Australian Dairy Herd Improvement Report 2004/2005

Australian Dairy Herd Improvement Scheme

NATIONAL HERD IMPROVEMENT ASSOCIATION OF AUSTRALIA INC. NHIA

ADHIS is supported by:

Contents

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2004/2005 AUSTRALIAN DAIRY HERD IMPROVEMENT REPORT - FOREWORD

Leon Giglia
NHIA Chairman

Dairy Genetic Progression continues to be a critical factor in the drive for productivity gains in the dairy sector. This report provides a great deal of information useful to farmers and the herd improvement staff that advise them on genetics and herd recording statistics for 2004/2005.

National Herd Improvement Association of Australia Inc (NHIA) is proud to support this publication in co-operation with the Australian Dairy Herd Improvement Scheme (ADHIS) which calculated the data used in this report. NHIA members provide the herd recording data used by ADHIS and use the output ABVs from ADHIS when discussing breeding selections with farmers.

Copies of the report are made available to herd improvement stakeholders all over Australia and provide a most useful industry resource for international visitors, researchers and others. Dairy farmers have access to the report through their local herd improvement provider or, alternatively, copies may be ordered by contacting the NHIA office, or downloaded from the NHIA Website.

NHIA continues to be a strong supporter of ADHIS, which is charged with the significant responsibility of producing accurate, reliable and impartial data for dairy genetic evaluation. For the purpose of this Australian Dairy Herd Improvement Report, a co-operative approach has been taken with ADHIS to ensure the continued provision of a broad spread of information. I acknowledge the board and staff at ADHIS for their dedication to achieving their goals and also their commitment to working closely with herd improvement firms.

Australian herd recording participation in 2004/2005 amounted to 5,080 herds and 949,726 cows under test. National average milk production for herd tested cows was 6,257 litres per cow, 251 kgs butterfat, 207 kgs protein and the average lactation length was 314 days.

The number of herds involved with herd recording declined by 10.9% compared with the previous year but milk production per cow under test increased by 3.5%. These figures indicate a continued decline in herd recording participation, however per cow production has increased. I am heartened by unofficial reports from herd improvement centres on current participation rates that suggest this decline has reversed since June 2005.

NHIA has completed a broad strategic review of its activities and its ability to effect positive change in the genetic progression landscape of dairy in Australia. I am excited about some of the programs that we have in place, now that we are in the phase of implementing the review recommendations. Australian dairy farmers can only benefit from these initiatives that are aimed at improving the quality of service delivery in herd improvement. Some of the initiatives include training and professional development programs for herd improvement staff, closer industry collaboration in new technologies and better co-ordination with other service providers to consolidate data collection and reporting.

We in the herd improvement industry are proud of the gains we have made in Australian dairy genetics as well as the continuing improvements in production achieved by herd-recorded herds. The landscape of this industry continues to change and we are seeing the competitive dynamics in some regions developing rapidly. Most Australians are comfortable with the idea of competition and its effect on driving improvements in service delivery. I again stress that, despite the dynamics, all service providers in herd improvement continue to be dedicated to the ideals of genetic progression and driving productivity gains for Australian dairy farmers.

Leon Giglia
NHIA Chairman

Allan Burgess
Chairman, ADHIS

Over the last twelve months the Board of ADHIS has spent a considerable amount of time developing a long-term strategic plan for ADHIS. From this process, combined with feedback from industry, the Board has identified a list of initiatives to be undertaken over the next twelve months. These initiatives are aimed at the on-going improvement of the ABV system.

During the year ADF was pleased to announce the appointment of Mr Warren Miles and re-appointment of Mr Peter Stewart and Mr Ian Carkeek to the Board of Management of the ADHIS Pty Ltd.

Warren is a dairyfarmer from Calivil in northern Victoria and a member of both the United Dairyfarmers of Victoria (UDV) Central Council and a board member of the Australian Dairy Farmers Ltd (ADF). Warren replaces Mr Geoff Akers who held the position for the last two years. At this time ADHIS would like to thank Geoff for his service to ADHIS and wish him well in his recent appointment to the Board of Dairy Australia.

In June this year Erica Shelfhorst completed her contract with ADHIS. Over the last three years Erica made a significant contribution to the development of the Cows n Genes extension program and in the management of the data capture project. The Board would like to thank Erica for her contribution and wishes her all the best in her future endeavours.

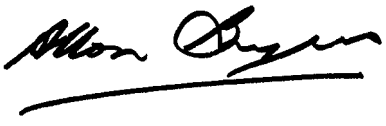
ADHIS is the Australian dairy industry's independent genetic evaluation service owned by farmers and governed by farmers. The aim of ADHIS is to provide farmers with the tools to make sound, independent decisions about breeding selections and to enable dairyfarmers to capture significant benefits through genetic improvement.

It is my belief that the dairy industry today may be taking for granted the benefits that have been derived from genetic improvement. As genetic gain is not easily seen on an individual farm, its impact over time may not always be clear. However, the average annual increase in profit via genetic improvement equates to $6 per Holstein cow and $9 per Jersey cow. The result is approximately $12 million per year in additional profit for Australian dairy farmers. As the HI industry undergoes considerable restructuring it is important that farmers continue to have sound independent analysis of bulls, progeny tested under Australian conditions.

There is no doubt that the conditions for dairying in Australia are different from all other countries in the world. Consequently it is vital for the future success of the Australian dairy industry that bulls are selected specifically for progeny testing (PT) in Australia. Farmers should support AI companies that are prepared to select bulls for PT in Australian conditions and have them assessed in the usual way through the ABV system.

The new requirements for dairy heifers being exported to China have generated a greater demand for recorded pedigree information. Over the last 18 moths ADHIS has been involved in the development of an export heifer database system for the Chinese market. The development of this system has been undertaken with the significant support of Australian Dairyfarmers Ltd (ADF), Holstein Australia and herd test centres from around Australia. The development of this export market has increased the importance of data and the recording of data by dairyfarmers.

On behalf of the Board of ADHIS I would like to thank the herd recording centres, breed societies and bull companies and their staff for their contribution and input at committee meetings and other interactions during the year. I look forward to the next twelve months and the opportunity to provide enhanced services to the Australian dairy industry. I would also like to record my appreciation to the staff of ADHIS who continue to provide loyal and high standard service to ADHIS.



Allan Burgess
Chairman, ADHIS

DIARY INDUSTRY OVERVIEW 2005

Chris Braniff
General Manager NHIA

Analysing results for the year ended 30 June 2005 shows a mix of positives and negatives. Herd participation numbers in herd recording continued the downward trend of the previous few years. However, in all states, participating herd sizes, average milk volumes and component yields have enjoyed strong growth.

Despite the reduction in total numbers of cows in herd recording, the quality of data being returned has improved, such that the National Herd Improvement Database can draw production data from more cows than the previous year. In 2003-04, 70.7% of recorded cows were included in the national statistics. In 2004-05, this number was up to 76.4%. This trend is supported by activities in the herd improvement industry to work more closely with farmers to collect accurate management data that underpins the relevance of the quoted production figures.

The herd improvement industry continues to develop as it rises to the challenge of servicing a constantly evolving dairy supplier client base. 2004-05 saw the continued consolidation of herd improvement providers, both in the co-operative sector as well as in the private sector. And yet, new businesses have entered the market and are being supported by dairy farmers.

There continues to be great investment in research for new technologies in the dairy sector, and this investment must continue. However, a great deal more productivity growth can be achieved by farmers adopting existing tried and proven technologies, than is likely from innovations to be discovered in the next few years. To this end, the herd improvement sector is investing in staff training in on-farm extension and promotion of existing technologies.

Innovations that are already available and seeing a rise in penetration in the market include:

- Use of bar coded sample vials to better identify milk samples
- NLIS ear tag reading on test day to automate animal identification
- Portable electronic meters have been commercialised and large field trials continue
- Once a day testing has been validated. This method allows for easier test day procedures

Since June 2005, NHIA has received numerous reports of herds coming back into herd recording, especially in Victoria. Centres are reporting increases in recording herds of between 5% and 9% compared to the same time last year. Following the trend in the dairy sector to herd consolidation, the average size of herds re-entering herd recording is approximately 20% greater than those that dropped out during the drought. These factors augur well for the herd improvement industry as the dairy sector continues its growth in the face of better seasons, strong domestic and global demand and continued adoption of productivity improvements.

The direct benefits of herd recording to farmers are obvious, with ABARE data showing herd recorded herds being nearly 10% more profitable per cow than herds not herd recorded. These benefits underpin the reasons why individual farmers choose to herd record. Additionally, indirect benefits flow on to all dairy farmers in the form of higher genetic merit semen and an improving Australian dairy herd.

Farmers who do not herd record still play an important role in the production of ABVs for Australian bulls. For instance, non-production data such as calving ease, fertility information, workability's, etc, can still be used in the National Herd Improvement Database. Farmers who collect this information are encouraged to make it available to their local Herd Improvement Centre so that it can be loaded into the database. Such cooperation by farmers in providing data, contributes to productivity improvement for the entire Australian dairy industry, and therefore for all dairy farmers.

The next few years will see growth and continued development in the herd improvement industry, an industry proud to be able to deliver $40 million in net present value per year in productivity gains to the Australian dairy sector.

Dr Chris Braniff
General Manager NHIA

REPORT ON ADHIS ACTIVITIES IN 2005

Daniel Abernethy
ADHIS Executive Officer

2005 Australian Breeding Value (ABV) Releases

In 2005 ADHIS released ABV's in February, May and August. Interbull ABV(i)'s were published as part of these releases as well as being published in November.

For each ABV release ADHIS produced a flyer of the top available ABV and ABV(i) bulls for Holsteins and Jerseys. Also included was the top ten bulls in the Red Breeds as well as the top 5 Guernsey. The ABV flyer was distributed via the AB companies and herd improvement centres. In August 2005 the brochure was sent to all Australian dairyfarmers via the Australian Dairyfarmer Magazine. The ABV's for individual bulls were available via the ADHIS website free of charge, using a searchable database.

About 950,000 cows were recorded in 2004/2005. This equates to a drop in herd recording participation of almost 71,000 cows or approximately 7% from the previous year. Average herd tested herd size increased to 187 cows.

Cow ABVs were calculated and available for distribution free of charge to herd owners via the regional herd improvement centres.

Major ADHIS events in 2005.

- Mr Ian Carkeek and Mr Warren Miles appointed to the Board of ADHIS
- Three official releases of Australian Breeding Values (ABV's) February, May & August
- ABVs quoted from an updated base
- Introduction of new Interbull traits for survival and calving ease for the Holstein breed.
- Expression of the calving ease ABV updated
- Formation of the ADHIS Technical Working Group
- Cows 'n' Genes Training course presented to HI Staff and farmers, increasing awareness and understanding of ABV's
- ADHIS completes Data Capture Trial, looking at improving on-farm recording of cow events such as mating, mastitis and calving.
- ADHIS involvement in establishing an export heifer database for the Chinese market
- Continued support for research and development projects, especially Countdown Downunder and InCalf.

New Appointments to the Board of ADHIS

In 2005 ADF was pleased to announce the appointments of Mr Ian Carkeek and Mr Warren Miles and re-appointment of Mr Peter Stewart to the Board of Management of the Australian Dairy Herd Improvement Scheme (ADHIS).

Mr Ian Carkeek was appointed to the ADHIS Board in February 2005. Mr Carkeek is a dairyfarmer from Waaia in northern Victoria and a member of both the United Dairyfarmers of Victoria (UDV) Central Council and the Australian Dairy Farmers Ltd (ADF) Board. Mr Carkeek replaced Mr Peter Owen who had held the position since August 2001.

Mr Miles is a dairyfarmer from Calivil in northern Victoria and is also a member of the United Dairyfarmers of Victoria (UDV) Central Council and the Australian Dairy Farmers Ltd (ADF) Board. Mr Miles replaces Mr Geoff Akers who held the position for the last two years.

At this time ADHIS would like to thank both Mr Peter Owen and Mr Akers for their service to ADHIS and the broader dairy industry.

Initiatives of the Board of ADHIS

These initiatives have been undertaken as part of ADHIS' longer-term strategic planning process as well as in response to industry feedback on areas of improvement to the ABV system.

1. **External ADHIS Technical Review**
   At the end of 2005, ADHIS will undergo an external technical review in order to analyse current performance and assess future direction. In particular the review will consider the capacity to develop and implement world's best practice in genetic evaluation and data management. Areas of the review include hardware, software, genetic models, QA systems, procedures, analysis tools, data format and transfer mechanisms and ability to incorporate genetic marker material. The outcomes from this review will be utilised in a project plan on the re-development of the genetic evaluation software (Item 9).
2. **Review of Structures**
   Given on-going changes in the Herd Improvement industry it is important that ADHIS maintains effective broad industry consultation. In order to meet this goal ADHIS will be analysing its committee structures, in particular, the format and structure of the ADHIS Advisory Committee. ADHIS will also review management and resource needs into the future.
3. **Analysis of Governance in conjunction with ADF**
   In association with ADF, the Board of ADHIS will be undertaking an analysis of the governance aspects of ADHIS.
4. **Joint Commissioning of Market Research in association with Dairy Australia**
   ADHIS has been working with Dairy Australia in the commissioning of market research aimed at analysing the key decision influences and drivers which impact on dairyfarmers' breeding selections. The outcomes from this research will be utilised in a proposal for a broad industry extension project on genetic improvement.

5. **Extension Plan**
   In 2005/2006 ADHIS will be implementing outcomes from the ADHIS Extension Plan. This plan covers areas such as website re-development, improved communication to the HI industry and the production of ABV "Fact Sheets" addressing frequently asked questions. This work will be informed by Item four and other industry working groups.

6. **Website Re-development**
   In 2006 ADHIS will be redeveloping its website. This re-development is aimed at improving the user friendliness of the site as well as to improve its use as an extension tool.

7. **Development of a Technical Working Group**
   ADHIS is confronted with a number of technical issues. ADHIS believes that gaining greater understanding of these issues within the HI industry is very important. Consequently, a technical working group has been established comprising representatives from HI companies. Outcomes and recommendations from this technical working group will be fed into the ADHIS Advisory committee and Board.

8. **ABV Expression**
   The way in which some ABVs are expressed can impact on farmers' understanding of the ABV. Difficulty in interpreting ABVs may also be negatively impacting on selection for profit. ADHIS is planning a significant review process, which is to be undertaken in early 2006, to address the issue of ABV expression and impacts from the updating of the ABV base. ADHIS will be looking to involve dairyfarmers together with the HI industry in this process.

9. **Re-development of the ADHIS Genetic Evaluation Software**
   Many countries around the world are developing improved genetic evaluation models; ADHIS must remain at the cutting edge of international genetic evaluation in order to improve reliability of ABVs and ultimately the rate of genetic gain.

   In order to achieve this goal, a redevelopment of the genetic evaluation software has been proposed. This re-development proposal formed part of the Dairy Australia R&D Prospectus. A draft plan for the redevelopment project will be completed in mid 2006.

   9.1 Development of Improved Genetic Evaluation
   ADHIS has been conducting research into an improved random regression genetic evaluation model. This genetic model is aimed at improving the reliability of breeding values. The new model is expected to increase the reliability of the APR, and as a result, increase in the rate of genetic gain.

   9.2 Improved Quality Assurance (QA)
   As part of ADHIS' long-term strategic plan, a significant QA component will be included within the software re-development project. This includes improvements to data warning reports sent to Data Processing Centres (DPCs). Furthermore, the "Active sire" listing will be updated and improvements in QA will be made through greater data requirements for NASIS Registrations, including international data on overseas sires.

10. **Linear Classification analysis and QA back to Breed Societies**
    In cooperation with the breed societies, ADHIS will be developing improved reporting and feedback to breed societies on Linear Type Evaluation (LTE) data, which is provided and used in the calculation of type ABVs. This data will aid breed societies in QA and management of LTE collection.

ADHIS will also be involved in supporting industry projects recommended in Dairy Australia's Genetics R&D plan, such as the review of the economic contributions in the Australian Profit Ranking (APR).

ADHIS remains committed to providing sound independent advice to dairyfarmers to aid them in making profitable selection decisions. The Board believes that the initiatives detailed in this document will further enhance the reliability and utilisation of ABVs into the future and improve the rate of genetic gain for Australian dairyfarmers.

ABV's in 2005

In February 2005 a number of improvements to ABVs were implemented. They included the update of the base for all ABVs, improvement to the calving ease expression and the addition of Interbull ABV(i)s for survival and calving ease for the Holstein breed.

Update of the base for all traits:
In February 2005 the ABV base for all traits was updated. There was no re-ranking of bulls as a result of this update. Rather all bulls shifted to the same degree.

Genetic bases were previously updated in Australia in 2000 for production traits and 2003 for type traits. By updating the ABV base, farmers are able to compare bulls to a more modern cow population and as a result maintain positive genetic selection pressure.

So what is a base? ABVs are not an absolute measure of a trait. Rather ABV's are expressed as a deviation from a base point. The base is the average ABV of a group of animals, which is set at zero. This provides a reference point for comparisons between bulls.

Example A bull with an ABV of +20 for protein has an ABV 20 kilograms greater than the base.

Updating the base means that ABVs are reported from a more modern group of cows and this provides more meaningful assessment.

By regularly updating the base the population average for any given trait remains at approximately zero. Consequently a positive ABV indicates above average for a trait and a negative ABV indicating below average for a trait.

Table 1 show the base updates for Holstein, Jersey and Red Breeds for APR and ASI.

Table 1. Base updates for APR and ASI

Breed	Base Update APR	Base Update ASI
Holstein	30	25
Jersey	46	37
Red Breeds	35	28

Example
A Holstein bull had an APR in August 2004 of 130. Under the new base the bull's APR in February 2005 will now be 100 *(Assuming his ABV does not change due to added data).*

The update of the base shows that Australian dairyfarmers are maintaining significant genetic improvement. It also indicates that by selecting sires based on APR farmers can continue to capture this genetic gain and increase profit through genetic improvement.

NEW Calving Ease Expression

A recent study indicated that there was significant confusion amongst farmers regarding the expression of the calving ease ABV and whether a higher ABV was better or worse. It was recommended that ADHIS consider a new form of expression for the calving ease ABV.

The ADHIS Advisory Committee discussed this point at length and agreed to update the expression of the calving ease ABV to increase its understanding.

The calving ease ABV is now expressed as the percentage of 'normal' calvings expected when joined to mature cows in the average Australian herd. (Normal being defined as non-assisted and non-serious easy pull calvings).

Example
A bull with a calving ease ABV of 98 is expected to have 98% of calvings rated 'normal' in an average Australian herd. (Previously this bulls calving ease ABV would have been 2%)

This is the same expression as the workability traits, which are widely recognised and understood and has lead to less confusion about what the ABV means.

The calving ease for a bull is based on farmer assessment of the level of difficulty experienced with the birth of the progeny of the bull, relative to births in the same herd in the same season.

ADHIS uses data collected on daughters of bulls that have commenced their second or later lactation. Because of the low heritability (0.05) and relatively low level of data capture, most Holstein bulls have Calving Ease ABVs below the official publishable levels (less than 50% reliability).

An increase in the number of dairyfarmers collecting calving ease data and submitting it to their herd-recording centre would improve the reliability of ABVs and would increase the number of bulls with a publishable proof. ADHIS encourages all farmers to discuss with their herd test centre how they can collect and enter this data.

Addition of Interbull Survival and Calving Ease ABV(i)s:
Since the start of 2005 ADHIS has suppled data to Interbull for two new ABV(i) services. These two new ABV(i)s are for calving ease and survival.

Interbull collects data from the 25 member countries and enters it into the international genetic evaluation. This analysis takes into account an animal's pedigree, international performance and inter-country correlations to estimate ABV(i)s for overseas sires that have no daughters in Australia.

The two new ABV(i)s for calving ease (Holstein) and survival will allow farmers to directly compare locally proven bulls with other international sires for their performance regarding calving ease and survival. Both calving ease and survival ABV(i)s were made available for Interbull sires from the February 2005 ABV release.

Cows n Genes Course

The Cows n Genes course has been developed into three formats aimed at different audiences. These formats include a two half-day course designed for HI staff, a four hour course designed for farmers and discussion groups and a 1 hour presentation for Boards of organisations and other dairy industry participants. ADHIS would like to thank Erica Schelfhorst for her contribution to the development of the Cows n Genes extension program and management of the Data Capture project

Over the last twelve months Cows n Genes courses were held in New South Wales, Queensland and several regions of Victoria. In 2005 ADHIS also produced and printed the Cows n Genes Workshop manual via funding from the Gardiner Foundation. This manual is a take home reference tool for farmers and HI industry representatives, which covers all aspects of ABVs from expression to more technical explanations of how ABVs are calculated. Going forward ADHIS will be conducting an annual Cows n Genes course for HI industry representatives as well providing courses to farmers and HI staff throughout the country as requested.

The Cows n Genes training workshop is designed to increase the knowledge and understanding of Australian Breeding Values (ABVs), the Australian Profit Ranking Index (APR) and dairy genetics. The course is a free training workshop offered by ADHIS and is run periodically in dairy regions around Australia.

Contact ADHIS for further information on the *COWS n GENES* training workshop.

Data Capture Project

The Data Capture Project managed by ADHIS was completed in 2005. The write up of this project has been finalised with outcomes and recommendations from this project to be distributed to the dairy industry in the New Year.

In summary the results showed that, after adjusting for location and level of recording before the trial started, farmers who used hand held computers collected significantly more calving ease, pregnancy test and other fertility data per calving than farmers who were not involved in the trial and those who recorded this data on paper or on a desktop computer.

The number of pregnancy test records collected by farms that used hand held computers almost tripled from 2001 to 2004 whereas there was little change in the amount of data collected by the other groups. Similarly the number of calving ease records recorded per calving increased 27% while the number of heats recorded per calving increased four fold during this same period. Complete results and recommendations from this project will be provided to the industry in 2006.

Industry groups supporting this project include: InCalf, Countdown Downunder, Genetics Australia, Gippsland Herd Improvement and Western Herd Improvement.

Formation of ADHIS Technical Working Group

In calculating ABVs and investigating improvements to the ABV system ADHIS utilises a number of technical models and principles. After discussions at the Advisory Committee it was agreed that a Technical Working group should be formed to discuss these technical aspects in order to generate a greater understanding amongst HI representatives.

The aim of the technical working group is to discuss the technical aspects of improvements being considered as well as to supply feedback, and make recommendations in regard to these improvements to the Advisory Committee and ADHIS Board. The Technical Working Group contains members from AB companies, Breed Societies and NHIA.

The first Technical Working Group was held in October with future meetings being planned to discuss the development of improved genetic evaluation models as well as aspects of the current evaluation such as the animal model and the use of reliability in ABV calculations.

ADHIS involved in the development of the Export Heifer database

In 2005 ADHIS was requested to aid in the development of an Export Heifer database to store the pedigree and identification details of heifers exported to China. This request came about after the Chinese Ministry of Agriculture sought additional pedigree information on cattle being purchased for the Chinese market.

ADHIS has been working with ADF, Holstein Australia, Agricultural Business Research Institute (ABRI), Data Processing Centres (DPCs) and exporters to facilitate the recording of heifer details onto the ADHIS database. This data is used in the generation of an Australian Dairy Breeding Animal Certificate, which is now a requirement for animals being exported to China.

The development of this database has added significant commercial value to the recording of pedigree data. Farmers, who currently herd test, already have significant amounts of data on the ADHIS database, which is received via their herd test centre. For non-herd recording farmers, data on heifers needs to be supplied to a DPC to be entered in order to appear on the ADHIS database.

Farmers interested in the export heifer trade should speak to their local DPC to find out more about the trade and the new pedigree requirements.

THE ADHIS BOARD AND COMMITTEES 2005

ADHIS Pty Ltd Board of Management

Members:
Mr Allan Burgess (Chairman), Mr Ivan Jones, Mr Peter Stewart, Mr Ian Carkeek (appointed 2/05), Mr Geoff Akers (retired from 9/05), Mr Warren Miles (appointed 9/05) Mr John McQueen (Secretary) and Mr Daniel Abernethy (Executive Officer)

The Board met on several occasions during 2005 to consider recommendations from the various committees as well as all administrative and policy issues. The Board would like to sincerely thank all committee members who gave their time to advise and assist ADHIS.

Advisory Committee

Members:
Mr. Bernie Harford (Genetics Australia), Mr. Graeme Gillan (ABS Australia), Mr. Jim Conroy (Herd Imp. Support Group), Dr. Christopher Braniff (NHIA), Mr. Ken Phillips (Dairy Express), Mr. Leon Giglia (CHISWA Group), Mr. Anthony Shelley (WHI), Mr. Stewart McRae (Mistro Group), Mr. Grant Monro, (HFAA), Mr. Matthew Shaffer, (HFAA), Mr. Scott Joynson (AJBS), Mr. James Hill (ARCBA/RDCA), ADHIS Board Members and staff.

The Advisory Committee met in July and November 2005. The Advisory Committee acts as the Board's main policy advisory body.

Genetics Committee

Members:
Prof. Mike Goddard (Chairman, University of Melbourne), Dr Sandy McClintock (Dairy CRC), Dr Mick Carrick (Department of Primary Industries Victoria), Dr Julius Van der Werf (University New England), Prof. Frank Nicholas (Sydney University), Dr Mekonnen Haile-Mariam (University of Melbourne) and ADHIS staff.

This committee met in September 2005. Key areas for consideration included the update of economic weights in the APR, calculation of composite traits from linear equations, development of random regression models, reviewing fertility ABVs and outcomes from recent inbreeding research.

Records Standards Committee

Members:
Mr Ivan Jones (ADHIS, Chairman), Mr John Stevenson (Dairy Express), Mr Peter Nish (Tasherd), Mr Frank Treasure (HISWA and CHISWA), Dr Mike Larcombe (Mistro Group), Mr David Parkinson (Ausherd) and ADHIS staff.

This committee met in March 2005. Key issues included Active NASIS file, Data Interchange Format (DIF) updates, data transfer for the export heifer trade, ABV data transfer schedules, and the full implementation of NLIS in Victoria.

Type Assessment Committee

Members:
Mr Ivan Jones (Chairman), Mr Graeme Gillan and Mr Peter Williams (ABS Australia), Mr. Jim Conroy and Mr. Rohan Butler (Semex Australia), Mr. Peter Thurn (Genetics Australia), Mr Scott Joynson (Australian Jersey Breeders Society), Mr Michael Perkins, Mr Sam Nichol and Mr. Bill Leggett (Holstein Friesian Association of Australia) and ADHIS staff.

This committee met in June 2005. The main items of discussion included a review of the previous year's type data collection, arrangements for type data collection in 2005/2006, production of composite traits from linear equations.

Communications Committee

Members:
Mr Peter Stewart (Chairman), Mr Christian Hickey (NHIA), Mr Ivan Jones (ADHIS), Mr Peter Williams (ABS Australia), Mr Bernie Harford (Genetics Australia), Mr Scott Joynson (Australian Jersey Breeders Society), Mr Ross Berryman (Holstein Friesian Association of Australia) and ADHIS staff.

This committee met in June 2005. The main items discusses included ADHIS publications, bull listings, the update of the ABV base, ABV Expression and ADHIS Communications Plan

Technical Working Group

Members:
Mr Peter Stewart (Chairman), Mr. Peter Thurn (Genetics Australia), Mr. Peter Williams (ABS Australia), Mr. Rohan Butler (Herd Imp. Support Group), Dr. Chris Braniff (NHIA), Mr. Bill Leggat (HFAA), Mr. Scott Joynson (AJBS) and ADHIS staff.

The Technical Working Group met in October 2005. Topics discussed included the update of economic weights in the APR, calculation of composite type traits from linear equations and on-going communication and interaction with HI industry technical staff

AUSTRALIAN HERD RECORDING STATISTICS 2004/2005

Table 1: National and State Totals and Production Averages

State	Herds and Cows Recorded					Production Averages					
	Number of Herds	Included in Averages	Excluded from Averages	Total Cows	Herd Size	Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation Length days
Victoria	3,079	451,604	134,962	586,566	190.5	6,083	4.0	245	3.3	202	309
New South Wales	665	90,337	25,451	115,788	174.1	6,814	4.0	275	3.4	232	335
Queensland	444	40,059	23,298	63,357	142.7	5,788	4.1	238	3.4	197	329
South Australia	383	61,092	15,436	76,528	199.8	7,032	3.9	271	3.2	226	322
Tasmania	299	45,951	19,023	64,974	217.3	5,547	4.2	234	3.5	191	289
Western Australia	210	36,331	6,182	42,513	202.4	7,152	3.8	270	3.1	221	323
Australia	5,080	725,374	224,352	949,726	187	6,257	4.0	251	3.3	207	314
Victorian regions											
Northern	1,345	175,735	61,821	237,556	176.6	6,216	4.1	252	3.3	207	312
Eastern	1,076	165,525	39,197	204,722	190.3	5,815	4.0	235	3.3	193	307
Western	658	110,344	33,944	144,288	219.3	6,272	4.0	250	3.3	208	307

Table 1a: National Totals and Production Averages 1997 to 2005

1997/1998	7,292	897,799	78,271	976,070	133.9	5,254	4.1	213	3.3	171	298
1998/1999	7,175	952,073	83,266	1,035,339	144.3	5,497	4.1	224	3.3	181	302
1999/2000	6,976	947,104	81,129	1,028,233	147.4	5,691	4	230	3.3	187	302
2000/2001	7,405	940,712	286,248	1,226,960	165.7	5,682	4	229	3.3	186	302
2001/2002	6,930	888,497	303,269	1,191,766	172	6,027	4	243	3.3	200	307
2002/2003	6,358	842,113	335,786	1,177,899	185.3	5,877	4	235	3.3	193	303
2003/2004	5,704	722,074	298,727	1,020,801	179	6,048	4.0	242	3.3	201	310
2004/2005	5,080	725,374	224,352	949,726	187	6,257	4.0	251	3.3	207	314

National Benchmark

There were an estimated 2.01 million* dairy cows in Australia in 2004/2005. Of these 950,000 or 47% were individually herd-recorded representing a fall of 3% from the previous year.

Table 2: Number of Herds in Fat Production Categories by Region

State	Total Herds	Average Fat Production (kg per cow)									
		<125	125-149	150-174	175-199	200-224	225-249	250-274	275-299	300-324	>324
Victoria	3,079	71	70	170	281	479	578	495	313	133	59
New South Wales	665	1	8	17	37	63	96	115	111	71	55
Queensland	444	8	11	28	41	49	42	37	29	9	10
South Australia	383	8	10	12	14	42	57	82	55	47	31
Tasmania	299	3	6	17	35	43	49	34	20	10	6
Western Australia	210	1	0	3	12	26	21	43	48	27	15
Australia	5,080	92	105	247	420	702	843	806	576	297	176
Victorian regions											
Northern	1,345	24	20	55	99	168	238	233	154	64	27
Eastern	1,076	27	31	85	121	208	224	153	93	28	8
Western	658	20	19	30	61	103	116	109	66	41	24

All statistics are based on Australian herd recorded dairy cows in the 2003/2004 year. Source: ADHIS Pty Ltd

Table 3: Number of Herds in Protein Production Categories by Region

State	Total Herds	Average Protein Production (kg per cow)									
		<100	100-124	125-149	150-174	175-199	200-224	225-249	250-274	275-299	>299
Victoria	3,079	65	107	263	456	664	542	340	143	46	23
New South Wales	665	1	9	29	67	94	125	101	85	43	20
Queensland	444	6	15	38	52	66	39	35	5	3	5
South Australia	383	7	16	12	36	69	83	69	37	22	7
Tasmania	299	5	5	30	56	41	47	23	10	3	3
Western Australia	210	1	1	7	26	27	58	43	21	9	3
Australia	5,080	85	153	379	693	961	894	611	301	126	61
Victorian regions											
Northern	1,345	21	34	80	156	284	259	160	65	12	11
Eastern	1,076	24	53	127	202	254	174	91	45	6	2
Western	658	20	20	56	98	126	109	89	33	28	10

Table 4: Production Averages by Age Group

Age Group	Number of Cows	Production Averages					Lactation
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	Length days
2 Year Old	118,396	5,413	3.96	214	3.30	179	317
3 Year Old	127,974	6,034	4.01	242	3.35	202	318
Mature Cow	479,004	6,525	4.03	263	3.31	216	312
Total	**725,374**	**6,257**	**4.01**	**251**	**3.31**	**207**	**314**

Table 5: Production Averages by Age Group and Mating Type

Age Group	Number of Cows	Average Fat (kg)		Average Protein (kg)	
		Artificially Bred Stock	Naturally Bred Stock	Artificially Bred Stock	Naturally Bred Stock
2 Year Old	118,396	218	200	183	165
3 Year Old	127,974	249	225	209	186
Mature Cow	479,004	275	244	226	200
Total	**725,374**	**259**	**236**	**214**	**194**

National Benchmark

There were an estimated 9,256* dairy farms in Australia in 2004/2005 of which 55% participated in herd recording. This represents a fall of 5% from the previous year.

****Dairy Australia – InFocus 2005***

How do we decide which cows should be included in the statistics?

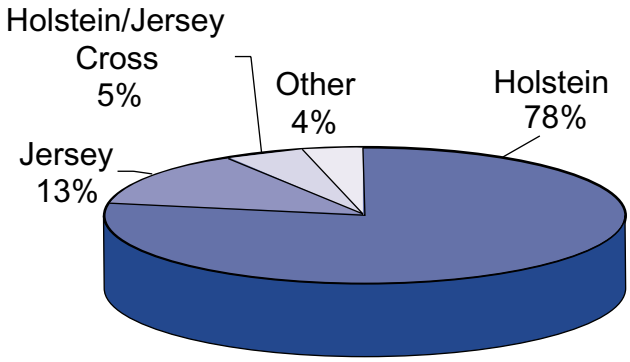
1. **Cows are considered for inclusion in the statistics if;**
   - they had a lactation that reached 305 days between July 1 and June 30 of the following year or
   - they were terminated between these dates and had not reached 305 days prior to July 1.
2. **A cow is only counted once where;**
   - the same data is supplied for the cow in more than one herd
   - more than one lactation record is supplied that satisfies the criteria.
3. **There must be at least 30 cows in a herd in order for the cows to be included in the statistics.**
4. **Cows which pass the above tests are included in the total number of recorded cows and hence in the average herd size.**
5. **Cows are not included in the production averages if;**
   - the termination date is less than the calving date
   - the lactation exclusion code is set to R indicating it should be rejected
   - the standard milk yield is not provided or yield is not valid
   - the first test date is before the calving date
6. **Cows are automatically excluded from the production averages for any of the following reasons:**
   - lactation length is less than 120 days
   - first test is more than 100 days after calving
   - heifer that calved at less than 18 months of age
   - interval between tests is greater than 150 days
7. **The EXCLUDED category includes any cow that calved in the year of analysis and had the opportunity to reach 305 days or be terminated in that year.**

Table 6: Production Averages by Percentage of Artificially Bred Cows in Herds

Percentage of Artificially Bred Cows in Herd	Number of Herds	Production Average		
		Milk litres	Fat kg	Protein kg
< 10	637	5,440	219	179
10-19	238	5,619	227	186
20-29	257	5,769	230	192
30-39	301	5,840	236	192
40-49	315	6,063	242	200
50-59	446	6,271	251	208
60-69	599	6,352	256	211
70-79	667	6,605	261	218
80-89	687	6,516	260	215
> 89	933	6,521	262	216
Total	**5,080**	**6,257**	**251**	**207**

National Benchmark

Average herd tested herd size increased from 179 to 187 cows per herd, which equates to a 4.5% increase in 2004/2005 compared to the previous year.



Proportion of cows by breed where breed is known

Table 7: Production Averages by Breed

Breed	Number of Cows	Production Averages					Lactation Length days
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	
Holstein	488,936	6,672	3.88	259	3.25	217	318
Unknown Breed	101,814	5,774	3.99	231	3.30	191	308
Jersey	79,087	4,792	4.86	233	3.72	178	304
Holstein/Jersey Cross	32,180	5,658	4.39	248	3.50	198	302
Illawarra	7,149	5,512	4.14	228	3.47	191	309
Aust Red Breed	6,083	5,660	4.17	236	3.50	198	307
Ayrshire	3,964	5,128	4.10	210	3.34	171	305
Brown Swiss	3,251	5,613	4.18	235	3.47	195	324
Guernsey	2,299	5,195	4.37	227	3.48	181	317
Dairy Shorthorn	398	4,709	3.87	182	3.43	161	301
Other	213	5,751	4.11	236	3.40	196	315
Total	**725,374**	**6,257**	**4.01**	**251**	**3.31**	**207**	**314**

National Benchmark

In 2004/2005, 74% of herd-recorded Holsteins and 70% of herd recorded Jersey's were bred via artificial insemination.

Table 8: Production Averages by Month of Calving

Month of Calving	Number of Cows	% of Total	Production Averages					
			Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation Length days
January	20,227	2.8	6,426	4.03	259	3.32	213	333
February	27,491	3.8	6,709	3.98	267	3.33	223	332
March	48,173	6.6	6,633	3.98	264	3.32	220	330
April	57,954	8.0	6,539	3.99	261	3.31	217	327
May	59,708	8.2	6,474	3.97	257	3.31	214	321
June	57,376	7.9	6,367	3.98	253	3.32	211	313
July	85,570	11.8	6,151	4.02	247	3.33	205	309
August	157,375	21.7	6,090	4.06	247	3.35	204	303
September	114,703	15.8	6,070	4.03	245	3.31	201	304
October	55,097	7.6	6,057	4.01	243	3.25	197	309
November	24,200	3.3	6,172	4.00	247	3.24	200	326
December	17,500	2.4	6,278	3.99	250	3.25	204	333
Australia	**725,374**	**100**	**6,257**	**4.01**	**251**	**3.31**	**207**	**314**

National Benchmark

50% of herd-recorded cows calved in the months of July/August/September in 2004/2005.

Table 9: Distribution of Calvings by Month and Region

State	Percentage Of Cows That Calved Each Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Victoria	1	1	5	7	8	9	14	26	18	7	2	1
New South Wales	8	8	10	10	9	8	9	11	9	8	6	6
Queensland	8	10	10	10	9	9	9	7	7	8	7	7
South Australia	5	8	11	9	8	6	8	12	14	9	6	5
Tasmania	1	1	3	5	3	2	7	36	30	9	2	1
Western Australia	9	11	11	10	9	7	7	8	8	7	6	7
Australia	3	4	7	8	8	8	12	22	16	8	3	2
Victorian regions												
Northern	1	1	6	7	5	3	7	31	24	11	3	1
Eastern	0	1	5	7	7	8	19	29	16	6	1	1
Western	1	3	5	9	17	20	18	14	8	4	1	1

Table 10: Production Averages by Breed, Age Group, Mating Type and Registration

	Number of Cows	Production Averages					Lactation Length days
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	
Holstein							
2 Year Old	85,198	5,704	3.82	218	3.24	185	320
3 Year Old	89,249	6,427	3.86	248	3.27	210	322
Mature Cow	314,489	7,004	3.91	274	3.25	228	316
Total	**488,936**	**6,672**	**3.88**	**259**	**3.25**	**217**	**318**
Artifically Bred	362,657	6,809	3.87	263	3.24	221	320
Naturally Bred	126,279	6,279	3.92	246	3.25	204	312
Pure Bred	75,902	7,536	3.82	288	3.21	242	338
Grade	413,034	6,514	3.90	254	3.26	212	314
Jersey							
2 Year Old	15,421	4,293	4.75	204	3.64	156	308
3 Year Old	15,309	4,627	4.87	225	3.73	173	305
Mature Cow	48,357	5,004	4.89	244	3.75	187	302
Total	**79,087**	**4,792**	**4.86**	**233**	**3.72**	**178**	**304**
Artifically Bred	55,402	4,939	4.84	239	3.72	184	305
Naturally Bred	23,685	4,449	4.88	217	3.72	166	301
Pure Bred	16,962	5,187	4.95	257	3.79	197	318
Grade	62,125	4,685	4.83	226	3.71	174	300
Holstein/Jersey Cross							
2 Year Old	6,535	4,920	4.33	213	3.45	170	305
3 Year Old	6,394	5,482	4.41	242	3.53	193	305
Mature Cow	19,251	5,968	4.40	263	3.50	209	301
Total	**32,180**	**5,658**	**4.39**	**248**	**3.50**	**198**	**302**
Artifically Bred	17,395	5,889	4.39	258	3.50	206	303
Naturally Bred	14,785	5,386	4.39	236	3.49	188	301
Pure Bred	0	0	0	0	0	0	0
Grade	32,180	5,658	4.39	248	3.50	198	302
Guernsey							
2 Year Old	327	4,689	4.23	198	3.37	158	323
3 Year Old	451	5,236	4.39	230	3.50	183	318
Mature Cow	1,521	5,291	4.41	233	3.50	185	316
Total	**2,299**	**5,195**	**4.37**	**227**	**3.48**	**181**	**317**
Artifically Bred	1,127	5,463	4.35	237	3.46	189	318
Naturally Bred	1,172	4,937	4.40	217	3.49	172	317
Pure Bred	643	5,592	4.30	240	3.43	192	322
Grade	1,656	5,040	4.40	222	3.49	176	316
Ayrshire							
2 Year Old	595	4,341	4.15	180	3.30	143	306
3 Year Old	743	4,876	4.07	199	3.33	162	314
Mature Cow	2,626	5,378	4.10	220	3.35	180	302
Total	**3,964**	**5,128**	**4.10**	**210**	**3.34**	**171**	**305**
Artifically Bred	2,178	5,403	4.09	221	3.33	180	310
Naturally Bred	1,786	4,793	4.10	197	3.35	160	299
Pure Bred	979	5,436	4.20	228	3.39	184	316
Grade	2,985	5,028	4.06	204	3.32	167	301

Table 10: (continued)

	Number of Cows	Production Averages					Lactation Length days
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	
Illawarra							
2 Year Old	881	4,927	3.96	195	3.37	166	321
3 Year Old	1,567	5,103	4.15	212	3.51	179	314
Mature Cow	4,701	5,759	4.20	242	3.50	201	306
Total	**7,149**	**5,512**	**4.14**	**228**	**3.47**	**191**	**309**
Artifically Bred	4,178	5,791	4.12	238	3.44	199	312
Naturally Bred	2,971	5,120	4.13	212	3.49	178	305
Pure Bred	2,990	5,811	4.11	239	3.45	201	313
Grade	4,159	5,297	4.15	220	3.47	184	307
Unknown Breed							
2 Year Old	7,569	5,144	3.97	204	3.31	170	314
3 Year Old	12,128	5,553	4.07	226	3.38	188	317
Mature Cow	82,117	5,865	3.98	234	3.29	193	306
Total	**101,814**	**5,774**	**3.99**	**231**	**3.30**	**191**	**308**
Artifically Bred	1,677	6,314	3.95	249	3.31	209	316
Naturally Bred	100,137	5,765	4.00	230	3.30	190	308
Pure Bred	0	0	0	0	0	0	0
Grade	101,814	5,774	3.99	231	3.30	191	308
Aust. Red Breed							
2 Year Old	1,244	5,086	4.12	209	3.48	177	309
3 Year Old	1,346	5,483	4.21	231	3.52	193	310
Mature Cow	3,493	5,933	4.19	249	3.50	208	306
Total	**6,083**	**5,660**	**4.17**	**236**	**3.50**	**198**	**307**
Artifically Bred	5,245	5,729	4.18	240	3.50	201	307
Naturally Bred	838	5,231	4.10	214	3.46	181	312
Pure Bred	406	7,375	4.14	306	3.43	253	318
Grade	5,677	5,538	4.17	231	3.49	193	307
Brown Swiss							
2 Year Old	574	4,653	4.10	191	3.45	160	327
3 Year Old	676	5,079	4.14	210	3.47	176	322
Mature Cow	2,001	6,068	4.23	257	3.48	211	324
Total	**3,251**	**5,613**	**4.18**	**235**	**3.47**	**195**	**324**
Artifically Bred	2,083	5,785	4.17	241	3.46	200	326
Naturally Bred	1,168	5,305	4.20	223	3.46	184	321
Pure Bred	608	6,007	4.14	249	3.56	214	337
Grade	2,643	5,522	4.19	231	3.44	190	321
Other Breeds							
2 Year Old	52	3,999	3.85	154	3.38	135	314
3 Year Old	111	4,469	4.09	183	3.55	159	302
Mature Cow	448	5,346	3.94	211	3.39	181	306
Total	**611**	**5,072**	**3.95**	**201**	**3.42**	**173**	**306**
Artifically Bred	290	5,553	3.86	214	3.34	185	313
Naturally Bred	321	4,638	4.07	189	3.50	162	300
Pure Bred	106	4,235	3.77	160	3.48	148	299
Grade	505	5,248	3.97	208	3.39	178	307

All statistics are based on Australian herd recorded dairy cows in the 2004/2005 year. Source: ADHIS Pty Ltd

Table 11: Production Averages of Stud Cows

Breed	Number of Cows	Production Averages					
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation Length days
Holstein	75,902	7,536	3.82	288	3.21	242	338
Jersey	16,962	5,187	4.95	257	3.79	197	318
Guernsey	643	5,592	4.30	240	3.43	192	322
Ayrshire	979	5,436	4.20	228	3.39	184	316
Illawarra	2,990	5,811	4.11	239	3.45	201	313
Aust Red Breed	406	7,375	4.14	306	3.43	253	318
Brown Swiss	608	6,007	4.14	249	3.56	214	337
Total	98,490	7,035	4.03	280	3.32	232	334

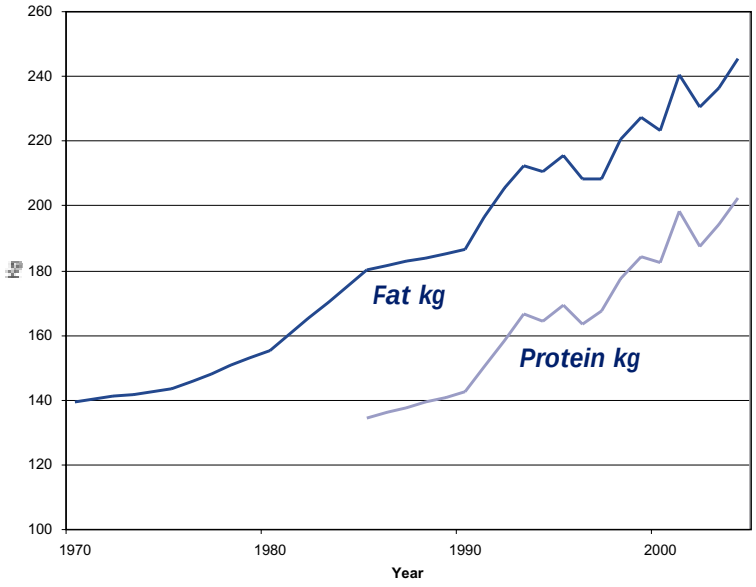
Table 12: Production Averages of Artificially Bred Stud Cows

Breed	Number of Cows	Production Averages					
		Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation Length days
Holstein	60,182	7,634	3.81	291	3.21	245	340
Jersey	13,060	5,328	4.90	261	3.77	201	318
Guernsey	450	5,776	4.31	249	3.44	199	323
Ayrshire	577	5,719	4.15	237	3.37	193	319
Illawarra	1,793	6,088	4.10	249	3.42	209	316
Aust Red Breed	371	7,403	4.16	308	3.45	255	316
Brown Swiss	416	6,192	4.13	256	3.58	221	336
Total	76,849	7,172	4.01	284	3.31	236	335

Table 13: Victorian Production Averages 1930/1931 - 2004/2005

Year	Total Herds	Total Cows	Herd Size	Production Averages				
				Milk litres	Fat %	Fat kg	Protein %	Protein kg
1930/1935	2,984	91,328	31	2,295	4.7	107		
1935/1940	2,324	80,883	35	2,210	4.9	108		
1940/1945	1,082	39,368	36	2,154	4.9	105		
1945/1950	2,329	90,015	39	2,301	5.0	114		
1950/1955	3,192	141,387	44	2,284	5.0	114		
1955/1960	3,461	187,306	54	2,485	5.1	126		
1960/1965	4,003	248,791	62	2,643	5.0	132		
1965/1970	5,041	368,300	73	2,793	4.9	137		
1970/1975	4,314	382,925	89	2,942	4.7	139		
1975/1980	2,456	256,744	105	3,159	4.5	143		
1980/1985	3,913	423,120	108	3,471	4.5	155		
1985/1990	4,399	527,240	120	4,047	4.4	180	3.3	134
1990/1991	4,402	568,885	129	4,245	4.4	186	3.4	142
1991/1992	4,061	517,760	128	4,477	4.4	196	3.4	150
1992/1993	4,293	552,445	129	4,708	4.4	205	3.4	158
1993/1994	4,606	604,160	131	4,962	4.3	212	3.3	166
1994/1995	4,591	574,674	125	4,976	4.2	210	3.3	164
1995/1996	4,685	606,198	129	5,142	4.2	215	3.3	169
1996/1997	4,928	619,470	126	4,984	4.2	208	3.3	163
1997/1998	4,328	624,428	144	5,084	4.1	208	3.3	167
1998/1999	4,156	641,106	154	5,350	4.1	220	3.3	177
1999/2000	3,904	622,281	159	5,570	4.1	227	3.3	184
2000/2001	4,267	761,219	178	5,527	4.0	223	3.3	182
2001/2002	4,198	757,029	180	5,969	4.0	240	3.3	198
2002/2003	3,831	738,329	193	5,705	4.0	230	3.3	187
2003/2004	3,414	624,002	183	5,841	4.0	236	3.3	194
2004/2005	3,079	586,566	191	6,083	4.0	245	3.3	202

Victorian Production Averages



National Benchmark

The protein production of Victorian herd-recorded cows increased by approximately 4.1% in 2004/2005 compared to the previous year.

The protein production of National herd-recorded cows increased by approximately 3.0% in 2004/2005 compared to the previous year.

Publishable Holsteins: Top 50 APR with semen available

Rank	Bull ID	Bull Name	Gene Codes	APR $	Rel	ASI $	Prot kg	Prot%	Milk	Fat kg	Fat%	Rel	No. Dtrs.	No. Herds	RIP%	Over Type	Mam Syst	Rel	Lwt kg	Milk Spd	Temp
1	ALTACOLIN	BARKLY DONOR COLIN	CV	143	67	131	34	0.25	764	44	0.16	76	47	24	21	0.8	0.4	65	15	93	92
2	DONOR	ELITE MOUNTAIN DONOR IMP (E.T)	TV	130	99	106	35	0.15	1011	23	-0.29	99	21863	2220	17	0.6	0.4	99	28	95	93
3	TERTIO	TOPSPEED TERTIO-ET	CV	118	81	99	15	0.25	61	52	0.71	88	70	39	8	-0.1	0.0	79	-34	92	93
4	ALTADECEPT	ELMAR DECEPT		118	62	98	27	0.10	804	37	0.04	69	32	18	18	0.0	0.2	64	8	93	92
5	DALEK	MANNA FARM DONOR DALEM	TLTCTV	115	71	98	28	0.16	726	30	-0.01	78	55	28	10	0.0	0.1	72	5	94	93
6	CAREY	MARION DALE CAREY	XI	110	96	88	30	0.05	1012	25	-0.26	99	2553	526	12	-0.5	-0.6	96	-15	93	94
7	PRINCIBUL	SELECT GIBBON PRINCIBUL-ET		109	74	89	23	0.24	374	23	0.11	83	64	36	20	-0.3	0.1	74	9	93	94
8	JANZE	JANZE MOUN	TV	108	89	95	28	0.28	479	13	-0.11	96	360	94	15	-0.9	-0.7	92	-21	88	91
9	GOBETWEEN	HILL VALLEY DON GOULBURN	TV	105	66	89	31	0.06	1009	24	-0.28	73	39	21	10	0.3	0.1	72	17	94	92
10	DARNAM	MILUDELL PATRON DARNAM-ET	TV	105	72	81	29	0.14	787	11	-0.32	84	61	37	6	0.6	0.6	59	-3	94	95
11	NLDAPOLLO	HOLIM APOLLO	TLCV	103	95	90	13	0.19	91	52	0.69	98	476	129	14	-0.2	-0.5	95	-2	92	93
12	1H0882	DIRIGO-LEBLANC JAZZMAN-ET		101	93	73	9	0.15	48	44	0.61	98	561	95	6	0.0	0.1	88	-15	92	91
13	TIDALWAVE	CLYDEVALE MALOY POSEIDON		98	76	93	21	0.26	270	30	0.27	85	74	38	21	0.3	0.8	72	3	94	94
14	NINEFOLD	KEYMER NINA WINLUKE	TL	96	84	78	23	0.07	698	28	-0.02	94	247	115	55	0.9	0.6	76	-8	94	94
15	EXCHANGE	GLOMAR FATAL LANCE-ET	TLTVXI	96	81	72	17	0.28	88	13	0.13	92	167	75	38	0.0	0.4	71	-14	93	92
16	MUIZON	MUIZON		95	80	91	28	0.20	631	18	-0.12	87	54	30	7	-0.1	-0.2	76	5	93	89
17	STATESMAN	GALLRAE STATESMAN-ET		92	70	92	18	0.18	321	43	0.42	79	57	35	8	0.0	0.1	62	-7	93	92
18	GIBHECTOR	SELECT GIBBON HECTOR	TL	92	70	84	29	0.12	832	17	-0.27	81	61	34	21	-0.4	-0.5	65	-1	91	92
19	CLEARVIEW	TANAMERA HILLS DONOR DEEJAY		92	68	74	17	0.13	386	29	0.18	75	43	23	13	0.3	0.2	71	1	95	92
20	HOGOOD	AULDREEKIE DON ISGOOD	TCTL	88	67	77	24	0.14	634	17	-0.15	75	47	21	27	1.0	0.7	69	20	96	93
21	PAVILION	GLOMAR PAVILION		88	70	70	17	0.01	592	40	0.21	79	56	35	16	0.6	0.2	69	2	95	91
22	RICHFIELD	LOCHAVON RICHFIELD-ET	TCTV	88	77	55	8	0.20	-83	21	0.36	86	79	33	29	0.8	0.4	74	-10	93	95
23	MUDLARK	GLENORD EASTLAND BENJAMIN	TCTV	88	81	54	9	0.13	78	26	0.32	91	135	65	34	-0.6	-0.8	71	-10	94	93
24	IDEALAGS	IDEAL AGS		87	95	75	19	0.13	457	27	0.11	98	851	185	21	1.3	1.5	95	13	90	94
25	NLDBOUDEWIJN	HOLIM BOUDEWIJN	TLCV	86	96	84	10	0.27	-165	44	0.73	99	1144	276	19	0.4	0.3	97	-18	93	93
26	ALTAKOROIT	GRAYMAR DONOR KOROIT		86	74	72	28	0.01	1013	17	-0.38	83	76	28	19	0.0	-0.2	72	19	93	92
27	ALTAJUSTIFY	DIRIGO JUSTIFY-ET		86	85	70	20	0.07	627	25	-0.02	93	134	63	16	-0.1	-0.3	83	-45	94	94
28	GEMBROOK	BROOKLANE JUMBO	TV	85	77	88	19	0.33	61	21	0.27	86	81	39	6	0.7	0.6	77	1	94	89
29	REFANO	GLENMEAD REFANO-ET	TV	85	75	86	27	0.35	316	-3	-0.23	83	40	23	17	-0.5	-0.5	75	-1	94	93
30	LOMU	WILARA DONOR JONAR	TV	85	69	76	26	0.04	880	23	-0.21	76	46	26	13	0.1	0.0	71	11	93	92
31	PANTHERET	GLENMAR PATRON PANTHER	TV	85	74	62	20	-0.03	805	27	-0.11	83	58	27	20	0.6	0.6	72	-1	94	93
32	INFORMER	HILL VALLEY BASAR ACME	TV	84	74	81	21	0.14	490	28	0.10	84	73	31	16	1.0	1.2	74	8	91	92
33	STINGER	TOP DECK MAGLEY DENNIS-ET	TV	84	79	73	24	0.14	621	13	-0.19	89	77	42	19	-0.2	0.6	76	-44	91	92
34	MGMAJOR	EBONY PARK MG MAJOR-ET	TV	84	76	72	20	0.17	398	19	0.02	86	76	38	17	0.0	-0.1	72	-13	94	94
35	VOODOO	GLYNYARI VOODOO-ET	TCTLRC	84	74	71	19	0.04	599	33	0.11	84	65	40	13	0.2	0.3	64	-2	94	91
36	GIBBON	GIBBON	TV	83	97	58	23	0.12	605	2	-0.34	99	1345	286	25	0.2	0.0	96	11	91	94
37	NZLROHUGO	COLLINS ROYAL HUGO	TV	82	88	76	12	0.34	-220	22	0.45	97	493	53	27	-0.6	-0.5	88	-25	92	89
38	BELLTOWER	HILL VALLEY DON ALLWYN	TV	79	75	65	17	0.15	342	17	0.04	83	72	34	12	0.7	0.5	72	6	94	94
39	MALOKAI	ILLAWAMBRA MALOKAI		79	73	55	7	0.23	-189	20	0.41	81	67	29	25	0.7	0.8	76	-30	95	93
40	ANVIL	STIRLING MAGLEY ANVIL	TV	78	79	74	23	0.20	442	10	-0.13	89	74	43	20	0.0	0.2	74	-8	93	91
41	HOLADINO	LADINO PARK TALENT-IMP-ET	RCTL	78	85	43	23	0.05	752	-8	-0.58	92	135	62	16	1.8	1.8	87	23	97	93
42	MAYHEM	BUSSLO MAGLEY WARRIOR ET	CV	77	81	70	20	0.16	433	16	-0.04	90	89	45	17	0.1	0.4	79	-27	93	93
43	GOLDBULLION	ELITE GOLD BULLION-IMP-ET	TV	76	93	62	20	0.03	671	23	-0.09	99	5587	966	19	0.9	0.6	97	12	93	93
44	WINSOME	EUREKA WINSOME-IMP-ET	TV	75	92	73	20	0.16	440	20	0.02	98	668	199	19	0.2	0.0	91	-5	92	92
45	ZIDANE	FUTURALAND G ZIDANE-ET		74	86	66	11	0.23	-22	24	0.35	94	193	84	12	1.1	0.7	79	29	92	93
46	LANCEDAVE	KAPAWAI LANCE DAVE	TV	74	82	47	10	0.16	63	14	0.16	91	86	43	16	0.0	0.3	79	-16	95	91
47	JAYJUMP	ELMAR JAY JUMPER	TCTV	73	81	61	12	0.03	382	38	0.32	89	96	48	9	0.3	0.7	75	-9	94	93
48	ALTAFRANCO	ALLORA AUBEL GIAN FRANCO		72	77	58	11	0.27	-135	13	0.27	85	46	19	15	0.4	0.2	76	7	92	94
49	HOTDAY	BIRCHMORE DONOR SUNSHINE	TCTV	72	71	57	14	0.26	-2	4	0.05	80	61	35	29	1.1	0.7	70	8	96	90
50	NLDROYAL	ZANDENBURGER ROYAL	CV	71	97	59	7	0.23	-186	24	0.46	99	1753	312	13	-0.2	-0.4	96	-15	91	90

"To be listed a bull must have semen readily available for sale and have a publishable production, workability and type ABV."

Like	Rel	CC %	Rel	DTR Fert	Rel	Survival Index	Rel	Calving Ease %	Rel	Source
92	70					2	56			21ST
95	99	-10	99	0.5	99	5	99	90	98	ABS
94	79	0	81			0	66			GAC
95	62					3	54			21ST
95	76					3	63			GAC
95	98	0	87	1.1	94	2	91	97	87	GAC
94	74					0	61			ABS
93	90	-11	60	1.0	65	1	81			AGRI
93	66					3	60			GAC
94	70	17	50			5	53			ABS
94	94	-4	84	-0.3	85	2	91	95	73	BOS
92	87	-2	85	2.4	83	4	86			BOS
96	78					2	61			GAC
95	80	-8	64	-0.9	59	2	67	92	92	GAC
94	78	-17	60	0.2	58	3	64	98	81	GAC
93	73	-2	80			1	68			AGRI
94	77					1	58			GAC
94	67					0	54			AGRI
95	71					3	60			ABS
95	68					4	59			SEM
94	73					3	59			GAC
94	80	-37	52			1	64	95	74	GAC
95	78	-9	60	2.6	59	3	63	94	85	GAC
94	93	-20	87	-0.3	87	1	91	95	89	AGRI
94	96	9	85	-0.7	90	-1	93	94	83	BOS
95	75					1	63			21ST
95	79	7	64	-2.4	60	1	76			21ST
91	77					-1	63			ABS
94	70	38	77			0	61			NZG
94	72					3	61			GAC
94	74	-31	50			3	60			ABS
94	74					3	61	93	74	GAC
92	76	9	54			0	67			NZG
94	75	19	54			2	62			GAC
94	77					1	56			GAC
95	97	-38	89	1.3	91	1	93	92	85	AGRI
92	90	15	52	2.9	67	0	74			NZG
94	81					3	64			GAC
94	76					3	66			ABS
94	76	15	53			0	65			NZG
96	83	0	63	-0.3	59	8	75	91	76	SEM
95	81	4	56			-1	70			NZG
95	99	18	69	2.6	92	2	81	96	95	ABS
93	95	20	75	1.9	76	0	82	98	82	GAC
93	86	-24	64	-0.3	61	1	73			BOS
94	74	-11	56			2	71			ABS
95	84	7	60	-0.8	56	2	66	98	74	GAC
94	65	-2	81			1	63			21ST
93	75					3	62			GAC
92	97	-11	94	0.0	94	2	95	96	87	BOS

Table 1: Requirements for Official Publishable ABV status

	Holstein/Jersey		Other Breeds	
Trait	**Reliability Minimum**	**Herds Minimum**	**Reliability Minimum**	**Herds Minimum**
Production (APR)	**63%**	**15 herds**	**40%**	**5 herds**
Workability	**57%**	**10 herds**	**40%**	**5 herds**
Survival	**25%**	**N/A**	**25%**	**N/A**
Type	**55%**	**10 herds**	**40%**	**5 herds**
Liveweight	**60%**	**10 herds**	**40%**	**5 herds**
Somatic Cell Count	**50%**	**15 herds**	**30%**	**5 herds**
Calving Ease	**60%**	**10 herds**	**N/A**	**N/A**
Daughter Fertility	**55%**	**10 herds**	**30%**	**5 herds**

Reliability is a measure of the amount of information contributing to the ABV. The more daughters, test-days and information about relatives that is included in a bull's ABV, the higher the reliability. To receive a publishable APR a bull must have publishable production ABVs.

Gene Codes: Holsteins

	Tested Positive	Tested Negative
Complex Veterbral Malformation (CVM)	CV	TV
BLAD	BL	TL
Citrullinaemia	CN	TC
DUMPS	DP	TD
Mulesfoot	MF	TM
Red Carrier	RC	TR
Factor XI	XI	TX

Key Source of Bulls

AGR	Agri-Gene
ABS	ABS Australia
BOS	BOS Trading
21st	21st Century Genetics
GAC	Genetics Australia
NZG	New Zealand Genetics
SEM	Semex Australia
WAS	Woodlands Agricultural Services
WWS	World Wide Sires
TBA	To Be Advised

Interbull ABV(i)'s: August 2005: Top 50 APR Holsteins with semen available

Rank	Bull Name	Gene Codes	Bull ID	ABV(i) for production traits APR $	Rel	ASI $	Prot kg	Prot%	Milk	Fat kg	Fat%	Rel	No. of Countries	1st Country	1st Dtrs	Over Type
1	GLENMEAD KR WINDMILL-ET			131	54	123	20	0.36	41	54	0.75	68	1	NZL	73	-0.3
2	GLENMEAD FR RENEGADE	CV	NZGRENEGADE	122	52	120	43	0.13	1336	23	-0.49	64	1	NZL	44	-0.2
3	ROJAN HB BULLION		NZGBULLION	110	59	98	16	0.24	106	48	0.63	70	1	NZL	77	0.1
4	V EATON		DNKEATON	109	54	82	21	0.17	455	25	0.08	63	1	DNK	68	0.1
5	MACFARLANES DAUNTLESS	TV	NZGDAUNTLESS	108	55	97	23	0.14	603	41	0.22	68	1	NZL	74	0.2
6	PATUR AD		PATUR	105	57	77	29	0.01	1037	20	-0.35	69	1	FRA	99	-0.1
7	ROCKLAND			102	52	114	42	0.03	1500	31	-0.48	66	1	FRA	62	0.3
8	DELTA CANVAS			101	54	103	36	-0.11	1538	45	-0.29	67	1	NLD	219	0.4
9	JOCKO BESN		JOCKO	98	74	89	35	0.06	1153	15	-0.50	82	14	FRA	55994	1.0
10	JANCKER			97	48	96	25	0.23	452	27	0.12	58	1	DEU	63	0.7
11	KOTUKU HB PADDY	TV	NZGPADDY	97	57	96	21	0.19	392	40	0.34	68	1	NZL	55	0.0
12	WOLFSKAMPER SIMBA		ALTASIMBA	97	57	93	14	0.19	149	52	0.66	66	1	NLD	100	0.2
13	BAGWORTH BELLS PRIZEWINNER		NZGWINNER	96	59	105	27	0.08	836	48	0.18	70	1	NZL	78	0.7
14	HOLIM RAFAEL	CV	NLDRAFAEL	95	57	79	24	0.07	763	27	-0.09	68	2	NLD	153	0.5
15	SCOTTS NORTHSEA		NZLNORTHSEA	93	57	73	8	0.38	-434	22	0.58	72	1	NZL	167	-0.4
16	TOP DECK KO PIERRE		PIERRE	91	59	92	23	0.18	473	33	0.19	71	1	NZL	119	0.3
17	WHINLEA MAGLEY EXTASY	TV	EXTASY	90	67	88	20	0.31	111	21	0.24	76	1	NZL	2637	-0.2
18	DE CROB ADEPT	TLTV	NLDADEPT	90	56	81	24	0.15	589	22	-0.05	67	1	NLD	212	0.3
19	COASTLINE OTAKEHO KNOCKOUT		NZLCOASTLINE	90	57	69	17	0.20	242	16	0.08	69	1	NZL	59	0.3
20	AURORA-DONOR FAVOUR		AMBFAVOUR	87	58	87	30	0.05	1001	25	-0.25	68	1	NZL	78	1.2
21	WHINLEA GERRIS EQUAL		NZLEQUAL	87	55	71	20	0.05	630	29	0.03	67	1	NZL	71	-0.5
22	O-BEE MANFRED JUSTICE		7H6417	86	54	64	20	-0.01	765	28	-0.07	62	1	USA	231	0.2
23	DELTA BROMIOS		NLDBROMIOS	85	58	88	24	0.15	586	29	0.06	67	1	NLD	142	0.3
24	CRISTELLA BESN UNCINO ET			84	48	72	29	-0.02	1107	18	-0.42	59	1	ITA	106	0.8
25	ROSEO JOC			84	55	61	20	0.16	413	7	-0.15	67	1	FRA	81	0.1
26	ORCIVAL		GDORCIVAL	83	55	72	20	0.07	611	28	0.03	64	1	NLD	46	0.6
27	MURPHYS PIONEER		NZGPIONEER	81	53	61	4	0.24	-327	34	0.69	67	1	NZL	75	-1.1
28	MELCHIOR*	TV	NLDMELCHIOR*	81*	88	87*	18	0.30	59	26	0.34	97	7	AUS*	432	0.2
29	GIBOR	TV	GGGIBOR	81	53	44	18	0.03	594	6	-0.28	61	1	DEU	91	0.3
30	RANGOON			80	52	63	27	0.00	1017	10	-0.49	64	1	FRA	53	0.0
31	NUMANS LORD NELSON		NZGNELSON	80	56	62	-1	0.51	-1060	18	0.91	71	1	NZL	151	-1.0
32	NACTIF	TVTL	NACTIF	80	59	55	22	0.07	699	4	-0.38	70	1	FRA	83	0.4
33	TRENT		80FFS95	78	64	72	22	0.03	771	27	-0.09	77	7	USA	5855	-0.2
34	DE CROB DYNASTY	CV	ALTADYNASTY	76	54	78	23	0.12	597	23	-0.03	66	1	NLD	129	0.7
35	ACE HIGH GERRIS PAISLY		NZLPAISLY	76	53	67	25	-0.15	1229	33	-0.28	65	1	NZL	52	0.3
36	SRC TIROHANGA PM APACHE		NZLAPACHE	75	61	82	24	0.14	617	24	-0.04	72	1	NZL	103	-0.7
37	LANCELOT		LANCELOT	75	50	74	21	0.13	541	21	-0.03	61	1	DEU	150	0.5
38	OKENDO	TVTL	OKENDO	75	56	56	23	-0.16	1145	28	-0.30	71	1	FRA	125	0.2
39	HOLIM CASSA		ALTACASSA	75	66	56	17	0.08	453	17	-0.04	78	2	NZL	114	0.0
40	NEWLOOK	TV	NEWLOOK	74	59	64	18	0.16	349	14	-0.01	70	1	FRA	83	0.2
41	JESTHER		GDJESTHER	74	70	48	22	-0.01	838	5	-0.44	79	10	FRA	13827	1.0
42	PEGASE	TLTV	PEGASE	73	55	68	21	0.17	431	12	-0.09	69	1	FRA	80	0.4
43	PRIMON			72	55	75	18	0.01	661	41	0.19	69	1	FRA	104	0.1
44	LAINGS WCO NIGHTHAWK S3F		NZGNIGHTHAWK	72	52	66	12	0.13	167	33	0.38	66	1	NZL	65	-1.0
45	REDNA ELY			72	54	58	17	0.14	342	12	-0.04	66	1	FRA	74	0.0
46	MARGRIET	CV	MARGRIET	72	64	56	16	0.13	330	14	0.00	75	1	FRA	1598	-0.2
47	NELEV		NELEV	72	59	56	16	0.20	187	6	-0.03	70	1	FRA	91	0.6
48	RONLY			72	55	47	16	0.05	483	12	-0.13	67	1	FRA	81	1.0
49	BRAEDALE GOLDWYN		HOGOLDWYN	72	57	33	5	0.07	51	19	0.24	65	1	CAN	130	1.6
50	GLENMEAD R E HOLIDAY	CV	NZLHOLIDAY	71	55	72	18	0.19	291	19	0.10	70	1	NZL	79	-0.1

* Bulls ASI and production are ABVs containing Australian Data.

ABBREVIATIONS

Production ABV's in this brochure

APR	Australian Profit Ranking
ASI	Australian Selection Index
Milk	milk production ABV - litres
Fat	fat production ABV - kgs
Fat%	fat per cent ABV
Prot	protein production ABV - kgs
Prot%	protein per cent ABV
Rel	reliability of production ABV
RIP%	Records in Progress % (percentage of 2 year olds that have 3 or less test days)
CC (%)	Cell Count ABV (percentage change)
Dtrs	daughters (refers to total daughters)
Dtr Fert	daughter fertility ABV (percentage change)
Over Type	Overall Type ABV

Mam Syst	Rel	Lwt Kg	CC %	Rel	Survival	Rel	C. Ease %	Rel	Source
-0.5	59	-10	-13	72	0	42			NZG
-0.2	53	3	17	66	1	36			NZG
0.1	59	-24	-2	77	1	43			NZG
0.2	53	12	-43	57	3	45	94	46	BOS
-0.1	57	-20	7	72	1	38			NZG
0.8	59	-21	-30	67	1	47	97	38	AGRI
-0.2	57	19	0	62	-2	42	95	35	AGRI
0.5	64	15	6	77	1	44	96	44	BOS
0.8	82	15	0	90	2	69	94	53	AGRI
0.6	53	11	-10	57	0	46			ABS
0.1	56	-27	26	73	-1	41			NZG
0.4	61	-12	15	74	0	47	94	46	21ST
0.4	59	21	24	77	-1	43			NZG
0.4	63	32	-27	76	2	45	96	45	BOS
-0.3	58	-58	-1	80	1	42			NZG
0.5	56	-6	26	79	1	41			BOS
0.1	66	-17	40	89	0	55			BOS
0.5	64	20	-23	77	1	47	95	45	BOS
0.4	56	-19	-23	74	2	40			NZG
0.8	55	37	29	72	3	44			BOS
-0.6	57	-19	5	71	2	39			NZG
0.1	61	29	-28	60	3	52	98	52	WWS
0.0	64	2	6	77	-1	49	95	47	BOS
0.9	52	-8	14	57	4	44	95	33	WWS
0.4	57	10	-40	65	3	51	95	38	AGRI
0.8	57	13	-4	69	2	44	93	41	21ST
-0.9	56	-47	-13	72	1	36			NZG
0.2	74	0	51	86	2	70	96	47	BOS
0.2	55	-8	-53	66	3	44			ABS
0.2	55	3	-33	60	2	49	97	38	AGRI
-0.6	54	-52	-4	79	1	40			NZG
0.5	58	16	-36	69	3	49	94	48	AGRI
0.1	76	7	-16	85	1	57	95	55	BOS
0.5	62	3	3	77	0	43	93	44	21ST
0.1	55	15	-10	68	2	37			NZG
-0.5	59	-19	40	79	-1	45			NZG
0.4	59	20	6	67	2	43			21ST
0.3	60	-4	-19	72	3	45	95	44	AGRI
0.1	61	-10	-3	88	2	54	96	48	21ST
-0.3	58	19	-19	69	0	50	94	46	AGRI
0.8	79	11	-20	86	4	64	92	54	21ST
0.3	58	17	-12	68	1	43	93	36	AGRI
0.1	58	-3	12	68	0	43	96	38	AGRI
-0.6	55	-42	24	70	1	36			NZG
0.5	57	-19	26	63	5	52	95	37	AGRI
-0.2	65	-16	0	79	3	54	98	46	AGRI
0.2	58	38	-36	69	1	49	92	44	AGRI
0.9	57	17	-25	65	6	52	94	36	AGRI
1.4	64	29	-43	65			93	43	SEM
-0.1	57	-27	27	78	0	39			NZG

Australian Proven Bulls

Bulls in this section have sufficient Australian information for an official production ABV. For Holsteins and Jerseys this is a minimum 63% Reliability (about 25 daughters) in at least 15 Australian herds (see the Reliability Table for more details).

Most of the bulls in this section are progeny tested in Australia.

Others are overseas bulls that have reached 85% Reliability in at least 40 Australian herds. This is the level required for overseas proven bulls, before they reach official ABV status. The aim is to ensure a wider unbiased ABV for bulls that are not randomly progeny-tested in Australia.

Because conditions for Australian dairyfarming are different to other countries, having an official ABV, based mainly on Australian information, is generally the best measure of genetic merit in Australia.

Overseas Bulls

Bulls in this section have little or no Australian information. The Interbull Centre provides their ABV(i). Using known links created by the bulls that are proven in more than one country, Interbull generates customised breeding values for each member country.

The ABV(i) is the best estimate of a bull's genetic merit when proven under Australian conditions.

Because Interbull customises the international proof into ABV units, the ABV(i) can be compared directly to an ABV. This is in contrast to a home country proof, say from North America or Europe, which cannot be compared to ABV's in any way. ABV(i)'s are available for production and type.

Generally ABV(i)'s have lower Reliability than an ABV because there is usually some reranking when a bull obtains its official Australian ABV. The Reliability is a measure of the risk of reranking and should be taken into account when you make your semen selection.

Mamm syst Mammary System ABV

(Note: many more type traits are assessed by ADHIS. Please ask your AB centre or ADHIS if you want the full linear type assessment).

Lwt (kgs) Liveweight ABV kilograms

REL Reliability for the type ABV's & liveweight ABV

Milk Spd Milking Speed (% satisfactory or better)

Temp Temperament (% satisfactory or better)

Like Likability (% satisfactory or better)

Interbull

No. of Countries Number of countries with information contributing to the ABV(i)

1st Country The country with first contributing daughters.

1st Dtrs Number of daughters in first country.

Publishable Jerseys: August 2005: Top 20 APR™ with semen available

Rank	Bull ID	Bull Name	APR $	Rel	ASI $	Prot kg	Prot%	Milk L	Fat kg	Fat%	Rel	No. Dtrs	No. Herd	RIP%	Over Type	Mam Syst
1	MEDIATOR	SILHOUETTE MEDIATOR	129	70	120	17	0.67	-414	40	1.18	78	56	25	26	1.5	0.5
2	ALTAWHISKEY	WATTLEBRINK WHISKY	126	74	91	19	0.19	292	37	0.41	83	80	27	22	1.2	0.5
3	TAILBOARD	NOWELL TARSAN	122	68	104	20	0.23	280	45	0.56	76	53	25	28	0.8	0.2
4	NZLCASPER	PARKWOOD CASPER	118	95	82	12	0.08	239	54	0.78	98	765	119	12	0.4	-0.3
5	SSPRIDE	ERRLYN SS PRIDE GR	117	84	110	17	0.11	350	69	0.94	92	113	51	15	0.2	-0.1
6	FLOWERPOWER	CLAYDON PARK FLOWER POWER	111	85	88	27	-0.01	822	26	-0.34	94	242	83	39	1.1	0.9
7	JEPERIMETER	ROCK ELLA PERIMITER	109	95	99	21	0.45	8	21	0.39	99	1459	283	15	0.8	0.0
8	TESTRUN	LIVEWIRE LEMVIG THOR-ET	108	74	99	18	0.29	133	41	0.64	84	89	44	16	0.5	0.0
9	OUTINFRONT	LIGHTWOOD LEDA	106	82	92	29	0.01	841	24	-0.40	91	118	57	12	1.7	0.9
10	CLEARCUT	JARNDIE CLEARCUT	102	74	85	22	0.09	530	30	0.02	83	77	34	15	0.4	0.4
11	ALTAFLICA	CRESCENT JUSTA FLICA	101	85	110	16	0.59	-338	37	1.04	94	220	56	30	-0.8	-0.3
12	NZLLAD	ALCISTON CHARLIES LAD	101	77	92	13	0.28	0	48	0.91	89	88	22	20	-0.8	-0.5
13	TREBLE	STRATHMORE TREBLE	99	77	81	19	-0.09	665	47	0.22	85	89	45	14	1.1	0.0
14	PASSIVE	BERCAR PASSIVE	98	81	87	18	0.16	306	38	0.41	89	106	46	9	0.4	0.5
15	EXCEPTIONAL	SILHOUETTE EXCEPTIONAL	97	80	76	8	0.56	-527	22	0.96	88	89	35	19	0.1	-0.2
16	ALTAMEGASTAR	ROWANTREE JUGIONG MEGASTAR	96	67	107	29	0.14	652	34	-0.02	78	50	24	40	1.5	0.4
17	BADGER	BEULAH TARANAK BADGER	96	75	81	21	-0.11	765	42	0.01	85	92	45	25	1.6	0.7
18	NZLFJORD	VAN DER FITS FJORD GR	94	94	77	5	0.37	-347	44	1.19	98	595	93	12	0.3	0.3
19	PRODIGY	MAPPERLEY PRODIGY	93	76	89	21	-0.02	654	44	0.17	85	91	38	19	0.7	0.2
20	SHARIF	CRESCENT SHARIF	91	86	99	20	0.21	292	43	0.51	95	250	57	9	-0.5	0.0

Interbull Jerseys ABV(i)'s: August 2005: Top 20 APR with semen available

Rank	Bull Name	Bull ID	ABV(i) for production traits: APR $	Rel	ASI $	Prot kg	Prot%	Milk L	Fat kg	Fat%	Rel	No. of Countries	1st Country
1	KONUI GLEN ELMOS BOWIE	AMBKONUI	150	58	134	28	0.36	338	49	0.57	69	1	NZL
2	OKURA MANHATTEN-ET SJ3	AMBMANHATTEN	141	59	144	34	0.27	631	51	0.32	71	1	NZL
3	MAGHERACANON DODDY GR	NZGDODDY	141	57	133	23	0.48	20	51	0.95	69	1	NZL
4	WILLIAMS MINSTREL	NZGMINSTREL	131	58	136	22	0.49	-14	56	1.08	70	1	NZL
5	OKURA ELMOS ICON	NZLICON	127	56	116	26	0.13	595	51	0.35	66	1	NZL
6	WILLIAMS ACE OF HEARTS	NZLHEARTS	122	59	113	12	0.66	-547	45	1.41	71	1	NZL
7	MITCHELLS LIKABULL SJ3	NZLLIKABULL	116	58	123	27	0.35	308	40	0.44	72	1	NZL
8	BROOKVALE MBSB DEREK-ET	AMBDEREK	116	60	100	33	0.07	874	19	-0.53	73	1	NZL
9	OKURA ELMOS EVEREST	AMBOKURA	110	58	108	18	0.35	55	46	0.82	69	1	NZL
10	O.F. MANNIX REBEL	14J365	107	54	103	29	-0.10	978	46	-0.12	66	1	USA
11	HILLSTAR PC JOSHUA SJ3	NZGJOSHUA	106	58	85	18	-0.08	637	54	0.37	69	1	NZL
12	WHELDON LOFTY	DONSLOFTY	104	57	89	15	0.12	272	50	0.67	68	1	NZL
13	WOODSTOCK LLV LIEUTENANT	LIEUTENANT	99	54	95	18	0.37	19	32	0.59	63	1	USA
14	AHLEM LEMVIG ABE	ALTAAHLEM	98	56	100	25	0.05	673	40	0.07	67	1	USA
15	TIRONUI JOCK SJ3	NZGJOCK	93	50	99	19	0.00	562	61	0.58	65	1	NZL
16	JAS TEKNO	DNKTEKNO	87	53	80	17	0.14	302	35	0.35	61	1	DNK
17	Q IMPULS	DNKIMPULS	82	45	86	19	0.11	408	38	0.30	57	1	DNK
18	CRESCENT ACE OF SPADES	NZLSPADES	79	59	89	19	0.15	349	39	0.37	71	1	NZL
19	WHELDON GERONEMO	NZGNEMO	79	58	87	11	0.41	-231	37	0.94	70	1	NZL
20	O.F. BARBER ROCKET	9J202	78	54	56	19	-0.06	648	17	-0.34	64	1	USA

Publishable Red Breeds: August 2005: Top 10 APR with semen available

Rank	Bull ID	Bull Name	APR $	Rel	ASI $	Prot kg	Prot%	Milk L	Fat kg	Fat%	Rel	No. Dtrs	No. Herds	RIP%	Over Type	Mam Syst
1	SKOLE3395	SKOLE 3395	149	79	106	30	0.05	1013	45	0.02	92	135	26	32		
2	ARBJIM	BEAULANDS JIM	138	63	108	29	0.01	1032	55	0.16	75	37	24	21	-0.3	-0.1
3	ARBXTRA	ARAJARRA KITTYS EXTRA	133	87	83	20	0.32	130	13	0.11	97	562	160	19	-1.2	-1.0
4	TORP882	TORPANE 882	132	94	71	14	0.08	347	40	0.36	98	461	93	10	-0.7	-0.5
5	ARBBALANCER	BEAULANDS BALANCER	118	66	74	20	0.08	588	30	0.07	83	68	39	16		
6	ARBRAMOND	BOSGOWAN RAMOND	116	68	98	23	0.17	535	39	0.23	82	64	32	26	-0.7	-0.5
7	FYNAKS	FYN AKS	116	74	78	26	-0.02	1007	31	-0.17	85	73	12	46		
8	TBRUNO	T BRUNO 907	116	92	57	19	0.03	643	18	-0.14	97	477	100	13	0.6	0.1
9	ARBLAWRENCE	BOSGOWAN LAWRENCE	114	79	73	17	0.18	288	24	0.17	90	105	46	7	0.2	-0.1
10	ARBSYDNEY	BEAULANDS SYDNEY	109	55	86	19	0.19	337	31	0.25	71	39	22	20		

Top 5 APR™ Publishable Guernsey

Rank	Bull ID	Bull Name	APR $	Rel	ASI $	Prot kg	Prot%	Milk L	Fat kg	Fat%	Rel	No. Dtrs	No. Herds	RIP%	Over Type	Mam Syst
1	GUJULIUS	ACCELERATED GOLDEN GENETICS JULIUS ET	118	52	119	30	-0.07	1111	65	0.35	67	25	11	0	0.5	0.5
2	GU0116	SPRING WALK STREAKS VICTOR	97	76	61	19	-0.14	854	32	-0.17	90	75	30	8	-0.1	-0.1
3	GOLDENJACK	ACCELERATED GOLDEN GENETICS JACK-ET	59	61	78	17	0.08	450	41	0.48	77	49	25	22	-1.3	-0.6
4	AUSFAYSBOO	KOOKABURRA FAYS BOO	59	52	57	20	0.04	626	12	-0.39	68	27	10	11		
5	KOYUGA	ROCHFORD PARK BIG BOY	41	64	42	18	-0.13	799	13	-0.54	83	42	24	19		

Australian Proven

Rel	LWT (kg)	Milk Spd	Temp	Like	Rel	CC %	Rel	Dtr Fert	Rel	Survival Index	Rel	Source
70	26	91	91	92	76					4	61	GAC
77	21	94	93	96	74					6	67	21ST
66	-4	92	91	92	72					2	58	GAC
95	17	93	94	94	95	-6	87	2.5	88	6	89	NZG
82	21	93	91	93	82	5	62	0.5	61	3	70	NZG
81	4	94	95	95	84	15	65	0.0	63	5	72	ABS
95	14	93	91	94	96	31	81	2.8	86	3	89	SEM
66	2	93	92	94	80					3	62	GAC
75	6	89	93	94	84	0	63	-1.3	61	5	67	GAC
70	-6	93	93	95	79					3	63	GAC
85	-4	94	93	93	81	37	63	-0.7	61	-1	74	21ST
83	14	93	93	95	78					0	68	NZG
78	36	92	91	92	82					4	69	GAC
81	7	91	93	95	85	3	51	-0.5	56	3	68	GAC
79	7	95	94	94	80	-5	57	0.8	56	2	67	GAC
63	27	94	92	95	64					2	52	21ST
70	32	92	92	94	81					4	64	GAC
91	11	93	92	93	94	-5	84	1.0	86	3	87	NZG
75	17	90	91	94	82					3	67	GAC
85	1	90	92	94	83	-7	61	-2.1	65	-1	75	BOS

Overseas Bulls

1st Dtrs	Over Type	Mam Syst	Rel	Lwt (Kg)	CC %	Rel	Survival Index	Rel	Source
89	0.4	0.1	53	23	-18	75	3	41	BOS
110	0.9	0.4	52	30	8	80	2	40	BOS
69	-0.1	-0.1	54	33	-23	76	2	38	NZG
80	0.2	0.2	54	27	28	78	2	39	NZG
56	-0.1	-0.1	53	8	10	70	4	39	NZG
90	-0.1	0.1	54	3	-26	79	0	40	NZG
100	-0.1	-0.1	53	19	-14	80	1	38	NZG
215					19	84			BOS
82	0.7	0.4	50	30	16	73	3	40	BOS
65	0.8		50	14	11	52	2	46	WWS
88	0.4	0.1	56	31	-32	74	3	40	NZG
69	0.3	0.3	54	0	12	72	3	39	NZG
58	1.4		45	6	-1	48	2	44	AGRI
80	0.5		52	11	9	54	2	47	21ST
53	-0.8	-0.5	49	2	13	69	0	29	NZG
88	0.5	0.3	50	5	-16	58	1	44	BOS
76	-0.6	-0.6	40	15	-6	53	0	35	BOS
85	0.1	0.0	55	13	-2	79	-1	40	NZG
75	0.7	0.3	54	46	-4	76	0	39	NZG
46	1.8		50	7	-16	51	4	46	WWS

Australian Proven

Rel	LWT kg	Milk Spd	Temp	Like	Rel	CC %	Rel	Dtr Fert	Rel	Survival Index	Rel	Source
		93	94	93	77	-37	44	1.3	45			GAC
47	-18	93	92	93	64	-30	36	-1.5	32	3	42	GAC
46	-29	92	93	92	89	17	77	2.6	79	8	71	GAC
83	-19	94	91	92	89	-36	85	3.5	85	7	89	GAC
		92	91	93	71	-37	42	3.6	39	4	33	GAC
47	-22	92	91	92	70	13	39	-0.3	36	4	44	GAC
		93	93	93	68							GAC
82	-6	93	93	94	93	-23	80	4.2	82	8	86	GAC
61	13	91	91	93	83	-26	59	3.9	57	5	59	GAC
		92	92	93	67					2	25	GAC

Australian Proven

Rel	LWT kg	Milk Spd	Temp	Like	Rel	CC %	Rel	Dtr Fert	Rel	Survival Index	Rel	Source
41	5									1	35	SEM
71	-17	93	93	95	42	8	43	1.2	39	7	67	SEM
40	-12	89	93	90	58					-3	37	GAC
						24	32			4	31	WAS
		89	92	92	46	8	30			1	49	ABS

The Australian Profit Ranking

The APR™ is an index that uses ABV's to estimate a ranking that identifies those bulls that produce the most profitable daughters. ADHIS will continue to produce ABV's for all individual traits and the ASI. This provides dairyfarmers with the option to select on ASI or other combinations of traits.

Australian Profit Ranking (APR) =
(3.8 x Protein ABV) + (0.9 x Fat ABV) - (0.048 x Milk ABV) + (3.9 x Survival Index) + (1.2 Milking Speed ABV) + (2.0 x Temperament) – (0.34 x Cell Count ABV) – (0.26 x Liveweight ABV) +(3.0 x Daughter Fertility ABV)

Note: Type traits and likability are part of the survival index. For traits other than production, the figure used in APR is the bull's ABV minus the breed average.

The ASI formula is:
ASI = (3.8 x Protein ABV) + (0.9 x Fat ABV) - (0.048 x Milk ABV)

Cow survival is an important part of farm profit. In APR a Survival Index is used to estimate survival.

The Survival index below shows contribution for actual survival data at 25% and predictors of survival at 75%. As more actual survival data is collected its % contribution to the survival index increases thus placing more emphasis on actual survival data as it is received.

Survival Index = (0.25 x Survival ABV) + (0.38 x likability + 1.34 x Overall Type + 2.30 x Udder Depth + 1.66 x Pin Set)

Daughter Ferility ABV's have been added to the APR formula. Each one percent change in 6-weeks or 100 day in-calf rate is worth $3.00 to net profit of APR.

An example of how to use the APR:

- Say a bull has an APR of 120. This means that based on his ABV's, the daughters of this bull are estimated to be $120 more profitable per year than the ABV base (cows born 1995). To estimate the result of a planned mating, you take half the contribution of the bull (only half the genes come from the bull) i.e. $60 contribution to profit via genetic change in the next generation. If the next bull on the list is 110 APR, there is an estimated $10 per cow per year difference between the profitability of the two bulls, based on contribution to genetic change.
- Say this bull has an APR Reliability of 80%. This indicates the possibility of some change as the bull adds more daughters and information to his ABV's. Note the reliability for APR is lower than production due to the inclusion of non-production traits in the APR.
- The APR and ASI are in the same units: profit dollars per cow per year.
- Say this bull has an ASI of 100 based on new ASI = 3.8 x protein ABV + 0.9 fat ABV – 0.048 milk volume ABV. By comparing ASI (100) to APR (120), you can see that the non-production traits are adding 20 points ($20) to the predicted profitability of these daughters. In other words, for this bull, the non-production traits are better than breed average and are adding to the profitability of the daughters. The contribution of production to APR is via the ASI. ADHIS will continue to publish all the individual production ABV's so that you can use these as selection tools if required.

TOP HERD SUMMARY

Top 2% Herd Average ABV's based on ASI in August 2005 - Holstein

National Herd ID	Owners Names	Address	Post Code	No. of Cows on File	No. of Current Cows	ASI ABV	Prot. ABV	Prot% ABV	Milk ABV	Fat ABV	Fat% ABV	ASI Rank
C01857C	JOLLIFFE KN & SK (DIF)	WAGGA	2650	66	61	54	15	0.07	437	18	-0.01	1
540624E	PERRETT RJ & HE	KONGWAK	3951	323	202	46	18	-0.02	712	14	-0.24	2
740143N	SHONE & SHEEDY	CUNDARE NORTH	3251	224	56	44	15	0.01	541	14	-0.13	3
C00877D	COCHRANE, W & K (DIF)	ROCHESTER	3561	76	54	40	9	0.03	284	20	0.12	4
540597R	ANDERSON WR & BL	KONGWAK	3951	871	249	37	12	0.01	404	14	-0.05	5
240025J	KENNEDY, R & M	SALE	3850	1163	263	34	11	0.04	324	11	-0.05	6
B20620W	DUNN KA & BJ	KYABRAM	3620	212	55	34	11	-0.01	436	14	-0.07	6
T63SWAA	Sehwag Pty Ltd G	WINNALEAH	7265	2910	182	33	11	0.00	416	13	-0.08	8
240783H	TURNER, G & J (NHT)(MF)	TRAFALGAR	3824	788	164	30	9	0.02	308	11	-0.04	9
840351P	MASON JC & MA	GORAE WEST	3305	476	104	30	8	0.02	248	15	0.06	9
W00248F	KITCHEN J M SONS	BOYANUP	6237	1194	390	30	8	0.04	215	12	0.03	9
N00544Q	PARRISH TJ & LR	BARRENGARRY	2577	855	225	29	7	0.05	140	11	0.08	12
650274B	J. W. & J. C. LAMBALK.,	TIMBOON	3268	691	310	28	8	0.06	161	8	0.02	13
850482E	ROACHE PV & RA	TERANG	3264	256	69	27	9	-0.01	334	12	-0.03	14
4A1440E	THORNE GD & LM (PCF)	KATANDRA	3634	956	247	26	8	0.01	276	11	-0.01	15
4A1647I	TWITE R. K. & M. R.	NATHALIA	3638	317	57	26	6	0.01	212	14	0.07	15
540564F	GLASGOW DC & EJ	BENA	3946	361	112	26	9	-0.02	378	11	-0.08	15
740349O	PAGE, N. & M.	SCOTTS CREEK	3267	313	48	26	10	-0.04	455	11	-0.13	15
840404W	WALDER RG & CA	PORTLAND	3305	612	169	26	7	0.03	177	10	0.04	15
840437L	LENEHAN P & LA	CROSSLEY	3282	184	59	26	9	0.00	324	10	-0.05	15
981317U	DEPPELER EL & AM	YINNAR SOUTH	3869	267	79	26	6	0.01	192	14	0.09	15
240251G	GARNER, ND & MA(MF)	COWWARR	3857	690	195	25	7	0.02	229	9	-0.02	22
4A1373N	FLEMMING G. M. & P. E.(MOFW)	FINLEY	2713	787	264	25	8	0.01	262	10	-0.02	22
240705F	VAN DE BURGT, PT & JJ	YARRAGON	3823	88	57	24	7	0.03	200	8	-0.01	24
240851B	HEYWOOD, BO & LD (NHT)	YARRAGON	3823	669	148	24	6	0.06	130	7	0.02	24
650421Q	WHITE, R. P. & L. J.	TIMBOON	3268	177	47	24	7	0.03	196	8	-0.01	24
C00469T	NOLAN FAMILY TRUST	NUMURKAH	3636	124	39	24	11	-0.05	486	8	-0.18	24
981306Q	COSTER B & M	RIPPLEBROOK	3818	878	622	23	6	0.03	154	9	0.04	28
981426V	LIGHT DG AG & EF	DROUIN SOUTH	3818	53	43	23	6	0.02	176	11	0.05	28
240024G	JOHNSTON, RSN & LJ	BUNDALAGUAH	3851	1085	323	22	6	0.02	181	8	0.00	30
841822I	CLIFFNEY PARK PARTNERSHIP	TERANG	3264	401	127	22	7	0.00	277	8	-0.05	30
C00160G	MCINNES, R. D. & E. K (DIF)	CORRYONG	3707	518	134	22	5	0.03	132	9	0.05	30
240108T	HENRY, W, M & T	TINAMBA	3859	1458	528	21	6	0.02	185	7	-0.01	33
770040K	PARKER, D. J. & W. J.	BEEAC	3251	208	49	21	5	0.03	133	9	0.05	33
C00155U	HOGG, A & J (DIF)	CORRYONG	3707	631	143	21	3	0.06	10	10	0.14	33
C00691E	NICHOLLS RJ & HJ (DIF)	STANHOPE	3623	557	165	21	6	0.04	147	6	0.00	33
240214L	NARDINO P, J & P (MF)	YINNAR	3869	1290	377	20	6	0.03	167	6	-0.02	37
980944I	COSTER NJ	LONGWARRY	3816	1625	317	20	5	0.04	99	8	0.05	37
B07138K	THORP RD	FOREST TAS	7330	145	128	20	6	0.07	73	1	-0.03	37
T11AHFV	House GE & VJ	FOREST	7330	251	207	20	6	0.05	140	3	-0.05	37
240123G	LITTLE, J & G	MAFFRA	3860	827	149	19	4	0.02	92	10	0.09	41
240726K	OWEN PS & JM	MORWELL	3840	867	134	19	5	0.04	100	6	0.03	41
2B0043B	MCRAE, SA & NM (MF)	SALE	3850	345	227	19	4	0.03	88	8	0.06	41
4A2101S	DOUGLAS JW & VL	LEITCHVILLE	3567	1300	510	19	5	0.03	118	7	0.03	41
4E0050E	BUTLER GARRY	KATUNGA	3640	71	64	19	9	-0.07	445	9	-0.15	41
540531Q	CASTLE, GG& RM & AH& SL	BENA	3946	340	64	19	4	0.05	69	7	0.07	41
540748V	MATTHIES DJ & HM	MARDAN	3953	490	145	19	6	0.02	181	6	-0.02	41
650188L	AG /JJ /DP GALE,	TIMBOON	3268	2101	640	19	6	0.00	212	9	-0.01	41
842120F	RYAN BJ & PM	GRASMERE	3281	894	246	19	5	0.02	151	8	0.02	41
C00576O	IBBOTT P & P	TATURA	3616	743	197	19	4	0.03	77	9	0.08	41
4A1321C	WILD RA	TALLANGATTA	3701	761	148	18	5	0.01	163	8	0.02	51
540184S	LIA TO & PM PTY LTD	NILMA NORTH	3821	411	231	18	6	-0.05	332	10	-0.06	51
540300E	MOSCRIPT JB ME CJ & JM	LEONGATHA SOUTH	3953	542	197	18	7	-0.04	340	10	-0.07	51
540600N	LITTLE JR & SL	KORUMBURRA	3950	691	171	18	5	0.01	170	6	-0.01	51
650399V	LE'RIDGE PTY. LTD.,	COORIEMUNGLE	3268	759	246	18	6	0.01	204	7	-0.03	51

TOP HERDS SUMMARY

Top 2% Herd Average ABV's based on ASI in August 2005 - Holstein

National Herd ID	Owners Names	Address	Post Code	No. of Cows on File	No. of Current Cows	ASI ABV	Prot. ABV	Prot% ABV	Milk ABV	Fat ABV	Fat% ABV	ASI Rank
850989R	ROWANVALE PTY LTD	CAMPERDOWN	3260	780	171	18	6	0.00	212	8	-0.02	51
981155M	ROBERTS DI & PJ	YARRAGON	3823	866	183	18	6	-0.05	315	11	-0.03	51
B20571E	WOODBINE HOLDINGS PTY LTD	LANCASTER	3620	1429	331	18	6	0.01	187	6	-0.03	51
C00412Q	HALL, R. O.	KATUNGA	3640	470	117	18	2	0.07	-65	8	0.15	51
C00857B	AULT G. K. & J. M. (DIF)	ROCHESTER	3561	442	149	18	6	-0.04	290	12	0.00	51
C00861H	BENNETT, M. F. & C. M. (DIF)	NANNEELLA	3561	240	49	18	3	0.05	3	8	0.12	51
C00927B	VANDENBOSCH, J. H. & C.A. CPD	LOCKINGTON	3563	477	157	18	5	0.00	196	7	-0.02	51
4A2002S	BEHRENS PT & JJ P/ L (N. 1) MOFW	LEITCHVILLE	3567	341	63	17	6	-0.01	240	6	-0.06	63
540565I	GLASGOW PW	BENA	3946	658	204	17	5	0.01	179	6	-0.02	63
540777V	OWEN GE & SD	BUDGEREE	3870	1546	497	17	5	0.01	178	7	-0.01	63
840377M	COATES JD	ALLESTREE	3305	769	228	7	6	-0.01	223	7	-0.03	63
841874T	MEADE JF & MB	CUDGEE	3265	550	184	17	7	-0.07	376	11	-0.08	63
B20602D	WILLIAMS TE & HD	MURCHISON	3610	592	57	17	4	0.01	110	9	0.06	63
C00520O	CARKEEK ID & DJ	WAAIA	3637	399	124	17	4	0.03	84	8	0.07	63
C00680A	AKERS R & H & G CPD	TALLYGAROOPNA	3634	60	35	17	6	0.01	194	5	-0.05	63
T43MDGV	Dornauf IA & JJ	MOLTEMA	7304	199	167	17	0	0.14	-282	4	0.23	63
240082G	WHITE, RA & MA (MF)	BOISDALE	3860	107	49	16	3	0.02	92	8	0.06	72
4A1330A	PRICE IH & SW (MOFW)	SANDY CREEK	3695	601	269	16	4	0.02	91	8	0.06	72
4A2112W	MAJOR A & C	COHUNA	3568	2007	356	16	4	0.03	83	7	0.05	72
540314R	SAGE RA & FR	LEONGATHA	3953	371	100	16	3	0.03	51	8	0.08	72
5C0049C	WELLER WH & JF P/ L	LONGWARRY	3816	793	756	16	4	0.03	82	7	0.06	72
650284C	BAKER PARTNERSHIP	COBDEN	3266	738	273	16	3	0.03	43	9	0.10	72
650360O	I. J. & A. E. LOCK.,	TIMBOON	3268	1504	406	16	4	-0.01	163	9	0.04	72
740204P	TAYLOR, K. & M. J.	BARWON DOWNS	3243	132	35	16	4	0.00	143	10	0.05	72
850550V	PEKIN JF,A & JG	TERANG	3264	612	113	16	5	-0.01	212	8	-0.01	72
B20538V	SMITH RG & JE	TATURA	3616	454	120	16	5	-0.02	215	8	-0.02	72
C00276F	COOK, R. J. & J. P. (DIF- DISK)	WANGARATTA	3678	1084	388	16	4	0.04	62	6	0.05	72
C00897F	HAINES, GN, A, I &M (DIF)	KOTTA	3564	1121	236	16	3	0.02	65	9	0.08	72

TOP HERD SUMMARY

Top 2% Herd Average ABV's based on ASI in August 2005 - Jersey

National Herd ID	Owners Names	Address	Post Code	No. of Cows on File	No. of Current Cows	ASI ABV	Prot. ABV	Prot% ABV	Milk ABV	Fat ABV	Fat% ABV	ASI Rank
240699A	HOEY DM & L (MOFW)	KATUNGA 3	640	695	255	38	7	0.11	47	16	0.25	1
C00993T	WORBOYS, R. & A. (DIF)	ECHUCA	3564	751	201	34	7	0.08	103	13	0.15	2
C00935T	MCMANUS B.T.& C.A.	BAMAWM	3561	533	124	33	5	0.13	-15	13	0.25	3
850588C	GLENNEN & CO C	TERANG	3264	1749	482	32	5	0.10	19	15	0.27	4
C00758B	HUNTER FAMILY DAIRY P/ L DIF	KYABRAM	3619	1599	149	28	6	0.07	72	11	0.14	5
C00304S	MORGAN FARM ENT (DIF- DISK)	NUMURKAH	3636	219	52	27	12	-0.19	596	13	-0.36	6
240324P	SMITH, K & A (MF)	DENISON	3858	141	44	24	5	0.01	145	13	0.09	7
4C0103F	COMER IR & MJ (MOFW)	STRATHMERTON	3641	74	30	24	11	-0.20	580	13	-0.35	7
740064P	HESTER, R. J. & M.A.	WOOL WOOL	3249	624	177	21	1	0.13	-132	10	0.32	9
T24GOAO	Lammas R	SISTERS CREEK	7325	357	39	21	3	0.09	-20	8	0.17	9
460041H	KIRK EWT & SONS	TALLANGATTA	3700	126	51	20	8	-0.05	296	6	-0.20	11
740008V	MURRAY, D. & J.	LARPENT	3249	600	137	20	7	-0.03	233	8	-0.09	11
C00234S	JARVIS A. & L. (DIF) (PD)	KERGUNYAH	3691	277	56	20	4	0.03	75	10	0.11	11
C00998L	BRIGGS, R. G.(DIF) DISK	NANNEELLA	3561	248	46	20	3	0.10	-53	7	0.18	11

Top 2% Herd Average ABV'c based on ASI in August 2005 -Red Breeds

National Herd ID	Owners Names	Address	Post Code	No. of Cows on File	No. of Current Cows	ASI ABV	Prot. ABV	Prot% ABV	Milk ABV	Fat ABV	Fat% ABV	ASI Rank
Ayrshire												
4A1648L	STACPOOLE D. & L.	KATAMATITE	3649	398	177	-4	-1	-0.04	62	1	-0.02	1
Illawarra												
C00168H	SHEATHER KL & P	CORRYONG	3707	53	30	31	11	-0.02	428	13	-0.08	1
4A3174M	HEFFERNAN RT & JA(MOFW)	GUNDOWRING	3691	218	38	5	3	-0.04	188	3	-0.07	2
Australian Red Breed												
N00555U	GRAHAM RW & BC	NOWRA	2540	482	190	56	13	0.12	253	21	0.14	1

Top 2% Herd Average ABV'c based on ASI in August 2005 - Guernsey

National Herd ID	Owners Names	Address	Post Code	No. of Cows on File	No. of Current Cows	ASI ABV	Prot. ABV	Prot% ABV	Milk ABV	Fat ABV	Fat% ABV	ASI Rank
EIMN00M	ISON M & S	MONTO	4630	62	31	16	6	-0.04	248	8	-0.08	1

COUNTDOWN DOWNUNDER 2005

Dr Rod Dyson

Countdown Downunder 2004 – building industry capacity to control mastitis

The Australian dairy industry has a long history as a supplier of high quality milk. Maintaining this reputation is a key part of the industry's ability to maintain existing markets and access new markets both domestically and internationally.

Low milk cell counts are internationally regarded as a key measure of milk quality and dairy processing companies pay premium prices to Australian dairy farmers for milk with a lower cell count. Mastitis is the primary cause of increased milk cell counts.

Countdown Downunder is Australia's national mastitis and milk quality program. It was created by the dairy industry in 1998 to help dairy farmers meet international and local milk quality standards, improve farm profitability and protect export markets.

Australia's cell count is currently 208,000 cells/mL. This measure is calculated from bulk milk cell counts for the 2004 calendar year and is reported using the International Dairy Federation recommended method (namely the geometric average of all the individual herds' geometric average bulk milk cell count).

Herd Milk Cell Counts are calculated from herds participating in milk recording which allows us to explore the role that some herd level factors play in milk quality.

The data from the past four years shows that herds with more than 300 cows have a similar proportion of Herd Milk Cell Counts below 250,000 cells/mL as herds with less than 300 cows (see graph). This provides strong reassurance to the industry that increasing herd size need not be an impediment to milk quality.

To maintain a focus on performance and risk management in milk quality whilst working in a changing and complex operating environment, farmers and their advisers need the management and technical capacity to routinely assess performance and effectively respond to change.

Herd recording continues to play an important role for many farmers and their advisers by providing a valuable tool to monitor Individual Cow Cell Counts and Herd Milk Cell Counts on the farm and a capacity to be able to react rapidly and in an informed manner to an emerging mastitis problem on the farm.

The benefits of achieving the industry goals (all milk supply below 400,000 cells per millilitre and 90% of supply below 250,000 cells per millilitre) is about $18 every year for every year for every cow in the Australian dairy herd. Dairy processing companies also benefit from low cell count milk because of production efficiencies, a more consistent supply of quality milk, and greater access to world markets.

It is a benefit well worth striving for.

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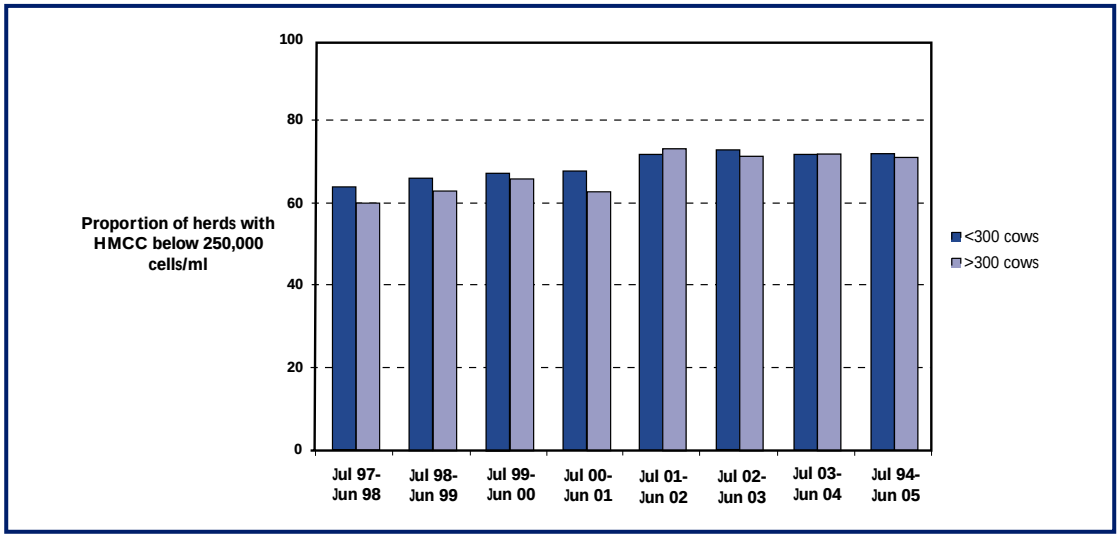


Herd Milk Cell Counts are:

- The volume weighted average of individual cow cell counts in a herd
- Collected each test day from 5,074 herds participating in milk recording
- Sourced from the same population of cows used by ADHIS to report annual production
- A way of assessing trends in cell counts over time

Countdown Downunder

DAIRY AUSTRALIA

INCALF 2004–2005: HELPING FARMERS GET MORE FROM THEIR HERD RECORDS

Dr Steve Little

InCalf, the national herd fertility program funded by Dairy Australia, has progressed with delivery of its training program for advisers through 2004-2005, and also commenced phase one of the roll-out of its innovative new farmer training program.

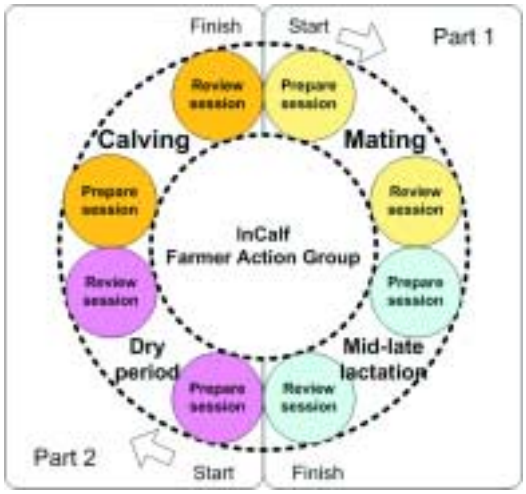
To the end of 2005, over 250 advisers (vets, nutritionists, herd improvement service providers, dairy company and DPI field officers and others) across Australia have completed the three day InCalf Adviser Training Course.

This network of 'InCalf-trained advisers' provides farmers in each region with support in using their InCalf Fertility Focus Report and the other InCalf resources to assess herd reproductive performance, explore options for improvement, and develop and implement strategies.

It also provides a supportive platform for the most exciting element of the InCalf extension package yet – the InCalf farmer training program. This program commenced its first phase in mid 2005. Pilot 'InCalf Farmer Action Groups' in South-West Vic, Gippsland and Northern Vic. are paving the way for the next phase commencing in early 2006 when farmers in all regions will have the opportunity to join a Farmer Action Group. Advisers and service providers in each region will be helping InCalf form and manage these groups.

The InCalf farmer training program is different – it is certainly not like a conventional farmer training course. Farmers join an 'InCalf Farmer Action Group' and participate in a series of four modules designed to support them "in real time" as they progress through the four phases of a year's herd fertility management on their farm – calving, mating, mid-late lactation and the dry period.

In each module, farmers meet firstly for a group session to prepare for the phase ahead - focusing on what they can do to improve their own herd's reproductive performance, and developing their own farm action plans. Farmers then progress these plans back on farm before meeting again weeks later for another session to review what happened.



The program is suitable for farmers using a seasonal / split or year-round calving system. Its primary aim is to provide an action planning process which enables them to achieve measured, step-by-step improvements in their own herd reproductive performance.

The starting point for improvements is having an accurate picture of past and present herd reproductive performance. Farmers participating in the program are finding that their herd records can provide even more value by enabling them to calculate standard InCalf measures which they can use to objectively assess their herd's reproductive performance.

The InCalf Fertility Focus Report is helping farmers obtain these measures for their herd. This easy-to-use single page report, generated by InCalf software using available herd records, allows farmers to readily compare the reproductive performance of their herd with other herds and with what's achievable. It also helps identify the management areas where change is most needed to improve their herd's reproductive performance.

In 2005 the Fertility Focus Report software was updated to produce a 'Behind your report' page with each report which enables farmers and advisers to cross check the herd records used for completeness and correctness. This page also provides information on how each herd performance measure reported was calculated.

InCalf has been working with herd improvement centres, dairy advisers and providers of herd management software across Australia to make this report as accessible as possible to farmers and help them obtain the most detailed report possible, taking maximum advantage of the herd records they keep. An up-to-date list of accredited Fertility Focus Report providers is on InCalf's website www.incalf.com.au

In addition to benefiting the individual farmer, the Fertility Focus software is also being applied at an industry level via InCalf's 'NatSCAN' software program in analysing the herd data supplied by herd test centres across the country to ADHIS. Key findings from this analysis will be communicated to industry in 2006.

For other new InCalf initiatives in the year ahead, keep an eye on industry communications or regularly visit www.incalf.com.au

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TOWARDS BETTER HERD FERTILITY

DAIRY AUSTRALIA

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InCalf research shows that AI practices can have a major impact on conception rates. In fact, the use of optimal AI practices by technicians may improve conception rates from 5 to 15%.

Accredited Professional AI Technicians have been trained in the use of optimal AI practices, they are experienced and have been assessed by a panel of expert AI technicians according to Herd Improvement Industry Standards managed by NHIA.

Check to see if your AI technician is accredited at **www.nhia.org.au**. Accredited AI technicians display this logo as your mark of assurance.

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+ high quality genetics
+ herd management
= productivity gains
& superior profits

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