



IRISH CATTLE BREEDING FEDERATION

€uro-Star Indexes



Chris Daly



Why?

Increase the rate of genetic gain in the national suckler herd

- Currently at $\frac{1}{4}$ the rate of the dairy herd.
- Not enough Index based breeding decisions.

Goal?

To increase profitability for suckler farmers

How?

Reduce calving difficulty

less vet bills, mortality & labour



How?

Increase fertility

better calving interval & more calves/cow/year



How?

Increase milk yield

heavier calves at weaning, less meal



How?

Improve carcass traits

(better prices @ marts & factories)



Why are Genetics Important?

- Genetics are cumulative and permanent.
- Environment (feeding, housing etc.) has no effect.



Appearance doesn't always tell the whole story!!

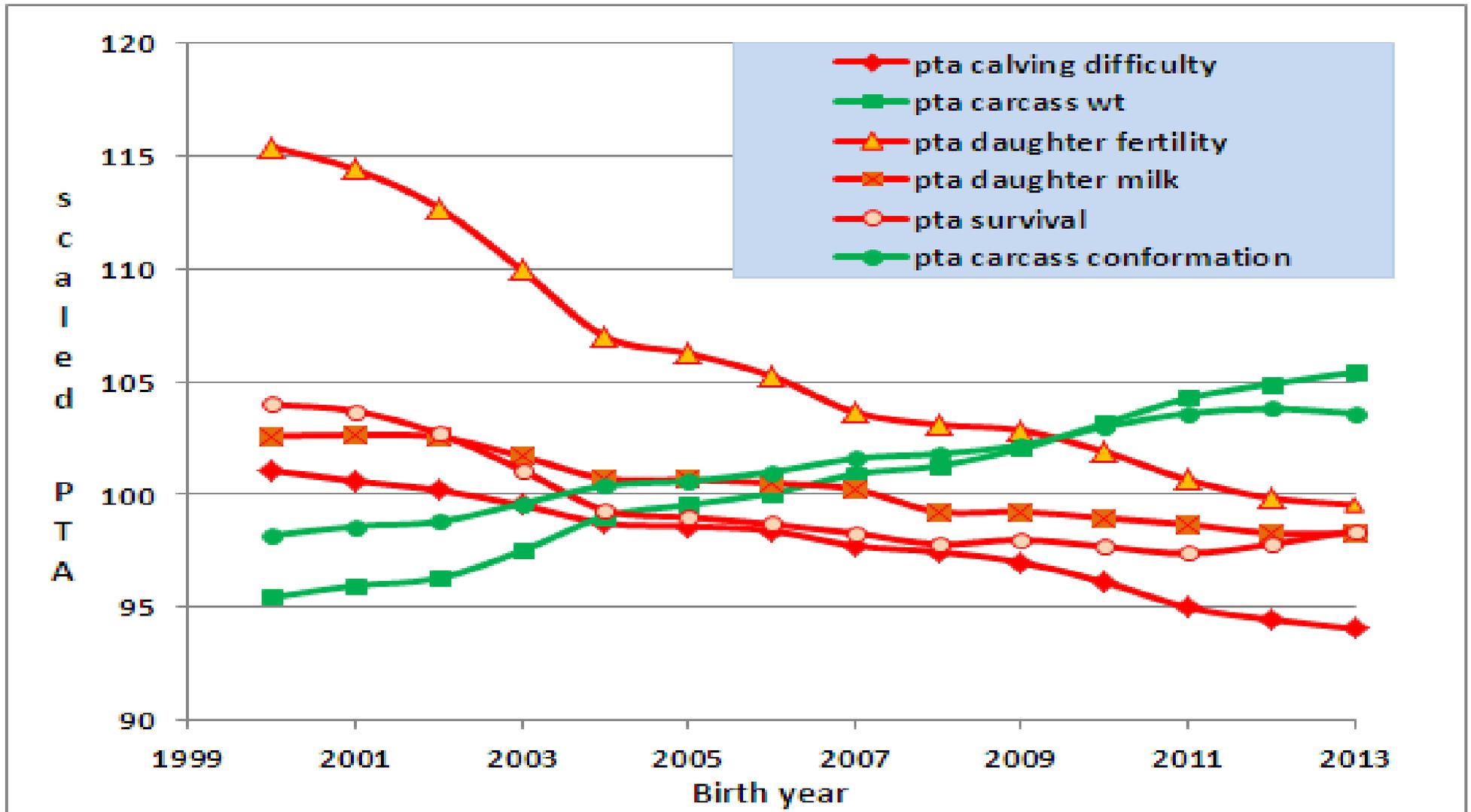


- Well fed
- Nice haircut for the big day!!



- Tough spring
- Not much to eat

Genetic Trends of Suckler Herd 2000-2013



Genetic Relationships

There are unfavourable consequences to breeding for higher weight gain and muscle!!!

“Huge calf but he’s dead and cow is down”

“Mother has no milk. Pumping meal into the calves”

“Great cow but impossible to get her back in calf”

Sound Familiar???

€uro-Star Index

Where?

Bull Search



erested in p Gene Ireland

3 following four (2
Saler) Gene
s for sale.



Suckler Cow Photo Competition

Suckler cow '888' from the
Teagasc Kildalton Suckler herd
is in the top 1% of all Suckler
cows in Ireland for the
Replacement Index with a
calving interval of 365 days after
9 calvings.

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BULL SEARCH

Search By:

- Code, Tag, Herd Book
- Name or part of name

ABC ×

[SEARCH](#)

[Active Bull Lists](#)

SUPPORTED BY

FIBD Trust

Where?

€uro-Star Online Profile

Animal Details							Euro-Star Values							
							Maternal				Terminal			
Jumbo ↓	DOB	Sex	Breed	Name	Sire	Dam	Index Value	Rel %	Within Breed	Across Breed	Index Value	Rel %	Within Breed	Across Breed
076	21-APR-03	F	LM		EPN	IE141461090042	214	50	★★★★★	★★★★★	131	47	★★★★★	★★★★★
087	21-MAY-04	F	SI		MWN	DFL563305	98	44	★★★☆☆	★★★☆☆	77	39	★★★☆☆	★★★☆☆
106	22-APR-06	F	LM		MBU	DFL563305	80	43	★★★☆☆	★★★☆☆	117	40	★★★★★	★★★★★
111	26-MAR-07	F	LM		HGR	DFL563305	55	37	★★★☆☆	★★★☆☆	112	36	★★★★★	★★★★★
123	22-MAR-08	F	LM		HGR	IE141461040087	126	42	★★★★★	★★★★★	122	38	★★★★★	★★★★★
124	23-MAR-08	F	LM		MBU	IE141461040104	94	40	★★★★★	★★★★★	107	37	★★★★★	★★★★★
130	29-MAR-08	F	SA		RIO	IE141461040062	171	36	★★★★★	★★★★★	86	33	★★★★★	★★★★★
137	25-FEB-09	F	SI		HKG	IE141461040079	161	39	★★★★★	★★★★★	88	35	★★★★★	★★★★★
154	27-FEB-10	F	LM		EPN	IE141461040087	119	44	★★★★★	★★★★★	99	38	★★★★★	★★★★★
157	25-MAR-10	F	LM		EPN	IE141461080090	103	38	★★★★★	★★★★★	89	36	★★★★★	★★★★★
163	19-AUG-10	F	SI		SVJ	IE141461060130	137	36	★★★★★	★★★★★	79	34	★★★★★	★★★★★
173	09-MAR-11	F	SI		SEV	IE141461020102	162	34	★★★★★	★★★★★	91	32	★★★★★	★★★★★
174	11-MAR-11	F	CH		CF61	IE141461040079	50	33	★★★☆☆	★★★☆☆	101	32	★★★★★	★★★★★

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	€93 €-60 €153	27% (Low) 24% 29%	★★★★★
★☆☆☆☆	Terminal	€101	29% (Low)	★★★★★
☆☆☆☆☆	Dairy Beef	€	% (N/A)	☆☆☆☆☆

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: 7.65%, All breeds ave: 4.99%	7.60%	31% (Low)	
★★★★★	Docility (1-5 scale) Breed ave: 0.04, All breeds ave: 0.00	0.15 scale	53% (Average)	★★★★★
★★★☆☆	Carcass weight (kg) Breed ave: 31.88kg, All breeds ave: 22.88kg	31kg	35% (Low)	★★★★★
★☆☆☆☆	Carcass conformation (1-15 scale) Breed ave: 1.91, All breeds ave: 1.85	1.68 scale	30% (Low)	★★★★★
Expected daughter breeding performance				
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.05%, All breeds ave: 5.29%	3.5%	17% (V Low)	
★★★★★	Daughter milk (kg) Breed ave: -6.33kg, All breeds ave: 0.33kg	-1.78kg	28% (Low)	★★★☆☆
★★★★★	Daughter calving interval (days) Breed ave: 0.06 days, All breeds ave: -0.52 days	-1.21days	18% (V Low)	★★★★★

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Why are Beef Traits Included in Maternal Index?

- Approx. 50% of any bulls progeny are males.
- Need to have strong beef genetics.
- Suckler cows also need this.
- Imagine dairy cows as suckler cows!!!
- Plenty of milk, but.....
- Calves wouldn't perform (Holstein, Jersey effect).



Finding the balanced cow!!!

Are Euro-Stars Working on the Ground?

Eurostars in Action---- Bull Beef Farm

530 Weanlings	One Star *	Five *****	Difference 5 Star Vs 1 Star
Purchase Weight Kgs	382	428	+46 kgs
Purchase Price €	€768 (€2.01 kg)	€845 (1.97 kg)	+€77
Slaughter Age Months	19	17	-2 Months
Carcase Weight	332	419	+ 87 kgs
Sale Price €	€1,310	€1,723	+ €413
Days On Farm	222	224	+2 days
Average Daily Liveweight Gain kg	0.92	1.30	+ 41%

Performance by Breed

Better Farms

Group	Number	%	Rep Index	CI Days	% Still Alive	Calf Weight kg	Calf Age Days
CH-CH	121	6.3%	€53	388	59%	266.7	230.5
LM-CH	179	9.3%	€98	399	64%	287.1	245.1
LM-HF	225	11.7%	€140	393	67%	290.5	223.7
LM-LM	358	18.6%	€141	401	67%	289.7	238.0
LM-SI	158	8.2%	€132	382	70%	293.1	234.8
SI-SI	97	5.0%	€148	396	67%	304.3	229.6
OTHER	789	40.9%	€116	388	62%	297.5	242.9
Overall	1927	100.0%	€120	392	64%	292.4	237.6

- Conventional thinking was to select by breed type.
- Some evidence that Cont X Hol/Fr cows are best milkers.
- Not always the case (see calf weight above).
- As much variation within breeds as across!!

Performance by Index

Better Farms

Group	Number	%	Rep Index	CI Days	Still Alive	Calf Weight kg	Calf Age Days
5 star	502	28	€195	389	75%	304.8	232.2
4 star	356	20	€138	389	64%	293.4	234.5
3 star	276	15	€113	395	66%	287.5	242.9
2 star	293	16	€88	393	63%	284.6	236.3
1 star	378	21	€35	392	53%	275.9	242.3
Overall	1805	100	€120	392	62%	292.4	237.6

- Clear trends emerge when assessed on index star rating.
- 5 star cows are:
 - *more fertile*
 - *longer lasting*
 - *producing heavier calves at weaning (milk)*

Performance by Index

BTAP Herds

Key Parameters	Top 20%	Average	Bottom 20%
Replacement Index	€152	€124	€92
- Cow contribution	€35	€17	-€19
- Calf contribution	€119	€109	€111
Calves per cow per year	0.88	0.87	0.84
Calving Interval	383	383	390
Heifer age first calving	29.9	30.1	30.8
Heifer slaughter weight*	305	306	306
Heifer slaughter age (mths)	23.5	24.1	25.7
Steer slaughter weight*	358	361	362
Steer slaughter age (mths)	25.2	26.4	27.8
% continental genes	74%	76%	75%
* No difference in EUROP score (~R3).			

All about the index!!!

Summary

- **€uro-Stars are working**
- **Use them when making breeding decisions**



- *Two very similar heifers in breed and appearance.*
- *But, what are their indexes???*
- *€uro-Stars give you that extra bit of guidance.*

Pick on index, not on breed!!!

Summary

- Look for traits important to you in a bull's index.
- Watch reliability %, particularly on calving difficulty.

Calving difficulty (% 3 & 4) Breed ave: 2.35%, All breeds ave: 4.99%		3.30%	32% (Low)
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- If picking on replacement index, check where a bull is getting it from (*cow traits v progeny traits*)

Replacement	€243	55% (Average)
Maternal Cow Traits	€-31	41%
Maternal Progeny Traits	€274	67%

Summary

Keep recording as much data as possible

Sires



Calving Ease



Weights



Star Rating (within Simmental breed)	Economic Indexes	Euro value per progeny	Index reliability	Star Rating (across all beef breeds)
★★★★★	Replacement Maternal Cow Traits Maternal Progeny Traits	€234 €29 €204	74% (High) 62% 86%	★★★★★
★★★★★	Terminal	€131	85% (V High)	★★★★★
☆☆☆☆☆	Dairy Beef	€	% (N/A)	☆☆☆☆☆

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: 5.45%, All breeds ave: 4.99%	6.00%	95% (V High)	
★★★★☆	Docility (1-5 scale) Breed ave: 0.04, All breeds ave: 0.00	0.03 scale	95% (V High)	★★★★☆
★★★★★	Carcass weight (kg) Breed ave: 21.25kg, All breeds ave: 22.88kg	42kg	91% (V High)	★★★★★
★★★★★	Carcass conformation (1-15 scale) Breed ave: 1.39, All breeds ave: 1.85	2.03 scale	89% (V High)	★★★★★
Expected daughter breeding performance				
	Daughter calving difficulty (% 3 & 4) Breed ave: 5.09%, All breeds ave: 5.29%	3.1%	43% (Average)	
★★★★☆	Daughter milk (kg) Breed ave: 8.23kg, All breeds ave: 0.33kg	4.01kg	59% (Average)	★★★★☆
★★★★☆	Daughter calving interval (days) Breed ave: -0.37 days, All breeds ave: -0.52 days	.16days	64% (High)	★★★★☆

More data = More reliable indexes

Thank You



IRISH CATTLE BREEDING FEDERATION

Gene Ireland Bull Breeder Program (Story Boards)



Pat Donnellan



Ultimate Goal of Gene Ireland



Breeding profitable Suckler Cows for the National Herd.

Ultimate Goal of the program

AI Sire



Replacement Index

High Reliability

Calving Diff: 99%

Carcass: 99%

Milk & Fertility: 82%

Popular: 10,085 calves



Limo x Hereford Suckler Cow

★★★★★ Replacement Index

- 12 Yrs Old: 10 AI bred calves
- 1ST calving: 24 mths old
- Calv Intervals: 337,346,355....days
- Calvings: All were unassisted
- Weanlings: Excellent Wt Gains
- Carcass: 4 U Grades & 3 R Grades



Replacement Daughter

★★★★★ Replacement Index

- 2 Yrs 7 mths Old
- 1ST calving: 23 mths old
- Fertility:
- 1st Insem: MLJ on 31/10/12
- Produced excellent calf
- 2nd Insem: TQL on 31/10/12
- Confirmed in calf

• An example of good breeding in action

How do we achieve this.....



**Maternally strong
Dam**

X



**Maternally Strong
Sire**

=



**Maternally Strong
Young Bull**



Semen Collected



Young Heifer



Profitable Cow

• By completing this process again & again & again.....

Gene Ireland Overview

- How do we breed profitable Suckler Cows?
- Firstly we must produce their Daddy's!
- 5 Steps
 1. Work closely with Pedigree Breeders
 2. Identify Bull Mothers
 3. Identify Bull Fathers
 4. Select Young Bull
 5. Progeny Test Young Bull

Gene Ireland Overview



1. Pedigree Breeders



1. Pedigree Breeders

- **Over 5000 Pedigree Beef Breeders in Ireland (12 breeds)**
- **Producing over 10,000 pedigree bulls/annum**
- **Program is open for Pedigree Breeders to join at any time.**
- **Committee set up for each breed – made up of:**
 - **Commercial Suckler Farmers**
 - **Pedigree Breeders**
 - **Breed Societies**
 - **Teagasc**
 - **ICBF**

1. Pedigree Breeders

- Currently 225 Breeders signed up to the program (Apr'14)

Breeders

Breeds

38	Angus
9	Aubrac
3	Belgian Blue
4	Blonde d'Aquitaine
45	Charolais
9	Hereford
60	Limousin
10	Parthenaise
5	Saler
6	Shorthorn
23	Simmental



1. Pedigree Breeders

1 Pedigree Beef Herds



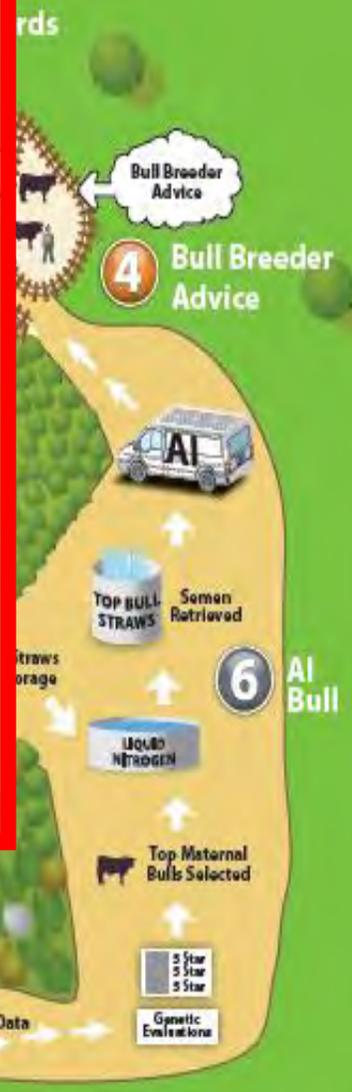
2 Maternal Bull Breeder Qualification Process

Commercial

Recommended Bull Breeder List

On-Farm	Tully
Calving	Growth
Docility	FCE
Fertility	Carcass
Milk	Tenderness

Data Data Data



Bull Breeder Advice

4 Bull Breeder Advice

6 AI Bull

Top Maternal Bulls Selected

3 Star
5 Star
5 Star
Genetic Evaluations

Semen Retrieved

TOP BULL STRAWS

LIQUID NITROGEN

AI

1. Pedigree Breeders



- Pedigree Breeder's Data records are checked for their accuracy e.g. insemination records etc.
- The Stamp is awarded when the herd's data reaches a certain level.

1. Pedigree Breeders

Lot 1 CURAHEEN ELEGANCE ET

ID: IE171059810461

Breed: Simmental

Sex: Female

DOB: 02-Oct-2013

Owner: David Wall - Curaheen Hazelhatch Road Newcastle Co Dublin

Breeder:

Sire: Curaheen Warrior (Et)
S682

Carnkern Titan

Teviot Panther

Carnkern Natasha

Raceview
Merle-Beauty

Raceview King
Kilmichael Beauty

Dam: Marsha Wanda
IE311030820481

Cloondroon Nugget

Hillcrest Jerome Et
Monaduff Jesse

Boyher Snowflake

Corlesmore Kirk
Boyher Helen



- Published in Sales Catalogues & on the ICBF Bull Search
- Stamp designed to identify pedigree animals that have been bred in herds that are signed up to the program.

2. Identify Bull Mothers & Fathers



2. Identify Bull Mothers

- All females in participating pedigree herds are Scored & Weighed.
- Extra data collected on them:
 - Udder Suspension
 - Teat Size
 - Teat Placement
 - Width & Length of Pelvis



2. Identify Bull Mothers

Animal Details			Ancestry Details				Euro-Star Index						
Jumbo: WANDA			Sire's Sire:	HCJ HILLCREST JEROME ET		Within Breed	Economic Indexes	Index	Rel%	Across Breed			
Official Tag: IE311030820481				Sire's Dam:	IECNWQ0066E MONADUFF JESSE		★ ★ ★ ☆	Maternal	€168	35%	★ ★ ★ ★ ☆		
Animal Name: MARSHA WANDA			Sire:		IE271822950043 CLOONDROON NUGGET		★ ★	Terminal	€56	31%	★ ☆		
Date of Birth: 15/01/2008				Dam:	IE291364110185 BOYHER SNOWFLAKE		Expected Progeny Performance						
Breed: SI (100%)			Dam's Sire:		IE121285520112 CORLESMORE KIRK		Calving Difficulty (%3&4)		5.7%	32%			
Herdbook: Pedigree Registered				Dam's Dam:	IEYVMF0018E BOYHER HELEN		Docility (1-5 scale)		+0.18	54%	★ ★ ★ ★ ★		
Scored: 19/08/2008					Carcass Weight (Kg)		+18 Kg	37%	★ ★				
Weighed: 19/08/2008					Carc Conf. (1-15 scale)		+1.51	31%	★ ★				
BLUP Index (Reliability 45%)							Expected Daughter Breeding Performance						
MUSCLE	SKELETAL	DOCILITY					Daught Calv Diff (%3&4)		5.7%	29%			
107	104						Daught Milk (Kg)		9.7 Kg	61%	★ ★ ★ ★ ★		
								Daught Calv Int. (Days)		0.78 Days	28%	★ ☆	

Calving & Fertility Performance										Weaning & Carcass Performance						
Calving Date	Tag Number	Calving Survey	Calving Interval	Sex	Current Status	Sire	Sire Breed	Age days	Weight Kgs	Growth Kg/Day*	Price/Kilo	Calf Quality	Docility	Age at Slaught. (months)	Carcass Conf. & Fat	Carcass Weight
1	03/07/2010	S1184		ET	M	Exported	S682	SI	185	321	1.52		Excellent	V. Quiet		
2	05/07/2010	IE171059830281		ET	F	Sold	S682	SI	183	320	1.53		Excellent	V. Quiet		
3	15/09/2010	IE171059880286	Normal		F	Sold	S749	SI	274	365	1.19		V. Good	Quiet		
4	19/09/2011	IE171059890337	Difficult	368	F	In herd	AIF	SI	276	423	1.39		Excellent	V. Quiet		
5	06/10/2012	KDZ	Normal	382	M	Sold	S682	SI	243	427	1.59		Excellent	V. Quiet		
6	02/10/2013	IE171059810461		ET	F	In herd	S682	SI	190	331	1.53		V. Good	V. Quiet		
7	13/02/2014	IE171059810486	Normal	494	M	In herd	S1037	SI								

Marsha Wanda – the dam of one of the 2014 Gene Ireland Young Bulls - KDZ

2. Identify Bull Mothers



- Curaheen Dickens (KDZ) — Curaheen Warrior x Marsha Wanda.
- Ploughing Championship 2013 - Norbrook Champion Bull
- Gene Ireland Youngbull Spring 2014
- Milk in the backpedigree – Hillcrest Jerome.
- Bloodline has bred well.
 - Full Brother: Curaheen Buck - €6100 to the pedigree Simmental Jalex herd in Antrim.
 - Full Sister: Auroch Belle - €8000 to the pedigree Simmental 'Hillcrest herd in Offaly.
- Full Sister: Curaheen Elegance (Born: 2nd Oct 2013).

2. Identify Bull Mothers

- Curaheen Via – Hillcrest Jerome x Celtic Highflyer
- Another Bull Mother of interest to the program.

Calving & Fertility Performance										Weanling & Carcass Performance						
Calving Date	Tag Number	Calving Survey	Calving Interval	Sex	Current Status	Sire	Sire Breed	Age days	Weight Kgs	Growth Kg/Day*	Price/Kilo	Calf Quality	Docility	Age at Slaught. (months)	Carcass Conf. & Fat	Carcass Weight
1	10/01/2010	IE171059860251	Normal	ET	M	Dead	S682	SI	261	445	1.55	Average	Quiet	17	R+2-	380
2	12/01/2010	IE171059820256	Normal		F	In herd	S682	SI	248	392	1.42	Excellent	V.Quiet			
3	17/01/2010	IE171059820264	Normal	ET	M	Dead	03351	SI	254	400	1.42	V.Good	Quiet	16	U+2=	407
4	01/02/2011	IE171059850317	Normal	384	M	Dead	KFY	SI	252	420	1.51	Average	Quiet	17	U-3=	434
5	16/02/2012	IE171021250018		379	F	Exported	S1115	SI	262							
6	08/07/2012	S1617		ET	M	Exported	S682	SI	276	530	1.77	Excellent	V.Quiet			
7	12/03/2013	IE171059850440	S. Assis	389	M	Sold	S1011	SI	269	558	1.97	Excellent	V.Quiet			
8	26/11/2013	IE171059890469		ET	M	In herd	S682	SI								

- Curaheen Drifter – son of ‘Via’ with excellent maternal genetics sold last year for €18,500



3. Identify Bull Fathers

- Each Committee selects Maternally strong AI Sires



Repair

- Proven Maternal Sire
- French Maternal Index: 111
- Easy Calving
- 4.5 Stars – Replacement Index
- 5 Stars – Daughter Milk



On-Dit

- Proven Maternal Sire
- French Maternal Index: 121
- Easy Calving
- 5 Stars – Replacement Index
- 5 Stars – Daughter Milk

3. Identify Bull Fathers



- ICBF has 5 Herd Liaison Officers to assist Breeders:
- Selecting what bulls to use on their cows.
- Ensuring that their data is recorded accurately.
- Liaising with Breeders over all aspects of the program.

4. Select the Young Bull

1. Young Pedigree Bull calves with high Indexes identified
2. Breed Committee decides on the selection criteria:
 - Replacement Index
 - Back Pedigree
 - Physical Appearance
3. Bulls meeting the criteria are inspected.
4. Results of inspections reviewed by each committee.
5. Preferred Bulls purchased for progeny testing.
6. AI Company Bulls that meet the same criteria are also included.



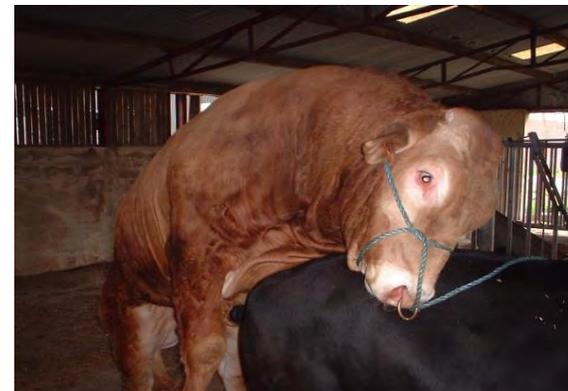
5. Progeny Test



5. Progeny Test

After Bull is purchased by Gene Ireland:

1. Health Tested for entry into AI Station.
2. 1000 doses collected off each bull.
3. 500 straws made available for progeny testing.
4. 500 straws stored away for future pedigree breeding.
5. Following semen collection the bulls are sold.



5. Progeny Test

Identification			Ancestry		Replacement Index			Calving Difficulty			Price	Owner
ID	Breed	Name	Sire	Sire of Dam	€-val	Rel %	Stars Within	Calving Diff %	Rel %	Breed Avg		
JZJ	Angus	Cairnmor Jameson	Lawsons Romeo C938	Ernehill Star	€163	24%	★★★★					256 Straws Dispatched
YBH	Charolais	Ballym Henri	Pinay	Pirate	€131	25%	★★★★★					378 Straws Dispatched
YCM	Charolais	Clewbay High-Master	Repair	Bova Sylvain	€97	26%	★★★★★					163 Straws Dispatched
KCH	Charolais	Clenagh Hank	Goldstar Echo	Organdi	€71	28%	★★★★					500 Straws - Sold Out
GKA	Charolais	Inverlochy Gurkha	Balmyle Bollinger	Rumsden Samurai	€64	3%	★★★★					500 Straws - Sold Out
GGM	Hereford	Gageboro Morgan	Gageboro Eugenic	Bowmont Storm A584	€139	22%	★★★★★					211 Straws Dispatched
KZH	Limousin	Kilskeagh Hill 16	On-Dit	Lino	€251	31%	★★★★★					500 Straws - Sold Out
ZAG	Limousin	Castleview Gazelle	Ampertaine Commander	Ronick Hawk	€251	26%	★★★★★					500 Straws - Sold Out
YHB	Limousin	Drombanny Hero	On-Dit	Ramses	€208	31%	★★★★★					237 Straws Dispatched
OHT	Limousin	Roundhill Hunter	Vivaldi	Otan	€199	30%	★★★★★					161 Straws Dispatched
AYH	Parthenaise	Lisnagranchy Hulio	Lisnagranchy Carlo	Toupet	€254	21%	★★★★★					135 Straws Dispatched
ZGH	Parthenaise	Hurricane Gonzo	Dere Noel	Socrate	€162	9%	★★★★					191 Straws Dispatched
ZYH	Parthenaise	Alamira Harry	Ti Lapin	Panache	€157	20%	★★★★					101 Straws Dispatched
KTM	Saler	Knottown Michael	Knottown Hermes	Buron (FR07)	€318	27%	★★★★★					115 Straws Dispatched
ZBZ	Saler	Breffni Muzz	Ecrin	Ulysse	€213	9%	★					35 Straws Dispatched
XDM	Simmental	Celtic Diceman P ET	Lykke Atlantis P	Curaheen Tyson ET	€214	20%	★★★★★					402 Straws Dispatched
LZZ	Simmental	Lisnacraan Demertios	Kilbride Farm Newry	Monaduff Jewel	€213	33%	★★★★					186 Straws Dispatched
KDZ	Simmental	Curaheen Dickens	Curaheen Warrior	Cloondroon Nugget	€187	24%	★★★★					274 Straws Dispatched

- Spring 2014 Gene Ireland Young Bull Panel

5. Progeny Test



- Over 20 young beef bulls have been sourced from participant's herds so far in 2014.
- 500 straws from the best of these – after the progeny test, will only be available to Bull Breeder Herds.

5. Progeny Test

- YCM – Clewboy Highmaster
- Selected by the Charolais Breeding Committee



- Purchased by Gene Ireland
- 1000 straws collected off him
- Why was Gene Ireland interested in him?

5. Progeny Test

- Dam of YCM – Clewbay Daisy

Animal Details			Ancestry Details						Euro-Star Index							
Jumbo: 371			Sire's Sire:	FR5898106514			Sire's Dam:	FR7194109870			Within Breed	Economic Indexes	Index	Rel%	Across Breed	
Official Tag: IE272285830371				ORIENTAL				JACOBINE			★ ★ ★ ★ ↓	Maternal	€89	35%	★ ★ ↓	
Animal Name: CLEWBAY DAISY			SLV			BOVA SYLVAIN			★	Terminal	€96	31%	★ ★ ↓			
Date of Birth: 12/12/2008			Sire:			Dam:			Expected Progeny Performance							
Breed: CH (100%)			IERLHK0089Q			LOUISBURGH ORGAN				Calving Difficulty (%3&4)	7.2%	37%				
Herdbook: Pedigree Registered			KCEM009			CLONKEEFY MACINERNY			★ ★ ★ ★ ↓	Docility (1-5 scale)	+0.10	47%	★ ★ ★ ★ ↓			
Scored:			LOB004			LOUISBURGH BRONAGH			★	Carcass Weight (Kg)	+26 Kg	32%	★ ★ ★ ↓			
Weighed:			Dam's Sire:			Dam's Dam:			↓	Carc Conf. (1-15 scale)	+1.57	30%	★ ★			
BLUP Index (Reliability 37%)			KCEM009			CLONKEEFY MACINERNY			Expected Daughter Breeding Performance							
MUSCLE	SKELETAL	DOCILITY	LOB004			LOUISBURGH BRONAGH				Daught Calv Diff (%3&4)	3.7%	32%				
97	107		LOUISBURGH BRONAGH						★ ★ ★ ★	Daught Milk (Kg)	-4.2 Kg	57%	★ ↓			
Calving & Fertility Performance											Weanling & Carcass Performance					
Calving Date	Tag Number	Calving Survey	Calving Interval	Sex	Current Status	Sire	Sire Breed	Age days	Weight Kgs	Growth Kg/Day*	Price/Kilo	Calf Quality	Docility	Age at Slaught. (months)	Carcass Conf. & Fat	Carcass Weight
23/09/2011	IE272285810411	Normal		M	Exported	PTE	CH	265	408	1.39		Excellent	V.Quiet			
20/09/2012	YCM	Normal	362	M	Sold	REP	CH	179	264	1.25		Average	V.Quiet			
28/08/2013	IE272285830446	Normal	341	M	In herd	RRZ	CH	196	352	1.59		Excellent	V.Quiet			

5. Progeny Test

- Sire of YCM – ‘Repair’



‘Maternal’ Bulls can have good beefing ability as well!

5. Progeny Test

What happens the 500 straws of YCM?

1. Herds are signed up to take the Testbull semen.
2. Semen orders are dispatched.
3. Inseminations take place & calves are born.
4. Calves are followed up on
 1. Calving Survey
 2. Weight Gain – % of his weanlings are weight recorded.
 3. Feed Efficiency - % of his weanlings are purchased for finishing here in Tully.
 4. Carcass Merit – The cattle killed through Tully have their carcasses assessed.
 5. Daughter Performance – Daughters are monitored in progeny test herds for:
 1. Growth – weight gain & conformation of their progeny.
 2. Milk & Fertility of his daughters.

5. Progeny Test - Beef



- **Weight Gain**

- **Feed Intake**

- **Carcass Conformation**



4. Progeny Test – Milk

2 Commercial Bulls born in the same herd on the same day & sired by the same Sire



651
(85% LM/ 15% BB)

317Kgs

Dam: 471



652
(85% LM/ 15% CH)

367Kgs

Dam: 471

50Kgs Difference
- a portion of this
is the milk of
their dam's

5. After the Progeny Test



Reminder of what we are doing!



**Maternally strong
Dam**

X



**Maternally Strong
Sire**

=



**Maternally Strong
Young Bull**



Semen Collected



Young Heifer



Profitable Cow

Irish Cattle Breeding Industry needs to do this again & again & again.....

Thank You





IRISH CATTLE BREEDING FEDERATION

Beef Genomics Scheme



Francis Kearney



Genomics



O-Bee Manfred Justice



O-Bee Manfred Justin

Full brothers – same parent average at birth but share 50% genes

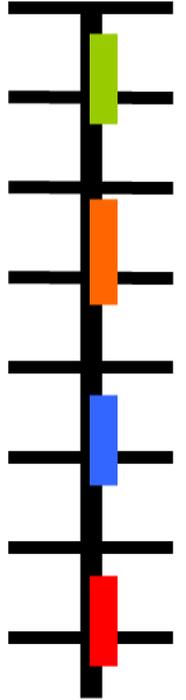
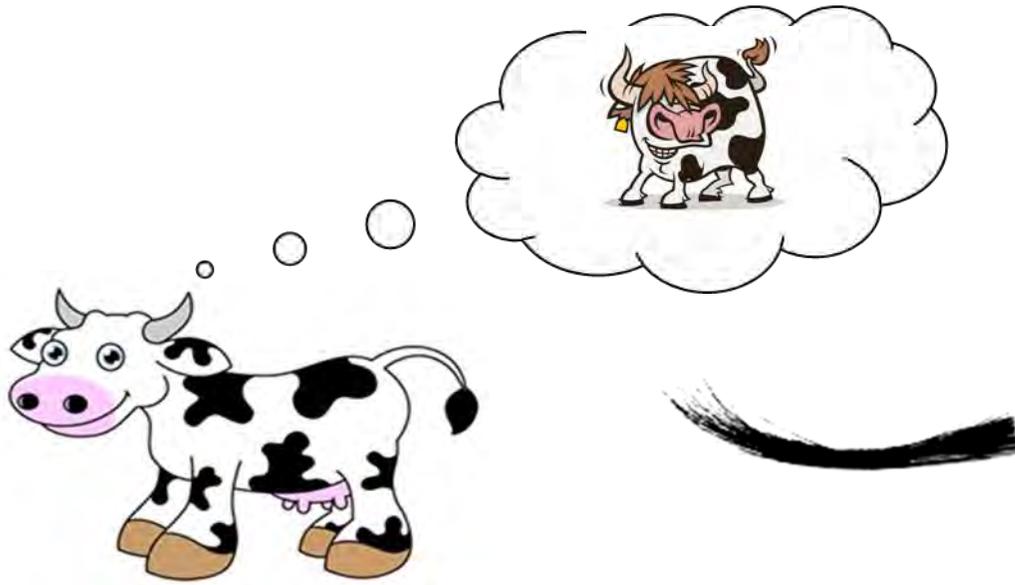


Both bulls purchased by AI companies and progeny tested



Genomic NM\$ @70% rel	586	203
NM\$ @99% rel	600	204

Genomics



- Genomics compares an animal's DNA to older proven animals and looks for similarities.
- Genetic Indexes are then produced based on the genes inherited from sire and dam

Beef Genomics Scheme

- Use stock bulls and cows to build up the reference population to be able to provide genomic indexes for beef animals
- Need to collect DNA samples and genotype these animals
- Farmer gets €60/calf (incl. €20 for BDP) provided he returns DNA samples at least 15% of the herd
- Must be in BDP

Beef Genomics Scheme

- Data collection will be a very important part of the success of genomics in the future
- Without data, reliability of genomics will decrease over time
- Continue to record as much data as possible!

Calf Information

- Record Sire
- Record Calving Ease

For calves 5 months of age and older:

- Record Docility
- Record Quality

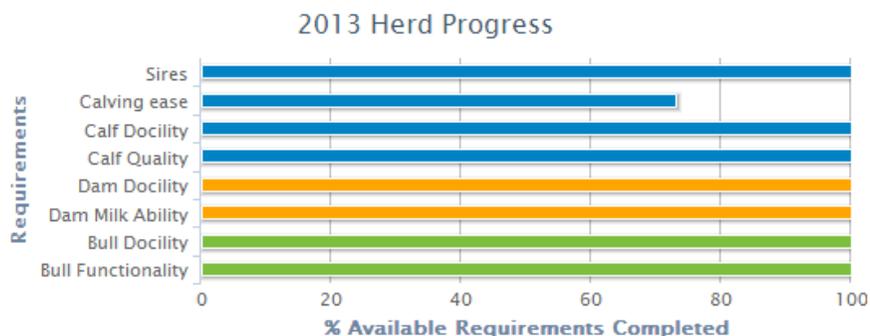
Dam Information

- Record Dam Docility
- Record Milk Ability

Stock Bull Information

- Record Bull Docility
- Record Functionality

Herd Summary



Herd Details

Calves Dams Sires

Showing 1 to 11 of 11 entries

Show filters



Excel

PDF

Print

Calf Tag	Sex	Birth Date	Death Date	Dam	Sire	Calving Ease	Docility	Quality
1252	M	27-FEB-13	25-APR-14	0103	APZ	1	VG	G
1255	F	09-AUG-13		0715	0235		G	A
1256	F	20-AUG-13		0786	MLJ		A	A
1257	M	21-AUG-13		0751	MLJ		A	A
1258	M	23-SEP-13		0257	APZ	1	VG	VG
1259	F	28-SEP-13		0275	APZ	1	A	A
1261	F	01-OCT-13		0376	APZ	1	G	A
1262	F	01-OCT-13		0376	APZ	2	VG	VG
1260	M	01-OCT-13		0337	APZ	1	A	G

Beef Genomics Scheme

- First tags currently going out on farm
- Animals selected based on a range of criteria
 - Age, information available, breed, sires etc
- Please tag the requested animals and return in the Freepost envelope within time specified
- If a requested animal is dead or sold please phone helpline to request a replacement

Pre-Genotyping Replacement Indexes



Post Genotyping Replacement Indexes

Beef Genomics Scheme

What are the benefits?

- Increase genetic gain for economically important traits especially milk and fertility
- Guarantee traceability of Irish beef.
- Increase reliability % figures of Euro-Stars.
- Confirm parentage
- First country in the world to roll out a genomics scheme for commercial beef cattle.



IRISH CATTLE BREEDING FEDERATION

Tully Progeny Testing



Stephen Conroy



G€N€ IRELAND progeny test program

- ❖ Background: Progeny testing allows for increased accuracy in genetic evaluations.
- ❖ Aim: Capture accurate early information on progeny of test and well proven AI sires for traits which are collected routinely by the industry (i.e. carcass data) but also for expensive & difficult traits to record such as feed intake & meat eating quality.
- ❖ Selection Process:
 - ICBF Database: G€N€ IRELAND AI sires (15 progeny), Sire & MGS recorded, age & gender (bulls & steers)
 - On-Farm: Parentage verification, weight & health.
- ❖ 479 bulls and 46 steers slaughtered to date.
- ❖ 117 (19 steers and 98 bulls) currently on test
- ❖ New Insentec system will allow for more steers to be performance tested

Current progeny intakes

Progeny in the acclimatisation period

- ❖ 42 bulls (dob: 1st May 2013 – 30th June 2013)
 - Due to start test: 15th May 2014

- ❖ 45 steers (dob: 1st December 2012 – 31st January 2013)
 - Due to start test: 30th May 2014

Progeny on test

- ❖ 25 bulls (dob: 1st January 2013 – 28th February 2013)
 - Started test: 25th February 2014
 - Due to be slaughtered: End May 2014

- ❖ 31 bulls (dob: 1st March 2013 – 30th April 2013)
 - Started test: 28th March 2014
 - Due to be slaughtered: End June 2014

- ❖ All data is available on the ICBF website (www.icbf.com)

Measurements obtained

- ❖ **Acclimatisation period: (30 days).**
 - Vaccination IBR, BVD, RSV, PI3, Blackleg & other clostridia diseases.
- ❖ **Diet**
 - Bulls (ad-lib concentrates); Steers (8 kg concentrates & ad-lib roughage)
- ❖ **Performance test measures (90 day testing period).**
 - Average daily gain (g/day), Feed conversion efficiency (DMI/ADG), Linear Scores, Scanned muscle and fat depth and intramuscular fat (mm) & Scrotal circumference (cm).
- ❖ **Carcass & meat eating quality.**
 - Carcass grades, primal yields, colour, pH, composition & sensory analysis.
- ❖ **Health & disease traits.**
 - Recording lameness, genetic defects, pneumonia and other illnesses.
- ❖ **Genomics.**
 - Genotyped using customised IDB Version 2 chip (17k markers).

Tully commercial progeny results

Index	Num	Index*	Lwt start test (kg)	Lwt end test (kg)	Age at slau	ADG	DMI	C Wt	KO%	HVC	VHVC
Top 20 %	65	€100.7	482.5	691.1	16.2	1.94	11.9	418.5	60.6	115.0	28.3
Nxt 20 %	65	€86.3	474.4	686.7	16.4	2.05	12.12	410.6	58.8	111.9	27.5
Mid 20 %	65	€75.3	480.9	692.5	16.4	2.03	12.22	411.1	59.4	107.0	26.8
Nxt 20%	65	€63.7	483.9	702.3	16.5	2.16	12.63	413.3	58.9	110.0	27.3
Btm 20%	65	€41.0	480.6	695.9	16.6	2.21	13.11	402.1	57.8	107.0	26.0
ALL	325	€73.4	480.5	693.7	16.4	2.08	12.39	411.1	59.3	110.5	27.2

*Commercial slaughter value

- ❖ Performance of 325 young bulls, from GENE IRELAND AI sires.
- ❖ Delivering ~€100 more profit/progeny through better carcass performance & better feed efficiency .
- ❖ *Additional benefits of more meat cuts*