

IRISH CATTLE BREEDING FEDERATION

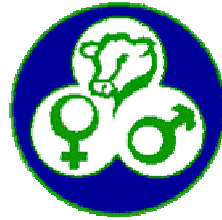
ICBF Beef Industry Meeting re: New Developments.

Tullamore Court Hotel.

26th August 2008

Agenda

- New beef performance evaluation - Ross
 - Additional data
 - Inclusion of foreign data
 - ET dam issue with weaning wt
 - Move to MIX99 for maternal weaning weight
- Update on linear, calving & CIS evaluations - Francis
- New Economic Values - Tim
- Overall impact of changes – Andrew
- Update on genomics – Brian.
- Any other business.



IRISH CATTLE BREEDING FEDERATION

Update on Beef Performance Evaluation

Beef Industry Meeting

26th August 2008

Ross Evans

Key additions

- Additional data
- Inclusion of foreign data
- ET dam issue with weaning wt
- Move to MIX99 for maternal weaning weight

1. Additional data

• *Ai bred stock
in new
suckler herds*

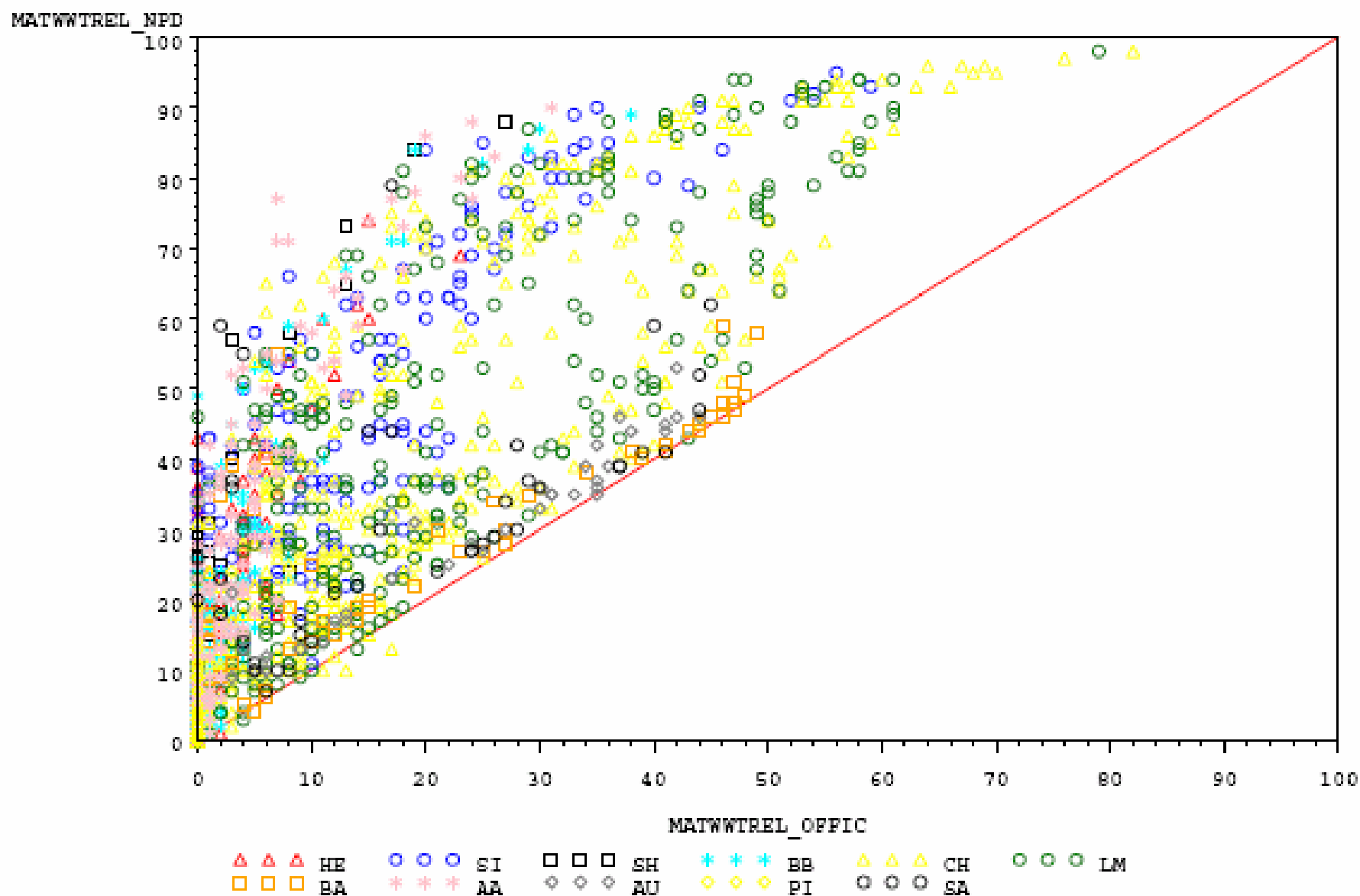
• *Additional
Tully data*

TYPE	May-08	Aug-08	EXTRA
Carcass weight	446,030	505,917	59,887
Carcass conformation	445,725	505,613	59,888
Carcass fat	445,465	505,352	59,887
Cull cow weight	101,181	122,493	21,312
Weaning weight	75,708	83,825	8,117
Liveweight	89,055	102,612	13,557
Feed Intake	2,592	3,476	884
Mart calf quality	23,739	31,349	7,610
Linear score	94,476	97,854	3,378
Total	1,723,971	1,958,491	234,520
age at 1st calving	210,841	276,102	65,261
calving interval	118,183	170,580	52,397
lifespan	210,841	276,096	65,255
survival	175,004	227,481	52,477
Total	714,869	950,259	235,390

2. Inclusion of foreign data

- Deadline Monday 18th August
- Official French evaluation Spring 2008 – direct and maternal weaning weight, 31,371 animals
- UK Simmental data: 178 animals
- Worked closely with AA – missed deadline.

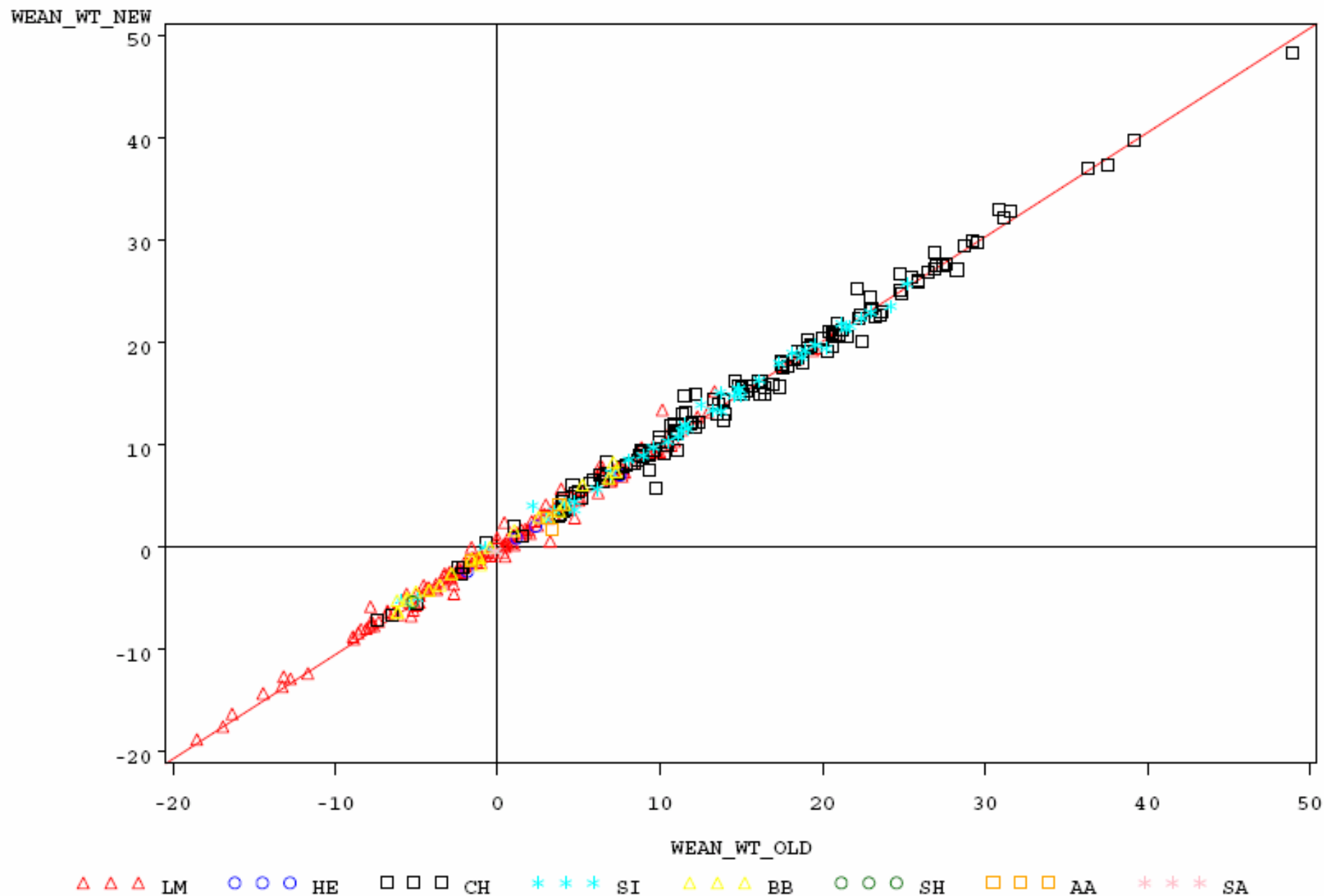
Alsires Mat weaningwt reliability — old vs new



3. ET animals

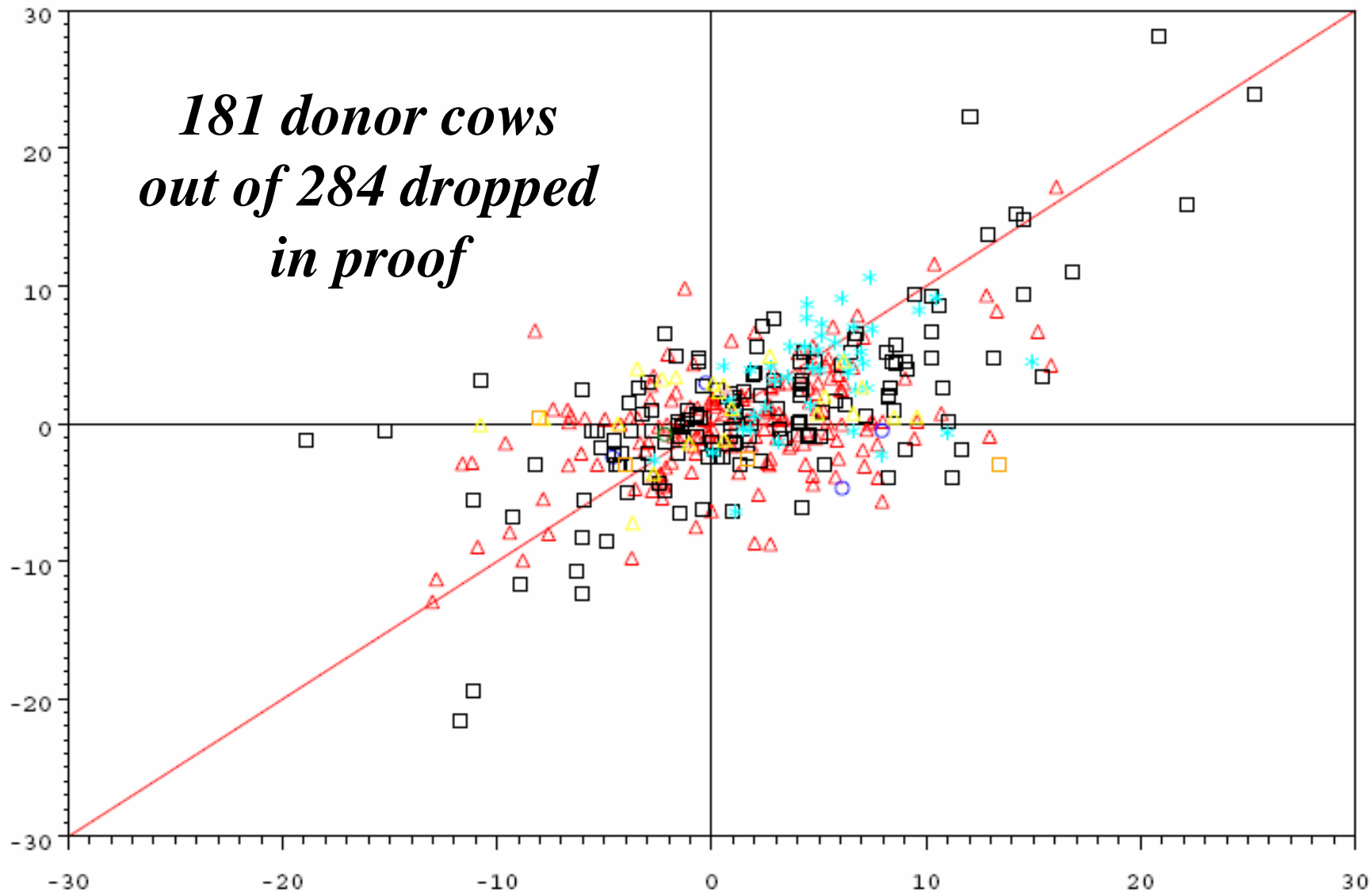
- Effect of milky recipient dam
- 803 ET animals in evaluation with weaning weight out of 284 donor dams, one fifth had no recipient

Weaning wt — existing vs new evaluation with ETrecips



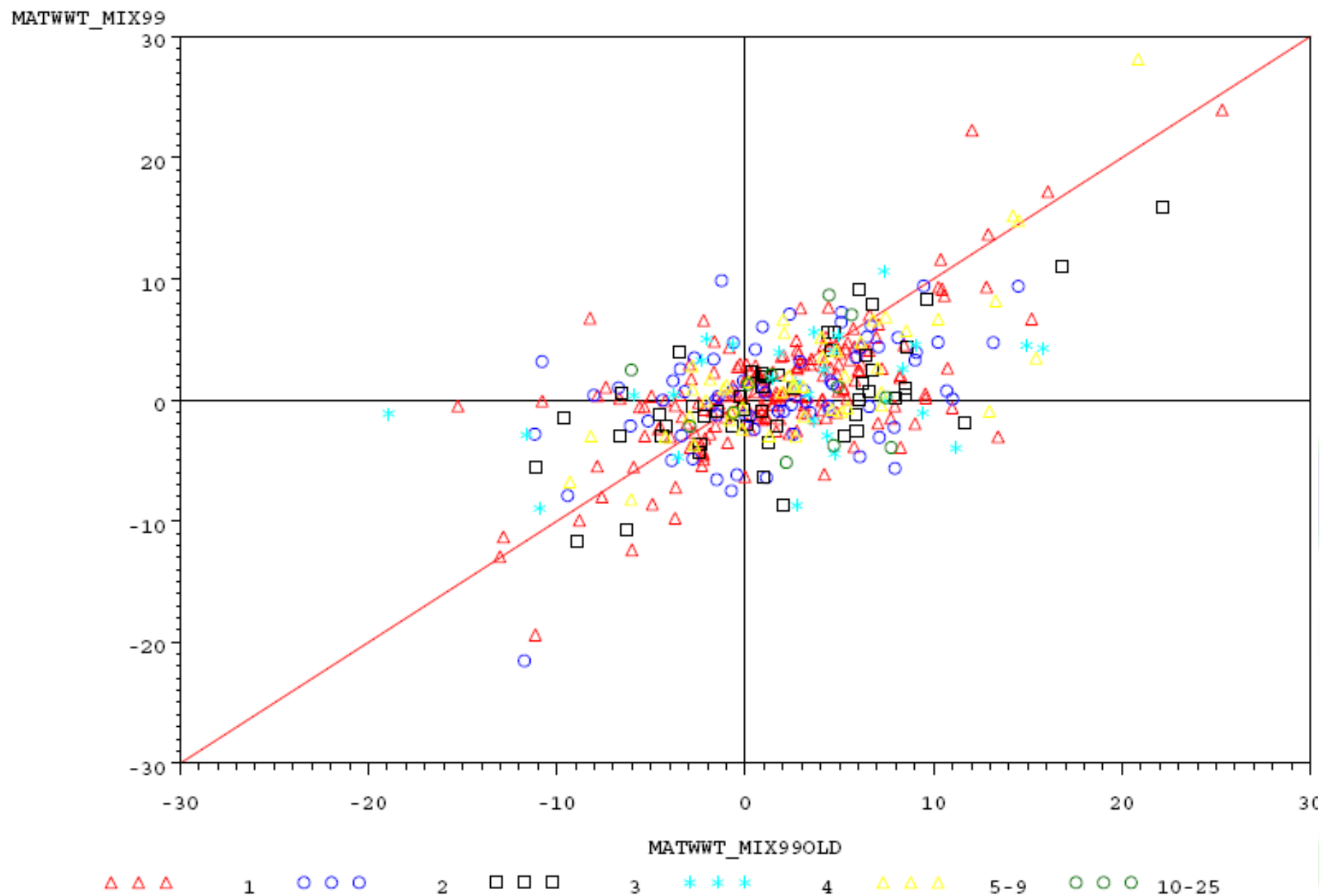
Maternal weaning wt — old MIX99 vs MIX99: ETrecips

MATWWT_MIX99



△ △ △ LM ○ ○ ○ HE □ □ □ CH * * * SI △ △ △ BB ○ ○ ○ SH □ □ □ AA * * * SA

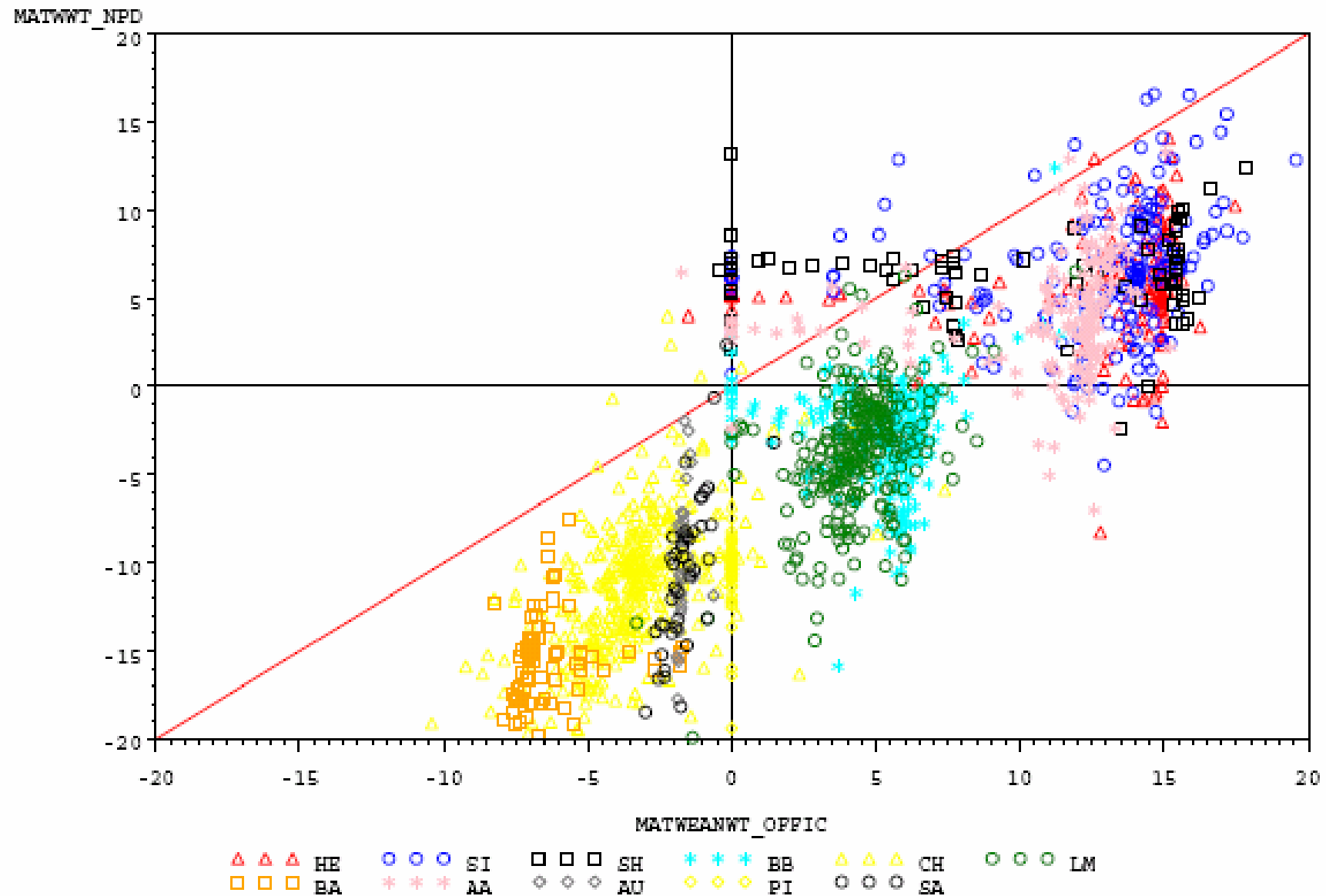
Maternal wwt differences — by number of ET calves per donor dam



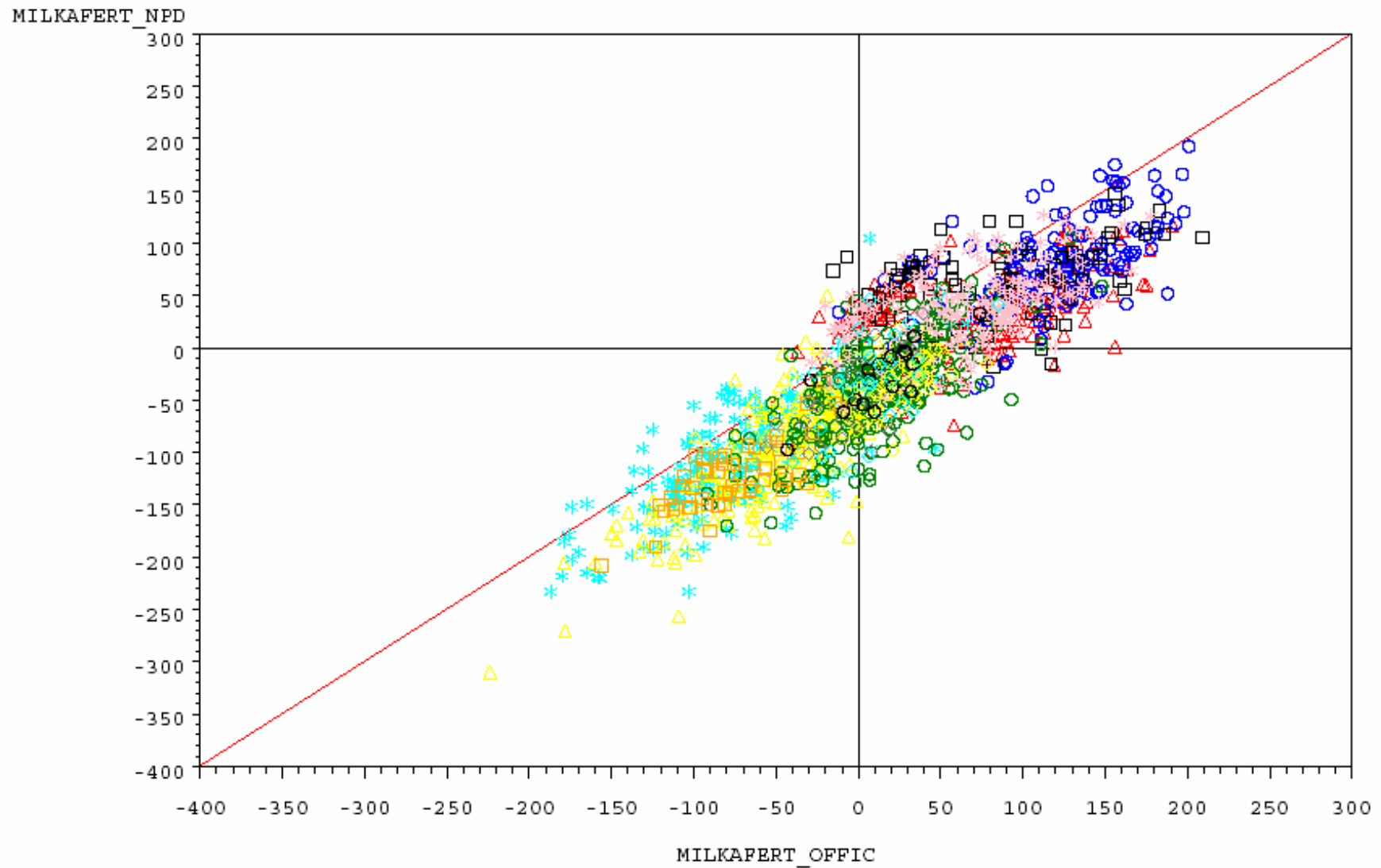
4. Move to Mix99

- New evaluation software for maternal weaning weight.
- Benefits;
 - Include foreign data
 - Combined evaluation (all beef performance traits).
 - Includes reliability.

Alsires Mat weaningwt — old ASREML vs new data MIX99 with foreign



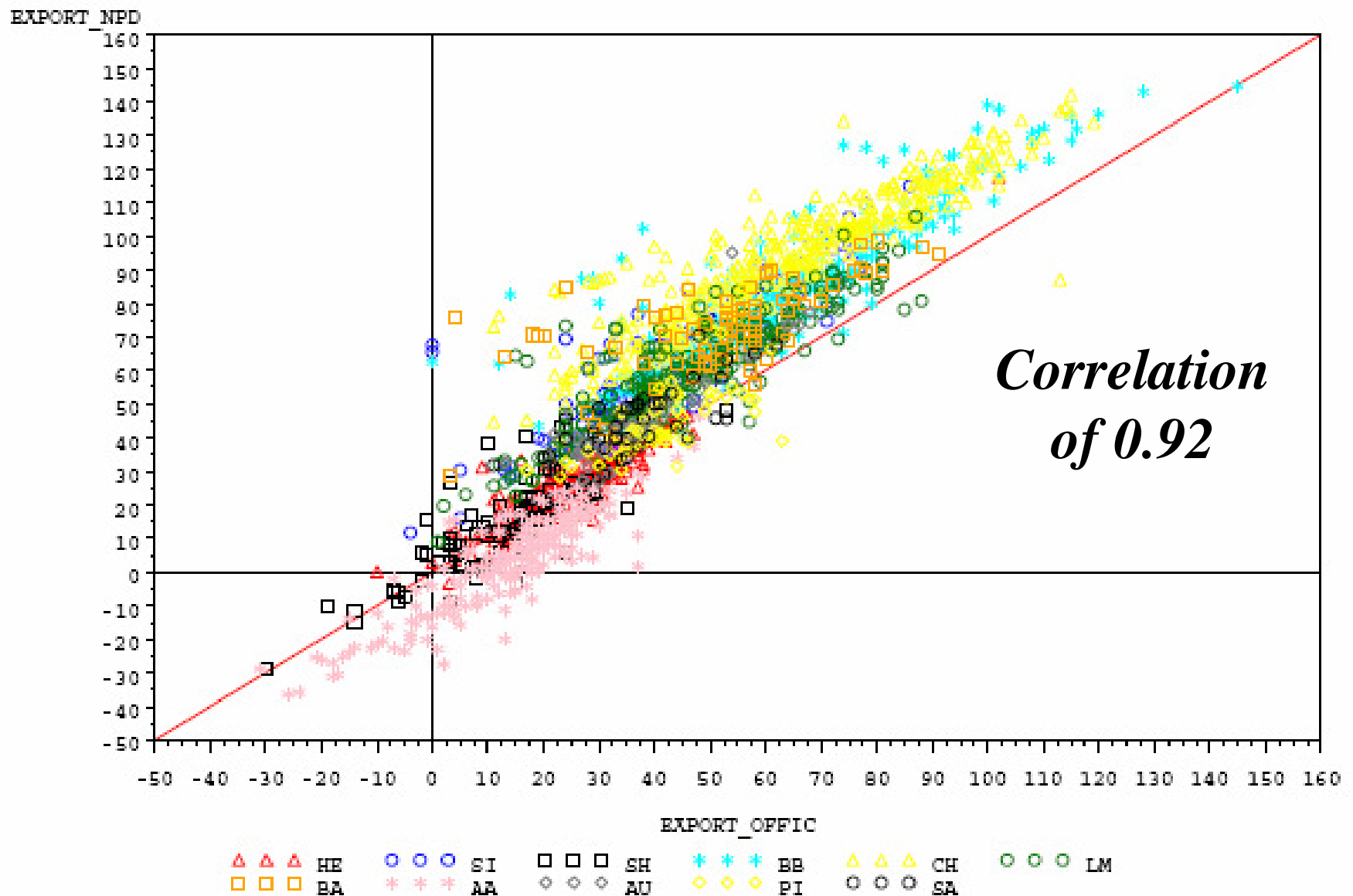
Alsires MILK & FERTILITY : old v new data & foreign EBVs



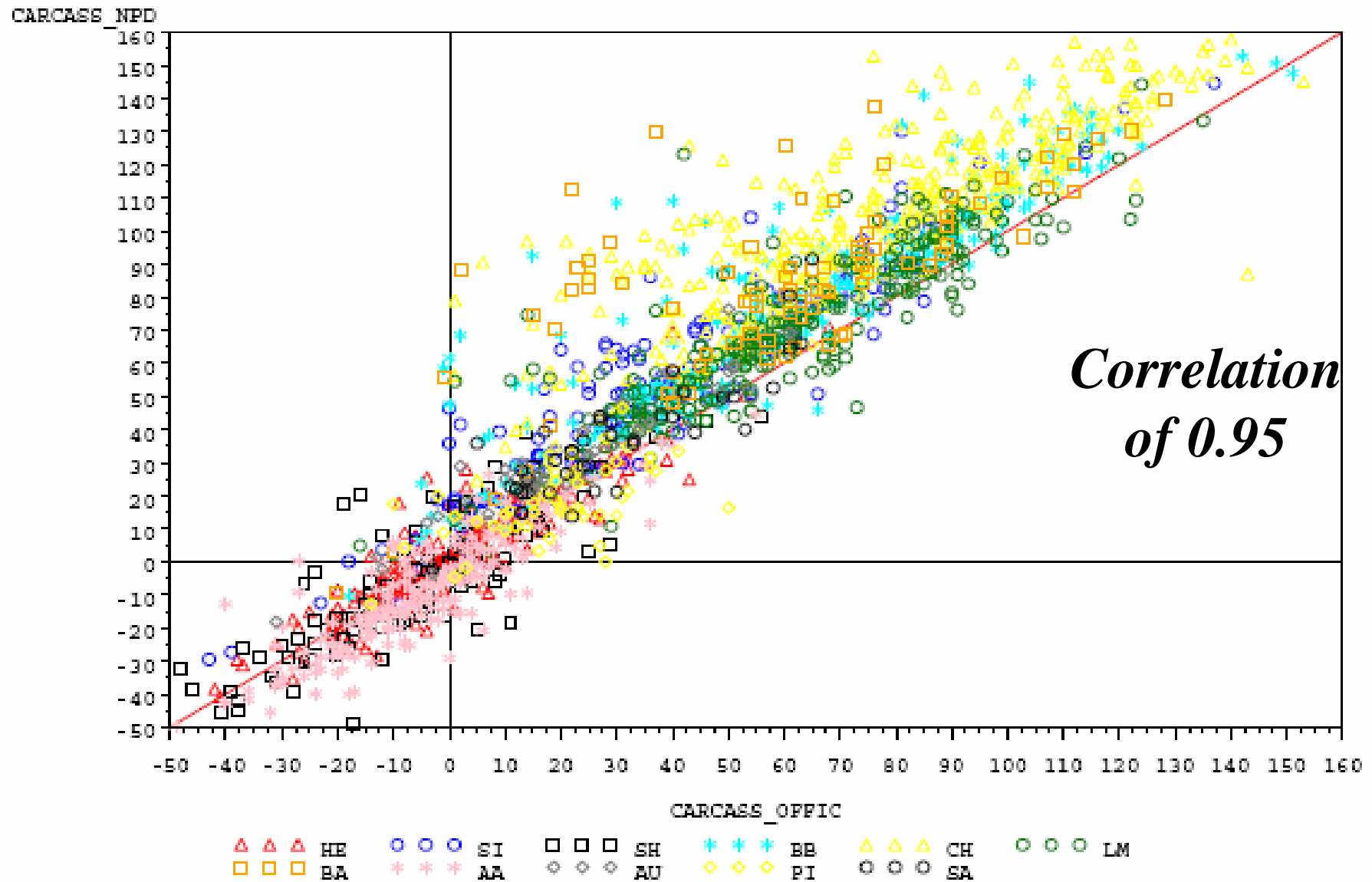
Impact of new data.

- Substantial changes in quantity & quality of data.
- Increases in accuracy of evaluations.
- Correlations generally high across sub-indexes & SBV.

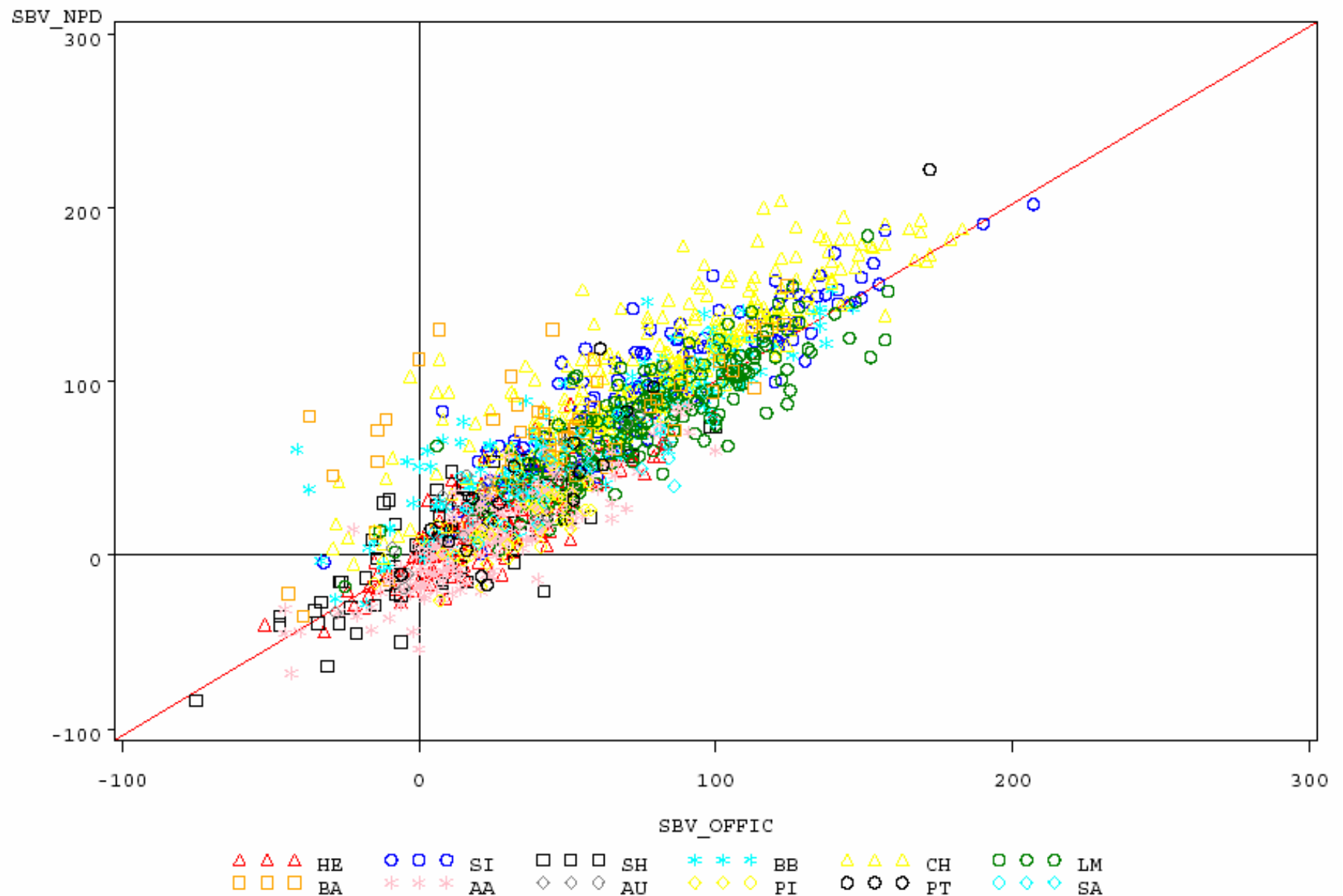
Alsires Export Index : old v new data & foreign EBVs

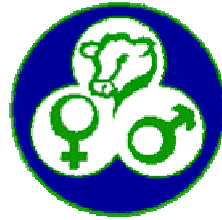


Alsires Carcass Index : old v new data & foreign EBVs



Alsires SBV : old v new data & foreign EBVs





IRISH CATTLE BREEDING FEDERATION

Update on linear, calving & beef CIS Evaluation

Beef Industry Meeting

26th August 2008

Francis Kearney

Beef Linear 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
<u>COM</u>	<u>16902</u>	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

Beef Linear

- Waiting on files from France
 - New few weeks.
- Evaluations and publication of test proofs.
- Meeting with industry ~ end Sept.
- Implementation & publication

Publication

Linear Type

AI Code:	GMI	Breed:	HO 100%	Sire:	Singing Brook N-B Mascot/SBM
Animal Name:	GALTEE MERCI ET	Owner:	NCBC	Dam:	Bude 038
Date of Birth:	01-Sep-1992	Date of Evaluation:	April 2007	MGS:	Sir C Valor/HOLUSAM000001811754
National ID:	HOLDEUM001021231601				
International ID:	HOLDEUM001021231601				

% Rank	Within Breed		Index	Data rel	Across Breed	% Rank
25	★ ★	Muscle	-€ 8	58%	★	5
75	★ ★ ★ ★	Skeletal	€66	81%	★ ★ ★ ★ ★	90
74	★ ★ ★ ★	Functionality	€85	70%	★ ★ ★ ★ ★	70
75	★ ★ ★ ★	Docility	€80	50%	★ ★ ★	65

Data Rel: 40% - 60% = Ave

20 - 40% = Below Ave

<20% = Poor

Conformation Traits

Trait Distribution

Conformation Traits					
Muscle	PTA	Percentile			
Width at Withers	0.277 Narrow				Wide
Width behind Withers	0.193 Narrow				Wide
Loin Development	0.235 Low				High
Development Hind Quarter	0.452 Narrow				Wide
Thigh Width	0.360 Narrow				Wide
Skeletal	PTA	Percentile			
Height Withers	-0.276 Small				Tall
Length of Back	0.084 Short				Long
Length of Pelvis	0.090 Short				Long
Width at Hips	0.048 Narrow				Wide
Functionality	PTA	Percentile			
Fore Leg - Front View	0.182 Turned Out				Turned In
Hind Leg - Side View	0.066 Straight				Sickle
Hind Leg - Rear View	0.055 Hock In				Hocks Out
Locomotion	-0.053 Poor				Good
Docility	PTA	Percentile			
Docility	0.600 Poor				Good

Body Condition Score

- Perception - Animals on high level of feeding have better BLUPs
 - E.g., males v females; cattle for show/sale v cattle not
- Currently no adjustment for BCS
- All animals in same contemporary groups

Body Condition Score

- Investigate if BCS is biasing breeding values
- How to handle it
 - Separate CG for animals with high BCS?
 - Include BCS in model for the traits?
 - Pre-adjustment for BCS?
- Scoring in commercials?

Docility

- Across breed docility proofs have been published.
- Proofs are consistent with raw data (breed average vs hys average).
- New across breed docility proofs will be beneficial to farmers.
- Access to new docility data from Suckler Cow Welfare Scheme.
- Looking at including this data in future evaluations for docility.

Docility – Across Breed Proofs

Breed	New Doc	Raw Doc	HYS Doc	Diff
AA	99.4	7.21	7.09	0.12
AU	100.3	7.00	6.90	0.10
BA	95.8	7.02	7.11	-0.09
BB	119.4	7.30	6.94	0.36
CH	106.5	7.62	7.53	0.09
HE	112.6	7.89	7.64	0.25
LM	92.3	7.11	7.11	0.00
PI	93.0	7.33	7.42	-0.09
SA	96.8	7.43	7.38	0.05
SH	112.0	7.80	7.58	0.22
SI	101.4	7.56	7.43	0.13
Grand	100.5	7.35	7.26	0.09

Calving Performance

- Across Breed Evaluation
- Condition of SCWS to record sire and calving score
- Resulted in large increase in data
- ~850,000 records between March and August

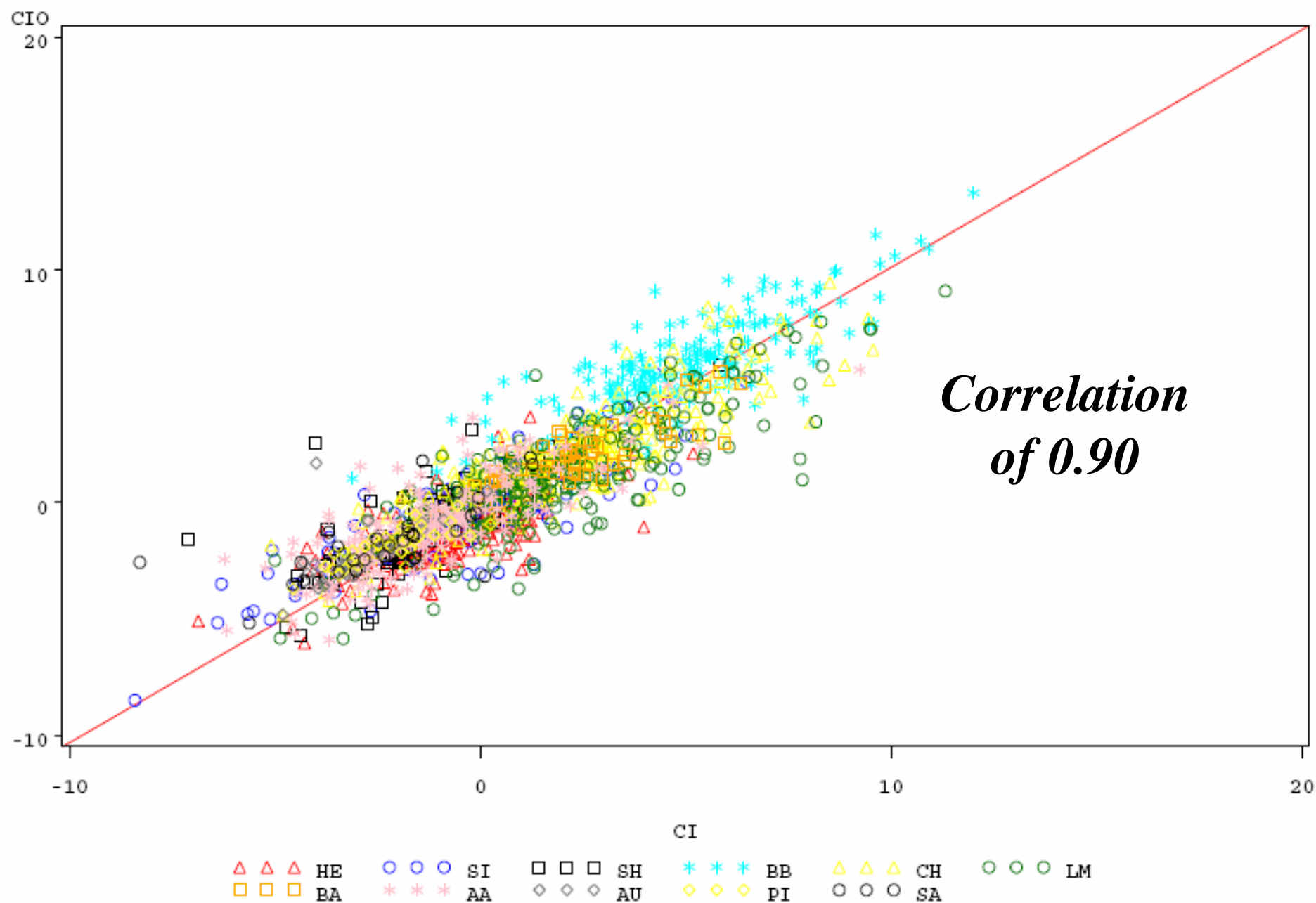
Calving Performance

- All known ET calves have calving score set to missing
- Slight reduction in reliability for some animals
- Overall correlations are high >0.9

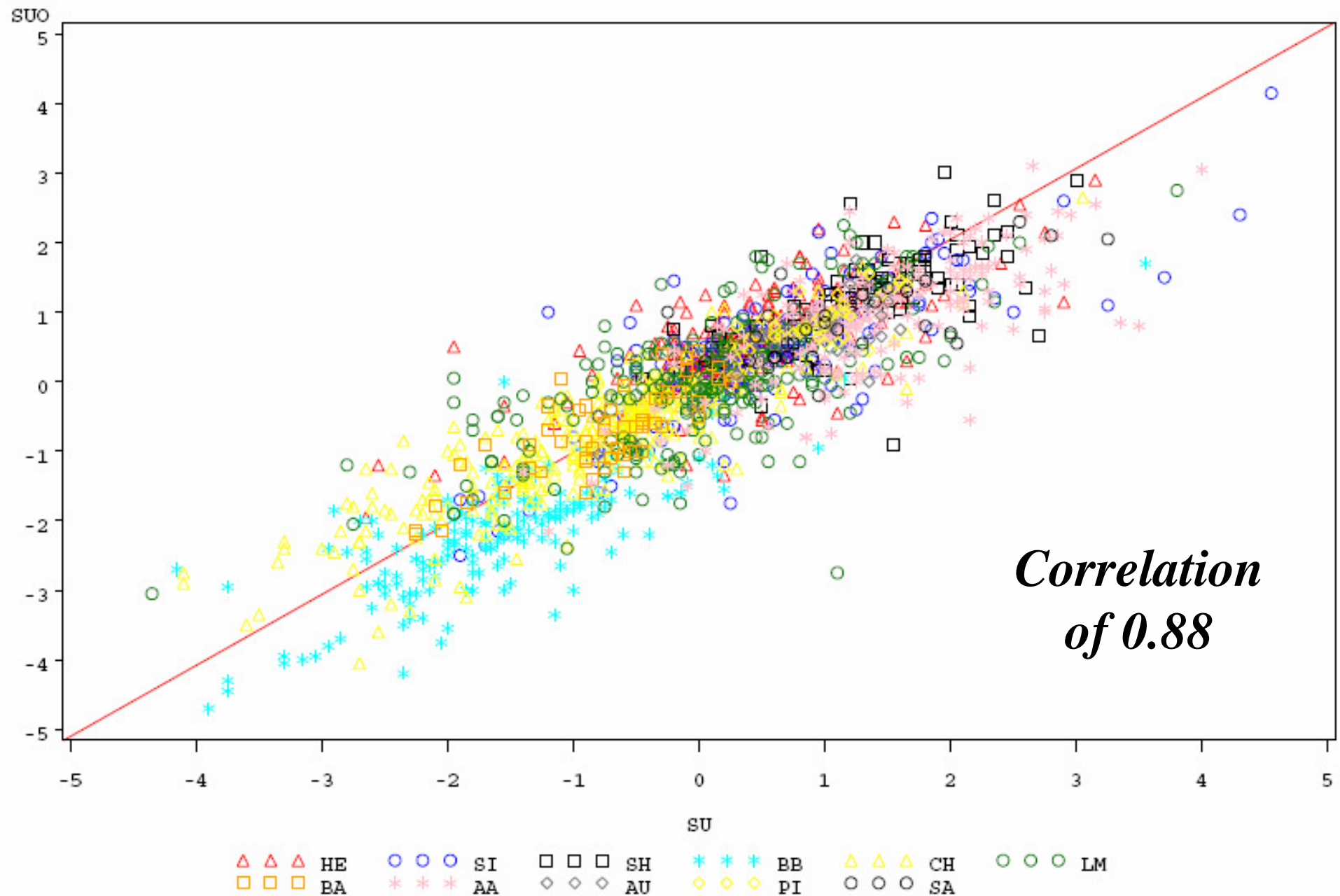
Beef Calving Interval & Survival (CIS)

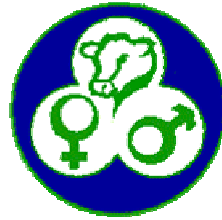
- 20% increase in CIS data.
- No change in approach.
- Including later lactations – next years work.

CI Feb08 vs CI Jul08 no reliability restriction



pd SUV Feb08 vs pd SUV Jul08 no reliability restriction





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Overall Impact including “where next”?

Tullamore Court Hotel.

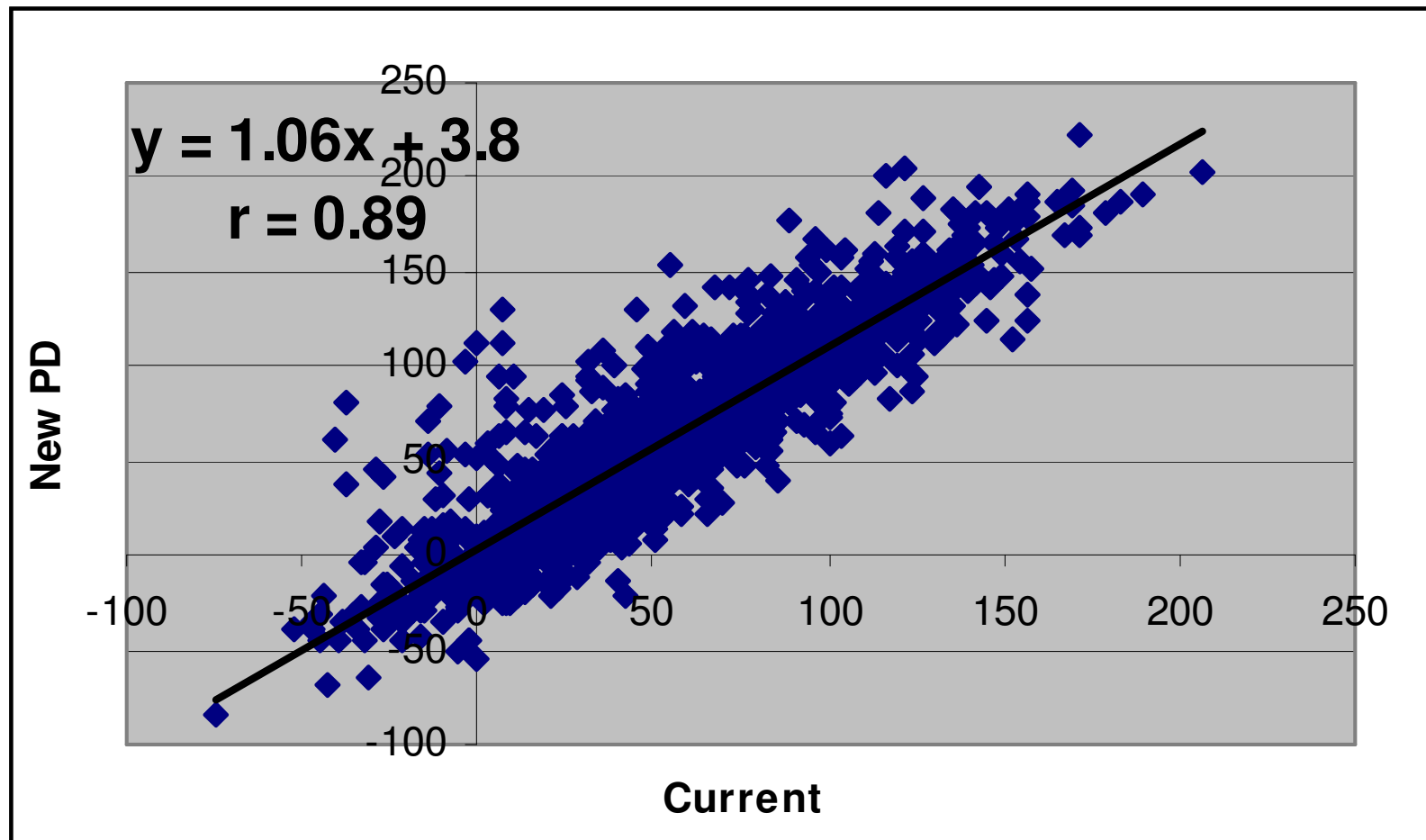
26th August 2008

Andrew Cromie

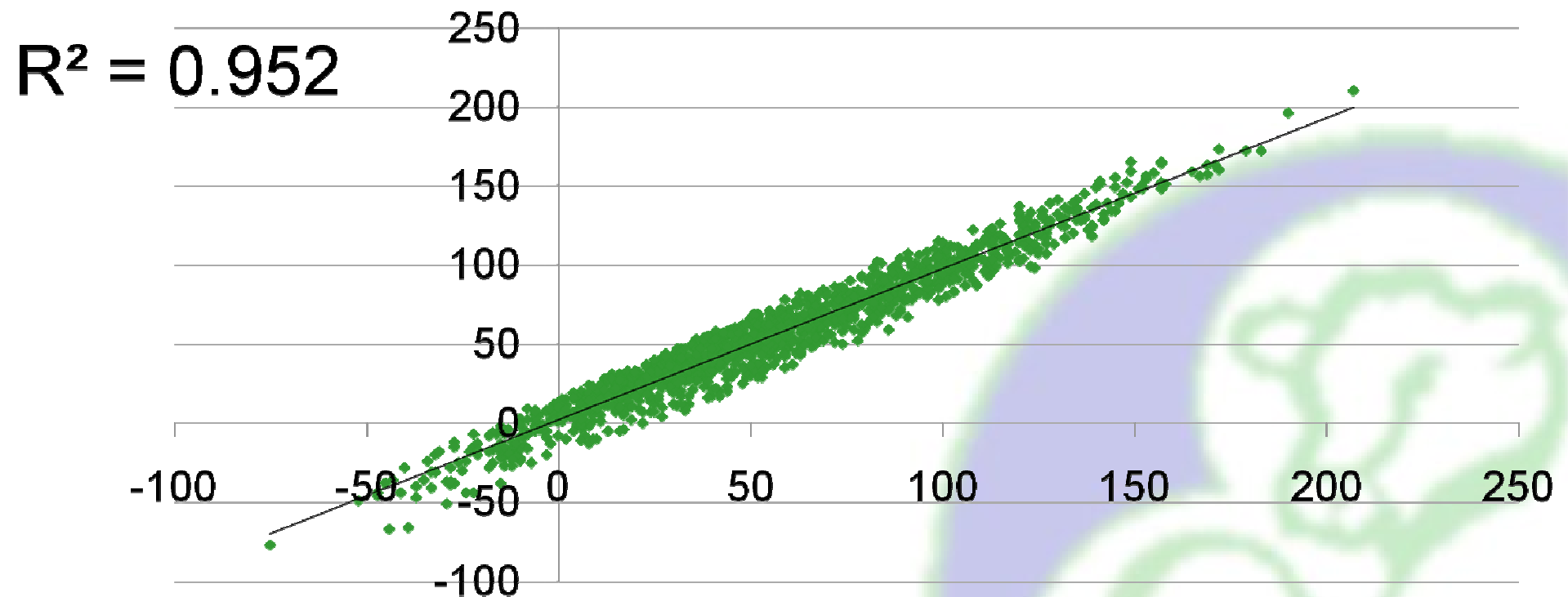
Review of changes.

- New evaluations for beef traits
 - Beef performance; New data, foreign, ET's & Software – Ross.
 - Calving & CIS; New data & ET's – Francis.
- New Economic Value's – Tim.
- Overall impact of these changes??

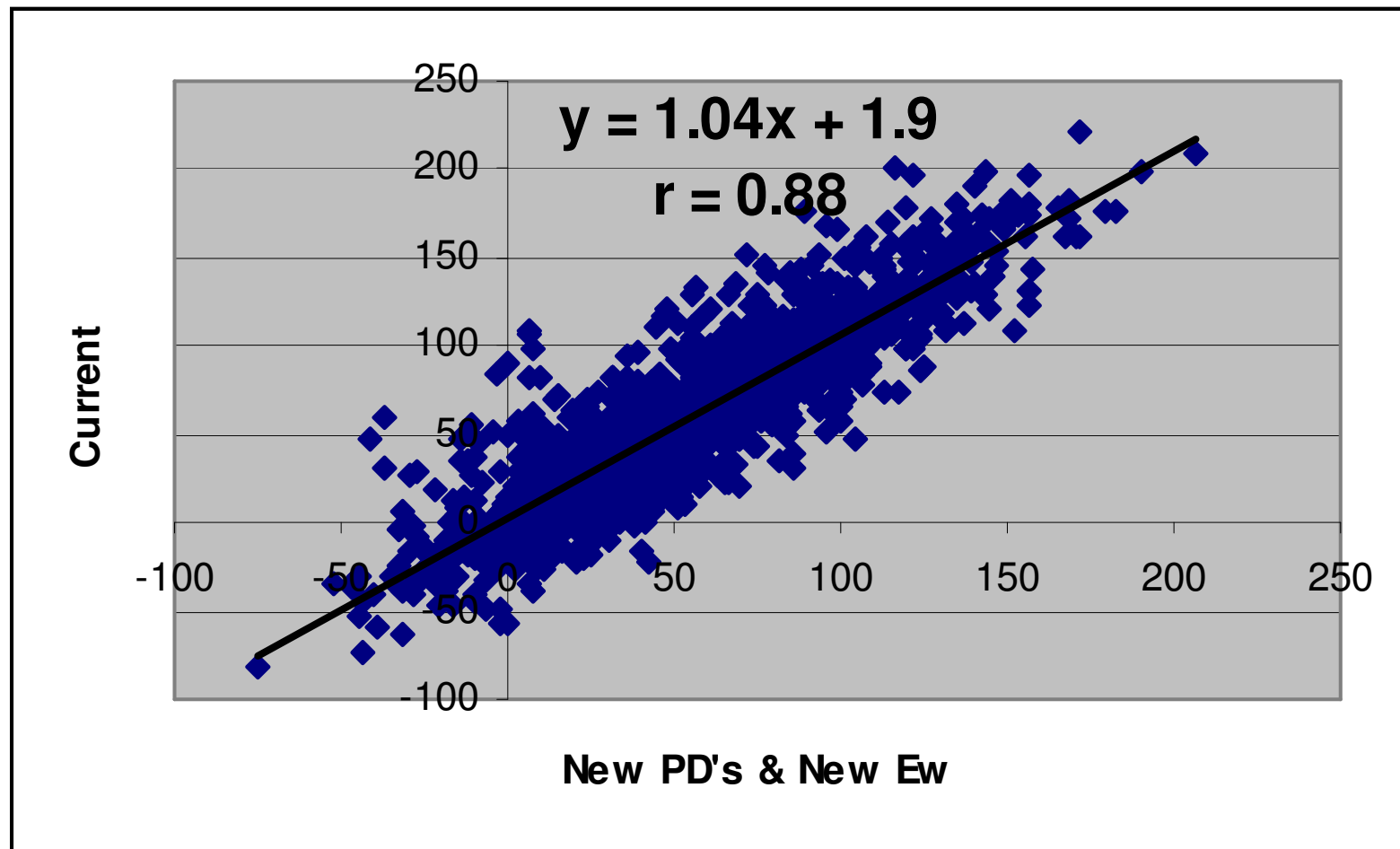
Impact of new proofs - SBV



Impact of New EV's - SBV



Impact of new proofs & new EV's - SBV



Impact of new proofs & new EV's - SBV

Breed	All	AA	AU	BA	BB	CH	HE	LM	PI	PT	RM	SA	SH	SI
Number of AI Sires	1441	173	28	57	193	269	184	213	44	17	4	31	85	143
SBV current	53.9	24.2	32.6	44.6	57.6	81.5	25.6	76.0	30.6	43.9	9.8	51.1	13.3	78.9
SBV new PDs	61.2	10.7	36.9	72.8	69.9	110	19.9	77.0	15.4	48.1	3.5	52.4	10.9	97.1
SBV new EVs	53.6	33.3	33.5	25.7	54.4	70.4	34.7	73.4	31.5	44.5	9.8	50.4	19.5	85.0
SBV new PDs & new EVs	58.2	10.2	35.8	50.0	66.6	98.0	25.3	71.8	11.9	46.9	-0.5	48.4	13.6	106
SBV rel curr	49.0	49.9	34.6	37.5	49.0	54.0	42.3	62.7	22.1	25.7	22.8	46.0	34.5	54.9
SBV rel new	55.9	55.8	43.7	45.9	57.0	62.0	47.6	68.8	29.8	34.8	26.0	54.9	39.7	60.4

Where next – SBV.

- Release draft proofs for AI sires – tomorrow.
 - Review base for maternal weaning weight.
- Feedback from industry – by this Friday.
- Review feedback
- Proceed to implementation as official – Monday 1st September.

Where next – Linears

- Same approach as beef
 - Foreign files, test evaluation & feedback – end September.
- Docility & polledness.
 - Continue to collect data.
 - New “test” evaluations.
 - EV work ~ completed
 - Publish PD’s for docility in interim.
 - Proceed to implement next year.