

LIVESTOCK PRODUCTS

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 12 FEB 2010

KEY		

S Dec Qtr 2008	Sep Qtr 2009	Dec Qtr 2009
'000	'000	'000
1 996	1 934	1 899
203	194	189
2 906 2 4		2 325
5 190	5 216	5 145
1 129	1 146	1 168
118 707	116 130	113 873
	1 996 203 2 906 5 190 1 129	1 996 1 934 203 194 2 906 2 483 5 190 5 216 1 129 1 146

	Dec Qtr 2008	Sep Qtr 2009	Dec Qtr 2009
	tonnes	tonnes	tonnes
Meat produced			
Beef	534 532	524 519	516 575
Veal	6 795	8 647	9 371
Mutton	60 451	52 892	50 599
Lamb	105 196	108 040	106 825
Pig meat	80 812	82 363	83 905
Chicken meat	207 974	206 181	203 459
Wool receivals	92 939	88 790	89 098

	Sep Qtr 2008	Jun Qtr 2009	Sep Qtr 2009
	ML	ML	ML
Whole milk intake by factories	2 362	2 319	2 300

KEY POINTS

- In the December quarter 2009, the trend estimate for sheep slaughterings decreased 6% to 2.3 million.
- \blacksquare The trend estimate for pig meat production increased 2% to 84 thousand tonnes.

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

NOTES

FORTHCOMING ISSUES

ISSUE (Quarter) RELEASE DATE

March 2010 14 May 2010 June 2010 17 August 2010

INTRODUCTION

This publication presents statistics on livestock slaughterings (including chickens), meat production, whole milk intake by factories, market milk sales by factories, receivals of taxable wool by wool brokers and dealers, exports of live sheep and cattle and exports of fresh, chilled, frozen and processed meat. It also includes seasonally adjusted and trend totals for numbers slaughtered, meat produced, whole milk intake and wool receivals. More detailed information can be obtained by contacting the Australian Bureau of Statistics (ABS) or by referring to the monthly ABS publication *Livestock and Meat*, *Australia* (cat. no. 7218.0.55.001).

ABBREVIATIONS

'000 thousand

\$'000 thousand dollars

ABS Australian Bureau of Statistics

ML megalitre

t tonne

UHT ultra heat treated

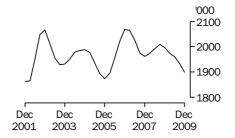
°C degrees Celsius

Brian Pink

Australian Statistician

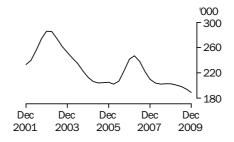
LIVESTOCK SLAUGHTERED TREND

CATTLE (EXCLUDING CALVES)



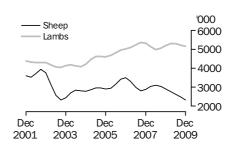
The number of cattle (excluding calves) slaughtered in the December quarter 2009 decreased 2% to 1.9 million compared to the previous quarter.

CALVES



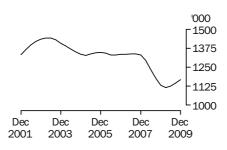
The number of calves slaughtered in the December quarter 2009 decreased 3% to 189 thousand compared to the previous quarter.

SHEEP AND LAMBS



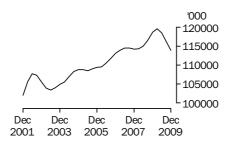
In the December quarter 2009, the number of sheep slaughtered fell 6% to 2.3 million compared to the previous quarter. Lamb slaughterings decreased 1% to 5.1 million compared to the previous quarter.

PIGS



Pig slaughterings in the December quarter 2009 increased 2% to 1.2 million compared to the previous quarter.

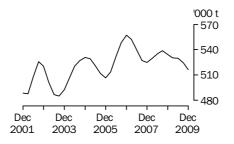
CHICKENS



Chicken slaughterings in the December quarter 2009 decreased 2% to 113.9 million compared to the previous quarter.

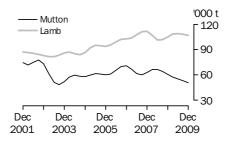
MEAT PRODUCTION TREND

BEEF



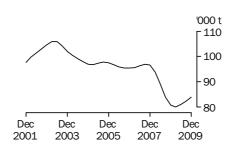
In the December quarter 2009, beef production decreased 2% to 517 thousand tonnes compared to the previous quarter.

MUTTON AND LAMB



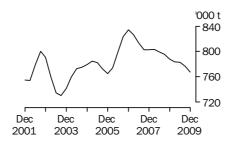
Mutton production in the December quarter 2009 decreased 4% to 51 thousand tonnes compared to the previous quarter. Lamb production decreased 1% to 107 thousand tonnes in the December quarter 2009 compared to the previous quarter.

PIG MEAT



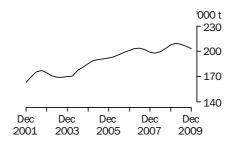
Pig meat production in the December quarter 2009 increased 2% to 84 thousand tonnes compared to the previous quarter.

TOTAL RED MEAT



Total red meat production decreased 1% to 767 thousand tonnes in the December quarter 2009 compared to the previous quarter.

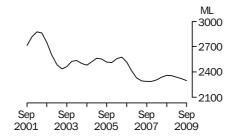
CHICKEN MEAT



Chicken meat production in the December quarter 2009, decreased 1% to 203 thousand tonnes compared to the previous quarter.

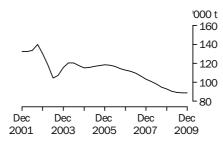
LIVESTOCK PRODUCTS TREND

WHOLE MILK INTAKE BY FACTORIES



Whole milk intake by factories in the September quarter 2009 decreased by less than 1% to 2,300 megalitres compared to the June quarter 2009.

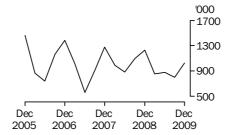
BROKERS AND DEALERS RECEIVALS OF TAXABLE WOOL



Wool receivals by brokers and dealers showed a slight increase in the December quarter 2009 compared to the September quarter 2009.

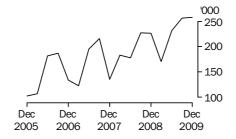
LIVESTOCK EXPORTS ORIGINAL

EXPORTS OF LIVE SHEEP



Live sheep exports in the December quarter 2009 increased 28% to 1.0 million compared to the previous quarter.

EXPORTS OF LIVE CATTLE



Exports of live cattle in the December quarter 2009 increased 1% to 258 thousand compared to the previous quarter.

LIST OF TABLES AND GRAPHS

		page
OVERVIEW		
	1	Livestock slaughtered, Australia
	2	Livestock products, Australia
EXPORTS OF MEAT AND LIVE	ANI	MALS
	3	Exports of fresh, chilled, frozen and processed meat, Australia
	4	Exports of live sheep and cattle, Australia
LIVESTOCK PRODUCTS		
	5	Whole milk intake by factories, by state
	6	Market milk sales by factories, by state
	7	Brokers and dealers receivals of taxable wool, by state

	Bulls, bullocks and steers	Cows and heifers	Cattle (excluding calves)	Calves	Sheep	Lambs	Pigs	Chickens(b)
Quarter	'000	'000	'000	'000	'000	'000	'000	'000
			• • • • • • •					
			0	RIGINA	L			
2008								
September	1 051.6	955.6	2 007.2	370.7	2 511.7	4 653.9	1 154.6	115 380.7
December	1 028.8	960.3	1 989.1	140.7	3 184.1	5 652.6	1 141.5	121 394.3
2009								
March	951.6	952.7	1 904.3	106.2	3 157.7	5 310.1	1 067.6	119 183.8
June	936.3	1 053.1	1 989.5	194.8	2 428.5	5 150.5	1 158.1	118 850.7
September	1 061.9	968.2	2 030.2	344.4	2 028.5	5 118.1	1 157.5	112 897.9
December	986.7	838.9	1 825.6	135.4	2 577.4	5 287.0	1 162.3	117 779.2
	• • • • • •		• • • • • • •		• • • • • • •			• • • • • • • •
			SEASON	ALLY AD	JUSTED			
2008								
September	1 023.5	970.7	1 994.2	205.9	3 085.7	4 884.4	1 153.0	116 048.0
December	1 002.0	1 004.8	2 006.7	196.5	2 833.5	5 373.4	1 145.6	118 223.8
2009								
March	987.2	984.8	1 972.0	204.6	2 754.3	5 271.8	1 099.7	119 889.4
June	953.7	966.1	1 919.9	201.5	2 653.3	5 227.0	1 123.2	120 727.7
September	1 033.3	979.4	2 012.8	191.4	2 491.7	5 362.2	1 156.3	113 470.1
December	960.3	878.7	1 839.1	189.6	2 291.8	5 011.0	1 165.1	114 695.7
			• • • • • • •					
				TREND				
2008								
September	1 030.5	978.9	2 009.4	203.0	3 045.0	5 047.3	1 174.2	116 452.2
December	1 004.8	990.9	1 995.6	203.2	2 905.6	5 190.5	1 129.0	118 707.1
2009	100.10	000.0	1 000.0	200.2	2 000.0	0 100.0	1 120.0	110.01
March	982.9	991.3	1 974.2	201.2	2 754.3	5 301.5	1 114.2	119 576.3
June	985.1	975.6	1 960.6	198.9	2 626.7	5 295.4	1 126.4	118 442.3
September	987.8	946.1	1 934.0	194.5	2 483.4	5 216.2	1 146.0	116 130.1
December	986.6	912.0	1 898.6	189.0	2 324.7	5 145.5	1 168.0	113 872.6

⁽a) For human consumption. Refer to paragraph 7 in (b) Excludes Tasmania, Northern Territory and the Australian Capital Territory the Explanatory Notes.

Australian Capital Territory.

LIVESTOCK PRODUCTS, Australia: All Series

	RED MEAT	Г(a)							Brokers and dealers
								Whole milk	receivals
					Pig	Total red	Chicken	intake by	of taxable
	Beef	Veal	Mutton	Lamb	meat	meat	meat(b)(c)	factories(d)	wool(e)
Quarter	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	ML	tonnes
• • • • • • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • • •	• • • • • • • • • • • •	• • • • • • • • •	• • • • • • • • • •
				C	RIGINAI	_			
2008									
September	538 945	9 473	53 017	91 360	83 093	775 887	204 359	2 341	100 421
December	533 421	5 443	68 978	113 698	80 924	802 464	209 611	3 098	101 264
2009									
March	517 143	5 538	64 962	111 218	76 043	774 904	208 725	2 153	93 538
June	530 661	7 286	48 487	106 668	83 897	776 999	209 761	1 797	75 378
September	550 015	12 671	43 981	103 932	84 650	795 250	203 116	2 252	86 170
December	497 725	8 149	57 974	109 747	82 033	755 628	206 992	nya	106 033
				SEASON	ALLY AD	JUSTED			
2008	=04.004	0 = 4 =	04.000	07.500	04.00=		005.050	0.070	07.000
September	534 034	6 515	64 393	97 588	81 865	784 394	205 676	2 370	97 099
December	535 929	6 438	59 245	108 577	82 468	792 657	206 342	2 340	89 193
2009	E00 004	7.646	E7 000	100.070	70.072	700 110	210 210	0.222	02.012
March June	529 201	7 646	57 228	108 970	79 073	782 118	210 219	2 333	93 013
	521 396	7 495	55 323	107 342	80 556 83 397	772 111 800 832	210 224	2 345 2 273	90 442 83 807
September December	544 290 500 278	8 684 9 640	53 376 49 773	111 085 104 282	83 513	747 487	204 488 203 541		93 340
December	500 278	9 640	49 773	104 282	83 513	141 481	203 541	nya	93 340
• • • • • • • • • •	• • • • • •	• • • • • •	• • • • • • •		• • • • • •	• • • • • • • •	• • • • • • • • • • •	• • • • • • • •	• • • • • • • • •
					TREND				
2008									
September	538 868	6 535	64 119	101 771	83 970	795 263	203 605	2 362	94 995
December	534 532	6 795	60 451	105 196	80 812	787 785	207 974	2 356	92 939
2009	00.002	0.00	00 .01	100 100	00 012	.000	20. 0	2 000	02 000
March	530 400	7 172	57 255	108 464	80 067	783 359	209 485	2 338	90 506
June	529 722	7 873	55 121	109 250	81 021	782 987	208 477	2 319	89 107
September	524 519	8 647	52 892	108 040	82 363	776 461	206 181	2 300	88 790
December	516 575	9 371	50 599	106 825	83 905	767 275	203 459	nya	89 098

nya not yet available

⁽a) Carcass weight excluding offal. Refer to paragraphs 5 and 6 in the Explanatory Notes.

⁽b) Excludes Tasmania, Northern Territory and the Australian Capital Territory.

⁽c) Dressed weight of whole birds, pieces and giblets.

⁽d) Original data sourced from Dairy Australia. Includes whole milk equivalent of farm cream intake.

⁽e) Taxable receivals only. Refer to paragraphs 21 and 22 in the Explanatory Notes.



EXPORTS OF FRESH, CHILLED, FROZEN AND PROCESSED MEAT(a)(b), Australia: Original

	FRESH, CHILLED OR FROZEN MEAT									PROCESS	ED MEAT
	Beef bone-in(c)	Beef bone-out(c)	Veal bone-in	Veal bone-out	Mutton bone-in	Mutton bone-out	Lamb bone-in	Lamb bone-out	Pork	Bacon and ham(d)	Canned meat(e)
Period	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes
• • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • •
2006–07	52 389	971 531	3 753	5 792	124 851	42 826	127 491	29 042	41 313	550	16 051
2007-08	57 199	917 494	3 704	5 049	119 496	43 827	134 101	32 499	39 138	772	12 493
2008-09	47 925	r954 473	4 102	4 594	107 004	44 119	131 144	31 254	32 258	464	12 852
2008											
September	12 983	238 419	1 397	1 801	20 540	8 443	25 605	5 047	8 953	266	3 287
December	12 956	258 168	991	1 385	32 180	13 617	37 673	9 124	8 111	101	3 381
2009											
March	9 708	216 388	645	570	29 110	12 498	34 177	8 807	7 528	64	2 940
June	12 279	r241 498	1 069	839	25 174	9 561	33 688	8 275	7 666	r32	3 243
September	r11 958	r230 695	r1 474	r1 260	r18 708	r6 813	r30 939	r6 813	r7 625	r58	r3 482
December	12 448	226 956	1 227	1 024	27 980	10 402	38 197	9 599	7 294	57	3 721

r revised

⁽a) Compiled from Australian Customs Service data. Refer to paragraph 11 in the Explanatory Notes.

⁽b) Export data may be subject to revision.

⁽c) Includes buffalo meat.

⁽d) Cured carcass weight, and stated net weight of packs of canned bacon and ham. Refer to paragraph 13 in the Explanatory Notes.

⁽e) Canned meat excludes bacon and ham. Refer to paragraph 14 in the Explanatory Notes.

	Numbar	Gross	Gross	Unit
	Number	weight	value	value(b)
		'000		
Period	'000	tonnes	\$'000	\$
• • • • • • • • • •				• • • • • •
	S	HEEP		
2006–07	4 137.9	198.8	288 697	69.77
2007-08	4 069.0	197.0	286 442	70.40
2008-09	4 063.9	199.0	339 083	83.44
2008				
September	1 099.1	52.8	86 570	78.77
December	1 234.0	60.5	101 446	82.21
2009				
March	852.8	43.0	73 316	85.97
June	878.1	42.8	77 751	88.55
September	801.8	38.7	76 827	95.82
December	1 030.0	50.1	93 851	91.12
• • • • • • • • • • • • • • • • • • • •				
	С	ATTLE		
2006-07	638.0	216.1	437 427	685.58
2007-08	713.3	241.2	450 511	631.63
2008-09	856.0	285.0	558 695	652.67
2008				
September	227.1	75.1	140 044	616.58
December	226.8	71.5	162 162	714.97
2009				
March	170.3	57.8	114 672	673.49
June	231.8	80.5	141 817	611.80
September	r256.2	r85.4	r159 578	r622.97
December	258.2	89.5	172 011	666.19

revised

⁽a) Export data may be subject to revision.

⁽b) Gross value divided by the number of animals exported.

	New South Wales(b)	Victoria	Queensland	South Australia(c)	Western Australia	Tasmania	Australia
	waies(b)	VICIONA	Queerisiariu	Australia (C)	Australia	Tasilialila	Australia
Quarter	ML	ML	ML	ML	ML	ML	ML
• • • • • • • • •	• • • • • • • •		• • • • • • • • •	• • • • • • • •		• • • • • • • •	
			ORIGI	NAL			
2008							
June	236	1 117	110	138	76	120	1 797
September	271	1 576	128	149	86	130	2 341
December	296	2 112	138	185	100	268	3 098
2009							
March	251	1 364	125	148	78	186	2 153
June	247	1 083	120	145	77	124	1 797
September	283	1 480	139	147	84	119	2 252
	• • • • • • • •						
		SE	ASONALLY	ADJUSTE	D		
2008							
June	260	1 579	121	153	80	176	2 370
September	263	1 562	122	157	83	182	2 370
December	263	1 532	127	156	88	173	2 340
2009							
March	268	1 515	131	157	87	175	2 333
June	272	1 519	132	157	82	183	2 345
September	274	1 464	133	155	82	166	2 273
• • • • • • • • •	• • • • • • • •		• • • • • • • • •	• • • • • • • •			
			TREI	VD			
2008							
June	260	1 553	122	153	80	174	2 341
September	262	1 560	123	156	84	178	2 362
December	264	1 542	127	157	86	178	2 356
2009							
March	268	1 520	130	157	86	177	2 338
June	271	1 501	132	156	84	175	2 319
September	274	1 482	133	155	81	173	2 300

⁽a) Includes whole milk equivalent of farm cream intake. (b) Includes data for the Australian Capital Territory. Refer to paragraphs 18 and 19 in the Explanatory $\hspace{1cm}$ (c) Includes data for the Northern Territory.

Source: Original series data from Dairy Australia.

	New South Wales(b)	Victoria	Queensland	South Australia(c)	Western Australia	Tasmania	Australia
	, ,			, ,			
Quarter	ML	ML	ML	ML	ML	ML	ML
• • • • • • • • •	• • • • • • • • • •	• • • • • • • •	ORIGI	NAL	• • • • • • • •	• • • • • • • • •	• • • • • • • •
2008							
June	173	135	127	52	60	14	561
September		135	129	53	62	14	568
December	172	132	125	52	61	14	556
2009							
March	172	131	127	51	59	14	553
June	176	136	128	53	59	14	567
September	180	141	132	55	62	14	583
• • • • • • • • •	• • • • • • • • •	S F	TASONALLY	ADJUSTE		• • • • • • • • •	• • • • • • • •
2008				7.5500122			
June	171	132	127	51	60	14	556
September		132	126	51	61	14	556 556
December	174	133	126	52	62	14	561
2009	114	133	120	32	02	14	301
March	175	133	129	52	60	14	563
June	175	135	129	53	59	14	565
September		138	129	53	61	14	571
• • • • • • • • •	• • • • • • • • • •	• • • • • • • •		• • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • •
			TRE	ND			
2008							
June	171	132	126	51	61	14	556
September	172	133	126	51	61	14	558
December	174	133	127	52	61	14	560
2009							
March	175	134	128	52	60	14	563
June	175	135	129	53	60	14	566
September	176	137	129	53	60	14	569

⁽a) Includes white, flavoured, high and low fat milk and UHT milk. Refer to paragraphs 18 and 20 in the Explanatory Notes.

⁽b) Includes data for the Australian Capital Territory.

⁽c) Includes data for the Northern Territory.

Source: Original series data from Dairy Australia.

BROKERS AND DEALERS RECEIVALS OF TAXABLE WOOL(a): All Series

								% of total
	New South			South	Western			received
	Wales	Victoria	Queensland	Australia	Australia	Tasmania	Australia	by brokers
	wales	Victoria	Queerisiana	Australia	Australia	rasmania	Australia	brokers
Quarter	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	%
• • • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • •
			0	RIGINAL				
2008								
September	35 673	22 069	3 395	16 466	20 177	2 642	100 421	83.9
December	31 407	27 368	2 185	14 231	23 437	2 636	101 264	77.4
2009								
March	27 243	22 865	1 886	12 232	27 767	1 545	93 538	79.3
June	25 102	18 833	3 363	10 893	14 767	2 419	75 378	77.3
September	32 534	19 880	3 072	12 344	15 585	2 756	86 170	82.5
December	31 358	29 135	2 190	17 318	23 032	3 000	106 033	79.7
			SEASON	ALLY ADJU:	STED			
2008								
September	30 972	23 773	2 657	15 469	21 875	2 353	97 099	
December	29 322	22 110	2 685	12 169	20 679	2 227	89 193	• •
2009	29 322	22 110	2 000	12 103	20 019	2 221	05 155	
March	30 297	22 663	2 620	12 785	22 466	2 183	93 013	
June	28 490	22 634	2 789	13 278	20 790	2 460	90 442	• •
September	28 375	21 692	2 443	11 565	17 242	2 490	83 807	• •
December	29 282	23 465	2 690	15 237	20 134	2 532	93 340	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •	• • • • • • • • •	• • • • • • • • • •	TDEND	• • • • • • • • • •	• • • • • • • • •	• • • • • • • • •	• • • • • •
				TREND				
2008								
September	31 289	23 819	2 670	14 101	20 733	2 384	94 995	
December	30 076	22 899	2 665	13 338	21 702	2 259	92 939	
2009								
March	29 303	22 252	2 664	12 596	21 428	2 264	90 506	
June	28 945	22 325	2 644	12 558	20 255	2 380	89 107	
September	28 742	22 514	2 614	13 164	19 269	2 487	88 790	
December	28 728	22 757	2 605	13 762	18 698	2 548	89 098	

^{..} not applicable

⁽a) Taxable receivals only. Refer to paragraphs 21 and 22 in the Explanatory Notes.

EXPLANATORY NOTES

INTRODUCTION

- **1** This publication contains information on livestock slaughterings (including chickens), meat production, exports of live sheep and cattle, exports of fresh, chilled, frozen and processed meat, whole milk intake by factories, market milk sales by factories and receivals of taxable wool by wool brokers and dealers.
- **2** Data in this publication have been revised where necessary and as a consequence may not agree with similar data shown in previous publications.
- **3** Where figures have been rounded, discrepancies may occur between sums of the component items and totals.
- 4 Unless otherwise indicated, Australian totals include data for all states/territories.

LIVESTOCK SLAUGHTERINGS AND MEAT PRODUCTION

- **5** The statistics on slaughterings for red meat production are based on a monthly collection from abattoirs and other major slaughtering establishments and include estimates of animals slaughtered on farms, by country butchers and other small slaughtering establishments.
- **6** Red meat is shown in carcass weight and excludes offal.
- **7** Care should be taken when using this information as the data only relate to slaughterings for human consumption and do not include animals condemned, slaughtered for pet food or those killed for boiling down.
- **8** Statistics for poultry slaughterings and chicken meat produced have been compiled from quarterly returns supplied by commercial poultry slaughtering establishments and comprise boilers, fryers and roasters. Many small producers are excluded from the collection; however, the statistics represent a high level of coverage.
- **9** Chicken meat is shown in dressed weight of whole birds, pieces and giblets.
- **10** Details about unpublished slaughterings and meat production statistics can be found in the Livestock Slaughtering Collection brief on the Australian Bureau of Statistics (ABS) website and also are available on request. Inquiries should be made to the *National Information and Referral Service* on 1300 135 070.

EXPORTS OF FRESH, CHILLED, FROZEN AND PROCESSED MEAT

- 11 International trade statistics are compiled by the ABS from information submitted to the Australian Customs Service by exporters and importers or their agents. Factors are applied to beef, veal, mutton and lamb bone-out figures to calculate a derived bone-in carcass weight. The derived bone-in carcass weights are then added to bone-in figures to calculate total exports in carcass weight. The factor for beef and veal is 1.5 and for mutton and lamb, 2.0. This information is sourced from the Australian Department of Agriculture, Fisheries and Forestry.
- **12** Beef also includes buffalo meat.
- **13** Bacon and ham shown is the cured carcass weight of smoked or cooked bacon and ham. It also includes the stated net weight of packs of canned bacon and ham.
- **14** Canned meat is shown as the canned weight and excludes canned bacon and ham.

LIVE SHEEP AND CATTLE EXPORTS

- **15** Sheep and cattle exported for breeding are excluded.
- **16** The unit value is obtained by dividing the gross value by the number of animals exported.
- **17** The graphs of livestock exports present quarterly original estimates for at least the last five years for the major commodities. These graphs highlight the major movements in the estimates over that period.

 MILK

18 Milk data collected by Dairy Australia. Data for the latest quarter are not yet available.

EXPLANATORY NOTES continued

MILK continued

- **19** Whole milk intake by factories includes the whole milk equivalent of farm cream intake.
- **20** Market sales includes white, flavoured, high and low fat milk and ultra heat treatment (UHT) milk. Interstate transfers of UHT milk have been included in their state of destination. UHT milk is milk that is heated to high temperatures to produce a milk which does not require refrigeration for a sustained period of time when unopened.

WOOL RECEIVALS

- **21** Wool receivals refers to the amount of taxable wool received by brokers and purchased by dealers from wool producers. It excludes wool received by brokers on which tax has already been paid by other dealers (private buyers) or brokers.
- **22** Data are based on the state in which wool has been received, and do not necessarily reflect the production of wool in that state.

SEASONAL ADJUSTMENT

- **23** Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences can be more clearly recognised.
- 24 In the seasonal adjustment of the livestock estimates, account has been taken of both normal seasonal factors and 'trading day' effects, where significant. Seasonal adjustment does not remove from the series the effect of irregular influences (e.g. abnormal weather, industrial disputes).
- **25** The state component series has been seasonally adjusted independently. Therefore, the adjusted components may not add to the Australian group totals.
- 26 In this publication, the seasonally adjusted estimates are produced by the concurrent seasonal adjustment method which takes account of the latest available original estimates. This method improves the estimation of seasonal factors and, therefore, the seasonally adjusted and trend estimates for the current and previous months. As a result of this improvement, revisions to the seasonally adjusted and trend estimates will be observed for recent periods. A more detailed review is conducted annually prior to the September release, using data up to and including the August release.
- **27** For further information, see *Time Series Analysis Frequently Asked Questions, 2003* (cat. no. 1346.0.55.002).
- **28** From September 2007, improved methods of producing seasonally adjusted estimates, focused on the application of Autoregressive Integrated Moving Average (ARIMA) modelling techniques, were implemented. The ARIMA modelling technique can be used to extend original estimates beyond the end of a time series.
- **29** For further information on ARIMA modelling, see the feature article '*Use of ARIMA modelling to reduce revisions*' in Australian Economic Indicators, Oct 2004 (cat. no. 1350.0).

TREND ESTIMATES

- **30** The graphs of livestock slaughtered, meat production and livestock products present quarterly trend estimates for at least the last five years for the major commodities. These graphs highlight the major movements in the estimates over that period.
- **31** A trend estimate is obtained by reducing the irregular component in the seasonally adjusted series. For quarterly data, trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted series. Revisions of trend estimates will also occur with revisions to the original data and re-estimation of seasonal factors.
- **32** The state component series has been adjusted independently. Therefore, the adjusted components may not add to the Australian group totals.

EXPLANATORY NOTES continued

TREND ESTIMATES continued

33 For further information, see *Information Paper: A Guide to Interpreting Time Series - Monitoring Trends, 2003* (cat. no. 1349.0).

RELATED PUBLICATIONS

- **34** Other ABS publications containing livestock data include:
 - Agricultural Commodities, Australia (cat. no. 7121.0)
 - Agricultural Commodities: Small Area Data, Australia (cat. no. 7125.0)
 - Livestock and Meat, Australia (cat. no. 7218.0.55.001)
 - Value of Agricultural Commodities Produced, Australia (cat. no. 7503.0)
- **35** Current publications and other products released by the ABS are listed under the Statistics and Themes pages on the ABS website http://www.abs.gov.au. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

GENERAL ACKNOWLEDGMENT

36 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

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