IRISH CATTLE BREEDING FEDERATION

Foreign animals International Cooperation

Thierry Pabiou

09 July 2008

NATIONAL DEVELOPMENT PLAN

InterBeef

- Working group : six countries
  - FRA GBR IRL DNK SWE FIN
  - Next meeting 29 August 2008
- Database under construction
  - InterBeef, Uppsala (SWE)
- Next evaluation Sept 2009
  - Need to improve link GBR – IRL (July 09)

International Evaluations

- World Hereford Conference (end June 2008)
  - Sustainability / consumer power
  - International test evaluation
    - Conducted by AGBU (Armidale, AUS)
    - 10 countries
    - Linkage to improve (estimation of r_g)

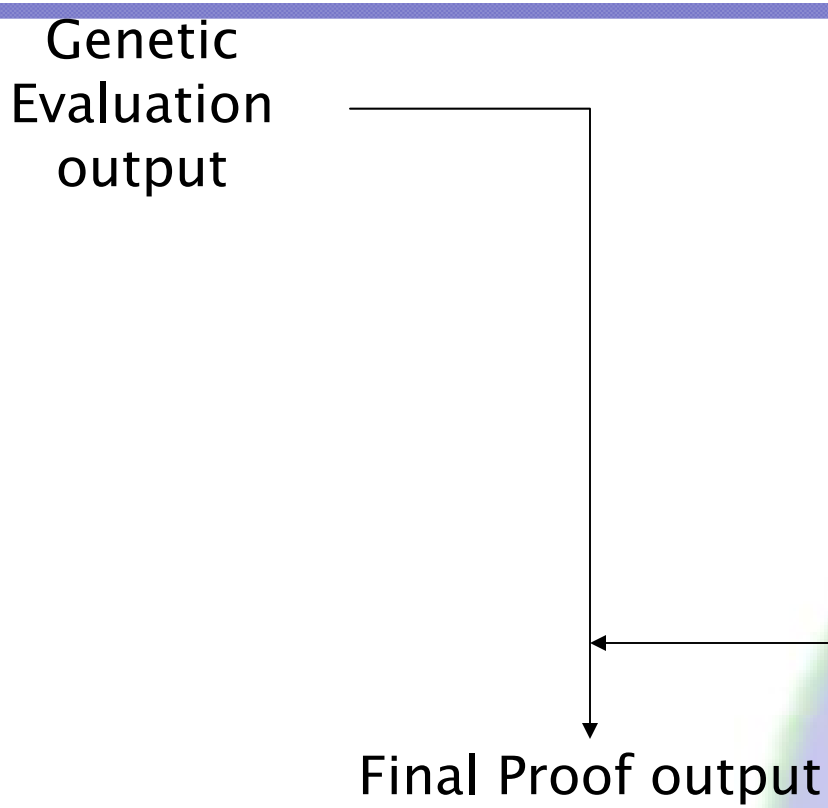
In the meantime

- Conversion Equations 
  - Foreign data => Irish base
  - $PAT_{IRL} = a + b.EBV_{FOR}$
  - Estimation of r_g
- Ranking 
  - Non genetic approach
  - Translation of foreign ranking => Irish ranking
  - $r_g = 1$
  - Convenient for small populations

The Proofs Converted

	Con. Eq.		Ranking				
	CHL	LMS	BAQ	AUB	SAL	PAR	SIM
Dir. Calving	✓	✓	✓	✓	✓	✓	✓
Mat. Calving	✓	✓	✓	✓	✓	✓	✓
Dir. Wea. Weight	✓	✓	✓	✓	✓	✓	✓
Mat. Wea. Weight	✓	✓	✓	✓	✓	✓	✓
Muscle	✓	✓	✓	✓	✓	✓	
Skeletal	✓	✓	✓	✓	✓	✓	
Carc. Weight	✓	✓					✓
Carc. Conf.	✓	✓					
Calf Quality	✓	✓					
Gestation Length							✓

The Steps


Genetic Evaluation output
Foreign data collection
Conversion equations update
Final Proof output

Pros & Cons

+

- ✓ Give a genetic value to foreign animals

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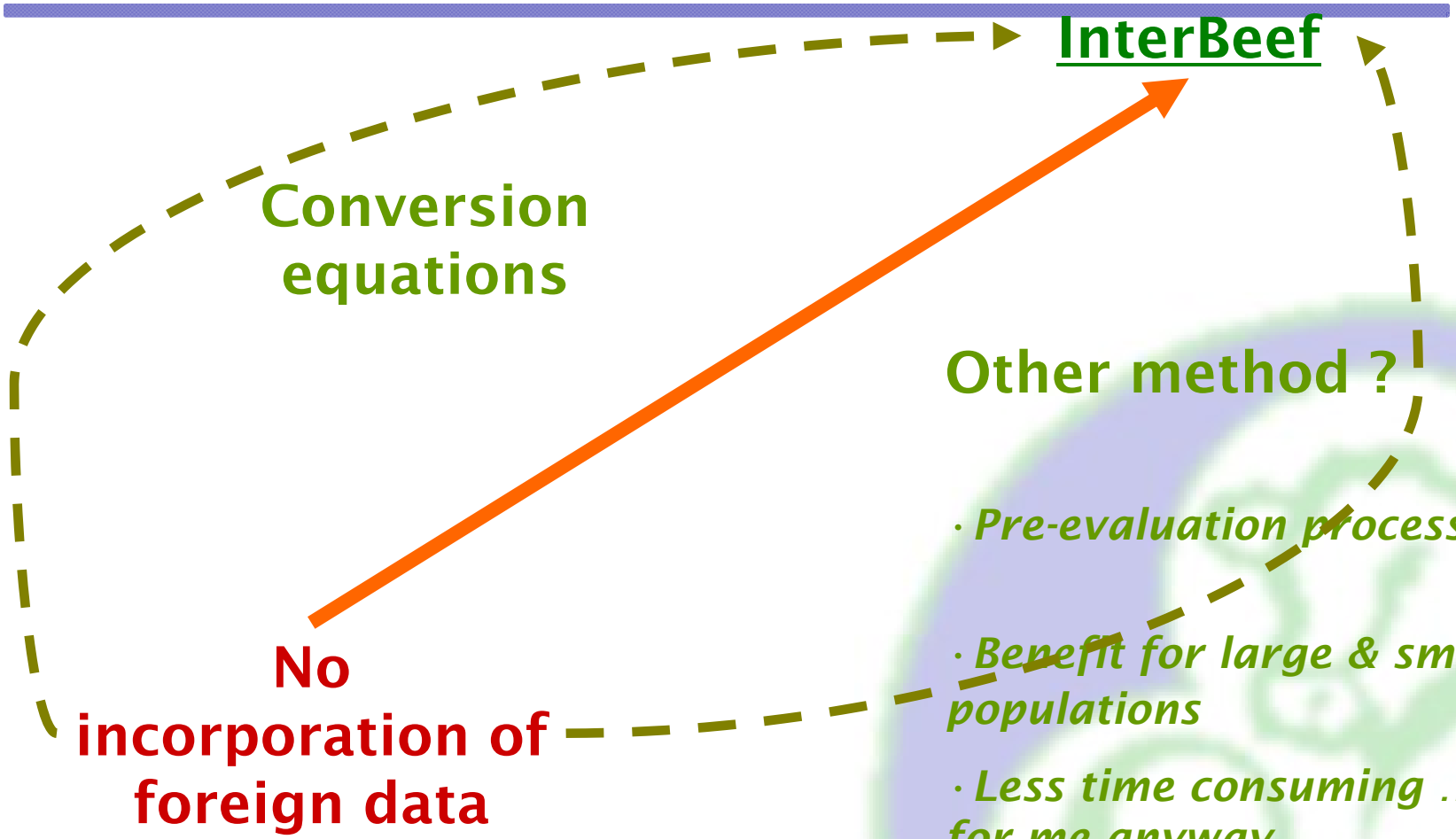
- ✓ Post-evaluation method
- ✓ Need a strong genetic link between the countries
- ✓ Ranking = gross approximation
- ✓ Time consuming

Would it be possible



IRISH CATTLE BREEDING FEDERATION

Use of Foreign Data
Some Results

Thierry Pabiou

09 July 2008

NATIONAL DEVELOPMENT PLAN

AI Bulls – Weaning Weight

	AA	AU	BA	BB	CH	HE	LM	PI	PT	SA	SH	SI
N	261	32	95	274	499	381	324	53	15	40	136	267
min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
max	0.0	41.0	47.0	0.0	47.0	0.0	43.0	0.0	42.0	39.0	0.0	0.0
mean	0.0	20.0	13.1	0.0	3.9	0.0	2.9	0.0	23.7	14.2	0.0	0.0
std	0.0	10.9	15.3	0.0	9.4	0.0	8.2	0.0	10.9	11.4	0.0	0.0
90%	0.0	35.0	37.0	0.0	19.0	0.0	13.0	0.0	36.0	31.0	0.0	0.0

Stock Bulls – Weaning Weight

	AA	AU	BA	BB	CH	HE	LM	PI	PT	SA	SH	SI
N	39990	1989	2253	20972	53717	26321	56087	489	479	2451	2204	20320
min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
max	0.0	42.0	48.0	0.0	48.0	0.0	48.0	0.0	44.0	46.0	0.0	0.0
mean	0.0	7.9	3.6	0.0	0.9	0.0	0.8	0.0	12.4	9.7	0.0	0.0
std	0.0	10.1	8.9	0.0	5.7	0.0	5.7	0.0	13.9	11.8	0.0	0.0
90%	0.0	25.0	15.0	0.0	0.0	0.0	0.0	0.0	33.0	29.0	0.0	0.0

Charolais: WW proofs Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
RCF	-5.6 (16%)	9.2 (57%)	112 (95%)
JYU	27.1 (43%)	21.5 (74%)	109 (92%)
SPU	-18.0 (15%)	4.1 (80%)	93 (99%)
FR5791100536 (M)	1.1 (6%)	8.3 (36%)	107 (45%)
FR5879106446 (F)	4.8 (10%)	-1.6 (20%)	87 (40%)

Charolais: MAT. WW proofs Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
VLR	-2.7 (46%)	7.9 (56%)	109 (97%)
OMD	-4.2 (50%)	2.1 (0.81)	92 (92%)
HDG	-6.2 (46%)	-11.5 (75%)	78 (89%)
FR382110812 (F)	-1.8 (13%)	5.9 (34%)	112 (51%)
FR7194109814 (M)	-4.8 (29%)	-4.3 (46%)	88 (59%)

Limousin: WW proofs
Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
CPG	-10.0 (64%)	-7.8 (82%)	85 (97%)
OND	8.7 (90%)	9.1 (91%)	106 (99%)
VRL	0.1 (10%)	-1.2 (77%)	92 (97%)
NUP	1.5 (96%)	0.9 (96%)	88 (96%)
FR8770001590 (F)	-4.7 (2%)	-4.5 (9%)	90 (29%)
FR2396040513 (M)	-5.4 (2%)	-0.3 (12%)	120 (81%)

Limousin: MAT. WW proofs Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
OTX	6 (30%)	5.4 (48%)	113 (78%)
SYP	43 (16%)	3.6 (18%)	110 (29%)
REQ	3.9 (12%)	-4.6 (28%)	95 (37%)
LTZ	3.6 (9%)	1.1 (40%)	90 (44%)
FR2380001027 (M)	2.4 (11%)	2.9 (13%)	106 (33%)
FR1930067430 (F)	2.5 (9%)	-7.7 (19%)	88 (33%)

Blonde: WW proofs
Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
GRO	-1.3 (41%)	3.1 (81%)	111 (99%)
OVI	-0.9 (1%)	7.4 (79%)	117 (99%)
VBS	2.5 (16%)	-2.9 (74%)	88 (95%)
NUI	4.2 (43%)	5.0 (80%)	110 (98%)
FR4091011305 (M)	-3.6 (5%)	1.3 (27%)	123 (79%)
FR4080016212 (F)	0.03 (4%)	-1.5 (20%)	95 (24%)

Blonde: MAT. WW proofs Ireland 082 <=> MIX99

	April 08 Irish evaluation	June 08 test evaluation	Spring 08 French evaluation
LEX	-5.7 (45%)	7.2 (68%)	122 (96%)
CKC	-6.4 (47%)	3.9 (77%)	115 (98%)
EOT	-7.9 (25%)	-10.1 (40%)	85 (72%)
VAN	-8.2 (47%)	-14.4 (77%)	79 (98%)
FR6484017917 (F)	-5.9 (11%)	2.3 (34%)	118 (48%)
FR6488014010 (M)	-5.7 (28%)	3.3 (48%)	122 (75%)

Where next?

- Weaning weight (direct & maternal) for French breeds.
- Next; additional breeds.
  - Simmental…..others?
  - Need file of Bull ID's & EBV's from herdbooks & countries of interest.
  - Must have data by 1st August.
- Additional traits; linear type, carcass & calving traits.
- Questions…..?

IRISH CATTLE BREEDING FEDERATION

New Economic Values & New Traits

Andrew Cromie

9th July 2008

NATIONAL DEVELOPMENT PLAN

Updating Economic Values.

- Review of beef economic values;
  - Increased feed & fertiliser prices.
    - Use of Grange economic models.
  - Increased beef prices (factories & marts)
  - Increased labour costs.
  - Economic values associated with “new traits”; docility & polledness.

Updating EV's – Expect….

- Increase in concentrate costs.
  - €200 to €300/tonne.
- Increase in weighted average feed & fertiliser costs across all finishing systems;
  - €.07 kg DM/day to €.126 kg DM/day.
- Increased carcass price.
  - €3.00/kg to €3.20/kg

Updating EV's – New Traits

- Docility
  - Trait of increasing economic importance.
  - Secondary selection trait (primary?!)
  - Should be included in economic indexes.
  - Confident in new PD's (next slide).
  - EV based on Teagasc & industry data
  - Deaths, injuries, time out of work.
  - €68 per one unit increase in PD.
    - 68% of bulls +/- €30.

Across Breed Docility

Breed	Bulls	PD Doc	Raw Doc	HYS Doc
AA	35	99	7.19	7.07
AU	3	100	7.00	6.90
BA	5	96	7.02	7.11
BB	42	119	7.29	6.97
CH	167	104	7.59	7.55
HE	25	113	7.89	7.64
LM	218	93	7.12	7.11
PI	3	93	7.33	7.42
SA	8	97	7.43	7.38
SH	1	112	7.80	7.58
SI	76	101	7.58	7.45

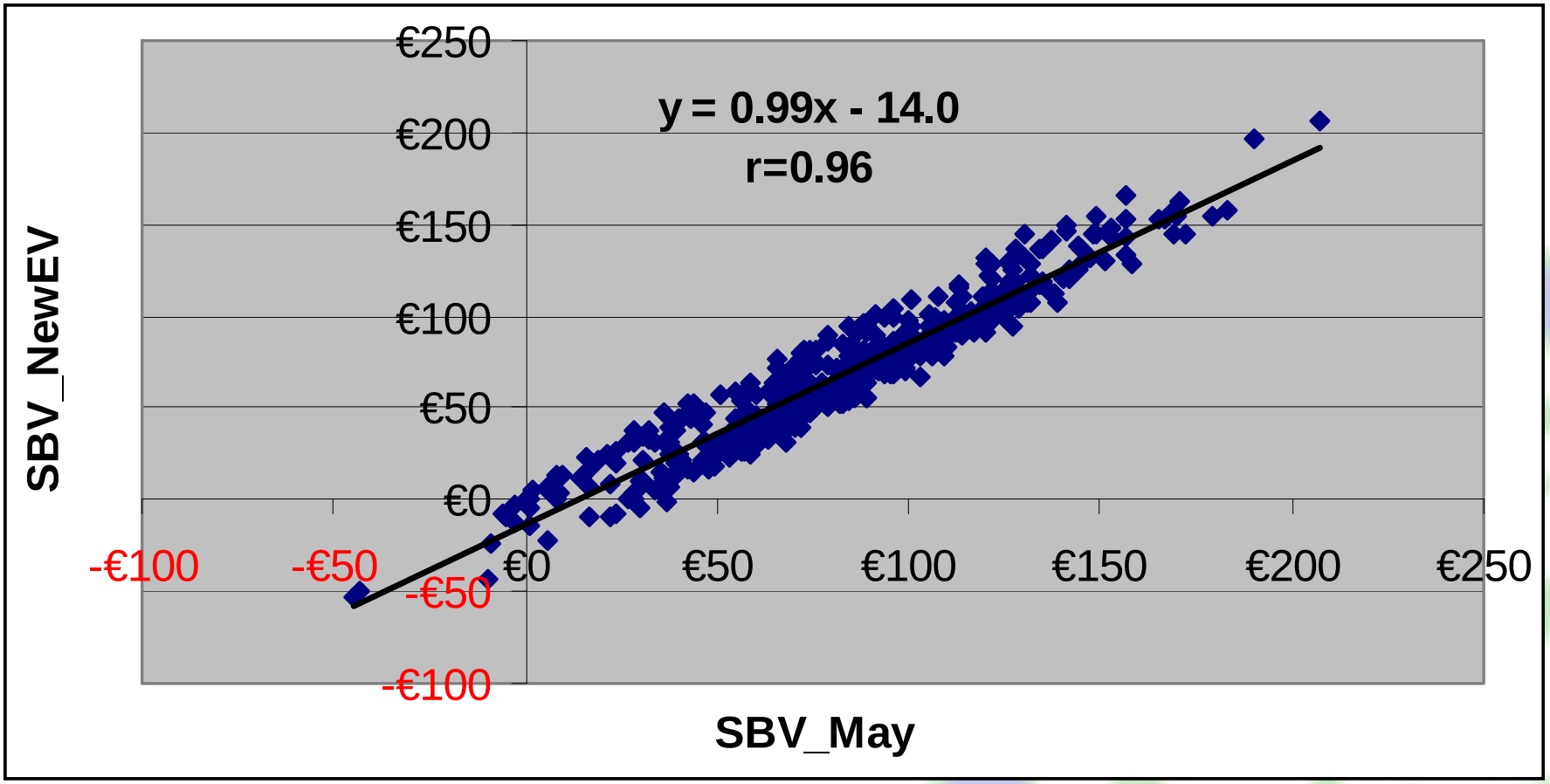
Updating EV's – New Traits

- Polledness
  - Trait of increasing economic importance.
  - Also, used in secondary selection.
  - Now being collected as part of Suckler Cow Welfare Scheme.
  - EV based on Teagasc & industry data
  - Cost of disbudding (labour, equipment…)
  - €7.14 per polled calf.

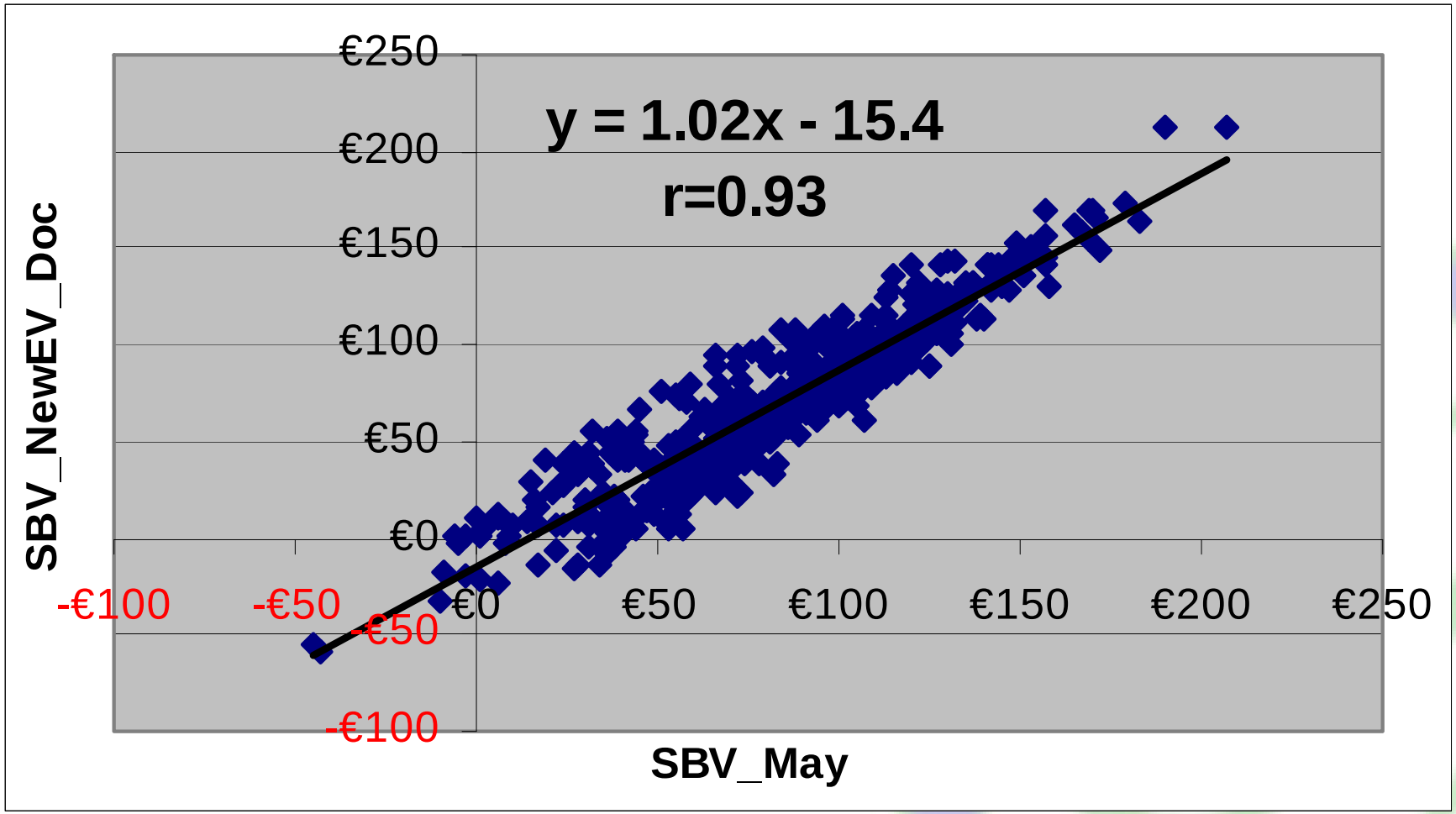
Updating EV's – Expect to see

- Impact of increasing feed costs on carcass sub index (& other indexes with feed costs).
- Increased weighting on calf quality in export index.
- Impact of docility across the sub-indexes & SBV (export, carcass, maternal cow & maternal calf).
- Net effect; reduction in average SBV's and some breed shifts.
- Overall; good agreement.

May versus Test; New EV's



May vs Test; New EV;s & Doc.



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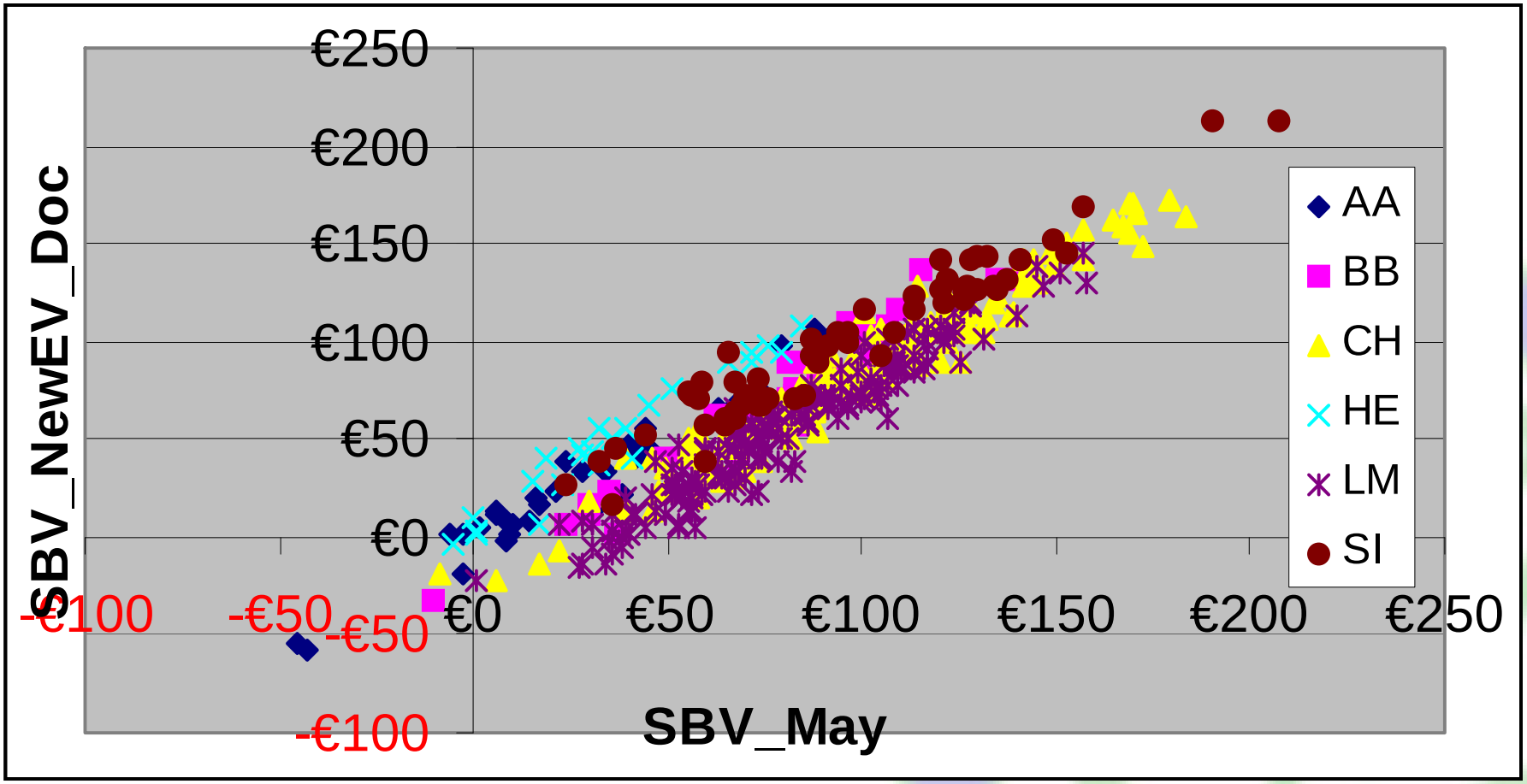

Where next?

- Some further work on EV's
- Beef industry meeting – end August.
  - Tim Byrne (Abacus Bio) in attendance.
  - Proposed changes to economic values including bull listings posted in advance of that meeting.

IRISH CATTLE BREEDING FEDERATION

Evaluations for Beef Type

Francis Kearney

NDP
NATIONAL DEVELOPMENT PLAN

Beef Type

- Across Breed Evaluation
- Include foreign data
- Update base
- Publish composites and individual type traits

Beef Type

Breed	Records	Percent
AA	1304	1.11
AU	740	0.63
BA	419	0.36
BB	564	0.48
CH	38589	32.94
HE	2361	2.02
LM	45899	39.18
PI	173	0.15
PT	85	0.07
SA	631	0.54
SH	131	0.11
SI	9343	7.98
COM	16902	14.43
Total	117141	

Beef Linear

- Include foreign data
  - Principle the same as with Beef Performance
  - Need individual trait information from foreign country
- Base
  - Updated to PB animals born from 03-06 with score between 150-300d
- Software
  - Use Mix99 for genetic evaluation

Presentation

- Mean 100 Std Dev 10 for composite Muscle, Skeletal, Functionality & Docility (Stars within/across?)
- Individual traits on linear score scale for AI & Stock bulls
- Information in new GROW reports

Work Plan

- Get linear traits of foreign bulls
- Evaluation incorporating available foreign information
- Results released – feedback from industry
- Implementation in next evaluation
  - 4 times per year

ET Calves

- Issues – where does it impact
  - Calving – calving ease score is on the recipient not own dam
  - Weaning weight – dam does not contribute milk to ET calf
  - Calving Interval – if dam is flushed she will have extended calving interval

ET Calves

- In current evaluations ET calves are treated the same as non-ET
  - Amount of data on ET calves is very small (<1%)
  - Can impact on individual proofs – especially cows with a lot of ET progeny

ET Calves

- Future thinking –
  - Ensure information on calving and maternal weaning weight are attributed to recipient dam and not genetic dam
    - Do not remove any information from evals
  - Set calving interval to missing for cows that are flushed
    - Crucial that flushing event is flagged in IRIS by breed society, breeder (via animal events etc…