



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!!

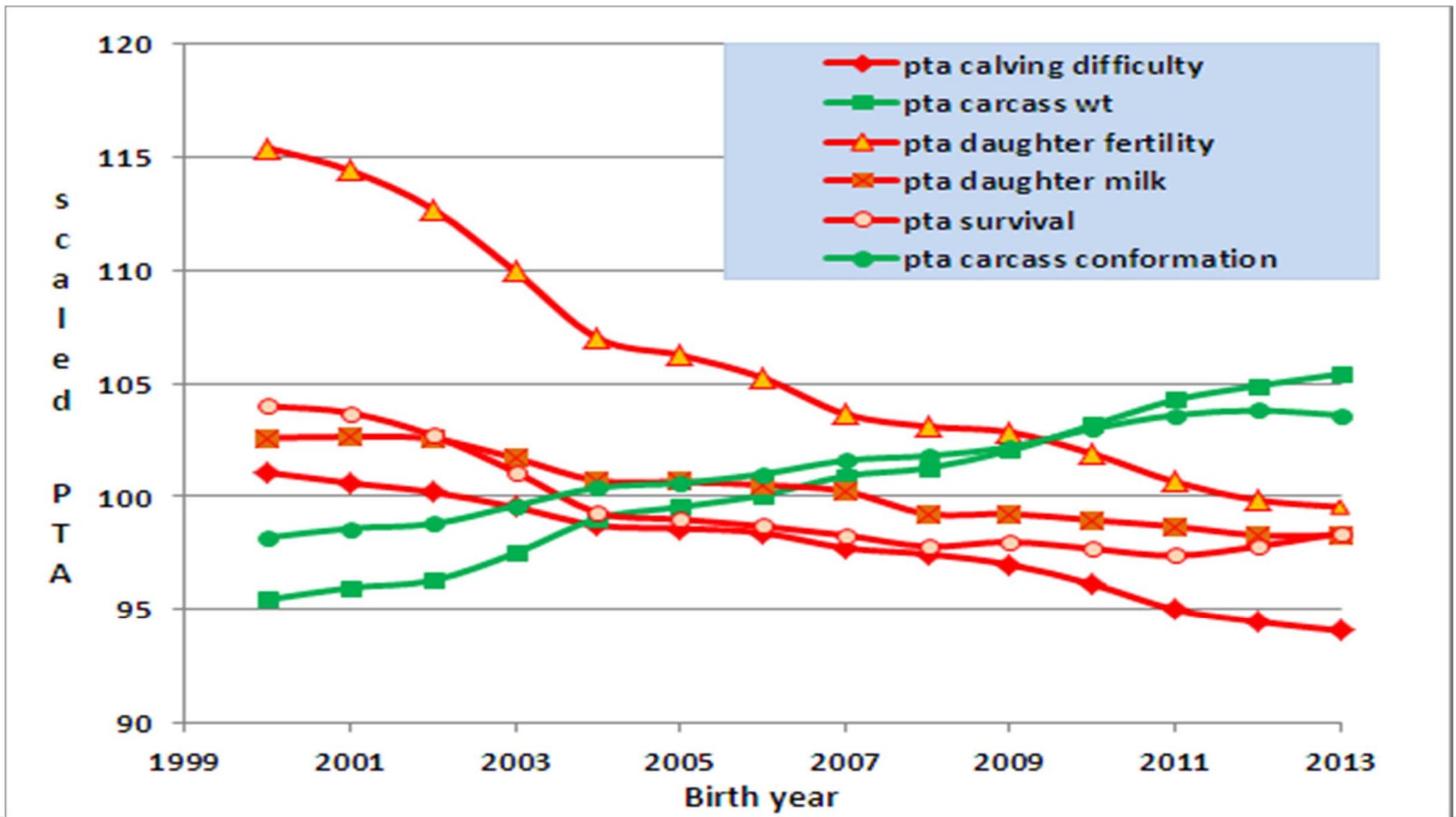


- Well fed
- Nice haircut for the big day!!



- 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

e 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

FIBID 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 Charolaia 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 Charolaia 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% <i>i</i>	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

- Euro-Stars are working
- Use them when making breeding decisions



- *Two very similar heifers in breed and appearance.*
- *But, what are their indexes???*
- *Euro-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%

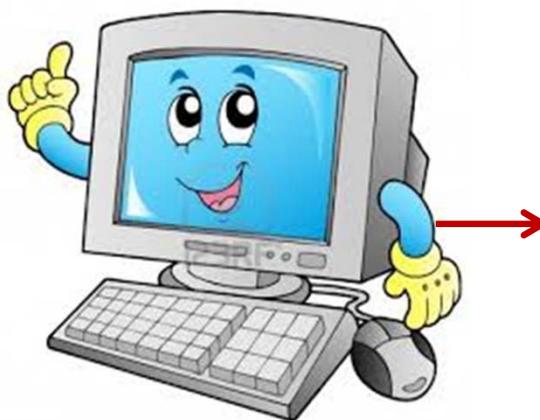
Summary

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% 80%	★★★★★
★★★★★	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