



IRISH CATTLE BREEDING FEDERATION

New ~~G~~~~E~~~~N~~~~E~~ ~~I~~~~R~~~~E~~~~L~~~~A~~~~N~~~~D~~ Program.

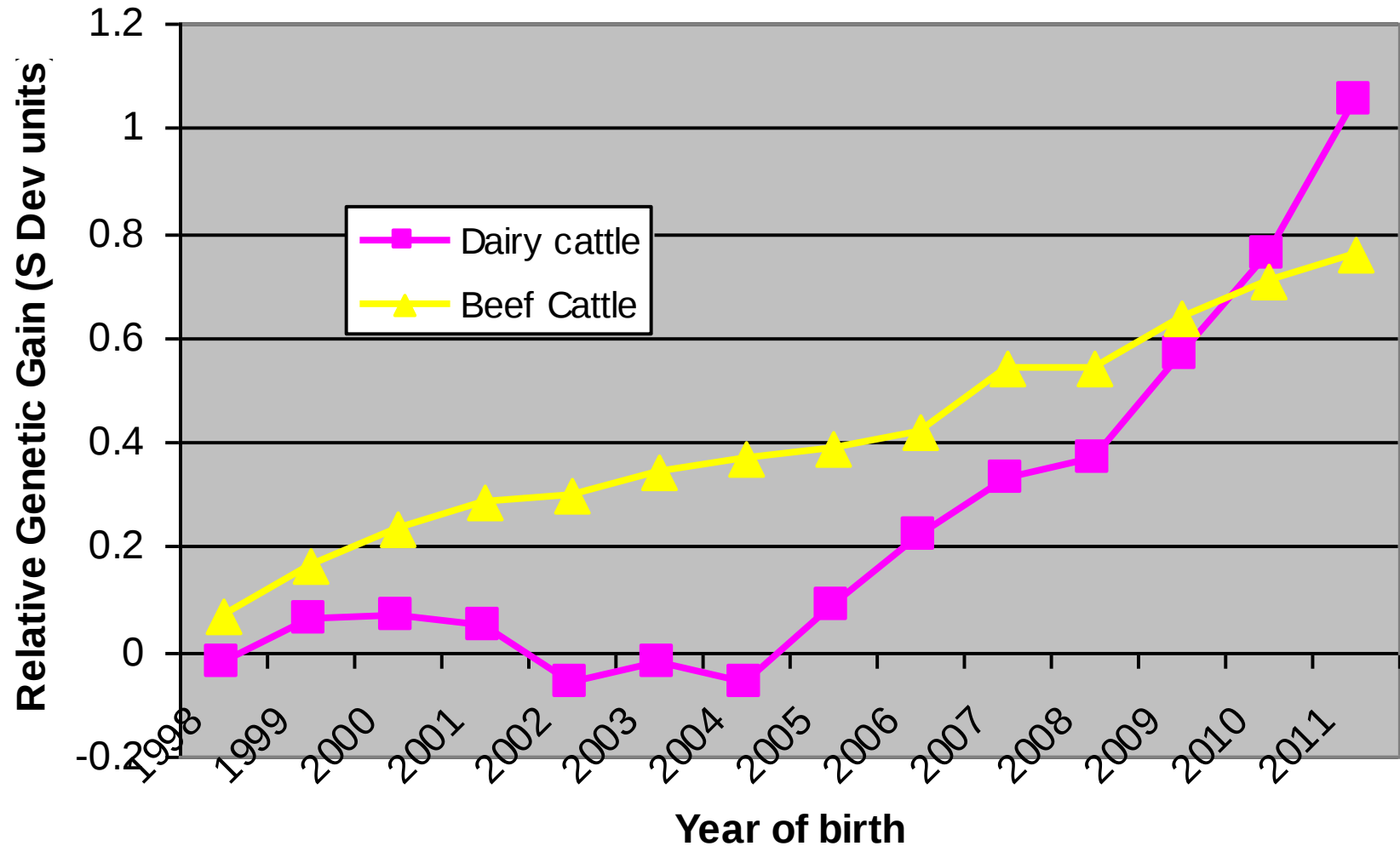
Charolais meeting



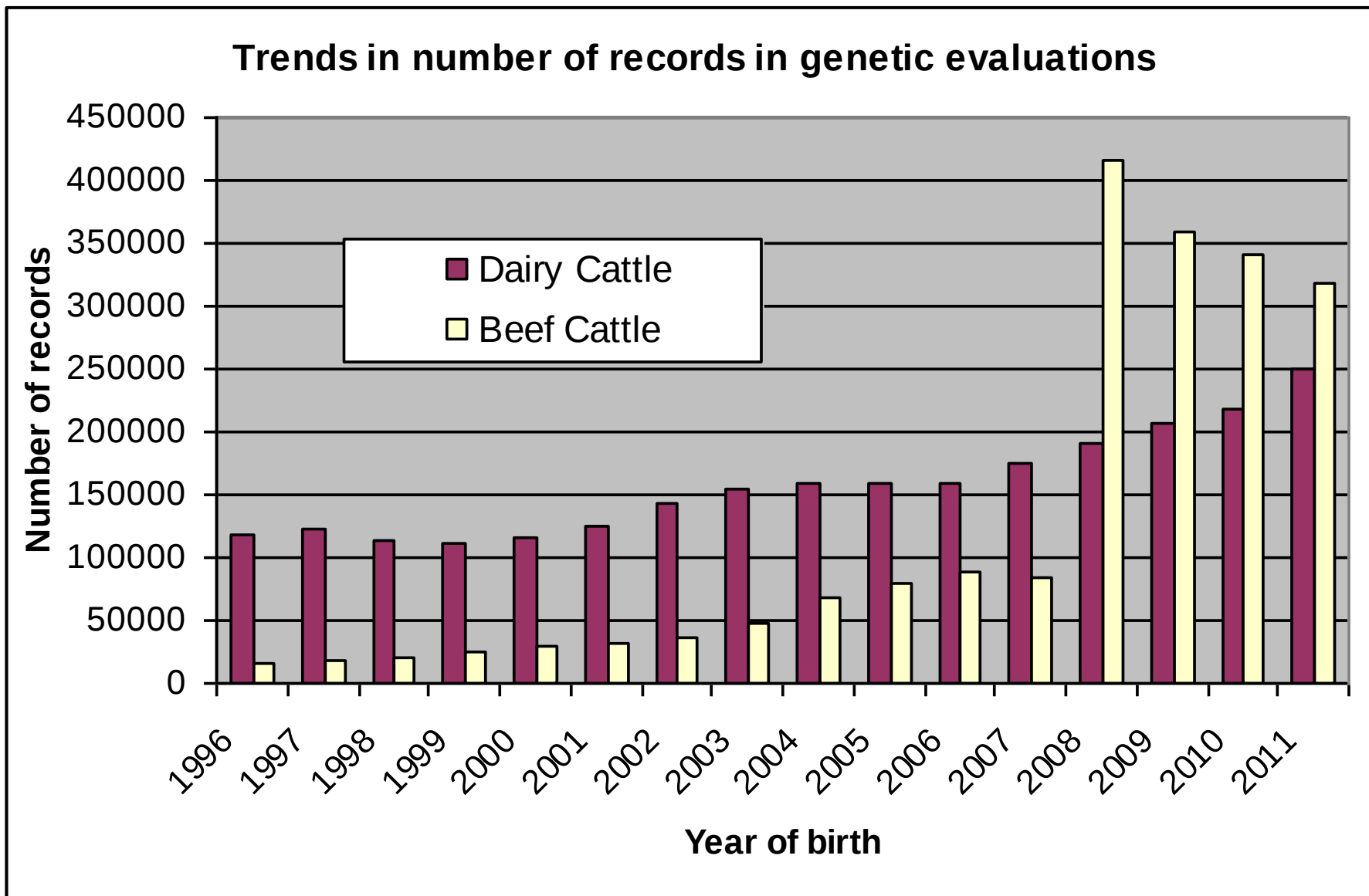
Stephen Conroy, ICBF
3rd July 2012

Genetic Gain in Ireland

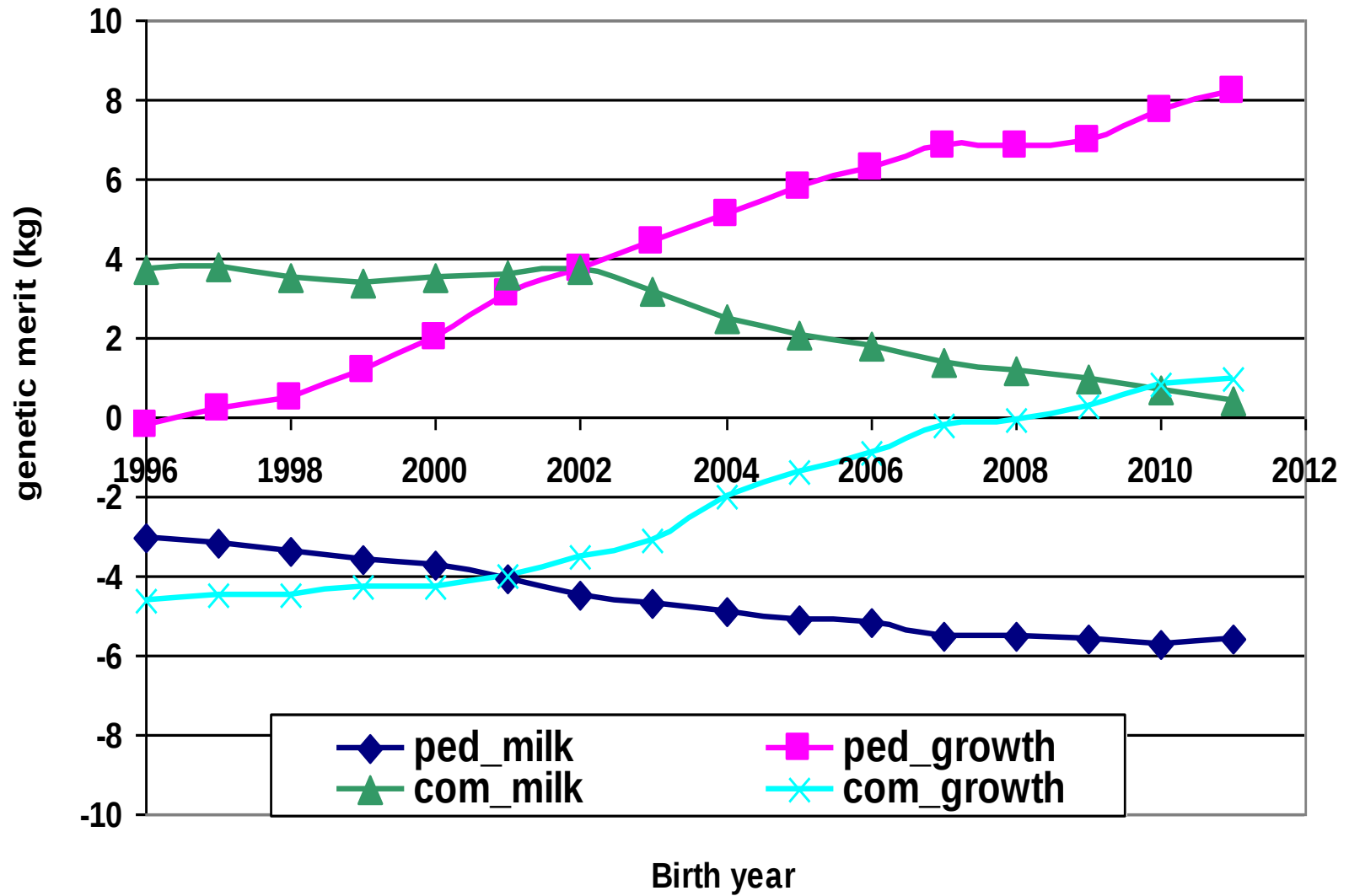
Relative Genetic Gain in Dairy & Beef Cattle



Data quantity & quality



Charolais Trends

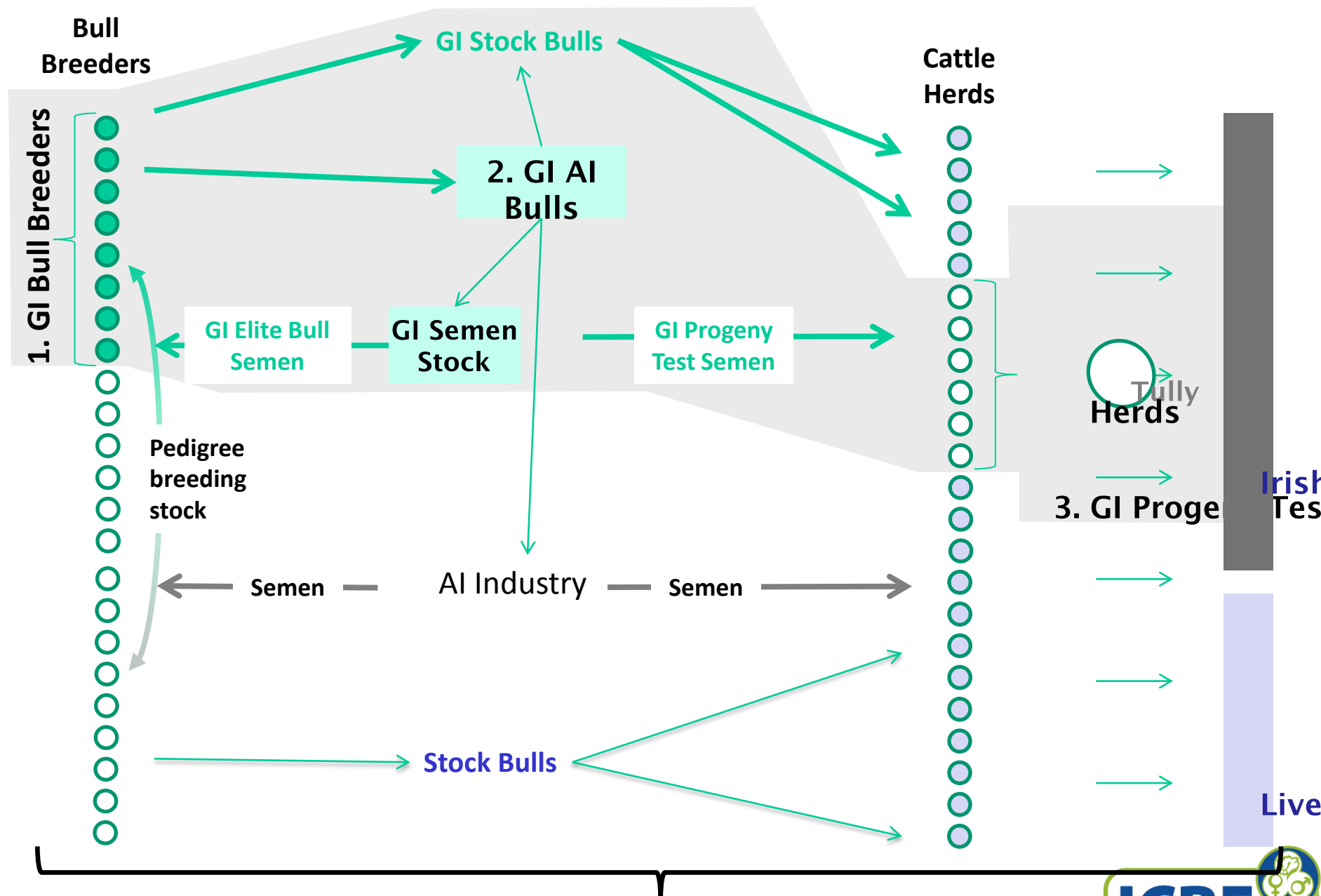


Background

- ❖ ICBF invests €700/year into beef breeding programs
 - €300k into Tully.
- ❖ Genetic gain in beef is principally through use of stock bulls.
 - Need AI to generate stock bulls.
 - ✓ 70% pedigree females bred to AI
 - AI important role in breeding maternal female replacements.
- ❖ Primary markets for beef AI is;
 - Easy calving (dairy)
 - Weanling export.
 - Not maternal traits.

Background cont'd

- ❖ Beef AI is a high cost
 - Low value business compared to dairy.
- ❖ Increase genetic gain
 - Need to progeny test more bulls.
- ❖ Not commercially viable for AI companies to invest in these bulls.
- ❖ Need a “new entity” to purchase these bulls.



New GENE IRELAND program

1. Bull breeder herds

- ✓ Best practice for herds
- ✓ Benefits to the breeder

2. Bulls in AI

- ✓ Selection
- ✓ Collection and distribution of semen
- ✓ Purchase and sale of bulls

3. GENE IRELAND progeny test

- Progeny test structure
 - ✓ On-farm
 - ✓ Tully

1. Bull breeder herds

- ❖ GENETICS IRELAND (GI) prepares terms and conditions
- ❖ GI recruits the herds
 - Voluntary program
- ❖ GI provides a range of services
 - Mating advice for elite cows
 - Access to stored semen from GI AI bulls
- ❖ GI gives guidance on best practice for:
 - Data collection
 - Health
 - Genetics
 - Rearing

1. Bull breeder herds

- ❖ Access to information quality
 - Data herd quality index
- ❖ GI determines if the herd has complied with best practice
 - Herd score annually
 - GI stamp
- ❖ Fee
 - €250 per annum



2. GI AI bulls

❖ GI decides selection

- New maternal index
- Relatedness to Irish herd
- Disease status

❖ GI purchases the bull

- 5k on average

❖ 1000 doses of semen collected

- 500 doses for progeny test
- 500 doses retained for elite mating's
 - ✓ GI herds have access to this semen

❖ Bulls sold

- AI (first option)
- Commercial herds
- GI ownership (short period of time)

3. GI Progeny Test Herds

- ❖ GI produces the catalogue
- ❖ GI recruits herds to use the semen
 - Test herd participation rules
 - Semen distributed through AI field service providers
 - Monitor test herds to ensure best practice
- ❖ GI purchases progeny to be evaluated at Tully
 - Feed intake/efficiency
 - Carcass/meat eating quality
 - Health/disease traits

Ownership, Funding & Direction

- ❖ Program would be “owned” by ICBF.
- ❖ Funded from ICBF’s annual budget.
- ❖ Technical direction provided by stakeholder group.
 - Breed specific for larger breeds.
 - Bulls selected on New Maternal Index, genetic diversity, health & visual (functionality).
- ❖ Reporting to ICBF board.
- ❖ Scale-able budget, with small net surplus.

Cash flows – 20 bull model

Income	2013	2014	2015	2016	2017	2018
Bull Breeder - Gene Ire fee	€100,000	€100,000	€100,000	€100,000	€100,000	€100,000
Farmer - HerdPlus contribution	€85,000	€85,000	€85,000	€85,000	€85,000	€85,000
Sale of surplus bulls	€42,000	€42,000	€42,000	€42,000	€42,000	€42,000
Sale of bulls to AI	€48,000	€48,000	€48,000	€48,000	€48,000	€48,000
Sale - progeny test cattle	€0	€0	€280,000	€280,000	€280,000	€280,000
ICBF annual contribution	€300,000	€300,000	€300,000	€300,000	€300,000	€300,000
Total income	€575,000	€575,000	€855,000	€855,000	€855,000	€855,000
Variable costs	2013	2014	2015	2016	2017	2018
Bull selection	€4,000	€4,000	€4,000	€4,000	€4,000	€4,000
Bull acquisition	€100,000	€100,000	€100,000	€100,000	€100,000	€100,000
Bull insurance	€7,000	€7,000	€7,000	€7,000	€7,000	€7,000
Semen collection	€60,000	€60,000	€60,000	€60,000	€60,000	€60,000
Semen assembly (PTEST bulls).	€3,600	€3,600	€3,600	€3,600	€3,600	€3,600
Semen storage (Surplus semen)	€12,500	€12,500	€12,500	€12,500	€12,500	€12,500
DNA Collection & Storage	€0	€4,500	€4,500	€4,500	€4,500	€4,500
GROW - Weanlings	€0	€18,000	€18,000	€18,000	€18,000	€18,000
Purchase - progeny test cattle	€0	€0	€200,000	€200,000	€200,000	€200,000
Cost of finishing progeny test cattle	€0	€0	€72,000	€72,000	€72,000	€72,000
GROW - Maternal replacements	€0	€0	€0	€0	€16,800	€16,800
ICBF Fixed Costs	€300,000	€300,000	€300,000	€300,000	€300,000	€300,000
Contingency (10% of Variable Costs=€50k/year)	€50,000	€50,000	€50,000	€50,000	€50,000	€50,000
Total costs	€537,100	€559,600	€831,600	€831,600	€848,400	€848,400
Balance	€37,900	€15,400	€23,400	€23,400	€6,600	€6,600

Summary

- ❖ Strong, simple & low cost program.
 - More effective use of ICBF funding (€300k/yr).
 - Scale-able, with no impact on ICBF budget.
 - Builds on GENE IR, SCWS & New Maternals.
- ❖ A breeding program. NOT a commercial business.
- ❖ Purchase and ownership of bulls.
 - No commercial transactions.
 - Bulls in ownership for short period.
 - Semen collection & processing by AI partners.
 - Open to all AI partners.

Summary cont'd

- ❖ Potential to test 20..40...80 bulls/year.
- ❖ Brings together all elements of beef breeding industry (AI, breeders, herdbooks, farmers, ICBF.....).
- ❖ *Worth ~€100m to Irish beef industry over 10 yrs.*

Where to next

- ❖ Develop and finalise material for bull breeder herds
- ❖ How best can we roll-out the program to Charolais breeders?
 - Increase genetic gain
 - Increase profitability
- ❖ Feedback welcome





Any
Questions

Alfie Shaw