

## Welcome

Welcome to this 2008 Autumn issue of Genetic Edge. Since the decision was taken to use Genomic Selection to choose our 2008 bull team it's fair to say life has changed considerably for breeders and breeding companies and provided new and exciting challenges for us all.

The end result of it all will be the advancement of modern genetics that will be available and in your cow three seasons earlier than may have been the case in the past.

From the AmBreed Genetic team can we say thank you to all breeders who submitted bulls to us and for the patience you showed for the duration of the selection process. To those of you who made the "final cut" our warmest congratulations.

## It's Here...



For a decade breeders have heard scientists use terms like Marker Assisted Selection and Quantitative Trait Loci but little has come of these techniques. Now AmBreed is pleased to be at the forefront of offering a genetic breakthrough to NZ farmers.

Over the past year AmBreed's parent company, CRV, has been genotyping bulls so that the genetic make-up of young unproven bulls can be more reliably predicted. This is the rationale for terming the technique "Genomic Selection".

In the last few days AmBreed has this genetic information to select 2 groups of bulls: our team of yearling bulls (born in 2007) to take into the 2008 progeny test program; and a team of unproven bulls to be marketed for commercial use this spring. The brand name for all CRV's genomically-selected bulls is "inSire".

Because Genomic information means we now have more reliable estimates of a bull's breeding values, young sires will be used more extensively in AmBreed breeding programs. So breeders should not be surprised to see AmBreed sire analysts recommending a significant proportion of young sire semen in mating contracts for 2008 and beyond.

## Pierre progeny strikes GOLD !!!!!

At the Canterbury Collection Sale in May a 3 year old in calf cow sold on behalf of AM & BV Sherriff of Deloraine Holsteins made \$21000.00. According to the selling agents PGG Wrightson this is the highest priced Holstein sold this season.

Since Pierre was introduced to the market as a Spring Forward bull in 2002 AmBreed have sold in excess of 460,000 straws and in two successive seasons, 2003 (102,598) 2004 (107340) this fellow sold over 100,000. By the end of this selling season he should crack the magic half million mark having already in the early stages of this selling season gone past 15,000.

His progeny have had a tremendous influence on the national herd as well as overseas markets particularly reports we are getting back from our colleagues at Bos Trading in Australia.

It is not only as a sire of daughters but also as a sire of sons that is further enhancing Pierres reputation and in the current 2008 catalogue he is represented by Flamboyant and Pamment with a number of young sires and bulls in waiting who will ensure the Pierre influence will continue for AmBreed well into the future.

## Bull Calves

Genomic information will be available on your bulls much quicker in 2008-09 as we all become more familiar with the processes. The technology and testing laboratory are now working towards optimising turnaround times for animals submitted for genotyping so we hope this runs more smoothly in 2008-09

If you have bull calves we want to hear from you to consider them for our 2009 team and should meet the following criteria

- Are out of top production cows in your herd (especially protein)
- Dams who have scored 6,6 or better for Udder Overall and Dairy Conformation.
- From the top cow families in the herd.

Please contact Sharon, Georgie, Aaron or Kevin to give us details or visit us at Fieldays site F32 and G31.

## GDD Team



Andy Medley



Phil Beatson



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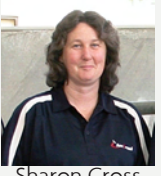
Kevin Hart  
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Georgie Smith  
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Maggie Vickers  
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Sharon Cross

## Bull Breeder Benefits at AmBreed

As most of you already know, Genomic Selection has arrived!

This season will be the inaugural use of genomically selected bulls in AmBreed's Progeny Test scheme. These genetically elite Jersey and Friesian bulls are the members of the 2008 inSire FastForward team.

There has been a very substantial investment in Genomic Selection (GS) by AmBreed (and other companies entering this field).

One consequence of this investment is that semen from AmBreed's yearling bulls is being used only in our contracted sire proving or breeding program herds, with none being available for public access, as we believe AmBreeds GS young bulls will be highly-sought by competitors due to their superior merit.

The only exception to this is that a breeder of an inSire FastForward bull can elect to purchase up to 50 straws of their bull in his first year of the progeny testing process.

Offering successful breeders access to these bulls so much earlier than the rest of the industry is just another example of how AmBreed wishes to work in partnership with breeders. We firmly believe there are huge opportunities for everybody with the introduction of this exciting new technology.

Please remember to offer your 2008 bull calves to AmBreed this Autumn/Spring, and you too could benefit from the AmBreed opportunities. We look forward to hearing from you!

## Produce more semen!

Nothing can change the way Breeders nurture their animals during the first 3 months of life. Physically any bulls which we select are under pressure from day one. The rearing of bull calves plays a crucial role in giving a bull the best chance of being able to produce in time for the Spring mating period.

To meet those tight deadlines it is important for bulls to be fed well and physically grow at least 1kg per day during the first 10-11 months of life. If we can meet this particular goal we are well on the way to ensuring your bull will produce in time. We have to start collecting semen from these bulls as they mature (at around 11 months of age) and as you can imagine a lot of work has to go into making this happen and it all starts with you on the farm.

Prior to entry to an AmBreed location bull calves are also tested for numerous clinical diseases. AmBreed NZ Ltd is a certified MAF approved export centre and all of our bulls are tested bi-annually to maintain the health requirements, as determined by export protocols. To encounter any positive test on centre effectively halts production, resulting in retesting and quarantine before we are able to recommence - an expensive exercise.

Consequently we have to ensure your bull calves undergo the same rigorous disease testing prior to entry to an AmBreed location. Bull calves are health tested usually through October and November allowing for us to pick up your bull calf in the time frame left before Christmas. You can play a role to help make the process run more smoothly.

- After the bulls have been blood sampled, ensure the bull remains in isolation after the bloods have been taken. This entails separation from all other stock by at least a 5 metre boundary so that any other nose to nose contact with other stock is avoided; **this is very important.**

- Ensure the animal is correctly identified. By law, every animal that is to be transported around the country must be tagged by official primary and secondary ID tags.

- We will need you to sign documentation recognising the disease history of your farm in relation to TB, Johnes, EBL and other diseases. We also need a declaration stating your animals have not been fed goats milk. This is all part of the certification, which is required for export purposes.

- The bull must be treated for internal and external parasites within the testing period. Please also keep a record of any vaccinations that may have been given to the animal. DO NOT vaccinate with any vaccine that may contain an IBR component, as this can seriously compromise the IBR status of the animal and can have major implications with exporting semen.

- If you are able to halter train your bull prior to leaving your farm then this also helps our staff when working with the bulls. We place a lot of emphasis on caring for our bulls and the earlier they are halter trained the better for saving valuable time when the bulls enter the collection arena

- Dehorning of all bull calves is must for of all animals entering AmBreed properties. They are a danger to other animals and farm staff.

If you have any further questions please feel free to ask your sire analyst or alternatively you can contact our centre veterinarian, Rob Courtney, here at the centre.

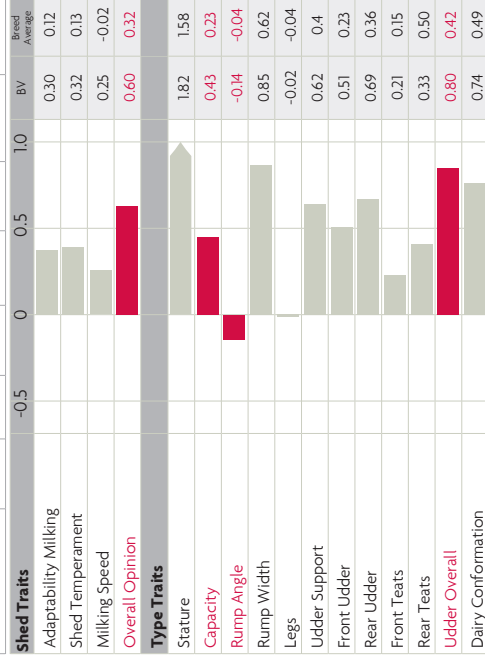
**All the best for calving**

### Holstein-Friesian Performance

- For systems enabling cows to have intakes of high-quality feed in environments to produce >450kg MS/cow
- Higher liveweight
- Big production
- Well liked
- Acceptable fertility
- Outstanding type to handle the production
- Very good indexes

Name	Bullcode	Sire
Webblea P Nikolaus ET S2F	105582	Top Deck KO Pierre
HSS Oman Megabuck	106545	O-Bee Manfred Justice ET
Elliotts Elsto Noel ET	107557	Whinlea Paladium Elsto ET
Murital Raul Wrangler	105601	Vanzetti Valentein Raul
Murital Elsto Wyatt	107574	Whinlea Paladium Elsto ET
HSS Favour Peer ET S3F	107588	Aurora Donor Favour

Production		gNZMI	gbW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
Breed Average		318	252	61	3.60	53	4.19	1793
<b>Management</b>		121	76	35	3.51	29	4.2	1161
		Liveweight (kg)	Fertility	Somatic Cell	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
Breed Average		96	-15	0.24	-88	280	6.5	-0.03
		82	-5.0	0.28	-25	39	6.1	-0.08

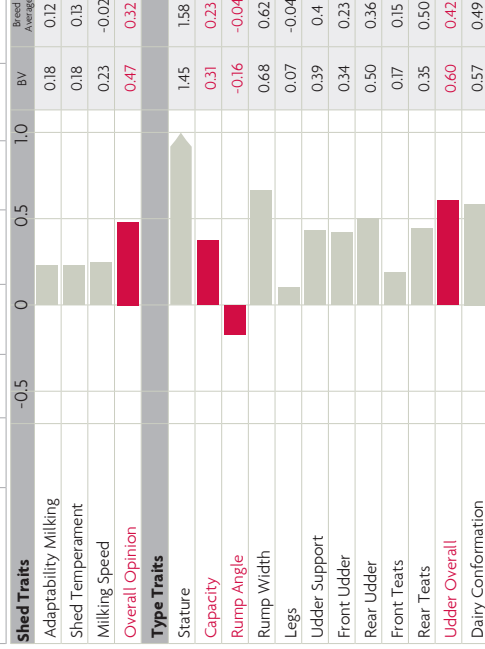


### Holstein-Friesian Efficiency

- For NZ pasture-dominated diets producing up to 400kgMS/cow
- Moderate size
- Great production
- Well-liked
- Good type
- High indexes

Name	Bullcode	Sire
Webblea P Nikolaus ET S2F	105582	Top Deck KO Pierre
Brkel Dauntless Proxy S3F	107562	Macfarlanes Dauntless
Busy Brook DC Gyro ET S3F	107583	Delta Canvas
Murital Elsto Wyatt	107574	Whinlea Paladium Elsto ET
Elliotts Elsto Noel ET	107557	Whinlea Paladium Elsto ET
Hazael Renegade Driver ET	107519	Glennmead FR Renegade

Production		gNZMI	gbW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
Breed Average		319	270	60	3.59	51	4.15	1763
<b>Management</b>		121	76	35	3.51	29	4.2	1161
		Liveweight (kg)	Fertility	Somatic Cell	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
Breed Average		77	0.3	0.24	-118	294	4.2	-0.04
		82	-5.0	0.28	-25	39	6.1	-0.08

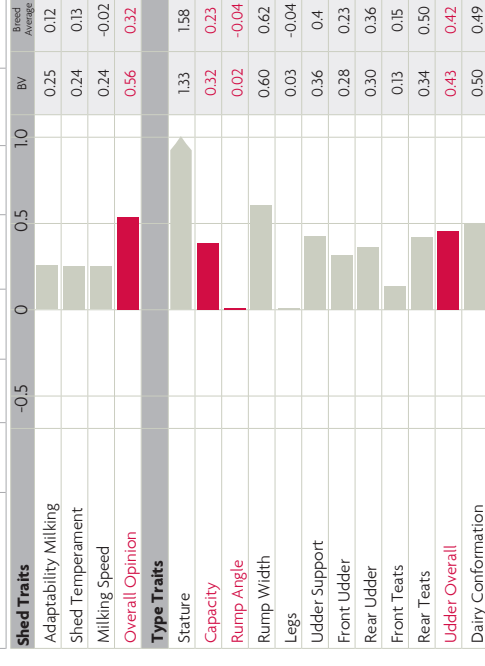


### Holstein-Friesian Easy Care

- For large enterprises with limits on labour resources
- Cows that look after themselves
- Moderate production
- Outstanding longevity
- Well liked with acceptable type
- Good body condition
- Highly Fertile with Calving ease
- Retain body condition

Name	Bullcode	Sire
Ambzed Burwell Gamble S1F	105542	SRB Corboys Lightening
Valden Elsto Eager ET S3F	107597	Whinlea Paladium Elsto ET
Hallville L Federa ET S1F	106512	SRB Corboys Lightening
Hazael Renegade Driver ET	107519	Glennmead FR Renegade
Puketawa Hopes Horizon	106510	Bagworth Paid Lucky ET
Roian Pal Frolic S1F	105552	Valden Curious Paladium

Production		gNZMI	gbW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
Breed Average		298	239	50	3.64	41	4.30	1368
<b>Management</b>		121	76	35	3.51	29	4.2	1161
		Liveweight (kg)	Fertility	Somatic Cell	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
Breed Average		75	4.9	0.15	12	480	2.8	-0.08
		82	-5.0	0.28	-25	39	6.1	-0.08



## Jersey Performance Plus

- Maximize production from your Jerseys
- Big production especially milk
- Well liked
- Good indexes
- Good capacity & good type
- Bigger and more robust
- Open framed

## Jersey Efficiency

- High indexes
- Good production
- Well liked
- Fertile
- Good type

## Jersey Admiral Free

- No Judds Admiral in pedigree
- Solid index
- Good longevity and well liked
- Very good type
- Low somatic cells

Name	Bullcode	Sire
Mullins Maunga Orion S2J	306511	Tawa Grove Maunga ET S13
Merridowns Mans Sting	306526	Okura Manhatten ET S13
Lynbrook Expose Treat ET	305510	Tahau Northern Exposure
Bradene Blakes Tiller ET	305524	Lostahill Forevers Blake
Luxmoore BMD Expert	305500	Brookvale MBSB Derek ET
Luxmoore Tyrone Elixir ET	307529	Brookvale Berretta Tyrone

Production	gNZMI	gBW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
	291	276	31	3.94	38	5.08	559
Breed Average	107	106	5	4.12	13	5.56	-198.8

Management	LiveWeight (kg)	Fertility	Somatic Cell (kg)	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
	-31	1.6	0.18	-33	339	-4.8	-0.12
Breed Average	-42	0.5	0.29	-11	108	-5.4	-0.21

Shed Traits	Adaptability Milking	Shed Temperament	Milking Speed	Overall Opinion	Type Traits	Stature	Capacity	Rump Angle	Rump Width	Legs	Udder Support	Front Udder	Rear Udder	Front Teats	Rear Teats	Udder Overall	Dairy Conformation
	0.33	0.38	0.24	0.45		-0.50	0.31	-0.07	-0.14	0.06	0.41	0.57	0.52	0.23	0.22	0.57	0.23
Breed Average	0.33	0.14	0.14	0.18		-0.65	0.03	-0.11	-0.20	0.10	0.07	0.21	0.22	0.13	0.02	0.23	0.13

Name	Bullcode	Sire
Mullins Maunga Orion S2J	306511	Tawa Grove Maunga ET S13
Merridowns Mans Sting	306526	Okura Manhatten ET S13
Okura Maunga Kawakawa ET	306500	Tawa Grove Maunga ET S13
Ambzed Mullins Murph S2J	307532	Noakes Nevvy S3J
Okura Nevvy Kelvin ET	307547	Noakes Nevvy S3J
Greenmile Maun Impish S3J	307517	Tawa Grove Maunga ET S13

Production	gNZMI	gBW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
	279	279	28	3.94	40	5.16	346
Breed Average	107	106	5	4.12	13	5.56	-198.8

Management	LiveWeight (kg)	Fertility	Somatic Cell (kg)	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
	-34	1.4	0.09	-76	303	-4.3	-0.15
Breed Average	-42	0.5	0.29	-11	108	-5.4	-0.21

Shed Traits	Adaptability Milking	Shed Temperament	Milking Speed	Overall Opinion	Type Traits	Stature	Capacity	Rump Angle	Rump Width	Legs	Udder Support	Front Udder	Rear Udder	Front Teats	Rear Teats	Udder Overall	Dairy Conformation
	0.47	0.48	0.15	0.47		-0.53	0.23	-0.10	-0.17	0.10	0.34	0.61	0.49	0.12	-0.10	0.56	0.34
Breed Average	0.10	0.14	0.14	0.18		-0.65	0.03	-0.11	-0.20	0.10	0.07	0.24	0.22	0.13	0.02	0.23	0.13

Name	Bullcode	Sire
Lynbrook Expose Treat ET	307510	Tahau Northern Exposure
Mullins Maunga Orion S2J	306511	Tawa Grove Maunga ET S13
Lynbrook TNE Trojan ET	308531	Tahau Northern Exposure
Lynbrook GMO Tempo ET	308522	Genesis TGM Opium S13
Hillstart Maungas Jono	307537	Tawa Grove Maunga ET S13
Ambzed NIN Brian	308546	Noakes Nevvy S12

Production	gNZMI	gBW	Protein (kg)	Protein %	Fat (kg)	Fat %	Milk
	283	300	30	4.16	46	5.59	386
Breed Average	107	106	5	4.12	13	5.56	-198.8

Management	LiveWeight (kg)	Fertility	Somatic Cell (kg)	Residual Survival	Total Longevity	Calving Difficulty	Body Condition Score
	-34	0.9	0.15	-108	298	-4.4	-0.16
Breed Average	-42	0.5	0.29	-11	108	-5.4	-0.21

Shed Traits	Adaptability Milking	Shed Temperament	Milking Speed	Overall Opinion	Type Traits	Stature	Capacity	Rump Angle	Rump Width	Legs	Udder Support	Front Udder	Rear Udder	Front Teats	Rear Teats	Udder Overall	Dairy Conformation
	0.22	0.24	0.28	0.35		-0.56	0.23	0.08	0.13	0.11	0.16	0.47	0.34	0.10	-0.07	0.43	0.34
Breed Average	0.10	0.14	0.14	0.18		-0.65	0.03	-0.11	-0.20	0.10	0.07	0.24	0.22	0.13	0.02	0.23	0.13