



Lessons from the Next Generation Herd

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Objective



- Economic Breeding Index

- Rapid genetic gain

- EBI validation

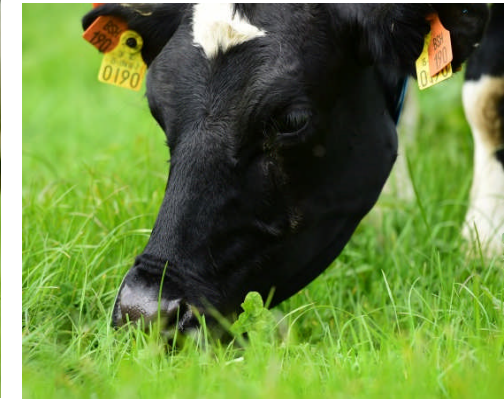
- Future proofing



Study Design

2013 - 2016

	Elite	NatAv
EBI	154	51
Milk SI	37	17
Fert SI	80	13



- Genetic diversity
- 3 Feeding treatments
- Parity structure
- Calving date

Production 2013-2016



	Elite	NatAv	Diff
Milk yield (kg)	5,413	5,612	-199
Fat (%)	4.47	4.19	+0.28
Protein (%)	3.72	3.55	+0.17
Milk solids (kg)	443	434	+9

Fertility Performance 2013 - 2016



	Elite	NatAv
Submission rate (%)	92	86
Pregnancy rate first service (%)	60	46
6 week in-calf rate (%)	73	58
Final pregnancy rate - 12 wks (%)	92	81
Calving to conception interval (days)	93	97
No. of services	1.57	1.77

Body Condition Score

Elite

NatAv

Body Condition Score

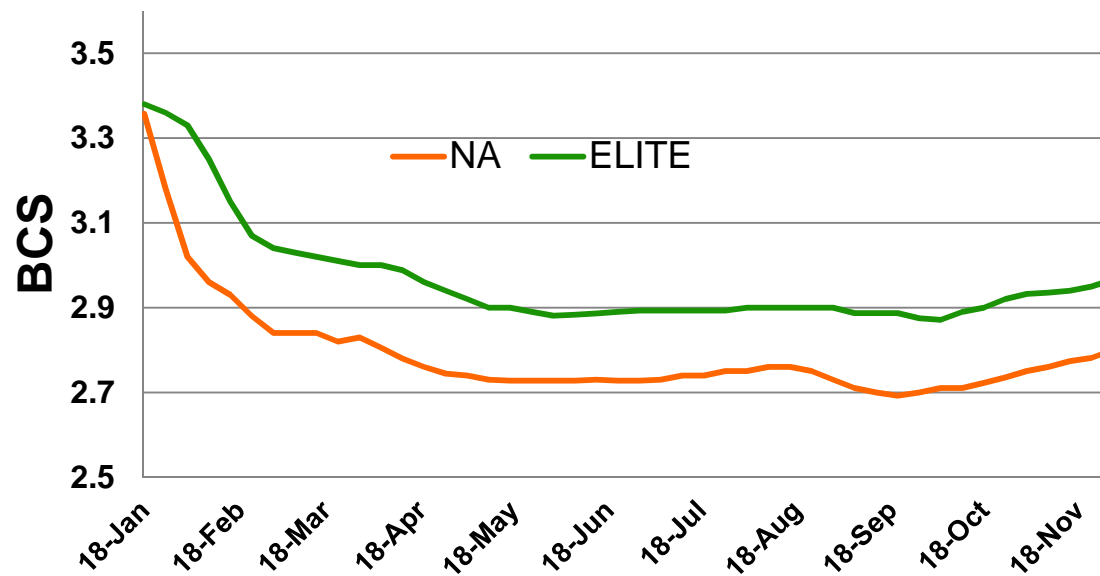
2.92

2.74

Mature cow liveweight (kg)

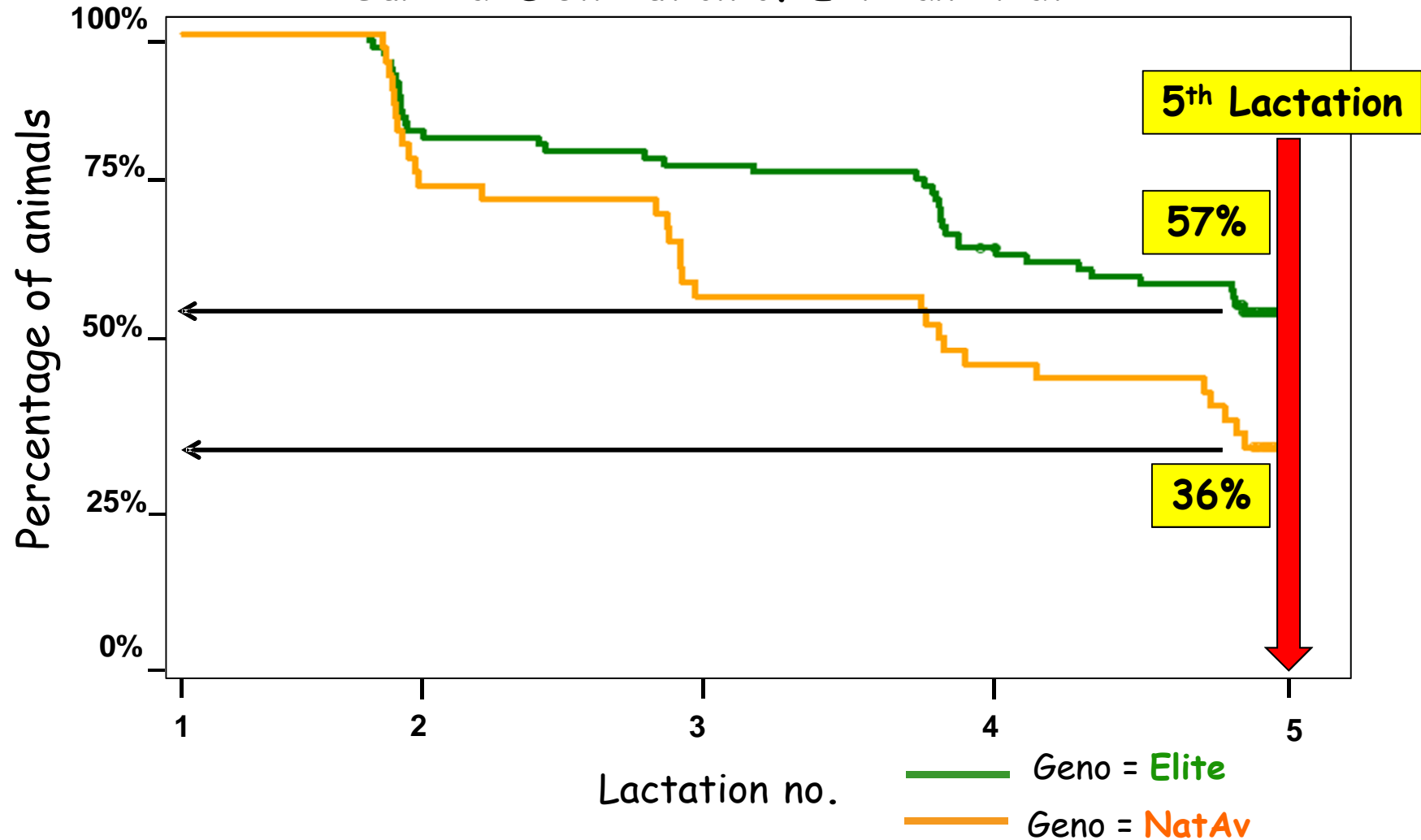
544

554



Survival Analysis

Survival Distribution of Elite and NatAv



Economic Modelling

Moorepark Dairy Systems Model



Economic Modelling

- Performance data - Next Generation Herd
 - Extrapolated for Elite and NatAv
- Moorepark Dairy Systems Model
 - 40 ha growing 13t grass DM
 - 110 cow herd
 - Base price 29.5 c/l



Herd Parity Structure

ELITE

NatAv

EBI

154

51

Replacement rate (%)

17

27

Parity structure

Parity 1

17

27

Parity 2

14

20

Parity 3 +

69

53

Milk returns



	Elite	NatAv
Milk yield (kg)	5780	5775
Fat (%)	4.48	4.15
Protein (%)	3.72	3.52
Milk solids (kg)	475	445
Milk price (c/l)	36.0	33.1
Milk receipts (€)	220,594	204,301

+ 30kg MS

Farm Profit

	Elite	NatAv
Labour cost (€)	32,443	31,660
Replacement costs (€)	29,079	46,022
Total costs (€)	163,081	178,782
Livestock sales (€)	34,792	42,593
Profit Farm (€)	92,305	68,023

**+ €220/
COW**

Take Home Messages

- EBI stacks up
 - Production
 - Fertility ~ survival



- Economics
 - Lower costs of production €
 - More valuable milk 3c/l
 - €100 difference in EBI > €200 profit



Thank you

Questions?