

Genetic Edge

Issue 04. December 2008.

IN THIS ISSUE >>

- 2008 - A summary
- EU Exports update
- AsureQuality feedback



www.ambreed.co.nz

2008 - A summary

Such has been the activity this year that Christmas and 2009 are here in the blink of an eye.

2008 has been a year of dramatic change for breeders and breeding companies alike. We all knew it would be, and we are learning to come to terms with the new Genomic vocabulary and the Base Change implemented earlier this year.

Adjustment will continue to be necessary into the new year and beyond as we work with the science of breeding better genetics for the future. Combining your knowledge and ours in the pursuit of that perfect bull or brood cow and thereby enhancing the profitability of your business partnership with AmBreed.

During the months of February and March, Georgie Aaron and Kevin will be in the field seaching for future bull mothers and to discuss the new challenges facing us all.

So as we bid farewell to 2008 we the Genetic team at AmBreed thank you for the association and goodwill given to us these past twelve months and take this opportunity to wish you and your families a happy Christmas and the very best of 2009.

Bull Proofs

December is always an interesting time for bull proofs. Daughter numbers are building with most progeny now herd tested twice. Many of these heifers are now T.O.P. inspected resulting in some useful breeding values. It's the time of the year to monitor three groups of bulls;

1. **Progeny test bulls** (potential new graduates) whose daughters are in their first lactation. This group of daughters add to the estimate the bull's genetic merit.

2. **Graduates** from the last couple of years with three and four year old daughters. Test day model, the method of evaluating animal breeding performance in New Zealand gives an insight to how well bull daughters may persist within the lactation and mature into their second, third and later lactations.

3. **Re-proof bulls** marketed on progeny test proof eventually receive a wide spread proof or second crop proof when a large group of new 2 year old daughters begin lactating. This group of daughters reveals the bull's true genetic merit.

The AEU run of 13th December is like any other year, possible new graduates are bouncing around like kids on a sugar high! However, there are clear trends emerging, Manhattan is siring a large number of the highest indexing sons. Already 5 of the highest indexes Jersey bulls with lactating daughters are by Manhattan.

There is no clear super star rising from the Friesian ranks. However after the latest AE run new Pierre and Banquet sons are closing the gap on the already proven high indexing Extasy sons.

The most impressive Friesian sire receiving a re proof this year is Favour. These heifers are powerful and open framed with great udders. These females hold condition and work. Favour is one of the few bulls that on re proof has indexes which keep getting better improving 12 NZMI and 23BW with the addition of 4000 new daughters.

The AEU run on 22nd November was excellent news for leading sire Telesis Euron Firenze because his Somatic Cell BV dropped to 0.28. This along with his other highly desirable traits and the progeny we are seeing on the ground continue to make him a tremendous breeding option.

Other highlights are the Maunga daughters who continue to impress; heifers and cows with length and stretch, well attached long front udders that continue to improve as they mature. Now with over 4500 daughters his indexes remain at the top.



Maunga Daughter



Favour Daughter

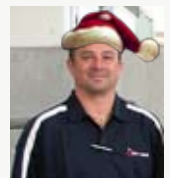
GDD Team



Andy Medley



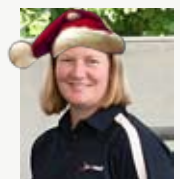
Phil Beatson



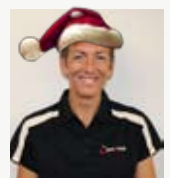
Aaron Parker
0274 413 747



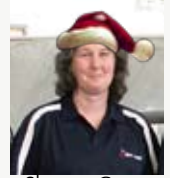
Kevin Hart
027 291 5575



Georgie Smith
0274 932 194



Maggie Vickers
021 0272 8454



Sharon Cross

Young Sires Used More in Breeding Program

Over the last few years AmBreed has used young sires (that is bulls awaiting proofs) in about 10% of its contract and recommended matings. These bulls' breeding values have reliabilities of about 35% for most traits which is well below the 75-99% for bulls with daughter information. Bulls with overseas proofs have also been commonly used and these bulls' converted information usually has reliability around 65% until they get NZ-born daughters in their proofs.

For the 2008 breeding season AmBreed has had genomic information for many of its young bulls including those 2 and 3-yr-olds awaiting proof. The BV reliabilities for most traits for these bulls are in the region of 50-55%. This means that high-ranking young sires based on genotype information can be used with more confidence.

As a result AmBreed used genotyped young sires for about 40% of this year's matings. Our plan is to genotype a high proportion of the resulting bull progeny and then incorporate the best in the 2010 progeny test program.

In addition some may be used as sires in the 2010 breeding program. This would mean that in theory an unproven son of a sire still awaiting a 75% reliable proof could be used in the program. At this early stage of the technology's adoption we don't want to get too far ahead of ourselves, but it's easy to see why generation turnover will be much faster with genomic selection and with its genetic gain for the industry.

AEU dates for 2009

The last AE run for 2008 was held last weekend (13 December) and included a TOP update.

AE run dates for the first half of 2009 are as follows;

| Date | Additional features of the Evaluation |
|-------------|--|
| 17 January | Interbull & Calving Difficulty updates |
| 14 February | Economic, Longevity, Fertility, Somatic Cell Count & TOP updates |
| 7 March | |
| 18 April | |
| 9 May | Longevity, Fertility, Somatic Cell Count & TOP updates |
| 13 June | |
| 18 July | |

February is an influential run early in the calendar year with so many updates having effects on both individual proven bulls and providing more settled information for the 2005 PT bulls which are now getting initial daughters nearing the end of their first lactations.

This is traditionally the data from which AI companies tend to finalise which bulls will make the cut for the new seasons catalogues, so is an important time of the year within the industry.

EU Exports just around the corner

Excitement is mounting at AmBreed, with EU re-certification now only a few steps away. New rules and regulations have been created between NZMAF and the EU commission and as a consequence AmBreed has been working towards becoming EU compliant again. We have invested in new bull housing, collection facilities and laboratory and storage areas on our existing main centre location.

3 months of builders, fencers, painters and tradesmen has resulted in the construction of a stunning new facility for our bulls that will be marketed and sold within the EU in the New Year. The latest technology has also been installed in the laboratory to increase the efficiency of the process and do justice to the new facility. The first bulls to be collected in the new barn & go through the new lab will be 2 teams of our genomically selected InSire packs. This means the genetics from your bulls will be some of the first being exported into this growing International market.

The most critical element of running a functional EU facility is maintaining an IBR negative status of our bulls resident on this location. As you may be aware the last 3 years of bull intake we have been establishing an IBR negative herd status as your bulls enter our Progeny Test programme. A vaccinated or positive bull is not allowed to be collected for the EU. Keeping positive and negative bulls separate is a logistical challenge and we spend a lot of time abiding by protocols that are in place to minimise the risk of spreading the viral disease which is prevalent in 90% of herds in NZ.

Close to 2 years of hard work will be rewarded in the New Year when our new centre will be fully operational; something the staff and bulls are looking forward to very much.



AsureQuality feedback

This has been the first time AmBreed has contracted the task of blood-taking for both DNA/Genotyping and Health Testing requirements for the bull calves (and dams) under consideration for 2009 Progeny Test to AsureQuality.

From AmBreed's point of view things seem to have gone pretty smoothly so far. Our only issue to date has been the confusion created by the fact that AsureQuality is also collecting bloods for our opposition!

Where possible, you should clarify which AI company your animals' bloods are being collected for when you are initially contacted by the AsureQuality staff member. This will ensure that bloods are only taken for the AI company as intended by the breeder!

The first round of this process is now completed – purple top blood tubes for DNA testing have all arrived here at AmBreed. So, we thought this would be a good time to seek feedback from the breeders involved as to how well you feel the new system is working.

We appreciate that in some cases AsureQuality have had to visit a farm on more than one occasion. However, this is usually a case of AmBreed not knowing about all bulls on offer prior to arranging a visit schedule to a particular area.

We acknowledge the need to make decisions as quickly as possible so bull calves are not reared unnecessarily by breeders, and see this as the main reason we are scheduling visits more regularly.

AsureQuality will be getting back in touch with breeders of bulls who have made the final 2009 team to organize red top blood tubes for Health Testing. Once bulls have passed these tests they will be collected for transport to AmBreed.

We would love to hear your thoughts on how things went at your place and any suggestions you have to make it even better! Please send your ideas and thoughts to Sharon by email (sharon@ambreed.co.nz) or phone on 0800 262 733

Naming of bulls

If your bull has successfully made the inSire Fast Forward Progeny Test Team for the coming 2009 season a AB code will be allocated to him, along with a provisional name. If you have already named the bull, or have a name suggestion for him, we ask that you advise us as soon as possible.

This should be done by indicating on contracts or forms that are being returned to AmBreed. In most instances we will do our best to use the name you have suggested. However to avoid confusion it is AmBreed's policy to not re-use a name that has been used in the past 10 years.

Transfer Cards

We would like to remind you that we require transfer cards to be submitted for the bull(s) before we can make payment. This can be done electronically or via paper copy.

If you wish to submit a transfer card(s) electronically you must be a MindaPro client and will need AmBreed's participant code DMLF and Herd code 2/23557. Otherwise please request the transfer card(s) from your service provider (LIC or MISTRO) and forward to AmBreed attention: Sharon Cross.

A Big Thanks for 2008

This season saw a record number of bull calves offered to AmBreed for consideration as potential members of the 2009 Progeny Test team.

Not only did the number of bulls put forward by breeders increase dramatically from that considered last season, but the quality of the candidates was also much higher.

The combination of these two factors has certainly made it a tough round of decision making sessions for AmBreed sire analysts this year. A situation we definitely wish to experience again!

Coupled with the added power of Genomic Selection this will of course mean only good things for the bulls that do make it into the final AmBreed Progeny Test team, as it creates an ever stronger process of selection for the young sires.

The take home message from here is that we want as many bull calves offered as possible to make best use of the new technology at our disposal. We are also finding that Genomic information is highlighting bull calves of merit that may have been eliminated earlier in the selection process using traditional methods alone.

We sincerely thank you all for offering us your bull calves for consideration this year and hope that you will continue to notify us of the bull calves that hit the ground each season.



Holiday Greetings from all of the GDD team

