# CONTROLLING HERD IMPROVEMENT AND AI COSTS

Australian Dairy Herd Improvement Scheme

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In the face of weakening milk prices, the topic of cost control is on the lips of many dairy farmers and their advisers. Like all areas of the budget, herd costs are under scrutiny. Let's take a closer look at the areas of Herd Recording and Artificial Insemination input costs.

## Genetics underpins profit

Genetic improvement is a significant contributor to improved productivity and is permanent and compounding. Similarly, a herd can take a long time to recover from poor genetic decisions. No matter what the season brings, the genetic value of an animal stays constant. As a group, the higher genetic merit animals within your herd contribute the most to the net profit of the farm business.

> *"High genetic merit bulls produce profit. For example, bulls that have an APR of 100 are $50 more profitable per year than bulls with an APR of 50. Genetic gain is permanent and compounds over time."*

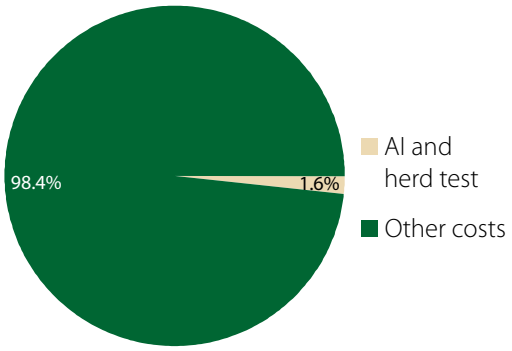


*Figure 1: Percentage of total farm costs. Only 1.6% – no bull!.*

The Victorian Department of Primary Industries Dairy Industry Farm Monitor Project 07/08 reports the average AI and herd test to be about 1.6% of total farm costs - a small percentage of costs to develop one of the farm's most valuable assets.

> *"On the surface, it looks easy. If you cut back the feed, you see the result in the vat. If you drop AI and Herd Test, the hidden financial impact could be significant. We're talking about a longer term investment."*

The question is, can you reduce Artificial Insemination and Herd Recording costs without impacting on the ability of the herd asset to perform this year and in the years to come?

## AI doesn't need to cost a fortune

- There were more than 250 different proven Holstein bulls sold in 2008. This is in addition to more than 50 bulls of other breeds.
- Australian Profit Rankings of these bulls ranged from -51 to +158 (-51 means $51 less profit per cow per year than average. +158 meaning $158 more profit per cow per year than the average).
- The price per dose of proven semen ranged from $12 to $120 but most bulls are sold for $18-$20.
- By paying more money, you not always getting a more profitable bull, as shown in Figure 2 (on next page). High genetic merit bulls are readily available throughout the price range. Bulls can be readily compared using their ABVs for important traits such as APR (profit), protein and fat yield, as well as survival, type, fertility and cell count.

> *"By paying more, you are not always getting a more profitable bull."*


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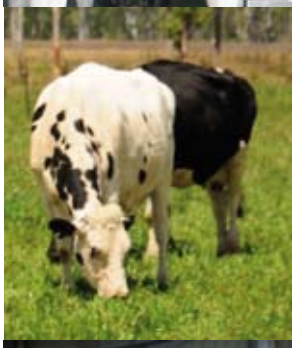


## Natural Service Bulls are not the cheaper option

- AI-bred cows are more profitable because they produce more milk solids and last in the herd for more lactations.
- Recent research shows that a dairy cow bred by AI is on average, $53 more profitable every year than it's naturally bred counterpart. For a 400-cow herd, that's an extra $21,000 pure profit every year (Haile Mariam, 2008).
- Genetic gain is permanent and compounds year-on-year. Losing one year of genetic gain is difficult to recover.

For a 400 cow herd, 700 doses of semen for three rounds of AI could be purchased in 2008 for $9,450. Assumes 25% progeny test and selecting from bulls in the top 10% APR list.[2]

For a 400 cow seasonal/split calving herd, 12 bulls are required. Over a 100-day period, bulls are estimated to cost $800 per bull, or $9,600.[1]

## Herd Recording pays

- Making accurate herd management decisions is critical when margins are tight. Can you afford to carry poor performing cows or high cell count cows? 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.

> *"Countdown Downunder estimates the benefit of lowering bulk milk cell count from 350,000 to 250,000 will return $55 per cow. At about $10 per cow, detecting high cell count cows through herd recording is a cheap option for making better decisions."*

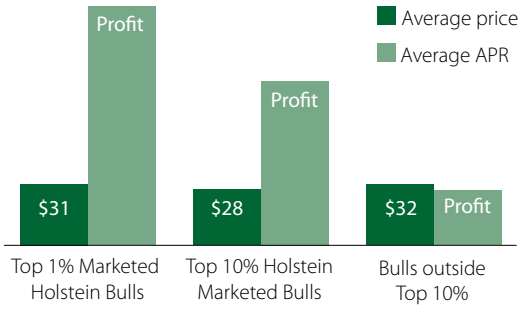


*Figure 2: Average price and average APR for holstein bulls marketed in 2008.*

## Actions

- Keep herd recording. It's the tool to help you make better herd decisions. Speak to your herd test centre about different herd recording options.
- Keep using AI. Natural bulls are not a cheaper option and in most cases are genetically inferior to the AI bulls available.
- Purchase only what you need. Make your initial purchase and top up if required.
- Herd recording herds can use progeny test semen to reduce the total semen purchase price.
- Speak to your breeding adviser about semen packages and bulk purchasing discounts.
- Go to www.incalf.com.au to look at how you can improve your herd's fertility. InCalf tools are available to analyse cost:benefit of different approaches.

*Footnotes:*

1. $800 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 $400 is feeding for 100 days, transport, vet, vaccinations.
2. 50% CR, 3 rounds AI, 175 PT at $6 + 525 at $16 = $9450. There are more than 30 bulls in the 12-20 price bracket that are in the top 10% for APR. Avg APR of this group is 92.

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Australian Dairy Farmers

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