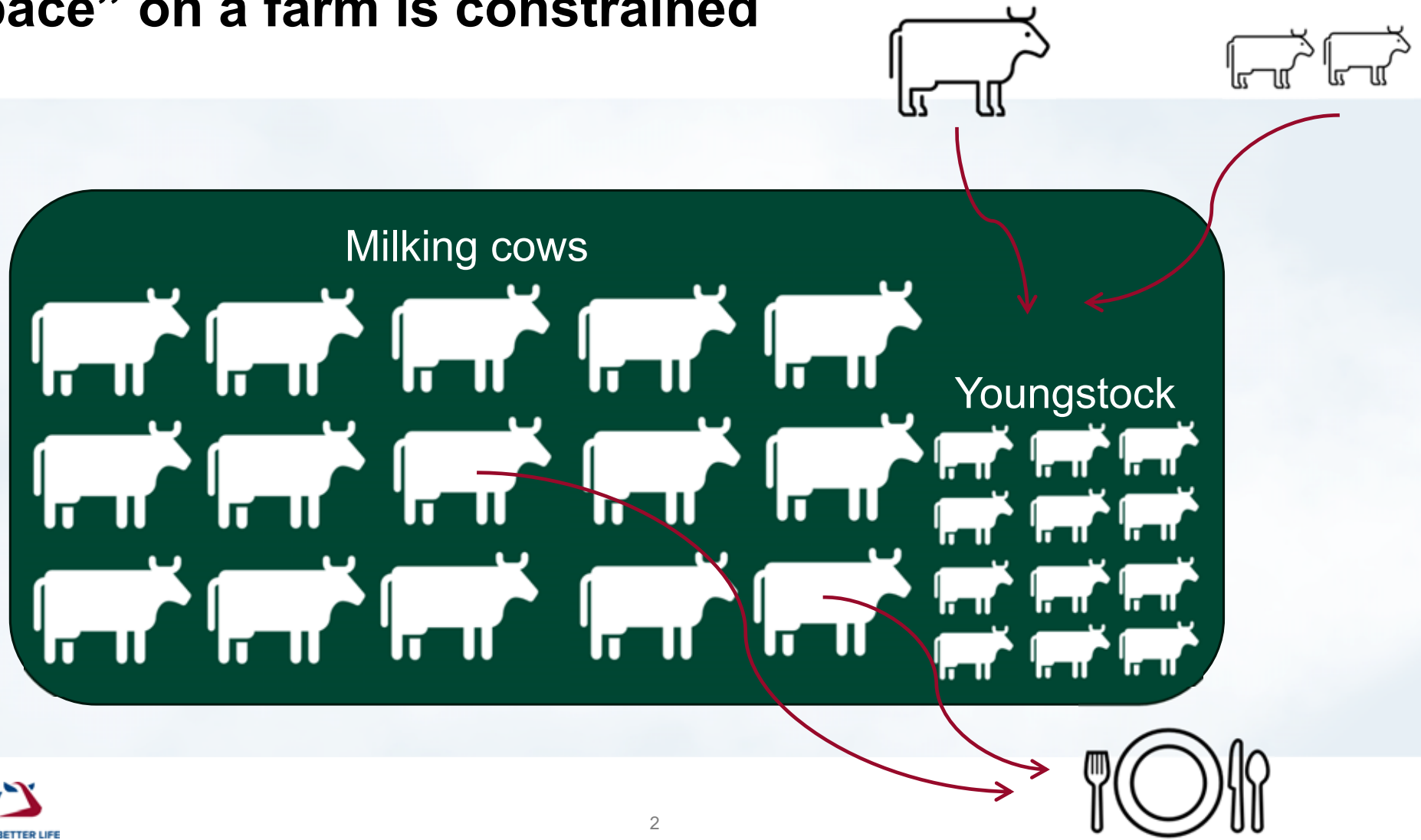


CRV HerdPlanner: model-based decision support for reproduction

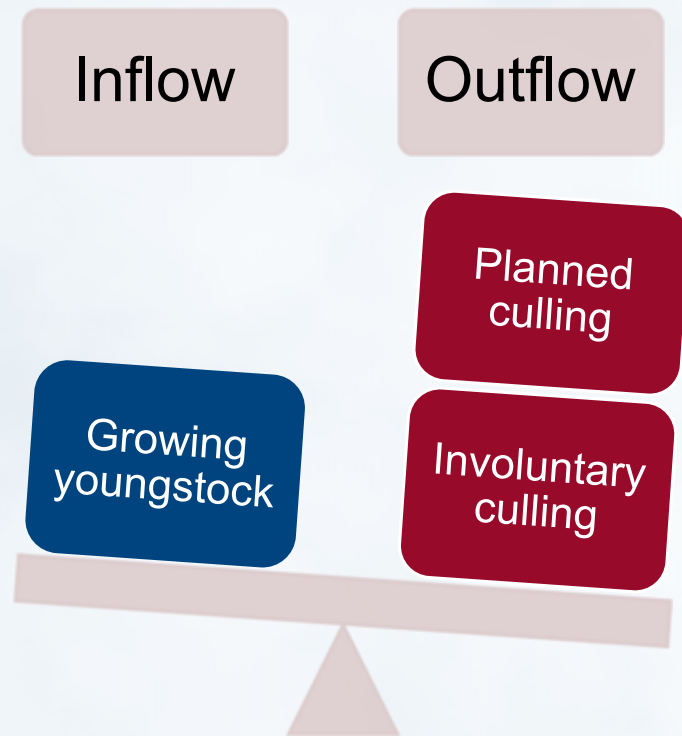
Elmer Harms | 04-06-2026 | CRV BV



“Space” on a farm is constrained



Optimal herd composition is a balancing act

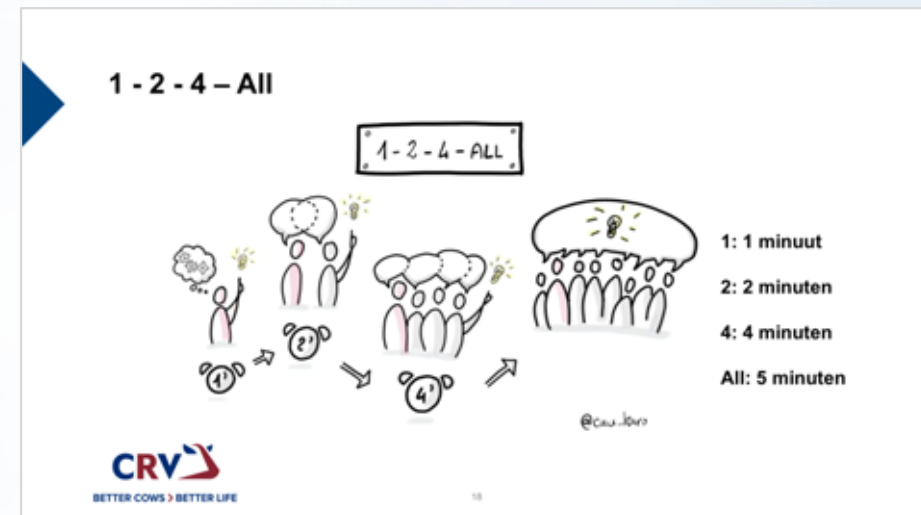


Workshops

29 farmers from across Netherlands and Flanders

Discussions on:

- Insemination decisions
- Culling decisions
- Ideal herd



Insemination goal for steady calving pattern

The amount of heifer calves needed in a 21-day period

Conventional semen counts as 0.5 heifer, sexed as 0.9 heifer

Based on:

- Replacement rate
- Recent pregnancies
- Attrition between insemination and calving of resulting heifer
- Safety margin

Smart selection of cows to inseminate

Let's say I have 100 milking cows and my insemination goal is 1.9

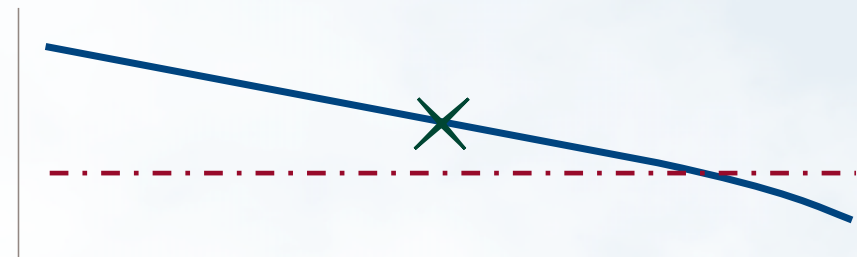
Genetic ranking	Cow	Product type	# Heifers	# Heifer cumulative
1	Cow A	Sexed	0.9	0.9
2	Cow B	Conv.	0.5	1.4
3	Cow C	Conv.	0.5	1.9
4	Cow D	Beef	0	1.9

Find suitable insemination moment for each cow

Minimum/maximum
DIM insemination



Expected milk
yield at dry off



Expected BCS at dry off



Metabolic state at insemination





Advice

Wait

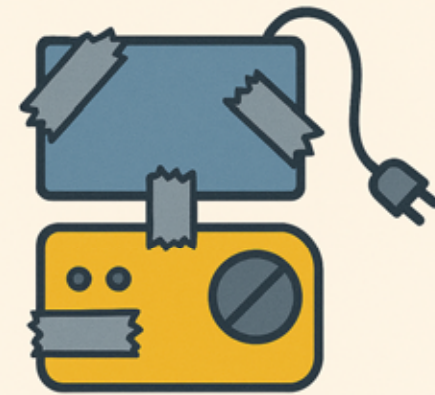


Inseminate



Prototype

- Prototype is tested with +/- 40 farms across Netherlands and Flanders
- Feedback from farmers is driving further development



PROTOTYPE

AI Lab

CRV Bedrijf elmer.harms@crv.nl

+ Nieuwe invoer

- Dashboard
- Veestapel
- Melk
- Vruchtbaarheid
- Gezondheid
- AI Lab**
- Instellingen

AI Lab

Dieroverzicht

Zoek koe

Naam	Halsbandnummer	Werknummer	Pariteit	Genetische rang	Dagen in lactatie	Advies	Productadvies	Productselectie
CLARA 74	7	4242	2	61	99	✓	Charity - Conventioneel	Gebruikskruising
HILTJE 277	78	4191	3	63	90	✓	Burt Rf - Conventioneel	Gebruikskruising
VROUWINA 75	56	4252	2	64	81	✓	Burt Rf - Conventioneel	Gebruikskruising
TRUUS 315	100	4261	2	65	67	✓	Praxis - Gesekst vrouwelijk	Gebruikskruising
MARGJE 301	51	4611	1	71	127	✓	Burt Rf - Conventioneel	Burt Rf - Conventioneel
GEESJE 116	61	4257	2	94	141	✓	Perfect - Conventioneel	Gebruikskruising
MARGJE 296	18	4250	2	96	121	✓	Frisson - Conventioneel	Gebruikskruising
MARTHA 499	14	4248	2	97	132	✓	Burt Rf - Conventioneel	Gebruikskruising
MARTHA 475	127	3969	4	106	58	✓	Fugleman - Conventioneel	Gebruikskruising
MARGJE 269	193	3972	4	109	150	✓	Onbekend -	Gebruikskruising

Verberg menu

Take home message

- Farmers want a steady calving pattern
- Expected dry-off yield is a good indicator for selecting cows for later insemination, however it does not cover the complete picture
- Working with direct feedback from farmers helps developing a tool that fits their needs



Any questions?

