

Welcome to our first edition of **Grazing Matters**, a new update for farmers running grassland focused systems. In this issue we introduce the UK Fertility Index, take a closer look at two bulls making their mark on grassland farms and get an update on the grassland cornerstone programme.

Can you Breed for Fertility?

For any dairy farmer getting cows back in calf over a tight time period is critical to their profitability. Fertility remains the most common reason for dairy cows to leave the national herd, and this is even more important if you run a block calving system. Although herd fertility is predominantly determined by management issues, breeding the type of cow that is more likely to conceive also has a valuable part to play.

In May 2005 the UK fertility index was introduced to enable farmers to select bulls that would improve daughter fertility. The index is based on six traits, which are either a direct measure of fertility or have strong correlations with fertility, and is published as a financial benefit.

Six traits included in UK fertility index:-

1. Calving Interval
2. Non return rate
3. Body condition score
4. Measure of milk yield around insemination
5. Days from calving to first insemination
6. Number of inseminations needed to get a cow in calf

The range in Fertility Index is roughly from +£15 to -£15 with an average for available Holstein Friesians of -£3.5. A bull with an above average Fertility Index will breed cows with improved calving intervals and better non return levels. As a rough guideline, every point increase in Fertility Index, say from -3 to -2, will decrease calving interval by half a day and improve non return rates by 0.5%.

This issue:

Cornerstone Update

Generations of Genetics at Carracoush

Pen-Col Drumbeat

Proven Grassland Genetics in Ireland



Daughter of Regancrest RBK Die-Hard

For example, Regancrest RBK Die-Hard is the top UK fertility bull available with positive production. Die Hard has a fertility index of £11.5. Therefore on average he will decrease calving interval by 7.5 days and improve non return rates by 7.5%! With over 30,000 daughters milking around the world, this figure is extremely accurate.

Due to its low heritability (0.3) Fertility Index should not be used as a primary selection criteria, but when used in combination with other information on a bulls genetic potential it can have a positive and permanent impact on the fertility of your herd.

Top Ten Sires on Fertility Index (source MDC Breeding+)

Sire Name	Rel%	Milk (kg)	Fat (%)	Prot (%)	£PIN	SCC	LS	FI	Type
Taylor's Inquisitor	89	-657	0.45	0.17	6	4	0.3	21.0	
Caldwells Jordanaire	97	-401	0.29	0.15	11	11	0.2	20.6	-2.40
Collins Royal Hugo	99	-476	0.34	0.18	13	11	0.0	14.5	-2.30
Welburn A V Hermes	98	-680	0.25	0.07	-17	8	0.2	14.2	
Roberts Halfvolley	99	-468	0.48	0.13	15	7	0.2	12.8	-2.20
Regancrest RBK Die-Hard	99	704	-0.17	-0.08	19	-8	0.2	11.2	1.10
Maloya Leo	99	-63	0.09	0.01	3	-4	0.1	11.1	0.30
Ectavia	99	135	-0.03	0.01	8	12	0.3	9.4	-0.30
SRB Lawsons Kaiapoi	93	-242	0.17	0.08	6	-4	0.1	8.9	-0.32
Joylan Renaissance	98	-458	0.18	0.02	-15	-7	0.2	8.8	0.40



Cornerstone Update

Here Isabel Gardner, ABS Cornerstone Co-ordinator gives us an update on the Grassland Cornerstone programme and talks about her recent secondment to Australia.



Isabel Gardner

Since our last update in March, Grassland Cornerstone membership has grown to 340 members, demonstrating the continued interest in Grassland genetics. The 180 UK members are spread across the country, but are concentrated in Yorkshire, South Wales and the South West of England. In Ireland, membership also continues to grow, hitting the 160 member mark.

A Promising Start

The first five bulls we sampled in 2006 (three of which were Irish) now have UK calving ease information which all looks favourable. We also have promising looking EBI sub index scores from preliminary information gathered from calvings in Ireland. Two more Irish bulls were added to the stud in 2007 along with a high estimated EBI ranking Oman son. Looking back, daughters of the Australian and UK grassland bulls we sampled in 2004/2005 will start to calve this autumn so by January we will have early information and come the proof run in May 2008 we will have lots of daughter information and hopefully some photographs!

Cornerstone Young Sires

We now have information on our Cornerstone young sires we sampled last year in Ireland. Early figures suggest these are higher than breed average for the Calving Sub Index of EBI. The British Friesians have promising looking figures closely followed by Don Pierre whose shorter than average gestation length contributes to his good Calving Sub Index with Krezanda Duke having the lowest calving difficulty score of all the bulls sampled.

	Breed	Calving Sub Index	Gestation PTA
Lightwood Don Pierre	HO	17.9	-2.23
Kaarmona Flowta	JE	16.7	-1.14
Krezanda Duke ET	HO	13.6	-0.68
Langley Evolution	FR	26.1	-2.51
Winnoch Thunder	FR	13.8	-1.24
Blackisle Glencoe ET	FR	21.4	-1.95
Estimated Average*		12.43	-1.13

*based on the average for the Holstein bulls on the published top 500 EBI list

News from Downunder

I recently spent two months in Australia, helping to set up the Cornerstone Breeding Club over there, during this time I saw many bulls which have been sampled in the UK and are from the ABS Australia stud including, daughters of Donor, Gold Bullion and Lucky Strike. Nearly all farms graze 365 days a year, having to irrigate their grassland. The recent drought has seriously affected the dairy industry, losing around 25% of their annual production through lack of feed and the heat. This has however meant forward prices for this winter look very encouraging. Donor has had a massive impact on the Australian herd, with his high APR (Australian Proof Ranking) and with positive daughter fertility, he is now a successful sire of sons.

Cornerstone Update

Gold Bullion has done a great job, with many farmers I spoke to being very happy with their Gold Bullion daughters. Offering an outcross pedigree, he is a breed leader for daughter fertility in Australia, with one farmer telling me he could guarantee his Gold Bullions would be the first in calf every year!



Donor daughter in Australia



Gold Bullion daughter in Australia

Generations of Grassland Genetics at Carracough

Here we take a closer look at the Carracough herd in Ireland, one of the farms where we are currently sourcing bulls for the Grassland Cornerstone Programme.

Denis & Bredr O'Connell have been farming west of mallow in Southern Ireland since 1968. They are currently milking 60 cows on their 155 acres farm, which they run between them aside from occasional relief when they go on holiday. They operate a spring calving system, with cows calving from the 1st February until the end of March. For generations the breeding goal at Carracough has been to produce high protein cows which stay within a tight calving block. The breeding and management of the cows really pays dividends as the herd averages over 7,200kgs at 4% fat and 3.5% protein, with only a small amount of concentrates fed. A testament to their hard work, the herd won the National Ireland RBI index award in 1998 and 1999, plus the EBI index award in 2000.

The quality of the herd is truly impressive, with cows being averaged sized with plenty of strength and tremendous legs and feet. ABS has sourced two young bulls from the herd so far, both from different cow families that can be traced back through numerous generations of cows milked by Denis. The staying power of these genetics to prosper in a true grassland environment make us very excited about the prospect of the Carracough bulls being at the top of the EBI index in a few years time.



Carracough Magpie 75



Pen-Col Drumbeat

Grassland farms require a certain type of cow. Dairy systems in the UK vary greatly; from high input:high output systems based on the US model to more efficient grassland focused systems originally seen in New Zealand but now becoming more relevant in the UK market. Therefore a cow bred for a grassland system should look a lot different to an extreme Holstein bred for intensive production, so what genetics should you choose? Cross breeding has never been more popular. Swedish Reds and Friesians have seen a huge growth in popularity, as an excellent way of breeding your cows to live longer and be more trouble free. However, there are still genetics within the Black and White breed which do all these requirements and still maintain the value of your herd.



Gamlake Drumbeat 1311

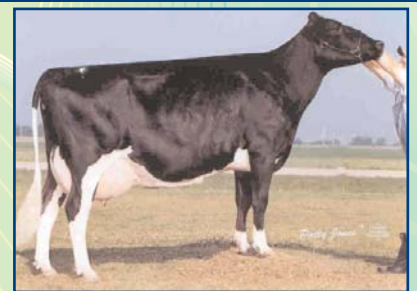
One such bull is Pen-Col Drumbeat. Drumbeat is unique in his transmitting pattern. He is 5% calving ease, which means there are few bulls better at ensuring a trouble free calving, so important when you are calving a large number of cows each day. He is a huge fat and protein improver alongside -18 somatic cell count, which helps to maximise milk price.

Drumbeat daughters are significantly smaller than the breed average, which allows bigger stocking rates. Yet he is also a big negative for angularity, meaning daughters carry condition throughout their lactation making them easier to look after. He scores well for longevity traits, namely; feet and legs and udders, which is proven to have a significant positive correlation with longevity (if they can't walk, they can't survive). Last but not least, his daughters are proven to get back in calf quicker than their herdmates, based on actual daughter information on farm.

So if you are looking for a new bull to use this season, one which will be easy calving, improve components, make cows smaller and carry more condition as well as improve fertility on farm, then Drumbeat is very much worth a look.

Whittail-Valley Zest Proven Grassland Genetics in Ireland

The dairy industry tests thousands of dairy sires each year around the globe. This is essentially a numbers game, but occasionally unique bulls that sire something completely different come to the fore, this is definitely the case with Zest. Zest now has thousands of daughters milking worldwide, including a number in Southern Ireland. These daughters have an EBI index, which ranks him amongst the top 25 sires with Irish milking daughters, showing that he truly is a bull designed for the grassland market.



United Meadows Zest 826

So what does Zest do that is so unique? Firstly he transmits high fat and protein percentage and is proven to reduce somatic cell count, which means your milk price is maximised. Based on data from over 4,000 milking daughters worldwide Zest daughters live significantly longer than their herdmates, which means lifetime production is higher. Fertility of his daughters are above average and he is exceptional for Body Condition in the UK at +3.34, which means they look after themselves, helping them to get back in calf quicker.

So if you are looking for a bull to improve percentages, herd life and keep your fertility levels high, then Zest could be the bull for you.



For more information on ABS Grassland Genetics, Alpha Building, London Road, Nantwich CW5 7JW.

Tel 0870 162 2000 Fax 01270 616702 www.genusbreeding.co.uk

Calls may be monitored for training purposes.