



*Travel Report 24th June
2004*

*Pat Donnellan and Michael
Barron*

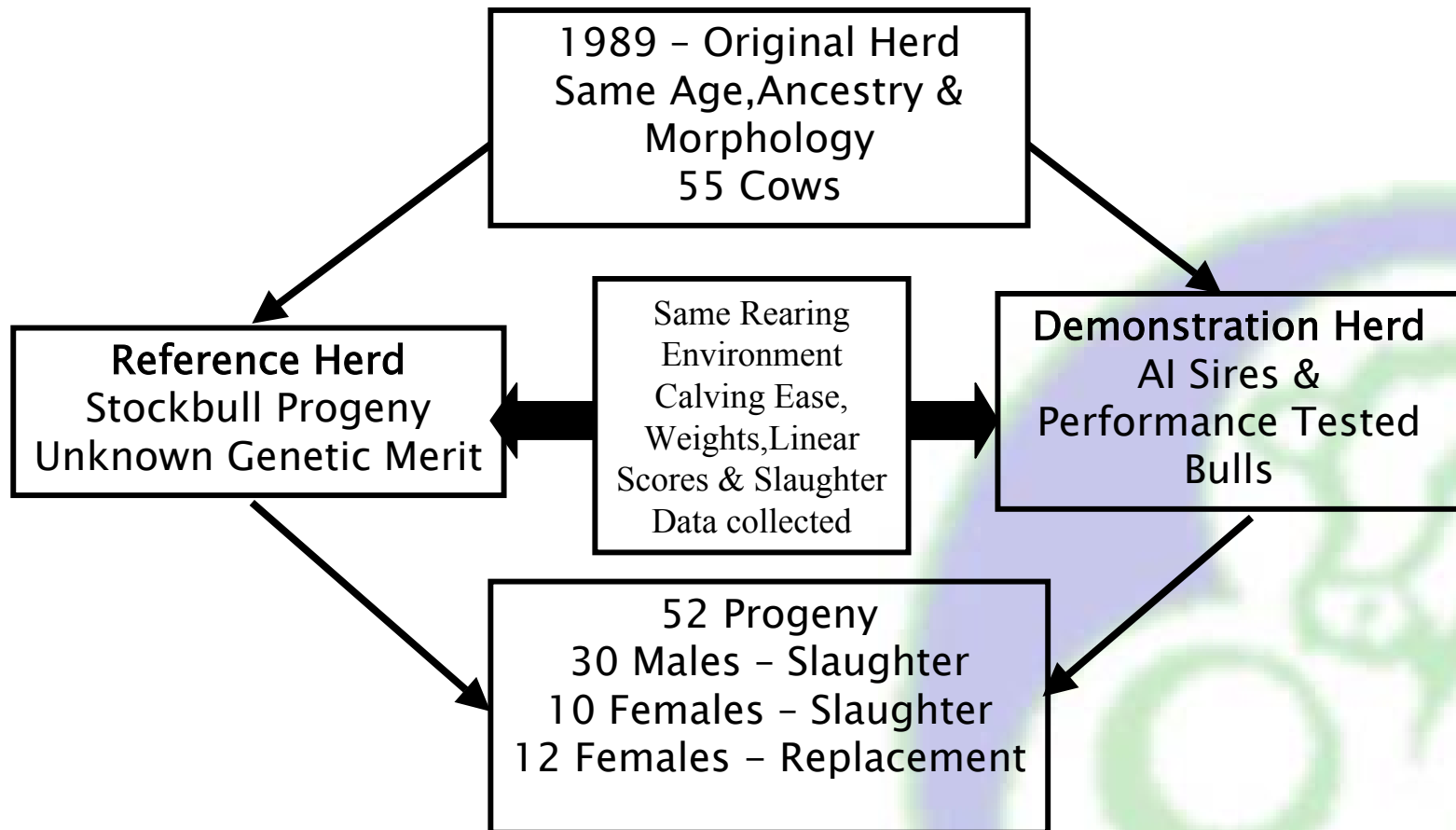
Overview

1. Agricultural College – Research Programme
2. Performance Test Centre
3. AI System
4. Farm Visit
5. Linear Scoring
6. Genetic Evaluations



Agricultural College – Research Programme

- Objective: To demonstrate that progeny of AI Sires & Stockbulls with superior genetic merit leave more profit than bulls with unknown genetic merit.



Results

Difference Between Herds – Genetic Merit		
Index	Reference Herd	Demonstration Herd
Growth	97	105
Muscle	107	108
Skeletal	94	100
Calving	100	94
Weanling	100	106
Milk	100	105

Difference Between Herds – Profit		
Reference Herd/L.U	Demonstration Herd/L.U	+ 15 %
€515	€594	

Performance Test Centre

Bull Selection

- Bull's with predicted BLUP's in top 33% of breed selected on paper & nominated calves inspected on farm.
- Veterinary Tests – Herd certified free of IBR, TB, Brucellosis, Leucose & Johnes.
- Cost to Breeder is €1 000 (incl. Insurance costs).
- Breeder's who refuse to put a selected bull on Test are overlooked for future intakes

Performance Test Centre

On - Test

- 8 months old at start of test. 1 month adaptation, 4 month growth control, 1 month pre-sale preparation
- Diet Formulation: 43% Hay, 18% Corn, 18% Barley + minerals. Hay & Concentrates gauged for daily gain of 1.2kgs/day
- Feed Conversion Efficiency not measured
- Bulls not performing sent home or slaughtered with breeder consent (contract)

Performance Test Centre

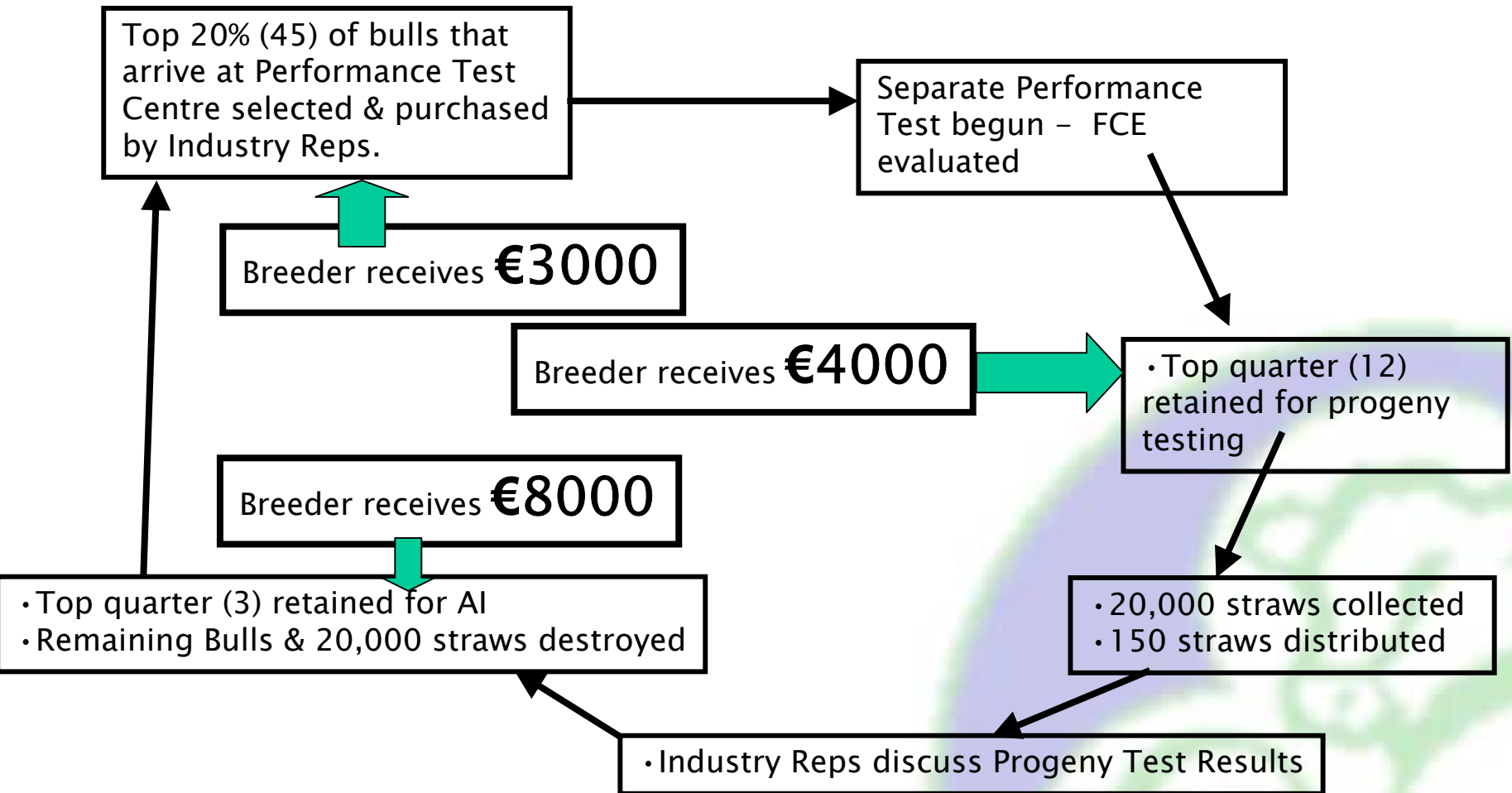
End of Test

- Bulls graded
 - 10% with lowest results not 'Qualified'
 - 90% – 50% highest results (performance & Scoring): Top Grade
 - 50% others: 2nd Grade

Sale

- Bull preparation starts 1 month before the sale
- Base price of €2500 set. Base price varies for top performing bulls
- Order of sale depends on performance results
- AI Bull presented at start of sale

AI System



Farm Visit

- 90 Cows – 30 are pedigree registered
- Regular Suppliers of bulls to Performance Test Centre
- Very Satisfied with system.
- Successful Price = If (Price Received) – (Cost of Performance Test) > Factory Price
- Base Sale price = €2500
- Cost of PT = €1000
- Base price received = €1500

Farm Visit

- AI Sire selection based on Genetic Merit & Reliability % e.g AI Sire Progeny Tested in one herd would not be considered.
- Herd Statistics reports are extremely useful
- All statistics given relative to National Population – easy to identify progress
 - Length of calving season
 - Age profile of females
 - Average Calving Intervals
 - Trend in Genetic merit of Females, Males & Calves for different traits
 - Kgs of production due to genetics

Linear Scoring - System

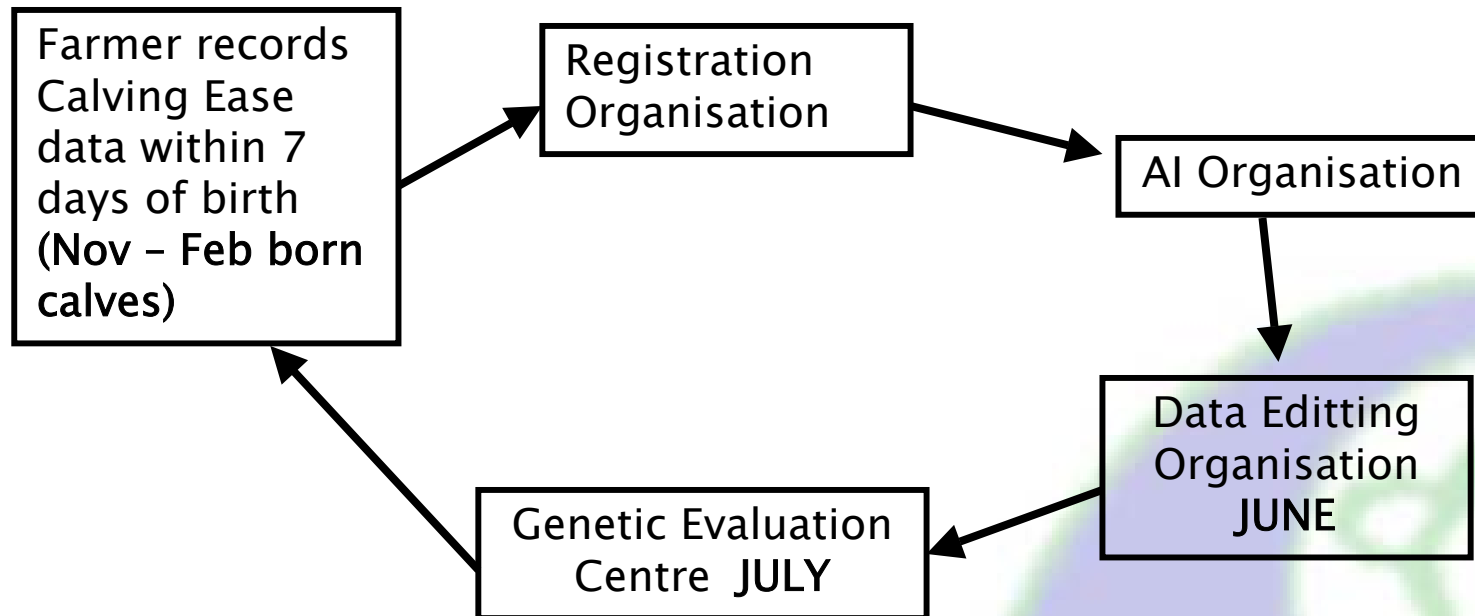
- 500,000 weanlings scored
 - 10€ – 1 animal weighed & scored
- 400 Linear Scorers (1250 animals each)
- Scores recorded on paper
 - electronic system now being introduced
 - Scorers have their own region
- Same scale across different Breeds
 - Different Scale for Breed Specific Traits
- Scoring system is changing to describe functional traits

Linear Scoring - Referencing

- Examination takes place once/annum
 1. Repeatability
 2. Use of Scale
 3. Similarity with 'Master Scorer'
- If Successful – 1 Year 'Temporary' contract signed
- Contract renewed each year following successful referencing exam.
- After 3 years – Scorer not tested again for 5 years

Genetic Evaluations

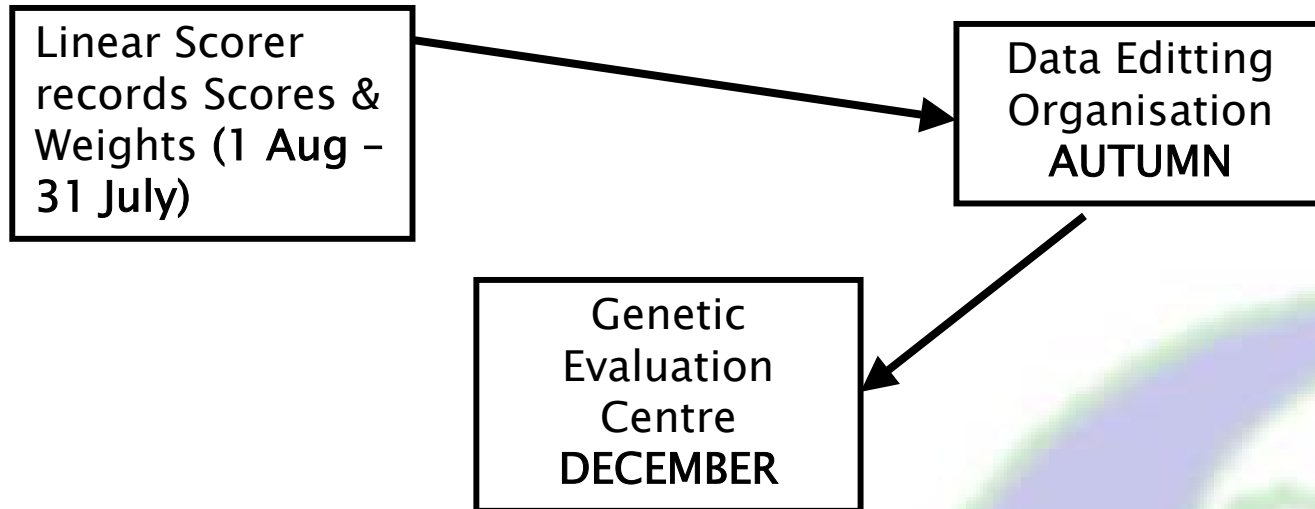
Calving Ease Evaluation



- Evaluation performed once/annum.
 - No assistance
 - Some assistance
 - Severe Difficulty
 - Caesarean

Genetic Evaluations

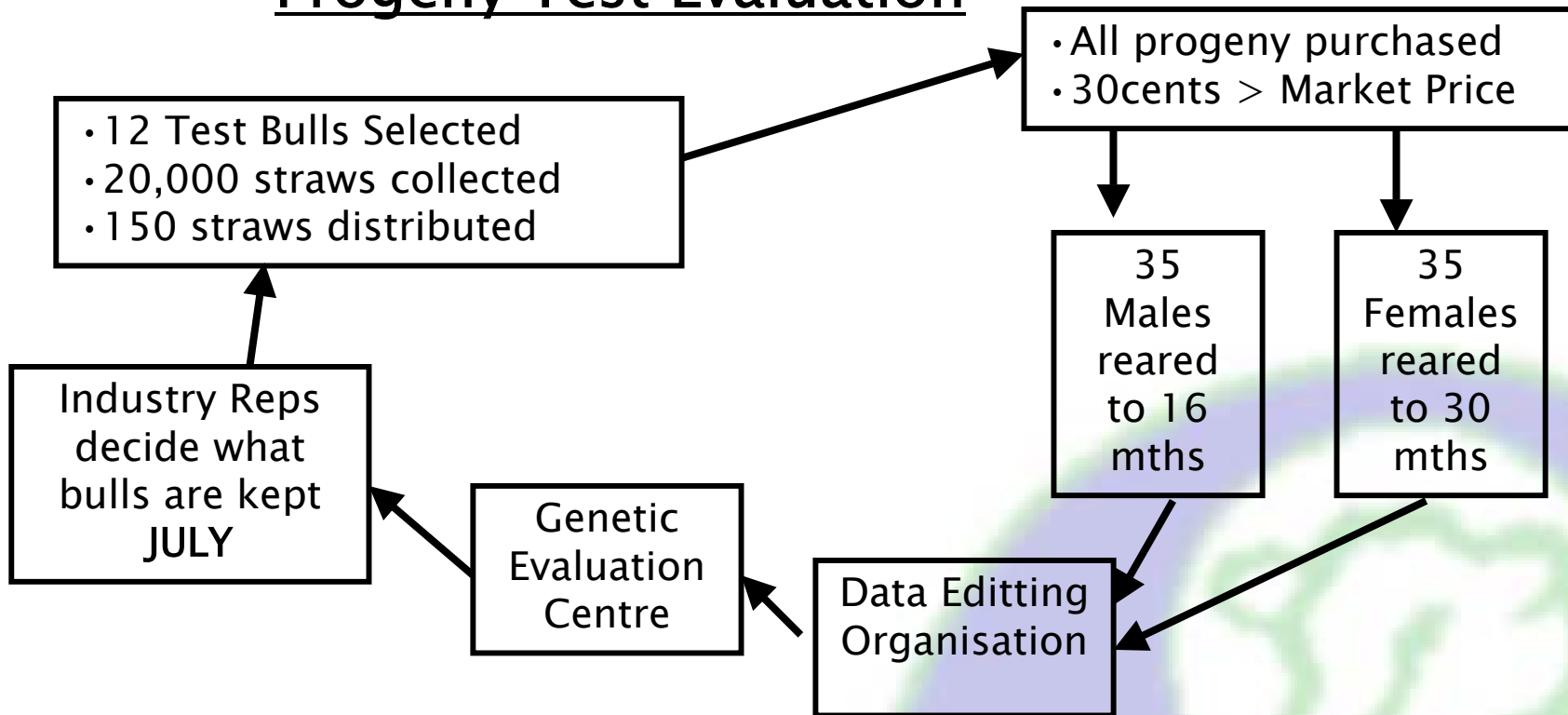
BLUP Evaluation



- Evaluation performed once/annum.
- Bulls receive BLUP figures in March
- Females receive BLUP figures in May
- Bulls do not receive BLUP figures unless they have at least 25 progeny scored & weighed
- Predicted BLUPs are not published
- Breeders have more interest in female BLUP's – Breeding decisions

Genetic Evaluations

Progeny Test Evaluation



- Evaluation performed once/annum.
- €1.3 million to progeny test 12 bulls.
- Usually 3 out of twelve bulls kept.
- Rejected bulls & their 20,000 straws destroyed
- Maternal Test is most expensive part.

Genetic Evaluations

Beef Indices

Maternal Index

- 40% – Reproduction
- 25% – Milk
- 20% – Conformation
- 15% – Calving Ease

Beef Index

- $0.54 \times$ Carcass weight
- $+ 0.54 \times$ Carcass conformation
- $- 0.08 \times$ Fat