



Understanding and responding to public expectations in the changing world of livestock farming



Saskmilk

Dairy Farmers
of Manitoba



Saputo



NSERC
CRSNG



Boehringer
Ingelheim



MERCK
Animal Health



SEMEX
Genetics for Life®





12:43



Upgrade to Premium



'People say they want me arrested': the owners putting their pets on vegan diets

The vegan pet food industry is now worth billions. But can plant-based meals really meet a dog or cat's nutritional needs?



Tim Dowling

01:00 Wednesday, 11 May 2022



Follow Tim Dowling



676

Father Terry Martin, a Catholic priest in West Sussex, became a vegan almost three years ago. The transition was fairly abrupt: he was alone eating a roast dinner with his dog Pepe on his knees ("I know," he says. "Terrible.") when he was struck by the realisation that the animal he was eating had been "just as sentient as the one sitting on my lap".

Tim Dowling, May 11, 2022, *Guardian*

Niche



Commodity

Niche

- Meets specific consumer demand
- Products marketed on the basis of perceived quality
- E.g. Omega-3 and free-range eggs

Commodity

- Single product meeting a common standard; interchangeable
- Competes on costs
- E.g. milk solids used for frozen pizza topping

Why protein from flora?

Our animal-free milk from flora is the first of its kind, using whey protein made by microflora, not cows, to make dairy that's identical to traditional milk. Yes, we said identical.



Real dairy that's
100% animal-free



Tastes, scoops, and
spreads the same

**Substitutes are getting
closer:**

- E.g. Perfect Day whey protein

Niche

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Commodity

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How to respond to this changing landscape?

- *Short term*: help livestock industry retain commodity market by avoiding reputational damage
- *Long term*: help gain market by better understanding the values of consumers, and helping industry stakeholders better understand and articulate their own values

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 - ✓ Create and enforce industry-led standards
 - ✓ Avoid attempts of secrecy and to 'educate' the public



CODE OF PRACTICE

FOR THE CARE AND HANDLING OF

**DAIRY
CATTLE**



Canada

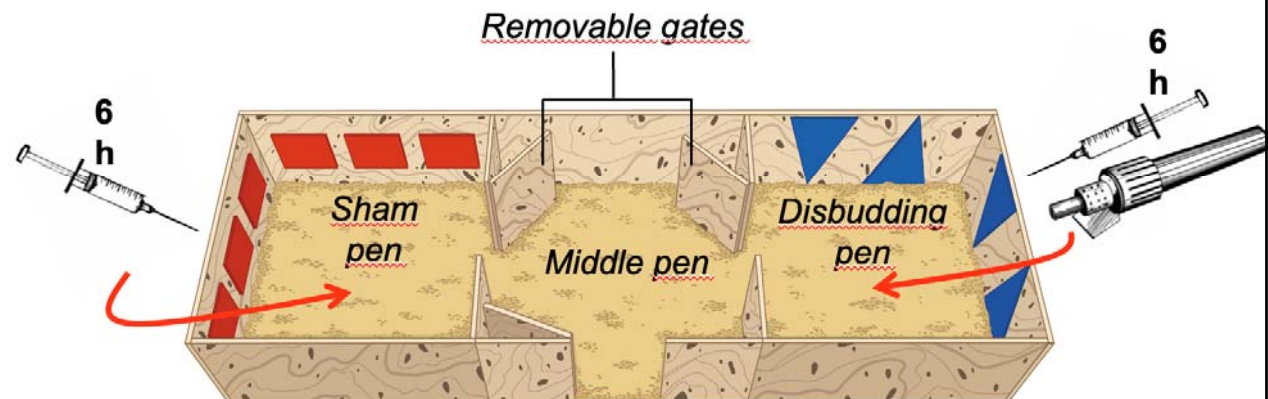
Canada's Codes of Practice

- *Industry led*
- *Multi-stakeholder*
- *Science informed*
- *Transparent*
- *Continuous improvement*

UBC Research informing the Code

- *Pain mitigation*
- *Calf feeding*
- *Social housing*
- *Lameness*
- *Etc.*

Conditioned place avoidance



Ede et al., 2019: Scientific reports 9: 5344

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Attempts to limit transparency

‘Ag-gag’ laws -- prohibit taking or possessing photographs, video or audio recordings on farms without consent

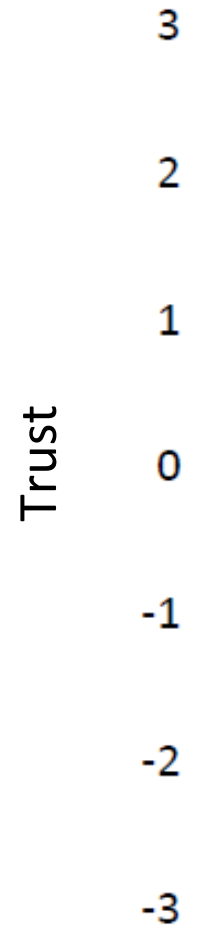
Counter-productive effects of reduced transparency

Do 'Ag-gag' laws reduce the credibility of farmers?

Unintended effects of the 'ag-gag' laws



Robbins et al., 2016. Food Policy 61:121–125.



Participants exposed to information about 'Ag-gag' laws were less likely to agree that:

Farmers are trustworthy sources of information

% agree

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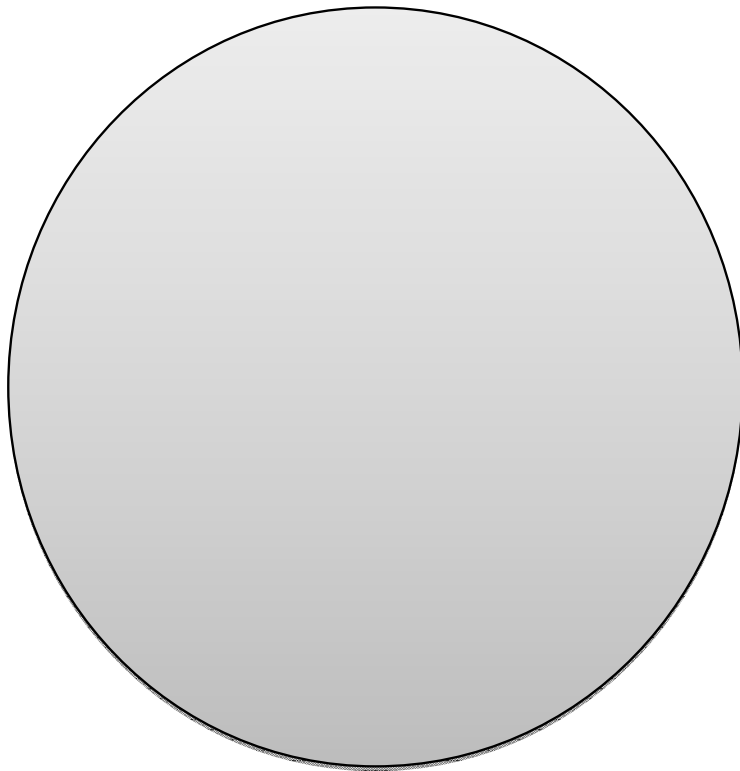
Farm animals have good lives

% agree

Does learning about current dairy cattle care practices change perceptions?



Overall, participants were:



Pleased to see a high level of attention and care to cattle



Displeased about cow-calf separation and the lack of pasture/outdoor access

How confident are you that dairy cattle have a good life?



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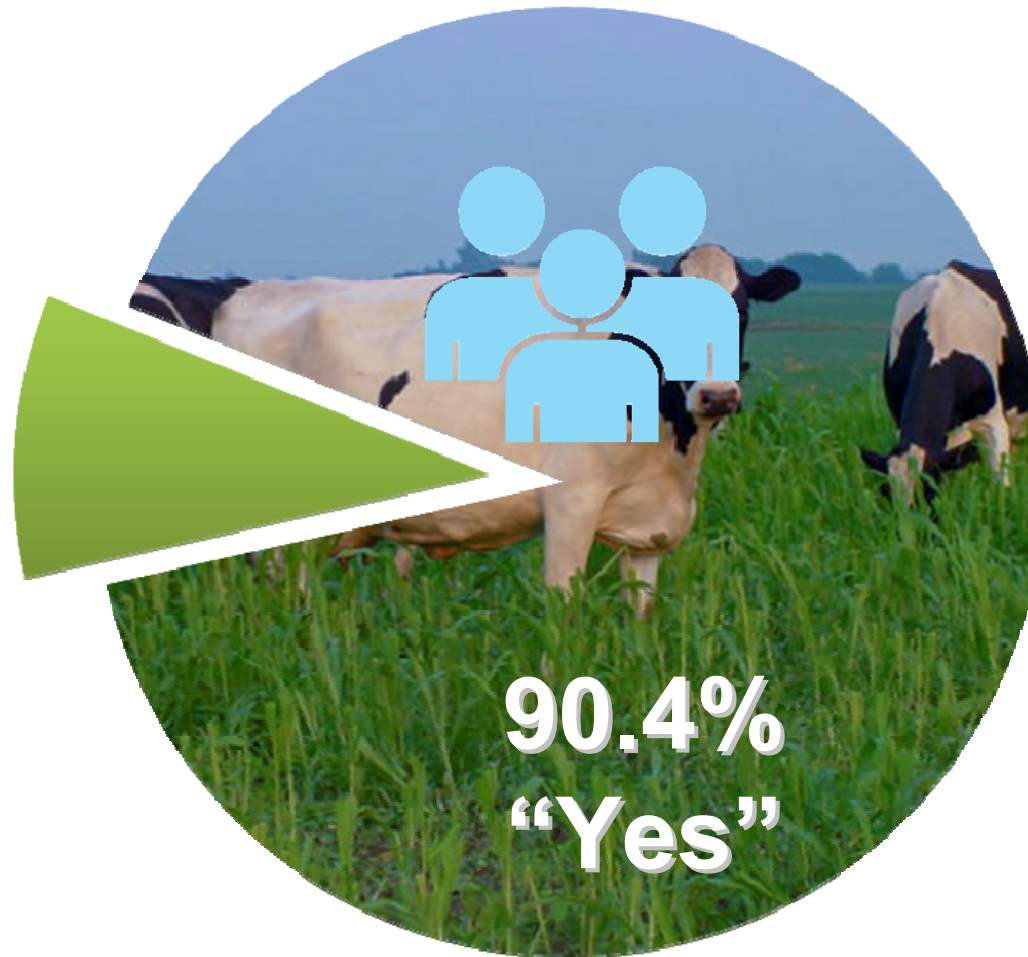


A collage of images related to dairy farming, including cows in various settings (pasture, barn, milking), a person milking a cow, and a person holding a milk can. The images are arranged around two silhouettes of people talking, with speech bubbles and thought bubbles containing the images.

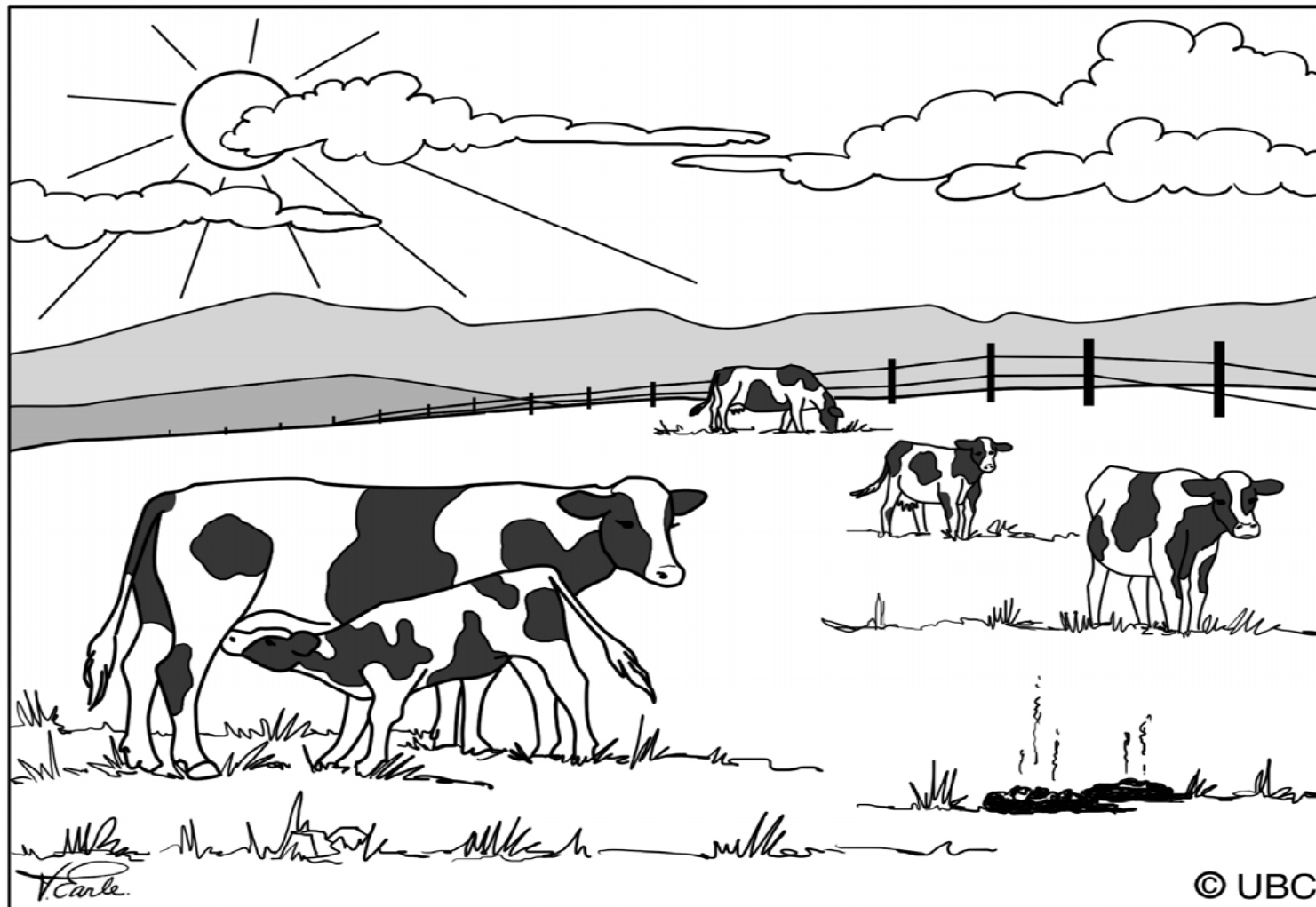
“Should dairy cows be provided access to pasture?”

9.6%
“Neutral”

0%
“No”



Imagining the ideal dairy farm



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Context:

“Let’s fast forward to the year 2050. You’re hoping that your grandchildren will take over the farm.

In your ideal world, what does this farm look like?”

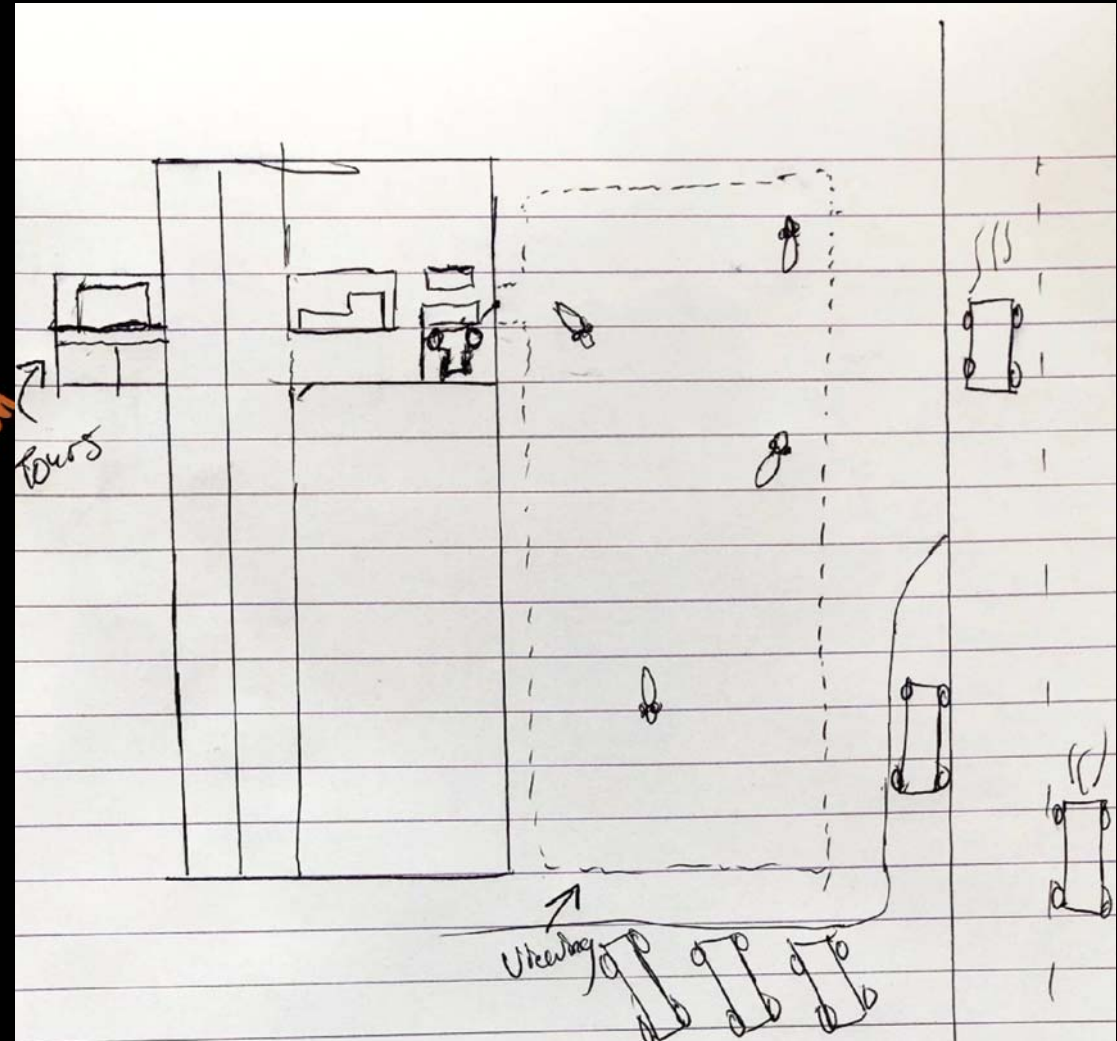
Ritter et al., 2020. J. Dairy Sci. 103: 10273-10282





Lethbridge, Alberta

energy-efficiency
feed-efficiency
family-run
farm-to-table
manure-smell
tiestall
cow-calf
drug-use
robot
organic
local
transparency
factory-farm
biosecurity
pasture
freedom
antibiotic
natural-breeding
tours
automation



Red Deer, Alberta

Take home points:

- Technological and societal changes will result in market disruption
- Avoid loss of market by adopting rigorous standards and a culture of transparency
- Strive to gain market by better understanding public views
- Provide leadership by better articulating industry values

*What's your dream for how farms should look in 30 years,
and how do we achieve this?*



The Quebec cheese story: from cheese curds to 300 varieties



Les têtes fromagères –
Cheesemakers circuit 2022-2023

Fine, curd, raw milk, sheep, goat... in the Townships, you'll find cheeses that you already love and new ones to try.

**The BC wine story: from
1000 to 10,000 acres in 30
years**





*Reasons **to provide** outdoor access*



*Reasons **not to provide** access*

Region specific weather

Region specific weather

Health, preferences, behavior, quality of the
outdoor environment

Health, preferences, care, nutritional needs

Premium pricing, operation expenses

Milk production, operations expenses and
investments

Farm set up

Farm set up

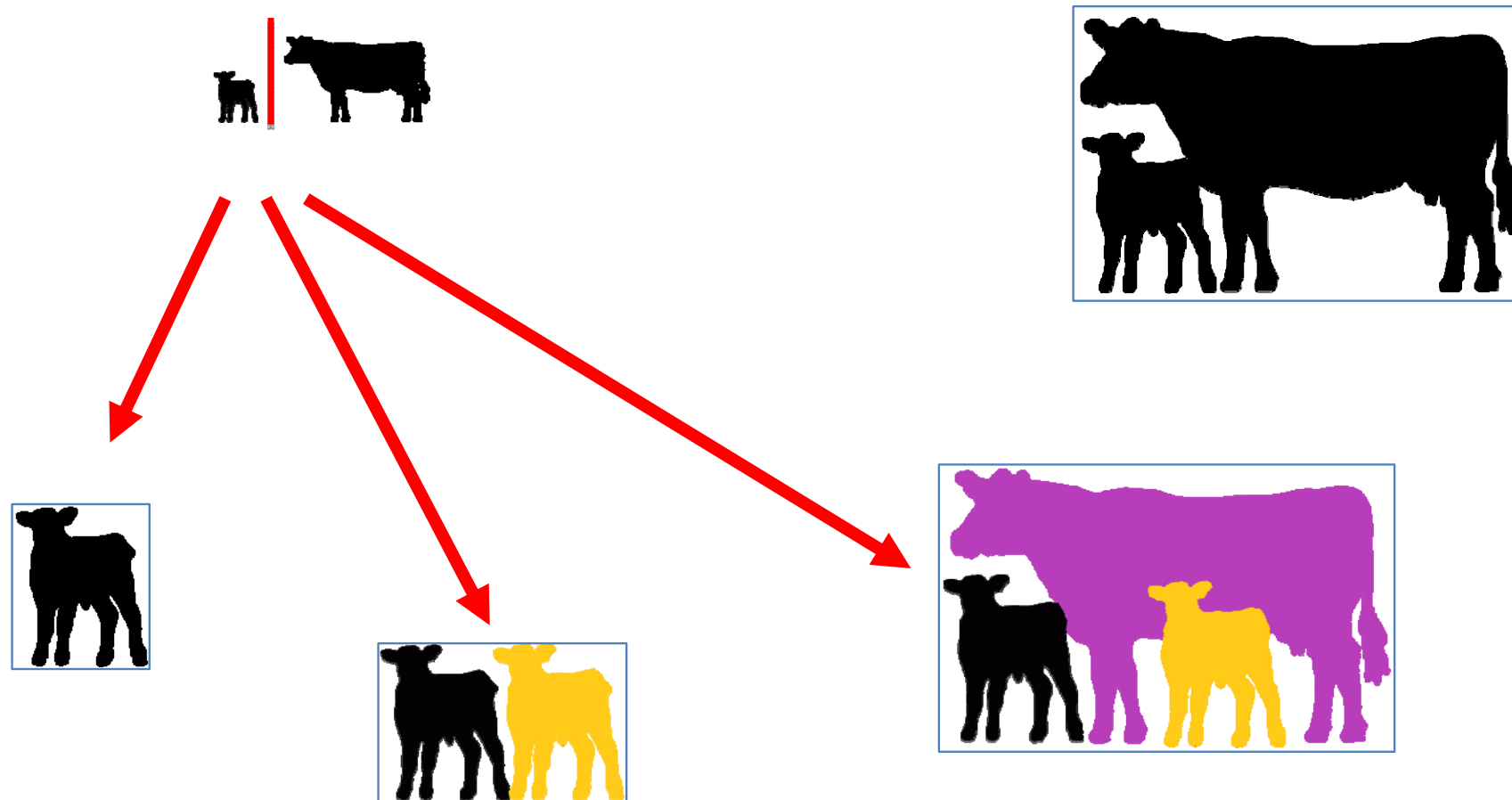
Ease of management, knowledge and expertise

Ease of management, lack of knowledge



Sirovica et al., 2022. J. Dairy Sci. 105:3248-3268

Cow-calf management system scenarios



Perceptions of welfare

