

#### IRISH CATTLE BREEDING FEDERATION

## Outcross Bulls & BDGP





#### **Overview**

Q: What is an outcross bull?

 Ans: A bull with a bloodline that has never been used here before.

- My Technical Definition:
  - The AI bull's Sire, Sire's Sire and Dam's sire do not have AI Codes and were not widely used by Pedigree Breeders in the last few years
  - They would also not be in the immediate backpedigrees (Sire.
     Grandsire line) of many breeding females today.



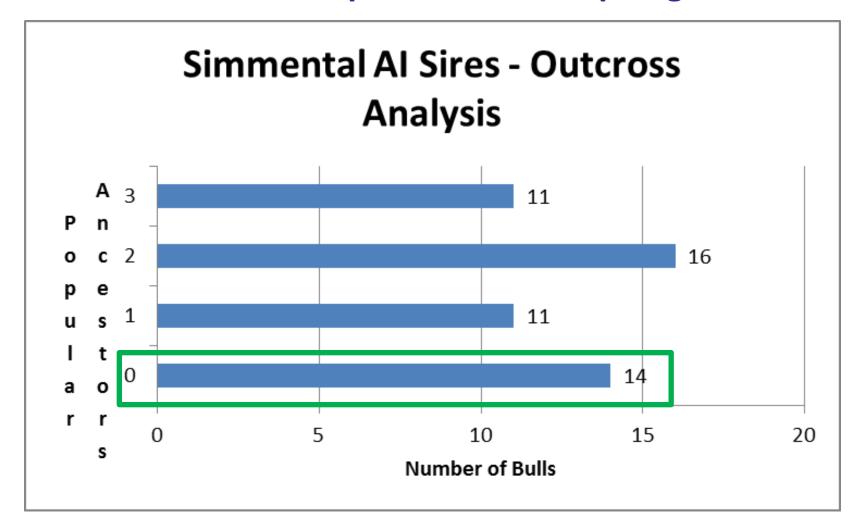
# Case Study

Simmental Breed

- 52 Sires recommended for use by their Pedigree Breeders
- How many have 0,1,2 or 3 popular Simmental AI Sires in their immediate backpedigree (Sire & both Grandsires)?
- What are the €uro-Stars of those outcross bulls?
- What are their chances of improving their €uro-Stars?

# **Proportion of Outcross Bulls**

14 of the 52 have complete 'Outcross' pedigrees





	Simmental Outcross Bulls										
		Bull Details		Replace	ment		Terminal				
Code	Origin	Name	Index	Stars Within	Stars Across	Rel %	Index	Stars Within	Stars Across	Rel %	BGDP
BLA	IRL	BALLYBANE LAD	204	5	5	88	55	1	1.5	90	Υ
S549	UK	OMORGA REGAN	140	3	3.5	59	97	5	2	67	Υ
ISL	UK	ISLAVALE CRACKER 11	128	2.5	3.5	34	48	0.5	1	44	Υ
S1515	UK	KEELDRUM CLIO 11 (P)	125	2	3	18	61	1.5	1.5	24	N
АНС	IRL	AUROCH DEUTER PP	121	2	3	11	72	3	2	12	N
S2003	UK	POPES BARCLAY 10 (PV)	118	2	3	9	63	2	1.5	10	N
RHC	IRL	CELTIC HUNTER	113	1.5	3	74	19	0.5	0.5	75	N
S1200	DNK	TISET DARWIN P	99	1	2.5	6	47	0.5	1	9	N
APZ	IRL	CURAHEEN APOSTLE ET	95	1	2.5	78	67	2	1.5	95	N
S2269	DNK	LOSNING IVER P	88	1	2	3	35	0.5	0.5	3	N
S2009	UK	WROXALL COCKER-LEEKY-SOUP 11PP	86	1	2	8	48	0.5	1	10	N
S2005	UK	BANWY WONDERBOY	86	1	2	22	54	1	1.5	23	N
S2004	UK	FALONDENE CINCINNATI 11	74	0.5	2	7	39	0.5	1	7	N
FZD	UK	DELFUR DECIDER 12	57	0.5	1.5	13	39	0.5	1	18	N

All are outcross bulls but with different usage potential



- Reliability % of outcross bulls is generally always lower than their comrades with 'Popular' backpedigrees.
- Until 'Rel %' rises the potential benefits of using the 'outcross' bull is unknown.
- 2 Factors affecting the €uro-Stars of an 'Outcross' bull:
  - Foreign data being included in his Irish figures
  - How his semen is priced, marketed & used here.
    - Is his semen available for use in commercial & pedigree herds?
    - Is his semen only available on a pre-order basis to pedigree breeders?

Regardless of BDGP scheme this is always an issue for such bulls.



Simmental Outcross Bulls											
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ISL	UK	ISLAVALE CRACKER 11	128	2.5	3.5	34	48	0.5	1	44	Υ
S1515	UK	KEELDRUM CLIO 11 (P)	125	2	3	18	61	1.5	1.5	24	N
AHC	IRL	AUROCH DEUTER PP	121	2	3	11	72	3	2	12	Ν
S2003	UK	POPES BARCLAY 10 (PV)	118	2	3	9	63	2	1.5	10	N
RHC	IRL	CELTIC HUNTER	113	1.5	3	74	19	0.5	0.5	75	Ν
S1200	DNK	TISET DARWIN P	99	1	2.5	6	47	0.5	1	9	N
APZ	IRL	CURAHEEN APOSTLE ET	95	1	2.5	78	67	2	1.5	95	N
S2269	DNK	LOSNING IVER P	88	1	2	3	35	0.5	0.5	3	N
S2009	UK	WROXALL COCKER-LEEKY-SOUP 11PP	86	1	2	8	48	0.5	1	10	N
S2005	UK	BANWY WONDERBOY	86	1	2	22	54	1	1.5	23	N
S2004	UK	FALONDENE CINCINNATI 11	74	0.5	2	7	39	0.5	1	7	N
FZD	UK	DELFUR DECIDER 12	57	0.5	1.5	13	39	0.5	1	18	N

Take 2 bulls to explain the 'usage potential' issue



Islavale Cracker 11 ISI HB No: UK522759501584

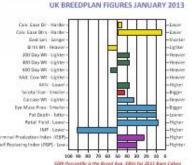
**April** 2013



Pedigree					
Sire: Glenturk Premier M061570	Sire: Milnafua Keystone Dam:Milnafua Hula [TR]				
Dam: Islovale Rula F077827	Sire: Islavale Marvel Dom: Balmanno Ladybird				

- Superb new addition to Dovea **Genetics Simmental Stud**
- Cracker was purchased at the Stirling Bull sales in Oct. 2012
- for £8,500 stg
- Cracker is a total outcross for Irish breeders
- from an excellent cow family





- **Outcross Bull in** Widespread Al
- Inclusion of reign data in his €uro-**S**rs
- €8/straw in Tech Service
- Widely available to Commercial falmers

Total	Ped	Calving	Linear	Weights	Carcass
Calves	Calves	Surveys	Scores	vveigitts	Recs
493	89	284	14	87	2



April 2015

Star Rating (within Simmental breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (across all beef breeds)	
<b>★★</b> 非會會	Replacement Maternal Cow Traits Maternal Progeny Traits	€128 €67 €61	34% (Low) 21% 47%	<b>★★★</b> ☆☆	
<b>非</b> 宣言宣言	Terminal	€48	44% (Average)	★官官官官	
****	Dairy Beef	€	% (N/A)	音音音音音	
Star Rating (within Simmental breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)	
	Expected progeny	performance			\
	Calving difficulty (% 3 & 4) Breed ave: 5.48%, All breeds ave: 4.98%	7.70%	85% (V High)		85%
★★☆☆☆	Docility (1-5 scale) Breed ave: 0.05, All breeds ave: 0.00	0.01 scale	11% (V Low)	****	
****	Carcass weight (kg) Breed ave: 22.98kg, All breeds ave: 22.98kg	22kg	36% (Low)	****	
****	Carcass conformation (1-15 scale) Breed ave: 1.44, All breeds ave: 1.86	1.43 scale	22% (Low)	**宣宣宣	
	Expected daughter bree	eding performanc	e		
	Daughter calving difficulty (% 3 & 4) Breed ave: 6.15%, All breeds ave: 6.15%	6%	8% (V Low)		
****	Daughter milk (kg) Breed ave: 7.98kg, All breeds ave: 0.31kg	11.37kg	21% (Low)	****	
****	Daughter calving interval (days) Breed ave: 0.37 days, All breeds ave: -0.32 days	3days	22% (Low)	****	

 His AI Usage has put enough progeny on the ground to allow his €uro-Stars to find their correct level in time.



TISET DARWIN P Al. Code: \$1200 Available from: ISCS 057 93 24577 **April** 2014 MARYWOOD POLLED WESTERN 9 SIRE TISET VAGN P TISET PETRINE DUN LANCER DAM BUCKLANDS MOLLY **BUCKLANDS LAURA** Within Index Across Economic Indexes Euro Value Breed Reliability Breed **Terminal** €41.60 296 €110.95 1% Replacement \*\*\* Index Trait Within Within Key Profit Traits Breed Value Reliability Breed Carcase Weight 13kg 4% \*1 Carcase Conformation (1-15) 1.06 296 Calving difficulty (% 3 & 4) 4.6 296

Outcross Bull <u>not</u> in Widespread Al

 Inclusion of reign data in his €uro-Sars

• €30/straw pre-order

• Widely available to Commer al farmers

Total	Ped	Calving	Linear	Weights	Carcass
Calves	Calves	Surveys	Scores		Recs
9	7	3	2	5	-

Former dictorio and through Deven



April 2015

Star Rating (within Sin mental breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (ocross all beef breeds)	
★会会会会	Replacement Maternal Cow Traits Maternal Progeny Traits	€99 €28 €72	6% (V Low) 3% 10%	****	
<b>東</b> 音音音音	Terminal	€47	9% (V Low)	★官官官官	
中中中中中	Dairy Beef	€	% (N/A)	<b>常常常常常</b>	
Star Rating (within Simmental breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)	
	Expected progeny	performance			
	Calving difficulty (% 3 & 4) Breed ave: 5.48%, All breeds ave: 4.98%	5.60%	19% (V Low)		19%
****	Docility (1-5 scale) Breed ave: 0.05, All breeds ave: 0.00	0.02 scale	7% (V Low)	****	
****	Carcass weight (kg) Breed ave: 22.98kg, All breeds ave: 22.98kg	15kg	7% (V Low)	****	
****	Carcass conformation (1-15 scale) Breed ave: 1.44, All breeds ave: 1.86	1.2 scale	3% (Too Low)	****	
	Expected daughter bree	ding performanc	е		
	Daughter calving difficulty (% 3 & 4) Breed ave: 6.15%, All breeds ave: 6.15%	6.7%	1% (Too Low)		
****	Daughter milk (kg) Breed ave: 7.98kg, All breeds ave: 0.31kg	8.04kg	0% (Too Low)	****	
****	Daughter calving interval (days) Breed ave: 0.37 days, All breeds ave: -0.32 days	95days	4% (Too Low)	****	

 His AI Usage has <u>not</u> put enough progeny on the ground to allow his €uro-Stars to find their correct level in time.



Targeting Farmers to use semen is another approach.







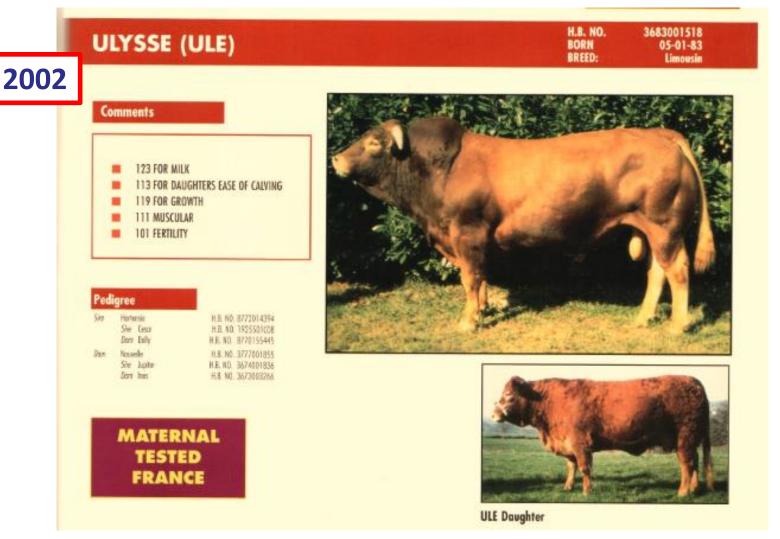


8000 catalogues sent out. 100's of calls made



- Regardless of whether a bull is an outcross or not:
- Getting a large number of progeny born across a large number of herds is critical for an accurate picture of his evaluations.
- Some 'Well Proven' bulls from foreign breeding programs have been used here and disappointed when their progeny arrived.
- Other such Foreign bulls though have delivered on their foreign figures.





ULE – Maternally proven bull from French Program



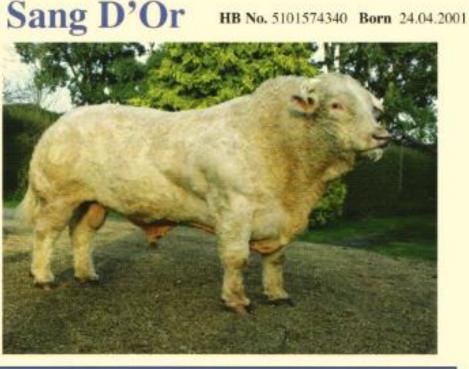
Star Rating (within Limousin breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (across all beef breeds)
★★☆☆☆	Replacement Maternal Cow Traits Maternal Progeny Traits	€108 €-97 €205	97% (V High) 97% 97%	<b>★★</b> 非官官
★★☆☆☆	Terminal	€121	96% (V High)	<b>★★★</b> 宇宙
安全安全会	Dairy Beef	€	% (N/A)	中中中中中
Star Rating (within Linousin breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)
	Expected progeny	performance		
	Calving difficulty (% 3 & 4) Breed ave: 4.95%, All breeds ave: 4.98%	3.70%	99% (V High)	
**宣宣宣	Docility (1-5 scale) Breed ave: -0.06, All breeds ave: 0.00	-0.09 scale	98% (V High)	<b>★</b> 育育育育
黄金金金金	Carcass weight (kg) Breed ave: 23.82kg, All breeds ave: 22.98kg	14kg	99% (V High)	<b>★</b> 東京京京
****	Carcass conformation (1-15 scale) Breed ave: 2.14, All breeds ave: 1.86	2.09 scale	99% (V H igh)	****
	Expected daughter bree	eding performanc	е	
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.45%, All breeds ave: 6.15%	5.6%	98% (V H igh)	
****	Daughter milk (kg) Breed ave: -0.84kg, All breeds ave: 0.31kg	2.09kg	99% (V High)	★★★☆☆
★e site site site site	Daughter calving interval (days) Breed ave: 1.09 days, All breeds ave: -0.32 days	5.73days	95% (V H igh)	ple site site site site

• Delivered on milk but not fertility



2015

2008



	Pe	digree	
Sire: Ordeo	8998108843	Sire: James Cook	
		Dam: Jordanie	
Dam: Legion	5194426993	Sire: Baron	
		Dam: Histoire	



Charolais

- Total outcross for pedigree breeders
- Indurain's successor
- Outstanding conformation, muscularity and locomotion (1500kg mature weight)
- Over 100 progeny inspected before purchase
- All immediate Dams and Grand Dam's scored RR4S

SGO – Imported from pedigree breeder in France



2015

Star Rating (within Charolais breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (across all beef breeds)
<b>東</b> 宣宣宣宣	Replacement Maternal Cow Traits Maternal Progeny Traits	€-225 €-289 €64	84% (V High) 78% 88%	食育育育育
<b>東</b> 音音音音	Terminal	€77	88% (V High)	★★官官官
安安安安	Dairy Beef	€	% (N/A)	安安安安安
Star Rating (within Charolais breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)
	Expected proge	ny performance		
	Calving difficulty (% 3 & 4) Breed ave: 7.55%, All breeds ave: 4.98%	18.70%	95% (V High)	
<b>★</b> 東京京京	Docility (1-5 scale) Breed ave: 0.04, All breeds ave: 0.00	-0.01 scale	94% (V High)	****
****	Carcass weight (kg) Breed ave: 32.88kg, All breeds ave: 22.98kg	38kg	97% (V High)	****
****	Carcass conformation (1-15 scale) Breed ave: 1.94, All breeds ave: 1.86	2.22 scale	96% (V High)	****
	Expected daughter bi	reeding performand	e	
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.85%, All breeds ave: 6.15%	6.8%	65% (High)	
do ato ato ato ato	Daughter milk (kg)	-11 /2kg	79%	*****

Daughter milk (kg)
Breed ave: -6.51kg, All breeds ave: 0.31kg

Daughter calving interval (days)
Breed ave: 0.47 days, All breeds ave: -0.32 days

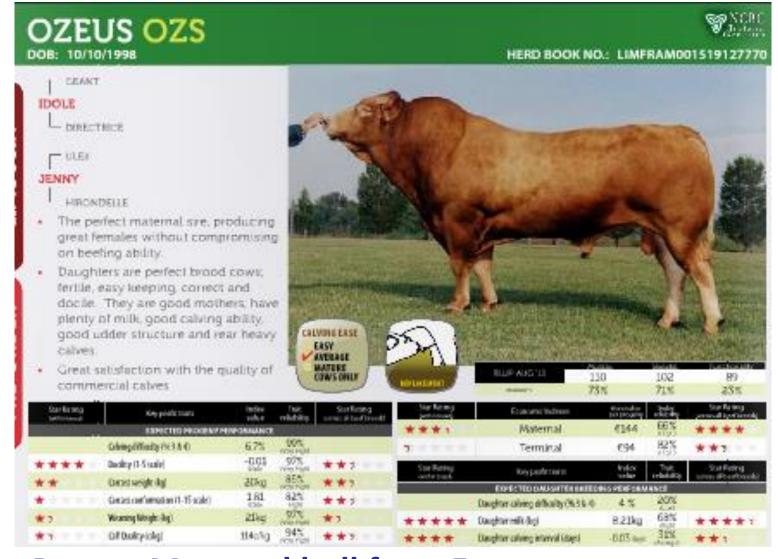
79%
(High)

79%
(High)

Delivered on carcass but not on calving or maternal



2013



OZS – Proven Maternal bull from France



2015

Star Rating (within Limousin breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (across all beef breeds)
****	Replacement Maternal Gow Traits Maternal Progeny Traits	€196 €5 €191	85% (V High) 75% 95%	****
<b>★★</b> ☆☆☆	Terminal	€121	95% (V High)	****
<b>会会会会</b>	Dairy Beef	€	% (N/A)	音音音音音
Star Rating (within Linousin breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)
	Expected proge	ny performance		
	Calving difficulty (% 3 & 4) Breed ave: 4.95%, All breeds ave: 4.98%	6.10%	99% (V High)	
****	Docility (1-5 scale) Breed ave: -0.06, All breeds ave: 0.00	-0.03 scale	98% (V High)	★★☆☆☆
****	Carcass weight (kg) Breed ave: 23.82kg, All breeds ave: 22.98kg	26kg	99% (V High)	****
****	Carcass conformation (1-15 scale) Breed ave: 2.14, All breeds ave: 1.86	2.19 scale	99% (V High)	****
	Expected daughter bi	reeding performand	e	
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.45%, All breeds ave: 6.15%	4.7%	65% (High)	
****	Daughter milk (kg) Breed ave: -0.84kg, All breeds ave: 0.31kg	2.85kg	80% (V High)	****
****	Daughter calving interval (days) Breed ave: 1.09 days, All breeds ave: -0.32 days	.2days	80% (V High)	****

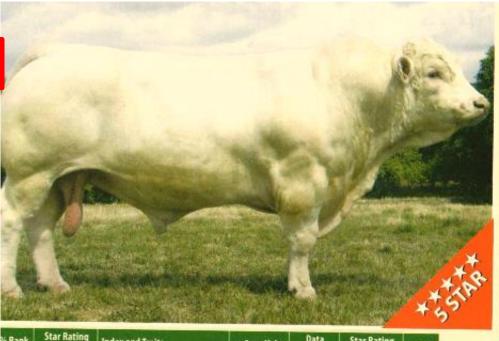
Delivering on maternal promise.

Breed ave: 1.09 days, All breeds ave: -0.32 days



(V High)

2006



% Rank	Star Rating (within breed)	Index and Traits	Euro-Value	Data Reliability	Star Rating (accross breed)	% Rank	
87%	****	Suckler Beef Value (SBV)	€123	60%	****	91%	
51%	***	Weanling Export	€75	65%	****	83%	
39%	**	Beef Carcass	€113	61%	****	78%	
85%	****	Daughter Fertility	€14	2%	***	53%	
85%	****	Daughter Milk	€-51	44%	**	28%	
		Other Key	Traits	HOLE	E THE		•
99%	****	Calving Difficulty (% 3 or 4)	4.23%	85%	****	69%	
99%	****	Gestation Length (Days)	1.01 Day(s)	70%	****	76%	•
93%	****	Docility (1-5 score)	0.15	68%	++++	0.406	

	SIRE: IMPAII	3	G SIRE: BLASON G DAM: OFFICINE				
	DAM: MARY	-		: HOMERI II: JACINTI			
MUSCLE	Width at Withers	Narrow				Wide	
	Width behind Withers	Namew				Wide	
	Loin Development	Low				High	
	Development Hind Quarter	Narrow				Wide	
	Thigh Width	Narrow				Wide	
			* *			196	
SKELETAL	Height Withers	Smult				Tall	
	Length of Back	Short				tong	
	Length of Pelvis	Short			- 12	long	
	Width at Hips	Namow				Wide	
	E					10.	
È	Fore Leg - Front View					Optimum	
IONA	Hind Leg - Side View			11 6		Optimum	
틸	Hind Leg - Rear View				The same of	Optimum	
Ξ.	Locomotion	Poor	-			Good	
	BLUP JAN 10		MUS	SKE	FUN	DOC	
	BLUP JAN 10		109	113	98	0.15	
	RELIABILITY		76%	76%	31%	68%	

- Easy calving (top 1%) and short gestation (top 1%), suitable for maiden heifers
- Proven in France for both beef capacity and maternal traits (ivmat 122)
- Exceptional maternal traits, high milk (French index 113) and excellent calving ability (French index 120)

#### • PNY - Proven Maternal bull from France



2015

Star Rating (within Charolais breed)	Economic Indexes	€uro value per progeny	Index reliability	Star Rating (across all beef breeds)
****	Replacement Maternal Cow Traits Maternal Progeny Traits	€194 €-53 €247	80% (V High) 72% 87%	****
****	Terminal	€149	86% (V High)	****
安安安安全	Dairy Beef	€	% (N/A)	安全安全会

Star Rating (within Charolais breed)	Key profit traits	Index value	Trait reliability	Star Rating (across all beef breeds)				
Expected progeny performance								
	Calving difficulty (% 3 & 4) Breed ave: 7.55%, All breeds ave: 4.98%	3.50%	93% (V High)					
****	Docility (1-5 scale) Breed ave: 0.04, All breeds ave: 0.00	0.11 scale	89% (V High)	****				
****	Carcass weight (kg) Breed ave: 32.88kg, All breeds ave: 22.98kg	37kg	95% (V High)	****				
<b>★</b> 東京京京	Carcass conformation (1-15 scale) Breed ave: 1.94, All breeds ave: 1.86	1.83 scale	95% (V High)	****				
	Expected daughter bree	ding performance	9					
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.85%, All breeds ave: 6.15%	4%	54% (Average)					
****	Daughter milk (kg) Breed ave: -6.51kg, All breeds ave: 0.31kg	.53kg	82% (V High)	****				
****	Daughter calving interval (days) Breed ave: 0.47 days, All breeds ave: -0.32 days	94days	68% (High)	****				

Delivering on maternal traits.



#### Conclusion

 Factors affecting the establishment & movement of a Bull's €uro-Stars:

#### 1. Inclusion of a Bull's foreign data

- Availability of the data & Suitability of that data for inclusion
- i.e. is the bull in a breeding program in the foreign country.

#### 2. Semen Usage Prospects of the bull:

- Availability of his semen
  - Is he in an AI Technician network service or pre-order?
  - Is he in a structured program where farmers are being called?
- Price of his semen
  - Is he @ €10/straw for commercial usage?
  - Is there a royalty fee on top of the straw price?



# **Thank You**

