



IRISH CATTLE BREEDING FEDERATION

Minimising risk in the breeding season



Andrew Cromie & Kevin Downing

Overview

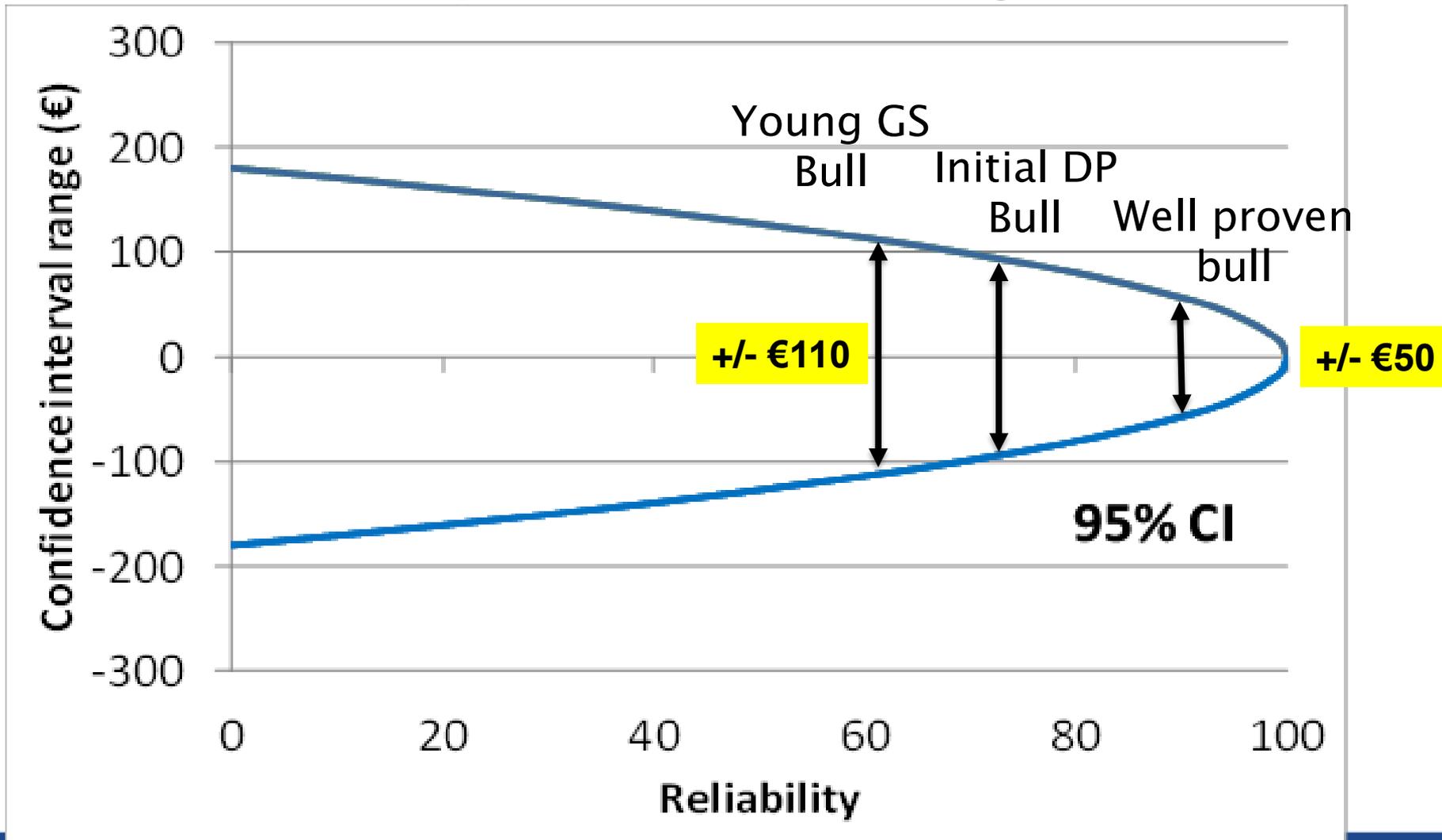
- Benefits of EBI at farm level
- Managing risk in your breeding programme
 - Daughter proven bulls?
 - Teams of bulls?
 - HerdPlus Sire Advice tool?
- EBI developments 2018
- Questions & Answers

Trend in herd performance 2010 – 2016

Based on 2,801 creamery suppliers with EBI, milk co-op and fertility data

Criterion	2010	2011	2012	2013	2014	2015	2016
EBI Performance							
- Herd EBI (Cows only)	€2.3	€22.4	€41.8	€53.1	€58.2	€67.8	€69.5
Milk Co-op performance							
- Milk litres delivered/cow	4,858	4,872	4,713	4,795	4,845	5,240	5,170
- F+P kg/cow	363.4	367.8	359.5	365.9	374.0	410.4	407.1
- Fat%	4.00%	4.05%	4.13%	4.12%	4.17%	4.20%	4.28%
- Protein%	3.48%	3.50%	3.50%	3.51%	3.55%	3.64%	3.60%
Fertility performance							
- CI Days	393.5	393.8	388.7	385.8	387.2	383.3	381.2
- Six week calving rate	55.3	56.2	59.5	62.1	61.3	62.0	63.9
- % calving 22-26 mths		67.4	70.2	73.4	70.5	72.0	74.8
Total milk solids							
- F+P kg/Herd	28,222	30,713	31,042	33,014	34,370	41,097	43,808
- % increase		8.8%	10.0%	17.0%	21.8%	45.6%	55.2%

Bull proofs will change!



Managing Risk - Use Proven Bulls?

	Genomic	Daughter Proven
No. cows/herd	96.2	76.4
Herd EBI	€92	€73
% calf 2011-14 calf crop GS	72%	13%
Milk production 2016		
Litres /cow	5,176	4,853
Fat kg/cow	223.9	204.3
Protein kg/cow	187.4	174.6
F+P kg/cow	411.3	378.9
Fertility 2016		
CI Days	378.0	379.1
6-week calving rate	67.7	63.9
Heifers calved at opt age	81%	66%

- Yes, you will have bulls that are less likely to move, but they will be 3-4 years inferior in EBI + Profit

Managing Risk – Use of Bull Teams

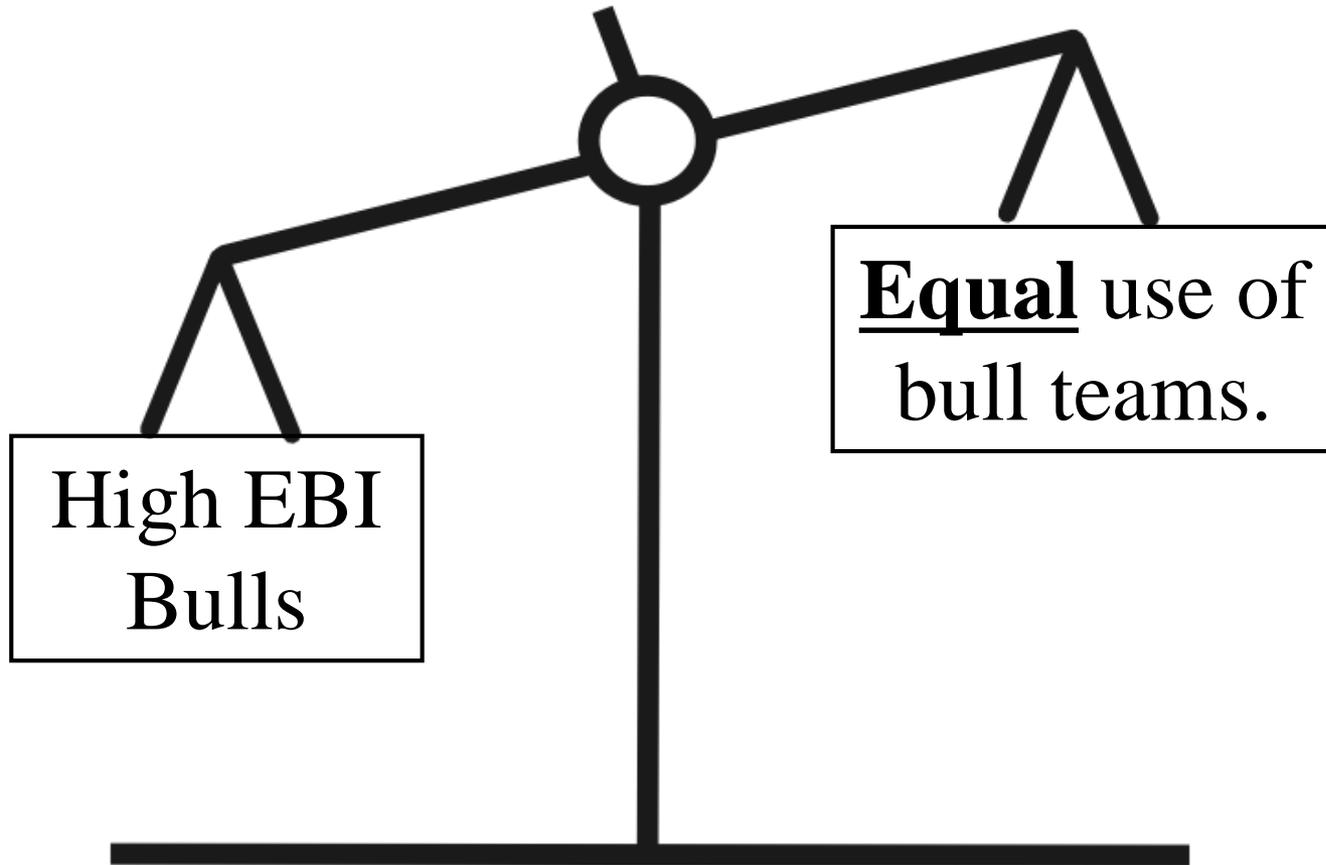
	Herds*
Number herds	5,973
Number bulls used	7.5
% to most heavily used bull	34%
% to most heavily used 3 bulls	69%
% herds where usage of 3 most heavily used bulls \leq 50%	18%

- Yes we use teams of bulls
- But we majorly over-use individual bulls
 - Especially relevant for heifers – herds using 1 or 2 bulls on heifers!



" Everything on black is not a risk management strategy, Hoskins."

Breeding Programme Strategy



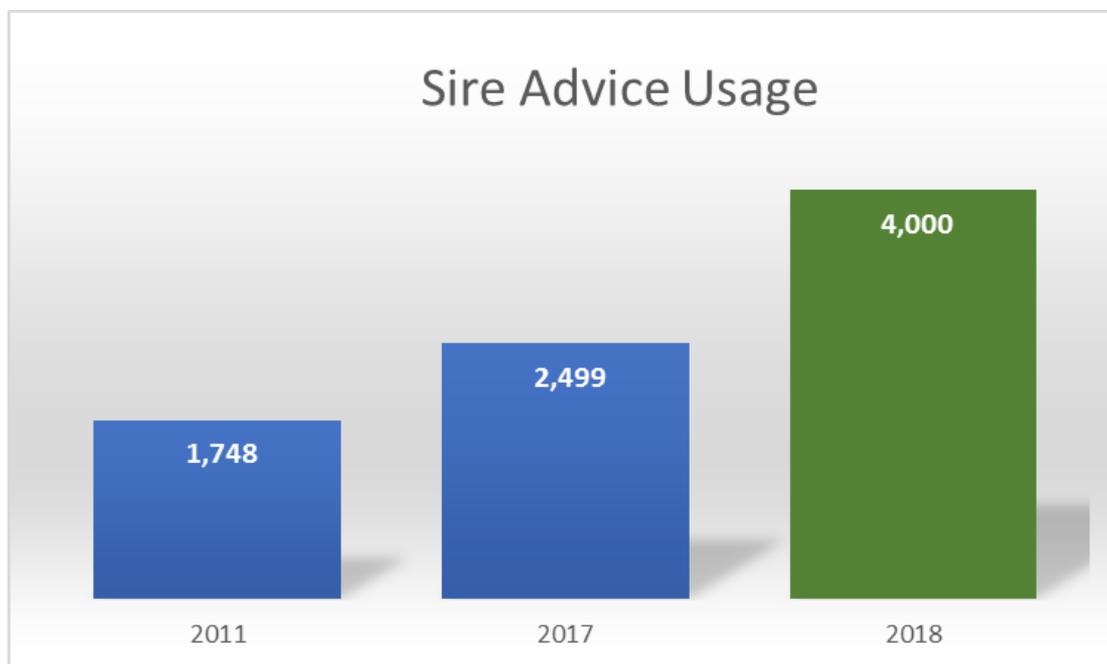
Updated Bull Usage Guidelines

Herd Size (incl. Heifers)	Minimum Bull Team	Possible EBI of team
51 - 100	7	€263
101 - 150	8	€261
151 - 200	10	€257
201 - 250	11	€255
251 - 300	12	€254
301 - 400	14	€252

- New guidelines account for;
 - relatedness of bull teams
 - increase in reliability of bull team from 90% to 95%
 - impact of herd size/industry
- Minimum use targets & equal usage of bulls

Managing Risk - HerdPlus Sire Advice

- Usage has been low - about 2,500 herds in 2017 (~27% HerdPlus members)
- New version being developed
- Launch of Breeding programme campaign (Teagasc & AI orgs)



Managing Risk - Sire Advice



- What's included in new version to help minimise risk
 - Min. pack reliability criteria – 95%
 - Usage of packs of bulls e.g. Fertility, High Production
 - Genomic Inbreeding
 - Avoidance of carrier matings
- Other improvements include:
 - Crossbreeding
 - Contract reared animals
 - Contract & beef matings
 - Mark for Culling
 - Sliders to help select suitable bulls

HerdPlus Sire Advice

Female Selector

Bull Selector

Manual Enter Bulls

Straw Allocation

Mating Review

Finish & Send to AI

1. Choose your females

2. Pick your Bulls

3. Decide on straw usage

4. Review your pack

5. Save to AI Handheld / Breeding Chart

5 EASY STEPS



Bull Selector Screen

Female Selector Bull Selector Manual Enter Bulls Straw Allocation Mating Review Finish & Send to AI

Bull Selector Filter preferences

Search for Bulls:

Active List All Available

- ▶ Breed
- ▶ Dairy EBI
- ▶ EBI Sub-Indexes
- ▶ Health Sub-Indexes
- ▶ Management SI
- ▶ AI Companies
- ▶ Milk Production PTA
- ▶ Fertility
- ▶ Calving PTA
- ▶ Sexed Semen
- ▶ Price
- ▶ Proof Source
- ▶ Pedigree Status
- ▶ Conformation



Search for Bulls:

Active List All Available

- ▶ Breed
- ▶ Dairy EBI Index
- ▼ EBI Sub-Indexes

Production

0 30 85

0 25 50 75 100

Fertility (My Herd)

0 50 100

0 Bulls Selected: Bull Team

Price	View	Select
19	Compare Bulls	Select for Herd
19	Q	Select Bull
19	Q	Adding...
19	Q	Select Bull
16	Q	Select Bull
19	Q	Select Bull

February 2018

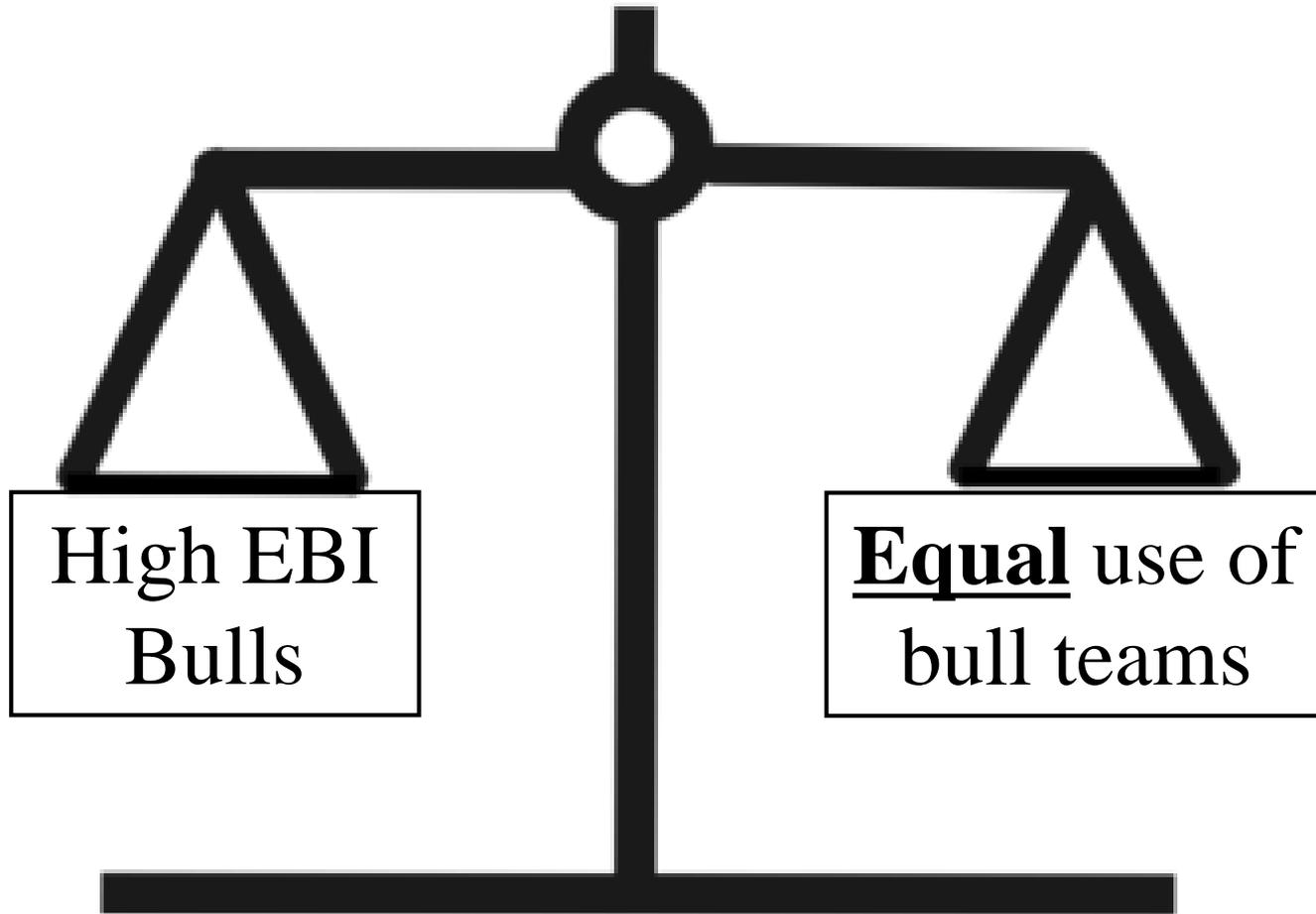
EBI Developments 2018

- **Update of the economic values by Teagasc**
 - Increasing milk price by 1 cpl, from 29.5 to 30.5
 - Increase in the value of fat
 - Increasing farm labour costs
- **Changing to a Test Day Model for milk traits**
 - Replaces predicted 305-day yield
 - More accurate for grass based system - accounts for non-genetic effects, (e.g., weather, grass quality)
- **Overall impact of these changes is minimal**
 - Avg. EBI of bulls on the ICBF Active Bull List to increase by ~€30
 - Average correlation is 0.97, with relatively little re-ranking

Summary

- Maximising breeding profit is about using EBI correctly.
- Need to consider the RISK of individual bulls proofs changing
- Using Daughter Proven bulls will reduce this risk (somewhat), but EBI & profit will be reduced as a result!
- Instead, you should use a **team of high EBI GS bulls equally on your herd**
 - For 100 cow herd, need to use a min. of 8 bulls evenly across your herd
- HerdPlus Sire Advice is key tool in managing risk
- New “Breeding Programme” campaign being developed with Teagasc & AI industry for Spring 2018
- EBI & Genomics will continue to evolve. This is also part of your risk management strategy

New Breeding Programme Strategy





Our Farmer & Government Representation



Our AI & Milk Recording Organisations



Our Herdbooks



Acknowledging Our Members