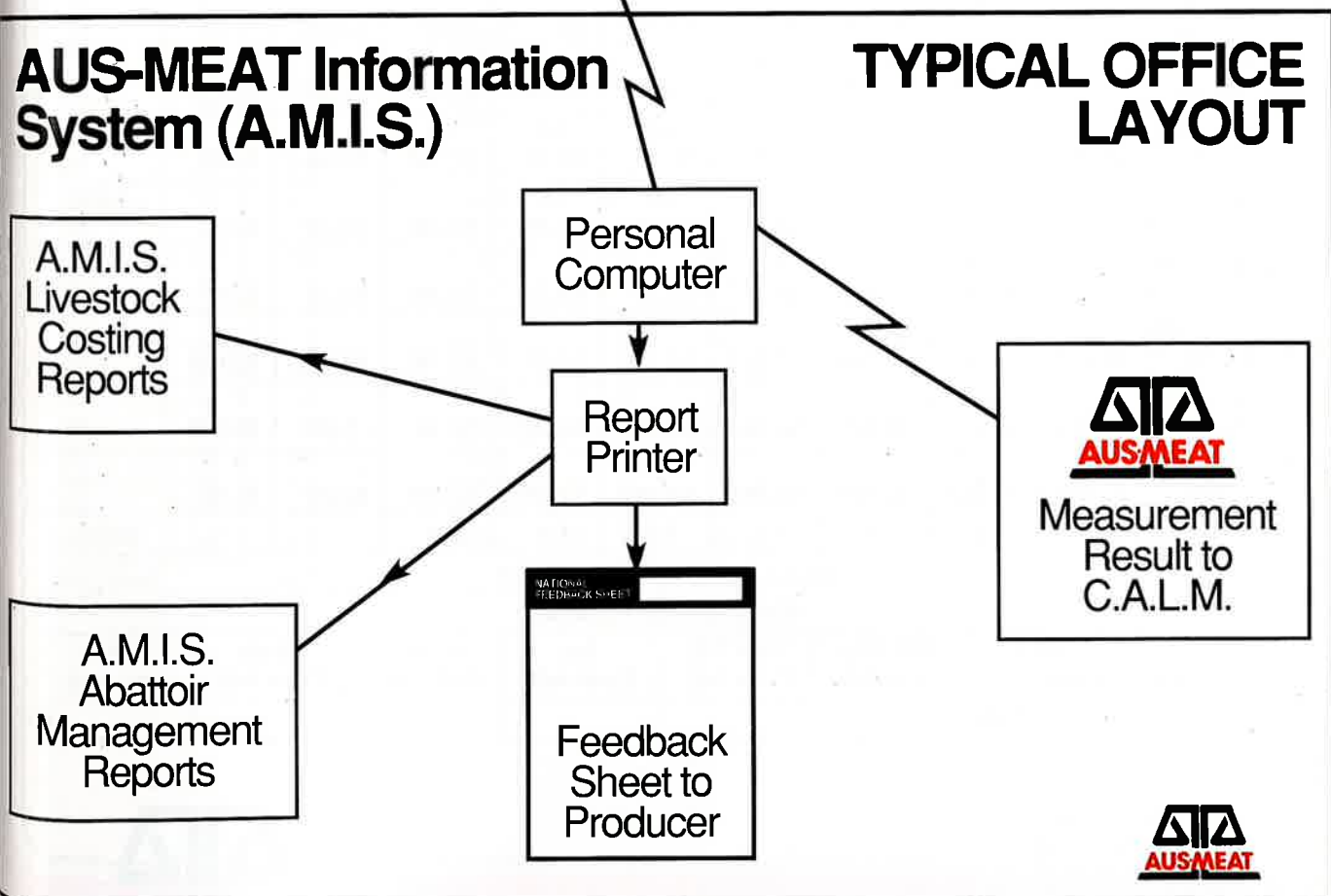
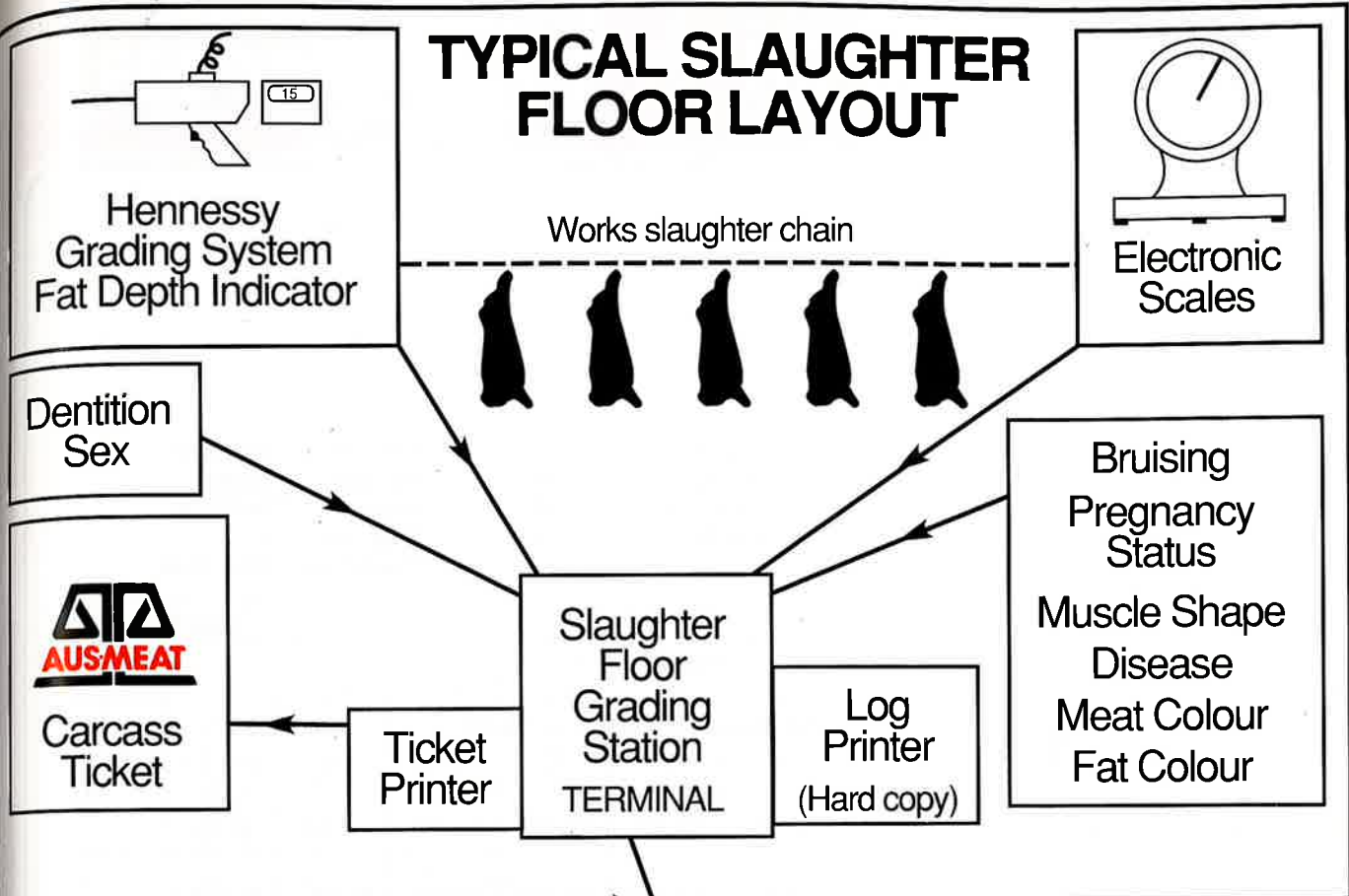
AUS-MEAT collaborates closely with the marketing divisions of the AMLC to co-ordinate promotional funds with product particularly in demand in specific markets. For example planning is well advanced for a heavier, leaner lamb carcass to be identified specifically for the United States market. Co-operating abattoirs will identify these lambs with specific promotional logos and receive selective promotion in that market.

This strategy allows the promotional funds to be used as an incentive for cooperating meatworks to receive the rewards for acquiring and processing the lamb most demanded by customers in that market. If the promotional support is significant, premiums for that particular product should flow back to the producer, and customers in that market should be provided with product closer to their requirements. This strategy also has the advantage of improving the efficiency of promotion, that is greater sales from dollars invested can be expected. Depending on the success of this particular project other initiatives are likely to be taken in the future.

To date the national language has concentrated on the description of grass or crop fed product with limited grain feeding. Australia has a small but rapidly growing grain fed cattle industry which has hopes of significantly increasing its share in the Japanese market. AUS-MEAT in collaboration with the Australian Lot Feeders Association and CSIRO has commenced research into a more sophisticated specification system assessed in the chiller and based on marbling, meat colour, fat colour and eye muscle area. These proposals are yet to be considered in detail by the Australian industry.



# Automatic Data Collection



# NATIONAL FEEDBACK SHEET

The Abattoir

Slaughterhouse Road  
Killdale,

QLD 0 (004) 123 - 0235

Producer:  
JOHN SMITH  
BROWNS LANE  
SMITHTOWN  
NSW 0

Works Lot No.: 10  
Delivery Date : 13/07/88  
Kill Date : 14/07/88  
Species : Cattle

CALM DETAILS  
Asses. No. : 0  
Auct. No. : 0  
Lot No. : 0

Carc. Trim: Standard  
Fat Site : Rump  
Date : 26/07/88  
Page No. : 1  
Purch type: Price Grid

Grid 1 NORMAL JAP OX										Base Rate \$2.250
Weight From To	Fat scores									Total Head
	1	2	3-	3+	4-	4+	5-	5+	6	
	Fat distribution in millimetres (up to)									
	2	6	9	12	17	22	27	32	over 32	
0 240 Per kg.	\$1.957	\$2.025	\$2.025	\$2.025	\$2.025	\$2.025	\$1.912	\$1.912	\$1.80	
240 260 Per kg.	\$1.957	\$2.025	\$2.137	\$2.137	\$2.137	\$2.137	\$2.025	\$1.98	\$1.912	
260 280 Per kg.	\$1.957	\$2.025	\$2.137	\$2.137	\$2.137	\$2.137	\$2.07	\$2.025	\$1.98	
280 300 Per kg.	\$1.957	\$2.025	1.0 \$2.205	2.0 \$2.205	2.0 \$2.205	2.0 \$2.205	\$2.16	\$2.137	\$2.025	5.0
300 320 Per kg.	\$2.025	1.0 \$2.07	3.0 \$2.227	1.0 \$2.25	4.0 \$2.25	1.0 \$2.25	1.0 \$2.205	\$2.16	\$2.07	11.0
320 340 Per kg.	\$2.025	2.0 \$2.07	1.0 \$2.205	1.0 \$2.25	1.0 \$2.25	1.0 \$2.25	\$2.205	\$2.16	\$2.07	6.0
340 360 Per kg.	\$2.025	1.0 \$2.07	\$2.205	1.0 \$2.25	\$2.25	\$2.25	\$2.205	\$2.16	\$2.07	2.0
360 380 Per kg.	\$2.025	\$2.07	\$2.205	\$2.227	\$2.227	\$2.227	\$2.182	\$2.137	\$2.025	
380 400 Per kg.	\$2.025	\$2.07	\$2.137	\$2.182	\$2.205	\$2.205	\$2.16	2.115	\$2.025	
400 999 Per kg.	\$2.025	\$2.025	\$2.025	\$2.092	\$2.092	\$2.092	\$2.092	\$2.07	\$1.98	
Tot. Head		4.0	5.0	5.0	5.0	4.0	1.0			24.0
Total weight: 7517.5 kg (313.2 av.)										
Discounts and Premiums										
Bruise Code Adj.	Dentition Code Adj.	Muscling Code Adj.	Fat C&D Code Adj.	Sex Code Adj.	Damage Code Adj.	Grade Code Adj.	Disease Code Adj.			
	8	98%								

FROM YOUR AUS-MEAT ACCREDITED ABATTOIR



# NATIONAL FEEDBACK SHEET

The Abattoir

Slaughterhouse Road  
Killdale,

QLD 0 (004) 123 - 0235

Lot Number: 10

Species: Cattle

Date: 26/07/88

Page No.: 3

## Carcass Details

Works Body No.	Body I.D.No.	S e x	D e n t	Fat mm	M C	P s c	Hot Wght	Left Side				Hot Wght	Right Side				Body		Net Value			
								B	Gr	Gr	Dm		B	Gr	Gr	Dm	Wght	Price Per Kg	Adj.			
Young Steer																						
234		M	2	9			151.0	1	X			151.0	1	X			302.0	2.228	0.00	672.86		
Steers																						
227		M	8	18			170.0	1	X			158.5	1	X			328.5	2.250	-14.78	724.35		
																			Adjust for Dentition		-14.78	
228		M	4	22			159.5	1	X			158.0	1	X			317.5	2.250	0.00	714.38		
229		M	7	10			144.0	1	X			140.0	1	X			284.0	2.205	0.00	626.22		
230		M	4	18			146.0	1	X			143.5	1	X			289.5	2.205	0.00	638.35		
231		M	4	12			153.0	4	1	X		151.5	1	X			304.5	2.250	0.00	685.13		
232		M	7	7			168.5	1	X			161.0	1	X			329.5	2.205	0.00	726.55		
233		M	7	5			170.0	1	X			166.0	1	X			336.0	2.070	0.00	695.52		
235		M	4	15			162.5	1	X			160.0	1	X			322.5	2.250	0.00	725.63		
236		M	8	5			180.5	1	X			173.5	1	X			354.0	2.070	-14.65	718.14		
																			Adjust for Dentition		-14.65	
237		M	7	17			161.0	1	X			139.5	1	X			300.5	2.250	0.00	676.13		
238		M	4	18			149.0	1	X			145.5	1	X			294.5	2.205	0.00	649.38		
239		M	4	14			153.5	1	X			147.5	1	X			301.0	2.250	0.00	677.26		
240		M	4	10			176.5	1	X			173.0	1	X			349.5	2.250	0.00	786.38		
241		M	4	8			161.5	1	X			156.0	1	X			317.5	2.228	0.00	707.39		
242		M	7	7			144.5	1	X			138.5	1	X			283.0	2.205	0.00	624.01		
243		M	7	5			166.5	1	X			165.5	1	X			332.0	2.070	0.00	687.25		
244		M	4	24			154.5	1	X			154.0	1	X			308.5	2.205	0.00	680.24		
245		M	4	4			162.0	1	X			154.0	1	X			316.0	2.070	0.00	654.12		
246		M	4	8			159.0	1	X			151.5	1	X			310.5	2.228	0.00	691.79		
247		M	7	14			151.5	1	X			150.0	1	X			301.5	2.250	0.00	678.38		
248		M	7	11			144.5	1	X			145.0	1	X			289.5	2.205	0.00	638.35		
249		M	4	14			154.5	1	X			153.0	1	X			307.5	2.250	0.00	691.88		
250		M	7	11			172.0	1	X			166.0	1	X			338.0	2.250	0.00	760.50		
Total Head:				24.0				Totals, weight & value				7517.5		2.202				\$16530.19				
Condemned:				0.0				& adjustments										-\$29.43				
Average Fat:				11.9				Average weight & value				313.2		2.198				\$688.75				

FROM YOUR AUS-MEAT ACCREDITED ABATTOIR



## Extending the System back to the Livestock Producer

The AMLC through AUS-MEAT, has injected significant resources in extension back to the livestock producer to encourage a much greater carcass and meat awareness; to encourage direct delivery of stock from the farm to the abattoir and to encourage payment on carcass or carcass measurement basis.

For example, all AUS-MEAT accredited abattoirs must provide carcass measurement feedback to beef producers who sell "over-the-hooks". This includes hot carcass weight, dentition, sex, fat thickness, and bruise score. In addition, dozens of major field days have been held explaining the system and encouraging producers to pay greater attention to carcass characteristics when considering their management and breeding programs. This promotion has been backed with an extensive advertising campaign.

Thirteen Australia wide seminars with Government extension officers have sought the same philosophy to be established into Departmental policies.

The AMLC through AUS-MEAT provides funds for approximately forty beef and sheep carcass competitions throughout Australia which encourage breeders to compete against specific market criteria. These competitions are currently being reviewed to establish national criteria.

AUS-MEAT's development of the National Livestock Feedback Trials, co-sponsored by the Rural Press Corporation, has attracted enormous interest in the rural community and a significant interest in carcass characteristics and ultimate meat yield and quality. These trials involve producers entering teams of commercial progeny which are grown under common pasture/grain conditions. Carcasses are assessed against specific market requirements and sample carcass sides are boned out to determine saleable meat yield. Points are awarded for each team's performance on growth rate, carcass characteristics and saleable meat yield of cuts. Carcasses which fail to meet specific market requirements are rejected from the competition.

Four of these trials are being conducted in 1988:

- Japanese grass-fed market
- Japanese grain-fed market
- Australian young beef market
- United States lamb market.

The winners of each competition will tour an overseas market, studying customer preferences. Already the results indicate that the fastest growing animals on the farm may not be the most suitable for specific markets. The results of these trials support the hypothesis that one cannot judge the value of genetic material until the hide has been removed and the meat preparation concluded.

## FUTURE DEVELOPMENTS

### Technical Systems

The AMLC's Technical Systems Division will continue to improve the automation of measurement and information functions within the abattoir and between the abattoir and other parts of the marketing chain. More sophisticated measurement possibilities involve ultrasound, video image analysis and the measurement of meat and fat colour. Significant improvements to the current carcass ticketing system and the carton labelling system are technologically feasible. The AMIS software system can also be extended to cover disease traceback to livestock producers.

New technology for animal identification is already commercially available. Both active and passive storage units on the animal, either implanted or as eartags, tailtags or neck collars are being developed in Australia or imported. Automated animal identification has major on farm management benefits but is particularly significant for providing carcass feedback to producers

on an individual animal basis. This technology will also give a significant impetus to the introduction of carcass traits in the National Beef Recording Scheme (NBRS) and the selection of sires on group Breedplan by carcass merit as well as growth rate and fertility.

There is considerable interest in Australia in finding a cheap, secure and visually attractive alternative to the current system of carcass strip branding. The Australian Meat and Livestock Research and Development Corporation (AMLRDC) is funding a number of companies to investigate alternative systems of identification which can operate both on the slaughterfloor and in the boning room.

The AMLRDC is also funding a number of projects into prediction measurement of tenderness on the slaughterfloor but no commercial results seem likely in the short term. The CSIRO at Cannon Hill are continuing to investigate online measurement technology of the chemical lean content of carton meat. The current systems of sampling, measurement and description result in significant variability which pleases neither the customer nor the processor. Two proto-type machines are currently under investigation.

### Description Systems

The AUS-MEAT national language has been inherited and extended from a variety of Government and industry systems. It is relatively complex. This problem is accentuated because the language involves basic carcass measurements rather than the simplified packages of information that are provided by a grading system. It is becoming clear that the national language could be simplified to ensure better communication and needs to differentiate products more effectively. The process of regular review will continue.

With regard to the basic carcass measurements dentition, standard carcass, and the bruise system are already offering the industry significant commercial benefits. The single fat measurement at the P8 site remains contentious and will be reviewed in the near future.

The AMLC included in its Charter in 1984 the objective of establishing an improved consumer labelling system, commonly titled "Meatmark". Consumer labelling is hotly debated in the Australian industry and the subject of a variety of State and Federal Laws, and industry codes of practice covering nutritional standards, fat content, cut description and so on. The AMLC has decided that industry languages should be established and functioning before consumer labelling proposals are launched nationally. It has limited its activities to a small scale trial which tests a usage based (cooking recommendations) labelling system. A further development of the system will depend on the success of this trial.

Theoretically, usage based labelling could be a more effective means of marketing to export markets as well as to our domestic market. The potential of labelling cartoned product in this way, rather than on the basis of carcass characteristics or traditional primal cut descriptions, will receive considerable attention in the future.

### Total Quality Control

It has often been suggested internationally that the meat processing industry has not adopted quality control principles to the same degree of other manufacturing industries. It has been argued that the total quality control approach could not only handle product description but can incorporate health and hygiene, and lower costs significantly when compared to the more piecemeal approach currently being adopted. This is likely to be a major issue for AUS-MEAT and the industry to consider over the next two to three years. AUS-MEAT is examining the feasibility of conducting voluntary inter-firm comparisons for those abattoirs interested in this approach of improving efficiency.

# The National Livestock Feedback Trials

The National Livestock Feedback Trials will help producers learn about producing the meat the market wants.

The winners will excel at understanding what processors, butchers and consumers want, and breeding and managing their stock under commercial conditions to meet those demands.

But everyone in the meat industry will win from the information we gain from the Trials — the producers who get the feedback they need, processors, butchers and customers who get the quality and consistency of meat they want.

Entrants listed here have put their expertise on the line to be judged a new way. Performance.

There are four Trials, based on four important markets for Australian meat:

- Domestic Market Beef (based in Ballarat)
- US Lamb (based at Murrumbidgee Agricultural Research Institute, Yanco)
- Grainfed Japanese Market (based in Toowoomba)
- Grassfed Japanese Market (based in Rockhampton)

In each case, stock are finished under common conditions and the results calculated on objective measurement or assessment of three performance indicators — liveweight gain, meat yield and meat quality — to determine the winner.

The winner of each Trial receives two places on the AMLC/Rural Press Study Tour to Japan or the US.

The Trials are presented by AUS-MEAT and sponsored by Rural Press Ltd. Follow progressive results over the next five months in leading rural newspapers in each State, with detailed results in FARM Magazine.

## National Livestock Feedback Trial for the GRAINFED JAPANESE MARKET

### Host group:

The Royal Agricultural Society of Queensland, Toowoomba

### National Convenor:

AMLC Director and producer Mr Robin Hart.

Cattle of 19 breed types from Victoria, NSW and Queensland are being finished at Colanya Feedlot.

Six steers from each entrant are being fed for a minimum 150

days, and are expected to gain over 1.3 kg/day over the finishing period, on a nutritionally balanced feed of about 70 per cent grain, with a mineral mix and roughage. Five animals from each entry will be slaughtered.

The Grainfed Trial will end in October with a presentation dinner.

Entrants and results from the first interim weigh-in on June 20, after 48 days on feed, are shown below.

### First interim weigh-in result — 20 June 1988

Entrant	Breed	Average gain per head per day		Entrant	Breed	Average gain per head per day	
1. Aust. Agricultural Co Ltd, (Bob McPherson) Windy Station, Quirindi 2343	Santa Gertrudis	99	2.07	16. The Glen Murray Greys (M. Gad), "The Glen" Wodonga 3690	Murray Grey	92	1.92
2. H K & J M Anderson "Karoola", Inverell 2360	Maine Anjou	119	2.48	17. Warroo Station (J Goodrich), Inglewood 4387	Angus	81	1.69
3. Banana Station, (R. Wilson), Banana 4702	Brahman/Hereford	91	1.89	18. G.A. Greenup & Co "Rosevale", Jandowae 4410	Santa Gertrudis	76	1.60
4. A & G Ball "Grenell", Bowman's Creek, Via Singleton 2330	Angus x Charolais	85	1.76	19. Harpham & Harpham "Yandarlo", Miles 4415	Hereford	74	1.55
5. G W & R Bauer "Wahroonga", Jandowae 4410	Brahman	56	1.18	20. J A Lee "Broadmere", Nanango 4315	Santa Gertrudis	112	2.34
6. R R Beirs & Sons "Minoora", Via Jingellic 2642	Murray Grey	93	1.93	21. Lithgow Partnership Kragra Chianina Stud "Koala", Chinchilla 4413	Chiaford	81	1.69
7. Aloomba Pastoral Co (P.R. Bonner), Wylie Creek Warwick 4370	Simmental x Braford/Hereford	103	2.16	22. G E Morgan "Myall Grove", Condamine 4416	Shorthorn	89	1.86
8. Kenwin Beef Holdings (W. Bridgeford and P. Sparkes) "Lyndley", Jandowae 4410	Poll Hereford	83	1.74	23. D.G. Noller Pty Ltd Gunnadoo, Oakey 4401	Charolais	86	1.80
9. G & R M Cass & Sons "Ayr Charolais" Irriwilbin, Manilla 2346	Charolais Cross	122	2.55	24. R W Pearson Bull Creek, McKinlay 4823	Santa Gertrudis	101	2.11
10. Cheyne Farms Pty Ltd RMB 5230, Timboon 3268	Angus	81	1.67	25. Pownall Grazing Co "Wingfield", Monto 4630	Santa Gertrudis x Hereford	96	2.01
11. E F & C P McCormack Clonlara Droughtmaster Stud "Dilga", Glenmorgan 4423	Droughtmaster	105	2.18	26. L J & A Reade "Glendale", Forbes 2871	Limousin Cross	111	2.31
12. Rimfire Angus Stud (A M & M E Connellan) MacLagan 4352	Angus	94	1.95	27. Riverglen Pastoral Co "Riverglen", Glenmorgan 4423	Charolais & Charolais Cross	109	2.27
13. Gobongo Charbray Stud (B.M. Conroy) Manumbar, Goomeri 4601	Charbray	73	1.52	28. Niagara Grazing Co (J R, M E & W E Sparkes) "Niagara", Bell 4408	Hereford & Poll Hereford	58	1.21
14. D E & M D Dingle Moolboolamana Station Gin Gin 4671	Santa Gertrudis	88	1.84	29. Waterloo Grazing Co (P Gosper), Waterloo Station Glen Innes 2370	Simford	99	2.05
15. — no entry				30. P A Wright & Sons "Kindon", Goondiwindi 4390	Beefmaker	78	1.63
				31. Wallamumbi Pty Ltd (P D A Wright) "Wallamumbi", Armidale 2350	V2V Beefmaker	81	1.69

For more information on the National Livestock Feedback Trials contact AUS-MEAT, P.O. Box 4129, Sydney 2001.

## CONCLUSION

The AUS-MEAT strategy has been to implement a national language at the same time that industry regulation replaced Government regulation. Whilst the meaning and interpretation of this strategy is widely misunderstood, progress to date has been more than satisfactory on both fronts. As the system progresses one could expect a gradual transfer of Government regulation to industry regulation and a similar transfer of industry regulation to self-regulation (deregulation). If this occurs AUS-MEAT should move to less frequent monitoring and a much greater role in industry training. There is a clear demand for training services within the Australian meat industry and an opportunity for an organisation such as AUS-MEAT to provide those services.

The programme and objectives adopted by the Australian Meat and Live-stock Corporation in 1985 are extraordinarily ambitious by any international comparison. Through AUS-MEAT and CALM, Australia is already the first major meat producing country to transfer its national product description from Government to industry. It is the first-country to pursue objective classification of meat and livestock to the degree adopted and the first to establish a national electronic auction system. Payment on "hot weight", the hot trimmed standard carcass and the usage based labelling system are also major marketing innovations. The AMIS software is a creative analysis package from which many meat packers could improve their buying efficiency.

The success of the programme in total will be difficult to assess for some years. Increases in carcass based payment systems, boxed meat usage and more precise customer specifications will be measures of progress. Ultimate success will be the maintenance and/or expansion of major markets, particularly in competition with white meats. This progress is unlikely to be satisfactory without practical strategies by the planners, without an industry commitment to change and a long term view of the programme by all participants.

