![mla logo] MEAT & LIVESTOCK AUSTRALIA

Market Information Services

CATTLE ASSESSMENT MANUAL

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SECTION 1

ASSESSMENT LANGUAGE

MLA describes cattle using a standardised language across all states that rely on a combination of sex, age, fat and degree of muscularity. All classifications account for a more accurate depiction of the market, highlighting aspects which will contribute to the ultimate price of the animal.

1.1   Stock Categories

MLA classifies stock into age, sex and weight (Table 1). More information can also be found in Appendix 1.

Table 1: MLA stock classifications

Stock category	Description
Calves	Male and female calves less than 6 months old.
Vealer steers and heifers	Castrate male or female cattle with no permanent teeth. Less than 12 months old.
Yearling steers and heifers	Castrate male and female cattle. Predominantly with no permanent teeth, however two are permissible.
Grown Steers	Export type castrate male cattle with no more than eight permanent teeth. Usually 4 to 6 teeth.
Grown Heifers	Export type female cattle with no more than eight permanent teeth. Usually 4 to 6 teeth.
Manufacturing Steers	Castrate male cattle of any age including dairy crossbred and aged types.
Cows	Female cattle with up to eight permanent teeth.
Bulls	Male and castrate male cattle of any age showing bullish traits.

Source: AUSmeat

Table 2: Stock categories applicable to MLA cattle store market reports

Stock category	Description
Weaner steers and heifers	Castrate male or female cattle with no permanent teeth. Less than 12 months old.
Yearling steers and heifers	Castrate male and female cattle. Predominantly with no permanent teeth, however two are permissible.
PTIC heifers	Pregnancy Tested In Calf with first calf.
PTIC cows	Pregnancy Tested In Calf after first calf.
Cows and calves <2 months	Cows with calves under 2 months old at foot.
Cows and calves <2-4 months	Cows with 2-4 month calves at foot.
Cows and calves >4 months	Cows with 4 month old calves or older at foot.
Cows and Calves PTIC 4-6 months	Pregnancy Tested In Calf with 4-6 month old calves at foot.
Cows	Female cattle with up to eight permanent teeth.
Feeder steers and heifers	Castrate male and female cattle. Predominantly with no permanent teeth, however two are permissible. Yearling steers and heifers bought by feedlot.

Source: AUSmeat

1.2   Live weight and Carcase weight

MLA assesses cattle as they appear in the saleyards in live weight. A dressing percentage is then applied to convert this stock into carcase weight. The formula for converting stock into carcase weight is:

Carcase weight = live weight x dressing percentage

Most of the changes in live weight we observe are changes to gut content. This occurs immediately after stock have been taken off feed.

Carcase weight losses occur later and is due to the dehydration of muscle and fat tissue that occurs when water is withheld. This leads to a breakdown in these tissues when feed is withheld, causing the stock to draw on their own body tissue to supply them with their energy needs. Losses to carcase weight can occur after 12 hours without water and from 24 hours without feed.

1.3   Fat Score

There is increasing pressure for cattle sellers to meet market specifications for fat depth. A failure to meet fat requirements will often result in significant price discounts offered by cattle buyers. Outlined in Appendix 1, Table 9 (page 11), there are six fat scores ranging from 1 (lean) to 6 (fat). The amount of fat coverage for each score is shown in Table 3.

Table 3: Score fat table

Score	P8 site (mm)	12th rib (mm)	
1	0–2	0–1	
2	3–6	2–3	
3	7–12	4–7	
4	13–22	8–12	
5	23–32	13–18	
6	33+	18+	

Source: AUSmeat

Figure 1: Reference points used for fat assessment
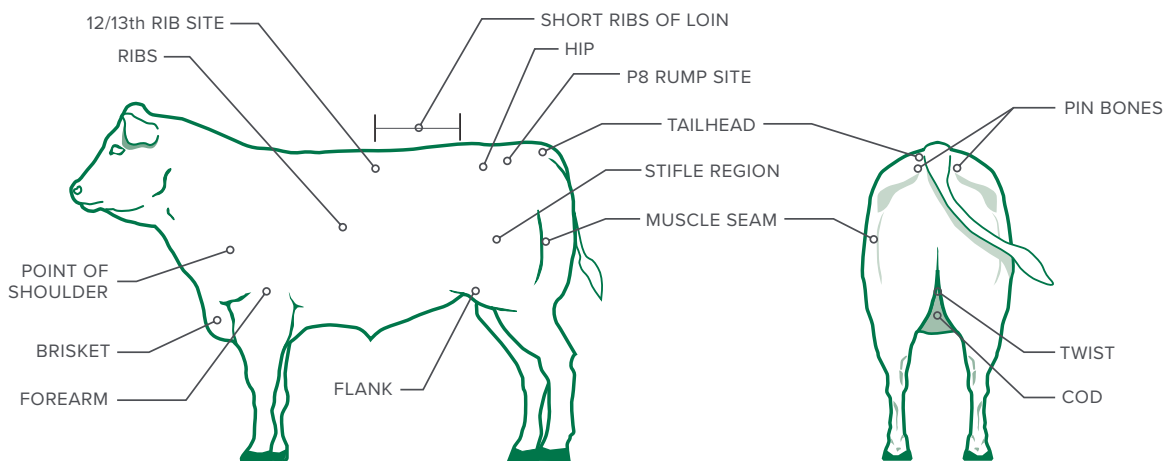
Identifiying the fat score:

- **Fat score 1**: There is no fat around the tail head.
- **Fat score 2**: There little fat around the tail head. Short ribs of loin are sharp to touch and easily distinguished. Hipbones and ribs are hard to the touch.
- **Fat score 3**: Short ribs can be individually felt by feel rounded. Ribs are clearly felt. Hipbone is still quite hard and only a light deposit of flank fat around the tail head.
- **Fat score 4**: Short ribs are only felt with firm pressure. Moderate fat cover around tail head. Hipbone carrying some fat cover.
- **Fat score 5**: Short ribs cannot be felt or need firm pressure. Ribs and hips are well covered. Tail head fat is at slight mounds, soft to touch.
- **Fat score 6**: Hard to distinguish bone structure. Tail head buried in fatty tissue. All other sites show obvious soft fat deposits. With a hand placed flat over the ribs behind the shoulder, it is difficult to detect these ribs.
  Source: AUSmeat

1.4 Muscle Score

To help identify the red meat content of different cattle, a method of evaluating shape, deemed 'muscle score', is used.

Muscle score measures the degree of muscularity of an animal and describes the shape of cattle independent of the influence of fatness. Muscling is the degree of thickness or convexity of an animal relative to its frame size, after adjustments have been made for subcutaneous fat. The degree of muscling positively influences dressing percentage and meat yield, therefore indicating the greater value of more heavily muscled animals.

There are five muscle scores ranging from A (extremely well-muscled) through to E (lightly muscled). These scores are outlined in Figure 2.

Figure 2: The five muscle scores
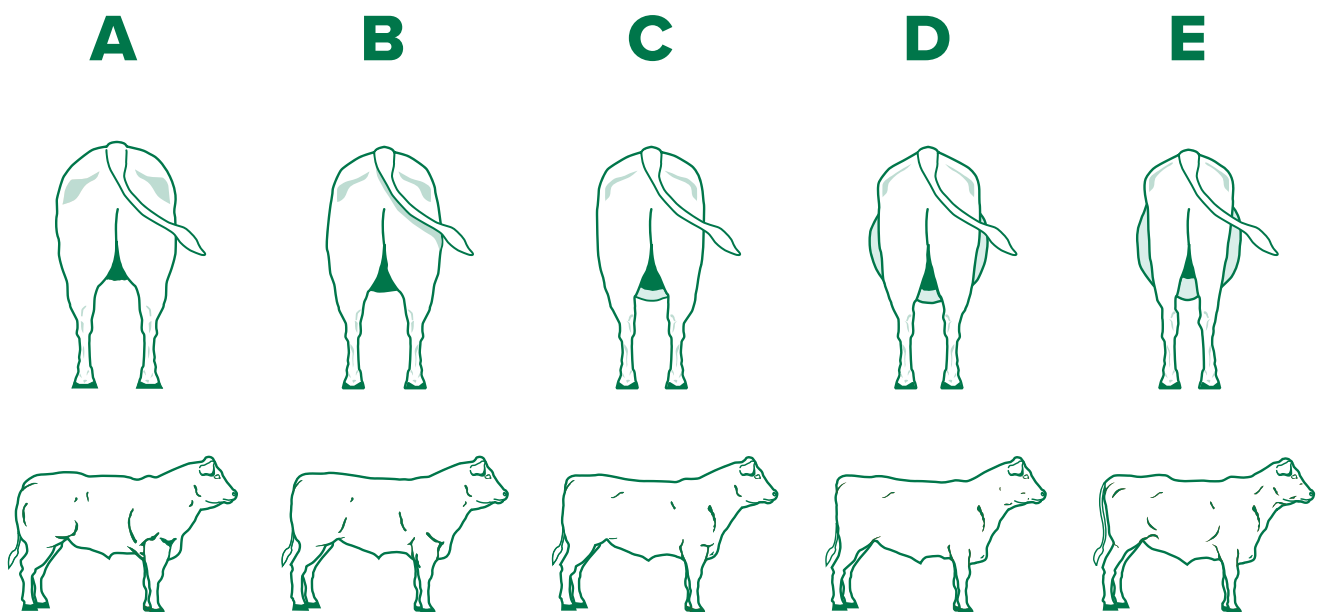
1.5 Dentition

While market reporters are not required to mouth (check) cattle's dentition, it is still important to understand how dentition is measured as it is relative to the stock categories you are required to assess and report on.

Mouthing cattle is done by assessing how many permanent incisor teeth are shown, see Appendix 1, table 10 (page 12). The age at which teeth erupt is extremely variable and is thought to be affected by breed and nutrition. Table 4 gives a brief overview.

Table 4: Assessing age by dentition

Teeth	Age
Milk or 0 permanent incisors	0–18 months
2 permanent incisors	18–30 months
4 permanent incisors	24–36 months
6 permanent incisors	30–42 months
8 permanent incisors	36+ months

Source: AUSmeat

1.6 Dressing Percentage

Dressed or carcase weight refers to the weight of a carcase once the live animal has been slaughtered, with hide, feet, tail, head and innards removed. AUS-MEAT language refers to this as Hot Standard Carcase Weight (HSCW). Dressing percentage is simply carcase weight expressed as a percentage of live weight. That is:

> – **Dressing percentage = (carcase weight/live weight) x 100**

Carcase weight can be found by multiplying live weight by dressing percentage, that is:

> – **Carcase weight = live weight x dressing percentage**

The term 'yield' is often used instead of dressing percentage. It is important to not confuse the term 'yield' in this context with 'saleable meat yield', which is the difference between dressed weight and saleable meat content.

Any factor that affects live weight or carcase weight will affect dressing percentage. Such things include:

> – Gutfill
> – Transit loss
> – Weather conditions
> – Feed type. e.g. lot fed cattle
> – Breed
> – Pregnant cows

A dressing percentage matrix was introduce by the NSW Department of Primary Industries and for your reference for assessment can be found in Appendix 1, Figure 3 (page 16).

1.7 Sales Prefixes

The following classifications, known as sales prefixes, effect price determination. They are used by MLA to highlight different stock characteristics with each category generally providing a price differential compared to the stock to be slaughtered for the larger domestic and export markets. Table 5 highlights the different sales prefixes.

Table 5: Sales prefixes

Sales Prefix abbreviation	Description
GF	Certified grain fed cattle.
RS	Cattle purchased by restocker, either to be re-fattened or kept for future breeding.
FD	Cattle purchased by lot feeders.
DA	Dairy bred cows, bulls and manufacturing steers.
PTIC	Cows or grown heifers pregnancy tested in calf.
PC	Pastoral cattle – usually used to classify those from the pastoral regions of WA.
Processor (Grass)	Stock going to slaughter.
LE	Stock going to live export.

1.8 Breed

The MLA classifies stock into breed categories when reporting on store stock only. If you have to report on a store market the following breeds are available for use. If a breed code is not in Table 6, please let us know so we can create one.

Table 6: Breed codes for reporting on store stock

Breed	Breed Code	Breed	Breed Code
Angus	1	Friesian	17
Angus X Friesian	22	Friesian Cross	18
Belgium Blues	28	Hereford	2
Black Baldy	9	Herford X Angus	4
Bos Indicus Cross	7	Herford X Friesian	21
Bradford	30	Jersey	26
Brahman	10	Murray Grey	3
British Cross	8	Murray Grey X Friesian	23
Charolais	15	Murray Grey Friesian	27
Charolais X Angus	24	Red Angus	16
Charolais X Friesian	20	Santa Gertrudis	6
Cross Breed	13	Shorthorn	11
Droughtmaster	14	Shorthorn X Friesian	19
European	12	Simmental	29
European Cross	5	Wagyu	25

SECTION 2

ASSESSMENTS

Under the evidence guide in Appendix 3 (Table 17), you are required to undertake a minimum of three forms of training to demonstrate competency.

Three forms of evidence are required and this means three different kinds – not three pieces of the same kind. These include:

1. **Formal Accreditation** – Undertake notionally recognised independent, standardised units of competency for sheep assessment via a Registered Training Organisation (RTO).
2. **Annual abattoir assessment training day** – 70% of the selected stock must be accurately assessed to maintain competency. Appendix 2.
3. **Question and answer assessment** – A series of multiple choice and question answer scenarios provided through MLA's "The FEEDlot" – 100% pass mark required.

All these components are required to be fulfilled annually in order to maintain your accreditation.

A summary of the expected competency level is outline in Appendix 3, Table 15, Performance Criteria, Point 3 Accuracy Standards.

Table 7: MLA competency level

Trait	Maximum Accuracy Variation	Explanation of competency
Live weight	Within 7% of actual weight	Cattle live weight estimates are within 7% of actual cattle live weight. 70% of the animals assessed must be within this range.
Dressing Percentage	(+/-) 3%	Estimate must be within 3% (+/-) of actual dressing percentage. 70% of the animals assessed must be within this range.
Carcase weight	(+/-) 12kg	Estimate must be within 12kg (+/-) of actual carcase weight. 70% of the animals assessed must be within this range.
Muscle Score	Within 1 (+/-) grade of muscle score	Must be within 1 grade (+/-) of the actual muscle score. 70% of the animals assessed must be within this range.
Fat Score	Within 1 (+/-) score of fat score	Estimate must be within 1 score (+/-) if the actual fat score. 70% of the animals assessed must be within this range.

SECTION 3

MARKET REPORT COMMENTS

This guideline outlines the requirements for cattle comments for all physical market reports.

MLA is a national service, therefore the quality, content and language must be standardised without losing the independence or individualistic nature of each market.

Market reports are written and then disseminated to a variety of clients including producers, agents and corporate clients such as Rural Press. Therefore, the structure and content of the comments is important to ensure the true picture from each market is communicated. In the majority of instances, MLA reports are displayed in the commentary format only and therefore, it is essential that all aspects of the market are accurately described.

3.1 General commentary guidelines

Introduction

The first paragraph should be an overview of the market. The purpose of this section is to provide the reader of the report with an indication of what has actually happened at the market. The following should be included in this paragraph as a bare minimum. Remember to use a short, sharp sentence structure.

- Yarding (supply) – greater and less and why?
- What impacted on the market? (Explain its relevance and consequences to the day's market)
- Buyer competition
  - Were all the regular buyers in attendance?
  - Stronger or weaker (why?)
  - Where did the cattle go?
- Yarding break up
  - E.g. the yarding consisted of good quality vealer and yearling steers, while yearling heifer numbers were limited to a few isolated pens
- What was quality like?
- Overall actual price movements (up/down)

Body

For cattle segregate the body of the commentary into:

1. Young cattle
2. Grown cattle, cows and bulls

Using the following as a guide:

- Quote price trends as X¢ dearer or X¢ cheaper and provide a reason. Provide reason behind price movements relevant to own market.
- Express prices as a range and/or average, unless the top price is a feature of the market.
- When quoting prices and weights, use the MLA standard weight range.
- Quote the relevant indicator grades, unless it is a feature of the sale.
- There should be a correlation between the comments and data.
- Do not use subjective language when explaining a variation in price.
- The number of young cattle, grown cattle and cows penned should be quoted if the break-up is available if not provide an estimate as a number or percentage.
- Don't overload your commentary with price – you need to find a balance.
- Try not to repeat the same word too many times.
- Important for comments to flow from light to heavy weights.
- For cattle, try and only quote live weight prices across all categories.
- If open auction cattle have been removed from the total yarding, be sure to mention them in the first paragraph of your comments.

Words to avoid:

- **Fully firm** – use firm instead.
- **Poor conditioned** – use Lighter Conditioned or Lighter Framed.
- **Sappy** – use well presented.
- **Rates** or **values.**
- Do not use **'grain-fed'** unless prefix states they are certified – either say supplementary fed or grain assisted.

Grammar and abbreviations

Table 8 is a list of abbreviations; grammatical corrections and other related structural suggestions that you should adopt in order to maintain a consistent high standard of market commentary.

Table 8: List of abbreviations; grammatical corrections and other related structural suggestions

	Example	Rule
Quoting cattle prices	Vealers were 4¢ to 5¢ dearer and averaged 121¢/kg.	¢/kg is used once at the end of a sentence where a price, or change in price has been quoted. All prices must have a "¢" immediately after the number.
Quoting live weight and carcase weight	lwt or cwt following a quoted price	Only use the abbreviations in the report when there is a change in the price quoted. For example, if the prices being quoted have changed from ¢/kg lwt to ¢/kg cwt it would be then necessary to use the abbreviation.
Quoting weight categories	Light, medium, heavy weight	You can quote specific weight ranges if necessary.
Quality	Well-finished, well-conditioned	Quality is described subjectively and must be followed by muscle and fat score – with exception where quality is described in the opening paragraph to provide an overall picture of the market on that particular day.
Quoting muscle and fat scores	The C3 and C4 steers	Provide reason for variation in prices with emphasis on muscle and fat scores. Classification of muscle and fat score should be quoted throughout the commentaries alongside any price quotations.
Write in past tense	500 young cattle were offered	Keep your 'tense' consistent throughout the market report.
Capital letter for cattle breeds	Friesian cows	For every breed included in your market report, a capital should be used.
Round up/down prices	183¢/kg, or $185/head	If market report states 183.4¢/kg, round down to 183¢/kg, if it states 183.6¢/kg, round up to 184¢/kg.

SECTION 4

QUALITY MANAGEMENT

A Quality Management System (QMS) is a set of policies, processes and procedures required for the planning and execution of a business.

MLA's Market Information Service (MIS) has been certified through SAI Global for its QMS since the 28th August 2006. In that time, the QMS has continued to provide direction and control, highlighted areas of concern and created areas of improvement within the organisation.

The QMS is currently certified to the AS/NZS ISO 9001:2008 standards. The main benefit to having a QMS and being certified is to help maintain the quality and integrity of the data that we provide to levy payers. It has also been developed and implemented to ensure that all customer and stakeholder requirements are satisfied.

Quality problems arising in various areas are to be identified and solved with timeliness, professionalism, efficiency and cost effectiveness. We focus our resources, both technical and human, towards the prevention of quality deficiencies to satisfy organisational goals.

The successful operation of the system relies upon the co-operation and involvement of personnel at all levels. Our commitment to quality will ensure the continued success of our service and the satisfaction of clients and other key stakeholders.

Some of the purposes of the QMS are:

- Requirements, feedback and opportunities are addressed and documented within the management system at the appropriate location and that they are addressed.
- Ensure all staff using the QMS are trained and provided with an induction to the system.
- Produce records and provide evidence that system requirements have been met.
- Continually measure, monitor and analyse any changes that need to be made to ensure the quality and integrity of the data.
- Execute an internal and external audit annually.
- Log any opportunities that will help improve the QMS.
- The five tick standards mark helps us to let customers know that we are certified with the market leading certification body in Australia.

Certified System ™

Quality
ISO 9001
SAI GLOBAL

APPENDIX 1

AUS-MEAT LANGUAGE

Table 9: Fat measurement P8 site

Manual measurement

- Fat depths may be measured manually using a cut and measure knife.
- The measurement is taken at the P8 site and is recorded on the Feedback Sheet as consistent indication of the carcase.

Automatic measurement

- Fat depths may be measured electronically at the P8 site using a Hennessey Grading probe.
- The reading is fed into a computer and the measurement recorded on the feedback Sheet.

### Fat Class

Below shows mm of fat at P8 site.

Class	mm
1	up to 2
2	over 2 and up to 6
3	over 6 and up to 12
4	over 12 and up to 22
5	over 22 and up to 32
6	over 32

Source: AUSmeat

P8 site
ALIGNED WITH CREST OF 3RD SACRAL VERTEBRA
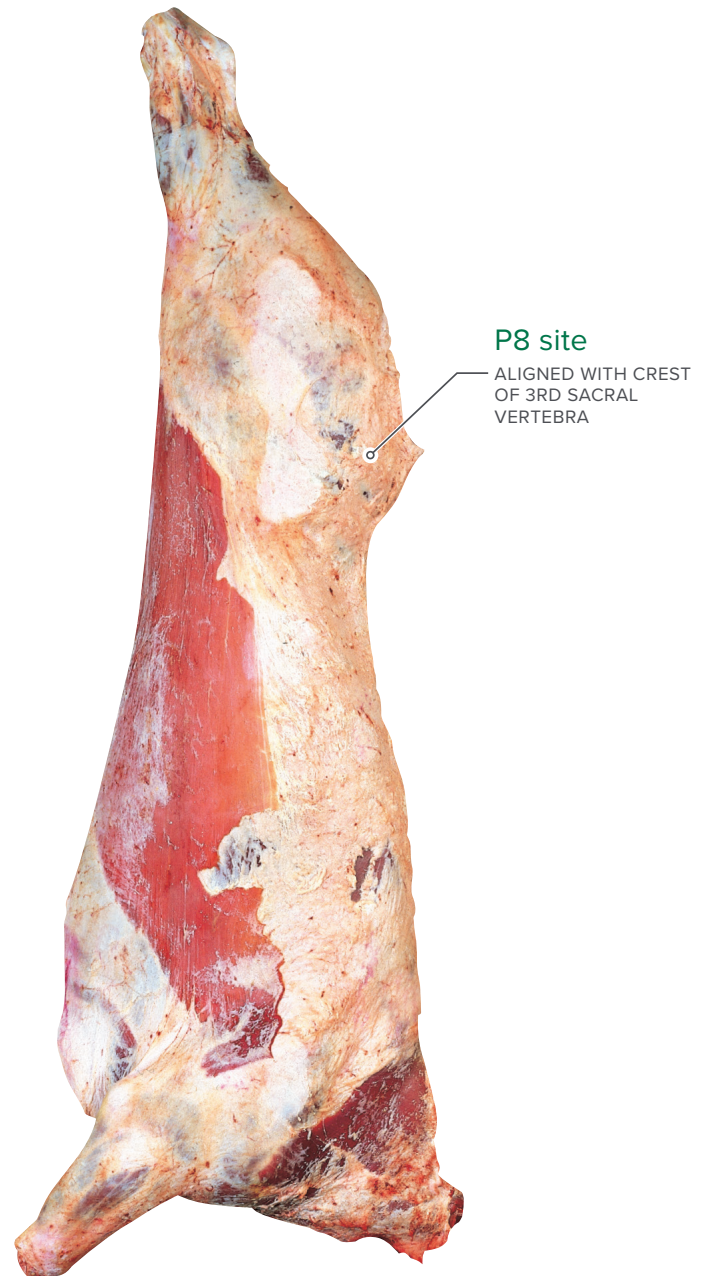
Table 10: Basic categories

VEAL *V*

**Female or castrate or entire male bovine that:**

- Has no evidence of eruption of permanent incisor teeth.
- Weighs no more than 150kg (HSCW).
- In males, shows no evidence of SSC.
- Shows youthfulness and Veal colour (Veal meat colour must not exceed the AUS-MEAT Veal colour standard V5).
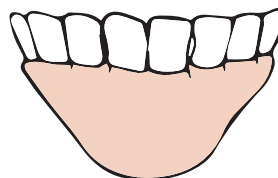
BEEF *A* or BEEF

Female or castrate or entire male bovine that:

- In males shows no evidence of SSC.
- Dentition range for this category is 0-8 permanent incisor teeth.
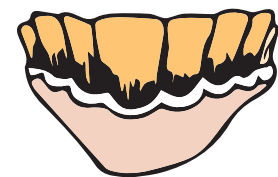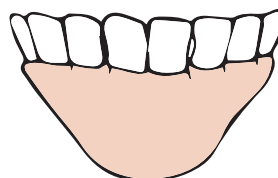
BULL *B*

Entire or castrate male bovine animals showing signs of SSC

- SSC in bovine are defined by the following well developed aspects:
  - Muscles on the neck and shoulder.
  - Inguinal canal and prominent erector muscle.
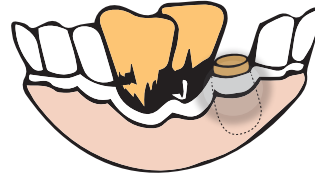 - Penis snub.
  - Pubic tubercle.
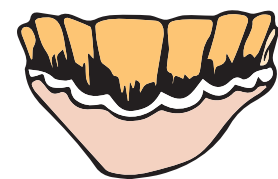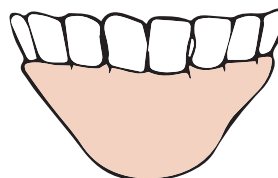
Source: AUSmeat

SSC = Secondary Sexual Characteristics
HSCW = Hot Standard Carcase Weight

Table 11: Definition of a permanent incisor

**A permanent incisor is defined as:**

- A new incisor that has broken (erupted) through the gum surface.
- Permanent incisors are used to determine age in animals.
- Animals with 1-2 permanent incisors are recorded as 2 tooth.
- Animals with 3 or 4 incisors are recorded as 4 tooth.

Source: AUSmeat

Table 12: Alternative categories to bull

Yearling Entire *YE*

- Entire male not assessed for SSC.
- Has no evidence of eruption of permanent incisor teeth.
- Carcase weighs more than 150kg (HSCW).
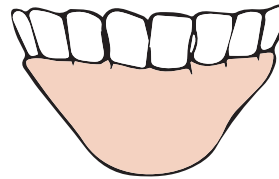
Young Entire 'YGE'

- Entire male not assessed for SSC.
- Has no evidence of eruption of more than 2 permanent incisor teeth.
- Carcase weighs more than 150kg (HSCW).

Young Bull 'BYG'

- Castrate or entire male that shows signs of SSC.
- Has no evidence of eruption of more than 2 permanent incisor teeth.
- Carcase weighs more than 150kg (HSCW).

Source: AUSmeat

SSC = Secondary Sexual Characteristics
HSCW = Hot Standard Carcase Weight

Table 13: Alternative categories to beef

Yearling Steer *YS*	**Castrate or entire male bovine that:** • Shows no evidence of SSC. • Has 0 permanent incisor teeth.	*up to 18 months	
Yearling Beef *Y*	**Female, castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more than 2 permanent incisor teeth.	*up to 18 months	
Young Steer *YGS*	**Castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more than 2 permanent incisor teeth.	*up to 30 months	
Young Beef *YG*	**Female, castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more then 2 permanent incisor teeth.	*up to 30 months	
Young Prime Steer *YPS*	**Castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more than 4 permanent incisor teeth.	*up to 36 months	
Young Prime Beef *YP*	**Female, castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more than 4 permanent incisor teeth.	*up to 36 months	
Prime Steer *PRS*	**Castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more then 7 permanent incisor teeth.	*up to 42 months	
Prime Beef *PR*	**Female, castrate or entire male bovine that:** • Shows no evidence of SSC. • Has no more than 7 permanent incisor teeth.	*up to 42 months	
OX *S*	**Female that:** • Shows no evidence of SSC. • Has no more than 7 permanent incisor teeth.	*up to 42 months	
Steer *SS*	**Castrate or entire male bovine that:** • Shows no evidence of SSC. • Has up to 8 permanent incisor teeth.	*any age	
Cow *C*	**Female that:** • Has 8 permanent incisor teeth.	*all ages	

Source: AUSmeat

* Chronological age as shown is approximation only

SUMMARY – BOVINE

Table 14: Basic categories and ciphers

CATEGORY	CIPHER	DEFINITION
BEEF	*A*	Product identified as Category BEEF or Cipher *A* can be derived from Female, Castrate or Entire Male Bovine animals with no Secondary Sexual Characteristics. Dentition range from 0 to 8 permanent incisor teeth. • Product prepared from this category for the domestic trade in Chilled condition must be identified as "**BEEF**". • Frozen product identified with the ***A*** cipher diverted from export trade for domestic disposal may retain the cipher ***A***. • Primal cuts from Veal carcases weighing 70.1 to 150kg (HSCW) can be included in this category.
BULL and BEEF	*BA*	A combination pack containing mixed product derived from Categories Bull *B* and Beef *A* must be described as **BULL and BEEF** or with the cipher ***BA***.
VEAL	*V*	Veal carcases are derived from female, castrate or entire male bovine that shows no evidence of permanent incisor teeth and are youthful and veal colour. (Veal meat colour must not exceed the AUS-MEAT Veal colour standard V5). Carcases must not show evidence of secondary sexual characteristics (SSC). **OPTIONAL SUPPLEMENTARY CLASS** **Light Veal (Bobby) –** • weighing no more than 40kg (HSCW). **Light Veal –** • weighing no more than 70.kg (HSCW). • Veal Colour : (refer AUS-MEAT Veal meat colour standards). **VEAL –** Cuts shall be derived from carcases: • weighing 70.1kg to 150kg (HSCW). • Veal Colour : (refer AUS-MEAT Veal meat colour standards.
BULL	*B*	Bull carcases are derived from Entire or Castrate Male Bovine animals showing signs of Secondary Sexual Characteristics. Secondary Sexual Characteristics (SSC) in Bovine are defined by the following well developed aspects: • Muscles of the neck and shoulder. • Inguinal canal and prominent erector muscle. • Penis stub. • Pubic tubercle. • Exposed area of the M. semimembranosus muscle-triangular and, relatively scarce scrotal fat and dark muscle colour.

ALTERNATIVE CATEGORIES

Further reference on the AUS–MEAT Language can be located at the AUS–MEAT website: *www.ausmeat.com.au/industry-standards/meat.aspx*

Source: AUSmeat

SSC = Secondary Sexual Characteristics
HSCW = Hot Standard Carcase Weight

NSW Department of Primary Industries dressing percentage matrix

Figure 3: Dressing percentage matrix

CATTLE CARCASE WEIGHT CALCULATOR (HSCW)

LIVEWEIGHT	46%	47%	48%	49%	50%	51%	52%	53%	54%	55%	56%	57%	58%	59%
	Dressing Percentage													
300	138	141	144	147	150	153	156	159	162	165	168	171	174	177
310	143	146	149	152	155	158	161	164	167	171	174	177	180	183
320	147	150	154	157	160	163	166	170	173	176	179	182	186	189
330	152	155	158	162	165	168	172	175	178	182	185	188	191	195
340	156	160	163	167	170	173	177	180	184	187	190	194	197	201
350	161	165	168	172	175	179	182	186	189	193	196	200	203	207
360	166	169	173	176	180	184	187	191	194	198	202	205	209	212
370	170	174	178	181	185	189	192	196	200	204	207	211	215	218
380	175	179	182	186	190	194	198	201	205	209	213	217	220	224
390	179	183	187	191	195	199	203	207	211	215	218	222	226	230
400	184	188	192	196	200	204	208	212	216	220	224	228	232	236
410	189	193	197	201	205	209	213	217	221	226	230	234	238	242
420	193	197	202	206	210	214	218	223	227	231	235	239	244	248
430	198	202	206	211	215	219	224	228	232	237	241	245	249	254
440	202	207	211	216	220	224	229	233	238	242	246	251	255	260
450	207	212	216	221	225	230	234	239	243	248	252	257	261	266
460	212	216	221	225	230	235	239	244	248	253	258	262	267	271
470	216	221	226	230	235	240	244	249	254	259	263	268	273	277
480	221	226	230	235	240	245	250	254	259	264	269	274	278	283
490	225	230	235	240	245	250	255	260	265	270	274	279	284	289
500	230	235	240	245	250	255	260	265	270	275	280	285	290	295
510	235	240	245	250	255	260	265	270	275	281	286	291	296	301
520	239	244	250	255	260	265	270	276	281	286	291	296	302	307
530	244	249	254	260	265	270	276	281	286	292	297	302	307	313
540	248	254	259	265	270	276	281	286	292	297	302	308	313	319
550	253	259	264	270	275	281	286	292	297	303	308	314	319	325
560	258	263	269	274	280	286	291	297	302	308	314	319	325	330
570	262	268	274	279	285	291	296	302	308	314	319	325	331	336
580	267	273	278	284	290	296	302	307	313	319	325	331	336	342
590	271	277	283	289	295	301	307	313	319	325	330	336	342	348
600	276	282	288	294	300	306	312	318	324	330	336	342	348	354

Time off Feed/Water	Percentage liveweight loss	Increased dressing %
1 hour	1.5%	0.75%
2 hours	2.5%	1.25%
4 hours	4%	2%
12 hours	7%	3.5%
16 hours	8%	4+%

Guide to Dressing % (2 hours off feed)

Fat score	P8 (mm) Fat	Vealers yearlings	Young cattle	Heavy steers	Cows <200 kg	Cows 200 to 250 kg	Cows >250 kg
1	0-2	49-50	50-53	48-52	38-40	41-44	42-45
2	3-6	50-53	51-54	50-53	39-41	42-45	43-46
3	7-12	51-56	52-56	51-55	40-44	45-53	44-50
4	13-22	53-57	54-58	53-57	43-49	47-51	49-55
5&6	23+		56-59	55-58	47-50	50-56	51-56

Bulls	
<200 kg	48-54
200 to 300 kg	53-57
>300 kg	54-58

Source: adapted from NSW DPI

APPENDIX 2

MLA's Cattle assessment sheet

Figure 4: Cattle assessment sheet

Pen No.	Description	Muscle score	Fat score	Live weight	Dressing %

APPENDIX 3

ANNUAL ABATTOIR ASSESSMENT AND REGIONAL WORKSHOP

Under assessments (see Section 2), you are required to undertake a minimum of three forms of training to demonstrate competency.

Purpose

The purpose of the annual abattoir assessment and regional workshop is to ensure those enlisted assess livestock using methods and procedures which provide accurate assessments of cattle, including weight, breed, fat and muscle score and dressing percentage; can identify livestock and minimise undue stress and risk to livestock, handlers and assessors.

Elements to be covered during annual abattoir assement and regional worskhops

Table 15: Elements and performance criteria

ELEMENT	PERFORMANCE CRITERIA
1. Training requirements cattle	1.1 Hazards in the assessment environments are recognised and any concerns reported. Comply with third party WHS requirements. 1.2 Identify stock categories, muscle score, fat score, weight, breed and sex in relation to AUS-meat standards. 1.3 Handle livestock with care when assessing for fat and muscle score and weight. 1.4 Suitable personal protective equipment is selected and used in relation to WHS requirements.
2. Attaining formal accreditation	2.1 Must pass the formal unit of competency for cattle assessmnet. 2.2 Accurately assess stock to the standards set out in the trianing package. 2.3 Consistently assess stock to the accuracy standards.
3. Accuracy standards	3.1 Cattle live weight estimates are within 7% of actual cattle live weight. 70% of the animals assessed must be within this range. 3.2 Estimate must be within 3% (+/-) of actual dressing percentage. 70% of the animals assessed must be within this range. 3.3 Estimate must be within 12kg (+/-) of actual carcase weight. 70% of the animals assessed must be within this range. 3.4 Must be within 1 grade (+/-) of the actual muscle score. 70% of the animals assessed must be within this range. 3.5 Estimate must be within 1 score (+/-) if the actual fat score. 70% of the animals assessed must be within this range.
4. Maintaining accreditation	4.1 Once formal accreditation is received maintaining your accreditation is required by: • Annual abattoir assessment training day. 70% of the selected stock must be accurately assessed to maintain competency (see Appendix 2; Figure 4). • Annual MLA FEEDLOT question and answer assessment – this is based on livestock assessment and market commentary (multiple choice). • Acquire results and determine further action with LMO Manager.

Table 16: Required skills and knowledge for Livestock Market Officers

This table describes the skills and knowledge required for Livestock Market Officers.

Required skills
• Identify hazards and follow safe work practices. • Recognise livestock abnormalities. • Read and comprehend oral and written information and instructions, write fundamental statements and maintain livestock assessment and reporting records. • Assess and calculate livestock numbers. • Current drivers license. • Apply contingencies in adverse weather conditions. Eg: raining, which makes assessment difficult. • Use oral communication skills/language competence to fulfil the job role specified by the organisation including questioning, active listening, asking for clarification when necessary and seeking advice from supervisor. • Use numeracy skills to estimate, calculate and record routine assessments and workplace practices. • Use interpersonal skills to relate to people from a range of backgrounds and abilities. • Develop constructive relationships with key livestock sales personnel.
Required knowledge
• Livestock breeds, sex and age can be identified. • Conduct training within saleyard and abattoir environments. • Livestock classification or scoring system. • AUS-meat standards. • Assess for quality.

Table 17: Evidence guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the assessment guidelines for the training package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency	The evidence required to demonstrate competency must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following. A minimum of three forms of evidence are required to demonstrate competency. Three forms of evidence means three different kinds – not three pieces of the same kind. All assessments must be conducted against AUS-meat industry standards and regulations as well as MLA's guidelines.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some sites of assessment may differ due to regional and enterprise circumstances. Competency must be identified and sustained over time.
Context and specific resources for assessment	Real saleyard environment. Real abattoir environment.