



## Eastern Young Cattle Indicator

### What is the Eastern Young Cattle Indicator?

The Eastern Young Cattle Indicator, or EYCI, is a seven-day rolling average of 24 young cattle categories from 24 saleyards across Queensland, New South Wales and Victoria. It is expressed in cents per kilogram carcass (or dressed) weight (¢/kg cwt) and is rounded to the nearest ¼ cent.

The EYCI is the base for the MLA/SFE Cattle Futures contract, listed on the Sydney Futures Exchange.

The EYCI is produced daily by Meat & Livestock Australia's National Livestock Reporting Service (NLRS). The EYCI was developed in 1999 after the producing and lot feeding sectors identified the need for a cattle futures contract. Highlighted as critical to the cattle futures contract's success was the ability to price the contract against an objectively reported, robust daily cattle price indicator.

The EYCI is designed to be applicable to a wide range of cattle and beef industry participants, and has sufficient diversity (both geographic and cattle

type) to prevent manipulation by activity in the physical cattle market.

The young cattle market was chosen as the base for the EYCI as it is the largest, most transparent of the physical cattle markets and attracts the widest range of industry participants.

### What is a seven-day rolling average?

At any point in time, a seven-day rolling average includes data from the past seven days.

In the case of the EYCI, this refers to seven calendar days, or one week.

## EYCI Composition

The EYCI includes vealer and yearling heifers and steers, grade score C2 or C3, with liveweight from 200kg (Figure 1). The EYCI currently includes cattle purchased for restocking, lot feeding and slaughter from the relevant prime sales.

Individual states were integrated into the EYCI at the commencement of NLRS reporting in that state:

- NSW – August 1996
- Victoria – May 1997
- Queensland – October 1999

Feeder cattle were integrated into the EYCI from 17 November 2004.

The prime sales included in the EYCI are outlined in Figure 2. Cattle sold at store sales are not included in the EYCI.

**Figure 1. Cattle categories in the EYCI**

Classification	Muscle and fat score	Liveweight (kg)
Vealer Steers	C2 & C3	200.1 – 280
		280.1 – 330
		≥330.1
Vealer Heifers	C2 & C3	200.1 – 280
		280.1 – 330
		≥330.1
Yearling Steers	C2 & C3	200.1 – 330
		330.1 – 400
		≥400.1
Yearling Heifers	C2 & C3	200.1 – 330
		330.1 – 400
		≥400.1

**Figure 2. Prime sales in the EYCI**

Market	Sale day
<b>NSW</b>	
Armidale	Thursday
Bathurst	Wednesday
Casino	Wednesday
Coonamble	Friday
Dubbo	Thursday
Finley	Friday
Forbes	Monday
Gunnedah	Tuesday
Inverell	Tuesday
Scone	Tuesday
Singleton	Wednesday
Tamworth	Monday
Wagga	Monday

Market	Sale day
<b>Victoria</b>	
Bairnsdale	Thursday
Ballarat	Monday
Camperdown	Tuesday
Pakenham	Monday
Shepparton	Tuesday
Warrnambool	Wednesday
Wodonga	Tuesday
<b>Queensland</b>	
Dalby	Wednesday
Warwick	Tuesday
Toowoomba	
– Elders	Monday
– Landmark	Monday

## How is the EYCI calculated?

The EYCI is the average price of all cattle meeting the EYCI specification from the past seven calendar days. It is calculated as follows, using the average liveweight (lwt) price, dressing percentage and number of head for individual pens.

1. The carcass weight (cwt) price for each pen is calculated.  

$$\text{cwt price} = \text{lwt price} \div \text{dressing percentage}$$
 (Note: express dressing percentage as a fraction)

2. The average price for each pen is weighted by the number of head in the pen. This is done by calculating the pen value.

$$\text{Pen value} = \text{cwt price} \times \text{head in pen}$$

3. The EYCI value (¢/kg cwt) is obtained by dividing the sum of all pen values by the total number of cattle meeting the EYCI specification, and rounding to the nearest ¼ cent.

$$\text{EYCI} = \frac{\text{Sum of all pen values}}{\text{Total head in EYCI}}$$

Figure 3 provides a simple example illustrating how the EYCI is calculated. In reality, the number of cattle included in the EYCI is much higher than that shown.

**Figure 3. Example of EYCI calculation**

On 3/6, EYCI comprises sales from 28/5 to 3/6:						
Date	Sale	Pen No.	Head	Lwt Price	Dressing %	Pen value
WED 28/5	Bathurst	1	10	160	55	2909
		2	20	168	53	6340
		3	15	165	55	4500
		4	10	173	54	3204
THU 29/5	Bairnsdale	1	8	156	55	2269
		2	10	190	53	3585
		3	20	200	54	7407
	Armidale	1	16	185	56	5286
		2	25	172	53	8113
FRI 30/5	Finley	1	15	165	56	4420
MON 2/6	Tamworth	1	17	165	54	5194
		2	9	160	55	2618
	Toowoomba	1	25	154	55	7000
		2	30	165	54	9167
		3	9	180	56	2893
TUE 3/6	Gunnedah	1	6	190	55	2073
		2	20	185	54	6852
	Wodonga	1	15	170	55	4636
<b>Total 28/5 – 3/6</b>			<b>280</b>			<b>88465</b>
<b>EYCI = 88465 / 280 = 315.95 (rounded to 316.00)</b>						
On 4/6, new sales are included, replacing sales from 28/5:						
WED 4/6	Bathurst	1	50	165	54	15278
		2	21	150	56	5625
<b>Total 29/5 – 4/6</b>			<b>296</b>			<b>92416</b>
<b>EYCI = 92416 / 296 = 312.22 (rounded to 312.25)</b>						

## The EYCI as an indicator of general cattle markets

The EYCI is designed to be applicable to a wide range of beef industry participants, and describes general movements in cattle market prices in much the same way that the All Ordinaries share index describes general price movements in the stock market.

The EYCI is generally a good indicator of the physical market, with movements in the EYCI closely reflecting movements in many cattle prices. This is demonstrated by the high correlations observed between selected prices and the EYCI (Figure 4), and can also be seen in Figures 5 to 7. The higher the correlation between two prices, the better the relationship.

Movements in the EYCI closely reflect movements in young cattle prices such as domestic trade steer and feeder cattle prices. The price relationship is particularly close for NSW, Queensland and Victoria, the three states comprising the EYCI.

Movements in the EYCI also closely reflect movements in young cattle prices in states outside the EYCI. This is to be expected, as many major Australian and global factors influencing beef demand and supply impact across all states. In addition, interstate trading opportunities and movements of cattle and beef also prevent young cattle prices from moving too far from those in neighbouring states.

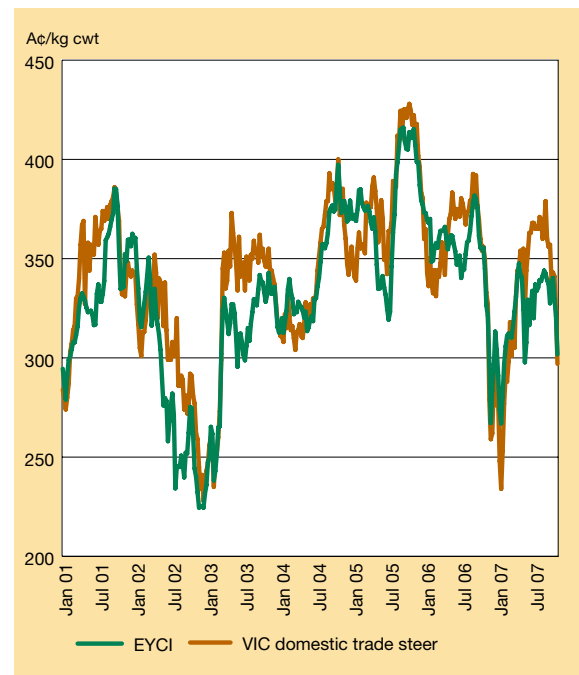
Price movements in WA and Tasmania follow the general trends of the EYCI, due to the influences described above. However, these states show evidence of other price trends, related to distance from major markets, focus on other trades such as live export, or local buyer factors (eg meat works closures or openings) and regional weather influence.

**Figure 4. Relationship between the EYCI and selected physical prices**

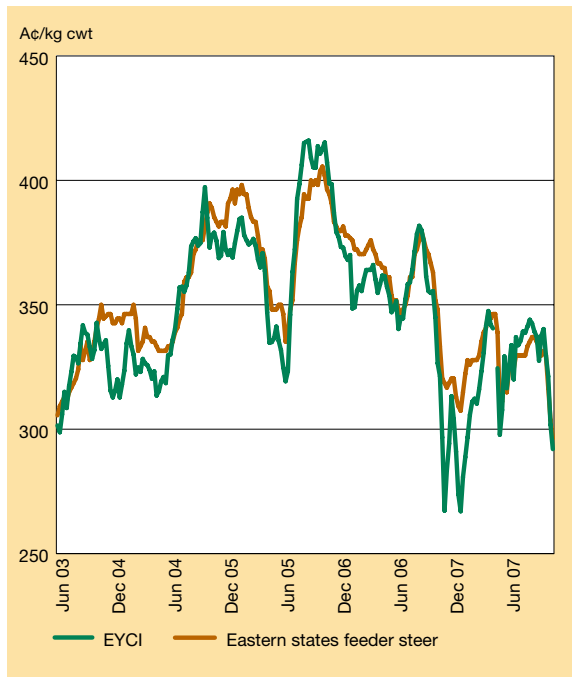
Category <sup>1</sup>	Correlation (%)
Domestic trade steer – NSW	97
Domestic trade steer – Qld	94
Domestic trade steer – Vic	89
Domestic trade steer – SA	85
Feeder steers – eastern states	90
Japan ox – NSW	89
US manufacturing cow – QLD	91

<sup>1</sup> All categories refer to saleyard prices except for Feeder Steers – Eastern States, which is a paddock sale price.

**Figure 5. EYCI vs VIC domestic trade steer prices**

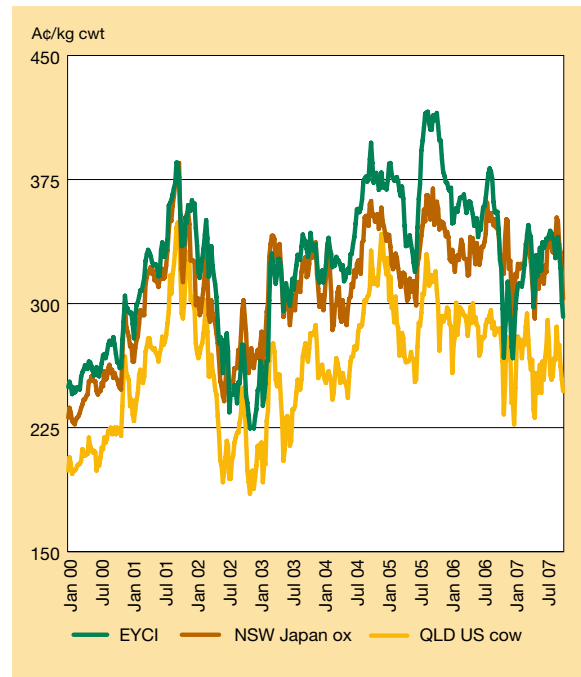


**Figure 6. EYCI vs Eastern States feeder steer prices (paddock sales)**



Note: Feeder steer prices were converted from liveweight to carcass weight price using a dressing percentage of 54%.

**Figure 7. EYCI vs Australian Japan ox, US cow prices**



## So why are prices for different cattle categories related?

- Young cattle, in addition to supplying the domestic retail and foodservice sectors, are also purchased for growing out into heavier animals for the Korean or Japanese trades. Further, the majority of cattle exported live are young. This means that changes in the demand for, and value of, finished live and meat export animals are ultimately reflected in the demand for young cattle. In addition, shifts in the cost of young animals are ultimately passed on in the price for finished animals.
- There is sufficient overlap in the cuts and types of beef demanded in local and various export markets to allow beef to be diverted from one destination to another if the prices offered were to differ significantly.
- Ultimately, producers also have the option of shifting production into categories that offer a better return.
- Over 50% of the weight (but not the value) of all cattle carcasses is in non-primal cuts, the value of which is largely set by the manufacturing trade, particularly to the US. This trade essentially drives export cow prices.
- Up to 20% of the total animal value is in co-products, such as hides, meat meal and tallow, which largely sell into the same markets regardless of the category of animal from which they were derived.

While general factors keep prices for the various cattle categories moving together, they cannot prevent some differences in both short-term movement and trends. This was apparent in the impact of the BSE incident in Japan on Japanese steer prices compared to the EYCI in late 2001/early 2002 and the effect of the very severe drought on the relationship between prices of all finished cattle and the EYCI during 2002/03 and again in 2006/07.

Clearly, it is also important to note that movements in prices in individual saleyards and for individual young cattle categories are likely to be much more volatile than the EYCI, while still subject to the same underlying price trends.

## Where can I get more information?

Visit [www.eyci.com.au](http://www.eyci.com.au) for the latest and historical EYCI data.

Contact MLA on **(02) 9463 9372**  
or email [nlrs@mla.com.au](mailto:nlrs@mla.com.au)

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