

### **£PLI** and Sire Selection

Dairying and Pigs Development Branch, Greenmount Campus College of Agriculture, Food and Rural Enterprise

# Relative Importance of Sire Selection Criteria



 Northern Ireland farmers asked to score range of traits from 1 (not important) to 5 (very important).

Bull selection criterion	Mean Rating	% rated as Important or Greater
Milk composition	4.05	83
Other	3.84	64
Milk yield	3.70	76
Type traits	3.61	69
Cost	2.85	37
£PLI	2.79	35

Source: AFBI-CAFRE Heifer Survey (2007)

## Farmers' Breeding Wish List



### Predicted Transmitting Abilities (PTAs) for:

- Increased Yield
- Improved Milk Quality
- Reduced SCC/Mastitis
- Increased Longevity
- Improved Fertility
- Reduced Lameness
- No Calving Problems
- All of the above

- ... Milk, Fat and Protein kg
- ... Fat and Protein %
- ... SCC, Udders
- ... Lifespan
- ... Fertility Index
- ... Locomotion/Feet & Leg
- ... Calving Ease

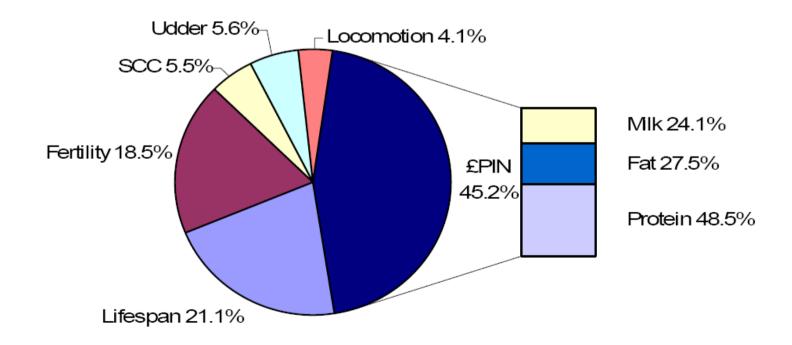
... £PLI

Profitable Lifetime Index (£)

# Profitable Lifetime Index - £PLI



- Profitable Lifetime Index (£PLI) summarises <u>all production and health</u> <u>PTA's</u> into a single financial figure.
- Expressed on a <u>lifetime</u> basis and <u>indicates extra margin</u> a bull or cow is expected to pass onto it's progeny in it's lifetime.



Source: DairyCo

# **Breeding Should Be All About Balance**

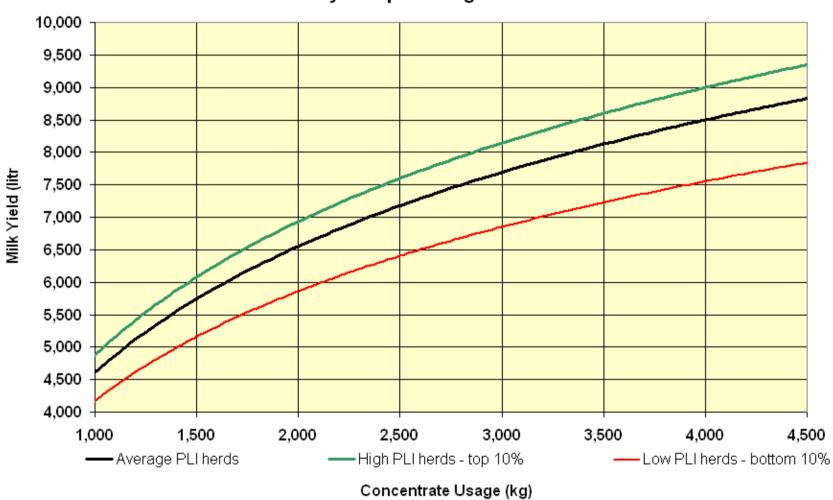




# £PLI increases efficiency of production



#### Milk yields plotted against concentrate



Source: Promar, 2011



#### Fact Sheet - Powered By CDI

LYNBROOK JANCEN ET BLF CVF 46272004770562

Date of birth: 20/10/2004

Dam: LYNBROOK MANAT CLASSIC 46272004790424

Poor

#### Holstein Production Proof

Interbull Pro	duction	on Proo	f				PTA	A2010 (8/11)					
Milk	Fa	at kg	Ptn	kg	Fat %	Ptn %	Rel%	PIN	PLI	Dtrs(UK)	Hds(UK	)	Hd1%
470	3	2.8	25	.1	0.17	0.12	74	256	€251	0	0		0
Lifespan		Lifespa	an Rel	%	Fert Index	FI Rel	%	mCE %	mCE Rel %	dCE	%	dCE	Rel%
0.5			49	$\Box$	0.3	60		N/A	N/A	N.	Α	N	/ <b>A</b>
Trait				+30	+20	+10	0	-10	-20	-30	SCCRe	l% <b>80</b>	Value

#### Somatic Cell C Type Proof

Click here for type proof daughter distribution

Interbull Type P	terbull Type Proof		PTAT2010 (8/11)			0 UK dtrs		0 UK Hds		el
Trait		-3	-2	-1	0	+1	+2	+3		Value
Type Merit	Poor								Excellent	-0.0
Mammary	Poor								Excellent	-0.0
Legs & feet	Poor								Excellent	-0.1
Stature	130 cm								154 cm	-1.0
Chest width	Narrow								Wide	0.0
Body depth	Shallow			-					Deep	-0.8
Angularity	Coarse								Open Rib	-1.6
Rump angle	High pins								Low pins	-0.6
Rump width	Narrow								Wide	1.6
Rear leg side	Straight				-				Sickled	0.2
Foot angle	Low								Steep	0.0
Fore udd att	Loose				$\neg$				Tight	-0
Rear udder ht	Very low								Very high	-1.3
Udder supp	Broken			- 10					Strong	-0.9
Udder depth	Below hock				$\neg$				20cm above	
Front teat pl	Outside								Close	-0.2
Teat length	Short								Long	-0.4
Rear teat pl	Apart								Close	-1.7
Teat pos side	Close								Apart	N
Temperament	Poor								Good	N
Ease of milk	Slow								Fast	N
Locomotion	Poor								Excellent	N
Cond Score	Low								High	N



What is this?

What does it tell you?

How do you use it?

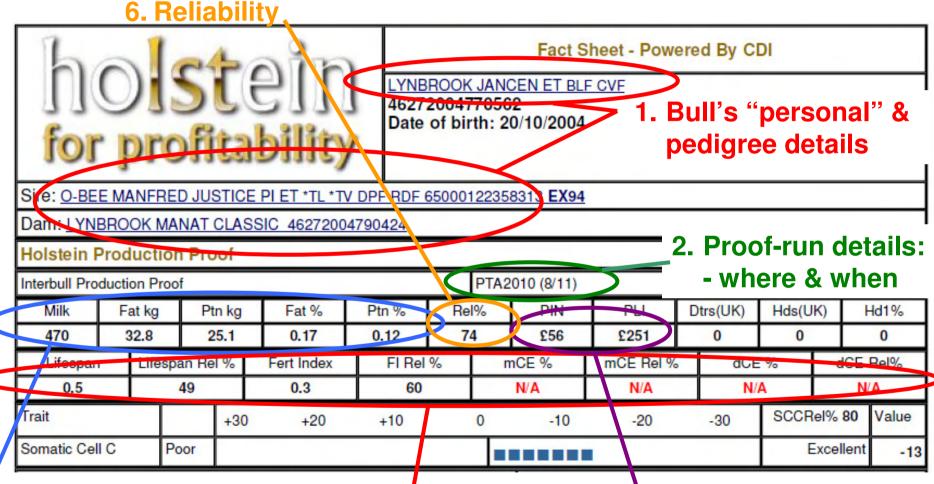
Sire proof for Lynbrook Jancen

- highest current ranking £PLI bull (£251).

Source: Holstein UK, Aug 2011

### How to Read Genetic Proofs





- 3. Bull's production proofs
- 4. Bull's non-production proofs & reliabilities
  - 5. Genetic merit indices
     £PIN and £PLI

# Reliability of Genetic Proofs



Reliability	Comment	Description
10-29%	Extremely Low	Some Pedigree Indexes – involving estimates from relatives.
30-40%	Very Low	Most Pedigree Indexes – involving estimates from parents with reasonable reliabilities.
41-55%	Low	Some Pedigree Indexes. Usually the bull is well proven and the dam has very high reliability.
56-65%	Low to Moderate	Bulls with officially published PTAs (minimum 50%). Cows with 3 lactations.
66-75%	Moderate	General maximum for most cows (3 lactations +). May be exceeded if a cow has many ET daughters in the UK.
76-90%	Moderate to High	Bulls with an initial progeny test through AI.
91-98%	High*	Proven bulls with a large number of daughters from a wide cross section of herds.
99%	Very High*	Widely proven and used AI bulls.

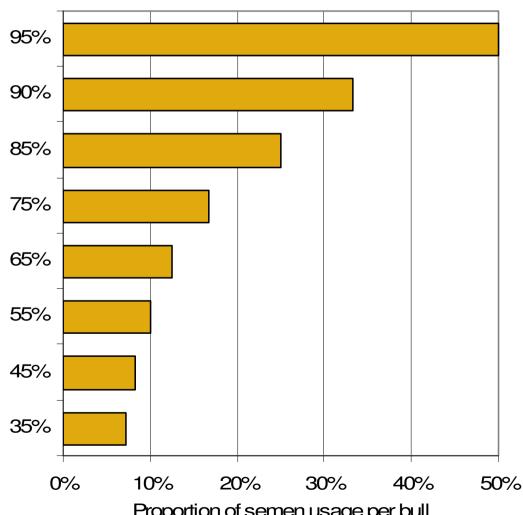
<sup>\*</sup>Recommended to choose bulls with high reliability

Source: DairyCo Breeding+

## How much semen of one bull?



### Using Reliability as a guide:

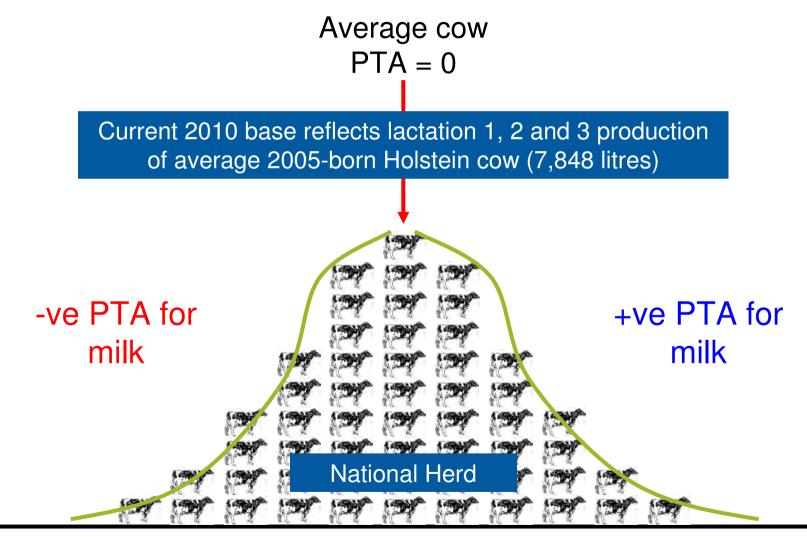


Source: DairyCo

Proportion of semen usage per bull

# Explaining PTAs - Production Traits



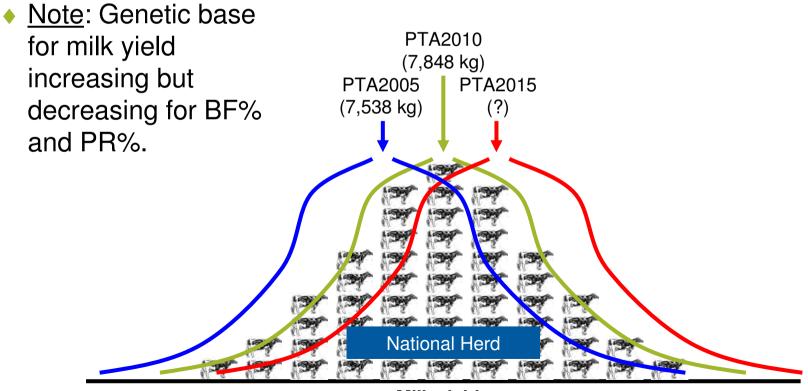


Milk yield →

## Explaining Genetic Base



- Each breed has it's own genetic base cannot compare proofs of a Holstein bull with an Ayrshire, Jersey or Friesian.
- Base year changes every 5 years to reflect changes in national population - cannot compare PTA2010 proofs with PTA2005 proofs.



# Predicted Transmitting Ability (PTA)



### PTAs for:

Milk yield (kg)

Fat yield (kg)

Protein yield (kg)

Fat %

Protein %

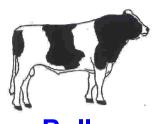
**Fertility** 

SCC

Lifespan

Calving ease - direct

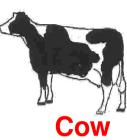
maternal



**Bull** PTA = 100

Milk Yield

X



PTA = 0



Progeny (heifer)

Breeding Value = 100 + 0 = 100PTA = 50

#### **Predicted progeny production potential:**

Genetic Base Production Progeny Breeding Value

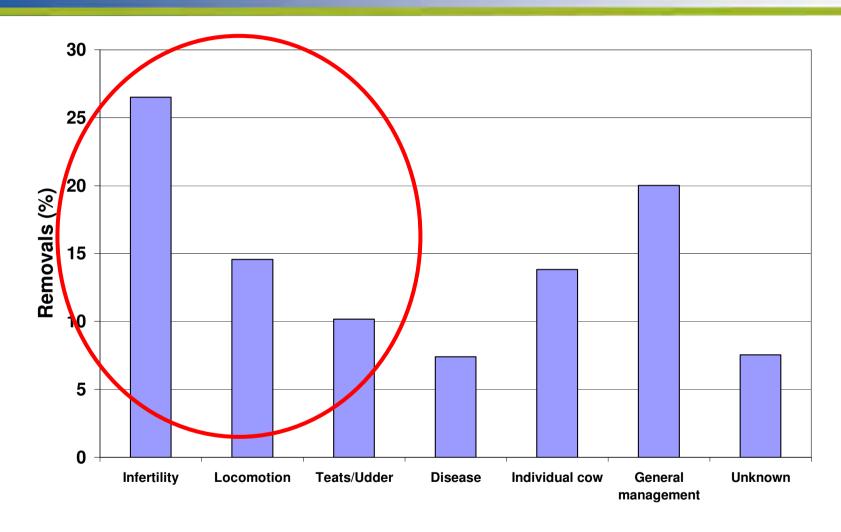
Progeny Genetic potential

7,848 litres 100 litres

7,948 litres

### Reasons for Removal of Cows





Over 50% of cows are removed for infertility, lameness or mastitis.

Source: AFBI Hillsborough

# Non-Productive Traits - Do you want +ve or -ve?



- For some traits you want to use +ve sires but others –ve!
  - Confusing ... How do you know what way to go?

Ask yourself the questions:

- Do	I want my	/ herd fertilit	to get better or worse?	+ve
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Do I want my herd lifespan to go up or down? +ve

- Do I want my herd <u>SCC</u> to go up or down? -ve

Do I want to use an easy calving bull on my heifers (Direct) +ve

Do I want my cows to calf easier themselves +ve

## Fertility Index



- Fertility Index introduced as component of £PLI in May 2005 but slow to be adopted by some AI companies.
- Practical tool based on national milk recording records:
  - Calving Interval.
  - Non return rate.
- Fertility Index:
  - typically ranges from -15 to +15.
  - bulls with higher figures have better fertility.
- ◆ Each 1-point increase in FI (e.g. from 2 to 3) predicted to:
  - decrease calving interval by 0.5 days.
  - increase non-return rates by 0.5%.

Select positive fertility bulls

Source: DairyCo

# Sire Fertility Index -The Real Practical Benefit



Sire Name	Sire Fertility Index	Average daughter CR-1%	Average daughter CI (days)		
Lowest FI sires: Shaker Bestow Promise	-12.2 -6.4 -5.2	36.4 33.3 25.7	395 406 399		
Weighted average	-9.6	33.1	397		
Highest Fl sires: Roxell Jamboree Tugolo	+6.7 +8.0 +10.5	61.9 50.0 56.0	361 379 382		
Weighted average	+8.4	54.4	376		
Difference Difference/Unit FI	18.0	21.4	-21.8 -1.2		

Note: Weighted mean results from Greenmount Future Herd based on fertility records from 2004-2011.

Better daughter fertility worth £7,100 per 100 cows per year

## Lifespan



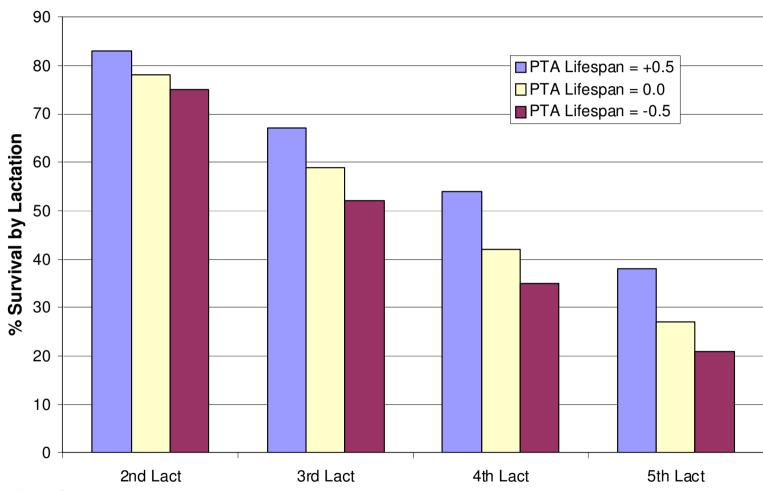
- Lifespan PTA:
  - based on national milk recording records.
  - expressed in term of lactations.
  - typically ranges from -0.5 to +0.5.
  - bulls with +ve Lifespan PTA should increase progeny longevity.
- Sires with a positive Lifespan PTA should increase progeny longevity.
  - e.g. daughters of a +0.5 bull predicted to survive, on average, 0.5 lactations longer than those of a zero PTA bull.
- Lifespan PTA takes account of the main reasons cows are culled from your herd - infertility, lameness & mastitis.

Select positive lifespan bulls

Source: DairyCo

# 





Source: DairyCo

Positive lifespan bulls have longer surviving daughters

### Somatic Cell Count



#### SCC PTA:

- based on national milk recording records.
- expressed as a percentage.
- typically ranges from -30 to +30.
- bulls with a negative SCC PTA should reduce progeny SCC.
- ◆ Each 1% change in a sire's SCC PTA is predicted to change his daughters' SCC by 1%.
  - e.g. SCC of daughters of a bull with a SCC PTA of -10% expected to be 10% lower than daughters of a bull with a SCC PTA of zero.
- Because of strong link between SCC and mastitis, SCC PTA will reduce mastitis incidence.

**Select negative SCC bulls** 

Source: DairyCo

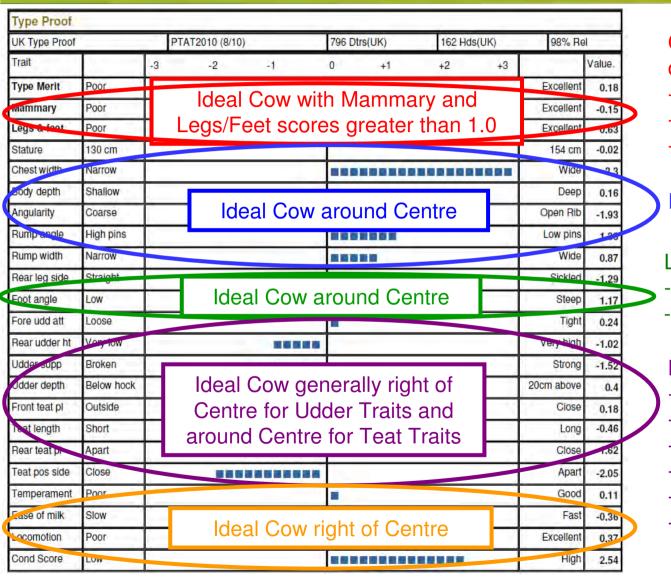




- Extreme Angularity is -ve for Productive Life & Fertility
- Extreme Stature and Body Depth is -ve for Lifespan
- National Type Merit Index re-developed to totally reflect a BALANCE of Functionality & Longevity
  - ✓ Emphasis on Mammary, Legs & Feet & Lifespan
  - ✓ Doesn't mean breeding small cows!

## Type Proofs





Composite Type Traits based on Type Classification

- Dairy Type
- Mammary (>1.0)
- Legs and feet (>1.0)

Dairyness traits

Legs and Feet Traits

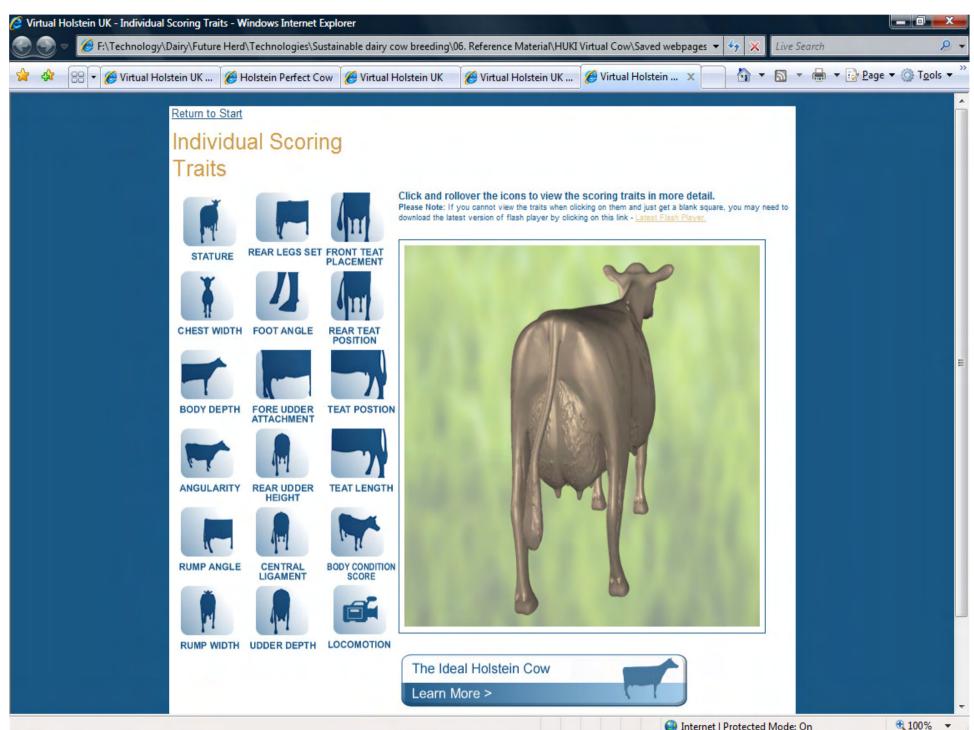
- -Rear leg
- -Foot angle

**Mammary Traits** 

- Udder attachment (F/R)
- Udder support
- Udder depth
- Front teat placement
- Teat length
- Teat position

Other traits

Source: Holstein UK. Type proofs for O-Bee Manfred Justice (Oman).



# Ideal Cow: Holstein UK



		1	2	3	4	5	6	7	8	9	
Stature	Short										Tall
Chest Width	Narrow										Wide
Body Depth	Shallow										Deep
Angularity	Coarse						ı				Open
Rump Angle	High pins										Extreme slope
Rump Width	Narrow										Wide
Rear Legs Set	Straight										Sickled
Foot Angle	Low										Steep
Fore Udder Attachment	Weak										Tight
Rear Udder Attachment	Low						ı	ı		ı	High
Central Ligament	Weak						ı	ı			Strong
Udder Depth	Deep					ı					Shallow
Front Teat Placement	Outside										Inside
Rear Teat Position	Outside					ı					Crossing
Teat Position	Close										Far apart
Teat length	Short										Long
Locomotion	Short Stride										Long stride
<b>Body Condition Score</b>	Poor										Grossly fat

Source: Adapted from Holstein UK Ideal Cow.

## Type and Lifespan



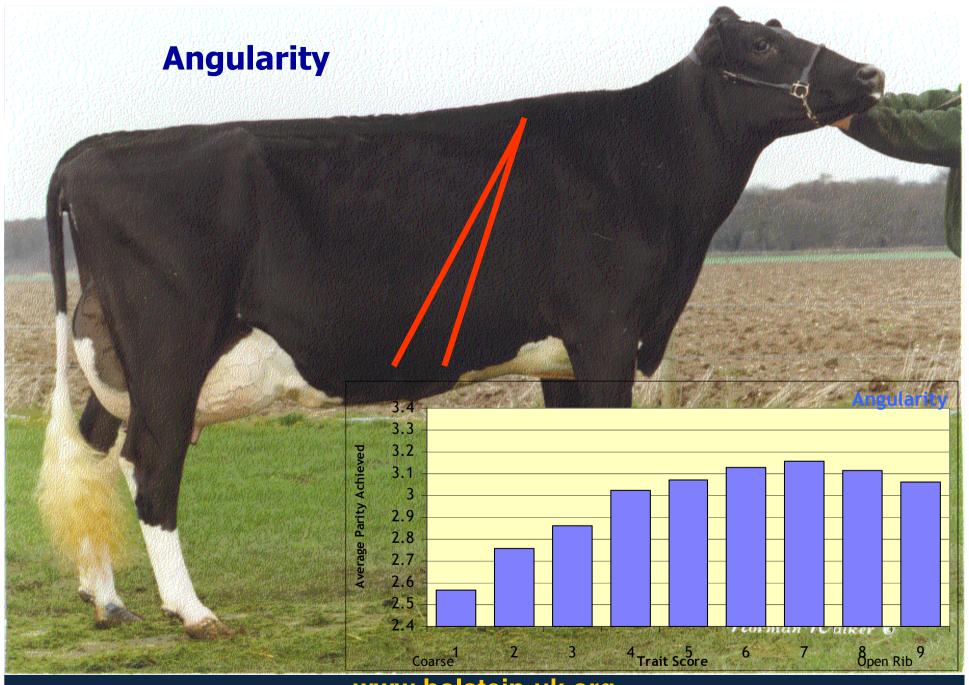
MAIN ARTICLE

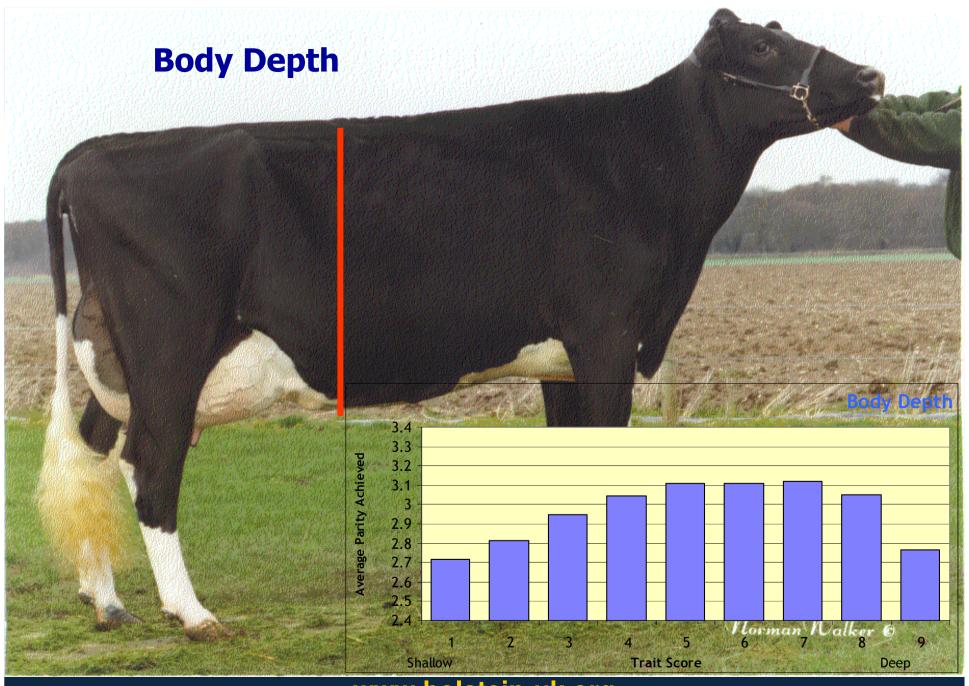
Selecting for type can be skin deep, so focus on fitness traits to increase longevity

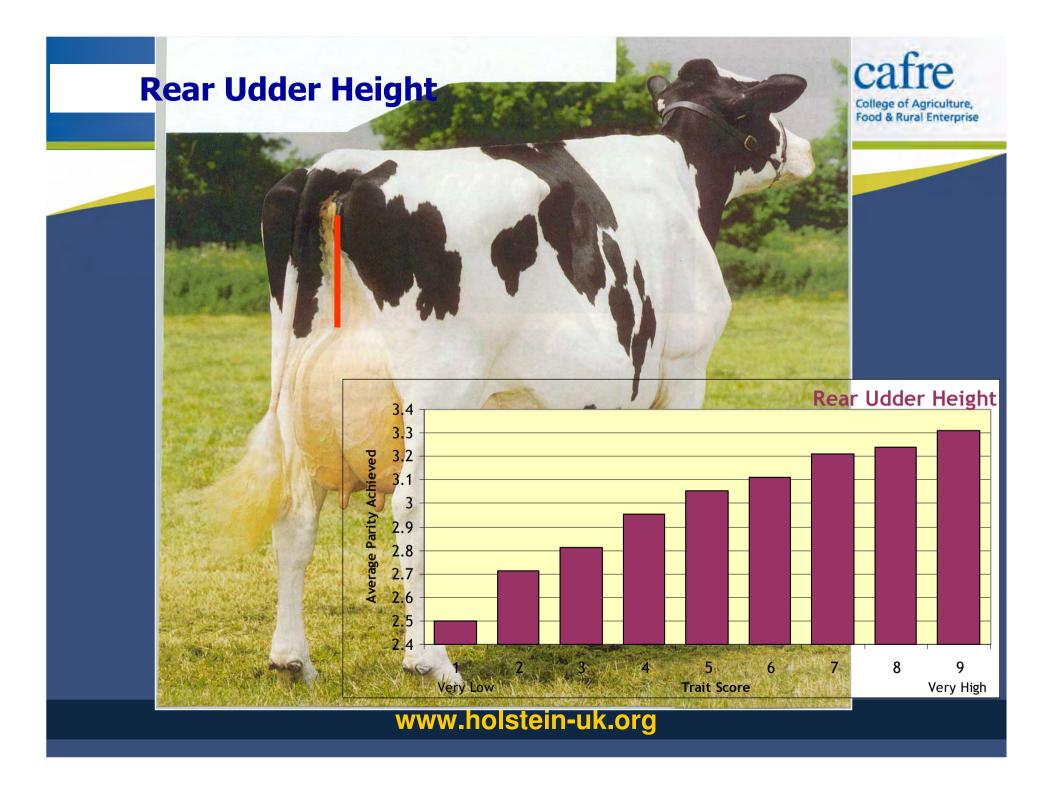
# Plain Janes offer lifespan gains

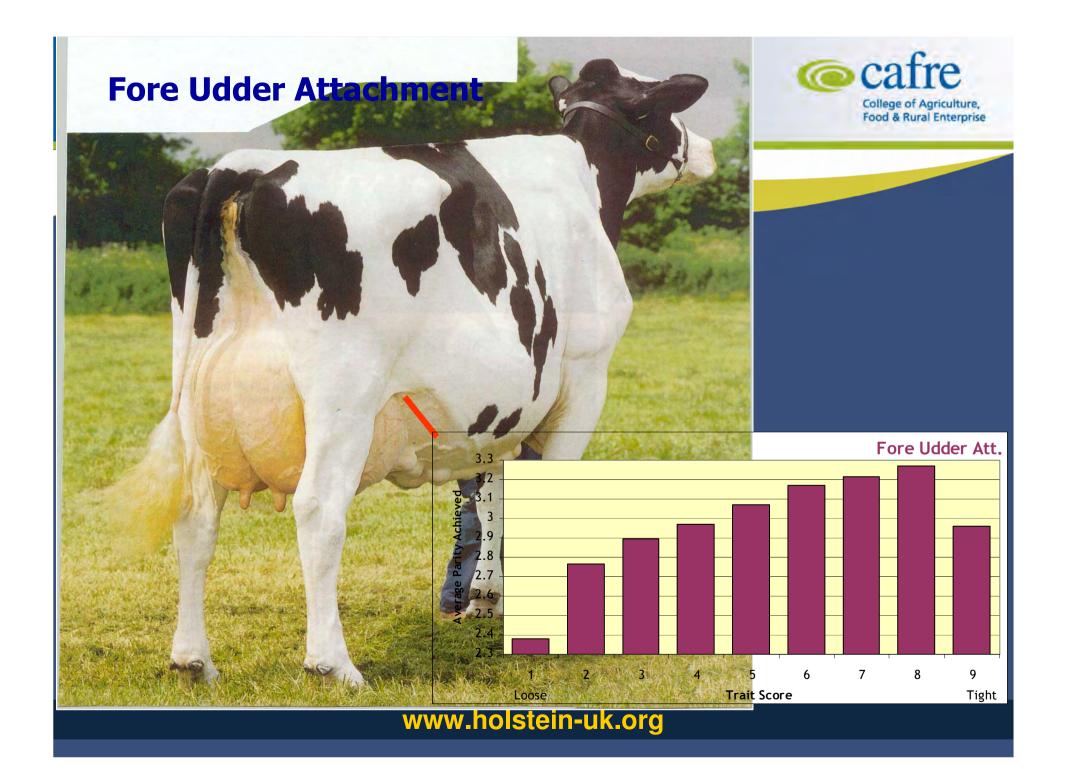
When is breeding for longevity not breeding branded onto their backs, then even the plainest cow may start

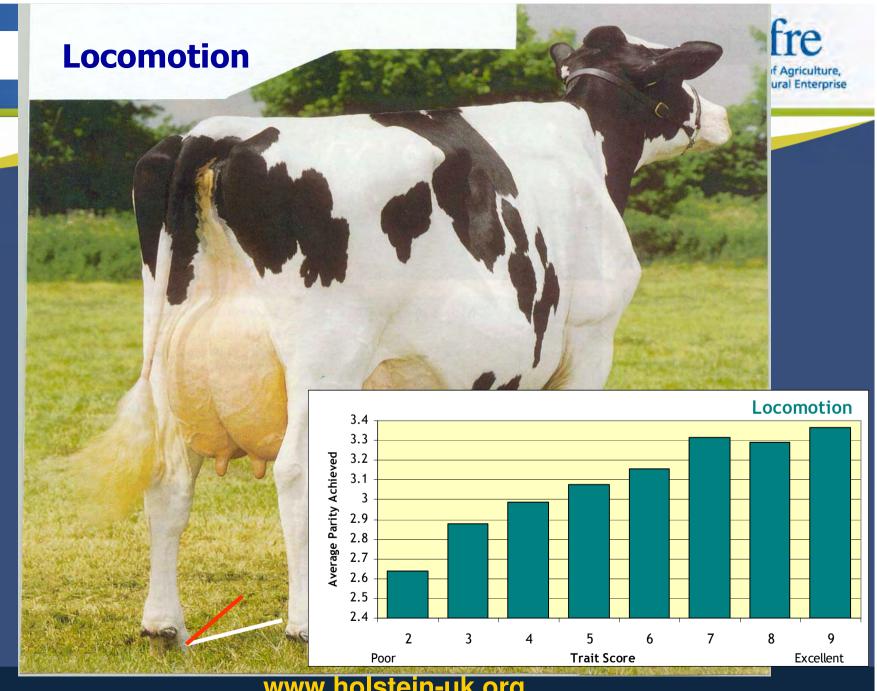
- "Desirable" dairyness traits (stature, angularity, rump angle, etc) negatively associated with longevity.
- Mammary and feet/legs composite type traits have been developed to indirectly improve longevity.
- Durability can be measured <u>directly</u> through:
  - PTA fertility
  - PTA SCC
  - PTA lifespan
- Select on £PLI first, shortlist for your specific needs and then consider type.
- Use a team of around 4 bulls each year.
- Follow a balance of 'function' not 'fashion' (Lucy Andrews, Holstein UK)











# Future Herd - Targets, Production and Genetics



	Herd Target	Rolling Herd Performance	Average Herd Genetic Merit	Sire Selection Target
Milk yield (litres)	8,000	8,100	-135	> -135
Butterfat %	4.10	4.30	0.14	-
Protein %	3.50	3.41	0.08	≥ 0.08
Lifetime yield (litres)	40,000	34,900	0.3	≥ 0.3
Fertility (Calv Int)	375	393	0.3	≥ 0.3
SCC	< 150	130	-6.9	≤ -7

- Have a long term breeding strategy with clear targets.
- Monitor herd production against these targets.
- Select sires over a number of years to meet these targets.

# Sire Selection - Autumn 2011 - Future Herd



	Genetic Merit	Target	McCormick	Tiergan	Loydie*	Padbury
£PLI	£63	> £150	£222	£220	£215	£152
Milk kg	-135	≥ 0	313	388	456	124
Fat%	0.14	-	0.20	0.21	0.11	0.09
Prot%	0.08	≥ 0.08	0.07	0.07	0.10	0.14
Rel%	66	≥ 80	74	90	72	96
Sire Fert.	0.3	≥ 0.3	7.4	2.2	1.9	5.7
Sire LS	0.3	≥ 0.3	0.3	0.2	0.2	0.0
Sire SCC	-6.9	≤ -7.0	-21	-11	-16	-10
Dairy Type	-	≥ 1.0	1.3	2.0	0.8	1.6
- Mammary	-	≥ 1.0	1.2	1.8	0.5	1.3
- Feet/Legs	-	≥ 1.0	1.0	1.6	1.1	1.8

<sup>\*</sup>Available sexed for use on heifers

Source: DairyCo bull proofs (Aug 2011)

Selecting sires with PTAs equal to or above the average genetic merit of herd should improve the genetic merit of the next generation.

# Herd Genetic Report

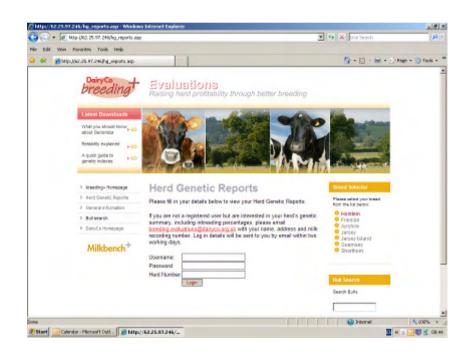


#### Available from:

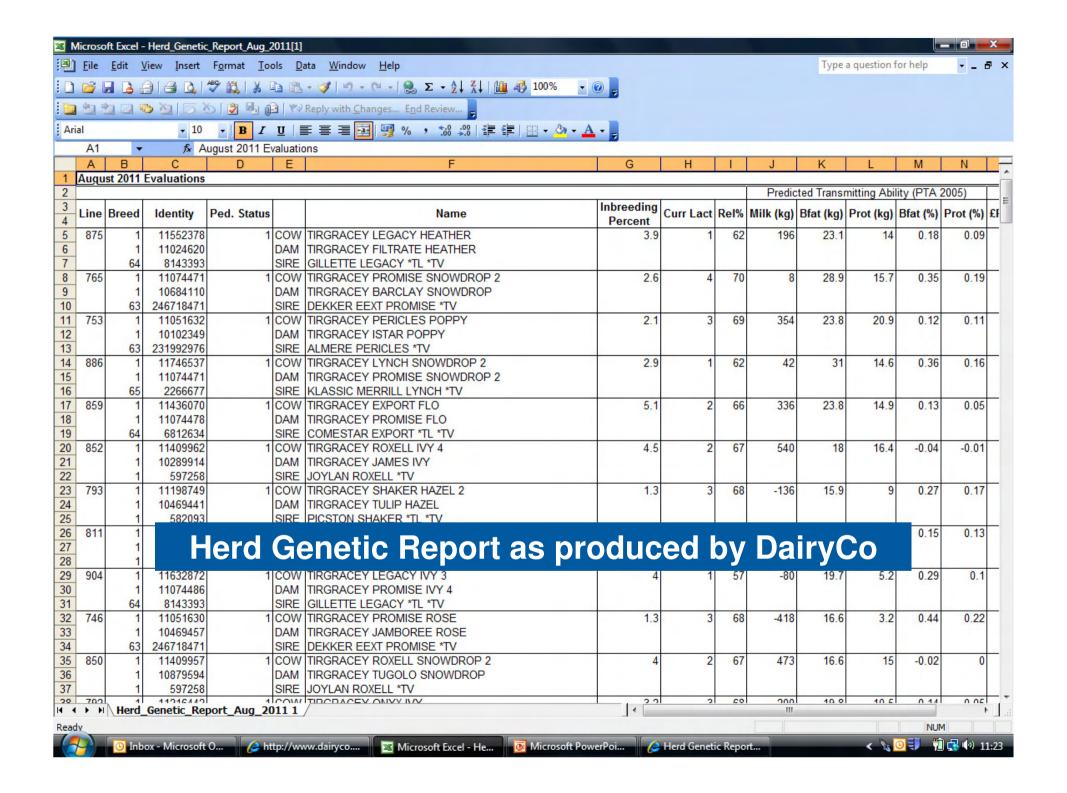
- a) DairyCo
- b) Milk records (United Milk Records or NMR)

#### Individual cow information on:

- Pedigree
- Milk PTA
- Fat yield PTA, Fat % PTA
- Prot yield PTA, Prot % PTA
- PIN
- £PLI
- Inbreeding
- Reliability %



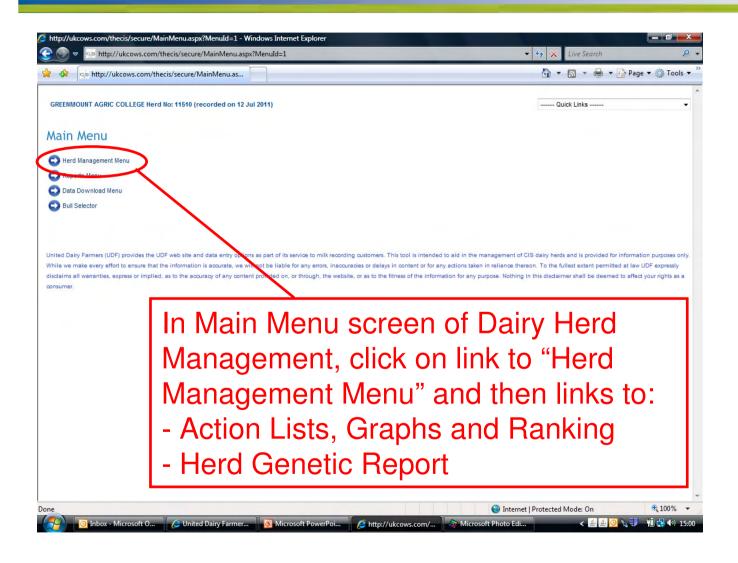
Herd Genetic Report – 'benchmarking tool' that gives genetic status of your herd which can aid bull selection if you have herd targets.



# Herd Genetic Report

- United Milk Records/Dairy Herd Management

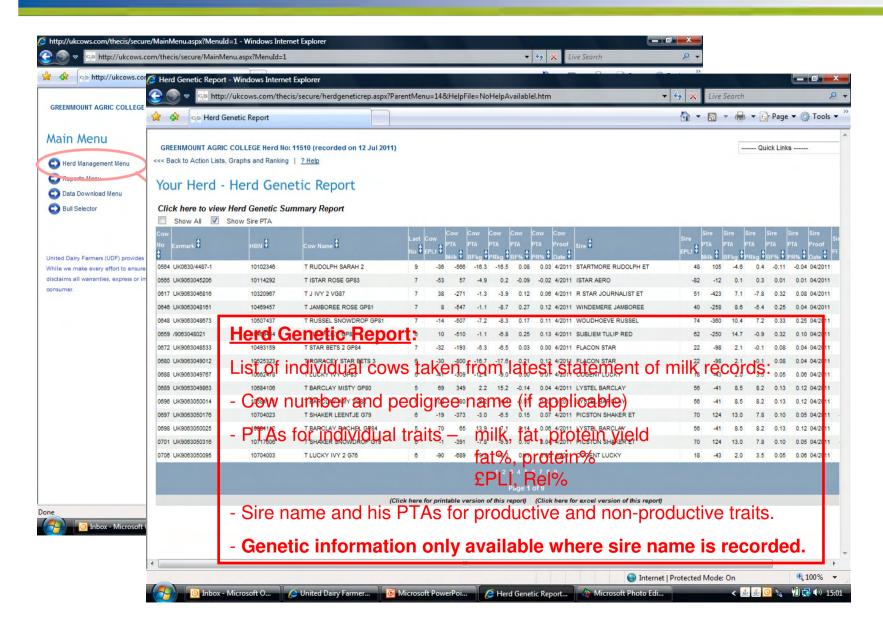




# Herd Genetic Report



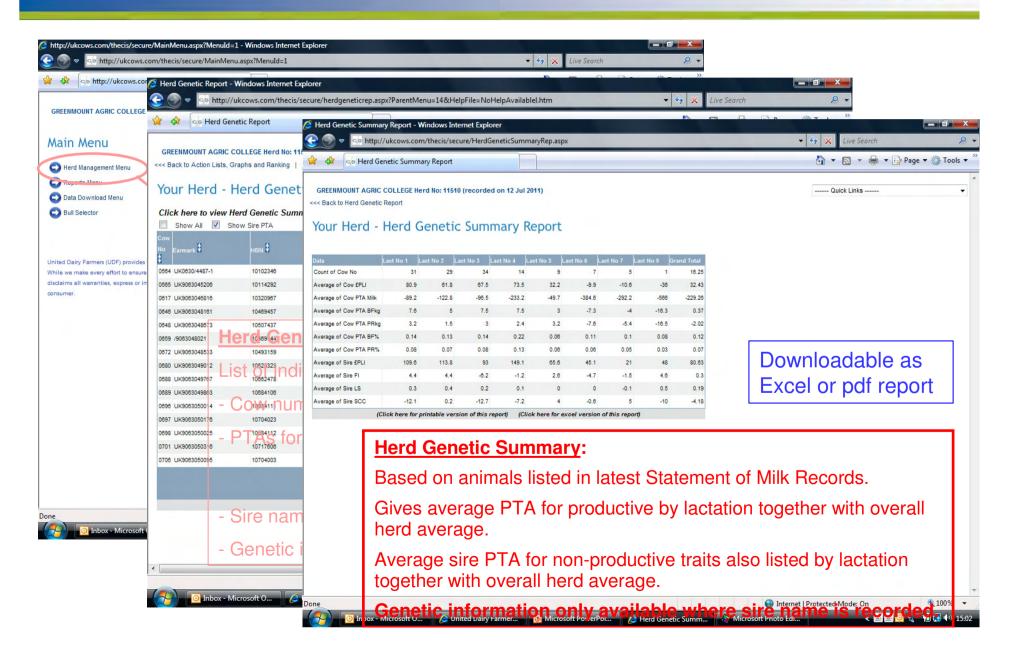




### Herd Genetic Report







### **Herd Genetic Report**

Scheme: AMR Monthly Page No: 1 Herd No: 11510 GREENMOUNT AGRIC COLLEGE (HIGH FORAGE HERD) 22 GREENMOUNT ROAD MUCKAMORE COUNTY ANTRIM BT41 4PU

United Dairy Farmers
Dale Farmhouse, 15 Dargan Road, Belfast, BT3 9L5
Tel: 028 9037 2219 WWW.UTDNLCO.UK



Previous Test Date: 13/09/2011 Latest Test Date: 13/10/2011 Test Interval: 30

Test Interval; 30 Date Run: 19/10/2011

Cow	Earmark	HBN	Cow Name	Lact No	Cow £PLI	Cow PTA Milk	Cow PTA BFkg	Cow PTA PRkg	Cow PTA BF%	Cow PTA PR%	Cow Proof Date	Sire Name	Sire £PLI	Sire PTA Milk	Sire PTA BFkg	Sire PTA PRkg	Sire PTA BF%	Sire PTA PR%	Sire Proof Date			Sire SCC
0564	UK0630/4487-1	10102346	TIRGRACEY RUDOLPH SARAH 2	9	-38	-575	-16.4	-16.9	0.08	0.02	Aug 2011	STARTMORE RUDOLPH ET	48	103	-4.7	0.4	-0.11	-0.04	Aug 2011	4.5	0.5	-10
0565	UK9063045206	10114292	TIRGRACEY ISTAR ROSE GPB3	7	-55	48	+5.3	-0,1	-0.09	-0.02	Aug 2011	ISTAR AERO	-73	-14	0.1	0.2	0.01	0.01	Aug 2011	-3.7	-0.6	19
0617	UK9063046816	10320967	TIRGRACEY JOURNALIST IVY 2 VG87	7.	37	-274	-1.5	-4.0	0.12	0.06	Aug 2011	RIDGE STAR JOURNALIST ET	54	-417	7.3	-7.6	0.32	0.08	Aug 2011	2.3	0.2	-11
0646	UK9063048161	10469457	TIRGRACEY JAMBOREE ROSE GP81	8	5	-558	-1.8	-9.0	0.27	0.12	Aug 2011	WINDEMERE JAMBOREE	41	-253	8.6	-5.1	0.24	0.04	Aug 2011	8.0	0.0	8
0648	UK9063048673	10507437	TIRGRACEY RUSSEL SNOWDROP GP81	7	-14	-532	-8.1	-6.5	0.17	0.14	Aug 2011	WOUDHOEVE RUSSEL	74	-351	10.7	7.5	0.33	0.25	Aug 2011	-10.2	0.0	-2
0659	/9063048021	10469444	TIRGRACEY TULIP LILY GP82	6	23	-541	-1.3	-6.5	0.27	0.15	Aug 2011	SUBLIEM TULIP RED	63	-247	14.9	-0.9	0.32	0.09	Aug 2011	4.0	0.0	-16
0680	UK9063049012	10525323	TIRGRACEV STAR BETS 3	7	-41	-810	-17.0	-17.9	0.21	0.12	Aug 2011	FLACON STAR	11	-103	2,0	-0.2	0.08	0.04	Aug 2011	-4.5	0,1	9
0688	UK9063049767	10662478	TIRGRACEY LUCKY IVY GP83	6	-41	-309	-12.6	-9.0	0.00	0.01	Aug 2011	COGENT LUCKY	20	-36	2.3	3.8	0.05	0.06	Aug 2011	0.5	-0.2	4
0689	UK9063049863	10684106	TIRGRACEY BARCLAY MISTY GP80	6	70	346	3.1	15.0	-0,13	0.04	Aug 2011	LYSTEL BARCLAY	58	-30	8,8	8.5	0.13	0.12	Aug 2011	-1.0	-0,1	17
0696	UK9063050014	10684111	TIRGRACEY BARCLAY AMV VG85	6	102	359	9.1	14.2	-0.06	0.03	Aug 2011	LYSTEL BARCLAY	58	-30	8.8	8.5	0.13	0.12	Aug 2011	-1.0	-0.1	17
0697	UK9063050176	10704023	TIRGRACEY SHAKER LEENTJE G79	6	-18	-368	-2.7	-6.3	0,15	0.07	Aug 2011	PICSTON SHAKER ET	82	158	13,9	8.6	0,10	0.04	Aug 2011	-12.2	0.4	-11
0698	UK9063050025	10684112	TIRGRACEY BARCLAY RACHEL GP84	5	73	80	14.8	7.3	0,14	0.06	Aug 2011	LYSTEL BARCLAY	58	-30	8.8	8.5	0.13	0.12	Aug 2011	-1.0	-0.1	17
0701	UK9063050316	10717606	TIRGRACEY SHAKER SNOWDROP G79	6	2	-395	-8.4	-9.0	0.09	0.05	Aug 2011	PICSTON SHAKER ET	82	158	13.9	8.6	0.10	0.04	Aug 2011	-12.2	0.4	-11
0706	UK9063050095	10704003	TIRGRACEY LUCKY IVY 2 G76	6	-91	-708	-19.7	-18.4	0.11	0.06	Aug 2011	COGENT LUCKY	20	-36	2.3	3.8	0.05	0.06	Aug 2011	0.5	-0.2	4
0715	UK9063051576	10858985	TIRGRACEY LUCKY POPPY 3 GP80	5	41	-42	1.3	8.2	0.04	0.12	Aug 2011	COGENT LUCKY	20	-36	2.3	3.8	0.05	0.06	Aug 2011	0.5	-0.2	4
0717	UK9063051484	10858968	TIRGRACEY LUCKY SNOWDROP 2 G79	5	-79	-540	-7.6	-14.2	0.18	0.04	Aug 2011	COGENT LUCKY	20	-36	2.3	3.8	0.05	0.06	Aug 2011	0.5	-0.2	4
0719	UK9063051543	10858980	TIRGRACEY TUGOLO SARAH	4	58	-394	3.2	-8.1	0.24	0.06	Aug 2011	OLMO PRELUDE TUGOLO	163	-46	19.9	2.9	0.28	0.06	Aug 2011	10.5	0.4	-7
0725	UK9063051834	10879604	TIRGRACEY TUGOLO ROSE	5	18	-278	-0.2	-4.5	0.14	0.06	Aug 2011	OLMO PRELUDE TUGOLO	163	-46	19.9	2.9	0.28	0.06	Aug 2011	10.5	0.4	-7
0731	UK9 0630 5155 4	10858982	TIRGRACEY GEREMOO ROSE GP81	5	56	-435	0.7	1.3	0.24	0.20	Aug 2011	GEREMOO	100	-198	8.2	6.7	0.21	0.17	Aug 2011	2,6	0.1	0
0733	UK9 0630 5177 5	10879601	TIRGRACEY PERICLES HEATHER VGB5	4	104	147	13.3	7.4	0.09	0.03	Aug 2011	ALMERE PERICLES RED	177	256	27.7	16.5	0,22	0.10	Aug 2011	0.5	0.1	-18
0734	UK9063051473	10858971	TIRGRACEY TUGOLO PHYLISS F71	5	86	119	16.9	7,9	0,15	0.05	Aug 2011	OLMO PRELUDE TUGOLO	163	-46	19,9	2.9	0.25	0.06	Aug 2011	10.5	0,4	-7

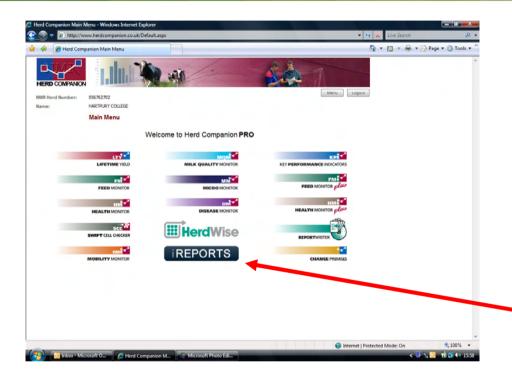
# Herd Genetic Summary Report - Future Herd



Data	Lact No 1	Lact No 2	Lact No 3	Lact No 4	Lact No 5	Lact No 6	Lact No 7	Lact No 8	Lact No 9	Grand Total
Count of Cow No	34	30	35	19	6	7	4	1	1	137
Average of Cow £PLI	82.7	72.1	69.7	76.7	32.5	6.7	-18.3	5	-38	65.76
Average of Cow PTA Milk	-72	-89.1	-71.2	-213.8	-182.7	-230.9	-392	-558	-575	-124.73
Average of Cow PTA BFkg	8.8	7.3	6.8	8.2	4.3	-4.6	-8	-1.8	-16.4	6.24
Average of Cow PTA PRkg	3.8	3.1	3.3	2.5	1	-2.9	-7.1	-9	-16.9	2.33
Average of Cow PTA BF%	0.15	0.14	0.12	0.22	0.15	0.06	0.1	0.27	0.08	0.14
Average of Cow PTA PR%	0.08	0.08	0.07	0.12	0.09	0.06	0.08	0.12	0.02	0.08
Average of Sire £PLI	122.6	113.1	105.3	153.2	87.3	54.7	16.5	41	48	111.09
Average of Sire FI	4.9	3.4	-4.4	-1.6	3.9	-4.2	-4	8	4.5	0.56
Average of Sire LS	0.3	0.3	0.4	0.2	0.1	0	-0.1	0	0.5	0.27
Average of Sire SCC	-9.9	-3.6	-10.5	-7.9	1.8	0.6	3.8	8	-10	-6.83

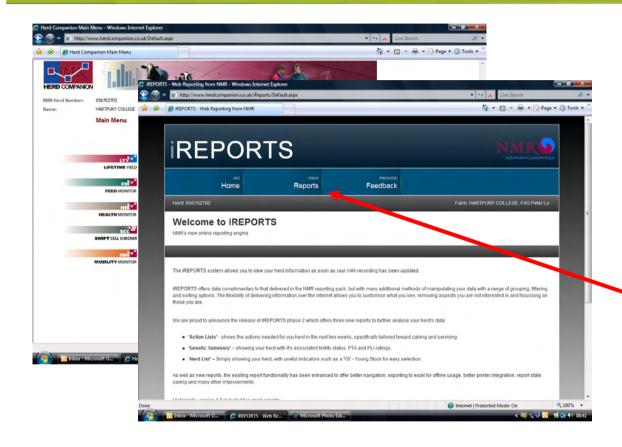
Source: Dairy Herd Management, Oct 2011.





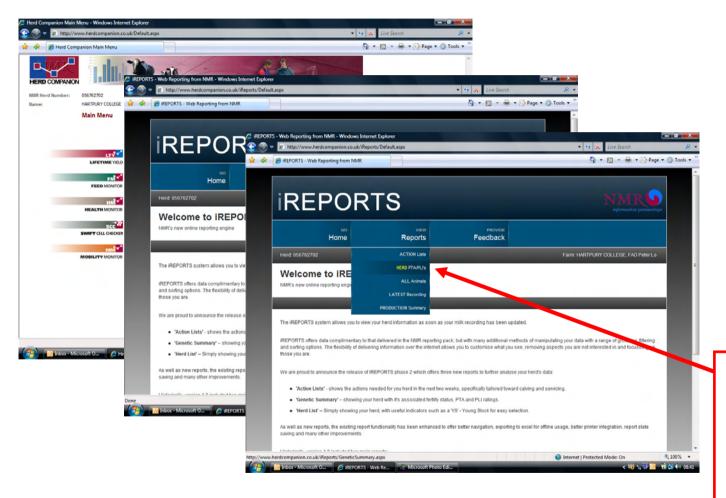
Click on link to iReports





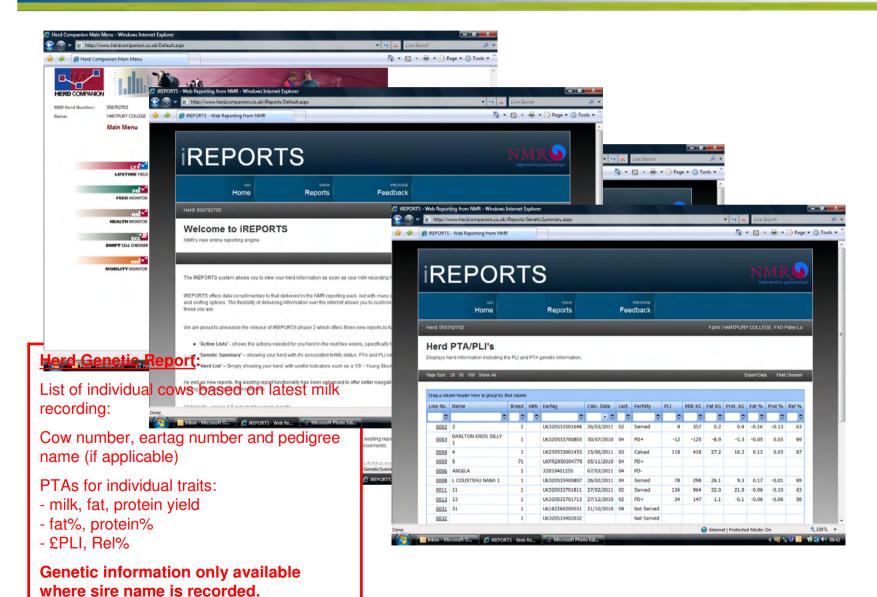
Click on link to view Reports



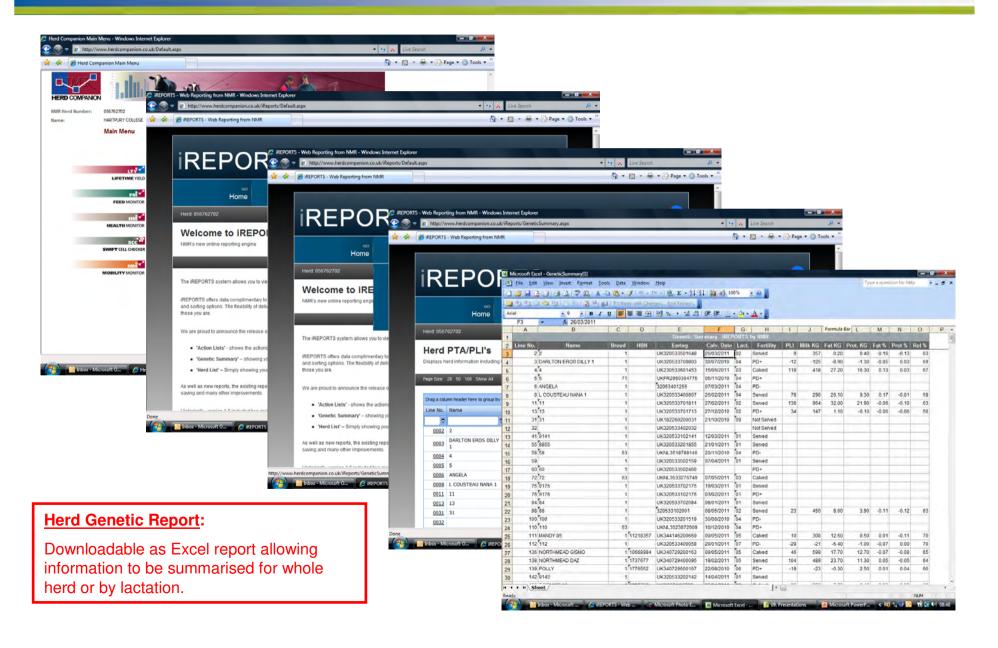


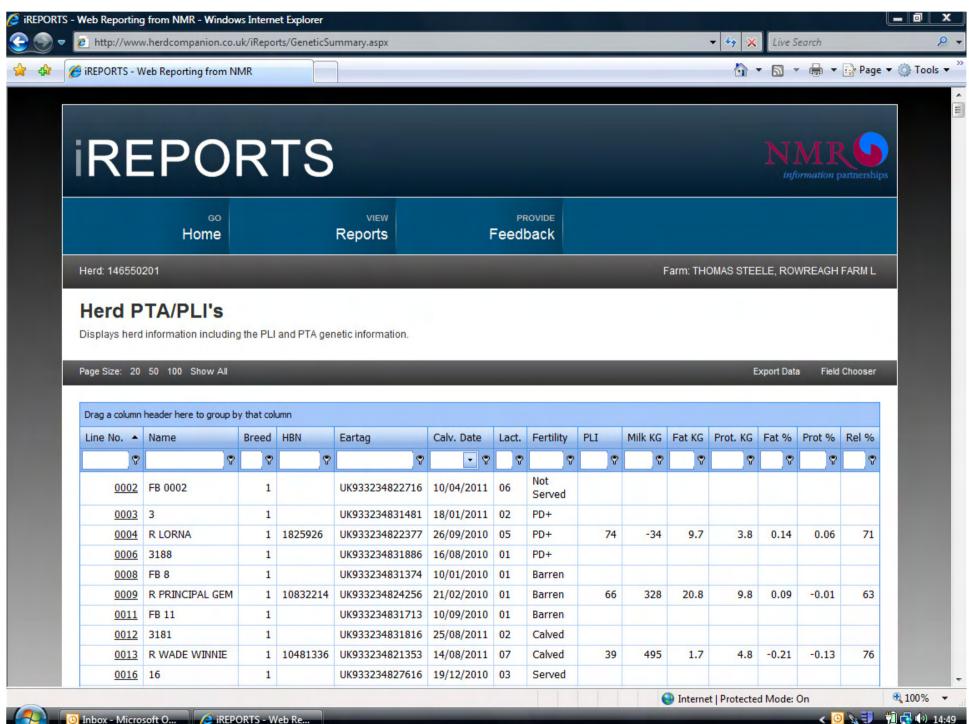
Select Herd PTAs/PLI from drop down menu.

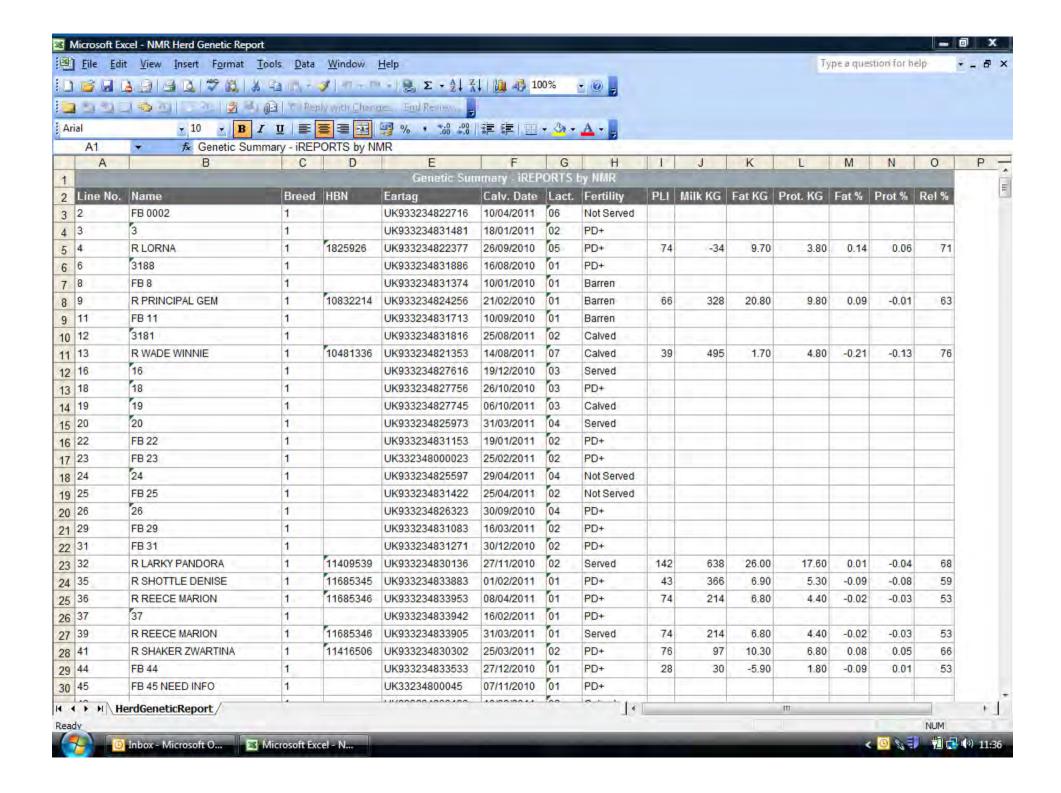












## Sire Selection using your Herd Genetic Summary



	Herd Genetic Merit	Sire Selection Criteria	No. Sires Available	Sire Selection Criteria	No. Sires Available
£PLI	54	_	661	_	661
Milk	251	≥ 251	469	≥ 251	469
Fat%	-0.01	≥ -0.01	178	≥ 0.05	94
Prot%	-0.03	≥ -0.03	146	≥ 0.05	34
Sire Fert	-	> 0	74	≥ 2	15
Sire LS	-	> 0	61	> 0	11
Sire SCC	-	< 0	58	< 0	11
Available NI			44		9
Top 100 PLI			37		9

Choice of sires is restricted by your selection criteria



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New DairyCo study on price transmission now available

A long term look at supply chains for dairy products, analysing how and when price movements are carried through dairy supply chains.

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- Extension Team
- · People Management
- · Tools & Information
- · Milkbench+
- · Financial Busines Management
- . Milk Prices & Contracts

#### Cow management

- · Health & Welfare
- · Grassland Management
- Mastitis
- · Breeding & Genetics

#### The Dairy Farming Information Centre

If you don't know what you get for your milk levy, how can you place a value on it? Check out our rapidly expanding site and access technical information and resources to support your dairy farming business.

#### DAIRYCO HIGHLIGHTS

- · New DairyCo report investigates price movements in supply chains 2 hours ago
- · Asymmetric Price Transmission Technical Report for DairyCo 2 hours ago
- Asymmetric Price Transmission in Dairy Supply Chains 11 hours ago





### Find out about your area

Click on link for Breeding and Genetics.

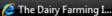
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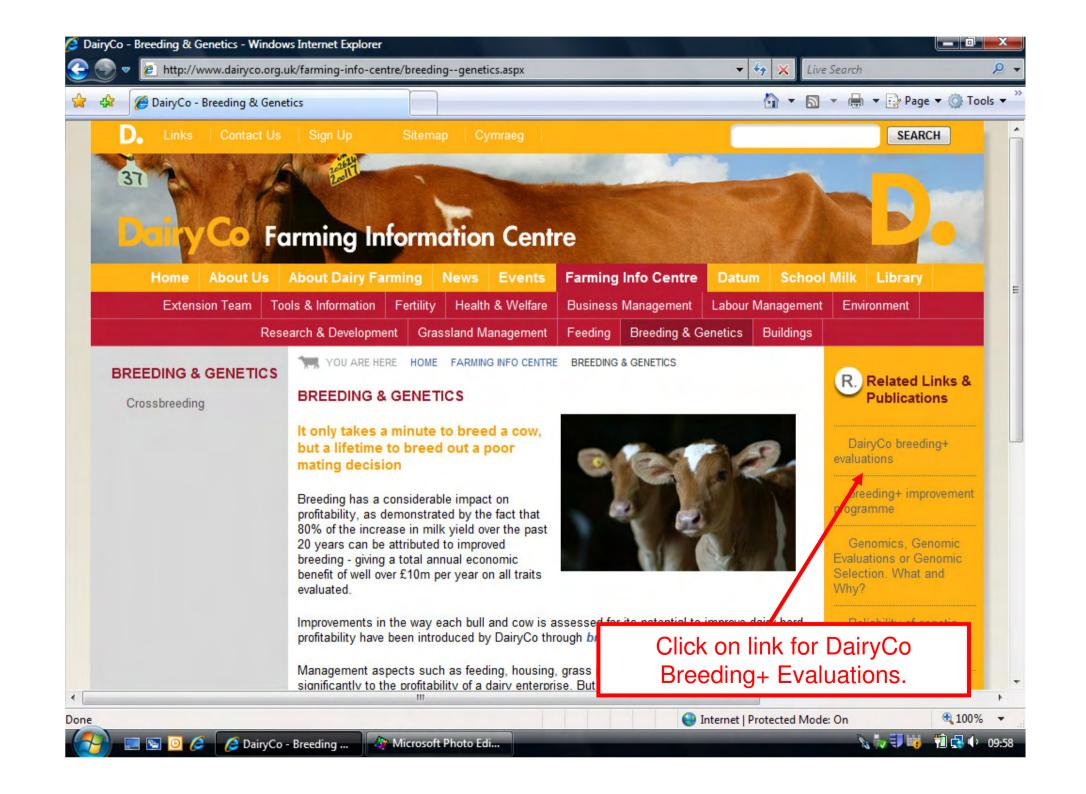


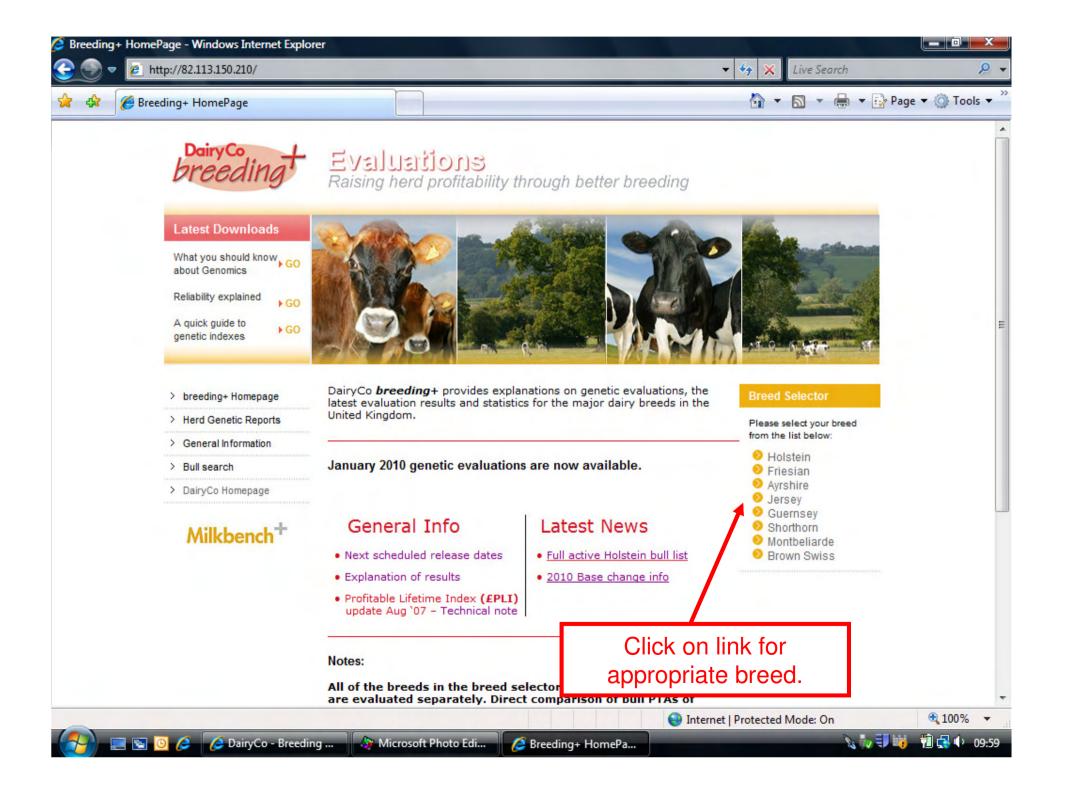


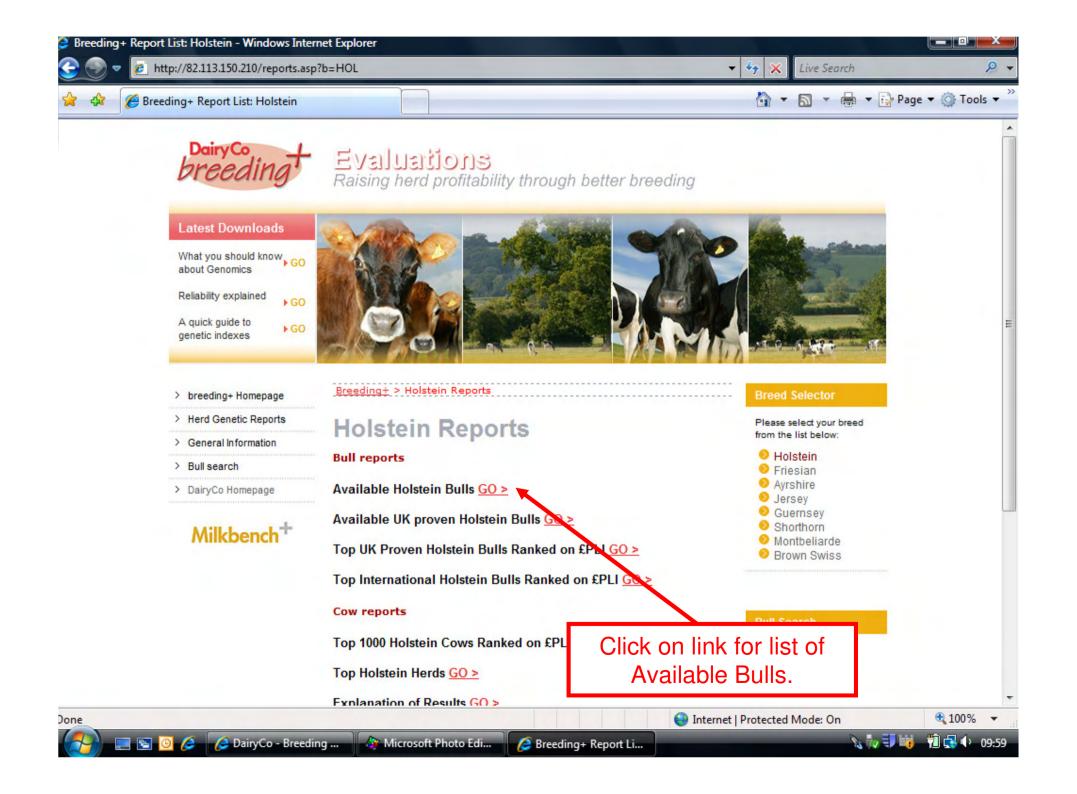


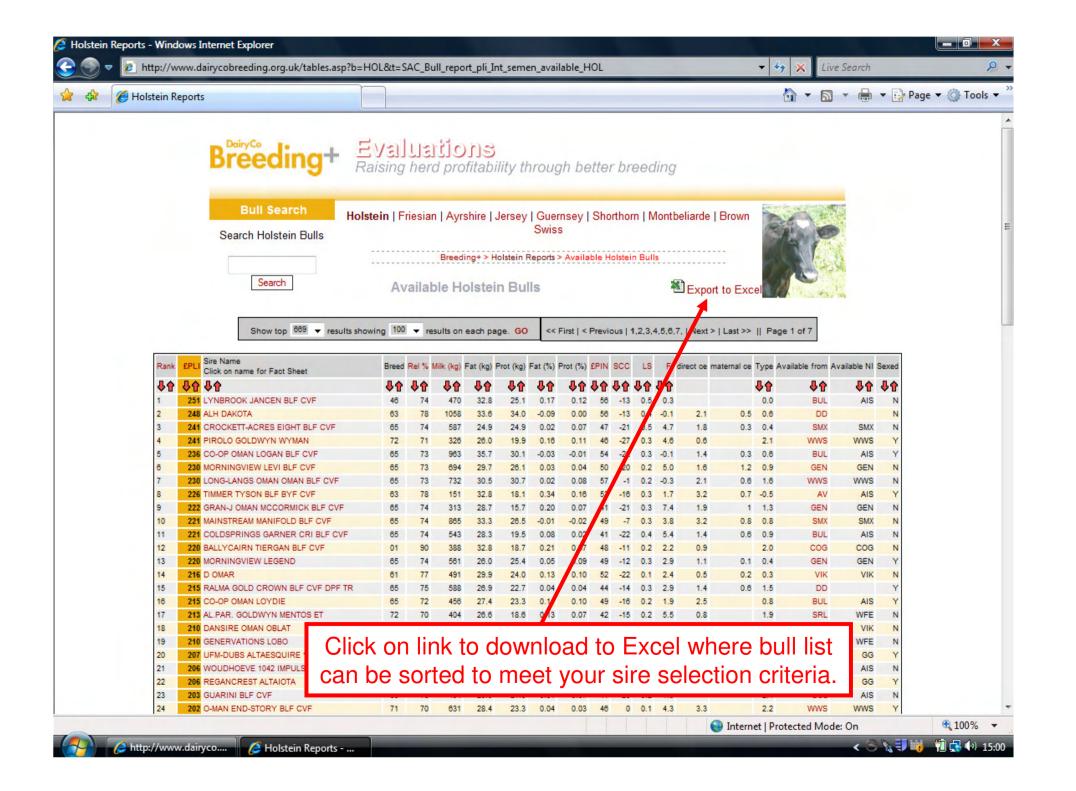


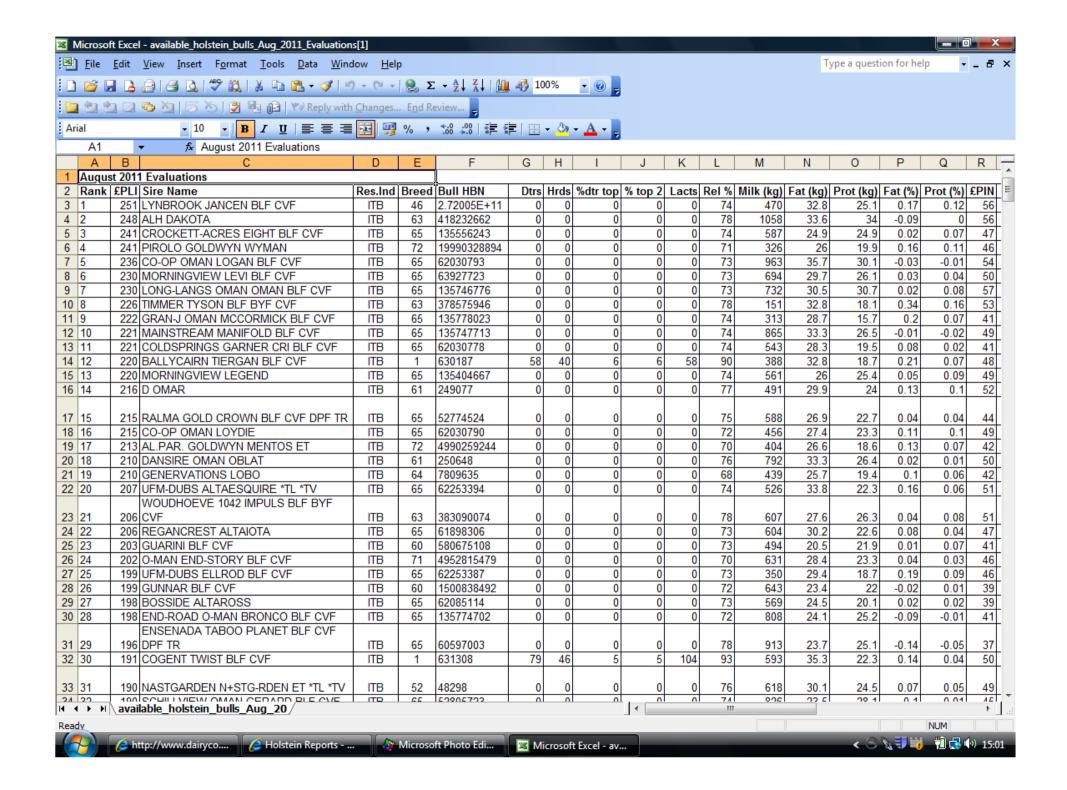


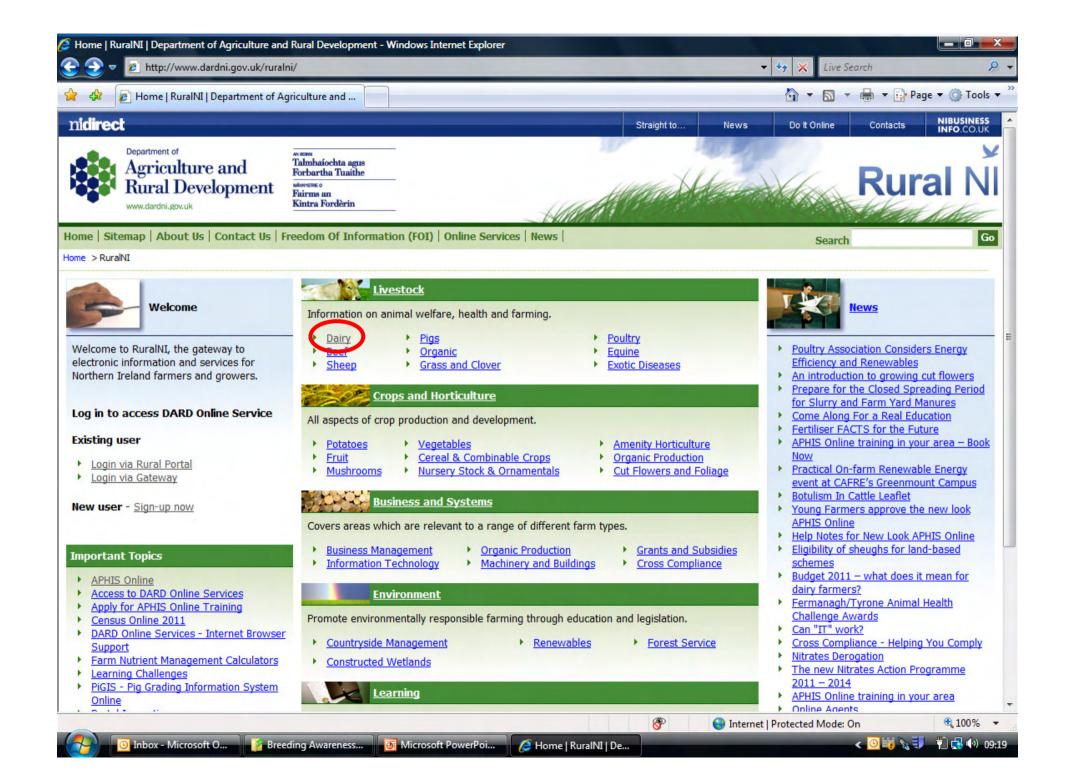


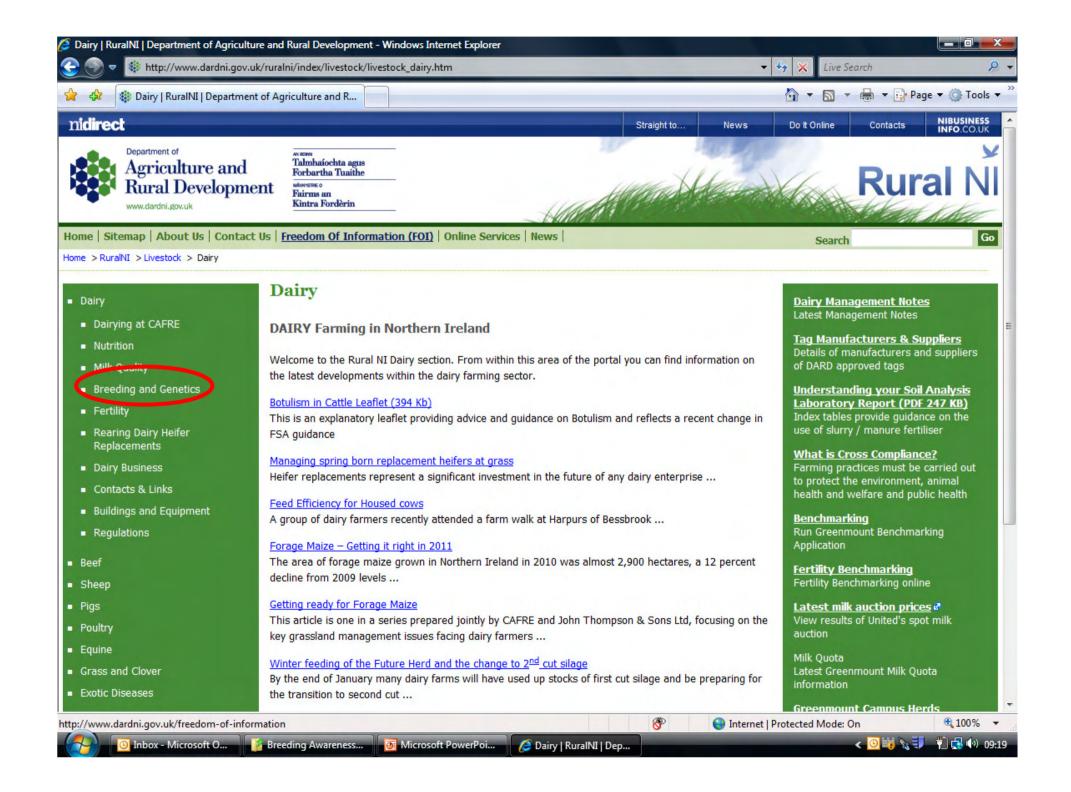


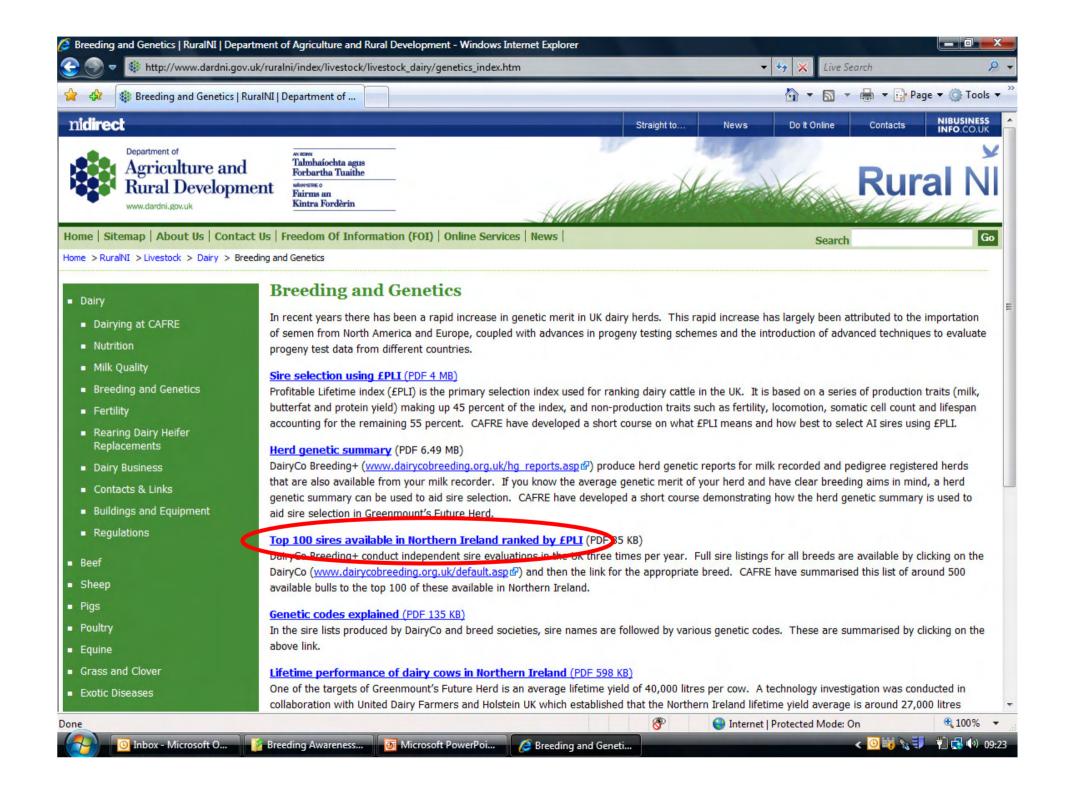


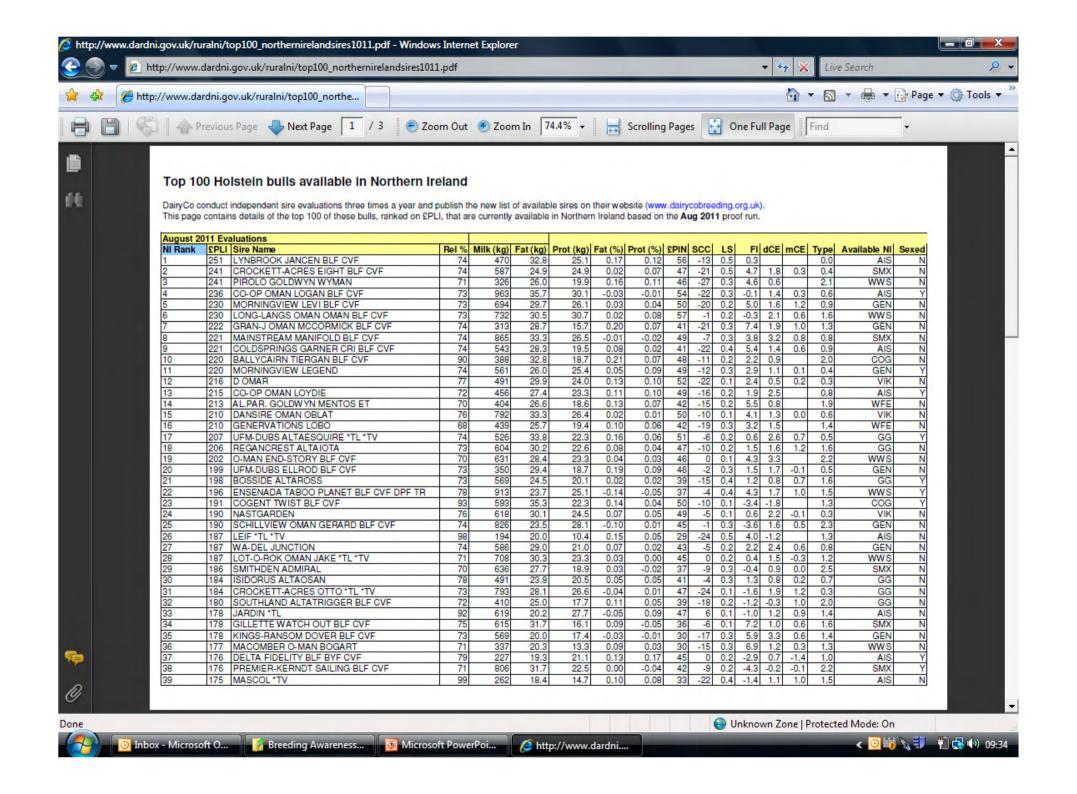












### Summary



- £PLI summarises all PTA's into a single lifetime-based financial index.
- PTAs for Fertility and Lifespan have real effects at herd level.
- Have clear objectives of where you want your herd to be in 5 years time and breed towards this:
  - Use Herd Genetic Report to establish current genetic merit of your herd.
  - Select bulls now that will meet your objectives in 5 years time.
- Use £PLI as your key selection criteria select from top 100 bulls available.
- Restrict your choice of bulls selecting those that will meet your herd targets:

Milk production Yield, BF%, PR% **Fertility** +ve Lifespan +ve SCC -ve

Type

Reliability 70% or more

Where possible, limit number of bulls to 3 or 4 each year.

Selection on £PLI should lead to improved longevity and lifetime yield.