# Australian Dairy Herd Improvement Report 2010













ADHIS is an Australian Dairy Farmers Ltd initiative that receives the majority of its funding from Dairy Australia through the Dairy Services Levy. ADHIS acknowledges the contribution of the Victorian Department of Primary Industries.

### Enquiries



ADHIS Pty Ltd ABN 97 006 475 378 Level 2, Swann House 22 William Street Melbourne Victoria 3000 T 03 8621 4240 F 03 8621 4280 dabernethy@adhis.com.au www.adhis.com.au



National Herd Improvement Association of Australia Inc. Reg No. A0008711E Unit 1/112 Synnot Street Werribee VIC 3030 T 03 9742 7244 F 03 9742 7696 carol@nhia.org.au www.nhia.org.au

Photo Acknowledgements: Thank you to all of the farmers who took time away from their businesses to enthusiastically participate in the photographs that appear in this report. Inside this report you will see Patrick Glass, Sue and Gavin Thorn, and Trevor and Leah Parish.

Copyright ADHIS Pty Ltd 2010. All rights reserved ©.

This Report is published for your information only. It is published with due care and attention to accuracy, but ADHIS and NHIA accept no liability if, for any reason, the information is inaccurate, incomplete or out of date whether negligent or otherwise.

All intellectual property rights in Australian Breeding Values (ABV<sup>™</sup>) detailed in this publication are owned by ADHIS Pty Ltd. Neither the ABVs nor any part of this publication, may be reproduced without the prior written permission of ADHIS Pty Ltd. Permission to reproduce or copy will not be given by ADHIS Pty Ltd, where the proposed reproduction or copy may, in the sole opinion of ADHIS Pty Ltd, result in a use of the ABV, which is likely to mislead or confuse stakeholders in the Australian dairy industry.

### Contents

2010 in Review	2
NHIA Chairman's report	
ADHIS Chairman's report3	
NHIA activities4	
ADHIS activity report6	
ADHIS Board and Committees9	
Partner Projects	.11
Incall	
National Herd Recording Statistics 2009-2010	.15
2010 Australian Breeding Values	,22
Partner Projects	11 .15 .22



# NHIA Chairman's report



By Gordon Stewart NHIA Chairman

History is made by asking the right question at the right time.

Almost two years ago, at a National Herd Improvement Association (NHIA) Member's Forum in Shepparton, Victoria, the question was asked, "Are we doing a good enough job with dairy data in Australia and can we improve?"

There was consensus that there was room for improvement in the way we organised dairy data and at that meeting the NHIA Working Group on Dairy Data was formed with a brief to investigate the matter further.

Since that time, the Working Group has expended considerable time and effort in pursuit of the goal of building industry consensus on a way forward. On behalf of NHIA members, I would like to express my gratitude to the Group for its dedication and hard work. Ably led by Dr Matthew Shaffer (Holstein Australia) as Chairman, the Group also included Daniel Abernethy (ADHIS), Leon Giglia (Farmwest), Peter Van Elzakker (BOS Trading) and NHIA General Manager, Carol Millar.

#### Significant financial investment

Some may ask why NHIA would get involved in this project but, in my view, the answer is obvious.

One of NHIA's five Statements of Purpose is to "lead the continual development of the herd improvement industry" and there is no better place for us to display leadership than in the area of dairy data, which has an enormous role to play in the businesses of our members and their farmer customers.

To this end, the Working Group identified the need to engage an independent consultant to carry out a stocktake of the current arrangements for dairy data in Australia, and establish the case for strategic improvement and identify options for the future. The NHIA Board stepped up to the plate and dug deep into Association resources in order to fund the consultant's report. At this point, we must also acknowledge Holstein Australia financial support for this report, for which we are most grateful.

Both organisations have had the courage to "put their money where their mouth is" and the result is *Report for NHIA Dairy Industry Data Project* which was released in July 2010.

This report represents the most comprehensive study of the dairy data situation ever undertaken in Australia. In addition, it was made available to any person or organisation with an interest in dairy data. This openness and transparency has been a characteristic of all the endeavors of the NHIA and its Working Group. The report remains available for use by the entire dairy industry.

#### Dairy data has many uses

Genetic evaluation and the production of Australian Breeding Values (ABVs) is an obvious benefit of the data collected from tested herds, but there are others.

There is an important farm benefit in being able to individually identify cows and monitor their performance, whether farmers are feeding for production, using cell count information to earn a premium milk price or deciding which cows to cull or sell. Farmers who herd test understand the enormous value of this data and how they can use this knowledge to generate greater profit.

There is also a collective benefit in gathering data from as many farms as possible so we can understand trends in the dairy industry. It is vital to industry leaders making strategic decisions about future priorities. The more data available, the more informed decisions can be made about industry priorities. This applies to setting dairy research priorities, monitoring food safety and milk quality, and for animal welfare and bio-security.

The whole way through the supply chain from farm to factory to boardrooms, more data means greater knowledge and better decisions. In turn, this means greater value and profit to all in the dairy industry.

# **ADHIS Chairman's report**

We have all heard it said that 'the only constant is change'. Unpredictable weather, new policy environments, novel robotic technology, and access to a world of information from any location can change how we do business. In the world of genetics, change is quick but the focus of ADHIS is to ensure that change maximises the opportunities for farmers to benefit. It's about building the tools that will lead to better breeding outcomes and lift the capacity of the herd to perform.

One of the most important changes at ADHIS was the implementation of a new Australian Profit Ranking (APR) in April. The APR which is used to rank bulls was put under the spotlight and reviewed by both scientists and industry. The updated APR emphasises important traits such as longer lasting cows, more mastitis resistance and improved fertility.

Building good herds starts with easy access to independent, objective information presented in the way that suits the needs of individual farmers. This is why ADHIS developed the Good Bulls Guide. It's a super quick way to use the best bulls available to give genetics a boost in your herd. ADHIS will send it to your mailbox twice a year so it's within reach when it's time for you to pick the next team of bulls. The world of genomics is opening before us. After significant industry investment, ADHIS is now capable of producing genomic based breeding values using data collected from a tiny hair sample. The technology is incredibly exciting but we're still not finished. Launched this year, the Dairy Futures CRC brings together government, industry and the research community to explore genomic developments that ADHIS will be able to deliver to dairy farmers in years to come.

I would like to take this opportunity, on behalf of the Board of ADHIS, to thank bull breeding companies, herd recording centres, breed societies, the Dairy Extension Centre, the National Centre for Dairy Education – Australia and the Department of Primary Industries – Victoria for their support and input over this past year as well as Dairy Australia for their significant financial support of the new initiatives ADHIS has delivered.

The coming year holds exciting opportunities. The Board of ADHIS continues to work on behalf of farmers to make sure you get access to the world of genetic opportunities in a way that is relevant to you.



By Wes Judd ADHIS Chairman

# **NHIA** activities



NHIA General

Manager

The Dairy *Industry Data Project Report 2010* is a landmark publication for the herd improvement industry and represents the most comprehensive examination of the state of dairy data ever done in Australia. For that reason, it is worthwhile to review the contents of this report which was prepared by independent consultancy firm, GHD.

#### Context

"We believe that the time is right for the Australian dairy industry to make a significant effort to adopt a dairy data system that is world's best practice, which enables dairy farmers to make informed and timely management decisions on their farms,"

#### Dr Shaffer, NHIA Working Group Chairman

There is an overwhelming consensus between dairy industry stakeholders that the way dairy data is currently exchanged limits potential productivity gains from herd improvement for the Australian dairy industry.

The profitability and international competitiveness of the Australian dairy industry depends on a continual improvement in dairy herd data. The industry has made a substantial investment to build a body of high-quality scientific knowledge with the expectation that this will underpin decisions regarding the selection of desirable traits.

Repositioning dairy data exchange into a pre-competitive setting is essential to support research, improve genetic evaluation and underpin information product innovation across the industry to realise productivity gains through better on-farm decision making. This report has found that Australia could achieve gains of \$10-\$50 million during the next 10 years if farm-level data management was improved.

#### Key Issues

Five main drivers that are both supporting and, in some cases, inhibiting improvements in dairy data collection, transfer and access are identified in the report. These are: better decision-making information; sustaining genetic evaluation data flows; rationalisation; innovation and technology; and regulatory and market compliance.

The report identifies three value chains for dairy data: herd recording; breeding, fertility and herd management; and food and safety/quality and environment, for which challenges and opportunities are identified. Many of the existing gaps and issues identified are concerned mainly with the quality and quantity of data, particularly relating to collection and integration.

The main challenges identified include:

- lack of industry leadership to address data issues and realise productivity gains;
- multiple animal ID processes and numbers with calls for implementing a unique recognised animal ID system;
- gaps in data, value-adding constrained;
- fragmented systems, difficulties in data transfer and sharing;
- less than optimal data collection processes and adoption of new technologies;
- reduced data flow through the data value chains;
- improvements in reliability of genetic evaluation;
- data not valued by all stakeholders; and
- incentives for data collection not aligned with benefits of data use.

These challenges present opportunities to the industry for improvement in dairy data collection, transfer and access. These opportunities can be pursued and challenges addressed by a mixture of education; regulation push and market pull to establish the elements of a desirable system as outlined by stakeholders.

4



### Options

Four scenarios were modelled in this report. These scenarios are based on the level of which two key variables impact on the dairy data: market forces and the level of intervention. The purpose of the scenarios is to provide strategic insight and test their ability to realistically improve data management in the dairy industry to identify a preferred pathway. The four scenarios tested are:

- Laissez faire market drives rationalisation and increasing demand for better information products from herd data.
- 2. Standards-drive approach focus on standardisation and data flow
- Centralised data repository builds on Scenario
   by establishing a pre-competitive herd testing/ data approach through the development of a national data repository.
- Full integration builds on Scenario 3 by establishing a single unified data architecture and software system.

#### Recommendations

Scenario 3 (centralised data repository) will provide the best outcome through combining an industryowned data repository with extension services and the standards-based approach of Scenario 2, to address both the leadership and technical issues associated with dairy data. This scenario is considerably more than enhancement of the current system because it requires equity, participation and commitment from all stakeholders to be effective. A staged approach progressively designing, testing and implementing the components is proposed. It is recommended that the Data Working Group continue to drive this initiative to oversee the key tasks required.

The implementation of Scenario 3 requires the establishment of three components; national data network, data repository and extension services; integrated through a strategic plan and underlying business model. This report has included a detailed description of the key tasks, risk analysis and timelines that need to be undertaken to implement Scenario 3 and create a centralised data repository.

# **ADHIS** activity report



By Daniel Abernethy, ADHIS General Manager

The Australian Dairy Herd Improvement Scheme (ADHIS) aims to maximise the opportunity for Australian dairy farmers to profit through independent, world-leading dairy genetic improvement services.

For more than 25 years, ADHIS has continually improved its processes to enable farmers to confidently select animals knowing that Australian Breeding Values (ABVs) are the best estimate of an animal's genetic merit under local conditions. This year, key developments were implemented across each of its core work areas (see Figure 1). This report describes the year's key initiatives. Table 1 gives a full list of developments.

#### **APR Review**

ADHIS produces ABVs to provide farmers with objective data to improve their herds. Table 2 gives the calendar of 2010 ABV release activities. The most significant change was the update of the Australian Profit Ranking (APR).



Figure 1 ADHIS focuses on three core areas

The APR is a single index that reflects nine traits that influence net farm profitability, including production (milk, fat and protein yields) and non-production traits. Non-production traits include survival (longevity), fertility, somatic cell count, liveweight (as an indicator of efficiency), temperament and milking speed. Type traits and likeability are used to estimate some of the non-production traits.

The contribution of each trait towards the final APR value is 'weighted' according to its relative

Table 1: Summary of 20	Table 1: Summary of 2010 Developments									
Development	Activity	Impact								
New Australian Profit Ranking	After two years of research and consultation, the new APR formula was implemented.	The new APR increases emphasis on longevity, fertility and mastitis resistance.								
Genomic evaluation system and associated services	New science together with required IT systems implemented to enable the production of genomic based breeding values.	Improved rate of genetic gain through greater selection pressure of young sires and, in time, bull dams.								
Good Bulls Guide	New publication providing breeding values of bulls organised by commonly selected traits (breeding objectives).	Farmers are able to breed better herds using better bulls in the least confusing way.								
Electronic NASIS system	A new web-based registration for AI bulls was implemented in July 2010 to improve accuracy of the bull file.	Faster and more efficient registration of NASIS bulls.								
NASIS updates	The NASIS file is updated weekly and web searches use the lat- est NASIS data	Direct access to the latest NASIS information								
Active bull tool	A new web-based tool enables bull companies to better man- age the active status of their bulls.	Farmers can more easily identify bulls for which semen is available.								
DIF Converter	A new tool to convert data interchange format (DIF) files to Microsoft Excel.	Data users can more quickly access industry data for analysis.								
ADHIS website re-fresh	The layout and menu structure of the website have been improved.	Web users can access a greater variety of infor- mation in a more user-friendly environment.								

6

Table 2: 2010 ca activities	lendar of ABV releases
January	ABV(i) release
April	ABV and ABV(i) release
August	ABV and ABV(i) release
September	ABV(g) unofficial release to participating bull companies
December	ABV(i) release ABV(g) unofficial release to participating bull companies

contribution to profitability and the relationship that exists between traits.

Since its introduction in 2001, the APR has proven to be both an accurate and reliable index of a sire's potential genetic contribution to dairy farm profitability. However, periodic updates are required to account for the changing farming environment including milk prices and input/output costs.

Over the past two years, ADHIS facilitated a scientific review and industry consultation process that concluded with a decision to change the APR. From April 2010, the APR is calculated with an updated formula which places more emphasis on daughter fertility, survival and mastitis resistance with a slight reduction in emphasis on production traits compared to the previous formula. Figure 2 shows the expected genetic trends in eight traits resulting from bull selection based on APR.

A change in selection pressure for different traits ultimately results in the re-ranking of bulls. This minor re-ranking which favours bulls superior in fertility and survival will be seen by farmers when making bull selection decisions.



Figure 2: Predicted response to selection based on updated APR over 10 years.

### Genomic Based Breeding Values

For the first time in Australia, ADHIS produced genomic based breeding values for bulls in September and December 2010. Following standard protocols in releasing new breeding values, ADHIS released unofficial ABV(g)s initially to bull owners who submitted samples for genotyping followed by wider distribution. The first official public release remains scheduled for April 2011.

Genomics improves the reliability of ABVs for young bulls. Some 2,381 Holstein bulls were included in the September 2010 analysis (2,193 reference bulls and 188 young bulls). In this group of 188 young bulls with almost no daughter performance data, an improvement in reliability across all key trait areas is evident. Table 3 shows the improvement in reliability from their traditional ABV (based mostly on parent average) with their ABV(g) which includes genomic data.

Now that a new type of breeding value is being published, farmers and industry will begin to notice a new term in use. ABV(g)s are published for unproven bulls based on genomic and pedigree data as shown in Table 4. ABV(g)s are expressed in

Table 3: Improvement in reliability using genomics								
	Improvement in reliability between ABV (parent average) and ABV(g) for 188 bulls							
<b>Production traits</b>	From 21% to 53%							
Overall type	From 14% to 42%							
Fertility	From 8% to 36%							
Survival	From 12% to 46%							

Table 4 A summary of ABVs, ABV(i)s and ABV(g)s									
ABV(g)	ABV(i)	ABV							
Unproven bulls	Interbull breeding values	Proven bulls							
Breeding values based on genomic and pedigree data.	Breeding values for bulls proven overseas with insufficient Australian daughter performance information.	Breeding values utilising Australian milking daughter information. Meet publishable requirements for production, type and workability.							

the same way as ABVs and ABV(i)s to make it easy to compare animals.

ADHIS, Dairy Australia, the Dairy Futures CRC, DPI-V and Genetics Australia continue to invest in genomic technology. Further research to improve the reliability and accessibility of this technology continues to provide farmers with the opportunity to gain further benefits from improved genetic gain.



8

#### Good Bulls Guide

Selecting bulls to breed better dairy herds is now easier than ever, with the release of the Good Bulls Guide by the Australian Dairy Herd Improvement Scheme (ADHIS) in August.

Produced twice a year, the Good Bulls Guide lists available bulls that are above average for profit. Within the Guide are lists of trait leaders for traits such as type, longevity, mastitis resistance, production and profit. These traits have been selected as they are common breeding objectives reported by farmers. Bulls of higher reliability are identified separately.

As the Good Food Guide directs consumers interested in a good night out to tried and tested eateries, the Good Bulls Guide directs farmers to 'highly recommended' bulls.

Farmers are encouraged to simply pick the table that reflects the needs of their herd with confidence that the genetic potential of the herd will be improved. The Good Bulls Guide includes bulls from every company and from both Australia and overseas. Each bull is listed with its relevant breeding values and reliability. Those farmers who wish to make more detailed comparisons of bulls can continue to use Selectabull and detailed bull pages available on the ADHIS website.

The Good Bulls Guide will be published twice a year in line with the April and August releases of Australian Breeding Values (ABVs). The Good Bulls Guide is delivered to all dairy farmers.

### Selectabull Workshops

In partnership with the Dairy Extension Centre, ADHIS has delivered a total of nineteen Selectabull workshops throughout Victoria and South Australia in 2010. During the workshops, participants develop or refine breeding objectives for their herd and learn to use the simple web-based Selectabull tool in a supervised and supported environment.

An evaluation of the Selectabull workshops has revealed a high degree of satisfaction with the program. Participants reported that the most useful components of the Selectabull program were the ability to find bulls that suited the particular requirements of their herd, and the speed at which this could be done. The variety of bulls identified, the flexibility to investigate alternatives and the independence of the information were all valued. Almost without exception, participants recorded that at the conclusion of the workshop they were confident in using Selectabull, and felt comfortable navigating through the program. They were satisfied with the breeding objective they had developed and understood the role of genetics in their herd better, and they understood the information services provided by the ADHIS and had a better understanding of ABVs at the conclusion of the workshop. A pleasing eighty-six per cent of participants reported that they planned to use the program when next making semen purchasing decisions.

As the partnership with the Dairy Extension Centre continues into 2011, further workshops will be scheduled across numerous locations.



# **ADHIS Board and Committees**

### ADHIS Pty Ltd Board of Management

The Board met six times during the year to progress ADHIS's Strategic Plan, including implementation of the new Australia Profit Ranking, genomics and extension activities.

*Members:* Wes Judd (Chairman), Peter Aldridge, John Harlock, Stewart McRae, Stuart Tweddle, Ian Carkeek (retired December 2010), Lyndon Cleggett (appointed December 2010), Ivan Jones, Daniel Abernethy (General Manager and Secretary).

### **ADHIS Staff**

Daniel Abernethy, ADHIS General Manager Sally Bernardo, Executive Assistant

Genetic Evaluation National Data and Database Service

Gert Nieuwhof, Geneticist and Team Leader

Kon Konstantinov, Statistician Judith Schweitzer, Information Scientist Paul Koh, Data and Services Manager Erica Jewell, Data and Services Manager Education and Extension

Michelle Axford, Project Leader

Adam Daniel, Project Officer



# **Industry Consultation**

#### Annual Stakeholder Meeting

Effective industry consultation is an underpinning element of the ADHIS Strategic Plan. ADHIS achieves industry consultation across its activity areas through its committees, specific meetings with individuals and organisations and the annual ADHIS stakeholder meeting.

The annual stakeholder meeting gathers a larger stakeholder group to provide strategic advice and input to the Board of ADHIS. This year's stakeholder meeting was held in July 2010 where representatives of AB Companies, data processing centres, semen resellers, state dairy organisations, farmers and the ADHIS Board were invited to discuss genomics, extension activities and were introduced to the Dairy Futures Co-operative Research Centre.

In addition to this, ADHIS hosted a number of technical industry meetings specifically for AB company and breed society managers to report on recent research and discuss future initiatives. These meetings provide ADHIS with a forum to discuss genetics in detail and provide a forum for open discussion. The technical meetings were implemented after a review of communication activities aimed at improving stakeholder engagement.

#### **Genetics Committee**

#### Members

Prof Mike Goddard (Chairman, University of Melbourne), Assoc Prof Julius Van der Werf (University of New England), Dr. Bruce Tier (University of New England), Dr. Rob Woolaston, Dr Mekonnen Haile-Mariam (University of Melbourne), Dr Kevin Beard (ADHIS Consultant), Dr Gert Nieuwhof (ADHIS), Dr Kon Konstantinov (ADHIS), Daniel Abernethy (ADHIS)

The Genetics Committee brings together scientists from a number of organisations to review genetic developments within ADHIS. Further support to this committee is gratefully received from Dr Gerhard Moser, Prof. Herman Raadsma, Dr Jennie Pryce, Dr Phil Bowman and Assoc Prof. Ben Hayes.

### **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 Dr Gert Nieuwhof (ADHIS), Mr Paul Koh (ADHIS), Mr Daniel Abernethy (ADHIS)

This Records Standards Committee provides representatives from data processing centres a forum to discuss data issues relating to herd improvement records and genetic evaluation.

#### Type Assessment Committee

On an annual basis, meetings are held with Holstein Australia and Jersey Australia that are the two breed societies that provide linear type data to ADHIS. Linear Type Evaluations for the coming year are reviewed with improvements made to the organisational aspects of data collection which should improve the amount of data collected.

## Education and Extension Reference Group

#### Members

Mr Stuart Tweddle (Chairman), Mr Ian Carkeek (ADHIS), Mr Stewart McRae (ADHIS), Mr Mick Blake (Dairy Australia), Mr Peter Thurn (Genetics Australia), Mr Bruce Ronalds (ABS Australia), Ms Carol Millar (NHIA), Mr Daryl Hoey (ADF), Dr John Penry (Rural Innovation Research Group), Ms Joanne Campbell (ADHIS consultant), Rebecca Dickson (NCDEA), Ms Ann McDowell (DEC), Mr Darold Klindworth (DEC), Dr Matt Shaffer (Holstein Australia), Adam Daniel, (ADHIS), Michelle Axford (ADHIS) and Daniel Abernethy (ADHIS).

This committee did not formally meet during 2010 however significant consultation occurred with key stakeholders including AB companies, breed societies, Dairy Extension Centre and National Centre for Dairy Education throughout the year with the APR update, Selectabull and Good Bulls Guide dominating discussion.

### Al use on dairy farms

Genetic selection enables dairy farmers to breed herds that perform profitably in Australian conditions.

Farmers usually improve the genetic merit of their milking herds using artificial insemination (AI). This year's ADHIS data again demonstrates that cows born to AI out-perform naturally bred cows (Table 1).

Reaping the benefits of this increased production and cow longevity does, however, rely on getting the cows in calf to AI (Figure 1).

The dairy industry is investing heavily in technology that enables farmers to accelerate genetic gain in their herds. To capitalise on this investment, industry must ensure the appropriate support is available to help farmers increase the proportion of Al-born calves in their herds. This requires a good understanding of the use of Al on Australian dairy farms. Here is an overview of what is known now:

#### Extent of AI use

- About 84% of dairy herds use AI (Figure 2), although the figure is lower for year-round calving herds (Figure 3) and small herds (Figure 4).<sup>1</sup>
- InCalf estimates that about one million cows are inseminated in Australia each year.
- However, the extent of the use of AI within herds is not known. ADHIS data suggests about 70% of cows in milk recording herds are AI progeny.<sup>2</sup> A significant jump in production is seen when more than 40% of cows in the herd are AI progeny.<sup>2</sup>

Table 1: Cows that are Al progeny on average have a higher production (566,029 cows). <sup>2</sup>										
Production averages	Al progeny	Not Al progeny								
Milk	6143 L	5508 L								
Fat	279 kg	255 kg								
Protein	230 kg	210 ka								

### Who does the AI

- Of the herds that use AI, almost a third (31%) exclusively use professional AI services.<sup>1</sup> The other two-thirds of herds do some or all of their own inseminations (DIY).
- DIY is even more prevalent in year-round calving herds (Figure 3 ).<sup>1</sup>



Figure 2: Most herds use AI.



Figure 1: A pathway for breeding dairy herds that perform in Australian conditions.

### **Partner Project**

Dairy

InCalf

Australia



Dr Barry Zimmermann InCalf Project Leader Level 2, Swann House 22 William Street, Melbourne Vic 3000 03 9620 7283 bzimm@incalf.com.au

#### Footnotes:

- 1. 2010 National Dairy Farmer Survey
- 2. Australian Dairy Herd Recording Statistics 2009/2010

### **Partner Project**

- Up to six different operators do the inseminations in some herds, although it is commonly one or two people in herds with fewer than 600 cows and two or three people in the larger herds.
- Thousands of DIY operators inseminated cows on Australian dairy farms last year. The conception rate varies significantly by technician. Many DIY inseminators achieve conception rates 5-15% lower than professional technicians.<sup>3</sup>

#### Al training and refreshers

 Across Australia about 26% of DIY inseminators have done an Al or refresher course in the past two years.<sup>1</sup> More herds in NSW and western Victoria have had some people from the farm participate than other regions.

Just small changes in methods of semen storage and handling, operator technique or farm insemination protocols can often improve performance on farm.



Immediate

needed

over cows

Genetic gain from Al calves

• Fewer cows to mop up at the end of Al, so fewer bulls

· Fewer late calving or carry-

 Fewer cows culled because they are not in calf

- Over several seasons
  - Higher producing, more profitable herds
  - Cows stay in herd for longer: more heifers to sell and more culling options

Given that 73% of dairy farmers are currently keeping all the heifers they breed,<sup>1</sup> the potential to make significant gains from using Al over a few seasons is very high.

InCalf's *AI: Do-It-Right* on-farm refresher and practical guide on heat detection, *Cows in Colour*, can help farmers increase the numbers of AI calves born in their herd. These can be obtained from www.incalf.com.au.



Figure 3: AI is used extensively in all calving systems (1003 survey herds).<sup>1</sup>

Number of herds



Figure 4: AI use tends to increase with herd size (1003 survey herds).<sup>1</sup>

#### Footnote:

3. The original InCalf research 1996-1998

### Mastitis Focus on clinical cases

The Australian dairy industry's ongoing success in domestic and international markets depends on the supply of top quality milk.

Milk cell counts, which are an important component of milk quality, increase when cows have clinical or subclinical mastitis. Maintaining milk quality relies on good mastitis control on dairy farms – there is no 'fix' in the manufacturing process.

Although there is no way of knowing what the rate of clinical cases is in Australia or whether it has changed significantly over time, 43% of farmers responding to a poll of issues around milk quality in 2010 expressed concerns about the number or management of clinical cases in their herds (Figure 1). Having to find and treat clinical mastitis is a major source of frustration and expense for dairy farmers, especially in early lactation. Any disruption to the milking routine and increase in workload at such a busy time is very unwelcome.

A key to avoiding mastitis outbreaks is to find and treat clinical cases early. So how do farmers know when they need to be taking extra measures to find cases as early as possible? The average Bulk Milk Cell Count of Australian dairy herds was 214,000 cells/mL for the 2009 calendar year. This measure was calculated using the International Dairy Federation recommended method.

Mastitis becomes a problem for herds when the level or rate of spread of infection is too high. The recommended triggers for taking action are when there are:

- Bulk Milk Cell Counts above 250,000 cells/mL; or
- 5 clinical cases per 100 cows in the 30 days after calving; or
- 2 clinical cases per 100 cows per month during lactation; or
- 5 new infections per 100 cows in milk.

On most farms Bulk Milk Cell Counts and clinical case numbers provide a general guide to the mastitis status of the herd. Following the release of the *Mastitis Focus Report* 18 months ago, a more sophisticated understanding of what is happening in the key mastitis management areas is now readily available to dairy farmers and their advisers.

Dr John Penry Project Leader Countdown Downunder Level 2, Swann House, 22 William Street, Melbourne Vic 3000 03 9620 7283 john@camperdownvet. com.au

# Partner Project

Dairy

Countdown Downunder Your Levy at Work

Australia





many dairy farmers at a poll in May-June 2010 (of 260 farmers from across Australia).

Figure 2: The top seven clinical case issues for farmers.

### **Partner Project**

*Mastitis Focus* reports can be generated for herds using the common herd management software (such as Mistro Farm and Easy Dairy) or herd recording data systems in Australia.

The *Mastitis Focus* report is a great value-add to those investing in herd recording. It uses individual cow cell counts to describe how quickly infection is spreading to clean cows in the herd. A high 'New Infection Rate' often precedes an increase in clinical cases – and taking early action can help avert a clinical case outbreak.



Queries around clinical case treatment effectiveness, the numbers of recurring cases and the levels of mastitis at calving were high on the list of concerns for farmers participating in the industry consultation (see Figure 2). *Mastitis Focus* reports these parameters for farms that enter Lactating Cow Treatments into the herd management software. However, this information is currently only able to be assessed for about 10% of herds because the data is not entered into the computerised herd records despite all farmers keeping these (usually paper-based) records as part of their quality assurance programs.

Dairy veterinarians have a good grounding in the principles of clinical case management and are able to help farmers develop protocols and reduce the risk of 'outbreaks' in their herds.

Currently, about 100 *Mastitis Focus* reports are being generated from the web per month. To increase its use, industry needs to promote the flow of clinical case data into the system and Countdown needs to help dairy advisers become more familiar with the report and confident in recommending its use.

#### Figure 3: You can practise generating this Mastitis Focus test report or try with a file from a client's farm.

- Download the Macalister Research Farm file onto your computer from http://www.dairyaustralia. com.au/Farm/Mastitis-and-milk-quality/ Mastitis-Focus.aspx
- Go to www.mastitisfocus.com.au then follow the prompts and load the Macalister zip file. If you want your report to exactly match the report on the left, enter the report date as 31/10/2010.
- PDFs of the generated reports will then appear as links that you can click on and will also be sent to your nominated e-mail address.

Table 1: National and state totals and production averages.												
State	Number	Herds and cows recorded				Production averages						
	of herds	Included	Excluded	Total	Herd	Milk	Fat	Fat	Protein	Protein	Lactation	
		in	from	cows	size	litres	%	kg	%	kg	length	
		averages	averages								days	
Victoria	2,127	305,509	132,302	437,811	205.8	6,443	4.1	265	3.4	217	318	On average, he
New South Wales	508	77,965	25,949	103,914	204.6	7,499	3.9	293	3.3	245	343	recorded cows
Queensland	309	29,119	19,443	48,562	157.2	6,401	4.1	262	3.4	218	336	more than non
South Australia	247	43,797	10,424	54,221	219.5	7,274	3.9	285	3.3	238	335	recorded cows
Tasmania	183	38,123	9,155	47,278	258.3	5,970	4.1	247	3.4	204	295	(Dairy Australia
Western Australia	129	28,356	4,127	32,483	251.8	7,311	3.8	277	3.1	230	334	2010 and ADH
Australia	3,503	522,869	201,400	724,269	206.8	6,680	4.0	270	3.3	223	323	
Victorian regions												
Northern	804	98,751	45,641	144,392	179.6	6,726	4.2	279	3.3	225	325	
Eastern	756	116,432	43,092	159,524	211.0	6,179	4.1	254	3.4	208	315	
Western	567	90,326	43,569	133,895	236.1	6,473	4.1	265	3.4	219	314	

Table 1a: National totals and production averages 1999 to 2010												
Year		Herc	Is and cows record	ded		Production averages						
	Number	Included in	Excluded from	Total	Herd size	Milk	Fat %	Fat kg	Protein	Protein	Lactation	
	of herds	averages	averages	COWS		litres			%	kg	length days	
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	
2005/2006	4,746	701,852	208,536	910,388	191.8	6,402	4.0	255	3.3	212	316	
2006/2007	4,462	655,212	222,592	877,804	196.7	6,452	4.0	257	3.3	216	312	
2007/2008	3,966	578,263	207,199	785,462	198	6,596	4.0	264	3.3	220	321	
2008/2009	3,779	566,029	206,694	772,723	204.5	6,645	4.1	270	3.4	223	318	
2009/2010	3,503	522,869	201,400	724,269	206.8	6,680	4.0	270	3.3	223	323	

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	2,127	42	50	79	127	201	333	321	256	172	152	
New South Wales	508	5	7	17	25	34	64	69	85	75	63	
Queensland	309	6	3	13	18	33	34	23	23	19	14	
South Australia	247	4	1	5	11	22	30	40	43	41	36	
Tasmania	183	0	4	10	24	24	30	17	12	15	16	
Western Australia	129	1	0	4	8	8	11	23	30	25	13	
Australia	3,503	58	65	128	213	322	502	493	449	347	294	
Victorian regions												
Northern	804	7	8	23	33	52	90	114	108	71	77	
Eastern	756	17	22	29	56	88	152	140	80	56	30	
Western	567	18	20	27	38	61	91	67	68	45	45	

Table 3: Number of herds in protein production categories by region.												
State	Total		Average protein production (kg per cow)									
	herds	< 100	100-124	125-149	150-174	175-199	200-224	225-249	250-274	275-299	> 299	
Victoria	2,127	43	63	132	199	384	347	279	167	87	32	
New South Wales	508	5	11	22	32	64	77	80	78	47	28	
Queensland	309	7	2	18	20	50	33	23	18	8	7	
South Australia	247	4	4	4	21	38	36	54	44	19	9	
Tasmania	183	1	8	19	31	25	20	17	13	11	7	
Western Australia	129	1	1	6	11	9	24	39	22	7	3	
Australia	3,503	61	89	201	314	570	537	492	342	179	86	
Victorian regions												
Northern	804	7	14	36	54	127	123	95	78	32	17	
Eastern	756	15	30	57	85	159	141	113	43	20	7	
Western	567	21	19	39	60	98	83	71	46	35	8	

Table 4: Prod								
Age group	Number of		Pro	oduction average	ges		Lactation	
	cows	Milk litres	Fat %	Fat kg	Protein %	Protein kg	length days	
2-year-old	87,528	5,887	4.00	235	3.33	196	329	45% of Australia's 1.6 million milking cows were
3-year-old	93,349	6,522	4.03	263	3.37	220	326	herd recorded in 2009/10.
Mature cow	341,992	6,926	4.06	281	3.33	231	321	Dairy Australia In Focus 2010,
Total	522,869	6,680	4.04	270	3.34	223	323	ADHIS 2010

Table 5: Production averages by age group and mating type.											
Age group	Number	Average	fat (kg)	Average protein (kg)							
	of cows	Artificially bred stock	Naturally bred stock	Artificially bred stock	Naturally bred stock						
2-year-old	87,528	241	220	201	182						
3-year-old	93,349	270	245	226	204						
Mature cow	341,992	293	263	241	215						
Total	522,869	279	255	230	210						

Table 6 : Production avera	ges by percentage of	artificially bred co	ws in herds.		
Percentage of artificially	Number of herds		Production average	S	
bred cows in herd		Milk litres	Fat kg	Protein kg	
< 10	471	5,823	239	196	On average, an AI cow is
10-19	196	6,244	250	207	\$53 more profitable each
20-29	164	6,058	246	202	counterpart.
30-39	202	6,575	263	219	HaileMariam & Goddard 2008
40-49	237	6,304	256	209	
50-59	314	6,960	275	230	
60-69	362	6,808	277	226	
70-79	435	6,982	279	232	
80-89	488	6,854	277	229	
> 89	634	6,942	283	233	
Total	3,503	6,680	270	223	

Table 7: Production a	Table 7: Production averages by breed.													
Breed	Number of			Produ	uction average	S								
	cows	Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation							
							length days							
Holstein	353,966	7,087	3.93	278	3.27	232	327							
Jersey	56,385	5,168	4.84	250	3.72	192	312							
Holstein/Jersey Cross	20,862	6,057	4.42	268	3.52	213	310							
Guernsey	1,387	5,481	4.27	234	3.38	185	329							
Ayrshire	2,769	5,505	4.10	225	3.38	186	313							
Dairy Shorthorn	294	4,772	3.85	184	3.26	156	303							
Illawarra	5,329	6,379	3.99	254	3.33	212	323							
Unknown Breed	70,723	6,253	4.04	252	3.33	208	319							
Aust Red Breed	7,465	5,807	4.14	240	3.46	201	310							
Brown Swiss	3,501	6,245	4.10	256	3.43	214	329							
Other	188	5,099	4.97	234	3.71	181	307							
Total	522,869	6,680	4.04	270	3.34	223	323							

Table 8: Production averages by month of calving.												
Month of	Number of	% of total		Pro	duction ave	rages		Lactation				
calving	COWS		Milk litres	Fat %	Fat kg	Protein %	Protein kg	length days				
January	16,060	3.1	7,015	3.97	279	3.31	232	342	43% of herd-record			
February	23,633	4.5	7,064	4.02	284	3.35	236	339	cows calved in the i			
March	47,290	9.0	7,113	4.01	285	3.33	237	336	in 2009/10.			
April	51,717	9.9	7,038	4.02	283	3.34	235	334				
May	45,917	8.8	6,888	4.01	277	3.35	231	328				
June	41,775	8.0	6,633	4.03	268	3.36	223	320				
July	57,038	10.9	6,405	4.07	261	3.36	215	317				
August	96,271	18.4	6,334	4.11	261	3.37	213	310				
September	74,411	14.2	6,537	4.08	266	3.32	217	314				
October	36,312	6.9	6,540	4.03	264	3.28	214	319				
November	18,841	3.6	6,702	3.99	268	3.26	219	337				
December	13,604	2.6	6,929	3.96	274	3.27	226	344				
Australia	522,869	100	6,680	4.04	270	3.34	223	323				



Table 9: Product	ion averages by l	oreed, age gro	oup, mati	ng type	and reg	istration.		
Breed	Туре	Number of			Proc	luction ave	rages	
		COWS	Milk	Fat %	Fat kg	Protein	Protein	Lactation
			litres			%	kg	length days
Holstein	2-year-old	64,588	6,206	3.87	240	3.28	204	332
	3-year-old	67,278	6,893	3.91	269	3.31	228	329
	Mature cow	222,100	7,402	3.95	292	3.27	242	325
	Total	353,966	7,087	3.93	278	3.27	232	327
	Artifically bred	256,221	7,255	3.92	284	3.27	237	329
	Naturally bred	97,745	6,648	3.95	263	3.28	218	320
	Pure bred	61,226	8,039	3.82	307	3.22	259	349
	Grade	292,740	6,888	3.95	272	3.29	226	322
Jersey	2-year-old	10,786	4,585	4.80	220	3.67	168	318
	3-year-old	10,768	5,050	4.87	246	3.74	189	312
	Mature cow	34,831	5,385	4.84	261	3.73	201	310
	Total	56,385	5,168	4.84	250	3.72	192	312
	Artifically bred	38,949	5,266	4.87	256	3.74	197	313
	Naturally bred	17,436	4,949	4.76	236	3.68	182	311
	Pure bred	14,437	5,613	4.89	274	3.74	210	327
	Grade	41,948	5,015	4.82	242	3.71	186	307
Holstein/Jersey	2-year-old	3,452	5,155	4.42	228	3.50	181	317
Cross	3-year-old	3,737	5,847	4.41	258	3.55	208	309
	Mature cow	13,673	6,342	4.43	281	3.51	223	309
	Total	20,862	6,057	4.42	268	3.52	213	310
	Artifically bred	10,856	6,162	4.44	274	3.54	218	309
	Naturally bred	10,006	5,943	4.39	261	3.49	207	311
	Pure bred	0	0	0	0	0	0	0
	Grade	20,862	6,057	4.42	268	3.52	213	310
Guernsey	2-year-old	195	4,990	4.31	215	3.38	169	332
	3-year-old	276	5,259	4.31	227	3.40	179	326
	Mature cow	916	5,652	4.26	241	3.38	191	330
	Total	1,387	5,481	4.27	234	3.38	185	329
	Artifically bred	701	5,754	4.32	249	3.39	195	336
	Naturally bred	686	5,201	4.20	219	3.35	174	322
	Pure bred	294	5,741	4.25	244	3.31	190	351
	Grade	1,093	5,411	4.28	231	3.39	184	323
Ayrshire	2-year-old	549	4,793	4.15	199	3.43	164	319
	3-year-old	509	5,227	4.19	219	3.42	179	314
	Mature cow	1,711	5,816	4.05	236	3.36	195	310
	Total	2,769	5,505	4.10	225	3.38	186	313
	Artifically bred	1,537	5,743	4.10	236	3.40	195	318
	Naturally bred	1,232	5,209	4.09	213	3.35	175	306
	Pure bred	910	6,052	4.09	248	3.34	202	329
	Grade	1,859	5,237	4.10	215	3.41	178	305

Table 9: Product	tion averages by	breed, age gr	oup, mat	ing type	and reg	istration (	continued).		
Breed	Туре	Number of			Proc	duction ave	rages		
		COWS	Milk	Fat %	Fat kg	Protein	Protein	Lactation	
			litres			%	kg	length days	
Illawarra	2-year-old	734	5,641	4.06	229	3.36	189	330	72% of herd-recorded
	3-year-old	1,119	5,871	3.99	234	3.33	195	325	<ul> <li>recorded Jerseys and</li> </ul>
	Mature cow	3,476	6,698	3.98	267	3.33	223	320	90% of herd-recorded
	Total	5,329	6,379	3.99	254	3.33	212	323	Australian Red Breeds
	Artifically bred	2,819	6,626	3.96	262	3.30	219	325	insemination.
	Naturally bred	2,510	6,101	4.01	245	3.35	204	320	
	Pure bred	2,338	6,733	3.95	266	3.29	222	323	
	Grade	2,991	6,102	4.02	245	3.36	205	322	
Unknown Breed	2-year-old	4,519	5,574	3.95	220	3.32	185	328	
	3-year-old	6,959	6,153	3.98	245	3.36	206	329	
	Mature cow	59,245	6,317	4.05	256	3.33	210	317	
	Total	70,723	6,253	4.04	252	3.33	208	319	
	Artifically bred	1,376	7,033	3.97	279	3.34	235	331	
	Naturally bred	69,347	6,238	4.04	252	3.33	208	319	
	Pure bred	0	0	0	0	0	0	0	
	Grade	70,723	6,253	4.04	252	3.33	208	319	
Aust. Red Breed	2-year-old	2,102	5,302	4.14	219	3.42	181	314	
	3-year-old	1,877	5,687	4.17	237	3.49	198	309	
	Mature cow	3,486	6,175	4.15	256	3.47	214	309	
	Total	7,465	5,807	4.14	240	3.46	201	310	
	Artifically bred	6,771	5,835	4.14	241	3.45	202	312	
	Naturally bred	694	5,532	4.19	232	3.47	192	300	
	Pure bred	833	7,164	3.82	274	3.46	248	331	
	Grade	6,632	5,636	4.19	236	3.45	195	308	
Brown Swiss	2-year-old	526	5,206	4.13	215	3.44	179	329	-
	3-year-old	722	5,819	4.08	237	3.44	200	329	
	Mature cow	2,253	6,624	4.10	272	3.42	226	329	
	Total	3,501	6,245	4.10	256	3.43	214	329	
	Artifically bred	2,257	6,239	4.15	259	3.44	215	329	-
	Naturally bred	1,244	6,256	4.01	251	3.41	213	330	-
	Pure bred	1,073	6,720	4.15	279	3.45	232	339	-
	Grade	2,428	6,035	4.06	245	3.40	205	325	-
Other Breeds	2-year-old	77	4,885	3.90	191	3.30	161	324	
	3-year-old	104	4,501	4.12	186	3.42	154	308	-
	Mature cow	301	4,802	4.31	207	3.48	167	297	1
	Total	482	4,750	4.41	201	3.49	162	303	1
	Artifically bred	198	5,525	3.93	217	3.29	182	305	1
	Naturally bred	284	4.210	4.40	185	3.56	150	302	1
	Pure bred	72	3,954	3.83	151	3.25	129	299	-
	Grade	410	4.890	4.25	208	3.46	169	304	-
			.,						

Australian Dairy Herd Improvement Report 2010 19

Table 10: Distribution of calvings by month and region.												
State				Percen	tage of	cows th	hat calv	ed each	month			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Victoria	1	2	8	11	10	9	13	21	15	6	2	1
New South Wales	7	8	11	9	8	7	9	10	9	7	7	7
Queensland	8	9	10	10	10	9	9	7	8	8	7	7
South Australia	6	8	10	10	8	7	7	11	14	9	6	4
Tasmania	1	3	5	6	3	1	5	37	27	10	2	1
Western Australia	7	10	13	10	9	6	6	9	10	8	7	6
Australia	3	5	9	10	9	8	11	18	14	7	4	3
Victorian regions												
Northern	1	2	11	13	7	3	7	23	20	9	3	1
Eastern	1	2	7	8	7	8	18	27	16	5	1	1
Western	2	4	8	11	16	18	15	12	9	4	2	1

Table 11: Production averages of stud cows.														
Breed	Number of			Pi	roduction ave	rages								
	COWS	Milk litres	Fat %	Fat kg	Protein %	Protein kg	Lactation length days							
Holstein	61,226	8,039	039 3.82 307 3.22 259 349											
Jersey	14,437	5,613	,613 4.89 274 3.74 210 327											
Guernsey	294	5,741	4.25	244	3.31	190	351							
Ayrshire	910	6,052	4.09	248	3.34	202	329							
Illawarra	2,338	6,733	3.95	266	3.29	222	323							
Aust Red Breed	833	7,164	3.82	274	3.46	248	331							
Brown Swiss	1,073	6,720	6,720 4.15 279 3.45 232 339											
Total	81,111	7,512	7,512 4.02 298 3.32 247 344											

Table 12: Production averages of artificially bred stud cows.															
Breed	Number			Р	roduction ave	erages									
	of cows	Milk litres	Fat %	Fat kg	Protein kg	Lactation length days									
Holstein	48,941	8,102	,102 3.81 309 3.22 261 350												
Jersey	11,485	5,715	5,715 4.87 279 3.74 214 327												
Guernsey	177	5,934	4.25	252	3.31	197	353								
Ayrshire	510	6,356	4.00	254	3.32	211	335								
Illawarra	1,197	7,000	3.90	273	3.25	227	326								
Aust Red Breed	803	7,162	3.83	274	3.46	248	330								
Brown Swiss	726	6,748	6,748 4.17 281 3.46 233 340												
Total	63,839	7,605	4.01	302	3.32	251	345								

Table 13: Victo	rian producti	on averages	1930/1931	- 2009/20	10.				
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			The production of protein
1935/1940	2,324	80,883	35	2,210	4.9	108			by Victorian herd-recorded
1940/1945	1,082	39,368	36	2,154	4.9	105			20% since 1990.
1945/1950	2,329	90,015	39	2,301	5.0	114			Over the past decade,
1950/1955	3,192	141,387	44	2,284	5.0	114			32% of productivity gains
1955/1960	3,461	187,306	54	2,485	5.1	126			the result of genetic
1960/1965	4,003	248,791	62	2,643	5.0	132			improvement.
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	
2005/2006	2,933	572,906	195	6,205	4.0	248	3.3	206	
2006/2007	2,775	554,136	200	6,245	4.0	250	3.4	209	
2007/2008	2,431	484,030	199	6,423	4.0	259	3.3	215	
2008/2009	2,313	478,612	207	6,458	4.1	266	3.4	218	
2009/2010	2,127	437,811	206	6,443	4.1	265	3.4	217	

Australian Dairy Herd Improvement Report 2010 21

### 2010 Australian Breeding Values – Genetic Trends



H	lolstein Pr			PRC	FIT	PRODU	ICTION				LONG	EVITY		
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	SOURCE
1	7H6417	O-BEE MANFRED JUSTICE		INT	301	87	185	91			44383	109*	83	WWS
2	29H012470	INDIJKS BABYLON		AUS	276	75	194	80	62	30		104	72	ABS
3	NZGMINTED	FAIRMOUNT MINT-EDITION		INT	260	60	201	68			81	104	41	LIC
4		VIVIO		INT	258	55	227	69			85	103	43	AGR
5	ALTACROCKETT	CROCKETT-ACRES OTTO	TVTL	INT	252	53	163	63			104	106	48	ALT
6	VOUSTERMAN	VOUSTER		INT	248	58	190	71			104	103	46	AGR
7	NZGSONFLAME	THOMPSONS GR FLAME S2F		INT	247	53	185	66			86	104	35	LIV
8	ROSEO	ROSEO JOC		INT	246	73	137	77			9265	105*	65	AGR
9	CARLOS	COUNTRY ROAD JOCKO CARLOS	TV	AUS	243	76	215	81	69	31		101	68	GAC
10	29H011932	MORNINGVIEW LEGEND		INT	243	53	186	63			127	106	48	ABS
11	SHOTTLE	PICSTON SHOTTLE		AUS	243	90	110	95	217	86		111	82	ABS
12	CARDINAL	KAARMONA CARDINAL	TV	AUS	241	73	170	79	55	30		108	65	GAC
13	HOACRESEIGHT	CROCKETT-ACRES EIGHT		INI	241	56	146	68			94	106	46	SEM
14	PORT	PERFECT PARTNERS LANCELOT PORT		AUS	239	73	196	80	63	25		104	62	ABS
15	ALIACOLIN	BARKLY DONOR COLIN	CV	AUS	238	96	202	99	1749	339	2700	104	89	ALI
10					234	70	195	74			3780	103	64	ABS
10	RANNESLOV				231	52	105	62			1290	105	40	RED
10	298013053				230	53	200	66			109	107	48	ABS
19					230	71	195	70	62	20	108	102	49 54	GAC
20	NZCOASTUDE			INT	229	67	168	75	03	30	30608	103	51	LIC
21	NZGFASTORE			INT	220	56	1/2	70			183	107	11	SEM
23	BOSMEGASTUD			INT	220	56	180	67			68	105	38	BOS
24	STOL IOC	STOL LOC		INT	224	60	153	71			95	106	50	AGR
25	GOLDSMITH	TOPSPEED H POTTER	TVTL	AUS	223	93	224	98	1112	237		100	79	GAC
26	YONDER	KAARMONA CHAPLIN		AUS	222	72	152	77	50	27		104	68	GAC
27	ЈОСКО	JOCKO BESN	TVTL	AUS	221	98	168	99	1453	326		106	96	AGR
28	ORANA	BUSHLEA WAVES FABULON		AUS	220	74	167	81	54	25		103	59	GAC
29	FARMDEALER	MANNA FARM DEALER	CV	AUS	220	73	158	79	64	28		108	64	ALT
30	PIERRE	TOP DECK KO PIERRE		AUS	218	93	163	97	485	113		104	85	BOS
31	WILLCOY	MANNA FARM DECOY		AUS	217	77	172	84	63	35		103	63	GAC
32	GGGIBOR	GIBOR	ΤV	INT	217	71	103	72			13494	106	68	ABS
33	VOSAC	VOSAC MAN		INT	216	57	129	70			88	106	46	AGR
34	NZGROCKSOLID	SRC GLENMEAD ROCKSOLID		INT	212	65	146	75			10860	103	50	LIC
35	GGMASCOL	MASCOL	ΤV	INT	212	73	107	81			9912	108	68	ABS
36	SOLVIT	KIRK ANDREWS FORCEFUL		AUS	211	76	173	84	67	37		102	60	GAC
37	JEEBIN	COUNTRY ROAD LADINO JADIN		AUS	210	77	152	83	74	37		106	68	GAC
38		R-E-W SEAVER-ET		INT	210	54	135	67			100	108	50	SEM
39		VIA THELO		INT	209	55	177	70			96	102	43	AGR
40		GILLETTE JERRICK		INT	209	54	132	67			112	106	50	SEM
41	NLDCANVAS	DELTA CANVAS	RC	INT	208	83	195	86			11671	103	77	BOS
42	HOAUTHOR	COMESTAR LAUTHORITY		INT	208	55	120	65			72	110*	49	SEM
43	NZGHOSANNA	VALDEN HI APPLAUSE S2F		INT	207	61	170	75			17630	103	45	LIC
44	NZGLANDSPER	WESTLAND CL JASPER		INT	207	56	150	67			92	104	39	LIV
45	NEWLOOK	NEWLOOK	TV	INT	207	73	138	76			7064	102*	68	AGR
46	NZGFROSTMAN	PUKETIRO FROSTMAN S1F		INT	207	54	108	68			72	104	36	LIC
47	NIMBLE	CLARINDA JOCKOSTRAP TWIN	TV	AUS	205	76	188	81	62	24		103	67	GAC
48	DICAST		TV	AUS	205	79	142	86	84	40		104	63	GAC
49	FARAWAY			AUS	204	76	152	83	63	27		104	61	GAC
50	LATAR	ELMAR LAIAR		AUS	204	77	146	83	/5	34		105	69	ABS

\*Denotes an ABV that incorporates Australian data, all other traits for this bull are ABV(i)s using data from foreign daughters.

The bull must meet minimum requirements for reliability, is active and more than 1 standard deviation above average for Profit \$.

For the full list go to www.adhis.com.au



Holstein Profit (Aug 2010)					PRO	OFIT	PRODU	JCTION				LONG	EVITY	
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	SOURCE
51	SZRAY	ZIAL ADDISON RAY	TVTL	INT	204	61	112	73			5288	105	50	GAC
52	7H6758	REGANCREST-MR DRHAM SAM		AUS	202	88	113	93	124	43		107	80	WWS
53	29H013387	LADYS-MANOR RUBY D SHOUT		INT	200	56	95	63			186	108*	57	ABS
54	VACUM	AULDREEKIE ADDISON VACUM		AUS	199	91	142	97	566	122		104	76	ABS
55	HOMANIFOLD	MAINSTREAM MANIFOLD		INT	199	53	140	63			145	105	48	SEM
56	BOSCRICKET	RALMA O-MAN CF CRICKET		INT	199	58	89	69			140	108	45	BOS
57	FEVOLA	CARENDA FEVOLA		AUS	198	81	196	87	105	43		102	72	ALT
58	CRITOYSTORY	JENNY-LOU MRSHL TOYSTORY		AUS	198	88	123	94	224	73		106	78	BOS
59	29H013366	END-ROAD BEACON		INT	198	56	98	63			153	107*	57	ABS
60	93FFW21	WIZZARD		INT	197	61	160	70			1477	103	54	ALT
61	JOBERT	JOBERT	TVTL	INT	196	64	172	73			2081	105	56	GAC
62		LADYS-MANOR DODGE-ET		INT	196	53	151	66			93	106	48	ABS
63	29H013162	SCHILLVIEW OMAN GERARD		INT	195	53	147	63			144	107	47	ABS
64	INTRUDER	ELMAR INTRUDER		AUS	195	69	143	77	52	25		106	58	ABS
65	7H8625	MR SCHULTZ OMAN BUTCH		INT	195	54	115	64			219	105	48	WWS
66	REXONDI	REXONDI		INT	194	83	187*	91	130	40		99	67	AGR
67	NZGSURETHING	MAIRE PIERRE GUARANTEE		INT	192	62	117	70			103	104	43	LIC
68	AMBFAVOUR	AURORA-DONOR FAVOUR		AUS	191	90	185	96	383	75		103	74	BOS
69	NLDADEPT	DE CROB ADEPT	TLTV	INT	191	85	165*	93	157	42		101*	72	BOS
70	WISEPOINT	KIRK ANDREWS JACKADINO	RC	AUS	189	81	107	87	91	37		107	68	GAC
71	GRAZER	CARENDA GRAZER	TC	AUS	188	77	185	85	70	43		103	59	GAC
72	LANCELOT	LANCELOT		AUS	188	97	174	99	725	152		105	93	AGR
73	NINESCAPE	GLEN JURISTAN NINEFOLD ESCAPE	TXTV	AUS	188	83	104	89	94	45		103	67	GAC
74	GGSTYLIST	STYLIST		INT	186	53	161	64			503	104	45	ABS
75	WHITLAM	FAIRSTAR GOLD LEMON-TWIN	TCTV	AUS	186	76	151	83	60	33		102	58	GAC
76	NZGMILLER	GLENMEAD MILLER		AUS	186	77	121	85	49	19		102	63	LIC
70	29H011993	RALMA FOCUS		INI	186	54	11	64	70		145	108	49	ABS
78	DOLITTLE			AUS	185	75	161	82	72	36		106	63	GAC
79	FULLHOUSE			AUS	185	74	140	83	62	30	400	103	54	GAC
80	29H011942				185	53	131	03	600	107	130	105	48	ABS
01	ALIABREAKUUT	IJSSELVLIEDT IJS BREAKUUT		AUS	104	95	131	98	70	127		103	89	ALI
82	DONLOTTO		DC	AUS	184	79	110	80	70 E1	29		101	- 69 - 50	ABS
03			RU	AUS	102	70	166	00	20	20		105	59	AD3
85				AUS INIT	103	62	119	75	80	39	0020	104	19	GAC
88	NINEFOLD		ті		192	90	131	90	10852	1070	0030	104	40	GAC
87	BOSDRIVE	OAKURA OMAN OVERDRIVE	16	INT	182	52	125	64	10002		67	107	34	BOS
88	NZGGLENMFAD	GI ENMEAD KR WINDMILL		INT	181	68	153	74			489	102	51	
89	ABSTENNYSON	BURLANE TENNYSON		AUS	180	83	122	89	70	26	100	104	71	ABS
90	DNKFATON	V FATON		INT	180	90	107*	95	203	50		106*	82	BOS
91	29H011111	SANDY-VALLEY BOLTON		AUS	180	89	68	96	390	78		108	78	ABS
92	DONANTE	HILL VALLEY DON ANDANTE ET	TV	AUS	179	95	136	99	1998	358		105	82	GAC
93	NZGEARLYTIME	BUCHANANS EARLYTIME S2F		INT	178	59	148	70			106	102	43	LIC
94	NZGDAUNTLESS	MACFARLANES DAUNTLESS	TV	INT	178	87	128*	96	350	43		100*	62	LIC
95	PATUR	PATUR AD		INT	178	75	108	81	-		14212	104	66	AGR
96	AMBFLUKE	SRB NGAIO HUGO FLUKE		INT	177	65	137	75			4821	104	51	BOS
97	LORETO	AVALON BULLION LABYRINTH		AUS	177	82	136	89	94	41		104	68	ABS
98	USONETFIN	USONET FIN		INT	175	58	158	71			102	104	46	AGR
99	NZGROCKFEST	SRC GLENMEAD ROCKFEST		INT	175	70	126	75			12648	103	51	LIC
100		GALASTAR BLUESKY		INT	175	54	116	70			70	107	44	ABS
101	BULLBAR	GLOMAR BULLBAR RB	TVRB	AUS	175	95	88	99	2733	440		103	81	GAC
102	201013224	FASTVIEW SENTRY		INT	175	56	85	63			145	108*	57	ARS

\*Denotes an ABV that incorporates Australian data, all other traits for this bull are ABV(i)s using data from foreign daughters. The bull must meet minimum requirements for reliability, is active and more than 1 standard deviation above average for Profit \$. For the full list go to **www.adhis.com.au** 

Jersey Profit (Aug 2010)					PRC	FIT	PRODU	ICTION				LONG	EVITY	
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	SOURCE
1	VALERIAN	KAARMONA VALERIAN		AUS	274	84	208	92	168	76		106	65	GAC
2	BOSMURMUR	OKURA LIKA MURMUR S3J		INT	271	55	202	67			82	105	34	BOS
3	LARFALOT	LIGHTWOOD LUCRATIVE		AUS	236	80	176	87	91	45		106	63	GAC
4	ELTON	CAIRNBRAE JACES ELTON		AUS	235	81	162	88	112	35		105	66	ABS
5	AMBMANHATTEN	OKURA MANHATTEN-ET SJ3		AUS	223	96	219	99	1014	173		101	88	BOS
6	JURACE	KAARMONA JURACE		AUS	218	73	145	82	61	22		106	55	WWS
7	TAILBOARD	NOWELL TARSAN		AUS	207	93	186	98	675	171		101	79	GAC
8	NZGLYNTRADE	LYNBROOK TRADEMARK S3J		INT	206	57	228	68			76	99	37	LIC
9	NZGCAPSTAN	SOUTH LAND CAPSTAN SJ3		INT	197	59	182	71			123	101	37	LIC
10		DJ HULK		INT	197	52	173	65			97	101	42	VIK
11	29JE3487	CAL-MART JACE SIMBA		INT	196	53	155	64			101	103	40	ABS
12	NZGJOSKIN	TIRONUI OM JOSKIN		INT	191	53	177	64			58	102	33	LIC
13	35JJV24	TAWA GROVE MAUNGA ET S3J		INT	190	68	174	76			7111	102	47	BOS
14	NZGGREENY	GREENPARK OM TARGET		INT	181	55	195	66			67	101	34	LIC
15	NZGEDIFY	DONALDS EDIFY		INT	180	57	134	69			78	102	37	LIC
16	RUSTIC	SPRING GULLY SARA MANHATTEN		AUS	179	67	139	74	40	23		103	54	GAC
17	BOSDJZUMA	DJ ZUMA		INT	178	53	98	65			105	104*	45	BOS
18	PROMVIEW	PROM VIEW ASTOUND POWER		AUS	176	78	164	83	75	28		102	67	ALT
19	BADGER	BEULAH TARANAK BADGER		AUS	176	96	100	99	1644	300		108	88	GAC
20	FLATTERY	YOORAMI GOLDIES FLATTERY		AUS	173	75	194	80	64	33		99	68	GAC
21	NZGPANLINK	WILLIAMS PAN LINK		INT	173	65	162	76			6777	101	47	LIC
22	BETAHEAD	KINGS VILLE OUTDO		AUS	172	78	131	85	76	33		104	61	GAC
23	TBONE	RICHIES JACE TBONE A364		INT	171	59	123	69			2008	106	54	AGR
24	BOSCANYON	SUNSET CANYON ANTHEMS ALLSTAR		INT	170	52	141	64			97	105*	49	BOS
25	BOSZEALOT	WHITMORE MAN ZEALOT		INT	168	57	176	69			84	101	37	BOS
26	AMBKONUI	KONUI GLEN ELMOS BOWIE		INT	165	71	148	76			6269	102	50	BOS
27	7J865	SUNSET CANYON KYROS		INT	163	47	107	64			21			WWS
28	14J365	O.F. MANNIX REBEL		AUS	161	91	160	96	270	59		106	81	WWS
29	NZGBANGA	LOXLEA ACL OSWALD		AUS	160	81	152	88	63	20		100	65	LIC
30	NZLLIKABULL	MITCHELLS LIKABULL SJ3		INT	157	90	151*	97	413	43		101*	72	LIC
31	NZGDODDY	MAGHERACANON DODDY GR		INT	157	86	139*	95	254	41		101*	66	LIC
32	VISIONARY	DENSON DALE MJ VISIONARY		INT	157	53	108	65			69	104	33	ABS
33	NZGIVINS	OKURA LFB IVINS		INT	155	54	128	70			115	104	31	LIC
34	JEPERIMETER	ROCK ELLA PERIMITER		AUS	155	98	127	99	2849	461		104	97	SEM
35	JEJEEP	KAARMONA JEEP		AUS	154	81	87	87	111	40		106	71	SEM
36	BARTPOWER	DARAWAY FLOWERPOWER SATIRA		AUS	152	84	83	91	130	55		104	69	GAC
37	NZGOKURAICE	OKURA DE ICE		INT	151	55	125	69			89	103	33	LIC
38	ALTAMERCH	SUNSET CANYON MARCHANT		INT	151	55	90	65	107	105	95	108*	48	ALT
39	SARATOGA	BERCAR SARATOGA		AUS	151	93	87	97	407	136		105	82	GAC
40	SPIRITUAL	RIVERSIDE SPIRIT		AUS	150	73	76	82	55	22		107	55	AGR

The bull must meet minimum requirements for reliability, is active and more than 1 standard deviation above average for Profit \$. For the full list go to **www.adhis.com.au** 



F	Red Breeds	Profit (Aug 2010)			PRO	OFIT	PRODL	JCTION				LONG	LONGEVITY	
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	SOURCE
1	RANDERSDAVID	R DAVID	TVTL	INT	242	62	156	73			1274	110	49	RED
2	ARBBOBDOWN	LODEN BOB		AUS	238	79	203	87	88	43		104	61	GAC
3	ARBMAWSON	BOSGOWAN MAWSON		AUS	227	72	142	78	54	34		105	62	GAC
4	ARBBONJOVI	BOSGOWAN BON JOVI		AUS	223	75	162	82	82	43		104	65	GAC
5	PETERSLUND	PETERSLUND 1213		AUS	223	93	118	98	539	78		109	82	RED
6	OBROLIN1804	O BROLIN 1804		INT	220	61	153	73			7555	108	55	RED
7	NZGBRODY	CARMELGLEN BRODY		INT	218	50	147	68			73			LIC
8	ATOSIKKO	ASMO TOSIKKO		INT	213	55	156	68			156			RED
9	GEDBO2263	G EDBO		INT	200	59	206	70			155			RED
10	FASTRUP	R FASTRUP		INT	200	58	136	68			103			RED
11	RBANGKOK	R BANGKOK		INT	200	59	122	72			2019	106	48	RED
12	NZGROYALPHIL	SANROSA ROYAL PHILLIP		INT	193	60	156	75			1559	106	40	LIC
13	ARBRIDLEY	BOSGOWAN RIDLEY		AUS	193	77	143	83	83	42		103	67	GAC
14	BOTANS3829	BOTANS 3829		AUS	185	92	128	97	483	74		105	81	RED
15	ARBEROS	ARAJARRA EROS		AUS	184	38	97	47	12	5				GAC
16	NZLCHALLENGE	KILFENNAN CHALLENGE		AUS	182	89	121	97	464	45		105	67	LIC
17	ARBMOLONE	BOSGOWAN MOLONEY		AUS	180	65	107	77	56	26		103	36	GAC
18	ORRARYD1433	ORRARYD 1433		AUS	175	91	113	97	363	63		104	79	RED
19	JUBY1617	JUBY VALOR 1617 ET		AUS	168	79	101	88	56	14				RED
20	ALINNE2385	A LINNE		INT	168	59	92	70			207			RED

Guernsey Profit (Aug 2010)					PRO	FIT	PRODI	UCTION				LONG	EVITY	
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	<b>AUSTRALIAN HERDS</b>	Foreign Daughters first	SURVIVAL	RELIABILITY	SOURCE
1	WYSNIDER	SNIDERS OPTION AARON		INT	158	57	167	67	0	0	100	101	43	WYA
2	TIRESFORD	TIRESFORD PEDRO		INT	157	53	125	65	0	0	127	101	41	AGR
3	GUJULIUS	ACCELERATED GOLDEN GENETICS JULIUS ET		AUS	155	72	165	85	83	29	0	99	50	SEM
4	WYLEWIS	TROTACRE ENHANCER LEWIS		INT	143	56	114	67	0	0	580	102	45	WYA
5	7G394	PENNY LANE ROYAL OAK TURLEY		INT	126	45	120	56	0	0	65	102	32	WWS

Brown Swiss Profit (Aug 2010)					PR	OFIT	PRODI	JCTION				LONG	EVITY	
PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT \$	RELIABILITY	PRODUCTION \$	RELIABILITY	AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	SOURCE
1	GGEVENT	EVENT		AUS	143	65	89	80	45	18		103	39	ABS
2	SWISSEDGE	ELM PARK JUPITERS EDGE		AUS	86	82	45	95	266	72		99	60	GAC
3	GGVID	VIDEO		AUS	48	55	25	74	52	10				ABS
4	TURMOIL	OLD MILL B TURMOIL		AUS	45	69	26	89	130	46		100	27	ALT

The bull must meet minimum requirements for reliability, is active and more than 1 standard deviation above average for Profit \$. For the full list go to **www.adhis.com.au** 

## 2010 Australian Breeding Values – Top Herd Summary

Asia rankOwner name consignationAddress consignationProperiod 	Top 2% of Holstein herds based on herd average ASI, August 2010 ABVs										
rankrankcodeHerd IDcowscurrentABVABVABVABVABV1MCRAE SA & NMNAMBROK3847280043B59824388140.05407172MDERSON WR & BLKONGWAK395154059R112826487120.06333163KITCHEN J M SONSBOYANUP6237W00248F161744084120.06333164HOGG A & JBIGGAR3707C0155U81016681110.1017155HENRYTW & TCTINAMBA3859240108T218858879130.06314125HERRETT RJ & HEKONGWAK3951540624E51721570130.01137136OCHRANE W & KROCHESTER3561C5057Q915171310131414149WAGNERGMINALEAH257N0544Q11113775130.0231414149WAGNERGMINALEAH256F635WA311123273120.023041410WAGNERGBENA3042455454311121214141411COARENG MAMINALEAH3645405431112121414141411GAGSOW PWBENABE	Fat %										
Image: Constraint of the constra	ABV										
1       MCRAE SA & NM       NAMBROK       3847       2800438       598       243       88       14       0.05       407       17         2       ANDERSON WR & BL       KONGWAK       3951       540597R       1128       264       87       15       0.04       475       16         3       KITCHEN J M SONS       BOYANUP       6237       W00248F       1617       440       84       12       0.06       333       16         4       HOGG A & J       BIGARA       3707       C00155U       801       166       81       11       0.10       197       15         5       HENRY TW & TC       TINAMBA       3859       240108T       2018       558       79       13       0.06       361       13         5       PERRET T J & HE       KONGWAK       3951       540624E       517       215       79       17       -0.01       637       11         7       COCHRANE W & K       ROCHESTER       3561       CF0597Q       99       65       77       13       0.00       424       18         8       PARRISH T J & LR       BARRENGARRY       257       N00544Q       1113       137       52       <											
2         ANDERSON WR & BL         KONGWAK         3951         540597R         1128         264         87         15         0.04         475         16           3         KITCHEN J M SONS         BOYANUP         6237         W00248F         1617         440         84         12         0.06         333         16           4         HOGG A & J         BIGGARA         3707         C00155U         801         166         81         11         0.10         197         15           5         HENRYTW & TC         TINAMBA         3859         240108T         2018         558         79         13         0.06         361         13           5         PERRETT RJ & HE         KONGWAK         3951         540624E         517         215         79         17         0.01         637         11           7         COCHRANE W & K         ROCHESTER         3561         CF0597Q         99         65         77         13         0.00         482         18           8         PARRISH TJ & LR         BARRENGARRY         257         N00544Q         1113         137         75         10         0.02         304         14           9	-0.01										
3       KITCHEN J M SONS       BOYANUP       6237       W00248F       1617       440       84       12       0.06       333       16         4       HOGG A & J       BIGGARA       3707       C00155U       801       166       81       11       0.10       197       15         5       HENRY TW & TC       TINAMBA       3859       240108T       2018       558       79       13       0.06       361       13         5       PERRETT RJ & HE       KONGWAK       3951       540624E       517       215       79       17       -0.01       637       11         7       COCHRANE W & K       ROCHESTER       3561       CF0597Q       99       65       77       13       0.00       482       18         8       PARRISH TJ & LR       BARRENGARRY       2577       N00544Q       1113       137       75       10       0.07       244       15         9       WAGNER G       WINNALEAH       7265       T635WAA       3111       223       73       12       0.02       308       14         10       WALDER RG & CA       HEATHMERE       3305       840404W       771       152       72 <t< td=""><td>-0.06</td></t<>	-0.06										
4       HOGG A & J       BIGGARA       3707       C00155U       801       166       81       11       0.10       197       15         5       HENRY TW & TC       TINAMBA       3859       240108T       2018       558       79       13       0.06       361       13         5       PERRETT RJ & HE       KONGWAK       3951       540624E       517       215       79       17       -0.01       637       11         7       COCHRANE W & K       ROCHESTER       3561       CF0597Q       99       65       77       13       0.00       482       18         8       PARRISH TJ & LR       BARRENGARRY       2577       N00544Q       1113       137       75       10       0.07       244       15         9       WAGNER G       WINNALEAH       7265       T63SWAA       3111       223       73       12       0.02       397       166         10       WALDER RG & CA       HEATHMERE       3305       840404W       711       152       72       11       0.05       308       14         11       GLASGOW PW       BENA       3946       5405651       807       120       70       12 <td>0.03</td>	0.03										
5HENRY TW & TCTINAMBA3859240108T201855879130.06361135PERRETT RJ & HEKONGWAK3951540624E5172157917-0.01637117COCHRANE W & KROCHESTER3561CF0597Q996577130.00482188PARRISH TJ & LRBARRENGARRY2577N00544Q111313775100.07244159WAGNER GWINNALEAH7265F63SWAA311122373120.023971610WALDER RG & CAHEATHMERE3305840404W77115272110.053081411GLASGOW PWBENA396454055180712070120.024041311COOK RJ & JPWANGARATTA3678C00276F160451970110.043371313COATES JDALLESTREE3305840377M102522166120.0239412	0.10										
5         PERRETT RJ & HE         KONGWAK         3951         540624E         517         215         79         17         -0.01         637         11           7         COCHRANE W & K         ROCHESTER         3561         CF0597Q         99         65         77         13         0.00         482         18           8         PARRISH TJ & LR         BARRENGARRY         2577         N00544Q         1113         137         75         10         0.07         244         15           9         WAGNER G         WINNALEAH         7265         T63SWAA         3111         223         73         12         0.02         397         16           10         WALDER RG & CA         HEATHMERE         3305         840404W         711         152         72         11         0.05         308         14           11         GLASGOW PW         BENA         3946         5405651         807         120         70         12         0.02         404         13           11         COOK RJ & JP         WANGARATTA         3678         C00276F         1604         519         70         11         0.04         337         13           13	-0.03										
7       COCHRANE W & K       ROCHESTER       3561       CF0597Q       99       65       77       13       0.00       482       18         8       PARRISH TJ & LR       BARRENGARRY       2577       N00544Q       1113       137       75       10       0.07       244       15         9       WAGNER G       WINNALEAH       7265       T63SWAA       3111       223       73       12       0.02       397       16         10       WALDER RG & CA       HEATHMERE       3305       840404W       711       152       72       11       0.05       308       14         11       GLASGOW PW       BENA       3946       5405651       807       120       70       12       0.02       404       13         11       COOK RJ & JP       WANGARATTA       3678       C00276F       1604       519       70       11       0.04       337       13         13       COATES JD       ALLESTREE       3305       840377M       1025       221       66       12       0.02       394       12	-0.24										
8         PARRISH TJ & LR         BARRENGARRY         257         N00544Q         1113         137         75         10         0.07         244         15           9         WAGNER G         WINNALEAH         7265         T63SWAA         3111         223         73         12         0.02         397         16           10         WALDER RG & CA         HEATHMERE         3305         840404W         771         152         72         11         0.05         308         14           11         GLASGOW PW         BENA         3946         5405651         807         120         70         12         0.02         404         13           11         COOK RJ & JP         WANGARATTA         3678         C00276F         1604         519         70         11         0.04         337         13           13         COATES JD         ALLESTREE         3305         840377M         1025         221         66         12         0.02         394         12	-0.04										
9         WAGNER G         WINNALEAH         7265         T63SWAA         3111         223         73         12         0.02         397         16           10         WALDER RG & CA         HEATHMERE         3305         840404W         771         152         72         11         0.05         308         14           11         GLASGOW PW         BENA         3946         5405651         807         120         70         12         0.02         404         13           11         COOK RJ & JP         WANGARATTA         3678         C00276F         1604         519         70         11         0.04         337         13           13         COATES JD         ALLESTREE         3305         840377M         1025         221         66         12         0.02         394         12	0.07										
10       WALDER RG & CA       HEATHMERE       3305       840404W       771       152       72       11       0.05       308       14         11       GLASGOW PW       BENA       3946       5405651       807       120       70       12       0.02       404       13         11       COOK RJ & JP       WANGARATTA       3678       C00276F       1604       519       70       11       0.04       337       13         13       COATES JD       ALLESTREE       3305       840377M       1025       221       66       12       0.02       394       12	-0.01										
11       GLASGOW PW       BENA       3946       5405651       807       120       70       12       0.02       404       13         11       COOK RJ & JP       WANGARATTA       3678       C00276F       1604       519       70       11       0.04       337       13         13       COATES JD       ALLESTREE       3305       840377M       1025       221       66       12       0.02       394       12	0.01										
11       COOK RJ & JP       WANGARATTA       3678       C00276F       1604       519       70       11       0.04       337       13         13       COATES JD       ALLESTREE       3305       840377M       1025       221       66       12       0.02       394       12	-0.07										
13 COATES JD ALLESTREE 3305 840377M 1025 221 66 12 0.02 394 12	-0.02										
	-0.07										
14         JOHNSTON RSN & LJ         BUNDALAGUAH         3851         240024G         1703         675         65         11         0.02         366         13	-0.04										
14         FLEMMING GM & PE         TOCUMWAL         2714         4A1373N         1129         305         65         11         0.02         350         13	-0.03										
14         GLASGOW DC & EJ         BENA         3946         540564F         502         126         65         11         0.02         355         13	-0.03										
14 LAMBALK JW & JC TIMBOON 3268 650274B 1080 394 65 10 0.06 252 10	-0.02										
18         DICKSON BJ & JL         TERANG         3264         850441U         2398         620         62         11         0.02         381         9	-0.10										
19 HEYWOOD BO & LD YARRAGON 3823 240851B 908 197 60 10 0.06 245 9	-0.02										
19         COSTER B & M         RIPPLEBROOK         3818         981306Q         1596         775         60         9         0.06         216         11	0.03										
19 WOODBINE HOLDINGS PTY LTD LANCASTER 3620 B20571E 2112 684 60 11 0.03 340 9	-0.08										
22 KENNEDY R & M SALE 3850 240025J 1338 192 59 11 0.01 376 10	-0.08										
22 MACQUEEN AD & GL YANAKIE 3960 540139F 1152 229 59 9 0.05 254 9	-0.02										
24 LIA TO & PM PTY LTD NILMA NORTH 3821 540184S 569 212 58 10 -0.03 413 16	-0.03										
24 NICHOLLS RJ & HJ STANHOPE 3623 C00691E 715 141 58 9 0.03 275 11	-0.01										
24 AULT GK & JM ROCHESTER 3561 C00857B 596 144 58 9 0.01 312 14	0.01										
27 KERRINS FAMILY TRUST KATUNGA 3640 C00455G 643 106 57 8 0.01 282 15	0.05										
28 YATES PD & SMITH AJ NAMBROK 3847 2J0073F 175 170 56 7 0.05 173 13	0.08										
29 GALE DP & J TIMBOON 3268 650188L 2595 524 55 10 0.03 302 8	-0.06										
29 TWEDDLE SA DARNUM 3822 981058S 1647 571 55 9 0.04 251 9	-0.02										
29 HUTTON TF AND SONS CAPEL 6271 W00088D 1700 501 55 6 0.09 55 10	0.10										
32 FEHRING BN NO 2. COHUNA 3568 4A2159B 906 175 53 8 0.04 219 11	0.03										
32 OANWAYJE FARMS LONGWARRY 3816 5C0049C 1331 775 53 7 0.05 184 11	0.05										
34 PRICE IH & SW SANDY CREEK 3695 4A1330A 874 276 52 8 0.04 196 11	0.03										
34 BATTY CG, CJ & MC SMITHTON 7330 T14CBBM 1004 274 52 7 0.05 164 12	0.07										
36         WILD RA         MITTA MITTA         3701         4A1321C         944         118         51         7         0.04         189         12	0.05										
36 DOUGLAS JW & VL LEITCHVILLE 3567 4A2101S 1827 571 51 8 0.03 259 9	-0.03										
36 WHITE RP & LJ TIMBOON 3268 650421Q 246 60 51 7 0.03 204 12	0.05										
36 RYAN BJ & PM GRASMERE 3281 842120F 1210 315 51 9 0.01 306 10	-0.05										
36 JERANG PTY LTD BEGA 2550 N00606V 1460 356 51 7 0.06 133 10	0.06										
41 WHITE KL & DM & RL LEONGATHA SOUTH 3953 540605F 1070 344 50 8 0.03 229 11	0.02										

## 2010 Australian Breeding Values – Top Herd Summary

٨٩١	Ownername	Addross	Doct	National	No. of	No. of	٨	Drot	Drot	Mille	Eat	Eat 04
rank	Ownername	Address	code	Herd ID		current	ABV	ARV	%	ARV	ARV	ARV
Turik			couc	TICIGID	on file	cows	/ DV	ADV	ABV			ΛUV
42	RURAL OPERATIONS GROUP	NEWBOROUGH	3825	240214L	1552	258	49	8	0.03	246	8	-0.03
42	COMBEN NR & EF	YANAKIE	3960	540284V	271	68	49	6	0.06	104	10	0.09
42	MOSCRIPT JB ME CJ & JM	LEONGATHA SOUTH	3953	540300E	739	191	49	11	-0.03	443	8	-0.15
45	UEBERGANG IS & JA	GORAE WEST	3305	840391T	262	58	48	10	0.01	333	6	-0.11
45	ZURRER JO & AB	LONGWARRY	3816	9809441	2214	447	48	6	0.05	138	10	0.05
45	HALL DJ & KJ	INVERGORDON	3636	C00315W	880	135	48	6	0.06	86	10	0.09
45	SPRUNT RG	KAARIMBA	3635	C01125S	350	164	48	9	-0.01	353	9	-0.08
45	TIMPERON DT & RN	BLUMONT	7260	T61STEH	1183	412	48	6	0.04	142	12	0.08
50	PEKIN JF, A & JG	TERANG	3264	850550V	998	237	47	7	0.04	189	9	0.01
50	ROWANVALE PTY LTD	CAMPERDOWN	3260	850989R	1170	299	47	8	0.02	260	8	-0.04
50	WILLCOCKS P & I	YANKALILLA	5203	S00047P	809	206	47	10	-0.03	415	10	-0.11
53	MEADE JF & MB	CUDGEE	3265	841874T	736	140	46	8	-0.02	335	12	-0.03
53	MEADE PW & JJ	PANMURE	3265	842142N	942	282	46	7	0.03	204	8	-0.02
53	CA & KL SPOKES FAMILY TRUST	WEERITE	3260	850530T	401	68	46	9	-0.01	339	8	-0.09
53	MYRLONG/CARROLL PTN	MUDGEGONGA	3737	C00273T	890	289	46	8	0.02	255	8	-0.05
53	HALL RO	KATUNGA	3640	C00412Q	521	73	46	5	0.08	2	10	0.14
53	STONE P & S PTY LTD	LANCASTER	3620	C00614F	1038	305	46	9	0.01	312	6	-0.11
53	GOVETT WF & J	DINGEE	3571	C01047A	163	70	46	9	-0.01	338	9	-0.08
53	BRETTSCHNEIDER WL & RFW	RAVENSHOE	4872	Q00274N	449	104	46	9	0.02	286	5	-0.10
53	FIELDING R & D	SOUTH RIANA	7316	T34GFJM	1329	360	46	6	0.05	117	10	0.07
Top 2	% of Jersey herds based on herd a	verage ASI, August 20	10 ABV	S								
1	HOEY DM & L	KATUNGA	3640	240699A	901	239	84	9	0.18	11	17	0.31
2	GLENNEN & CO C	TERANG	3264	850588C	2285	459	74	5	0.24	-178	17	0.50
3	MILLBROOK ELLIS & CO	TALLANDOON	3701	4A1307S	651	31	57	9	0.04	204	8	-0.06
4	MC MANUS BT & CA	BAMAWM	3561	C00935T	631	119	51	4	0.17	-130	10	0.32
5	WORBOYS R & A EASY DAIRY	ECHUCA	3564	C00993T	1013	260	50	4	0.16	-114	10	0.31
6	PINEGROVE PARK TRUST	KATAMATITE	3649	4A1466B	478	32	39	5	0.06	55	7	0.07
7	MOSCRIPT JB ME CJ & JM	LEONGATHA SOUTH	3953	540300E	890	72	37	0	0.16	-206	13	0.45
7	HESTER RJ	WOOL WOOL	3249	740064P	723	159	37	-1	0.25	-366	9	0.54
9	VAN DEN BOSCH JH & CA CPD	LOCKINGTON	3563	C00927B	350	45	35	1	0.18	-216	8	0.36
10	LORD P & S	ESKDALE	3701	460052L	284	40	34	3	0.07	-23	9	0.20
Top 2	% of Red Breeds herds based on h	erd average ASI, Augu	st 2010	ABVs								
Ayrsh	ire											
1	NGW FARMS PTY LTD	COBRAM	3643	C00402P	109	84	-61	-9	-0.04	-270	-12	-0.01
Illawa	rra											
1	CARSON JH & GL	IRREWILLIPE	3249	740170H	38	31	9	6	-0.10	436	1	-0.25
2	SALISBURY MR ANTHONY J	RATHDOWNEY	4287	C00042H	376	31	-7	-1	0.00	-40	-2	-0.01
Aussie	eRed											
1	GRAHAM RW & BC	NUMBAA	2540	N00555U	959	471	54	7	0.06	132	11	0.08
Top 2	% of Gernsey herds based on herd	average ASI, August 2	2010 AB	SVs								
1	CLARK PARTNERSHIP	CANIABA VIA LISMORE	2480	N00021N	863	126	9	1	0.01	29	3	0.03

