

# Farmer tools designed to support genetic gain and breeding decisions

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Australian  
Dairy Herd  
Improvement  
Scheme

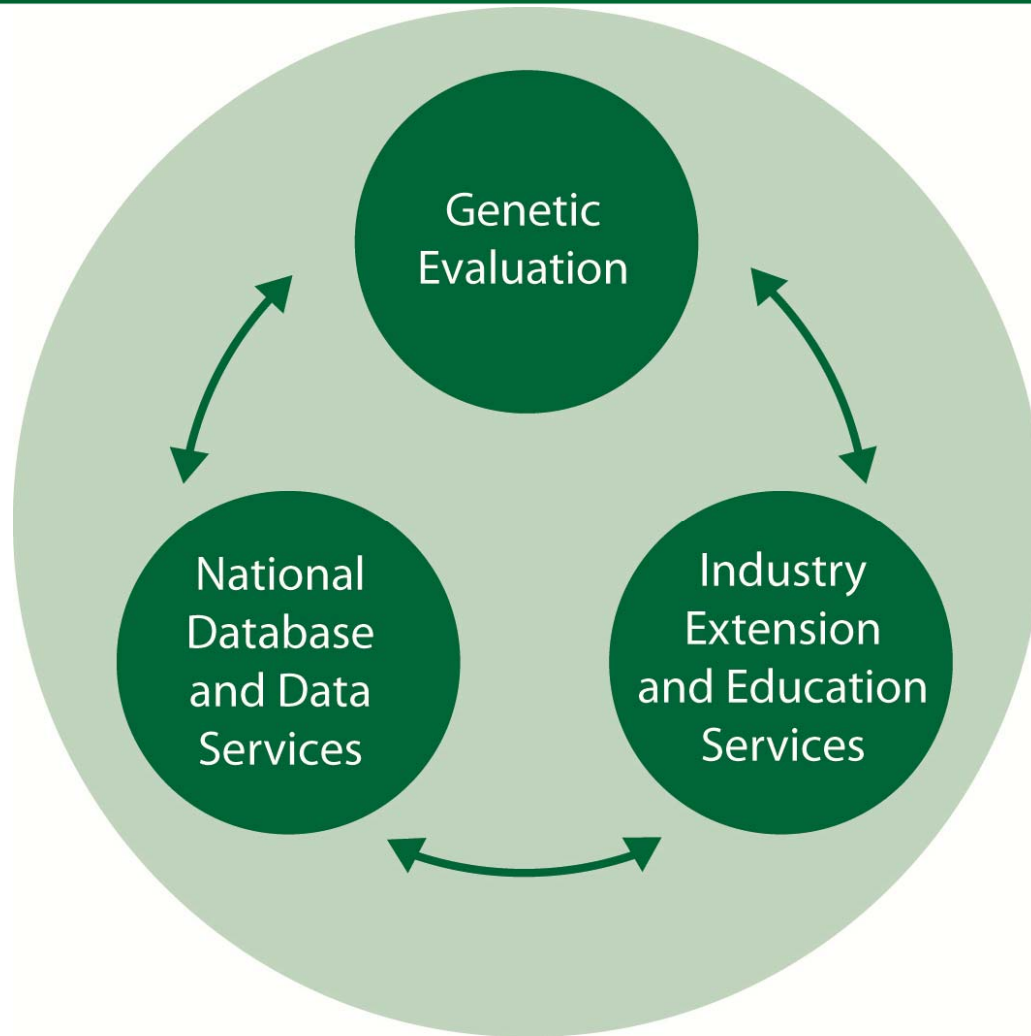
# National Statistics

- Total Dairy Farms 6,883 (49% herd recorded)
- Total Dairy Cows 1.6 million (44% herd recorded)
- Average Herd Size: 230 cows

(Source: Dairy Australia, 2011 and ADHIS, 2011)



# ADHIS is a National Evaluation Body



# How do farmers make breeding decisions?

- Ranking of Bulls on the national index (APR)
- Reliability of the proof (ABVs)
- Advise (various)
- Cost
- Genetic Merit for specific traits



*Farmers Individual Breeding Objective*

# Tools and current research



Top Bulls – Pick from the Guide



Develop your own index



Benchmark your rate of Genetic Gain

# Good Bulls Guide

- Top 1SD Bulls based on APR
- List ranked by;
  - APR
  - Production
  - Longevity (Survival)
  - Mastitis Resistance
  - Type
  - Reliability





# Holstein – APR (Profit) List



## Holstein Profit

PROFIT RANK	BULL ID	BULL NAME	GENETIC CODES	GENOMICS INCLUDED	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT		PRODUCTION		AUSTRALIAN DAUGHTERS	AUSTRALIAN HERDS	FOREIGN DAUGHTERS FIRST	SURVIVAL	RELIABILITY	OVERALL TYPE	MAMMARY SY	RELIABILITY	SOURCE
						PROFIT \$	RELIABILITY	PRODUCTION	RELIABILITY									
1	29H012470	INDIJKS BABYLON			A	289	76	197	84	70	33		104	62	102	102	74	ABS
2	USEAGE	KAARMONA CALEB			A	276	78	210	84	86	43		106	66	100	106	76	GAC
3	7H9321	RALMA GOLD CROWN			I	273	55	170	64			246	107	49	105	108	60	WWS
4	DELSANTO	MANNA FARM DEL SANTO		g	A	263	77	244	85	81	39		102	57	113	110	62	GAC
5	NZGMINTED	FAIRMOUNT MINT-EDITION			I	259	61	196	69			85	103	43	102	103	63	LIC
6	VOUSTERMAN	VOUSTER			I	249	59	184	71			105	102	47	101	100	59	AGR
7	ROSEO	ROSEO JOC			I	245	73	141	77			16089	105*	66	99	103	71	AGR
8	FARMDEALER	MANNA FARM DEALER	CV		A	239	77	195	84	80	38		107	63	110	114	75	ALT
9	CRVOMANOSCAR	D OSCAR			I	236	58	151	67			158	104*	52	101	100	58	CRV
10	ALTACROCKETT	CROCKETT-ACRES OTTO	TVTL		I	236	54	146	63			104	105	49	103	102	60	ALT
11	29H011932	MORNINGVIEW LEGEND			I	232	54	170	64			127	106	50	105	102	58	ABS
12	COGENTTWIST	COGENT TWIST	TLTV		I	232	58	169	69			68	106	47	106	103	61	ALT
13	HOACRESEIGHT	CROCKETT-ACRES EIGHT			I	232	58	136	69			94	106	48	100	100	61	SEM
14	FEARNOT	INVERWOOD INFORMER FORMOST 786	TV	g	A	231	67	205	72	36	20		104	56	109	112	61	GAC
15	29H013053	GRAN-J OMAN MCCORMIC			I	230	55	114	64			136	107	50	107	106	60	ABS
16	14H4929	LONG-LANGS OMAN OMAN			I	226	55	186	63			106	105	51	109	107	60	WWS
17	ALTACOLIN	BARKLY DONOR COLIN	CV	g	A	225	98	193	99	2361	402		104	93	103	103	96	ALT
18	NZLNORTHSEA	SCOTTS NORTHSEA			A	224	90	147	97	645	65		101	73	92#	93#	73	LIC



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# Jersey - Reliability List



## Jersey Reliability

BULL ID	BULL NAME	GENETIC CODES	AUSTRALIAN PROVEN OR INTERNATIONAL	PROFIT		LONGEVITY		TYPE					
				PROFIT \$	RELIABILITY	SURVIVAL	RELIABILITY	OVERALL TYPE	MAMMARY SYSTEM	RELIABILITY	FERTILITY	RELIABILITY	SOURCE
AMBMANHATTEN	OKURA MANHATTEN-ET SJ3		A	220	97	102	92	101	96	95	100	91	CRV
VALERIAN	KAARMONA VALERIAN		A	218	93	107	78	113	106	91	102	82	GAC
TAILBOARD	NOWELL TARSAN		A	206	94	103	84	109	105	86	98	88	GAC
NZLLIKABULL	MITCHELLS LIKABULL SJ3		A	160	91	102	76	95 <sup>#</sup>	96 <sup>#</sup>	64	101	84	LIC
SARATOGA	BERCAR SARATOGA		A	148	93	105	84	106	103	85	102	84	GAC
JEPERIMETER	ROCK ELLA PERIMETER		A	144	98	104	97	101	96	96	104	97	SEM
BADGER	BEULAH TARANAK BADGER		A	142	97	107	92	111	104	96	99	94	GAC
PASSIVE	BERCAR PASSIVE		A	140	96	104	90	105	103	92	101	91	GAC
14J365	O.F. MANNIX REBEL		A	132	93	106	85	110	106	91	96	75	WWS
CLEARCUT	JARNDIE CLEARCUT		A	127	93	102	82	100	100	88	106	83	GAC



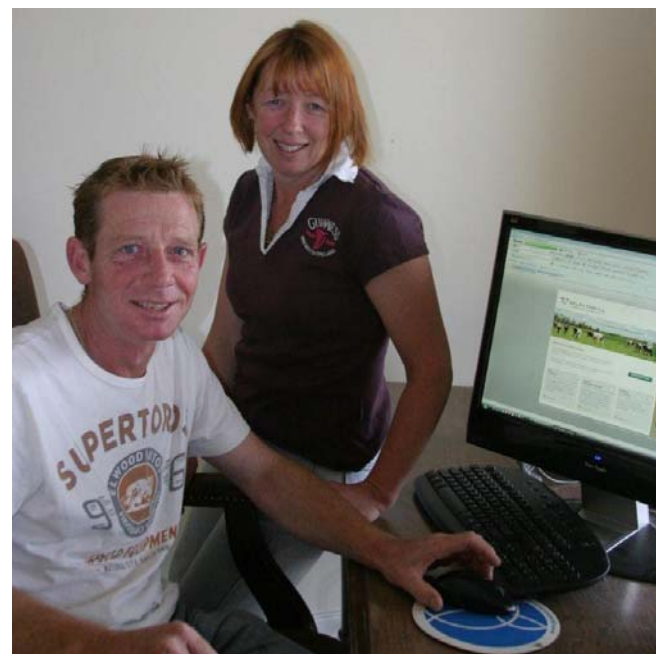
# Selectabull



**SELECTABULL**

An Australian Dairy Herd Improvement Scheme Tool

- A simple on-line tool to help farmers develop their breeding objective and find the bulls they want
- Breeding Objective Tool
- Simple/Customised 'search'
- the ability to save and recall for future reference





# SELECTABULL

An Australian Dairy Herd Improvement Scheme Tool



## Comprehensive Search

This search function allows you to build a customised index which meets the needs of your farm.

Select your priority traits by ticking the box beside each trait name. Then, decide how important the trait is to you on a scale of -10 to +10. More than 0 means more of a trait (ie taller stature). Less than 0 means less of a trait (ie shorter stature).

If you want to review your breeding objective or move to the quick search, simply select from the menu on the left of the screen.



Breeding Objective

Quick Search

Breeding Objective

Quick Search

Comprehensive Search

Results

Home

## Welcome

Genetics is a  
objective and

Prepared by:

Breeding Objective

Last Updated:

Australian Breeding

Production

☒ ASI

☐ Protein %

Non-Production M

☐ Milking Speed

☒ Survival

☒ Daughter Fertility

Non-Production Ty

☒ Overall Type

☐ Udder Texture

## What is ADHIS?

The Australian  
Scheme (ADHIS)  
Australia's national  
genetic evaluation  
dairyfarmers

Find out more

## Results Listing

Bull ID

ABV Summary

ABV All Traits

Bull ID	Bull Name	APR	Reliability	Protein kg	Fat kg	Milk	Pr
JACKAROO	KIRK ANDREWS TALENTED JACKSON	78	62	28	19	607	
ORANA	BUSHLEA WAVES FABULON	76	68	29	33	697	
HOGOLDWYN	BRAEDALE GOLDWYN	74	87	25	30	632	
YUKON	CARENDA YUKON	74	69	24	53	575	
GOLDSMITH	TOPSPEED H POTTER	72	81	31	41	421	
WILLCOY	MANNA FARM DECOY	72	74	27	25	713	
DONANTE	HILL VALLEY DON ANDANTE ET	71	83	35	37	1,501	
INFORMER	HILL VALLEY BASAR ACME	70	98	21	33	537	
MYLUCK	JOAX MYLUCK	70	76	21	36	334	
JOCKO	JOCKO BESN	68	97	39	21	1,528	
SOLVIT	KIRK ANDREWS FORCEFUL	68	72	25	31	567	



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# Genetic Progress Report

# GENETIC PROGRESS REPORT

- Benchmark individual herds genetic gain
- Provide a 'picture' of the herd at a genetic level
- Allow farmers to reflect on breeding decisions

## Your Herd's Genetic Snapshot

Your Holstein herd is ranked 900 out of 2000 Holstein milk recording herds for PROFIT (herd average APR of 30).

The bulls you selected over the last 10 years produced Holstein cows with genetic trends that have:

### Increased

Profit

Mastitis Resistance

### Remained Stable

Fertility

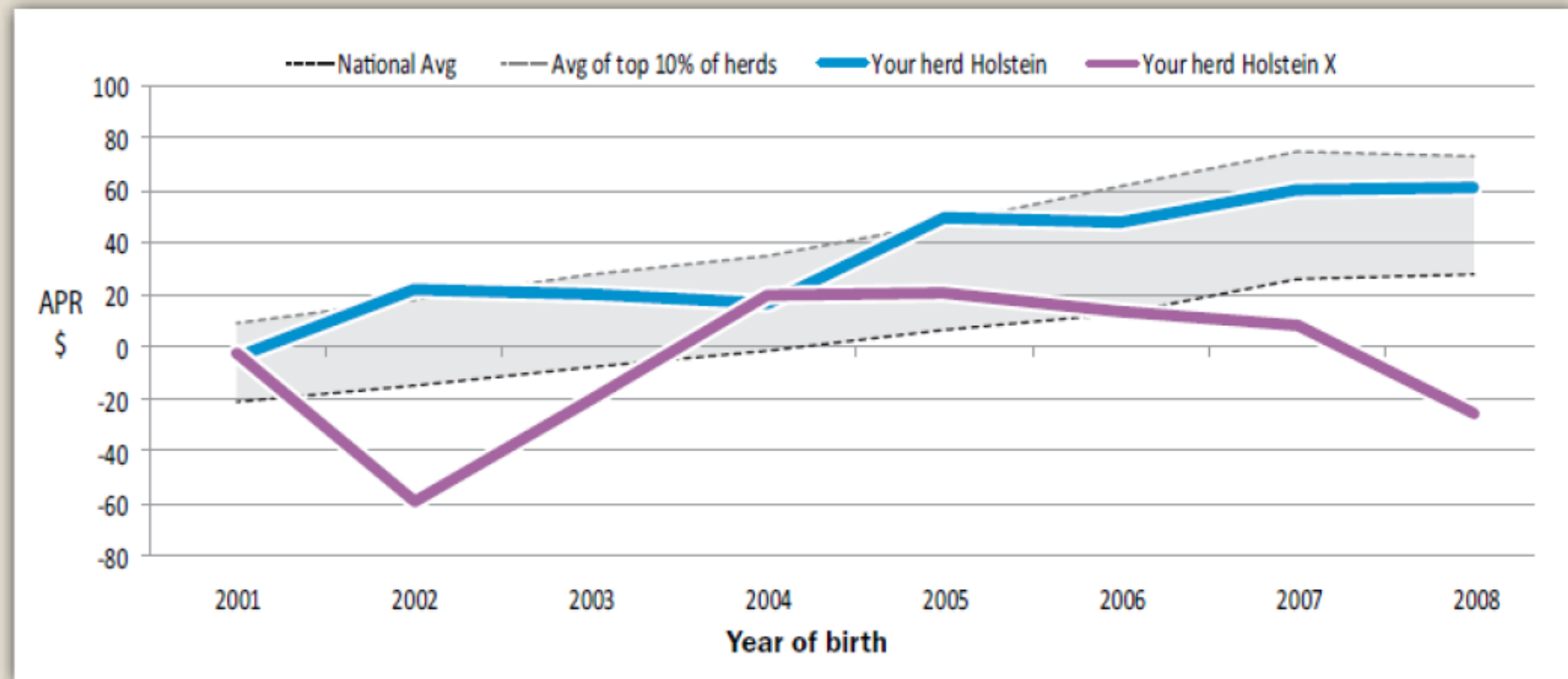
Longevity

### Reduced

# Genetic Progress Report

# GENETIC PROGRESS REPORT

## Genetic Progress for Profit



The Australian Profit Ranking (APR) reflects the economic drivers of net profitability for the range of dairy farming systems in Australia. The traits considered are production, survival, milking speed, temperament, cell count, liveweight and fertility.



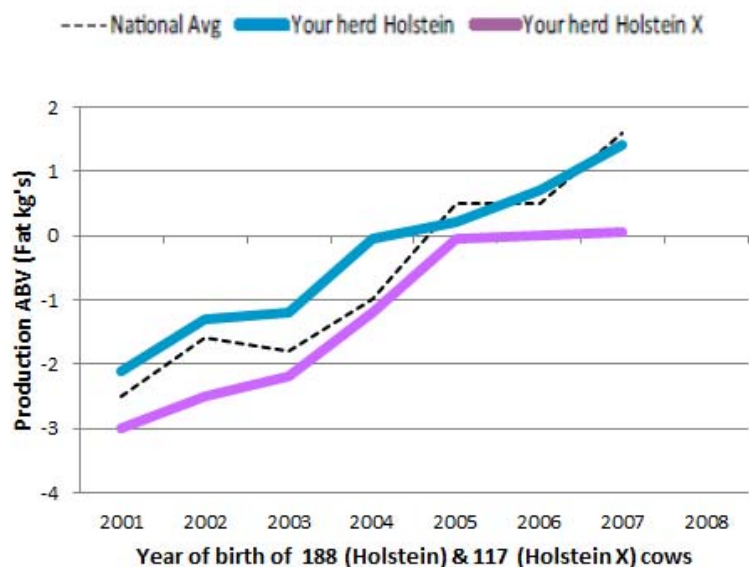
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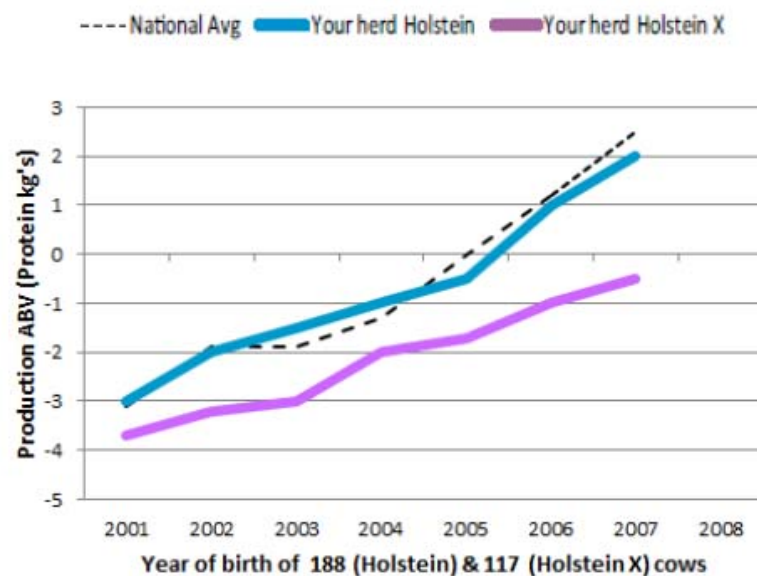
# Genetic Progress Report

# GENETIC PROGRESS REPORT

## Genetic Progress for Production - Fat



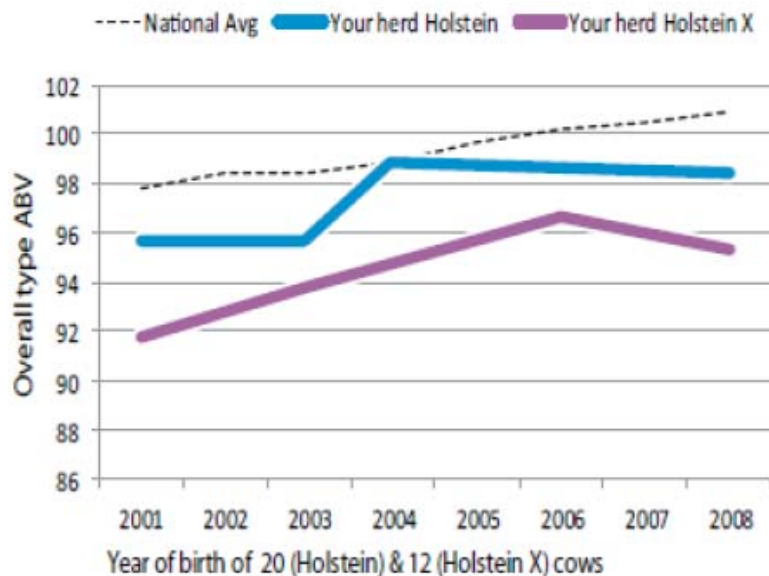
## Genetic Progress for Production - Protein



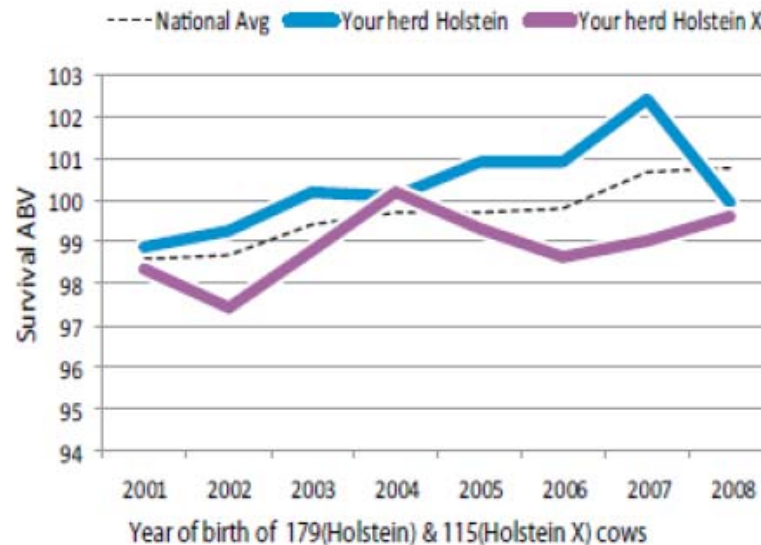
# Genetic Progress Report

# GENETIC PROGRESS REPORT

## Genetic Progress for Type



## Genetic Progress for Longevity



# Feeding the Genes - Aims

- To analyse the relationship between genetic merit & feeding systems.
- To provide information to farmers and advisors supporting the value of genetics.
- To address the perception that genetics is not as important because 'most cows are not fed to their genetic potential'

# Feeding The Genes Project

Project will compare high vs low genetic merit cows within five clearly defined feeding systems.

1. Pasture - up to 1.0 tonne grain/concentrates
2. Pasture - more than 1.0 tonne grain/concentrates
3. Pasture (partial mixed ration on feed pad  $\pm$  grain/concentrates fed in bail).
4. Hybrid system. (Pasture grazed < nine months per year + partial mixed ration on feed pad).
5. TMR system.



# Conclusions

- ADHIS aims to drive the rate of genetic gain for profit in Australia whilst supporting farmers to achieve their individual breeding objective
- Data driven decisions
- Feedback on Tools – positive



# Key Partners

[www.adhis.com.au](http://www.adhis.com.au)

