Preferences for Breeding Goal Traits for Danish Red and Jersey Cattle

M. Slagboom, M. Kargo, D. Edwards , A.C. Sørensen, J. R. Thomasen and L. Hjortø

Farmer preferences for breeding goal traits

Weight in breeding goal = Economic value + Farmer preferences

Economic model (Simherd)

The farmer survey

Farmer preferences for breeding goal traits

- Economic models don't account for everything
  - Organic principles

- Create ownership
  - Ensure the breeding goal reflects farmers' requirements

Aim

- To characterize preferences of farmers with Danish Red (*DR*) or Danish Jersey (*DJ*) cows
  - Heterogeneity in farmers' preferences
  - Herd characteristics and production system

The survey

Improvements economically equal

Economic weights for an organic system

Which of these two alternatives do you prefer?
(given they're identical in all other respects)

Milk production		Milk production
+35 kg per 305 days lactation		**As in your herd today**
Mastitis		Mastitis
As in your herd today		**5 less cases per 100 cows**
this one	OR	this one

they are equal

Breed specific survey

87 Danish Red
76 Danish Jersey

Danish Red

- Highest mastitis and milk production

- Lowest calving difficulty

- Clear clusters
  - Robustness
  - Production and health
  - Fertility and production

Herd characteristics Danish Red

	Robustness	Production and Health	Fertility and Production	P-value
ECM, kg	9,723	9,322	8,733	0.01
Fat yield, kg	404	402	375	0.04
Milk yield, kg	9,885	9,864	9,142	0.04
Protein yield, kg	335	334	307	0.03
% Organic	17	24	50	0.01
% Crossbreeding	33	17	6	0.04
Herd size	153	156	113	0.05
Udder disorders	0.27	0.25	0.19	0.08

- Farm

Ranked milk production the lowest

Herds using DR semen for crossbreeding

Ranked mastitis the highest

7

Danish Jersey

- Highest mastitis

- Lowest calving difficulty

- Clear clusters
  - Fertility and production
  - Production and robustness
  - Survival

Herd characteristics Danish Jersey

	Fertility and Production	Production and Robustness	Survival	P-value
% Dead cows	1.7	4.4	5.5	0.04
Udder disorders	0.18	0.27	0.33	0.03

- Farmer want what they don't have?

Ranked cow mortality the lowest

R Ranked mastitis tl the highest

Conclusions and implications

- Farmers' preferences are heterogeneous
  - Clear groups of farmers found

- Herd characteristics linked to farmer groups
  - Farmer want to improve what they don't have

- Customized indices (at herd level) or different breeding goals
  - Increases ownership
  - Simulate long term effects