

# Controlling herd improvement and AI costs

## Fact Sheet 1: August 2016

### What to do

- Keep using AI. Herd bulls are not a cheaper option and daughters produce 52kg less fat and protein, on average.
- Use Good Bulls. The top 100 bulls range in price from about \$10 to \$85 so there are Good Bulls for every budget.
- Keep herd recording. It's the tool to help you make better herd decisions.
- Use enough semen. About 6 straws of conventional semen for every replacement needed in 3 years.
- Don't waste semen using poor technique or joining cows that aren't suitable.

In the face of weaker milk prices, dairy farmers are taking a close look at all areas of the budget, including herd costs such as AI and herd recording.

### Genetics underpins profit

AI and herd testing accounts for about 2% of total farm costs (Dairy Farm Monitor Project 2014/15). But it builds one of the largest assets in the business, the herd.

Genetic improvement is permanent in that no matter what the season brings, the genetic value of an animal stays constant. Investment in genetics compounds from generation to generation as traits are passed on from dam to daughter.

As a group, the higher genetic merit animals within your herd contribute the most to the net profit of the farm business.

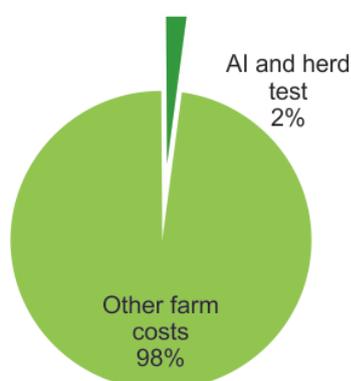


Figure 1: Percentage of total farm costs. Only 2.1% - no bull. Dark green: AI and herd test, Light green: other farm costs, Dairy Farm Monitor 2014/15.

### AI doesn't cost more than herd bulls

For a 400 cow herd, 700 doses of semen for three rounds of AI could be purchased from the Good Bulls Guide 2016 for \$10,500<sup>1</sup>.

For a 400 cow seasonal/split calving herd, 12 paddock bulls are required. Over a 100-day period, bulls are estimated to cost \$900 per bull, or \$10,800.<sup>2</sup>

But the daughters of AI sires produce more and last longer in the herd, making them more profitable. AI-bred cows produced 52kg combined fat and protein more per lactation than those bred from paddock bulls (ADHIS 2015).

The Feeding the Genes study (Morton, 2016) concluded in all pasture-based feeding systems, the daughters of high BPI sires last longer than daughters of low BPI sires. More detail is available in the Feeding the Genes factsheet.

*“Daughters of bulls that have a Balanced Performance Index (BPI) of 200 are predicted to be \$100 more profitable per cow per year than daughters sired by bulls with a BPI of 100.”*

#### Footnotes:

1. 50% conception rate, 3 rounds AI, at a blend price of \$15 per dose.
2. \$900 is an estimate \$400 'change-over costs' which are lease costs or the difference between purchasing a breeding bull and selling it at end of season. Remaining \$500 is feeding for 100 days, transport, vet, vaccinations.

## Good Bulls don't cost more

Good Bulls are those that meet minimum criteria for BPI, availability and reliability. There are Good Bulls to fit every budget.



In 2015, ADHIS summarised the relationship between BPI and recommended retail price of straws for 421 Holstein bulls with easily accessible recommended retail price information.

The average price is very similar between bulls grouped by genetic merit.

Higher BPI bulls don't always cost more. The top 100 BPI bulls ranged from \$10 to \$85 per straw. Paying more for semen doesn't mean the result will be more profitable replacements.

Speak to your adviser about packages from the Good Bulls Guide.

## Herd recording pays

Especially in difficult seasons, it is vital to know what cows are contributing to profitability – and what cows aren't. Herd recording gives you this information. Speak to your herd test centre about different herd recording options.

Josh Balcombe relies heavily on bought in feed so he uses herd recording to monitor each individual cow's performance and make sure she is paying her way in terms of milk response to supplementary feed. With a drought and milk price drop he culled cows mid-season.

- Can you afford to keep high cell count or poor performing cows this season?
- Do you know which cows are pregnant and which ones are ready to dry off?
- Do you want the flexibility of selling surplus heifers that are compliant with export protocols?

Herd recording provides vital information to make the accurate decisions required of a farm manager.

*"Without herd recording data, we would have just been guessing which cows to cull. A cow may look like a superstar but only be doing 10 or 15 Litres a day," Josh Balcombe.*



**"Good Bulls are available to meet every budget".**



*When the milk price dropped, ImProving Herds focus farmer Josh Balcombe culled cows mid-season based on herd recording data.*

## Use enough semen

It takes about six straws of conventional this season to produce every replacement needed in the herd in three years' time. This is based on an average conception rate of 50% and normal losses through pregnancy, birth, rearing and first calving. Less is required if sexed semen is used with a good quality program. Plan to use enough semen this season so your herd is ready to take advantage of improved conditions.

## Don't waste it

Once you've bought the semen, don't waste it by using poor AI technique or by joining unsuitable cows. Dairy Australia provides sound resources that can help improve reproductive performance.

## For more information

Go to [www.datagene.com.au](http://www.datagene.com.au) to download the Good Bulls App so you can check the genetic merit of bulls.

Go to [www.dairyaustralia.com.au](http://www.dairyaustralia.com.au) to look at how you can improve your herd's fertility

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## References

ADHIS, 2015. Australian Dairy Herd Imp. Report 14/15.

Morton, J., 2016. Feeding the Genes research commissioned by ADHIS.

Victorian Government and Dairy Australia, 2015. Dairy Farm Monitor 14/15.

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