# Australian Dairy Herd Improvement Report 2011

Australian Dairy Herd Improvement Scheme

NATIONAL HERD IMPROVEMENT ASSOCIATION OF AUSTRALIA INC. NHIA

ADHIS is an Australian Dairy Farmers Ltd initiative that receives the majority of its funding from Dairy Australia through the Dairy Services Levy.

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# Contents



# NHIA Chairman's report

*By Gordon Stewart*
*NHIA Chairman*

The statistics contained in this publication are a reflection of the production capabilities of Australian dairy farms in 2011. They give us a wealth of information about our industry and, I believe, that it is important that we take some time to examine them closely.

It is also important to reflect on how these statistics were collected and the efforts of so many people to make this report a reality.

The process starts with the dairy farmer who makes the extra effort to herd test his or her cows, and who, in return, receives extremely valuable information upon which to base operational management decisions. Next is the herd test service provider, which may also function as a data processing centre (DPC) who delivers equipment, perhaps assists with sample collection, picks up the milk samples and analyses them, finally delivering a report back to the farmer within a day or two. The DPCs then forward the data on all the herd tested cows from all over Australia to the Australian Dairy Herd Improvement Scheme (ADHIS) staff who receive it, and filter it through evermore complex computer systems with the cooperation of the Department of Primary Industries (Victoria).

Finally, the outcome of this process is the publication of valuable industry statistics such as those contained in this report, but, more importantly, for the release of Australian Breeding Values (ABVs). ABVs are published twice yearly to identify those AI bulls that have a superior ability to transmit the best genetics to their offspring. The new Good Bulls Guide is a convenient source of ABVs.

Being able to identify the bulls that perform best in Australian conditions is one of the key components in boosting the productivity on Australian dairy farms. Essentially, the collection of herd test data is the foundation upon which the genetic evaluation system is built.

Unfortunately, some people are making the mistaken assumption that, in the current era when genomics is rapidly becoming the new industry buzzword, there may be less need to gather herd test data. Nothing could be further from the truth.

Genomics is teaching us that the important traits in dairy cows – protein production for example – are controlled by many genes, each having small effects. We are learning that the interactions between traits are very complex and non-linear. As Dr Denis Funk said at the Herd '11 Conference, "All this says is that the genomic estimates that we have are only as good as the data we have to arrive at those estimates. Further, the data needs to be refreshed and updated frequently with updated phenotypes to be current and relevant for our breeding programs today. To make genetic improvement, whether with traditional genetic programs or genomics, requires volumes of data."

The members of NHIA, and its forerunners, have played an integral part in the collection of herd test data since 1923. Table 13, in this publication that shows that in 1930, 2,984 Victorian dairy farmers herd tested 91,328 cows which gave 2,295 litres of milk in an average herd size of 31 head. Compare that to 428,660 cows in 2011 giving 6,588 litres in herds averaging 211 head. The statistics can help us track the development of our industry and provide benchmarks for the future.

Herd test data is a vital part of the foundation of the dairy industry and NHIA members can be proud of the contribution they make.

Going forward, I believe that we need to apply significantly more industry investment in the collection of data, not for its own sake, but in order to provide Australian dairy farmers with even more valuable tools in the future. The future will belong to those who understand how to use data in innovative ways to make good, timely and profitable decisions.

# ADHIS Chairman's report

*By Adrian Drury*
*ADHIS Chairman*

It's almost thirty years since the ADHIS Board met for the first time at Dairy Industry House. I can just imagine the voices around the table talking about the need for high quality data, fail-safe data systems, independent genetic evaluation and the ability to participate in and implement leading edge research. As you will see in this report, our herds have come a long way since that time. For example cows are producing an average of 176 kg more milksolids each year. About one third of this improvement is the result of better genetics identified by Australian Breeding Values.

The challenges faced by ADHIS are similar to those of years ago – but in a very different environment. On our farms, we expect more of our herd, our people and our businesses. The need for data is increasing faster than our ability to collect it – but the solution starts at home. Sometimes, we need to remind ourselves of the benefit of consistently high quality herd recording, animal health and mating data to our own businesses. The bonuses are reliable Australian Breeding Values so we can find the best bulls for our herd and effective R&D backed by a high quality database of herd records.

ADHIS are responding to today's industry-level challenges. ADHIS has identified upgrades to strengthen its systems within a fast-paced, technically challenging environment. While it seeks support for further improvements, some big steps have been achieved in 2011. For example, ADHIS data systems have grown to handle tens of thousands of pieces of genomic data for individual animals – over and above the traditional yield, classification, health and mating data. As of April 2011, genomic data is routinely integrated into genetic evaluations giving farmers opportunities for faster genetic gain across a wide range of traits. New quality control systems are in place and are working. Outcomes from large scale research projects at the Dairy Futures CRC are being implemented within ADHIS systems. 1600 farmers and their advisers have participated in genetics workshops, conferences and on-farm days. The Good Bulls Guide is now regularly referenced both within the herd improvement sector and more broadly across a range of industry extension programs.

I wish to recognise the significant contributions made by ADHIS stakeholders who have contributed to this list of achievements. In particular, I thank Dairy Australia, Department of Primary Industries-Victoria, the Dairy Futures CRC, data processing centres, bull companies and breed societies for their ongoing collaboration and support.

On behalf of the Board, I thank Wes Judd for his leadership and advocacy for ADHIS. Wes chaired the ADHIS Board through the implementation of the new APR index, commercialisation of genomics and launch of the Good Bulls Guide. Wes stepped down in July 2011 to support his family as they recover from the Queensland floods.

As I look ahead to my first full year as Chair of ADHIS, I am eager to work with our stakeholders to ensure ADHIS provides you with information you need to get you where you want to be.

# NHIA activities

*By Carol Millar*
*NHIA General Manager*

Dairy farmers today rely on current information more than ever. Every day critical management decisions have to be made on farm which can mean the difference between profit and loss in these volatile times. The best decisions are those that are made on factual information. Whether it is on which cows to sell or keep, stocking rates, dry matter intakes, mastitis treatment regimes, breeding programs – on a dairy farm, knowing the facts makes a difference.

## Herd testing is a vital tool

The best way for dairy farmers to understand exactly what is happening on their farm is to herd test regularly.

Each test is a benchmarking opportunity to work out which cows are making a profit and which are not and then to be able to do something about it. It is the best and most effective way of managing individual cow cell counts (ICCC) and identifying those cows that are contributing most to high bulk milk cell count (BMCC), which may be preventing the farm from receiving premium milk prices.

As the statistics in this report will show, herd sizes continue to get bigger on Australian dairy farms. With increasing herd size brings the challenge of still being able to manage cows on an individual basis. A farmer does not treat the whole herd if the BMCC blows out, he/she needs to find the individual cows responsible. Equally, the whole herd does not get pregnant as a group, each individual cow needs to be in good post-partum health and bred to an AI sire or bull in order to achieve pregnancy. The most successful dairy farmers manage their cows individually within the context of the herd.

Herd recording and herd testing is the most effective way to achieve this goal of identifying individual cows and managing their care appropriately.

## Heifer identification for export

One of the important advantages in identifying individual animals on the herd test system is that all stock on the farm is assured of having parentage information. Therefore the compilation of 3-generation pedigrees for export buyers is a very simple process. The ready identification of heifers for export is a by-product of participating in herd test for most dairy farmers.

Australia is blessed with having one of the most disease-free environments in the world and this is a natural advantage in attracting foreign buyers for our livestock. Increasingly these buyers are looking for heifers that have parentage information. Any farmer that participates in herd testing is poised to take advantage of this growing demand.

## Genomics requires more data

Australian scientists have been at the forefront of the mapping of the cattle genome and the application of genomics. The dairy industry stands at the brink of many new applications which are expected to substantially speed up genetic gain in dairy animals. But as we utilize genomic information more extensively in breeding programs, we will have an ongoing need for additional performance information which arises out of herd testing. NHIA members will continue to play an important role in the collection of this data.

## Industry education and training

Skills shortages are acknowledged as one of the herd improvement industry's limiting factors to improving efficiency and adoption of new technologies. The herd test sector, in particular, suffers from a lack of a defined skills training pathway. The NHIA has as one of its strategic priorities the improvement of skills training for the herd test industry.

In recent years, NHIA has become the leading provider of Artificial Insemination (AI) training in Victoria along with our industry partners the National Centre for Dairy Education Australia (NCDEA) and Rural Industries Skills Training (RIST).

It has become apparent in the delivery of this training that the industry needs to prioritize the production of a new AI Manual to provide farmers and trainees with an effective learning resouce that encapsulates best practice in this area. Recent fertility studies indicate a wide variation in conception rates on farm which would indicate that there is considerable room for improvement in breeding management practices of which AI technique is an important component. NHIA will continue to advocate this as a priority for the dairy industry.

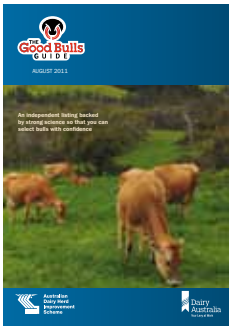
# ADHIS activity report

*By Daniel Abernethy, ADHIS General Manager*

ADHIS marked a significant year with the release of the first genomic based breeding values (ABV(g)s) as part of the Holstein ABV release in April 2011. It culminated the 10 years of research here in Australia supported by the Dairy Futures CRC , Department of Primary Industry – Victoria ( DPI-V), ADHIS and importantly dairy industry funding through Dairy Australia.

Genomics is a new technology that incorporates DNA information to improve the reliability of ABVs for younger bulls and herd recorded cows. The addition of genomics delivers better information on traits of particular interest, like fertility and longevity. By Spring 2011, farmers were able to utilise the benefit of genomics by having more young sires with ABV(g)s to choose from, more proven sires with reliable daughter fertility breeding values, more confidence in progeny test programs utilizing ABV(g) data in their selection and the ability to better select cows from which to breed the next generation. In essence farmers can build their herds faster and with more confidence by using genomics.

The introduction of genomics has been the most significant enhancement to the Australian Breeding Value(ABVs) system since the first release of ABVs in 1982 . The time honoured tradition of dairy cattle breeding has been revolutionised by innovative thinkers and the development and adoption of this new technology.




## Good Bulls Guide – April & August 2011

The first introduction of the Good Bulls Guide in August 2010 was followed by releases in April and August 2011 . The Good Bulls Guide ranks our most superior sires across APR profit , production , longevity , type, mastitis resistance , reliability and for the first time a ranking of top young Genomic sires.

The industry endorsement of the Good Bulls Guide can now be seen in AI Sire Catalogues and general industry advertisements promoting the superior genetic value of individual bulls. Recognising the influence of genetics on a range of farm management areas, the Good Bulls Guide messages have been integrated into key industry projects such as Dairy Australia's Countdown Down Under and InCalf . The industry can have confidence that the Good Bulls Guide is an independent ranking of the most superior sires from both Australian and International sources .

## Cow ABV and ABV(g)s

In March 2011, Holstein Australia and ADHIS announced a new genotyping service for cows and bulls. Through Holstein Australia, users of this service received the first cow ABV(g)s following the August 2011 release. Through the use of genomics , the genetic merit of a heifer calf can be calculated with the same level of reliability as a well-recorded cow with 7 lactations of data. Cows are now routinely evaluated for dozens of traits including production, health, workability and type traits as well as the APR.

## Herd 11 Conference Ballarat – March 2011

In March ADHIS partnered with NHIA and Holstein Australia to host the bi-annual Herd Improvement Industry conference held in Ballarat. The conference featured the key topics of genomics , Dairy Futures CRC research , fertility and reproductive performance , data collection and managing change. Presentations from key speakers from Australia, Belgium , Canada , USA , and New Zealand allowed participants the opportunity to update their understanding and knowledge on vital dairy industry research .

## Fertility – ABVs do work

Recent research conducted by the Dairy Australia In-Calf project group, supported by ADHIS, has confirmed the accuracy of Daughter Fertility ABVs to predict the reproductive performance of the daughters of proven sires . As demonstrated in Figure 1, cows with a higher genetic merit for ABV for fertility had 13% greater 6-week in-calf rate and 8% lower not-in-calf rate compared to the lower genetic merit counterparts.

ADHIS continues to assist the InCalf project to improve reproductive performance of Australian dairy herds by supporting the publication of daughter fertility ABVs and semen fertility values.

## Herd Improvement Data Collection

The issue of data and improving data capture has been on the agenda for many years. In 2002 ADHIS commenced the "Data Capture Project" with the support of DPI Victoria. This project looked at the way data is currently captured on-farm and potential opportunities to improve the capture and accuracy of data especially relating to health and fertility traits. Over the last two years the herd improvement industry has reviewed the value proposition for improving data collection, quality & quantity, transfer & access in the Australian dairy industry. From these investigations an initiative to develop a pre-competitive dairy data repository was recommended. This recommendation outlines an industry infrastructure approach to support data and its utilisation. Currently this recommendation is being reviewed by Dairy Australia. It is expected that detail on the support for such as initiative will be outlined in the new year. ADHIS, NHIA and Holstein Australia strongly support this initiative and the potential benefits this initiative could deliver to industry.

It is however recognised that some data is currently recorded but not submitted to ADHIS. This breakdown in dataflow will not be directly fixed by the implementation of a centralised data repository. ADHIS also recognised that recommendations from the 2002 Data Capture Project warrant reviewing. As a result ADHIS commissioned a review seeking to understand current data practices and processes, and potential improvements to data collection and transfer protocols.

The output of this review which complements the industry initiative on data infrastructure is currently under consideration with outcomes to be discussed with industry in the new year.

## R,D&E Activity Summary

ADHIS continues to invest in a range of research, development, extension, education and communication activities. Table 1 highlights the impact of several 2011 developments.

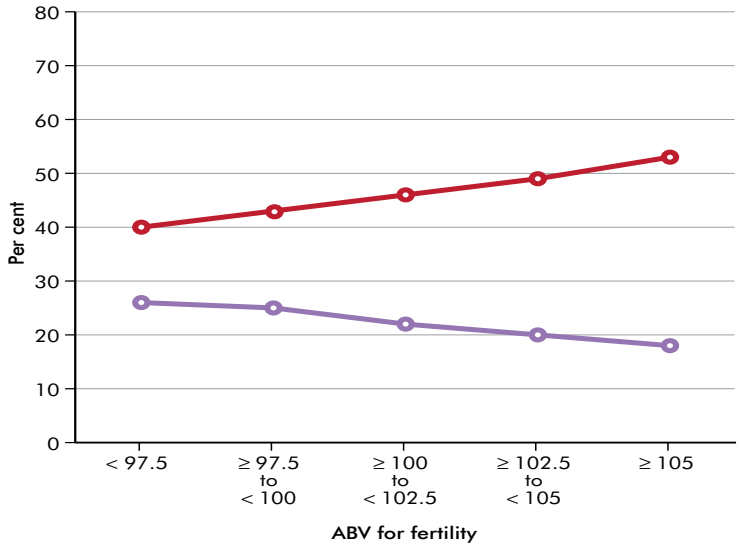



*Figure 1: Reproductive performance is higher in cows with higher ABVs for fertility.*

Rates are adjusted for source of data, herd (random effect), year, age at calving and calving to first service, Holstein-Friesian cows only

Table 1: A range of ADHIS activities in 2011.

| Development | Activity | Impact |
|---|---|---|
| **10,000 and Jernomic projects** | ADHIS has supported the Dairy Futures CRC in implementing the 10,000 Holstein cow and Jernomic projects. Cows with very well recorded histories were selected from the ADHIS database for genotyping. | More reliable genomic based breeding values for farmers and bull companies. |
| **Building the reference population** | ADHIS undertook an industry drive to locate semen from both past and present AI bulls that will be used as an important part of the Australian genomic reference population . | More reliable genomic based breeding values for farmers and bull companies. |
| **NCDEA Diploma of Agriculture delivery** | Support NCDEA in the development and delivery of 'Develop and Implement a Breeding Strategy' unit from the Diploma of Agriculture program. | Farmers are supported with regional delivery of a formal training program in applied dairy cattle breeding. |
| **New APR rankings for cows and herds.** | Top herds and cows are now ranked by Australian Profit Ranking (APR) instead of the production-only Australian Selection Index (ASI) | The APR index more accurately reflects the balance of production and non-production traits that contribute to on-farm profit. |
| **Top cow and top herd lists.** | Fees were removed from download of top cow and top herd lists. | Farmers and their advisers can easily identify the country's top herds and top cows, at no cost. |
| **Good Bulls Guide** | Published in April and August 2011 | Farmers can select Australian and overseas bulls based on top ABV and ABV(i) rankings. |
| **DPI-V Service Provider Seminars** | Hosted by the DPI-V Dairy Services Division, ADHIS participated in two series of seminars focusing on genomics (Autumn '11) and fertility (Spring '11) | Service providers have local opportunities to hear the latest in world of genetics. |
| **Genetic Progress Report** | A tool is under development that will provide within herd genetic trend data to assist in benchmarking bull selection practices. | After its launch in 2012, farmers will be able to check the genetic direction of their herds and make decisions about the effectiveness of bull selection practices. |
| **Daughter Fertility research** | Research is underway by the Dairy Futures CRC and its partners DPI-V and ADHIS to develop a multi-trait fertility model. | Bull companies and farmers will be able to better select for improved fertility by using more reliable daughter fertility ABVs in younger bulls. |
| **Improved Preliminary Breeding Values (PBVs)** | Improvements were made to the models used to blend ABV(i) and early Australian data in the calculation of preliminary breeding values. | Bull companies can make better decisions because they have access to more accurate data prior to official ABV releases. |
| **Straw Calculator** | In conjunction with InCalf, a web-based tool was developed to calculate the number of AI straws required to achieve sufficient herd replacements. | Farmers and their advisers are reminded to use sufficient AI semen to produce good quality replacements. |

# ADHIS Board and Committees

## ADHIS Board of Management

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

*Members:* Wes Judd (Chairman – retired July 2011), Adrian Drury (Chairman appointed July 2011), Peter Aldridge, John Harlock, Stewart McRae, Stuart Tweddle, Lyndon Cleggett, 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

**Paul Koh,** Data and Services Manager

**Judith Schweitzer,** Information Scientist

**Erica Jewell,** Data and Services Manager

*Education and Extension*

**Michelle Axford,** Project Leader

**Peter Williams,** Extension Officer

# Industry consultation

## Stakeholder meetings

Effective industry consultation underpins the ADHIS Strategic Plan. ADHIS achieves industry consultation across its activity areas through its committees, specific meetings with individuals and organisations, and periodic stakeholder meetings.

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

The 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, 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 that should improve the amount of data collected.

## The Genomics Communication Group

*Members*

Mrs Michelle Axford (ADHIS, Chairperson), Ms Belinda Griffiths (DF CRC), Dr David Nation (DF CRC), Dr Mick Blake (Dairy Australia), Kelly Charlton (Dairy Australia), Dr Ben Hayes (DPI-V), Dr Jennie Pryce (DPI-V), Mr Peter Thurn (Genetics Australia), Dr Matthew Shaffer (Holstein Australia), Mr Scott Joynson (Jersey Australia), Ms Carol Millar (NHIA), Mr Daniel Abernethy (ADHIS).

The Genomics Communication Group meets regularly to develop and implement activities to support the implementation of genomics within the Australian dairy industry.

# Current reproductive performance and changes over time

*Dr Barry Zimmermann*
*Project Leader*
*InCalf*
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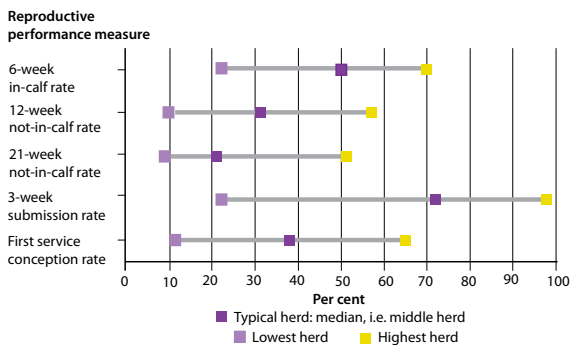
Farm profitability, cow health and longevity are highly desirable features of dairy farming and they all rely on good reproductive performance.

In 2010, the fertility of Australian dairy herds came under close scrutiny with concerns raised about dramatic declines in the fertility of some herds. There were many different views about the reasons for the apparent decline such as the 'Holstein-isation' of the Australian dairy herd, higher milk production and increases in herd sizes.

To find out how reproductive performance had changed and to explore the possible factors involved, InCalf commissioned a data analysis from 74 herds which had complete reproductive records over several years. Herds from participating veterinary practices and the ADHIS database that had accessible early pregnancy testing records were selected as this enabled direct measurement of 'actual' 6-week in-calf rates. Approximately 30,000 cows and 85,000 lactations were analysed over the 10 years from 2000 to 2009.

## Current reproductive performance

*Figure 1: The reproductive performance of 74 seasonal and split calving herds from Victoria and Tasmania in 2009.*



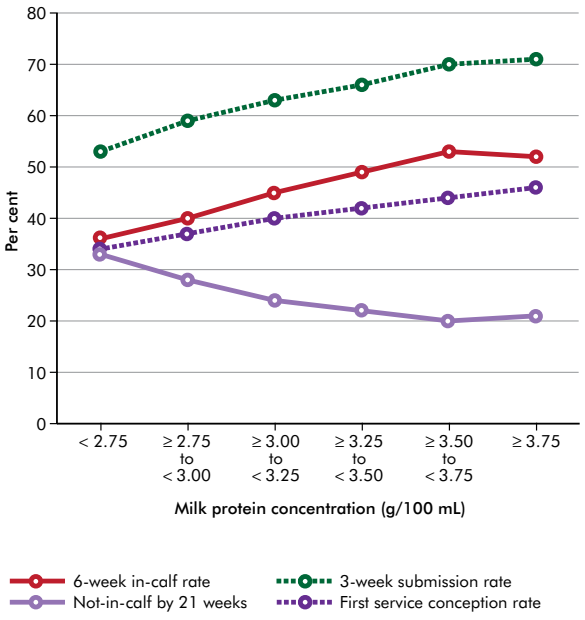

*Source: InCalf Fertility Data Project 2011*

Table 1: The effect of different factors on fertility of the modern dairy cow.

| Factor | Measure | Effect on cow fertility* | |
|---|---|---|---|
| | | Markedly higher | Markedly lower |
| ABV for fertility | When higher | ✓ | |
| Calving to MSD | When longer | ✓ | |
| Age | 2-7 year old cows | ✓ | |
| Milk production-volume, fat and protein yield | Very low levels | | ✓ |
| | Very high levels | | ✓ |
| Milk protein | Higher concentration | ✓ | |

* as measured by 6-week in-calf rates and not-in-calf rates
Source: InCalf Fertility Data Project 2011

*Figure 2: Reproductive performance is higher in cows with higher milk protein concentrations.*




Rates are adjusted for source of data, herd (random effect), year, age at calving and calving to first service, Holstein-Friesian cows only

*Source: InCalf Fertility Data Project 2011*

## Changes in reproductive performance over time

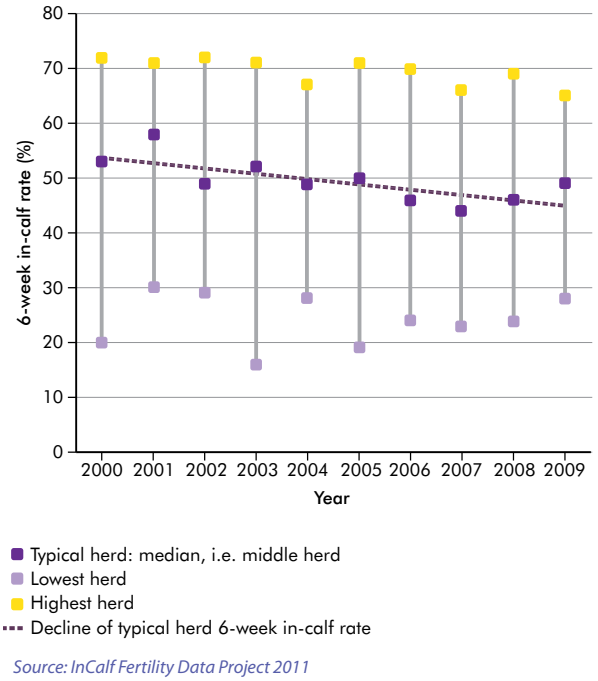
Thirty of the study herds had 8 of 10 years data between 2000 and 2009, enabling trends in reproductive performance over time to be analysed.

Reproductive performance declined in these herds by about 1% per year for 6-week in-calf rate, 0.6% per year for submission rate and 0.7% per year for conception rate.

Importantly, there were large differences between herds in each year (see vertical bars in Figure 3). In fact, the spread herds in any particular year was far greater than the decline over the 10 year period.

In the typical 6-week AI mating period the decline in reproductive performance was much more attributable to the decline in conception rates than submission rates. No single factor could explain the decline over the 10 year period, but combinations of factors did in part.

*Figure 3: Measure of 6-week in-calf rates from 2000 to 2009. The vertical lines show the large spread between the lowest and highest herd in each year. The dashed line is the line of best fit for median 6-week in-calf-rates over the period and shows the decline of the typical herd.*




*Source: InCalf Fertility Data Project 2011*

The results of this study will greatly assist industry planning (through Dairy Moving Forward) and InCalf's on-going program of work.

There are complex and potentially interacting factors causing the declines in submission and conception rates. High priority should be given to understanding the factors involved and devise appropriate management strategies that industry can use to improve reproductive performance.

More detailed information is available in the InCalf Fertility Data Project 2011 full and short reports on the Dairy Australia website, www.dairyaustralia.com.au/incalf

## In summary

Significant findings were:

- Reproductive performance was lower than in the original InCalf study in 1996-1998.
- Cows with higher milk protein concentrations had higher fertility (Figure 2).
- There was huge variation in herd reproductive performance (Figure 3).
- The calving pattern of herds was important: fertility was higher in cows with longer calving to mating start date intervals.
- High-producing cows (more than 8,000 litres) had lower fertility.
- The age profile of herds was important with fertility being lower in cows older than 7 years.
- ABVs for fertility work: cows with higher ABVs for fertility had better reproductive performance.
- In this study Holstein-Friesians had lower in-calf rates than Jerseys and all combinations of Jersey/Holstein crosses. However fertility decreased at a similar rate in Holstein-Friesians, Jerseys and Jersey-Holstein first cross over the 10 years.

Dairy Australia
Countdown Downunder
Your Levy at Work

# Select bulls that increase mastitis resistance

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Better udder health increases dairy farm profitability and underpins the demands of domestic and export markets for high quality dairy produce. There is no 'fix' for poor quality milk that leaves the farm.

Countdown's objective is to help Australian dairy farms improve their mastitis control and reduce the average bulk milk cell count of the national herd.

Genetics is one of the tools now available to farmers to reduce mastitis risk. Most mastitis control is based on the management of cows and their environment to minimise the number of bacteria around the teats and maximise teat health. But each cow's chance of developing mastitis is also influenced by her genetic makeup.

Some bulls produce daughters which are more resistant to mastitis than others. While the heritability of mastitis resistance is relatively low at 10 per cent, the benefits are permanent and accrue with each generation. Farmers who select dairy bulls with mastitis resistance can help fine-tune their mastitis management in the long term.

The Australian Dairy Herd Improvement Scheme (ADHIS) has been collecting cell count information from all test day records since the mid 1990s. This cell count information is used to calculate Australian Breeding Values for mastitis resistance (cell count ABVs) for AI bulls.

Improving mastitis resistance involves selecting bulls with a cell count ABV which is more than 100 – the higher the cell count ABV, the greater the mastitis resistance.

The Average Bulk Milk Cell Count of Australian dairy herd was 220,000 cells/mL for the 2010 calendar year. This was calculated using the International Dairy Federation recommended method.

In 2002 cell count ABVs were incorporated in the Australian Profit Ranking (APR) because mastitis lowers farm profitability. Last year Countdown supported the change to the formula used to calculate the APR, to place more emphasis on mastitis resistance (and daughter fertility and survival). This means that even farmers who are not actively choosing bulls for mastitis resistance will do so if they choose bulls with a high APR.

An increase in the average cell count ABV of the Australian herd-recorded cows has been observed in the last 10 years. Figure 1 shows the increasing genetic trend for mastitis resistance in Holstein cows with AI sires.

Without cow cell count figures available to the industry from milk recording herds, cell count ABVs for bulls would not be possible and the gains made in mastitis resistance may not have occurred.

The development of the Good Bulls Guide by ADHIS has made it easier for farmers to choose appropriate bulls for their herds.

Countdown recommends that for little or no extra cost, farmers can now make a long-term difference to the level of mastitis in their herds by selecting bulls from the mastitis resistance list in the Good Bulls Guide.

The difference between the best Holstein bull (Cell Count ABV of 183) and the worst bull (Cell Count ABV of 5) is estimated to be $119 net profit per cow per year

More information: Countdown Downunder Fact Sheet H: The impact of genetics on mastitis and cell counts at www.dairyaustralia.com.au/countdown

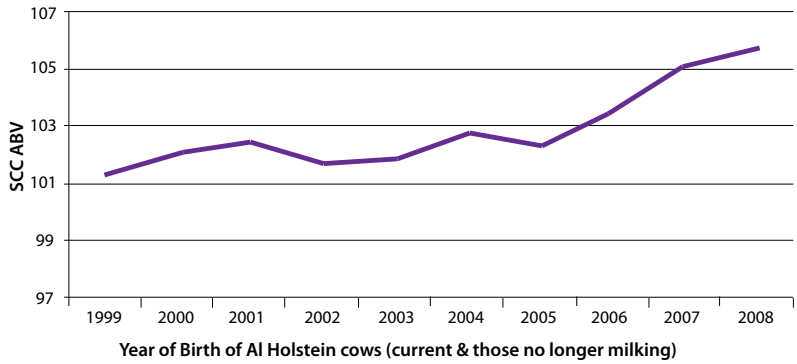



Figure 1 : The genetic trend for mastitis resistance in Holstein cows in the Australian herd has risen significantly in the past 5 years.

# Dairy Futures CRC Report

The Dairy Futures Cooperative Research Centre (CRC) is a unique collaboration between industry partners and research organisations, which attracts large-scale support from state and federal governments and from dairy levy funds from Dairy Australia. All participants have made significant contributions in the past 12 months, and $23 million was invested (cash and in-kind) in 2010/11.

## Breeding with genomics

The CRC's first major outcome was the delivery of DNA marker information to ADHIS so that it is included in a routine fashion into all Holstein genetic evaluations.

The second phase of research is designed to increase the value of genomics in a number of ways:

- Confirm the value of using lower-cost tests with fewer DNA markers. It has been demonstrated that extra value can be added to a lower-cost test (known as "imputing extra data") which means that it can be used effectively as a test for the genetic merit of cows. This has brought down the price of testing cows by two-thirds.
- Boost the reliability of genomic predictions. The priority is to build a national DNA database of animals with excellent records under Australian farming conditions. Bulls are the most informative as they have large numbers of daughters and all project partners are actively looking to expand the number of bulls on record. However, large-scale increases in records could only be achieved through sampling cows. The 10,000 Holstein cow project searched the national herd for cows with high quality records and diverse bloodlines and will be completed by December 2011.
- Expand the genomic test to include the Jersey breed. This project involved close cooperation with Jersey Australia to collect semen straws of Jersey bulls and collect DNA samples from large numbers of cows from their members' herds. These samples are being processed over summer with the aim of being introduced into breeding values in April 2012.

*Dr David Nation, CEO, Dairy Futures CRC*

## Has Australian genomic technology made an impact in 2011?

Yes. There are three major impacts in 2011. The first impact is that young bulls entering progeny test (PT) programs have been assessed using genomics. This will increase the quality of PT teams and ultimately increase the quality of bulls that graduate from PT programs.

The second impact is that there is a new category of bull genetics available – young bulls that do not yet have any daughters in milk. This includes a selection

Table 1: Improvements in reliability of ABVs as data is added during the life of a bull.

| Trait | Reliability | | | |
|---|---|---|---|---|
| | Young bull (parent average ABV) | Genotyped young bull ABV(g) | First crop bull publishable ABV | First crop bull with genomics (publishable ABV with genomics) |
| Protein kg | 28 | 56 | 85 | 85 |
| Overall Type | 21 | 42 | 74 | 75 |
| Survival (longevity) | 20 | 50 | 54 | 61 |
| Fertility | 18 | 38 | 54 | 58 |

Average reliabilities of 320 young bulls monitored from parent average ABV to first crop proof.
Source: Implementation of Genomics in Australia, Nieuwhof et al, 2010 (full paper available at www.adhis.com.au)

of premium sires and means that farmers can access elite genetics earlier. If this trend continues it will dramatically speed up genetic progress by reducing the generation interval of dairy herds.

The third impact is that it provides important information for bulls that have graduated from progeny test programs. For example, it is common for new graduates to not have a fertility breeding value due to lack of data. DNA results have added an important new data source and now there are more than twice as many bulls in the Top 50 merit list that have fertility breeding values.

## The CRC is about research partnerships

The strength of the CRC is based on the organisations that participate in its activities. World-class research is undertaken by the Department of Primary Industries (Victoria) and supported by project partners that include ADHIS, Holstein Australia, Jersey Australia, Genetics Australia and Dairy Australia.

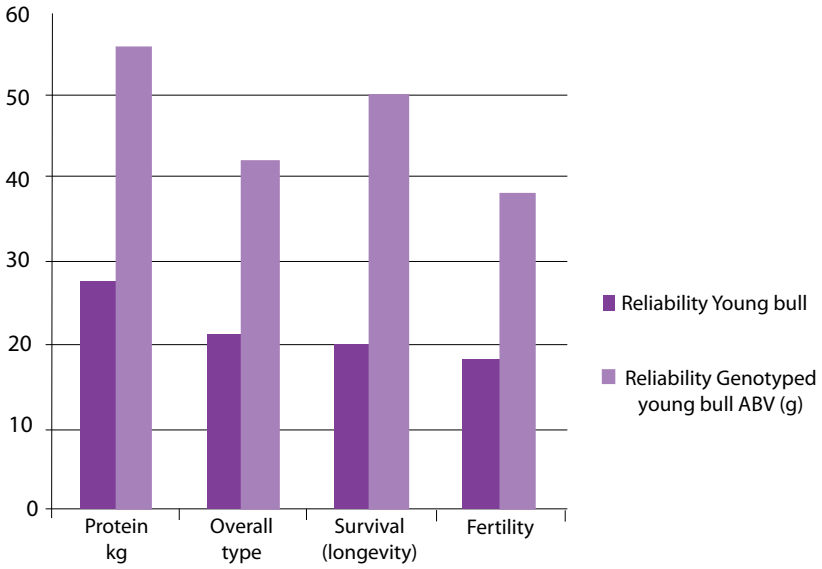



*Figure 1: Improvements in reliability of ABVs as data is added during the life of a bull. Graph depicts average reliabilities of 320 young bulls monitored from parent average ABV to first crop proof.*

*A/Prof. Ben Hayes and Brett Mason from the DPI Victoria Biosciences research team collecting tail hair samples from John Bilney's Jersey herd, Mirboo North.*

On average, herd recorded cows produced 32% more than non herd recorded cows (Dairy Australia *In Focus* 2011 and ADHIS 2011)

**Table 1 : National and State Totals and Production Averages.**

| State | Number of Herds | Herds and Cows Recorded | | | | Production Averages | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Included in Averages | Excluded from Averages | Total Cows | Herd Size | Milk litres | Fat % | Fat kg | Protein % | Protein kg | Lactation Length days |
| Victoria | 2,036 | 309,937 | 118,723 | 428,660 | 210.5 | 6,588 | 4.1 | 268 | 3.4 | 222 | 319 |
| New South Wales | 486 | 73,131 | 26,930 | 100,061 | 205.9 | 7,485 | 3.9 | 291 | 3.3 | 244 | 341 |
| Queensland | 288 | 26,653 | 19,106 | 45,759 | 158.9 | 6,348 | 3.9 | 249 | 3.3 | 207 | 331 |
| South Australia | 230 | 40,672 | 8,039 | 48,711 | 211.8 | 7,524 | 3.9 | 290 | 3.3 | 246 | 339 |
| Tasmania | 190 | 39,505 | 10,451 | 49,956 | 262.9 | 6,213 | 4.1 | 257 | 3.4 | 214 | 295 |
| Western Australia | 129 | 28,777 | 3,666 | 32,443 | 251.5 | 7,774 | 3.8 | 293 | 3.2 | 247 | 334 |
| Australia | 3,359 | 518,675 | 186,915 | 705,590 | 210.1 | 6,813 | 4.0 | 273 | 3.3 | 228 | 323 |
| Victorian regions | | | | | | | | | | | |
| Northern | 744 | 98,883 | 38,214 | 137,097 | 184.3 | 6,682 | 4.1 | 273 | 3.3 | 223 | 326 |
| Eastern | 716 | 117,090 | 36,447 | 153,537 | 214.4 | 6,447 | 4.1 | 262 | 3.4 | 217 | 316 |
| Western | 576 | 93,964 | 44,062 | 138,026 | 239.6 | 6,666 | 4.1 | 271 | 3.4 | 228 | 315 |

**Table 1a: National totals and production averages 1999 to 2011.**

| Year | 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 |
| 1999/2000 | 6,976 | 947,104 | 81,129 | 1,028,233 | 147.4 | 5,691 | 4.0 | 230 | 3.3 | 187 | 302 |
| 2000/2001 | 7,405 | 940,712 | 286,248 | 1,226,960 | 165.7 | 5,682 | 4.0 | 229 | 3.3 | 186 | 302 |
| 2001/2002 | 6,930 | 888,497 | 303,269 | 1,191,766 | 172 | 6,027 | 4.0 | 243 | 3.3 | 200 | 307 |
| 2002/2003 | 6,358 | 842,113 | 335,786 | 1,177,899 | 185.3 | 5,877 | 4.0 | 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 |
| 2010/2011 | 3,359 | 518,675 | 186,915 | 705,590 | 210.1 | 6,813 | 4.0 | 273 | 3.3 | 228 | 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 | 2,036 | 40 | 31 | 71 | 105 | 181 | 285 | 352 | 325 | 215 | 122 |
| New South Wales | 486 | 4 | 9 | 12 | 18 | 47 | 50 | 83 | 74 | 70 | 55 |
| Queensland | 288 | 2 | 6 | 13 | 23 | 38 | 33 | 23 | 23 | 11 | 9 |
| South Australia | 230 | 1 | 4 | 4 | 6 | 23 | 27 | 39 | 40 | 37 | 40 |
| Tasmania | 190 | 0 | 1 | 3 | 20 | 26 | 32 | 26 | 21 | 19 | 12 |
| Western Australia | 129 | 0 | 0 | 0 | 2 | 6 | 14 | 16 | 27 | 21 | 32 |
| Australia | 3,359 | 47 | 51 | 103 | 174 | 321 | 441 | 539 | 510 | 373 | 270 |
| Victorian regions | | | | | | | | | | | |
| Northern | 744 | 12 | 9 | 20 | 26 | 56 | 90 | 122 | 123 | 85 | 44 |
| Eastern | 716 | 13 | 9 | 28 | 35 | 73 | 120 | 142 | 122 | 67 | 33 |
| Western | 576 | 15 | 13 | 23 | 44 | 52 | 75 | 88 | 80 | 63 | 45 |

# National Herd Recording Statistics 2010-2011

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 | 2,036 | 39 | 43 | 104 | 173 | 329 | 378 | 323 | 210 | 87 | 41 |
| New South Wales | 486 | 4 | 11 | 14 | 37 | 58 | 78 | 73 | 79 | 51 | 17 |
| Queensland | 288 | 2 | 5 | 14 | 34 | 43 | 40 | 24 | 12 | 4 | 3 |
| South Australia | 230 | 1 | 1 | 9 | 14 | 36 | 44 | 39 | 38 | 27 | 12 |
| Tasmania | 190 | 0 | 4 | 8 | 32 | 37 | 21 | 21 | 18 | 11 | 8 |
| Western Australia | 129 | 0 | 0 | 2 | 3 | 11 | 20 | 28 | 21 | 27 | 6 |
| Australia | 3,359 | 46 | 64 | 151 | 293 | 514 | 581 | 508 | 378 | 207 | 87 |
| Victorian regions | | | | | | | | | | | |
| Northern | 744 | 9 | 15 | 31 | 61 | 116 | 121 | 114 | 79 | 28 | 13 |
| Eastern | 716 | 16 | 12 | 36 | 67 | 132 | 155 | 122 | 69 | 24 | 9 |
| Western | 576 | 14 | 16 | 37 | 45 | 81 | 102 | 87 | 62 | 35 | 19 |

44% of Australia's 1.6 million* milking cows were herd recorded in 2010/11

(Dairy Australia *InFocus* 2011, ADHIS 2011).

Table 4: Production averages by age group.

| Age group | Number of cows | Production averages | | | | | Lactation length days |
|---|---|---|---|---|---|---|---|
| | | Milk litres | Fat % | Fat kg | Protein % | Protein kg | |
| 2 Year Old | 85,232 | 6,042 | 3.97 | 240 | 3.34 | 202 | 329 |
| 3 Year Old | 90,437 | 6,698 | 3.97 | 266 | 3.37 | 226 | 327 |
| Mature Cow | 343,006 | 7,035 | 4.02 | 283 | 3.33 | 235 | 321 |
| Total | 518,675 | 6,813 | 4.01 | 273 | 3.34 | 228 | 323 |

49% of Australia's 6883 farms were herd recorded in 2010/11

(Dairy Australia *InFocus* 2011, ADHIS 2011).

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 | 85,232 | 244 | 227 | 206 | 189 |
| 3 Year Old | 90,437 | 274 | 248 | 233 | 209 |
| Mature Cow | 343,006 | 295 | 266 | 245 | 220 |
| Total | 518,675 | 281 | 259 | 235 | 214 |

On average an AI cow is $53 more profitable each year than a naturally bred counterpart.

(HaileMariam & Goddard,2008)

Table 6 : Production averages by percentage of artificially bred cows in herds.

| Percentage of artificially bred cows in herd | Number of herds | Production averages | | |
|---|---|---|---|---|
| | | Milk litres | Fat kg | Protein kg |
| < 10 | 500 | 6,113 | 247 | 205 |
| 10-19 | 169 | 6,335 | 251 | 212 |
| 20-29 | 167 | 6,309 | 256 | 211 |
| 30-39 | 180 | 6,670 | 266 | 221 |
| 40-49 | 233 | 6,615 | 267 | 221 |
| 50-59 | 307 | 6,759 | 269 | 225 |
| 60-69 | 340 | 7,033 | 278 | 232 |
| 70-79 | 397 | 7,030 | 280 | 235 |
| 80-89 | 451 | 7,019 | 282 | 234 |
| > 89 | 615 | 7,170 | 288 | 241 |
| Total | 3,359 | 6,813 | 273 | 228 |

| Table 7: Production averages by breed. | | | | | | | |
|---|---|---|---|---|---|---|---|
| Breed | Number of cows | Production averages | | | | | |
| | | Milk litres | Fat % | Fat kg | Protein % | Protein kg | Lactation length days |
| Holstein | 355,036 | 7,259 | 3.88 | 282 | 3.28 | 238 | 327 |
| Jersey | 56,055 | 5,196 | 4.82 | 251 | 3.73 | 194 | 313 |
| Holstein/Jersey Cross | 22,697 | 6,006 | 4.40 | 264 | 3.52 | 212 | 308 |
| Guernsey | 1,216 | 5,566 | 4.32 | 240 | 3.43 | 191 | 327 |
| Ayrshire | 2,814 | 5,538 | 4.11 | 228 | 3.39 | 188 | 312 |
| Dairy Shorthorn | 296 | 5,219 | 3.90 | 204 | 3.31 | 173 | 317 |
| Illawarra | 5,090 | 6,322 | 4.00 | 253 | 3.32 | 210 | 318 |
| Unknown Breed | 62,775 | 6,300 | 4.01 | 253 | 3.34 | 210 | 315 |
| Aust Red Breed | 8,993 | 6,055 | 4.11 | 249 | 3.45 | 209 | 313 |
| Brown Swiss | 3,533 | 6,154 | 4.04 | 249 | 3.43 | 211 | 327 |
| Other | 170 | 5559 | 4.57 | 246 | 3.44 | 190 | 326 |
| Total | 518,675 | 6,813 | 4.01 | 273 | 3.34 | 228 | 323 |

| Table 8: Production averages by month of calving. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Month of calving | Number of cows | % of total | Production averages | | | | | Lactation length days |
| | | | Milk litres | Fat % | Fat kg | Protein % | Protein kg | |
| January | 14,444 | 2.8 | 7,063 | 3.90 | 276 | 3.30 | 233 | 342 |
| February | 22,830 | 4.4 | 7,265 | 3.91 | 284 | 3.32 | 241 | 340 |
| March | 45,685 | 8.8 | 7,262 | 3.95 | 287 | 3.34 | 243 | 335 |
| April | 51,706 | 10.0 | 7,180 | 3.95 | 284 | 3.35 | 241 | 332 |
| May | 47,764 | 9.2 | 7,083 | 3.98 | 282 | 3.36 | 238 | 327 |
| June | 41,608 | 8.0 | 6,873 | 4.01 | 276 | 3.37 | 231 | 319 |
| July | 56,457 | 10.9 | 6,580 | 4.06 | 267 | 3.38 | 223 | 315 |
| August | 93,518 | 18.0 | 6,485 | 4.08 | 265 | 3.37 | 218 | 309 |
| September | 78,028 | 15.0 | 6,596 | 4.04 | 267 | 3.32 | 219 | 318 |
| October | 36,579 | 7.1 | 6,559 | 3.99 | 262 | 3.27 | 214 | 324 |
| November | 16,857 | 3.3 | 6,682 | 3.95 | 264 | 3.26 | 218 | 335 |
| December | 13,199 | 2.5 | 7,072 | 3.89 | 275 | 3.25 | 230 | 344 |
| Australia | 518,675 | 100 | 6,813 | 4.01 | 273 | 3.34 | 228 | 323 |

44% of herd-recorded cows calved in the months of July/August/September in 2010/11

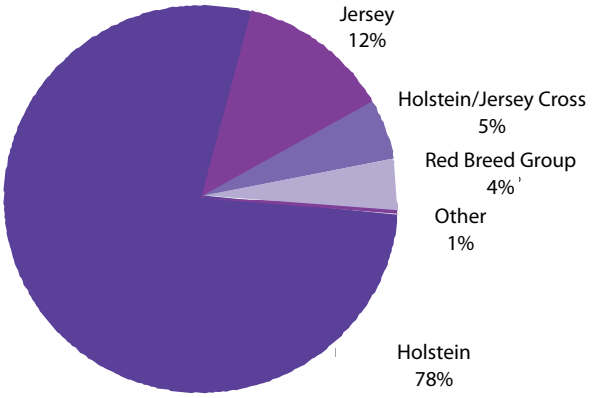
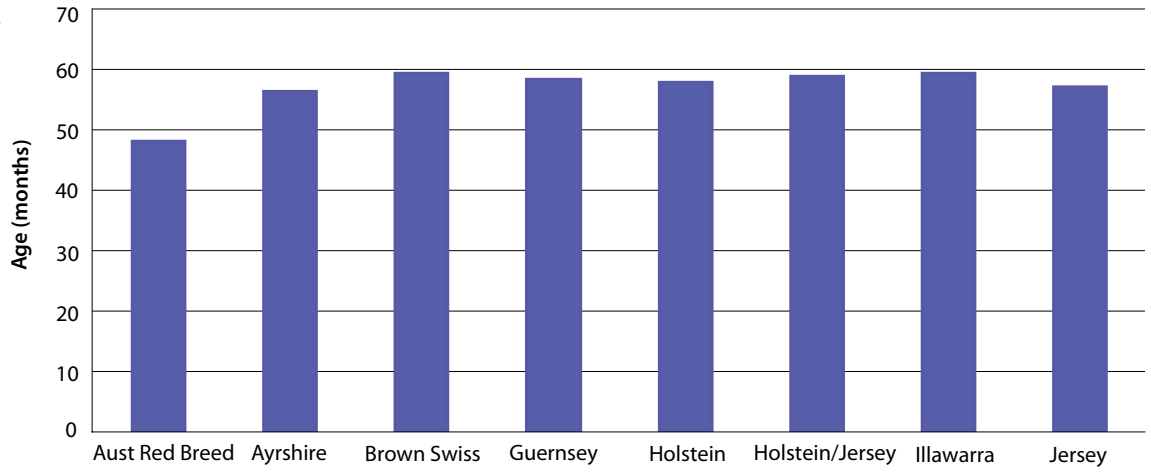



*Figure 1: Distribution of breeds.*

*Figure 2: Average age at Calving.*




31% of the Holstein herd is at least 6 years of age, 30% of the Jersey herd is at least 6 years of age

*Figure 3: Age distribution of herd recorded cows.*

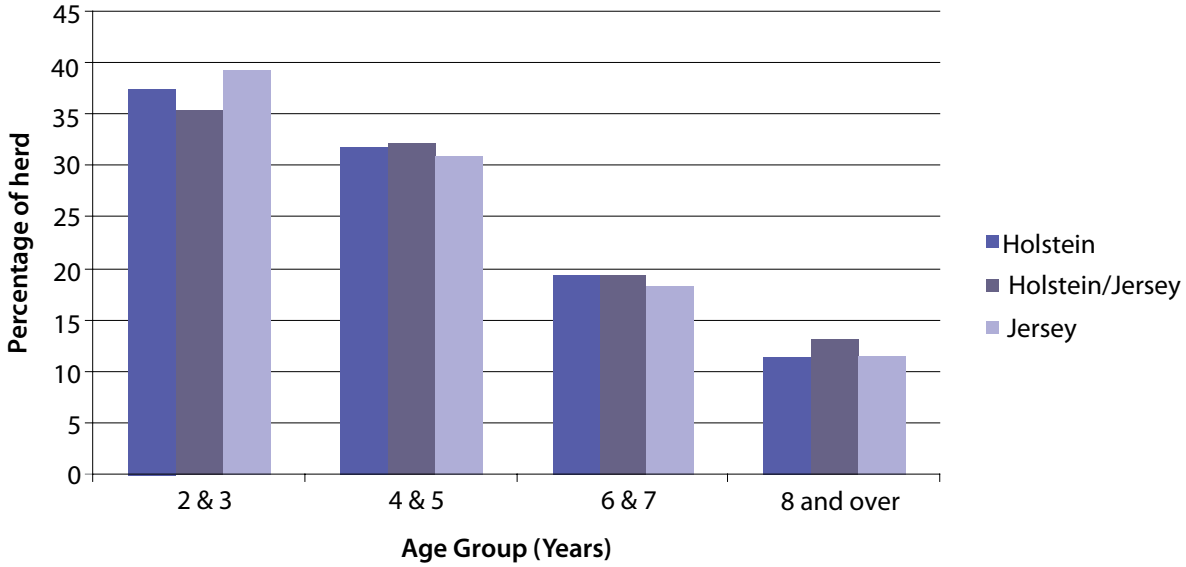


Table 9: Production averages by breed, age group, mating type and registration.

| Breed | Type | Number of cows | Production averages | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Milk litres | Fat % | Fat kg | Protein % | Protein kg | Lactation length days |
| Holstein | 2-year old | 61,136 | 6,411 | 3.82 | 245 | 3.28 | 210 | 332 |
| | 3-year old | 66,657 | 7,087 | 3.84 | 272 | 3.31 | 234 | 332 |
| | Mature cow | 227,243 | 7,538 | 3.91 | 295 | 3.27 | 247 | 325 |
| | Total | 355,036 | 7,259 | 3.88 | 282 | 3.28 | 238 | 327 |
| | Artifically bred | 245,072 | 7,435 | 3.87 | 288 | 3.28 | 244 | 330 |
| | Naturally bred | 109,964 | 6,867 | 3.91 | 269 | 3.28 | 225 | 323 |
| | Pure bred | 58,048 | 8,149 | 3.78 | 308 | 3.22 | 262 | 348 |
| | Grade | 296,988 | 7,086 | 3.91 | 277 | 3.29 | 233 | 324 |
| Jersey | 2-year old | 11,074 | 4,688 | 4.78 | 224 | 3.67 | 172 | 319 |
| | 3-year old | 10,267 | 5,082 | 4.85 | 246 | 3.75 | 190 | 314 |
| | Mature cow | 34,714 | 5,392 | 4.83 | 260 | 3.73 | 201 | 310 |
| | Total | 56,055 | 5,196 | 4.82 | 251 | 3.73 | 194 | 313 |
| | Artifically bred | 37,667 | 5,283 | 4.88 | 258 | 3.75 | 198 | 313 |
| | Naturally bred | 18,388 | 5,020 | 4.71 | 236 | 3.67 | 184 | 313 |
| | Pure bred | 13,719 | 5,564 | 4.89 | 272 | 3.75 | 209 | 326 |
| | Grade | 42,336 | 5,077 | 4.80 | 244 | 3.72 | 189 | 309 |
| Holstein/Jersey Cross | 2-year old | 4,246 | 5,298 | 4.39 | 233 | 3.52 | 186 | 315 |
| | 3-year old | 3,518 | 5,863 | 4.42 | 259 | 3.57 | 209 | 311 |
| | Mature cow | 14,933 | 6,241 | 4.40 | 275 | 3.51 | 219 | 305 |
| | Total | 22,697 | 6,006 | 4.40 | 264 | 3.52 | 212 | 308 |
| | Artifically bred | 10,552 | 6,254 | 4.43 | 277 | 3.55 | 222 | 309 |
| | Naturally bred | 12,145 | 5,790 | 4.38 | 254 | 3.49 | 202 | 307 |
| | Pure bred | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Grade | 22,697 | 6,006 | 4.40 | 264 | 3.52 | 212 | 308 |
| Guernsey | 2-year-old | 183 | 5,094 | 4.29 | 219 | 3.39 | 173 | 328 |
| | 3-year-old | 252 | 5,387 | 4.35 | 234 | 3.42 | 184 | 330 |
| | Mature cow | 781 | 5,734 | 4.31 | 247 | 3.44 | 197 | 325 |
| | Total | 1,216 | 5,566 | 4.32 | 240 | 3.43 | 191 | 327 |
| | Artifically bred | 627 | 5,815 | 4.38 | 255 | 3.43 | 200 | 334 |
| | Naturally bred | 589 | 5,300 | 4.24 | 225 | 3.43 | 182 | 318 |
| | Pure bred | 273 | 5,457 | 4.28 | 234 | 3.36 | 183 | 340 |
| | Grade | 943 | 5,597 | 4.33 | 242 | 3.45 | 193 | 323 |
| Ayrshire | 2-year-old | 475 | 4,683 | 4.20 | 197 | 3.39 | 159 | 317 |
| | 3-year-old | 658 | 5,226 | 4.14 | 216 | 3.44 | 180 | 312 |
| | Mature cow | 1,681 | 5,902 | 4.08 | 241 | 3.37 | 199 | 311 |
| | Total | 2,814 | 5,538 | 4.11 | 228 | 3.39 | 188 | 312 |
| | Artifically bred | 1,541 | 5,732 | 4.14 | 237 | 3.42 | 196 | 315 |
| | Naturally bred | 1,273 | 5,303 | 4.07 | 216 | 3.35 | 177 | 310 |
| | Pure bred | 839 | 6,030 | 4.11 | 248 | 3.35 | 202 | 325 |
| | Grade | 1,975 | 5,329 | 4.11 | 219 | 3.40 | 181 | 307 |

69% of herd-recorded Holsteins, 67% of herd-recorded Jerseys, 46% of herd-recorded Holstein-Jersey crosses and 91% of herd-recorded Australian Red Breeds were bred via Artificial Insemination

Table 9: Production averages by breed, age group, mating type and registration (continued).

| Breed | Type | Number of cows | Production averages | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Milk litres | Fat % | Fat kg | Protein % | Protein kg | Lactation length days |
| Illawarra | 2-year-old | 702 | 5,737 | 4.04 | 232 | 3.34 | 191 | 329 |
| | 3-year-old | 1,053 | 5,833 | 4.06 | 237 | 3.41 | 199 | 319 |
| | Mature cow | 3,335 | 6,600 | 3.97 | 262 | 3.30 | 218 | 315 |
| | Total | 5,090 | 6,322 | 4.00 | 253 | 3.32 | 210 | 318 |
| | Artifically bred | 2,529 | 6,617 | 3.95 | 262 | 3.30 | 218 | 320 |
| | Naturally bred | 2,561 | 6,031 | 4.04 | 244 | 3.35 | 202 | 315 |
| | Pure bred | 1,752 | 6,687 | 3.95 | 264 | 3.28 | 220 | 320 |
| | Grade | 3,338 | 6,131 | 4.03 | 247 | 3.34 | 205 | 316 |
| Unknown Breed | 2-year-old | 4,379 | 5,696 | 3.97 | 226 | 3.33 | 190 | 320 |
| | 3-year-old | 4,895 | 6,296 | 3.95 | 248 | 3.35 | 211 | 318 |
| | Mature cow | 53,501 | 6,350 | 4.02 | 255 | 3.34 | 212 | 315 |
| | Total | 62,775 | 6,300 | 4.01 | 253 | 3.34 | 210 | 315 |
| | Artifically bred | 1,616 | 6,805 | 3.88 | 264 | 3.32 | 226 | 325 |
| | Naturally bred | 61,159 | 6,287 | 4.02 | 252 | 3.34 | 210 | 315 |
| | Pure bred | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Grade | 62,775 | 6,300 | 4.01 | 253 | 3.34 | 210 | 315 |
| Aust. Red Breed | 2-year-old | 2,395 | 5,472 | 4.17 | 228 | 3.42 | 187 | 318 |
| | 3-year-old | 2,326 | 6,102 | 4.09 | 250 | 3.47 | 212 | 313 |
| | Mature cow | 4,272 | 6,356 | 4.11 | 261 | 3.46 | 220 | 310 |
| | Total | 8,993 | 6,055 | 4.11 | 249 | 3.45 | 209 | 313 |
| | Artifically bred | 8,223 | 6,089 | 4.12 | 251 | 3.46 | 210 | 313 |
| | Naturally bred | 770 | 5,689 | 4.05 | 230 | 3.39 | 193 | 308 |
| | Pure bred | 879 | 7,429 | 3.83 | 284 | 3.45 | 256 | 328 |
| | Grade | 8,114 | 5,906 | 4.15 | 245 | 3.45 | 204 | 311 |
| Brown Swiss | 2-year-old | 568 | 5,287 | 4.10 | 217 | 3.44 | 182 | 340 |
| | 3-year-old | 726 | 5,732 | 4.00 | 229 | 3.42 | 196 | 322 |
| | Mature cow | 2,239 | 6,510 | 4.04 | 263 | 3.42 | 223 | 325 |
| | Total | 3,533 | 6,154 | 4.04 | 249 | 3.43 | 211 | 327 |
| | Artifically bred | 2,263 | 6,154 | 4.11 | 253 | 3.45 | 212 | 327 |
| | Naturally bred | 1,270 | 6,153 | 3.92 | 241 | 3.39 | 209 | 326 |
| | Pure bred | 1,042 | 6,313 | 4.03 | 254 | 3.44 | 217 | 340 |
| | Grade | 2,491 | 6,087 | 4.05 | 246 | 3.42 | 208 | 321 |
| Other Breeds | 2-year-old | 74 | 5,012 | 4.00 | 200 | 3.32 | 166 | 337 |
| | 3-year-old | 85 | 5,422 | 3.88 | 211 | 3.32 | 180 | 321 |
| | Mature cow | 307 | 5,401 | 4.16 | 225 | 3.35 | 181 | 316 |
| | Total | 466 | 5,343 | 4.14 | 219 | 3.36 | 179 | 320 |
| | Artifically bred | 203 | 6,134 | 3.84 | 236 | 3.30 | 203 | 332 |
| | Naturally bred | 263 | 4,732 | 4.31 | 204 | 3.39 | 160 | 312 |
| | Pure bred | 47 | 4,328 | 4.05 | 175 | 3.25 | 141 | 339 |
| | Grade | 419 | 5,457 | 4.08 | 223 | 3.35 | 183 | 318 |

| Table 10: 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 | 3 | 8 | 11 | 10 | 9 | 13 | 20 | 16 | 6 | 2 | 1 |
| New South Wales | 6 | 8 | 10 | 9 | 9 | 8 | 9 | 10 | 9 | 7 | 6 | 6 |
| Queensland | 7 | 9 | 10 | 10 | 10 | 9 | 9 | 7 | 8 | 7 | 6 | 6 |
| South Australia | 5 | 7 | 11 | 11 | 9 | 7 | 7 | 10 | 14 | 9 | 6 | 4 |
| Tasmania | 1 | 2 | 5 | 5 | 2 | 1 | 6 | 36 | 30 | 11 | 2 | 1 |
| Western Australia | 8 | 10 | 13 | 10 | 8 | 6 | 6 | 9 | 11 | 8 | 6 | 6 |
| Australia | 3 | 4 | 9 | 10 | 9 | 8 | 11 | 18 | 15 | 7 | 3 | 3 |
| Victorian regions | | | | | | | | | | | | |
| Northern | 1 | 2 | 10 | 13 | 7 | 3 | 7 | 23 | 21 | 9 | 2 | 1 |
| Eastern | 1 | 2 | 7 | 9 | 7 | 8 | 17 | 25 | 16 | 6 | 1 | 1 |
| Western | 1 | 4 | 8 | 11 | 17 | 17 | 14 | 12 | 9 | 4 | 2 | 1 |

| 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 | 58,048 | 8,149 | 3.78 | 308 | 3.22 | 262 | 348 |
| Jersey | 13,719 | 5,564 | 4.89 | 272 | 3.75 | 209 | 326 |
| Guernsey | 273 | 5,457 | 4.28 | 234 | 3.36 | 183 | 340 |
| Ayrshire | 839 | 6,030 | 4.11 | 248 | 3.35 | 202 | 325 |
| Illawarra | 1,752 | 6,687 | 3.95 | 264 | 3.28 | 220 | 320 |
| Aust Red Breed | 879 | 7,429 | 3.83 | 284 | 3.45 | 256 | 328 |
| Brown Swiss | 1,042 | 6,313 | 4.03 | 254 | 3.44 | 217 | 340 |
| Total | 76,552 | 7,586 | 3.99 | 298 | 3.32 | 250 | 342 |

| 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 | 46,687 | 8,214 | 3.77 | 310 | 3.22 | 265 | 348 |
| Jersey | 10,903 | 5,655 | 4.89 | 276 | 3.75 | 212 | 325 |
| Guernsey | 156 | 5,695 | 4.23 | 241 | 3.34 | 190 | 342 |
| Ayrshire | 458 | 6,358 | 4.04 | 257 | 3.33 | 212 | 329 |
| Illawarra | 900 | 7,046 | 3.86 | 272 | 3.24 | 228 | 327 |
| Aust Red Breed | 827 | 7,496 | 3.82 | 287 | 3.45 | 258 | 328 |
| Brown Swiss | 690 | 6,357 | 4.04 | 257 | 3.45 | 219 | 342 |
| Total | 60,621 | 7,685 | 3.98 | 302 | 3.33 | 254 | 343 |

# National Herd Recording Statistics 2010-2011

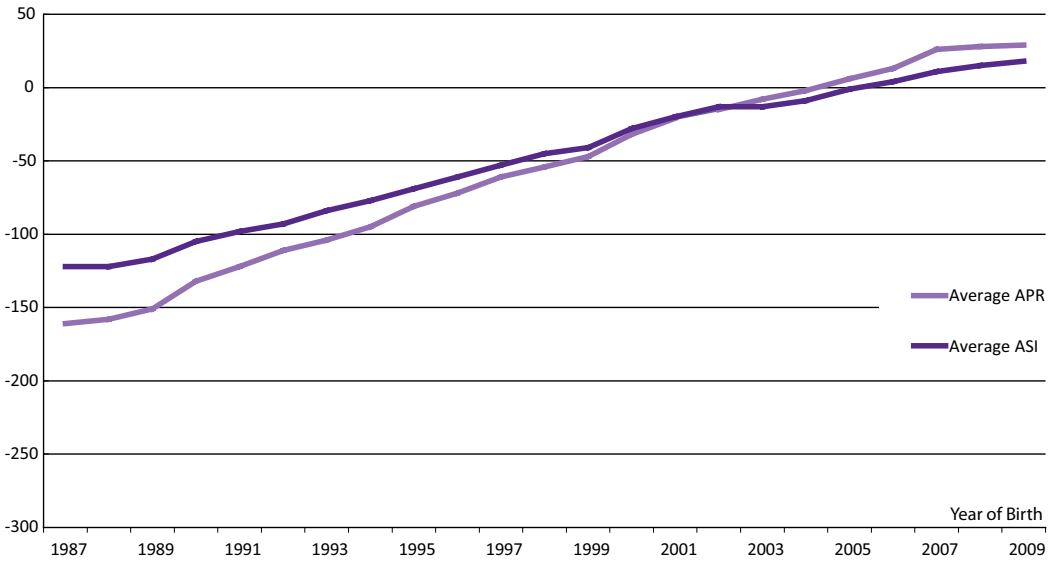
The production of protein by Victorian herd recorded cows has lifted by almost 20% since 1990.

Over the past decade, 32% of productivity gains achieved have been the result of genetic improvement.

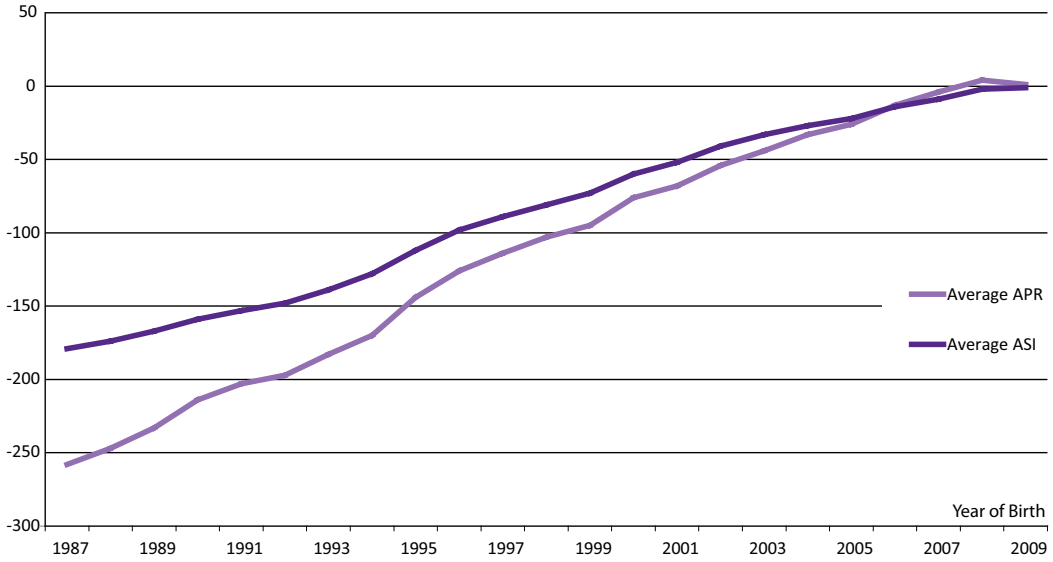
Table 13: Victorian production averages 1930/1931 – 2010/2011.

| 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 |
| 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 |
| 2010/2011 | 2,036 | 428,660 | 211 | 6,588 | 4.1 | 268 | 3.4 | 222 |

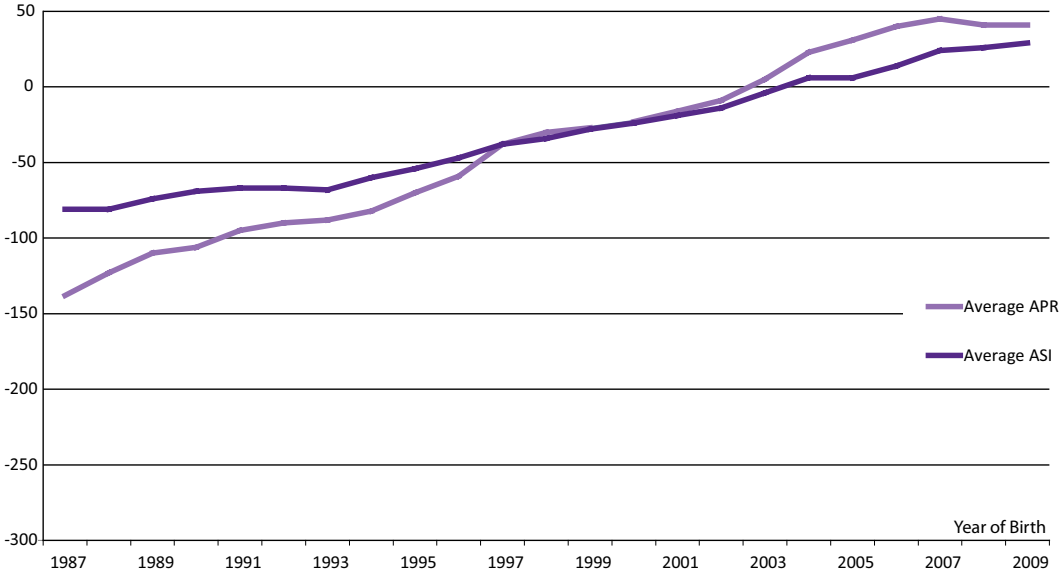
# 2011 Australian Breeding Values – Genetic Trends




*Holstein Cows*
*Ave APR & ASI*
*by year of birth.*




*Jersey Cows*
*Ave APR & ASI*
*by year of birth.*




*Red Breed Cows*
*Ave APR & ASI*
*by year of birth.*

*Data for other breeds available from ADHIS*

# 2011 Australian Breeding Values – Good Bulls Guide

THE Good Bulls GUIDE

## Holstein Profit (Aug 2011)

| PROFIT RANK | BULL ID | BULL NAME | GENETIC CODES | GENOMICS INCLUDED | AUSTRALIAN PROVEN OR INTERNATIONAL | PROFIT | | PRODUCTION | | | | | LONGEVITY | | TYPE | | | SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | PROFIT $ | RELIABILITY | PRODUCTION | RELIABILITY | AUSTRALIAN DAUGHTERS | AUSTRALIAN HERDS | FOREIGN DAUGHTERS FIRST | SURVIVAL | RELIABILITY | OVERALL TYPE | MAMMARY SYSTEM | RELIABILITY | |
| 1 | **ROUMARE** | ROUMARE | | | A | **332** | 88 | 261 | 94 | 206 | 58 | | 107 | 77 | 108 | 107 | 92 | CRV |
| 2 | **29HO12470** | INDIJKS BABYLON | | | A | **295** | 77 | 198 | 84 | 70 | 33 | | 104 | 62 | 102 | 102 | 74 | ABS |
| 3 | **USEAGE** | KAARMONA CALEB | | | A | **269** | 79 | 206 | 86 | 92 | 45 | | 106 | 64 | 100 | 106 | 76 | GAC |
| 4 | **DELSANTO** | MANNA FARM DEL SANTO | | g | A | **266** | 77 | 240 | 86 | 83 | 39 | | 102 | 57 | 113 | 110 | 62 | GAC |
| 5 | **7H9321** | RALMA GOLD CROWN | | | I | **263** | 56 | 173 | 65 | | | 328 | 107 | 51 | 106 | 106 | 62 | WWS |
| 6 | **29HO13664** | MORNINGVIEW LEVI | | | I | **263** | 56 | 165 | 63 | | | 154 | 106* | 55 | 105 | 104 | 61 | ABS |
| 7 | **GGGUARINI** | GUARINI-ET | TV | | I | **262** | 56 | 163 | 64 | | | 142 | 107* | 52 | 111 | 112 | 61 | ABS |
| 8 | **VOUSTERMAN** | VOUSTER | | | I | **256** | 59 | 189 | 71 | | | 105 | 102 | 48 | 102 | 100 | 59 | AGR |
| 9 | **NZGMINTED** | FAIRMOUNT MINT-EDITION | | | I | **253** | 61 | 193 | 69 | | | 86 | 103 | 43 | 102 | 103 | 63 | LIC |
| 10 | **CBTIERGAN** | BALLYCAIRN TIERGAN | TLTV | | I | **251** | 57 | 173 | 68 | | | 58 | 107 | 47 | 110 | 111 | 61 | ALT |
| 11 | **HOACRESEIGHT** | CROCKETT-ACRES EIGHT | | | I | **248** | 58 | 146 | 69 | | | 94 | 107 | 49 | 101 | 100 | 61 | SEM |
| 12 | **ROSEO** | ROSEO JOC | | | I | **247** | 74 | 139 | 77 | | | 19191 | 105* | 68 | 98 | 103 | 74 | AGR |
| 13 | **GGGUNNAR** | GUNNAR-ET | | TV | I | **243** | 56 | 163 | 64 | | | 117 | 107* | 49 | 114 | 115 | 58 | ABS |
| 14 | **ALTACROCKETT** | CROCKETT-ACRES OTTO | TVTL | | I | **239** | 54 | 143 | 63 | | | 105 | 106 | 50 | 103 | 101 | 60 | ALT |
| 15 | **29HO13053** | GRAN-J OMAN MCCORMIC | | | I | **237** | 55 | 121 | 64 | | | 136 | 107 | 51 | 107 | 106 | 60 | ABS |
| 16 | **QUINTY** | KAARMONA CARBASAR | | g | A | **236** | 77 | 189 | 82 | 77 | 31 | | 102 | 66 | 107 | 106 | 79 | GAC |
| 17 | **FARMDEALER** | MANNA FARM DEALER | CV | | A | **236** | 78 | 180 | 86 | 88 | 39 | | 107 | 62 | 110 | 114 | 75 | ALT |
| 18 | **PORT** | PERFECT PARTNERS LANCELOT PORT | | | A | **234** | 76 | 189 | 84 | 70 | 31 | | 104 | 60 | 102 | 104 | 72 | ABS |
| 19 | **29HO11932** | MORNINGVIEW LEGEND | | | I | **234** | 55 | 170 | 64 | | | 129 | 106 | 50 | 106 | 102 | 59 | ABS |
| 20 | **COGENTTWIST** | COGENT TWIST | TLTV | | I | **233** | 59 | 166 | 70 | | | 79 | 106 | 48 | 106 | 102 | 62 | ALT |
| 21 | **GDDANILLO** | DANILLO | | | I | **233** | 60 | 148 | 70 | | | 232 | 107 | 48 | 111 | 112 | 63 | CRV |
| 22 | **NZGMILLER** | GLENMEAD MILLER | | | A | **232** | 82 | 162 | 91 | 123 | 26 | | 102 | 66 | 98 | 99 | 77 | LIC |
| 23 | **CRVOMANOSCAR** | D OSCAR | | | I | **232** | 58 | 146 | 67 | | | 158 | 104* | 52 | 103 | 100 | 58 | CRV |
| 24 | **ALTACOLIN** | BARKLY DONOR COLIN | CV | g | A | **231** | 98 | 192 | 99 | 2544 | 423 | | 104 | 94 | 102 | 102 | 96 | ALT |
| 25 | **14H4929** | LONG-LANGS OMAN OMAN | | | I | **229** | 55 | 189 | 63 | | | 106 | 105 | 51 | 110 | 107 | 60 | WWS |
| 26 | **SHOTTLE** | PICSTON SHOTTLE | | g | A | **228** | 95 | 79 | 98 | 471 | 170 | | 110 | 87 | 110 | 108 | 96 | ABS |
| 27 | **GGTABLEAU** | TABLEAU | | | I | **227** | 57 | 143 | 65 | | | 137 | 106 | 50 | 107 | 109 | 62 | ABS |
| 28 | **FULLHOUSE** | JOYLEY 9 10 JACK | | g | A | **224** | 76 | 145 | 84 | 63 | 36 | | 105 | 58 | 107 | 101 | 63 | GAC |
| 29 | **GGMASCOL** | MASCOL | TV | | I | **223** | 77 | 100 | 82 | | | 13047 | 108 | 73 | 101 | 101 | 81 | ABS |
| 30 | **GGJARDIN** | JARDIN | | | A | **221** | 90 | 194 | 97 | 420 | 67 | | 103 | 78 | 102 | 106 | 91 | ABS |
| 31 | **VOSAC** | VOSAC MAN | | | I | **221** | 59 | 131 | 71 | | | 90 | 106 | 47 | 106 | 106 | 59 | AGR |
| 32 | **BOSMEGASTUD** | AMBZED P MEGASTUD | | | I | **220** | 57 | 176 | 68 | | | 77 | 105 | 40 | 101 | 103 | 61 | CRV |
| 33 | **DICAST** | DAMAR LEON | TV | g | A | **220** | 81 | 136 | 88 | 84 | 40 | | 107 | 65 | 103 | 99 | 76 | GAC |
| 34 | **MEDALLION** | BUNDALONG MARKS MEDALLION | | g | A | **219** | 76 | 172 | 84 | 79 | 33 | | 105 | 60 | 116 | 119 | 69 | GAC |
| 35 | **NZGSONFLAME** | THOMPSONS GR FLAME S2F | | | I | **217** | 56 | 160 | 68 | | | 86 | 104 | 39 | 97 | 97 | 62 | LIV |
| 36 | **NZGWARDSBANQ** | EDWARDS BANQ OVATION | | | I | **217** | 52 | 134 | 66 | | | 69 | 103 | 36 | 95 | 99 | 60 | LIC |
| 37 | **NZGLANDSPER** | WESTLAND CL JASPER | | | I | **216** | 58 | 154 | 69 | | | 94 | 104 | 41 | 90 | 91 | 63 | LIV |
| 38 | **ORANA** | BUSHLEA WAVES FABULON | | g | A | **213** | 76 | 184 | 82 | 59 | 27 | | 103 | 62 | 109 | 108 | 71 | GAC |
| 39 | **JEEBIN** | COUNTRY ROAD LADINO JADIN | | | A | **213** | 80 | 149 | 87 | 84 | 43 | | 106 | 65 | 108 | 108 | 78 | GAC |
| 40 | **RANNESLOV** | RANNESLOV | | | I | **212** | 71 | 174 | 70 | | | 9561 | 104 | 69 | 107 | 107 | 64 | VIK |
| 41 | **29HO12572** | GALASTAR BLUESKY | | | I | **212** | 61 | 113 | 71 | | | 129 | 108 | 50 | 110 | 108 | 65 | ABS |
| 42 | **GOLDSMITH** | TOPSPEED H POTTER | TVTL | g | A | **211** | 97 | 227 | 99 | 1882 | 310 | | 102 | 90 | 96 | 92 | 95 | GAC |
| 43 | **WISEPOINT** | KIRK ANDREWS JACKADINO | RC | g | A | **208** | 83 | 111 | 89 | 95 | 38 | | 107 | 70 | 111 | 113 | 82 | GAC |
| 44 | **29HO13568** | LUNCREST MILLARD | TV | | I | **206** | 56 | 74 | 64 | | | 150 | 110* | 55 | 109 | 108 | 61 | ABS |
| 45 | **VIKNASTGARD** | NASTGARDEN | TVTL | | I | **204** | 57 | 167 | 67 | | | 118 | 102* | 50 | 109 | 101 | 56 | VIK |
| 46 | **NZGHOSANNA** | VALDEN HI APPLAUSE S2F | | | I | **204** | 63 | 165 | 75 | | | 49790 | 103 | 46 | 89 | 88 | 71 | LIC |
| 47 | **NZGFROSTMAN** | PUKETIRO FROSTMAN S1F | | | I | **204** | 57 | 108 | 71 | | | 252 | 103 | 41 | 99 | 100 | 62 | LIC |
| 48 | **PIERRE** | TOP DECK KO PIERRE | | g | A | **203** | 95 | 159 | 98 | 845 | 177 | | 104 | 89 | 103 | 104 | 92 | CRV |
| 49 | **CARDINAL** | KAARMONA CARDINAL | TV | | A | **202** | 77 | 152 | 85 | 74 | 41 | | 107 | 62 | 114 | 112 | 74 | GAC |
| 50 | **NZGPASTURE** | LAKESIDE S D MEADOWS | | | I | **202** | 69 | 152 | 76 | | | 39637 | 103 | 52 | 100 | 95 | 73 | LIC |
| 51 | **HOMANIFOLD** | MAINSTREAM MANIFOLD | | | I | **201** | 55 | 136 | 64 | | | 148 | 105 | 51 | 106 | 105 | 61 | SEM |

*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 2011)

| | | | | | PROFIT | | PRODUCTION | | | | | LONGEVITY | | TYPE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | BULL ID | BULL NAME | GENOMICS INCLUDED | AUSTRALIAN PROVEN OR INTERNATIONAL | PROFIT $ | RELIABILITY | PRODUCTION $ | RELIABILITY | AUSTRALIAN DAUGHTERS | AUSTRALIAN HERDS | FOREIGN DAUGHTERS FIRST | SURVIVAL | RELIABILITY | OVERALL TYPE | MAMMARY SYSTEM | RELIABILITY | SOURCE |
| 1 | **SANDBLAST** | NOWELL SANDBLAST | | A | **321** | 74 | 270 | 80 | 58 | 21 | | 103 | 61 | 110 | 111 | 71 | AGR |
| 2 | **BOSMURMUR** | OKURA LIKA MURMUR S3J | | I | **272** | 57 | 210 | 69 | | | 86 | 105 | 37 | 103 | 102 | 52 | CRV |
| 3 | **ELTON** | CAIRNBRAE JACES ELTON | | A | **255** | 83 | 190 | 90 | 127 | 40 | | 106 | 67 | 106 | 106 | 80 | ABS |
| 4 | **VALERIAN** | KAARMONA VALERIAN | | A | **239** | 94 | 175 | 99 | 1357 | 252 | | 107 | 78 | 112 | 106 | 91 | GAC |
| 5 | **VANAHLEM** | PANNOO ABE VANAHLEM | | A | **233** | 68 | 160 | 72 | 40 | 21 | | 109 | 68 | 124 | 116 | 69 | ALT |
| 6 | **TAILBOARD** | NOWELL TARSAN | | A | **228** | 95 | 183 | 98 | 907 | 204 | | 104 | 86 | 109 | 105 | 86 | GAC |
| 7 | **NZGGLENGENI** | GLENHAVEN TGM GENIUS S3J | | I | **227** | 53 | 206 | 67 | | | 79 | 103 | 32 | 96 | 98 | 55 | LIC |
| 8 | **AMBMANHATTEN** | OKURA MANHATTEN-ET SJ3 | | A | **221** | 97 | 215 | 99 | 1399 | 212 | | 102 | 92 | 101 | 96 | 95 | CRV |
| 9 | **GAINFUL** | KAARMONA GALEAO | | A | **215** | 77 | 158 | 83 | 75 | 39 | | 103 | 65 | 112 | 110 | 72 | GAC |
| 10 | **LARFALOT** | LIGHTWOOD LUCRATIVE | | A | **215** | 82 | 158 | 89 | 97 | 48 | | 106 | 66 | 111 | 106 | 75 | GAC |
| 11 | **NZGLYNTRADE** | LYNBROOK TRADEMARK S3J | | I | **213** | 58 | 227 | 69 | | | 78 | 100 | 40 | 96 | 91 | 58 | LIC |
| 12 | **NZGJOSKIN** | TIRONUI OM JOSKIN | | I | **208** | 56 | 192 | 67 | | | 66 | 103 | 36 | 103 | 99 | 56 | LIV |
| 13 | **NZGGREENY** | GREENPARK OM TARGET | | I | **200** | 57 | 206 | 68 | | | 70 | 102 | 37 | 104 | 101 | 57 | LIV |
| 14 | **CRVCANAAN** | CANAAN NEVVY PIONEER | | I | **200** | 48 | 187 | 63 | | | 56 | 102 | 26 | 98 | 98 | 49 | CRV |
| 15 | **VIKHULK** | DJ HULK | | I | **193** | 52 | 161 | 65 | | | 134 | 102 | 41 | 93 | 96 | 47 | VIK |
| 16 | **29JE3487** | CAL-MART JACE SIMBA | | I | **183** | 57 | 133 | 69 | | | 103 | 104 | 46 | 108 | 100 | 55 | ABS |
| 17 | **NZGTRADESMAN** | LYNBROOK TRADESMAN S3J | | I | **176** | 58 | 210 | 69 | | | 85 | 100 | 40 | 91 | 88 | 59 | LIC |
| 18 | **35JJV24** | TAWA GROVE MAUNGA ET S3J | | I | **174** | 68 | 163 | 75 | | | 10502 | 102 | 48 | 99 | 98 | 67 | CRV |
| 19 | **TBONE** | RICHIES JACE TBONE A364 | | I | **174** | 60 | 119 | 69 | | | 4182 | 106 | 57 | 118 | 110 | 64 | AGR |
| 20 | **JURACE** | KAARMONA JURACE | | A | **171** | 76 | 101 | 85 | 71 | 27 | | 106 | 57 | 104 | 103 | 64 | WWS |
| 21 | **NZGCAPSTAN** | SOUTH LAND CAPSTAN SJ3 | | I | **168** | 66 | 167 | 75 | | | 6164 | 101 | 45 | 92 | 96 | 62 | LIC |
| 22 | **NZGEDIFY** | DONALDS EDIFY | | I | **168** | 63 | 126 | 75 | | | 1805 | 102 | 43 | 93 | 98 | 55 | LIC |
| 23 | **NEKEY** | DENSON DALE N E KEYSTONE | | A | **167** | 76 | 138 | 84 | 56 | 21 | | 103 | 58 | 110 | 105 | 71 | ABS |
| 24 | **BOSZEALOT** | WHITMORE MAN ZEALOT | | I | **164** | 58 | 172 | 69 | | | 87 | 102 | 39 | 106 | 101 | 57 | CRV |
| 25 | **PROMVIEW** | PROM VIEW ASTOUND POWER | | A | **164** | 80 | 163 | 86 | 82 | 29 | | 101 | 66 | 106 | 112 | 79 | ALT |
| 26 | **NZLLIKABULL** | MITCHELLS LIKABULL SJ3 | | A | **164** | 91 | 152 | 97 | 468 | 50 | | 103 | 77 | 95# | 96# | 64 | LIC |
| 27 | **BOSCANYON** | SUNSET CANYON ANTHEMS ALLSTAR | | I | **164** | 51 | 150 | 65 | | | 125 | 103 | 44 | 108 | 106 | 57 | CRV |
| 28 | **NZGOKURAICE** | OKURA DE ICE | | I | **161** | 56 | 132 | 69 | | | 89 | 103 | 35 | 92 | 96 | 57 | LIC |
| 29 | **VIKJANTE** | DJ JANTE | | I | **160** | 58 | 109 | 67 | | | 140 | 102* | 46 | 106 | 102 | 54 | VIK |
| 30 | **NZGDODDY** | MAGHERACANON DODDY GR | | A | **158** | 89 | 141 | 96 | 312 | 49 | | 100 | 73 | 101# | 100# | 66 | LIC |
| 31 | **SARATOGA** | BERCAR SARATOGA | | A | **158** | 93 | 88 | 97 | 433 | 143 | | 105 | 84 | 106 | 103 | 85 | GAC |
| 32 | **BOSDJZUMA** | DJ ZUMA | | I | **157** | 53 | 81 | 65 | | | 108 | 104* | 45 | 103 | 104 | 50 | CRV |
| 33 | **BETAHEAD** | KINGS VILLE OUTDO | | A | **156** | 80 | 118 | 87 | 80 | 36 | | 104 | 63 | 111 | 102 | 72 | GAC |
| 34 | **NZGIVINS** | OKURA LFB IVINS | | I | **154** | 55 | 123 | 70 | | | 115 | 104 | 34 | 103 | 102 | 55 | LIC |
| 35 | **VISIONARY** | DENSON DALE MJ VISIONARY | | A | **152** | 77 | 128 | 84 | 62 | 23 | | 102 | 62 | 113 | 105 | 75 | ABS |
| 36 | **NZGBANGA** | LOXLEA ACL OSWALD | | A | **151** | 84 | 131 | 91 | 98 | 27 | | 101 | 69 | 94 | 97 | 79 | LIC |
| 37 | **BADGER** | BEULAH TARANAK BADGER | | A | **148** | 98 | 78 | 99 | 2450 | 373 | | 107 | 94 | 111 | 104 | 96 | GAC |
| 38 | **SPIRITUAL** | RIVERSIDE SPIRIT | | A | **147** | 83 | 81 | 92 | 234 | 56 | | 106 | 61 | 110 | 104 | 69 | AGR |
| 39 | **JEJEEP** | KAARMONA JEEP | | A | **146** | 83 | 98 | 90 | 130 | 47 | | 105 | 68 | 103 | 100 | 83 | SEM |
| 40 | **NZGPANLINK** | WILLIAMS PAN LINK | | I | **145** | 65 | 133 | 76 | | | 13403 | 101 | 48 | 86 | 92 | 65 | LIC |
| 41 | **JEPERIMETER** | ROCK ELLA PERIMITER | | A | **145** | 98 | 120 | 99 | 2928 | 477 | | 104 | 97 | 101 | 96 | 96 | SEM |
| 42 | **PASSIVE** | BERCAR PASSIVE | | A | **145** | 97 | 106 | 99 | 1035 | 217 | | 105 | 91 | 105 | 103 | 92 | GAC |

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**

# 2011 Australian Breeding Values – Good Bulls Guide

## Red Breeds Profit (Aug 2011)

| | | | | | PROFIT | | PRODUCTION | | | | | LONGEVITY | | TYPE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | BULL ID | BULL NAME | GENETIC CODES | AUSTRALIAN PROVEN OR INTERNATIONAL | PROFIT $ | RELIABILITY | PRODUCTION | RELIABILITY | AUSTRALIAN DAUGHTERS | AUSTRALIAN HERDS | FOREIGN DAUGHTERS FIRST | SURVIVAL | RELIABILITY | OVERALL TYPE | MAMMARY SYSTEM | RELIABILITY | SOURCE |
| 1 | **RANDERSDAVID** | R DAVID | TVTL | I | **243** | 66 | 154 | 74 | | | 4377 | 111 | 58 | 112 | 111 | 58 | VIK |
| 2 | **ATOSIKKO** | ASMO TOSIKKO | | I | **225** | 55 | 169 | 68 | | | 156 | 102* | 43 | 105 | 109 | 50 | VIK |
| 3 | **PETERSLUND** | PETERSLUND 1213 | | A | **223** | 94 | 113 | 98 | 599 | 89 | | 109 | 86 | 109# | 97# | 74 | VIK |
| 4 | **ARBBOBDOWN** | LODEN BOB | | A | **217** | 81 | 182 | 89 | 93 | 46 | | 105 | 62 | 110 | 104 | 71 | GAC |
| 5 | **GEDB02263** | G EDBO | | I | **215** | 60 | 202 | 70 | | | 159 | 104 | 49 | 102 | 100 | 50 | VIK |
| 6 | **NZGBRODY** | CARMELGLEN BRODY | | I | **211** | 52 | 145 | 69 | | | 99 | 109* | 35 | | | | LIC |
| 7 | **ARBBONJOVI** | BOSGOWAN BON JOVI | | A | **198** | 79 | 140 | 87 | 103 | 54 | | 104 | 61 | 111 | 104 | 71 | GAC |
| 8 | **ARBLEX** | BEAULANDS LORRY | | A | **197** | 73 | 134 | 81 | 69 | 36 | | 107 | 56 | 118 | 108 | 57 | GAC |
| 9 | **RBANGKOK** | R BANGKOK | | I | **191** | 61 | 107 | 73 | | | 3844 | 108 | 55 | 110 | 108 | 55 | VIK |
| 10 | **FASTRUP** | R FASTRUP | | I | **187** | 58 | 130 | 68 | | | 104 | 104* | 43 | 115 | 108 | 50 | VIK |
| 11 | **GGDRAGOMIR** | DRAGOMIR | | A | **183** | 68 | 142 | 82 | 50 | 15 | | 104# | 52 | 114# | 110# | 54 | ABS |
| 12 | **BOTANS3829** | BOTANS 3829 | | A | **180** | 93 | 118 | 98 | 633 | 85 | | 106 | 84 | 102# | 101# | 69 | VIK |
| 13 | **ARBMAWSON** | BOSGOWAN MAWSON | | A | **180** | 74 | 114 | 83 | 64 | 41 | | 104 | 55 | 111 | 109 | 64 | GAC |
| 14 | **GGHEXER** | HEXER | | I | **174** | 53 | 172 | 64 | | | 112 | 104 | 43 | 117 | 113 | 48 | ABS |
| 15 | **VFOSKE** | V FOSKE | | I | **173** | 55 | 149 | 68 | | | 188 | 102* | 43 | 108 | 104 | 49 | VIK |
| 16 | **AASHEIM10183** | AASHEIM 10183 | | I | **172** | 60 | 137 | 73 | | | 779 | 102* | 43 | 105 | 98 | 44 | GAC |
| 17 | **ARBLIPPMAN** | BOSGOWAN LIPPMAN | | A | **172** | 71 | 118 | 81 | 75 | 29 | | 103 | 50 | 106 | 105 | 48 | GAC |
| 18 | **NZLCHALLENGE** | KILFENNAN CHALLENGE | | A | **171** | 92 | 112 | 98 | 607 | 57 | | 106 | 75 | 107# | 100# | 74 | LIC |
| 19 | **NZGROYALPHIL** | SANROSA ROYAL PHILLIP | | I | **170** | 60 | 134 | 75 | | | 2599 | 105 | 41 | 103 | 102 | 70 | LIC |
| 20 | **VIKHASLEV** | R HASLEV | | I | **170** | 58 | 102 | 68 | | | 129 | 106* | 43 | 115 | 110 | 51 | VIK |

## Guernsey Profit (Aug 2011)

| | | | | | PROFIT | | PRODUCTION | | | | | LONGEVITY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | **TIRESFORD** | TIRESFORD PEDRO | | I | **154** | 55 | 108 | 67 | | | 136 | 103 | 45 | AGR |
| 2 | **WYSNIDER** | SNIDERS OPTION AARON | | I | **141** | 59 | 140 | 68 | | | 222 | 101 | 47 | WYA |
| 3 | **BOSGEO** | GOLDEN J LES GEORGE | | I | **134** | 41 | 111 | 52 | | | 49 | 102 | 28 | CRV |
| 4 | **AUSFAYSBOO** | KOOKABURRA FAYS BOO | | A | **124** | 70 | 75 | 85 | 72 | 27 | | 107 | 46 | WAS |
| 5 | **7G394** | PENNY LANE ROYAL OAK TURLEY | | I | **120** | 50 | 129 | 59 | | | 118 | 102 | 38 | WWS |

## Brown Swiss Profit (Aug 2011)

| | | | | | PROFIT | | PRODUCTION | | | | | LONGEVITY | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | A | **152** | 68 | 90 | 83 | 61 | 22 | | 104 | 45 | ABS |
| 2 | **SWISSEDGE** | ELM PARK JUPITERS EDGE | | A | **92** | 84 | 43 | 95 | 282 | 75 | | 100 | 68 | GAC |
| 3 | **GGVID** | VIDEO | | A | **50** | 60 | 29 | 79 | 58 | 11 | | | | ABS |

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**

# 2011 Australian Breeding Values – Top Herd Summary

| Top 2% of Holstein herds based on herd average APR, August 2011 ABVs | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| APR rank | Owner name | Address | Post code | National Herd ID | No. of cows on file | No. of current cows | APR | ASI | Prot. ABV | Prot % ABV | Milk ABV | Fat ABV | Fat % ABV |
| 1 | MCRAE SA & NM | NAMBROK | 3847 | 2B0043B | 568 | 198 | 119 | 94 | 15 | 0.05 | 465 | 18 | -0.02 |
| 2 | ANDERSON WR & BL | KONGWAK | 3951 | 540597R | 1161 | 254 | 111 | 88 | 15 | 0.03 | 468 | 16 | -0.07 |
| 3 | HENRY TW & TC | TINAMBA | 3859 | 240108T | 2127 | 537 | 104 | 85 | 14 | 0.06 | 396 | 14 | -0.04 |
| 4 | KITCHEN J M SONS | BOYANUP | 6237 | W00248F | 1692 | 454 | 100 | 83 | 12 | 0.06 | 327 | 17 | 0.04 |
| 5 | WALDER RG & CA | HEATHMERE | 3305 | 840404W | 764 | 153 | 97 | 71 | 11 | 0.06 | 271 | 13 | 0.03 |
| 6 | HOGG, A & J | BIGGARA | 3707 | C00155U | 763 | 163 | 96 | 82 | 11 | 0.1 | 217 | 15 | 0.08 |
| 7 | DICKSON BJ & JL | TERANG | 3264 | 850441U | 2459 | 586 | 93 | 74 | 13 | 0.03 | 432 | 11 | -0.1 |
| 8 | PERRETT RJ & HE | KONGWAK | 3951 | 540624E | 556 | 216 | 92 | 78 | 16 | -0.01 | 630 | 10 | -0.24 |
| 9 | UEBERGANG IS & JA | GORAE WEST | 3305 | 840391T | 272 | 65 | 89 | 69 | 12 | 0.03 | 400 | 10 | -0.1 |
| 10 | COOK, R.J. & J.P. | WANGARATTA | 3678 | C00276F | 1705 | 536 | 88 | 73 | 12 | 0.04 | 352 | 14 | -0.02 |
| 10 | PARRISH TJ & LR | BARRENGARRY | 2577 | N00544Q | 1135 | 193 | 88 | 67 | 10 | 0.05 | 257 | 14 | 0.05 |
| 12 | WAGNER G | WINNALEAH | 7265 | T63SWAA | 3135 | 232 | 85 | 71 | 11 | 0.02 | 391 | 16 | -0.01 |
| 12 | COATES JD | ALLESTREE | 3305 | 840377M | 982 | 230 | 85 | 67 | 11 | 0.02 | 382 | 13 | -0.05 |
| 12 | MACQUEEN AD & GL | YANAKIE | 3960 | 540139F | 1168 | 239 | 85 | 64 | 10 | 0.05 | 279 | 10 | -0.03 |
| 15 | SPRUNT RG | KAARIMBA | 3635 | C01125S | 375 | 161 | 84 | 58 | 11 | 0 | 392 | 11 | -0.08 |
| 16 | LAMBALK J.W. & J.C. | TIMBOON | 3268 | 650274B | 1122 | 402 | 83 | 66 | 10 | 0.06 | 256 | 10 | -0.01 |
| 17 | KERRINS FAMILY TRUST | KATUNGA | 3640 | C00455G | 652 | 79 | 80 | 65 | 9 | 0.03 | 285 | 16 | 0.06 |
| 18 | HEYWOOD, BO & LD | YARRAGON | 3823 | 240851B | 941 | 200 | 79 | 60 | 9 | 0.07 | 193 | 10 | 0.02 |
| 18 | GALE D.P. & J.F. | TIMBOON | 3268 | 650188L | 2629 | 538 | 79 | 54 | 9 | 0.04 | 274 | 8 | -0.06 |
| 18 | WILLCOCKS P & I | YANKALILLA | 5203 | S00047P | 820 | 193 | 79 | 48 | 10 | -0.04 | 432 | 11 | -0.11 |
| 21 | MOSCRIPT JB ME CJ & JM | LEONGATHA | 3953 | 540300E | 761 | 197 | 78 | 50 | 11 | -0.03 | 447 | 8 | -0.16 |
| 22 | COSTER B & M | RIPPLEBROOK | 3818 | 981306Q | 1586 | 819 | 76 | 62 | 9 | 0.05 | 234 | 11 | 0.02 |
| 22 | JOHNSTON RSN & LJ | BUNDALAGUAH | 3851 | 240024G | 1706 | 563 | 76 | 62 | 10 | 0.02 | 357 | 12 | -0.04 |
| 22 | FLEMMING GM & PE | TOCUMWAL | 2714 | 4A1373N | 1176 | 321 | 76 | 62 | 10 | 0.03 | 324 | 12 | -0.02 |
| 22 | GLASGOW DC & EJ | BENA | 3946 | 540564F | 530 | 134 | 76 | 61 | 11 | 0.01 | 381 | 11 | -0.08 |
| 26 | COCHRANE W & K | ROCHESTER | 3561 | CF0597Q | 105 | 62 | 75 | 71 | 13 | -0.01 | 485 | 15 | -0.08 |
| 27 | PRICE IH & SW | SANDY CREEK | 3695 | 4A1330A | 899 | 296 | 74 | 59 | 8 | 0.05 | 219 | 12 | 0.04 |
| 28 | WOODBINE HOLDINGS P/L | LANCASTER | 3620 | B20571E | 2211 | 722 | 73 | 61 | 11 | 0.02 | 360 | 9 | -0.09 |
| 28 | FIELDING R & D | SOUTH RIANA | 7316 | T34GFJM | 1413 | 368 | 73 | 52 | 7 | 0.05 | 160 | 10 | 0.05 |
| 28 | PEKIN JF, A & JG | TERANG | 3264 | 850550V | 1002 | 258 | 73 | 51 | 8 | 0.03 | 247 | 10 | -0.01 |
| 31 | MEADE JF & MB | CUDGEE | 3265 | 841874T | 742 | 145 | 72 | 44 | 8 | -0.02 | 335 | 11 | -0.05 |
| 32 | NICHOLLS RJ & HJ | STANHOPE | 3623 | C00691E | 733 | 120 | 71 | 53 | 9 | 0.02 | 272 | 11 | -0.01 |
| 33 | LIA TO & PM PTY LTD | NILMA NORTH | 3821 | 540184S | 597 | 204 | 70 | 63 | 11 | -0.02 | 424 | 17 | -0.02 |
| 33 | WHITE KL & DM & RL | LEONGATHA STH | 3953 | 540605F | 1132 | 374 | 70 | 57 | 9 | 0.03 | 257 | 12 | 0.01 |
| 33 | KENNEDY R & M | SALE | 3850 | 240025J | 1361 | 206 | 70 | 54 | 10 | 0.01 | 346 | 10 | -0.07 |
| 36 | OANWAYJE FARMS | LONGWARRY | 3816 | 5C0049C | 1399 | 778 | 69 | 54 | 7 | 0.05 | 176 | 11 | 0.05 |
| 36 | HUTTON TF AND SONS | CAPEL | 6271 | W00088D | 1777 | 516 | 69 | 53 | 6 | 0.1 | 33 | 9 | 0.11 |
| 36 | TIMPERON DT & RN | BLUMONT | 7260 | T61STEH | 1259 | 439 | 69 | 49 | 6 | 0.05 | 130 | 12 | 0.1 |
| 36 | DERIX GM & ME | MAFFRA | 3860 | 2700031H | 673 | 114 | 69 | 41 | 5 | 0.06 | 67 | 9 | 0.09 |
| 40 | BATTY CG, CJ & MC | SMITHTON | 7330 | T14CBBM | 1073 | 298 | 68 | 50 | 6 | 0.05 | 144 | 12 | 0.08 |

# 2011 Australian Breeding Values – Top Herd Summary

| APR rank | Owner name | Address | Post code | National Herd ID | No. of cows o n file | No. of current cows | APR | ASI | Prot. ABV | Prot % ABV | Milk ABV | Fat ABV | Fat % ABV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41 | TWEDDLE SA | DARNUM | 3822 | 981058S | 1697 | 607 | 67 | 54 | 9 | 0.04 | 239 | 9 | -0.01 |
| 41 | WALKER AH & AR | YINNAR SOUTH | 3869 | 981403K | 452 | 92 | 67 | 47 | 6 | 0.04 | 161 | 11 | 0.07 |
| 41 | THORP RD | FOREST | 7330 | B07138K | 587 | 470 | 67 | 38 | 4 | 0.07 | 11 | 6 | 0.08 |
| 44 | RYAN BJ & PM | GRASMERE | 3281 | 842120F | 1278 | 349 | 65 | 53 | 9 | 0.01 | 340 | 10 | -0.07 |
| 44 | DOUGLAS JW & VL | LEITCHVILLE | 3567 | 4A2101S | 1918 | 551 | 65 | 48 | 8 | 0.02 | 257 | 8 | -0.04 |
| 44 | JELBART ML & BJ | LEONGATHA STH | 3953 | 540364W | 4153 | 784 | 65 | 45 | 6 | 0.06 | 88 | 8 | 0.06 |
| 44 | NAILER NL & BE MW & JC | RINGAROOMA | 7263 | T62SNDW | 654 | 91 | 65 | 42 | 5 | 0.05 | 80 | 10 | 0.09 |
| 44 | PORTEUS GD | SMITHTON | 7330 | T15APLF | 47 | 35 | 65 | 33 | 2 | 0.06 | -55 | 12 | 0.21 |
| 49 | AULT G.K. & J.M. | ROCHESTER | 3561 | C00857B | 649 | 174 | 64 | 54 | 9 | 0 | 335 | 13 | -0.02 |
| 49 | FEHRING B.N. NO 2 (MEAD) | COHUNA | 3568 | 4A2159B | 948 | 190 | 64 | 52 | 8 | 0.03 | 221 | 11 | 0.02 |
| 49 | CASHMORE DB & RA | TIMBOON | 3268 | 650288O | 1421 | 358 | 64 | 41 | 7 | 0.02 | 235 | 7 | -0.04 |
| **Top 2% of Jersey herds based on herd average APR, August 2011 ABVs** | | | | | | | | | | | | | |
| 1 | HOEY DM & L | KATUNGA | 3640 | 240699A | 945 | 247 | 102 | 83 | 9 | 0.18 | 1 | 16 | 0.3 |
| 2 | GLENNEN & CO C | TERANG | 3264 | 850588C | 2372 | 460 | 98 | 77 | 5 | 0.25 | -182 | 17 | 0.51 |
| 3 | WORBOYS R. & A. | KOTTA | 3565 | C00993T | 1002 | 240 | 75 | 54 | 4 | 0.17 | -116 | 11 | 0.32 |
| 4 | MCMANUS, B.T.& C.A. | BAMAWM | 3561 | C00935T | 646 | 109 | 62 | 48 | 4 | 0.17 | -119 | 8 | 0.27 |
| 5 | WYSS TRADING P/L | BOORCAN | 3265 | 850604I | 990 | 150 | 60 | 50 | 3 | 0.1 | -30 | 16 | 0.33 |
| 6 | DUPLIEX, DM & WH | COBRAM | 3644 | C00430M | 321 | 49 | 57 | 45 | 2 | 0.15 | -139 | 11 | 0.35 |
| 7 | MILLBROOK ELLIS & CO | TALLANDOON | 3701 | 4A1307S | 622 | 32 | 50 | 41 | 6 | 0.07 | 80 | 3 | -0.02 |
| 8 | SEALEY NJ & V | HENTY | 3312 | 840537O | 718 | 261 | 46 | 40 | 1 | 0.19 | -210 | 8 | 0.37 |
| 9 | MOSCRIPT JB ME CJ & JM | LEONGATHA | 3953 | 540300E | 893 | 81 | 45 | 27 | -1 | 0.15 | -249 | 11 | 0.46 |
| **Top 2% of Red Breeds herds based on herd average APR, August 2011 ABVs** | | | | | | | | | | | | | |
| Ayrshire | | | | | | | | | | | | | |
| 1 | PENFOLD DA & VE | WILLOW GROVE | 3825 | 5A0045H | 246 | 31 | -87 | -61 | -11 | 0.02 | -449 | -13 | 0.09 |
| Illawarra | | | | | | | | | | | | | |
| 1 | CARSON, J.H. & G.L. | IRREWILLIPE | 3249 | 740170H | 45 | 34 | 1 | 9 | 6 | -0.09 | 410 | 0 | -0.25 |
| 2 | SALISBURY ANTHONY J | RATHDOWNEY | 4287 | C00042H | 381 | 33 | -35 | -25 | -4 | 0 | -161 | -7 | 0 |
| AussieRed | | | | | | | | | | | | | |
| 1 | RALEIGH J | TIMBOON | 3268 | 650244V | 575 | 188 | 79 | 39 | 5 | 0.05 | 70 | 7 | 0.06 |
| **Top 2% of Guernsey herds based on herd average APR, August 2011 ABVs** | | | | | | | | | | | | | |
| Guernsey | | | | | | | | | | | | | |
| 1 | KEYWYN FARMS - FIEBIGER | ANGASTON | 5353 | S00193L | 492 | 44 | 22 | 2 | 0 | 0.02 | -29 | -1 | 0.02 |
| **Top 2% of Brown Swiss herds based on herd average APR, August 2011 ABVs** | | | | | | | | | | | | | |
| Brown Swiss | | | | | | | | | | | | | |
| 1 | BRADLEY JH | DAYBORO | 4521 | Q00345Q | 284 | 144 | -15 | -13 | -2 | -0.02 | -37 | -2 | 0 |
| 1 | FIECHTNER KJ & JC | CLIFTON | 4361 | EGCT00L | 199 | 32 | -15 | -14 | -1 | -0.05 | 13 | -3 | -0.08 |