



IRISH CATTLE BREEDING FEDERATION

Cow liveweight as a measure of intake



17 January 2017

Current situation

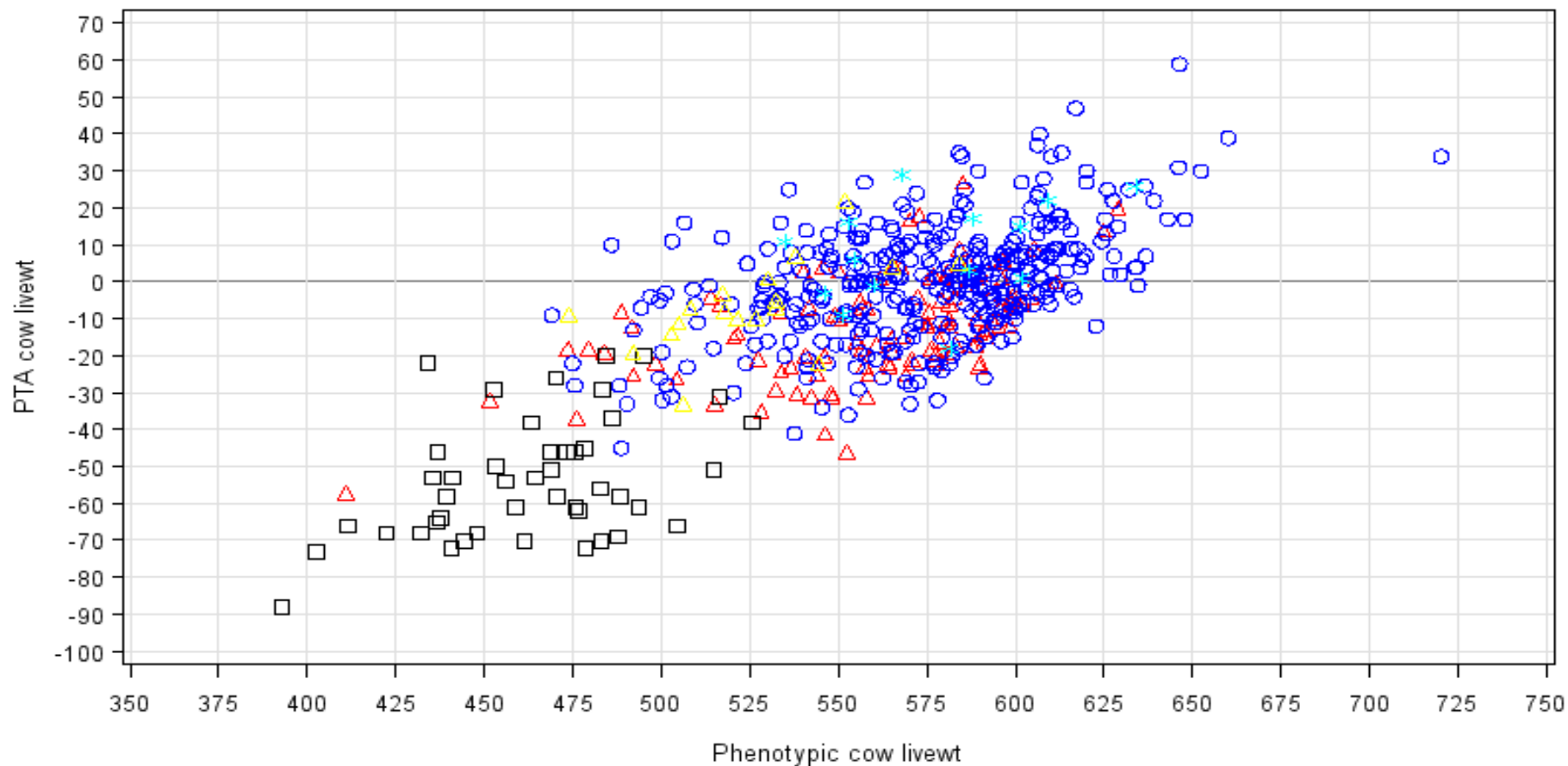
- Cull cow weight is used to estimate cow intake in the absence of ptas for liveweight
- Penalty in maintenance index = 1.49 kg cull cow weight
- Reward in beef index = €0.15 kg
- Cow liveweight now being evaluated in its own right
439,227 records on 228,000 cows
- Option to switch from cull cow to liveweight pta for maintenance index
- Liveweight rankings will be different to cull cow weight rankings due to differences in killout %
- Cull cow weight would remain in Beef index

Cow liveweight pta v phenotypic (min 25 daughters)

No of bulls 553 correlation $r = 0.705$

PTA = -6.71 {stdev = 21.06}

Phenotypic (kg) = 561.42 {stdev = 46.63}



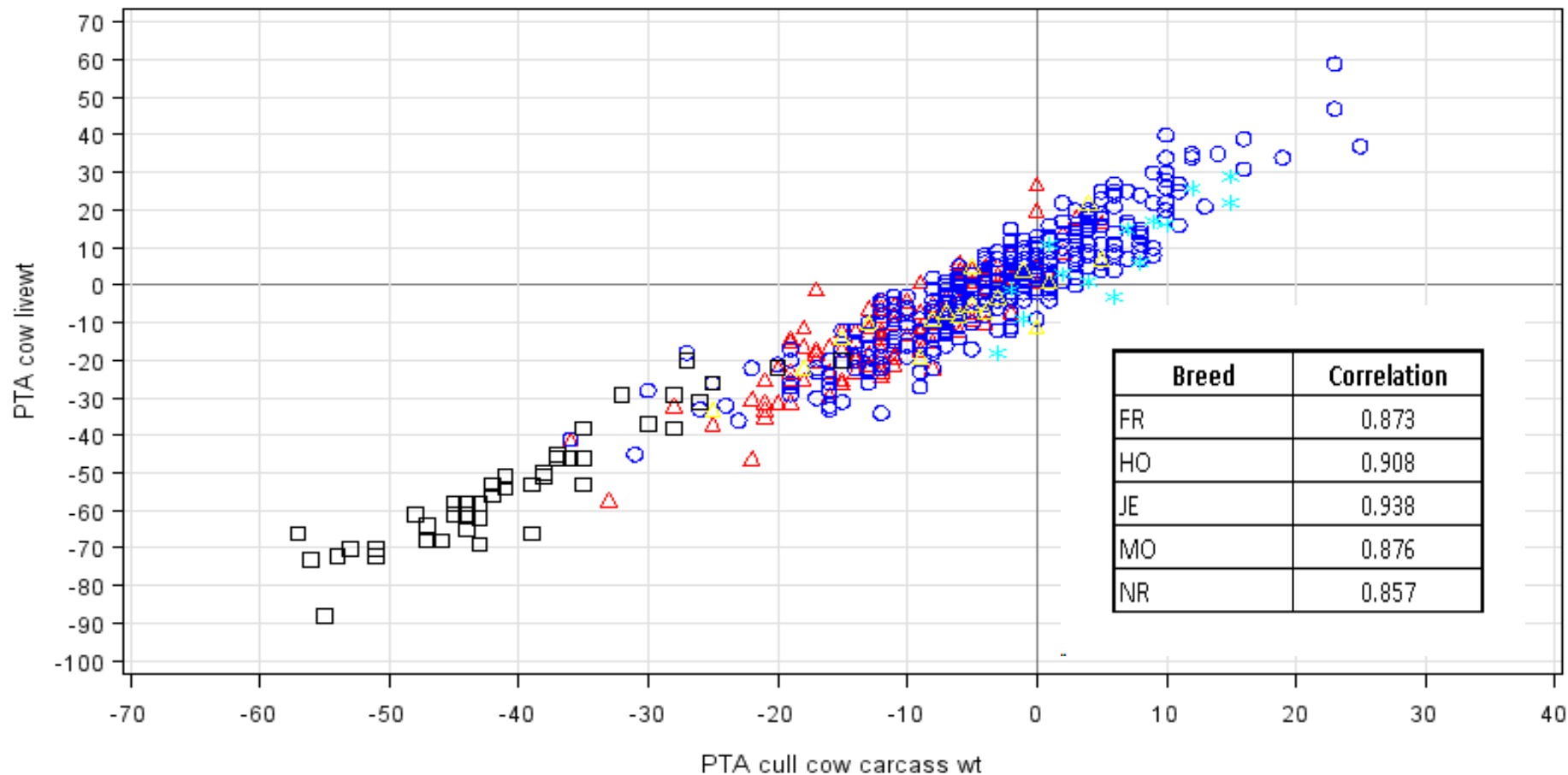
△ △ △ FR ○ ○ ○ HO □ □ □ JE * * * MO △ △ △ NR

Cow liveweight pta v Cull cow carcass weight

No of bulls 553 correlation $r = 0.949$

PTA cow lwt = -6.71 {stdev = 21.06}

PTA cow carcass wt = -7.73 {stdev = 13.24}



△ △ △ FR ○ ○ ○ HO □ □ □ JE * * * MO △ △ △ NR

Breed shifts

| Breed | sires | Phenotypic | | Genetic | | Euro | |
|-------|-------|--------------|---------|--------------|---------|--------------|---------|
| | | cull carc wt | Live wt | cull carc wt | Live wt | cull carc wt | Live wt |
| JE | 45 | 235 | 463 | -40 | -54 | €60 | €36 |
| FR | 119 | 287 | 564 | -11 | -11 | €16 | €8 |
| NR | 18 | 290 | 525 | -7 | -7 | €10 | €4 |
| HO | 349 | 297 | 574 | -3 | 0 | €5 | €0 |
| MO | 14 | 314 | 577 | 6 | 8 | -€9 | -€6 |

Difference of 108kg between HO and JE cow (54kg x 2)
 = 108 x 4 = 432kg difference over lifetime
 Economic Value = €0.67 per kg