# SUPREME JUNIOR BEEF BREED BULL

The winning Junior Champion Bulls from all beef breeds will be eligible to compete.

The Interbreed Sash, trophy and \$1000 will be awarded to the Exhibitor of the Supreme Junior Beef Breed Bull. (S432)

The Reserve Interbreed Sash will be awarded to the Exhibitor of the Reserve Supreme Junior Beef Breed Bull. (S433)

516 Lerwick Park Murray Grey Stud: LERWICK PARK BUCKLEY B2 (A.I) (E.T)), LERB2, 05/02/06 [LER B2] S: Orcadia Park Century, D: Orcadia Park Topaz S82

**TROPHY** The JOHN BARBER MEMORIAL TROPHY will be presented by Mrs. M. Barber to the Exhibitor of the Supreme Junior Beef Breed Bull.

The Reserve Interbreed Sash will be awarded to the Exhibitor of the Reserve Supreme Junior Beef Breed Bull. (S433)

414 M A O'Sullivan: KENSAL BACK IN BLACK B04 (P) (B) (PU), KGPB004, 04/03/06 [KGP B004] S: Kensal Yeppoon Y56, D: Kensal Black Moonbeam 703

#### SUPREME SENIOR BEEF BREED BULL

The winning Senior Champion Bulls from all beef breeds will be eligible to compete.

The Interbreed Sash, trophy and \$1000 will be awarded to the Exhibitor of the Supreme Senior Beef Breed Bull. (S434)

**TROPHY** The trophy awarded to the Exhibitor of the Supreme Junior Beef Breed Bull is donated by the Estate of the late D.S. MacGregor MBE.

767 K A & E L Williams: POLLDALE ABLAZE (P), POLA27, 01/08/05 [POL A27] S: Polldale Grunt, D: Polldale Marjory 23rd

The Reserve Interbreed Sash will be awarded to the Exhibitor of the Reserve Supreme Senior Beef Breed Bull. (S435)

349 Charnock Hereford Stud: CHARNOCK ICEMAN, HMMA077, 09/06/05 [HMM A077] S: Charnock Fire Up, D: Charnock Lass 180

#### SUPREME BEEF EXHIBIT

The Supreme Junior Beef Breed Heifer, the Supreme Senior Beef Breed Female, the Supreme Junior Beef Breed Bull and the Supreme Senior Beef Breed Bull will compete for the ultimate accolade of Supreme Beef Exhibit of the Show.

The Supreme Beef Exhibit Sash, trophy and \$1000 will be awarded to the successful Exhibitor. (S436)

767 K A & E L Williams: POLLDALE ABLAZE (P), POLA27, 01/08/05 [POL A27] S: Polldale Grunt, D: Polldale Marjory 23rd

# STUD BEEF - VICTORIA PARADERS COMPETITION

Judge:

Stewards: B. Godbolt, G. Turnham, P.Little



#### **CONDITIONS OF ENTRY**

- This Paraders Competition is subject to the Regulations for Beef Cattle Competition, as listed in the front of the 2007 Beef Cattle Schedule. In the event of any inconsistency between the Regulations for Beef Cattle Competition and these Conditions of Entry, the Regulations for Beef Cattle Competition will prevail.
- The Parader must have the written permission from the owner of the animal to be paraded.
- Each Parader will be assessed for Showmanship, Animal/Handler Relationship Preparation of Animal, Cleanliness of Gear and Suitability of Animal.
- Paraders under the age of 15 years must prepare a Heifer from the Junior breed ordinary classes.
- All animals utilised for the purposes of the Competition must be entered into the ordinary beef cattle competitions classes. Animals are not to be brought into the grounds for the sole purpose of this Competition.
- A white coat or breed uniform recognised by The Royal Agricultural Society of Victoria Limited must be worn by the Parader when parading his/her animal.
- All animals paraded must comply with the Regulations for Beef Cattle, especially with regard to the use of nose clips and nose rings.
- Awards will be presented to the Paraders who best prepare an animal for the Show Ring, attention being given to the manner in which it is brought before the judges.
- Prize money will not be paid on the day of competition, rather by post following the Show, as per the Regulations for Beef Cattle.
- 10. Entry forms for this competition will also be made available at the Show through the Cattle Administration Office. Close of entries will be strictly enforced, the date and time of which will be published on the entry form and in the Show Catalogue.
- 11. The RAS reserves the right to limit entries at it's discretion, should there be time constraints or excessive entries. In such a case, limitations will be based on time of entry. Details of class limits will be published in the Show Catalogue.
- 12. Entry Fee \$5.00 per exhibitor.

#### CLASSES

CLASS 6000 Parader aged 12 years and under 15 years on judging day.

CLASS 6001 Parader aged 15 years and under 18 years on judging day.

CLASS 6002 Parader aged 18 years and under 25 years on judging day.

CHAMPION BEEF CATTLE PARADER - As selected from the three classes. (S437)

## **PRIZES**

CASH PRIZE For each class, prize money will be awarded as such:

1st Place: \$30 2nd Place: \$20 3rd Place: \$10

SPECIAL SASHES Sashes will be awarded for 1st through to 6th place.

TROPHY A trophy will be presented to Champion Beef Cattle Parader.

# **EXHIBITORS INDEX**

#### **ANGUS**

M & S Atkinson, Drouin South Vic 3818: 1, 5, 7, 12, 19, 24, 29, 30, 33, 34, 44, 49, 51, 52, 56

J Bourchier, Deniliquin NSW 2710: 41

P J Collins, Tennyson Vic 3572: 4, 15, 23, 27, 31, 45, 53

Fraser Angus, Parklands, Burnie Tas 7320: 37

K.O. Angus Stud, Bowral NSW 2576: 6, 18, 17, 20

PG, PM & GP Kallady, Nar Nar Goon Vic 3812: 16, 28, 32

Lawsons Angus, Albury NSW 2640: 13

P & J Mc Lauchlan, Edenhope Vic 3318: 8, 26, 35, 46, 54

W Milne, Porepunkah Vic 3740: 9, 14, 36, 47

P & A J Poole, Kinglake Vic 3763: 21

Rossander Properties Pty Ltd, Warrnambool Vic 3280: 2, 3, 11, 10, 22, 25, 39, 38, 40, 42, 43, 48, 50, 55, 57

#### **AUSTRALIAN SHORTHORN**

Mr D Ashley, Camberwell Vic 3124: 295
R T & Y E Falls & Sons, Finley NSW 2713: 297, 298, 300, 302, 304
B R & R Harris, Clarkefield Vic 3430: 296, 299, 303
Spencer Family, Yuroke Vic 3063: 293, 294, 301, 305
F Tynan, Table Top Via Albury NSW 2641: 292

### **BEEF SHORTHORN**

Mr D Ashley, Camberwell Vic 3124: 65, 68, 73

RT & YE Falls & Sons, Finley NSW 2713: 60, 67, 70, 75, 79, 82, 84, 89, 91, 94, 93, 100, 99, 104, 105

Mrs M A Hallyburton, Bookaar Vic 3260: 66, 74, 101

W & M Harwood, Streatham Vic 3351: 62, 78, 86, 92, 95, 102

D Horsburgh, Mathoura NSW 2710: 77, 90, 96

W Johnson, Streatham Vic 3351: 59

A H & S B Loane, East Devonport Tas 7310: 87

R Pfeiffer, Lake Boga Vic 3584: 64, 80

Mrs C Shannon, Romsey Vic 3434: 61, 63, 72, 85, 88, 97, 103, 106

Spencer Family, Yuroke Vic 3063: 69, 76, 83, 98

J & J Swan, Strathdale Vic 3550: 71

L A & F G Swan, Lake Boga Vic 3584: 58, 81

#### **BELGIAN BLUE**

P D & L J Mangles, Benalla Vic 3672: 107, 108, 109, 110, 111, 112, 114, 113, 115

#### **BELTED GALLOWAY**

R W & J E Davidson, Binginwarri Vic 3966: 123 K & W Edwards, Moss Vale NSW 2577: 118, 122, 126, 129 Mrs J Hall & Miss T Barry, Moss Vale NSW 2577: 128 A Hilli, Dromana Vic 3936: 121, 127, 130, 131 A Michael, Leongatha South Vic 3953: 117, 120, 125 M A M Scott, Flinders Vic 3929: 116, 119, 124

#### **BRAFORD**

M Coates & Ms C Jolliffe, Rushworth Vic 3612: 132

#### BRAHMAN

A Basse & Family, Mangalore Vic 3663: 136, 137, 139, 141, 150, 154, 160 I E & J C Chappel, Tennyson Vic 3572: 151 Mrs M Dicks, Malmsbury Vic 3446: 134, 146, 148, 149, 155, 158 H J Humphreys, Tallygaroopna Vic 3634: 138, 143, 161 Miss R Humphreys, Tallygaroopna Vic 3634: 140, 147, 153, 156 Lynton Brahman Syndicate, Creswick Vic 3363: 142, 144, 145, 152, 157, 159, 162 R A & K G Mc Alpine, Leongatha Vic 3953: 135, 133, 163

#### **BRANGUS**

N Desira, Tatura VIC 3616: 167 G Elliott, Barfold Vic 3444: 164, 165, 166, 168, 169

G & K Rath, Katandra Vic 3634: 182

# **BRAUNVIEH**

Mr & Mrs A & A Backshall, Malanda Qld 4885: 173
D Crockford & G Mumford, Trafalgar Vic 3824: 177
L & M Neist, Devon North Vic 3971: 171, 176, 184, 185, 187
T & J Onley, Won Wron Vic 3971: 174, 175
D & E Paton, Burn Burn Creek Via Crows Nest Qld 4335: 170, 172, 180, 186, 188
A J & R A Rainsford, Apsley Vic 3319: 179, 178, 181, 183

#### **CHARBRAY**

D Chappel, Tennyson Vic 3572: 189, 190

M & S Alberni, Longwarry North Vic 3816: 197, 196, 222

#### CHAROLAIS

Glenfields Pastoral Co, Yea Vic 3717: 194, 214, 215, 219
G & D Halliday, Mt Macedon Vic 3441: 195, 199, 200
Ms R Keeley, Marong Vic 3515: 193, 202, 207, 216, 223
G R & N E King, Frankston South Vic 3199: 209
G O'Brien, Orange NSW 2800: 191, 211
H A Seeley, Brunswick Vic 3056: 192, 201, 204, 203, 208, 213, 217, 218, 220, 224
G W & I Smith, Yarra Junction Vic 3797: 212
J L & J H Waddell, Mt Beckworth Vic 3364: 206, 205, 221
V I, N J & A J Wilson, Tandarra Vic 3571: 198, 210

#### **DAIRY SHORTHORN**

Miss K Doggett, Kyneton Vic 3444: 230, 236, 239

M & I Douglas, Stanhope Vic 3623: 227, 228, 234, 231, 232, 237, 241, 242, 245, 244, 247, 248, 249, 251, 253, 254

N R & L M Fry, Benalla Vic 3672: 225, 238, 243, 255

W A & E C Holmes, Western Creek Tas 7304: 226, 235

A W Iskov & Son, Strathlea Vic 3364: 229, 233, 240, 246, 250, 252, 256

#### DEXTER

L Clark & J O'Brien, Ballan Vic 3342: 264, 268, 269, 270, 276, 277, 279, 281
O Czernik & Ms A Strack, Kyneton Vic 3444: 257, 261, 271, 278
P A V & J R den Brinker, Clarkefield Vic 3430: 263, 262, 274, 282
P W & C J Gulbin, Taradale Vic 3447: 259, 258, 275, 283
J D & J J Hince, Kyneton Vic 3444: 266, 267, 272, 280, 284
P J K & L E Little, Lara Vic 3212: 260, 265
P & L Mitchell, Yarra Glen Vic 3775: 273

#### **GALLOWAY**

R W & J E Davidson, Binginwarri Vic 3966: 288 Ms C Hart, Yass NSW 2582: 285 G Stuart, Yass NSW 2582: 286, 287, 289, 290, 291

#### HEREFORD

Andtravern Herefords, Lancefield Vic 3435: 316, 330, 338, 345, 353
D J & S L Armour, Warragul Vic 3820: 325
Big V Herefords, Major Plains Vic 3725: 309, 323, 336
Charnock Hereford Stud, Rochford Vic 3442: 307, 312, 326, 331, 334, 344, 349, 354, 360, 363
G Cumming, Clyde Vic 3978: 321, 332, 343, 355, 364
E D R Herefords & Denstone Investments, Wynyard Tas 7325: 348
G S Jones, Toora Vic 3962: 339, 350, 352, 351, 365
Karibu Rise Herefords, Canterbury Vic 3126: 324, 335, 333, 340, 366
Mrs N King, Frankston South Vic 3199: 311, 320
Maxan Enterprises, Mount Waverley Vic 3149: 313, 341, 356, 367
Penborn Hereford Stud, Lilydale Vic 3140: 318, 319, 342, 346, 357, 361
R K & J M Pretty, Jindivick Vic 3818: 314, 317, 328, 358
Red Hill Stud, Euroa Vic 3666: 308, 315, 322, 329, 337, 347, 359, 362, 368
K Sparkes, Foster Vic 3960: 310, 327
A J & A M Townsend, Via Westbury Tas 7303: 306

#### HIGHLAND

Mr & Mrs G & K Hastie, Sunbury Vic 3429: 371, 370, 373, 374, 378 B, J & M Heath, Mt Macedon Vic 3441: 376 M L & D R Phillips, Scarsdale Vic 3351: 369, 375 K & J Webster, Bungaree Vic 3352: 372, 377

#### LIMOUSIN

Baycross Pty Ltd, Mosman NSW 2088: 392, 403
B J & S J Griffiths, Kyneton Vic 3444: 389, 393, 387, 395, 415, 417
G R & K A Hedger, Culcairn NSW 2660: 413
Mr & Mrs B & K Keirl, Connewarre Vic 3227: 383, 381, 388, 406, 409, 416, 418, 424, 426
J O'Brien, Bungaree Vic 3352: 382, 380, 384, 397, 402, 408, 407, 419, 420, 425, 427
M A O'Sullivan, Culcairn NSW 2660: 394, 400, 404, 412, 414, 421, 428
Premier Limousins, Berrima NSW 2577: 379, 391, 396, 398, 405, 410, 422
S & G Schneider, Albury NSW 2640: 390, 386
Miss H Sheehan, Bulla Vic 3428: 385, 399, 401, 411, 423

#### LOWLINE

V & D Cronin, Yarragon Vic 3823: 438, 444, 452 H Hollis & M Searle, Theresa Park NSW 2570: 459, 466 Ms J Jackson, Gruyere Vic 3770: 464

Mr & Mrs G & J Knight, Blampied Vic 3364: 436, 443, 451, 457, 471

P & R Miller & T Breuer, Dubbo NSW 2830: 440, 437, 441, 449, 454, 460, 472, 474,

G Podbury & B Crowley, Tylden Vic 3444: 432, 433, 435, 434, 448, 455, 461, 465, 467, 470, 476

Mr & Mrs B & L Quayle, Yea Vic 3717: 445, 462

A & Mrs J Ristrom, Lang Lang Vic 3984: 439, 442, 450, 453, 456, 458, 468

Mrs L Senger-Whitehead, Shoreham Vic 3916: 430, 469

G & S Turnham, Gisborne Vic 3437: 431, 429, 447, 463, 473

P & L West, Moorooduc Vic 3933: 446

#### MINIATURE GALLOWAY

Ms P Hunder, Balnarring Vic 3926: 477, 478, 479

#### **MURRAY GREY**

J Burgun, Benalla Vic 3672: 505

Gilldon Murray Grey Stud, Clyde Vic 3978: 499, 523

A Hilli, Dromana Vic 3936: 501

Dr S E Johnson & Ms M Hunter, Yass NSW 2582: 487, 484, 504, 512, 526, 527, 542 Lerwick Park Murray Grey Stud, Clyde Vic 3978: 491, 506, 516, 522, 528, 543

Miss F Lindsay & J Glover, Yannathan Vic 3981: 482, 511

D, J & R Mc Rae, Shepparton Vic 3631: 488, 502, 519, 529, 544

R Miller, Buln Buln East Vic 3821: 483, 498, 500, 535, 545

Shellgardi Murray Grey Stud, Gunning NSW 2581: 481, 486, 490, 508, 510, 517, 518, 525, 531, 530, 539, 538, 547, 546

Siekman and Kent Partnership, Labertouche Vic 3816: 493, 507, 548

D B & A M Slattery, Bochara Vic 3301: 485, 515, 536

P & G Sutherland, Tallangatta Vic 3700: 509

R J Travers, Howlong NSW 2643: 480, 489, 496, 494, 497, 503, 514, 521, 533, 532, 537, 540, 549, 550

Watermill Pastoral Co, Red Hill Vic 3937: 492, 495, 513, 520, 524, 534, 541, 551

#### **PINZGAUER**

B Fraser, Labertouche Vic 3816: 553, 554 P & J Green, Linton Vic 3360: 555 Lockwood Family Pty Ltd, Drouin Vic 3818: 556, 557, 561, 562, 563 J & V F Murdica, Korumburra Vic 3950: 552, 558 D & L Wells, Longwarry Vic 3816: 559, 560

#### POLL HEREFORD

Miss N Bolton, Mooroopna Vic 3629: 575, 577, 594 F W & J Boyer, Ascot Vale Vic 3032: 568 Charnock Hereford Stud, Rochford Vic 3442: 565, 578, 582, 591, 595, 599 Mrs E S R Cole, Balnarring Vic 3926: 567, 570, 573, 576, 583, 586, 596, 600 Glen Goulburn Poll Herefords, Epping Vic 3076: 587, 588, 601 R Green, Culcairn NSW 2660: 584 J & J Henne, Yan Yean Vic 3755: 572, 571, 589, 590, 597, 602 J J Honner & Sons, Brentwood Via Minlaton SA 5575: 574, 592 lan Manson Pty Ltd, Maffra Vic 3860: 564, 569, 581, 585, 593, 598, 603 C Robinson, Wodonga Vic 3689: 580, 579, 604

#### **RED ANGUS**

Bayfield Pty Ltd, Flagstaff Hill SA 5159: 607, 612, 609, 610, 615, 617, 618, 619, 620, 622, 623

Ms C Bermingham, Whittlesea Vic 3757: 614

A J & A M Townsend, Via Westbury Tas 7303: 566

J & S Boland, Clunes Vic 3370: 605, 611, 608, 616, 621, 624 Leongatha Secondary College, Leongatha Vic 3953: 606, 613

**RED POLL** 

S Storm, Barham NSW 2732: 629

Mr & Mrs S & J Coles, Pearcedale VIC 3912: 648, 649 Dr R W R & Mrs K L Daley, Jamestown SA 5491: 645, 647, 657 R Draper, Arthurs Creek Vic 3099: 625, 631, 632, 634, 635, 646, 650, 654, 658 B E & L E Johnson, Kinglake Central Vic 3757: 627, 628, 638, 643, 651, 655 C Smith, Adelong NSW 2729: 626 J A & D W Smith, Tarago NSW 2580: 633, 641 M Smith, Tarago NSW 2580: 640 I A & N F Staff, Pheasant Creek Vic 3757: 637, 639, 644, 652, 659

Ms A Walker & N Gnaden, Buln Buln Vic 3821: 630, 636, 642, 653, 656

SALERS

P & J Gregory, Molong NSW 2866: 660, 663, 667, 670, 671, 673, 678, 681, 683 M & H Manley, Dalby Qld 4405: 662, 669, 672, 677, 676, 679, 682, 684 R & A Mickelburough, Heatherton Vic 3202: 665, 668 R C, M F, M J & S J Randall, Wangoom Vic 3279: 661, 666, 675, 680, 685 Wonganoo Pty Ltd, Moorak SA 5291: 664, 674

#### SANTA GERTRUDIS

P G & D M Conroy, Sebastopol Vic 3356: 686, 687, 689, 690, 688, 691, 692

#### SHORTHORN

G E Ashby & Sons, Gulnare SA 5471: 709, 747, 752, 759, 772, 786, 794 G & M Batson, Tarnook Vic 3670: 712 Blackjack Shorthorns, Jindabyne NSW 2627: 706 R A & J K Brook, Cavendish Vic 3314: 730, 771 E & L Brown, Newham Vic 3442: 720, 727, 749, 773 Master C Carter, Jindabyne NSW 2627: 741 F Clayton, Deniliquin NSW 2710: 697, 699 D J & K A Dawson, Yulecart Vic 3301: 704, 864 F H Steer Investments Pty Ltd, Burrumbuttock NSW 2642: 728, 738, 764, 774, 795 Finley High School, Finley NSW 2713: 710, 725 R B, C J, W R, A J & L J Ham, Moama NSW 2731: 696, 734, 745, 743, 775, 796 N H & S E Job, Cumnock NSW 2867: 703, 705, 701, 700, 708, 755, 761, 766, 777. 776, 789, 787, 788, 797 John Nitschke Drilling Pty Ltd, Hahndorf SA 5245: 693, 715, 723, 731, 735, 778, 790 B & L Mann, Albury NSW 2640: 713, 719, 726, 768 Mc Kay Bros, Creswick Vic 3363: 694, 736, 742, 739, 750, 779, 798

Spencer Family, Yuroke Vic 3063: 702, 721, 724, 729, 762, 780 H G Thompson & Sons, Yorketown SA 5576: 717, 756, 751, 781, 791, 799 J, G & M Tink, Parkes NSW 2870: 698, 737, 765, 782 Tippetts Glengyron, Creswick Vic 3363: 695, 711, 733, 744, 746, 783, 792, 800 KS Trengove & Sons, Spalding SA 5454: 707, 714, 718, 748, 757, 760, 784, 801 K A & E L Williams, Dubbo NSW 2830: 740, 763, 767, 802

G R & J Williamson, Carisbrook Vic 3464: 758, 754, 769, 770, 804, 805 L Williamson, Carisbrook Vic 3464: 716, 722, 732, 753, 785, 793, 803

# SIMMENTAL

R & C Cardile, Strathewen Vic 3099: 827, 834 H Chappel, Tennyson Vic 3572: 816, 824, 837 G S & L Cockerell, Portarlington Vic 3223: 818, 815, 821, 828, 840 Mr G & Mrs J Huggins, Mt Egerton Vic 3352: 807, 809, 810 D Mathieson, Drysdale Vic 3222: 806, 808, 820, 822, 831, 830, 833, 839, 841, 847 F & F Rizzo, Mickleham Vic 3064: 819, 813 M & V Ryan, Glenburn Vic 3717: 829 Mr & Mrs G & S Schilg, Burrumbuttock NSW 2642: 811, 817 Ms B Sutton & G Clarke, Bona Vista Via Warragul Vic 3820: 825, 826, 832, 838, 843, B W & Mrs R Thompson, Echuca Vic 3564: 812

#### SOUTH DEVON

C & L Daley, Mirboo North Vic 3871: 850, 851, 855, 852, 856, 857, 859, 861 G & E Garratt, Allambee Vic 3823: 849, 854, 853, 858, 860

C & Mrs K Wenn, Narre Warren Vic 3805: 814, 823, 836, 844, 846

#### SQUARE MEATERS

P Brown, Kyneton Vic 3444: 862, 863

#### **WELSH BLACK**

G & C Clark, Myrrhee Vic 3732: 871

A & J Furborough, Berwick Vic 3806: 865, 868, 869, 870, 873, 874, 876, 877 Silver Metal Investment Pty Ltd, Myrrhee Vic 3732: 866, 867, 872, 875, 878

# LED STEER OR HEIFER BEEF CARCASE COMPETITION

# **BEEF CARCASE**

CLASS 0001 - Entries in the Weekly Times Beef Carcase competition

- 1 Barham High School: (RPxAA), 01/01/07 Bred by Stormley Red Polls S: Stormley Strad Dale.
- 2 Barham High School: (RP), 01/01/07 Bred by Stormley Red Polls S: Stormley Strad Dale, D: Wyena Sea Hope
- 3 Barham High School: (SD), 14/09/06 Bred by The Bend South Devon Stud S: Thoura Downs Romany, D: Angeldale R22 Roxanne
- 4 Barham High School: (SD), 17/09/06 Bred by The Bend South Devon Stud S: Thoura Downs Romany, D: BBM R121 Loveday
- 5 Barham High School: (HH), 01/01/07 Bred by N & J Eagle
- 6 Barham High School: (MG), 07/07/06 Bred by A & G Martin
- 7 Barham High School: (SS), 01/01/07 Bred by B Bott
- **8 Barham High School**: (SD), 06/09/06 **Bred by** The Bend South Devon Stud S: Thoura Downs Romany, D: BDM R127 Beauty
- 10 Billabong High School: (SS), 01/01/07 Bred by J Willis & T Bullock S: Wagon Vale Cobber W25
- 11 Billabong High School: (LL), 12/08/06 Bred by Mandayen S: Ramornie Choice V27, D: Ramornie Jill Z15
- **12** Billabong High School: (LLxAA), 09/09/06 Bred by T & Ih Emerson S: Baylim Break Thru W001
- **13 Billabong High School**: (LL), 23/09/06 **Bred by** Mandayen S: Ramornie Sentinel W016, D: Ramornie Daphne U5
- **14 Billabong High School**: (LLxAA), 25/09/06 **Bred by** T & th Emerson S: Baylim Break Thru W001
- 15 Billabong High School: (LL), 01/01/07 Bred by G & M Withers S: Donna Valley Vengeance
- **16** P Brown & L Ward: (SQM), 15/09/06 Bred by P Brown & L Ward S: Thurloo Park X-Ocet, D: Windridge Una
- 17 I & A Burnside: (MG), 14/10/06 Bred by I & A Burnside S: Wiltshire Y Worry, D: Cratloe Z49
- 18 | & A Burnside: (MG), 13/09/06 Bred by | & A Burnside S: Cratloe Zany Z9, D: Cratloe U31
- 19 Chairo Christian School: (LL), 16/05/06 Bred by Vesper Hill Limousins S: Vesper Hill Yongala
- 20 Chairo Christian School: (BV), 02/10/06 Bred by Chairo Christian School S: Hideaway Bruno, D: Koijak 634
- 21 Chairo Christian School: (BV), 25/08/06 Bred by Chairo Christian School S: Hideaway Bruno, D: Koijak 654
- 22 Chairo Christian School: (LLxLL/AA), 23/03/06 Bred by Vesper Hill Limousins S: Vesper Hill Yongala
- 23 B Davies: (CCxAA/SS), 15/05/06 Bred by B Davies S: Rosedale Offshore
- **24 D J & K A Dawson**: (SS), 01/01/07 **Bred by** D J & K A Dawson S: Camaro Park Condimine Y3, D: Camaro Park Miss Starenia Z1
- 25 Emmanuel College: (HH), 29/07/06 Bred by K Hodge
- **26 Emmanuel College**: (HH), 15/07/06 **Bred by** K Hodge S: Beaumont Charger
- 27 Finley High School: (BZxSS), 30/10/05 Bred by J Montgomery S: Dollyriver Webster
- 28 Finley High School: (AA), 20/07/06 Bred by J & J Hawkins S: Woolami Charlie
- 29 Finley High School: (HH), 01/04/06 Bred by J Doyle S: Cobungra Douglad
- **30** Finley High School: (SS), 17/09/06 Bred by B & L Moran S: Broome Granite Rock
- 31 Finley High School: (CC), 25/11/06 Bred by A Paton
- 32 Finley High School: (SS), 26/07/06 Bred by T & H Willis S: Wagon Vale Cobber W25
- **33** Finley High School: (CCxMG), 29/07/06 Bred by G Close S: Morgiana House Yiseman (A.I) (E.T)
- **34** Finley High School: (SS), 14/08/06 Bred by G & J Knight S: Marellan Einstein, D: Broome Enchant Wallflower (P)
- 35 Finley High School: (HH), 18/08/06 Bred by M & F Archer S: Lowanna Wakeful V53, D: Ellerslie Lioness 343
- 36 Finley High School: (HH), 31/08/06 Bred by J Doyle S: Cobungra Dougald
- 37 Finley High School: (AA), 25/04/06 Bred by D & D Sexton
- 38 Finley High School: (BWxAA), 06/03/06 Bred by I R & D A Holmes S: Ravenswood Wellington 226

- **39 Geelong Grammar School Timbertop**: (MG), 07/09/06 **Bred by** Geelong Grammar School Timbertop S: Keighlians Wensleydale, D: Timbertop 416
- 40 Geelong Grammar School Timbertop: (AAxAA/MG), 01/09/06 Bred by Geelong Grammar School - Timbertop S: Bando 9074, D: Timbetop 419
- 41 Geelong Grammar School Timbertop: (MG), 17/09/06 Bred by Geelong Grammar School - Timbertop S: Keighlians Swaledale, D: Timbertop 02
- 42 Geelong Grammar School Timbertop: (MG), 19/09/06 Bred by Geelong Grammar School - Timbertop S: Glen Manuel X52, D: Willalooka Y1047
- 43 Geelong Grammar School Timbertop: (MG), 06/09/06 Bred by Geelong Grammar School - Timbertop S: Keighlians Wensleydale, D: Timbertop 427
- 44 Geelong Grammar School Timbertop: MGxMG/AA), 05/09/06 Bred by Geelong Grammar School - Timbertop S: Glen Manuel X52, D: Willalooka Christy Y170
- 45 Geelong Grammar School Timbertop: (MG), 27/09/06 Bred by Geelong Grammar School - Timbertop S: Keighlians Swaledale, D: Timbertop V103
- 46 Geelong Grammar School Timbertop: (MG), 28/09/06 Bred by Geelong Grammar School - Timbertop S: Keighlans Swaledale, D: Timbertop V203
- **47 Geelong Grammar School Timbertop**: (MG), 30/09/06 **Bred by** Geelong Grammar School Timbertop S: Keighlans Swaledale, D: Timbertop V138
- 48 Geelong Grammar School Timbertop: (MG), 23/10/06 Bred by Geelong Grammar School Timbertop S: Keighlans Swaledale, D: Timbertop 1/124
- **49 Glen Goulburn Poll Herefords**: (PH), 13/10/06 **Bred by** Glen Goulbum Poll Herefords S: Maungahina Globe
- 50 Glen Goulburn Poll Herefords: (PH), 18/04/06 Bred by Glen Goulburn Poll Herefords S: L J S Survivor U122
- 51 Glenormiston Campus South West Institute of Tafe: (LLxAA), 02/10/06 Bred by J & C Hine
- 52 Glenormiston Campus South West Institute of Tafe: (HH), 24/07/06 Bred by K Hodge
- 53 Glenormiston Campus South West Institute of Tafe: (HH), 24/07/06 Bred by K Hodge
- 54 Glenormiston Campus South West Institute of Tafe: (AA), 20/05/06 Bred by Hamish Cumming
- 55 Glenormiston Campus South West Institute of Tafe: (AA), 03/03/06 Bred by Ballangeich Stud S: Ballangeich Z145, D: Ballangeich X534
- 56 Glenormiston Campus South West Institute of Tafe: (AAxFF), 30/05/06 Bred by K Hodge
- 57 Glenormiston Campus South West Institute of Tafe: (LLxAA), 28/08/06 Bred by J & C Hine
- 58 Glenormiston Campus South West Institute of Tafe: (RP), 05/06/06 Bred by J Castle Red Phoenix Violet Tint
- 59 Glenormiston Campus South West Institute of Tafe: (HH), 15/06/06
- 60 Glenormiston Campus South West Institute of Tate: (LI), 11/09/06 Bred by Limstow Stud S: The Pines Quantum Star, D: Amerant Advance
- 61 Gundagai High School: (AA), 21/09/06
- 62 Gundagai High School: (AAxMG), 01/09/06 Bred by Abingdon Station
- 63 Gundagai High School: (AA), 22/09/06 Bred by Gundagai High School
- 64 C H & V M Hawkins: (SS), 15/08/06 Bred by C H & V M Hawkins S: Alta Cedar Signature 119N, D: Lone Pine Magical Red
- 65 C H & V M Hawkins: (PH), 31/10/06 Bred by C H & V M Hawkins S: Merewah Wideload, D: Mt Raven Shamrock W35
- 66 Mr & Mrs E A & G Keen: (MG), 22/03/06 Bred by E A & G Keen S: Southern Cross Jasper V936
- 67 Mr & Mrs G & N King: (CCxAA), 04/02/07 Bred by G & N King S: Campaspe Downs Yoshi, D: Wooralla Park Jean
- 68 Mr & Mrs G & N King: (CCxAA), 01/09/06
- **69 Longerenong College**: (CCxAA), 02/03/06 **Bred by** Mount William Charolais S: Mt William William
- 70 Longerenong College: (CC), 23/04/06 Bred by P J & M M Carter
- 71 Longerenong College: (CCxSS/HH), 01/08/06 Bred by Longerenong College
- 72 Longerenong College: (BAxSS/PH), 02/08/06 Bred by Longerenong College
- 73 Longerenong College: (AA), 05/09/06 Bred by Werribee Agriculture
- 74 Longerenong College: (CCxAA), 28/03/06 Bred by Mount William Charolais S: Mt William William
- 75 Longerenong College: (LL), 01/05/06 Bred by J & J Repper
- 77 Longerenong College: (CCxAA), 15/09/06 Bred by Werribee Agriculture

- 78 Marist-Sion College Warragul: (SIxAA/FF), 22/07/06 Bred by M & S Van Hout S: Pemijon Park Xavi,
- 79 Marist-Sion College Warragul: (SIxAA/FF), 15/07/06 Bred by M & S Van Hout S: Pemijon Park Xavi
- 80 Marist-Sion College Warragul: (AAxMG), 01/01/07 Bred by Marist-Sion College
- 81 Marist-Sion College Warragul: (LLxMG/FF), 01/01/07 Bred by E & D
- 82 Marist-Sion College Warragul: (AAxMG), 01/01/07 Bred by Marist-Sion College
- 83 Marist-Sion College Warragul: (LLxHH/FF), 01/01/07 Bred by E & D Rule
- 84 Marist-Sion College Warragul: (BLxAA/FF), 01/01/07 Bred by P & L Mangles
- 85 Marist-Sion College Warragul: (BLxLL/FF), 01/01/07 Bred by P & L Mangles
- 86 Marist-Sion College Warragul: (LLxAA), 01/01/07 Bred by E & D Rule
- 87 Mc Kay Bros: (SS), 09/10/06 Bred by Mc Kay Bros S: C J H Superbright, D: Marschay Y56
- 88 Mc Kay Bros: (SS), 17/10/06 Bred by Mc Kay Bros S: Marschay Vicar Zulu Z52, D: Marschay W11
- 89 Nagle College: (SSxHH), 15/06/06 Bred by J Rogers
- 90 Nagle College: (HH), 28/06/06 Bred by K & S Davies S: Wynella Rockford
- 91 Nagle College: (LLxLL/AA), 04/05/06 Bred by D & G Freshwater S: Clifton View Yes
- 92 Nagle College: (LL), 25/08/06 Bred by E Lissenden S: Mount Tek Quantim
- 93 Nagle College: (AAxLL), 24/08/06 Bred by D & G Freshwater S: Kumana Umpire
- 94 Nagle College: (LL), 13/06/06 Bred by E Lissenden S: Bruangil Park Yeoman
- 95 Northern Melbourne Institute of Tafe: (RP), 01/09/06
- 96 Northern Melbourne Institute of Tafe: (AA), 21/02/06 Bred by Northern Melbourne Institute of Tafe) S: Banquet Time Frame, D: Northern Ins Cab Y053
- 97 Northern Melbourne Institute of Tafe: (AA), 24/02/06 Bred by Northern Melbourne Institute of Tafe) S: Vermillion Yellowstone, D: Alexander Park U017
- 98 Northern Melbourne Institute of Tafe: (AA), 26/02/06 Bred by Northern Melbourne Institute of Tafe) S: Banquet Time Frame, D: Alexander Park V05
- 99 Northern Melbourne Institute of Tafe: (RAxCC), 01/01/07
- 100 Northern Melbourne Institute of Tafe: (RAxCC), 01/01/07
- 101 Northern Melbourne Institute of Tafe: (SIxRA/HH), 02/09/06
- 102 Northern Melbourne Institute of Tafe: (RAxCC), 01/01/07
- 103 M O'Sullivan: (PHxLL), 01/01/07 Bred by M A O'Sullivan Kensal Black Pearl W11
- 105 H Rogers: (SIXAA), 18/04/06 Bred by S: Power Source
- 106 H Rogers: (CCxAA), 20/04/06 Bred by Altimate Angus
- 107 H A Seeley: (CCxRA), 01/05/06 Bred by H A Seeley S: Ashwood Park
- 108 H A Seeley: (CC), 01/04/06 Bred by H A Seeley S: Ashwood Park Xmas
- 109 H A Seeley: (CCxAA), 01/04/06 Bred by H A Seeley S: Ashwood Park Xmas
- 110 Mrs L Senger-Whitehead: (LW), 18/03/06 Bred by Mrs L Senger-Whitehead S: Colombo Park Tannhauser, D: Keimoi Wollondilly Rose
- 111 Mrs L Senger-Whitehead: (LWxPH), 01/09/06 Bred by Mrs L Senger-Whitehead S: Colombo Park Xerxes
- 112 Silver Metal Investments Pty Ltd: (WB), 01/01/07 Bred by Silver Metal Investments Pty Ltd
- 113 Silver Metal Investments Pty Ltd: (WB), 01/01/07 Bred by Silver Metal Investments Pty Ltd
- 114 Silver Metal Investments Pty Ltd: (WB), 01/01/07 Bred by Silver Metal Investments Pty Ltd
- 115 St Johns College Dubbo: (CCXAA/HH), 07/10/06 Bred by Bail Family S: Grenell Exceptional P04, D: Bettsy 17
- 116 St Johns College Dubbo: (CCxAA), 26/10/06 Bred by Ball Family S: Grenell Exceptional P04, D: Jenny 16
- 117 St Johns College Dubbo: (CCxAA/HH), 10/10/06 Bred by B Dowler Barbie 049
- 118 St Johns College Dubbo: (LLxSS/MG), 21/10/06 Bred by C & L Mc Gilchrist S: Greenacres Upbeat 06
- 119 St Johns College Dubbo: (CCxAA), 04/05/06 Bred by Bail Family S: Grenell Exceptional P04, D: Daisy 08
- 120 St Johns College Dubbo: (LLxAA/HH), 14/10/06 Bred by B Dowler S: Sheraton P01, D: Debbie 026
- 121 St Johns College Dubbo: (BF), 12/05/06 Bred by Chadwick Downs S: Grandslam, D: Dorothy P0164

- 122 St Johns College Dubbo: (CCXLL/SS), 01/01/07 Bred by St Johns College Dubbo S: Caloona Park Exceptional, D: Katina 076
- 123 St Johns College Dubbo: (LLxCC/HH), 26/07/06 Bred by Kirk Family S: Wilworril Warrior, D: Pattsy 071
- 124 St Johns College Dubbo: (LLxLL/SS), 01/01/07 Bred by St Johns College Dubbo S: Sheraton Warrior P01, D: Annie 04
- 125 St Johns College Dubbo: (LLxCC/MG), 02/07/06 Bred by A Attard S: Sheraton Idol 07, D: Herbie 018
- 126 St Johns College Dubbo: (LLxHH/AA), 01/01/07 Bred by St Johns College Dubbo S: Sheraton Warrion P01, D: Karen 021
- 127 St Pauls College: (AAxMG/SI), 01/01/07 Bred by Merv Wegner
- 128 St Pauls College: (PH), 01/01/07 Bred by M A O'Sullivan
- 129 St Pauls College: (AAxMG/SI), 01/01/07 Bred by Merv Wegner
- 130 St Pauls College: (AAxLL), 01/01/07 Bred by St Paul's College
- 131 St Pauls College: (AA), 01/01/07 Bred by M Gadd
- 132 F H Steer Investments Pty Ltd: (SS), 05/10/00 Bred by F H Steer Investments Pty Ltd S: Myrtle Vale Trump MV X93, D: Myrtle Vale Glee Bell V91
- 133 Swifts Creek Secondary College: (HH), 15/08/06 Bred by W Flannagan
- 135 Tippetts Glengyron: (SS), 10/09/06 Bred by Tippets Glengyron S: Bayview Geoff Y15, D: Glengyron Rose 44th
- Wagga Wagga High School: (SS), 01/09/06 Bred by Evilo Shorthorns S: Evilo Zephyr Kae Z2, D: Evilo Kae 758
- 137 Wagga Wagga High School: (SS), 23/07/06 Bred by Evilo Shorthorns S: Evilo Zwingi Kae Z30, D: Evilo Kae X31
- 138 K T & C P Willoughby: (PMxHH/MG), 17/09/06 Bred by K & C Willoughby
- 140 KT&CP Willoughby: (PMxHH/AA), 18/09/06 Bred by K & C Willoughby
- 141 KT&CP Willoughby: (PMxHH/AA), 02/06/06 Bred by K & C Willoughby
- 143 Yanco Agricultural High School: (LLxMG), 18/07/06 Bred by Yango Agricultural High School
- 144 Yanco Agricultural High School: LLxMG, 06/03/06 Bred by Yanco Agricultural High School
- 145 Yanco Agricultural High School: (LLxMG), 02/09/06 Bred by Yango Agricultural High School
- 146 Yanco Agricultural High School: (LLxMG), 29/08/06 Bred by Yango Agricultural High School
- 147 Yanco Agricultural High School: (LLxMG), 29/08/06 Bred by Yango Agricultural High School
- 148 Yanco Agricultural High School: (SS), 01/06/06 Bred by A A Bennett
- 149 Yanco Agricultural High School: (LLxMG), 17/08/06 Bred by Yango Agricultural High School
- 150 Yanco Agricultural High School: (LLxMG), 16/08/06 Bred by Yango Agricultural High School
- 151 Yanco Agricultural High School: (SS), 07/08/06 Bred by P M Lawrence
- 152 Yanco Agricultural High School: (MG), 07/08/06 Bred by M Knight

# REGULATIONS OF BEEF CARCASE COMPETITION

300. The Regulations appearing in this Schedule form part of the General Regulations and conditions of entry to an Event at the Royal Melbourne Show. In the event of any inconsistency between the General Regulations and these Regulations, the General Regulations shall prevail to the extent of the inconsistency unless the General Regulations provide otherwise.

#### **CLOSE OF ENTRIES**

301. Entries in the Led Steer or Heifer Beef Carcase Competition must be received at RAS's Administration Office, located at Melbourne Showgrounds, Epsom Rd, Ascot Vale, 3032 by not later than 5:30pm on Friday 6 July 2007. Entry Forms must be accompanied by all fees at this time.

#### ENTRY FEES AND BEDDING FEES

302. Entry Fees for the Beef Carcase Competition are as follows:

Each Exhibit:

\$40.00 (GST inc.) for Members

\$60.00 (GST inc.) for Non-members

Bedding Fee: All Exhibitors are required to pay \$25.00 (GST inc.) for each Exhibit for Bedding fees.

303. National Vendor Declaration must accompany livestock traveling to the Showgrounds for the purpose of this competition.

- 304. Steers and Heifers are eligible to compete.
- 305. Each Exhibit must be tractable, and shall be led for Judging.

#### **GENERAL RULES AND ARRANGEMENTS**

306. All Exhibitors are to nominate a Market Category for their entry on a separate form that will be posted to each Exhibitor after the close of entries. This form must be returned to the RAS before 5.30pm on Friday 1 September 2007.

307. The live classes will be representative of the four Market Categories for the carcase appraisal, as follows:

Market Category		HSCW (kg)	Actual fat depth (mm)		
			P8	11/12 Rib	12/13 Rib
A	Light Domestic	100 – 180	4 – 8	4-6	3 – 6
B	Medium Domestic	181 – 240	6 – 10	5 – 8	4-7
C	Heavy Domestic	241 – 300	8 – 13	6 – 10	5-9
D	Export	300+	12 – 17	8 – 13	7 – 12

- 308. All Exhibits will be weighed live early morning on Tuesday 18 September 2007.
- 309. The classes will be finalised once all Exhibits have been weighed, and determined on manageable numbers as deemed by the RAS (approximately 20 Exhibits).
- 310. All Exhibits must be paraded live before the Judge to be eligible for judging on the hook.
- 311. Only entries exhibited by a recognised School, College, Young Farmers Group or TAFE (School) will be eligible for the Schools competition and awards.
- 312. School or College Exhibits denoted by (B&P) at the time of entry will be eligible for the Bred and Prepared trophy.
- 313. All Exhibitors shall state on their entry forms:
- a) the breed, cross of breeds or mixture of breeds; and
- the birth date if known, otherwise the month born, of each animal entered so far as this is known; and
- c) the name and breed of the sire and registration ID if known; and
- d) the name and breed of the dam and registration ID if known.
- 314. The RAS reserves the right to reject or limit entries at their absolute discretion, at any time, and for any reason. In this regard, Exhibitors are advised that accommodation for Beef Carcase Exhibits may be limited. If entries exceed the quantity that can be suitably accommodated, it may be necessary for the RAS to ballot entries. Exhibitors are also advised to read General Regulation 2.6.
- 315. For the purpose of this competition Hormone Growth Promotants are not permitted.
- 316. An animal or carcase which, in the opinion of the Chief Steward, shows secondary sex characteristics will be deemed to be a bull and will not be eligible for an award.
- 317. All Exhibits must be either polled or dehorned.
- 318. All Exhibits must comply with the Property Identification Code and National Livestock Identification Scheme legislation of Victoria. Exhibits not appropriately identified by means of an electronic identification will be deemed ineligible. The complete NLIS visual identification number must be provided at the time of entry.
- 319. The RAS reserves the right to insist that ineligible animals be removed from the Showgrounds at the expense of the Exhibitor.
- 320. In order for Exhibits to be slaughtered, and therefore eligible for competition, Exhibitors must provide a National Vendor Declaration.
- 321. Subject only to the General Regulations, the Chief Steward reserves the right to make such determinations and directions on any matter in relation to the conduct of the Beef Carcase Competition, as he/she thinks fit.
- 322. The Chief Steward reserves the right to penalise, disqualify or make ineligible for an award any Exhibit in the Beef Carcase Competition that is determined to be outside of acceptable specifications in regard to weight, eye muscle area, meat colour, fat depth, fat colour, fat distribution and marbling.
- 323. All Exhibits shall either be rung through the nose or have a fitted nose clip, and at all times shall be led by such nose ring/nose clip. This includes the unloading of livestock upon arrival at the Showgrounds.
- 324. All Exhibits for the Beef Carcase Competition are required to be housed as directed at the Showgrounds. Any proposed departure from this requirement by an Exhibitor must receive prior written permission from the RAS.
- 325. A complete Timetable of Arrangements for the Beef Carcase Section will be forwarded to each Exhibitor prior to the Show. The timetable that appears in this Schedule is subject to change and will be finalised once we have an indication of entry numbers for this section.

#### **JUDGING OF BEEF CARCASES**

326. Carcases will be judged within the general parameters of the Australian Beef Carcase Appraisal System (ABCAS), incorporating carcase attributes relevant to Market Specifications and Meat Standards Australia (MSA) developed eating quality standards.

327. Animals entered in Carcase Competitions cannot comply with the pre-slaughter management guidelines of MSA pathways, so their carcases are not eligible for sale as MSA-graded beef. However, the principles of MSA grading will still be applied in judging the carcases, according to the following Schedule of maximum points:

1. Market Specification	20 points	3. MSA Eating Quality*	45 points, combined
P8 Fat Depth	10	Ultimate meat pH	Units
Meat Colour	5	Ossification Score	100 - 590
Fat Distribution	5	Tropical Breed Content	0 - 100%
Penalties	As required	Hump Height	mm
2. Saleable Meat Yield	35 points	AUS-MEAT Marbling	0-6
		MSA Marbling	100 - 1190
Rib Fat Depth	15	Sex	Male/Female
Eye Muscle Area	20	Total	100 points

328. To receive eating quality points all carcases must meet MSA minimum standards, as such:

- a) Minimum 3mm of rib fat
- b) Adequate fat distribution
- c) Ultimate pH below 5.7
- d) Meat colour of 1b and no greater than 3

329. Carcases will not be penalised for bruising should any occur.

#### **ACQUISITION OF CARCASES**

330. The RAS reserves the right to arrange the sale of carcases over the hooks using a grid system. Carcases are sold over the hook and a commission of 3.0% payable to the RAS will apply.

# AWARDS FOR BEEF CARCASE COMPETITION

#### **AWARDS - LIVE**

331. Awards will be provided for each of the ordinary classes as follows:

a) Ribbons: 1st, 2nd & 3nd places, plus Highly Commended and Commended.

b) Prize money: 1st - \$25, 2nd - \$15, 3nd - \$10.

332. First and second placed Exhibits from the ordinary classes will then compete for the following awards, and presented with a Sash:

a) Champion Light Domestic Steer or Heifer

b) Reserve Champion Light Domestic Steer or Heifer

c) Champion Medium Domestic Steer or Heifer

d) Reserve Champion Medium Domestic Steer or Heifer

e) Champion Heavy Domestic Steer or Heifer

f) Reserve Champion Heavy Domestic Steer or Heifer

g) Champion Export Steer or Heifer

h) Reserve Champion Export Steer of Heifer

i) Grand Champion Steer or Heifer

333. The highest placed Schools Exhibits from each ordinary class will then compete for the following awards:

a) Champion Schools Steer or Heifer

Reserve Champion Schools Steer or Heifer

334. The highest placed Schools Exhibits will be drawn only from the top five Exhibits in each live class, ie: 1<sup>st</sup> through to 3<sup>rd</sup>, Highly Commended and Commended. If a class does not have a School exhibit amongst these top five, then no Exhibit from that class will compete for Champion or Reserve Champion Schools Steer or Heifer awards.

#### CARCASE AWARDS

335. Awards will be provided for each of the Light Domestic, Medium Domestic and Heavy Domestic and Export carcase divisions as follows:

a) Prize money:

1st - \$300, 2nd - \$150, 3rd - \$50

336. Sashes and wall plaques will also be awarded to:

a) Champion Light Domestic Carcase

b) Champion Medium Domestic Carcase

c) Champion Heavy Domestic Carcase

d) Champion Export Carcase

e) Grand Champion Carcase

f) Champion School Carcase

337. Wall plaques will be issued to the Exhibitors of the Grand Champion Carcase, and also to the Champion Schools Carcase

338. The Exhibitor of the Grand Champion Carcase will also be awarded \$1000 by The Royal Agricultural Society of Victoria.

# SCHOOL AND COLLEGE PARADERS COMPETITION

339. Students from each school or college entering steers or heifers in the Royal Melbourne Show Led Steer or Heifer Beef Carcase Competition may enter the School & College Paraders competition, which will be held on Tuesday 18 September 2007.

340. Upon receipt of Entry in the 2007 Led Steer or Heifer Beef Carcase Competition, those Exhibitors that are eligible (ie: Schools and Colleges) will be forwarded a separate Entry form pertaining to the School & College Paraders Competition.

341. Entries stating the name, age and school must be received at the RAS's Administration Office, located at Melbourne Showgrounds, Epsom Rd, Ascot Vale, 3032 by not later than by not later than 5:30pm on Friday 17 August 2007.

342. The number of students from each school or college is restricted to three for each steer or heifer exhibited (as opposed to entered). Points gained in this section contribute to the Most Successful School or College Exhibitor awards.

343. Classes will be arranged in suitable groups based on age.

344. Sashes will be awarded for:

a) 1st, 2nd and 3rd in each class.

b) Champion Schools Steer or Heifer Parader.

c) Reserve Champion Schools Steer or Heifer Parader

345. A Certificate of Participation will be awarded to all entrants. The RAS may choose to provide these Certificates after the completion of the Show.

#### MOST SUCCESSFUL SCHOOLS OR COLLEGE HOOF & HOOK EXHIBITOR.

346. The Bott-Burston perpetual trophy plus an annual replica will be awarded to the School or College gaining the highest total number of points in the School & College Paraders, Live Steer and Heifer, and Beef Carcase classes based on the following:

) 3 points for 1st

b) 2 points for 2nd c) 1 point for 3rd

d) 2 points for Grand Champion

e) 3 points for Champion f) 2 points for Reserve Champion

#### THE MARCUS OLDHAM COLLEGE TROPHY

347. The Marcus Oldham College perpetual trophy will be awarded to the highest scoring carcase entered by a school or college. The trophy will remain in the possession of the RAS, and a replica will be awarded to the winning school.

#### THE NORTHERN MELBOURNE INSTITUTE OF TAFE TROPHY

348. The Northern Melbourne Institute of TAFE perpetual trophy will be awarded to the highest scoring school Bred and Prepared carcase. The trophy will remain in the possession of the RAS, and a replica will be presented to the winning school.

#### THE BORTHWICK TROPHY

349. The Borthwick Trophy is celebrating its 55th year at the Royal Melbourne Show, and is widely recognised as the most prestigious interbreed steer and carcase award in Australia. The conditions of the competition are as under:

- The competition to be between teams of three purebred steers. Heifers are not eligible for the Borthwick Trophy.
- b) Steers to be led into the judging ring.
- c) Each team to be representative of any recognised Beef Cattle Breed.
- d) Each team to be selected from amongst the entries in the ordinary classes by a Breed Panel prior to live judging of these classes.
- e) Each breed to be represented by one team only.
- f) The results of both live and carcase judging will be considered in determining the winner of the Borthwick Trophy, with 25% of total points allocated for live judging and 75% of total points allocated for carcase appraisal. (Maximum points awarded by live judge - 100 points).
- g) Points gained by the steers in the carcase judging (maximum 300 points) to be added to the points awarded alive.
- The winner of the Borthwick Trophy will be the team that gains the highest aggregate points in both the live and carcase judging. (Maximum 400 points).
- i) The Borthwick Trophy to be competed for in perpetuity, and the name of the winning breed to be engraved on it each year. The Trophy to remain the property of The Royal Agricultural Society of Victoria Limited. A replica of the trophy will be presented to each of the Exhibitors of the winning team.

Past winners of the Borthwick Trophy are as follows:

1053

1953	Angus	1980	Galloway
1954	Angus	1981	Murray Grey
1955	Angus	1982	Angus
1956	Hereford	1983	Hereford
1957	Angus	1984	Angus
1958	Angus	1985	Poll Hereford
1959	Angus	1986	Angus
1960	Poll Hereford	1987	Angus
1961	Angus	1988	Angus
1962	Poll Hereford	1989	Angus
1963	Angus	1990	Murray Grey
1964	Angus	1991	Charolais
1965	Angus	1992	Charolais
1966	Angus	1993	Murray Grey
1967	Murray Grey	1994	Murray Grey
1968	Angus	1995	Murray Grey
1969	Poll Shorthorn	1996	Murray Grey
1970	Poll Shorthorn	1997	Hereford
1971	Hereford	1998	Shorthorn
1972	Murray Grey	1999	Angus
1973	Murray Grey	2000	Murray Grey
1974	Angus	2001	Shorthorn
1975	Murray Grey	2002	Shorthorn
1976	Murray Grey	2003	Shorthorn
1977	Murray Grey	2004	Murray Grey
1978	Galloway	2005	Charolais
1979	Galloway	2006	Charolais
		2000	Gladuals

# CONDITIONAL AND BREED SPECIFIC PRIZES

**ANGUS** 

Awarded to the Exhibitor of the Grand Champion Carcase, provided it is sired by an Angus, as nominated on the entry

form.

Prize money:

\$600

Presented by:

Angus Society of Australia (Federal

Council)

**BEEF SHORTHORN** 

Awarded to the Exhibitor of the Beef Shorthorn gaining the highest points for a carcase in the ordinary classes.

Prize money:

Trophy: Presented by: John Williamson Memorial Trophy The Beef Shorthorn Society of

Australia (Victorian Branch)

**BELGIAN BLUE** 

Awards Live:

Per Class

Prize money:

1st, \$50, 2nd, \$25.00, 3rd, \$10.00

Awarded to the Exhibitor of the Live Grand Champion provided it is sired by a pure bred registered Belgian Blue.

Awarded to the Exhibitor of the Live Reserve Grand Champion provided it is sired by a pure bred registered Belgian Blue.

Prize money:

\$15

Carcase Awards:

Per Class

Prize money:

1<sup>st</sup>, \$100, 2<sup>nd</sup>, \$50.00, 3<sup>rd</sup>, \$25.00

Awarded to the Exhibitor of the Grand Champion Carcase provided it is sired by a pure bred registered Belgian Blue.

Prize money:

\$100

Awarded to the Exhibitor of the Reserve Grand Champion Carcase provided it is sired by a pure bred registered Belgian

Blue.

Prize money:

Presented by:

The Belgian Blue Cattle Society Inc

BRITISH WHITE

Awarded to the Exhibitor of the 1st, 2nd or 3rd placegetter on the hoof or on the hook in its class providing it is a British

White or a British White Cross Prize money.

Presented by

The British White Cattle Society of

Australia Ltd.

CHAROLIAIS

Awarded to the Exhibitor of the Grand Champion Carcase,

provided such Exhibit is sired by a Charolais.

Prize money:

\$400

Awarded to the Exhibitor of the Reserve Grand Champion Carcase, provided such Exhibit is sired by a Charolais.

Prize money:

Presented by:

Charolais Society of Australia (Vic

Region)

DEXTER

Awarded to the exhibitor of any winning animal in the live or carcase judging providing it is a Dexter or Dexter cross sired

by a registered Dexter or from a Dexter mating

Prize money

\$200

Presented by:

Dexter Cattle Australia Inc

**GALLOWAY** 

Awarded to the Exhibitor of the Grand Champion Live or Carcase animal provided such exhibit is the progeny of a

registered Galloway sire or dam.

Prize money \$500

Presented by:

The Australian Galloway Association

HEREFORD

Awarded to the respective Exhibitors provided the winning carcase is a Hereford or Hereford Cross provided further in the case of cross bred Exhibits, the name Hereford is used first,

e.g. Hereford/Other Breed.

\$1000 Grand Champion Carcase Prize money:

> \$1000 Highest scoring Pure bred Hereford Carcase scoring 87 points

\$1000 Borthwick Trophy - if

Hereford

Presented by:

The Australian Hereford Society Ltd.

HEREFORD

The Howard W. Yelland Award will be awarded to the Exhibitor

of the highest scoring Hereford Carcase.

Prize money:

\$100

Presented by:

Mrs Margaret Yelland

HIGHLAND

Awarded to the exhibitor of the Highland gaining both first place and 80 points or higher in any Carcase class, provided the sire or dam is a Highland and nominated on the entry

Winning first place entitles the exhibitor to apply to the AHCS by 31 October in the current calendar year for inclusion in the AHCS Carcase Competition.

Prize money: Presented by:

Australian Highland Cattle Society

Inc.

LIMOUSIN

Awarded to the Exhibitor of the Grand Champion Carcase

provided it is sired by a Limousin \$250

Prize money

Awarded to each Exhibitor of the Exhibits which win the Borthwick Trophy provided they are Limousins

Prize money

\$150

Presented by

The Australian Limousin Breeders

Society Ltd.

LOWLINE

Awarded to the Exhibitor of the Grand Champion Carcase, provided the sire or dam is a registered Lowline and nominated as such on the entry form.

Prize money:

\$500

Presented by:

The Australian Lowline Cattle

Association

**MURRAY GREY** 

Awarded to the Exhibitors of the Grand Champion Carcase, provided such Exhibits are sired by a registered Murray Grey Bull and is entered as such.

Prize money:

\$200 Grand Champion

Presented by:

The Murray Grey Beef Cattle Society

Limited

**POLL HEREFORD** 

Awarded to the Exhibitor of the Grand Champion Carcase,

Limited

provided it is a pure bred Poll Hereford.

least one RASA registered parent.

Prize money: Presented by: \$350 The Australian Poll Hereford Society

Awarded to the Exhibitor of the Grand Champion Carcase, provided it is at least 50% Red Angus and entered as Red Angus or Red Angus cross. The animal to be the progeny of at

Prize money:

\$1000

Presented by:

The Red Angus Society of Australia

**RED ANGUS** 

**RED ANGUS** 

Awarded to the Exhibitor of the Highest Scoring Red Angus carcase, entered as Red Angus or Red Angus cross. The animal to be the progeny of at least one RASA registered

Prize money:

parent.

\$300

The Red Angus Society of Australia Presented by:

**RED ANGUS** 

Awarded to each Exhibitor of a steer represented in the Borthwick Trophy Red Angus Tearn. Steer to be the progeny of

at least one RASA registered parent.

Prize money:

\$100

Presented by:

The Red Angus Society of Australia

Inc.

**RED POLL** 

Awarded to the Exhibitor of the Grand Champion Carcase, provided such Exhibit is a pure-bred Red Poll by a registered

sire.

Prize money:

Presented by:

The Australian Red Poll Cattle Breeders Inc. (Federal Council)

Awarded to the Exhibitor of the Highest Scoring pure bred Red **RED POLL** Poll Steer.

Prize money:

\$200

Presented by:

The Australian Red Poll Cattle Breeders Inc. (Victorian Region)

**RED POLL** 

Awarded to the Exhibitor of the Highest Scoring Cress Bred Steer provided it is at least 50% Red Poll.

Prize money:

\$100

Presented by:

The Australian Red Poll Cattle Breeders Inc. (Victorian Region))

SANTA GERTRUDIS

Awarded to the respective Exhibitors, provided the carcase is

a Santa Gertrudis

**Grand Champion** 

\$2,000 or \$1,000 if less than 50

Carcase

Led Steer entries.

Presented by:

The Santa Gertrudis Breeders (Aust.)

Association

SHORTHORN

Awarded to the Exhibitor of the Grand Champion Carcase provided such Exhibit is a pure bred Shorthorn. Name of Sire

and Dam to be stated on the Entry Form.

Prize money:

\$250

Presented by:

The Shorthorn Society of Australia

(Victorian Branch)

SHORTHORN

The John Crilly Memorial Trophy will be awarded to the breeder of the highest scoring Shorthorn Carcase.

SIMMENTAL

Awarded to the respective Exhibitors provided the winning carcase is nominated on the entry form as a Simbeef (minimum 25% Simmental blood).

Prize money: Presented by: \$500 Grand Champion Carcase The Australian Simmental Breeders

Association Ltd. (Vic)

**SQUARE MEATERS** 

Awarded to the Exhibitor of the Grand Champion Live or Carcase animal provided it is a Square Meaters sired by a

Square Meaters Bull

Prize money:

Presented by:

Square Meaters Cattle Association of

Australia

# **BEEF CARCASE EXHIBITORS**

Barham High School, Barham NSW 2732: 7, 5, 6, 8, 3, 4, 1, 2

Billabong High School, Culcairn NSW 2660: 11, 9, 14, 13, 15, 10, 12

P Brown & L Ward, Kyneton Vic 3444: 16 1 & A Burnside, Sunbury Vic 3429: 18, 17

Chairo Christian School, Drouin Vic 3818: 20, 22, 21, 19

B Davies, Finley NSW 2713: 23

D J & K A Dawson, Yulecart Vic 3301: 24

Emmanuel College, Warrnambool Vic 3280: 25, 26

Finley High School, Finley NSW 2713: 34, 35, 37, 30, 28, 32, 33, 29, 38, 36, 27, 31 Geelong Grammar School - Timbertop, Mansfield Vic 3722: 44, 48, 39, 41, 42, 45,

47, 43, 46, 40

Glen Goulburn Poll Herefords, Epping Vic 3076: 49, 50

Glenormistron Campus - South West Institute of Tafe, Terang Vic 3264: 54, 59, 58, 57,

51, 56, 55, 60, 53, 52

Gundagai High School, Gundagai NSW 2722: 63, 62, 61

C H & V M Hawkins, Mountain Creek via Culcairn NSW 2660: 64, 65

Mr & Mrs E A & G Keen, Gregadoo NSW 2650: 66 Mr & Mrs G & N King, Frankston South Vic 3199: 67, 68

Longerenong College, Longerenong Vic 3401: 70, 77, 72, 69, 71, 75, 74, 73 Marist-Sion College Warragul, Drouin Vic 3818: 81, 85, 86, 83, 82, 84, 80, 78, 79

Mc Kay Bros, Creswick Vic 3363: 88, 87

Nagle College, Bairnsdale Vic 3875: 89, 91, 93, 92, 90, 94

Northern Melbourne Institute of Tafe, Epping Vic 3076: 102, 100, 99, 101, 95, 96, 97,

M O'Sullivan, Culcairn NSW 2660: 103 H Rogers, Edenhope Vic 3318: 105, 106 H A Seeley, Brunswick Vic 3056: 108, 107, 109 Mrs L Senger-Whitehead, Shoreham Vic 3916: 111, 110

Silver Metal Investments Pty Ltd, Myrrhee Vic 3732: 112, 113, 114

St Johns College - Dubbo, Dubbo NSW 2830: 123, 119, 122, 126, 118, 125, 124, 117, 120, 121, 115, 116

St Pauls College, Walla Walla NSW 2659: 129, 128, 130, 131, 127 F H Steer Investments Pty Ltd, Burrumbuttock NSW 2642: 132 Swifts Creek Secondary College, Swifts Creek Vic 3896: 134, 133 Tippetts Glengyron, Creswick Vic 3363: 135

Wagga Wagga High School, Wagga Wagga NSW 2650: 137, 136 KT & CP Willoughby, Wodonga Vic 3690: 142, 139, 138, 141, 140

Yanco Agricultural High School, Yanco NSW 2703: 147, 146, 150, 143, 152, 148,

151, 144, 145, 149

# AUSTRALIAN BEEF CARCASE APPRAISAL SYSTEM (ABCAS)







The Australian Beef Carcase Appraisal System ranks beef carcases on their overall merit, and gives feedback to producers about compliance to market specifications, the yield of saleable meat and the potential eating quality of the meat.

ABCAS combines the extensive experience of the NSW Department of Primary Industries in carcase judging and evaluation with the advanced technology of the world's most comprehensive grading system, Meat Standards Australia (MSA). Practices to improve and optimise meat quality have come directly from research by the Cooperative Research Centre (CRC) for Beef Quality.

ABCAS focuses on the factors that producers can control. In commercial grading, MSA accounts for many factors that affect eating quality but which the producer cannot control, such as preslaughter management, livestock handling, hanging method, chilling and ageing.

As far as possible, carcase competitions and educational activities should be structured in accordance with MSA grading requirements to optimise meat quality and demonstrate best practice. Please note that although ABCAS provides grading information on all carcases, in many competitions they will not be eligible for sale as MSA-graded beef, either because they do not meet MSA licensing conditions, or because they cannot meet requirements for pre-slaughter management (e.g. no mixing of different mobs of cattle, and direct delivery from farm to abattoir).

To assess market suitability, the basic specifications of a carcase are judged for compliance against the specifications of the appropriate market category.

### 1. Compliance to Market Specifications (20 points total)

Most markets require carcases to meet basic specifications of age (dentition), sex, weight and P8 (rump) fat depth. Dentition is usually checked in the live cattle, and is not part of the carcase assessment, while some markets specify only steers.

- 1.1 P8 Fat Depth (10 points) is measured on the hot carcase at the P8 site, over the rump, and is the method of describing fatness in the AUS-MEAT national carcase description language. It is commonly used to set market targets and for payment of premiums and discounts. Optimum P8 fat depth is the range set for each class (Market Category) in the carcase specifications.
- 1.2 Meat Colour (5 points) is recorded using AUS-MEAT standard meat colour chips in a range of 1a (very pale) to 7 (very dark purple). Colour strongly influences consumer appeal, with bright, pinkish colours in the range 1b to 3 being most acceptable to consumers. Carcases must meet the MSA specification of Meat colour 1b to 3 to receive eating quality points.

1.3 Fat Distribution (5 points) Ideally, a carcase will have a thin, even fat cover over all the important cuts, especially over the rump and forward along the backline. This contributes to eating quality by slowing the chilling rate, and reduces weight loss due to dehydration as the carcase chills.

Carcases will lose points for inadequate cover, or for heavy, wastey deposits. Key areas for assessment of excessive fat deposits are the subcutaneous fat (especially over the ribs), intermuscular (seam) fat and internal fat in the cod, udder, ribs and brisket.

Points	Description	• 7-
5	Meets minimum fat requirements with good even fat cover over entire body, without excess deposits of subcutaneous or seam fat.	
4	Meets minimum fat requirements with good even cover over the butt.	
3	Meets minimum fat requirements with fat cover over major primals, Cube roll, Striploin and Rump.	3 4 5
2	Lean carcases or carcases with uneven fat distribution. Also carcases with some excess fat deposits or seam fat.	
1	Fails to meet minimum fat requirements or overfat carcases with excessive fat deposits.	
0	Extremely lean or extremely fat wastey carcases.	1 2

- \* Carcases must have adequate fat cover over the highlighted areas to receive maximum points.
- 1.4 Fat Colour is recorded for your information at the end of the eating quality section but has no direct impact on eating quality; excessive yellowing or softness may affect the saleability of the carcase. Fat colour is assessed on the internal seam fat at the quartered site using the AUS-MEAT chips and ranges from 0 (bright white) to 9 (very yellow).

There are no points allocated for fat colour but individual competitions may apply penalty points (max. 5) if a carcase exceeds Fat colour 3 or if a market specification for fat colour is set.

- 1.5 Penalties may be applied to carcases that:
- fall outside the specified weight range (usually 1 point per kg outside)
- Exceed Fat colour 3 or fall outside the specified fat colour range
- Show Secondary Sexual Characteristics (bull or stag)
- Fall outside specifications for dentition
- Exhibit obvious defects, e.g. bruising, blood splash, injection site damage.

# 2. Saleable Meat Yield (35 points total)

Saleable meat yield is the proportion of the carcase that is saleable as primal cuts and meat trimmings. It excludes bone and waste fat. High-yielding carcases are preferred, and they are heavily muscled with a thin, even fat cover, but the fat depth and distribution must be adequate to meet quality requirements.

- 2.1 Rib Fat Depth (15 points) is a good indicator of carcase yield with over-fat animals having lower yields. It is measured in millimetres at the quartering site (usually 10/11th or 12/13th rib). Optimum rib fat depth is the range set for each class (Market Category) in the specifications. To receive eating quality points, carcases must meet the MSA minimum standard of 3mm at the quartering site.
- **Eye Muscle Area (20 points)** is a good indicator of the red meat content of the carcase. It is measured in square centimetres at the quartering site (10/11th or 12/13th rib) and points awarded according to the area measured in relation to the carcase weight. The larger the rib eye area in relation to the carcase weight the higher the points awarded.

# 3. MSA Eating Quality (45 points, combined)

When Meat Standards Australia (MSA) grades a carcase, grading is based on the principles that:

- 1. The potential meat quality of an animal must be realised as far as possible by minimising stress between farm and slaughter, and by optimising chilling/electrical stimulation conditions during processing
- 2. There are known variable factors that affect the eating quality of individual muscles and adjustments are made for their effect.

The MSA Grading Model predicts eating quality of 40 muscles by 6 different cooking methods. It applies all our current knowledge about the factors affecting meat quality — which muscles they affect, by how much, and what interactions there are with other factors. These have been defined by a large research effort and more than 439 000 consumer product tests, involving some 62 800 consumers.

In the Australian Beef Carcase Appraisal System the MSA eating quality score is the average predicted MSA eating quality score of 11 major primal cuts, cooked by their optimum method. Scores have been scaled to deliver a maximum of 45 points for eating quality. If carcases fail to meet MSA minimum requirements, they are below the benchmark standard for high quality table beef and will not receive an eating quality score.

### Eating quality variables and their effect

In commercial grading, once cattle have been slaughtered and have met processor requirements for eligibility, the grader enters information about each carcase and the MSA Model predicts the eating quality of each cut (visit <a href="www.msagrading.com">www.msagrading.com</a> for further details). Predictions are scientifically based and validated by the extensive MSA consumer testing program.

Processor requirements include:

- 1. Meeting the MSA pH decline "window" the rate of chilling and amount of electrical stimulation to optimise meat quality, determined by CRC research)
- 2. Cattle must be from a licensed producer / saleyard and must be accompanied by an MSA vendor declaration.
- 3. Direct consignment cattle must be killed the day after dispatch.
- 4. No mixing or drafting of different mobs of cattle.

Please note that the structure of some competitions may preclude the carcases from commercial grading. In this case, the assessments are provided for education and feedback.

# 3.1 Ultimate pH

pH is a measure of acidity / alkalinity levels of the meat. It is very important for keeping quality (shelf life) and is related to its cooking properties, colour and consumer acceptance.

After slaughter, the reserves of glycogen (energy) in the animals' muscles are converted to lactic acid, causing the pH to fall. As long as there is adequate glycogen present at slaughter, the pH will fall to within the normal range of 5.4 to 5.7. If there is not enough glycogen (due to stress or poor nutrition) then pH will remain above the acceptable limit of pH 5.70 and the meat is likely to be dark in colour, with poor keeping quality.

High pH meat is more difficult to cook to the right degree of doneness. At the same temperature as a cooked normal steak, it appears much rarer and if further cooked will lose its juices and become tough and dry.

- MSA rejects carcases with pH over 5.70
- A slight downward adjustment is made to eating quality of all cuts from carcases high in the acceptable 5.70 range.
- To maintain high glycogen levels it is important to maintain a high level of nutrition and water prior to slaughter and minimise transport and handling stress.

# 3.2 Ossification (maturity) and Carcase Weight

Ossification score is a measure of physiological maturity of the beef carcase. Hot Standard Carcase Weight (HSCW) is used in conjunction with the ossification score to identify carcases with greater weight for maturity - faster grown cattle have better eating quality.

As beef cattle mature the cartilage present around the bones of the spinal column gradually change into bone (ossify). The rate at which this occurs is reasonably predictable but is affected by factors such as sex and nutrition. The scale of ossification runs from 100 to 590.

Cuts from carcases with lower ossification at the same weight are graded higher. Increasing ossification has a cut-by-cut effect with a high effect on some cuts (e.g. rump) and a low effect on others (e.g. oyster blade).

Ossification score is influenced by a number of other factors:

- Heifers tend to have higher ossification scores at the same age compared to steers
- Hormonal Growth Promotants (HGP) treatment tends to increase ossification scores
- Nutritional setbacks or injury can increase ossification score, and this is not reversible.

Ossification score is assessed at three different locations on the sawn chine: the 5 sacral vertebrae (Tail), 6 Lumbar (back) and first 13 thoracic vertebrae (ribs).

# 3.3 Tropical Breed Content (TBC) % and Hump Height

MSA data clearly shows that cattle with tropical breed content have a higher risk of delivering "unacceptable" beef to consumers. Research by the Beef CRC has found that these breeds do carry more genes associated with toughness, but if animals are well managed before slaughter and optimally processed, the differences are small.

MSA research has determined that the major negative effect is toughening of the striploin, cube roll, tenderloin and oyster blade — all high value grilling cuts. The effect is smaller in the cuts with higher connective tissue such as brisket, topside, outside (silverside) and eye round.

The percentage of tropical breed content is taken into account by the grading model in combination with other factors. All cuts from 100% tropical breeds can still meet acceptable MSA consumer standards if the cattle are within age and fat limits and optimum eating quality interventions such as tenderstretch hanging, and ageing of cuts, are applied.

In crossbred cattle the hump height is an easily measured indicator of the percentage tropical breed content (TBC %). Animals of the same TBC can show different levels of visible traits such as hump, pizzle and ear length. Analysis of MSA data has confirmed that when adjusted for carcase weight, hump height can also be used to estimate the 'tropical breed effect' on eating quality. Hump height is measured in increments of 5mm on the hump muscle (*M. Rhomboideus*) on the animals' neck.

The tropical breed content (TBC) is supplied by the producer on the MSA Vendor Declaration or as the breed description on the competition entry form. Values are expressed as a percentage: 0, 12, 18, 25, 38, 50, 75, 100.

The grading model adjusts hump height for carcase weight and ossification, then checks this against the declared TBC% and applies whichever is the greater of the two eating quality adjustments.

# 3.4 MSA and AUS-MEAT Marbling Score

Marbling is the intramuscular fat (IMF), which appears as fine flecks within the muscle. It is deposited unevenly throughout the body, increasing through the carcase towards the neck and decreasing towards the tail. As cattle fatten, deposits accumulate in all the main fat depots (under the skin, around the internal organs, between the muscles and inside the muscles) but some cattle have the genetic ability to favour the development of marbling within the muscles.

To maximise marbling, cattle must be on good nutrition, at least during the finishing stage, and well finished.

MSA research associates increased marbling to higher eating quality scores for many grilling and roasting cuts. The effect is greatest in the loin cuts (cube roll and striploin) but it is possible to achieve good eating quality without visible marbling.

The MSA grader assesses marbling on the exposed rib eye (eye-muscle) at the quartering site.

AUS-MEAT marbling is assessed on a scale of 0 to 6, reported in tenths within each score, and is based on the total amount of marbling within the eye muscle.

An MSA-specific marbling score is also given on a scale of 100 to 1190, in increments of 10, with emphasis on its fineness and how it is distributed. This is thought to relate more closely to eating quality.

#### 3.5 Sex

There are small differences in eating quality between steers and heifers, other factors being equal. Although small, the effect of sex is rather complex, with heifers having a lower eating quality in some muscles and higher in others compared to steers.

The biological basis for the sex effect is not clear at this stage.

#### 3.6 Rib Fat

In ABCAS, Rib fat depth is primarily used as an indicator of saleable meat yield, but it also plays two roles in eating quality. Firstly, MSA requires a minimum of 3mm of subcutaneous fat at the quartering site with even fat distribution required over the entire body. This fat cover helps avoid eating quality problems caused by a rapid or irregular pattern of chilling (see fat distribution). Secondly, fatter carcases have slightly improved eating quality, over and above that associated with marbling and in this case a small upward adjustment is made to the grilling cuts.

# 3.7 Other variable factors affecting eating quality

There are other factors affecting eating quality in the MSA model, but most are usually constant across competition groups, or are outside the producer's control. The factors include:

# 3.7.1 Hang Method

Tenderstretch hanging (from the pelvis) has a number of significant advantages over the traditional hanging from the Achilles tendon (AT or hock), including:

- Significant improvement in eating quality from most of the major high-priced cuts
- A reduced need for post-slaughter ageing to improve eating quality
- Significant improvement in eating quality of tropical breed types
- Counteracts the negative eating quality effects of hormonal growth promotants (HGPs)

#### 3.7.2 Hormonal Growth Promotants (HGPs)

HGPs have a negative effect on eating quality, especially in the grilling cuts, and this effect will soon become part of the eating quality calculation in the MSA model.

## 3.7.3 Milk Fed Vealer (MFV)

Unweaned calves produce beef with better eating quality compared to weaned calves of similar age and fatness. The MSA model adjusts scores for all cuts.

# 3.7.4 Saleyards

The extra stress of saleyard handling compared to direct transport from farm to abattoir has been shown to reduce eating quality. The MSA model adjusts scores across the carcase.

#### **3.7.5** Ageing

Storing beef carcases or vacuum-packed cuts for up to 21 days at 0-1°C improves tenderness. Improvement is greatest in AT hung carcases, in those with higher tropical breed content and those treated with HGPs.

# **HOW TO IMPROVE YOUR SCORE**

The feedback from your score sheet provides a great deal of information and can identify areas for future improvement. When preparing cattle for a competition, remember that high scores come from three main factors:

- Meeting the weight, fat, sex and dentition specifications of the class
- High yield of saleable meat optimum fat cover and heavy muscling
- High eating quality young and well nourished, not stressed, with marbling as a bonus

An "average" young animal will achieve a high score if it is fed well in the final six weeks, it is not excessively stressed in the 24 hours before slaughter and it meets the correct weight and fat specifications. Very high scores are possible by retaining these features and increasing saleable meat yield.

# 1. Meeting market specifications

Key indicators: HSCW; sex; dentition; P8 fat depth; Meat colour; Fat colour.

Meeting the weight/fat target is the key starting point for achieving a high score. Achieving a weight and fat target is a complex combination of management and animal factors - frame size, muscling, genetics — and nutrition. Heavily muscled or large framed cattle require higher level of nutrition (and/or a longer time) to put on the same fat depth.

Optimal meat colour comes from cattle that are younger, have high levels of nutrition and low pre-slaughter stress (see meat quality).

Ideal fat colour (firm and white) results from feeding a grain-based ration. Young, grass-fed cattle produce a creamy-white fat colour, which is highly acceptable for most markets. Deeper yellow fat is undesirable and comes with older, grass-fed cattle. Some feeds can change the characteristics of fat, for example, large amounts of lupins can produce fat that is soft and greasy.

# 2. Improving saleable meat yield

Key indicators: Eye-muscle area (EMA), rib fat depth.

"Yield" is the weight of saleable cuts as a percentage of carcase weight. It is not to be confused with dressing percentage which is the ratio of carcase to live weight. High-yielding carcases are heavily muscled with optimum fat depth.

Among cattle meeting market specifications and minimum quality requirements for grading, the greatest potential to improve your score is by increasing yield. CRC research confirms that high yielding carcases contain significantly more beef.

Ensure fat depth is within the optimum specifications — this will maximize your yield points with the particular animal. Overfat carcases require more trimming, resulting in lower yield.

To increase EMA points, and therefore yield, after fat depth is optimized, in future you will need to select a more muscular animal. Consider these points:

Crossbreed, using high-yielding sire breeds

- Select bulls for moderate frame and heavy muscling, either visually or with help from BREEDPLAN EBVs for higher yield and EMA
- Heavily muscled cattle occur in most breeds, you don't have to use large European types
- More muscular cattle usually put on less fat, especially if they are large framed — they may need more feed or longer preparation time to reach the target fat depth
- Females from heavily muscled bulls are just as functional for breeding, as long as you avoid the extremes.

# 3. Improving eating quality

Key indicators: pH, Ossification score, Tropical Breed Content, Hump height, Marbling, Meat colour

The above key indicators along with other factors such as hanging method and ageing combine to produce the final eating quality score. As some factors interact with others, it is not possible to allocate points independently to each factor.

A score of zero in this section means the carcase failed to meet one or more of the minimum requirements for grading. This does not mean the beef has no value, but does mean its value has been severely downgraded against the industry's minimum quality benchmark.

If you received zero in the eating quality section, use the individual feedback assessments to identify the reason. It may be pH over 5.7, meat colour over Chip 3, rib fat depth less than 3mm or inadequate fat distribution. Any of these factors will result in a complete loss of meat quality points, and should be given highest priority for correction in the future.

- High pH or dark Meat colour are signs of pre-slaughter stress and low energy reserves at slaughter. Ensure as a minimum that nutrition is kept at a high level in the two weeks prior to slaughter, the animal has a quiet temperament and there is minimum handling and minimum time between farm and slaughter
- Inadequate rib fat or fat distribution feed a better quality ration with sufficient energy or feed for longer prior to slaughter

Once the carcase has met minimum grading requirements the best ways to maximize your eating quality score are:

- Ensure optimum pH (5.4-5.6) and meat colour (1b to 1c) by building up energy reserves before slaughter (good nutrition, minimum stress, avoid mixing with strange cattle, minimise handling, minimum time from farm to slaughter)
- Minimise the tropical breed content (hump height)
- Do not use hormonal growth promotants (HGPs)
- Increase marbling by using proven genetics (BREEDPLAN EBVs and GeneStar Marbling)
- Ensure good growth, without setbacks, and a fat cover near the top of the optimum range
- Aim for lower ossification score by faster growth for age

#### **64 BEEF CARCASE**

- Apart from these animal factors, research by the Beef CRC and MSA has defined other significant factors that can be used to improve meat quality. These are either included in MSA grading requirements or the variable factors in the meat quality calculation. They include:
- Minimising pre-slaughter stress by conducting necessary preslaughter assessments well beforehand (say 2 weeks), and transporting cattle direct to the abattoir for slaughter without delay
- Ensuring chilling and electrical stimulation are operated by the abattoir to optimum specifications
- Hanging carcases by tenderstretch to improve the eating quality of most major cuts and reduce the need for ageing
- · Ageing cuts after slaughter to increase tenderness.

#### **Further Information**

Meat Standards Australia

www.msagrading.com

Beef CRC

www.beef.crc.org.au

NSW Department of Primary Industries

www.dpi.nsw.gov.au

It is important to remember that to receive Eating Quality points, carcases must meet MSA minimum standards:

- Minimum 3mm of Rib Fat
- 2. Adequate Fat Distribution
- 3. Ultimate pH below 5.7
- 4. Meat Colour of or between1b and no greater than 3

MSA Website: www.msagrading.com







