



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Network. Guidelines. Certification.



Overview: data collection for beef on dairy

Wednesday 22 May 2024

Joint ICAR – Interbull Session

Jo Newton

2022/23 BWYPEX Recipient

Research Scientist Agriculture Victoria

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Interbull Steering Committee Chair

CEO DataGene Ltd.

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6 countries
100+ interviewees



Beef from dairy: a dairy origin animal entering the beef supply chain



Beef from dairy: a dairy origin animal entering the beef supply chain



Win-win-win?



Sustainable pathway
for all calves
Higher value calves



New markets for beef
genetics

Image courtesy of Summit Livestock



Lower carbon footprint
Year-round supply

Image courtesy of Agriculture Victoria

Data for a global snapshot?

Fragmented....

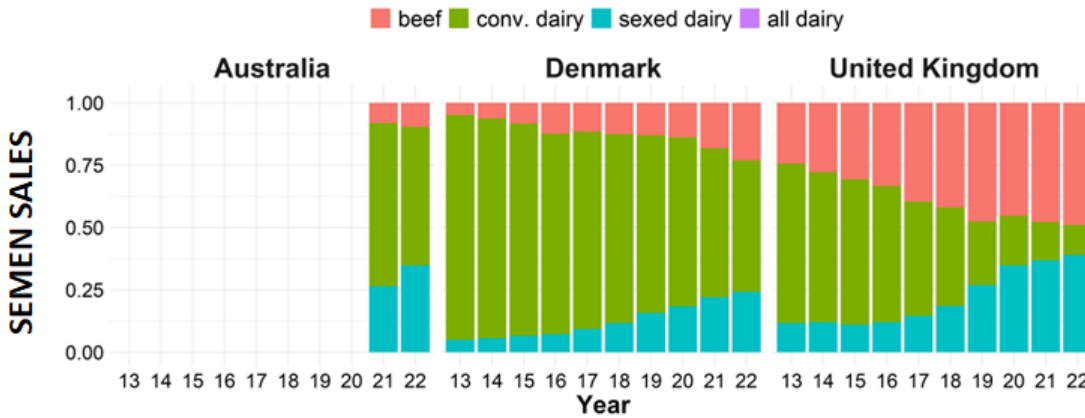


1 year \neq 1 year

Data for a global snapshot?



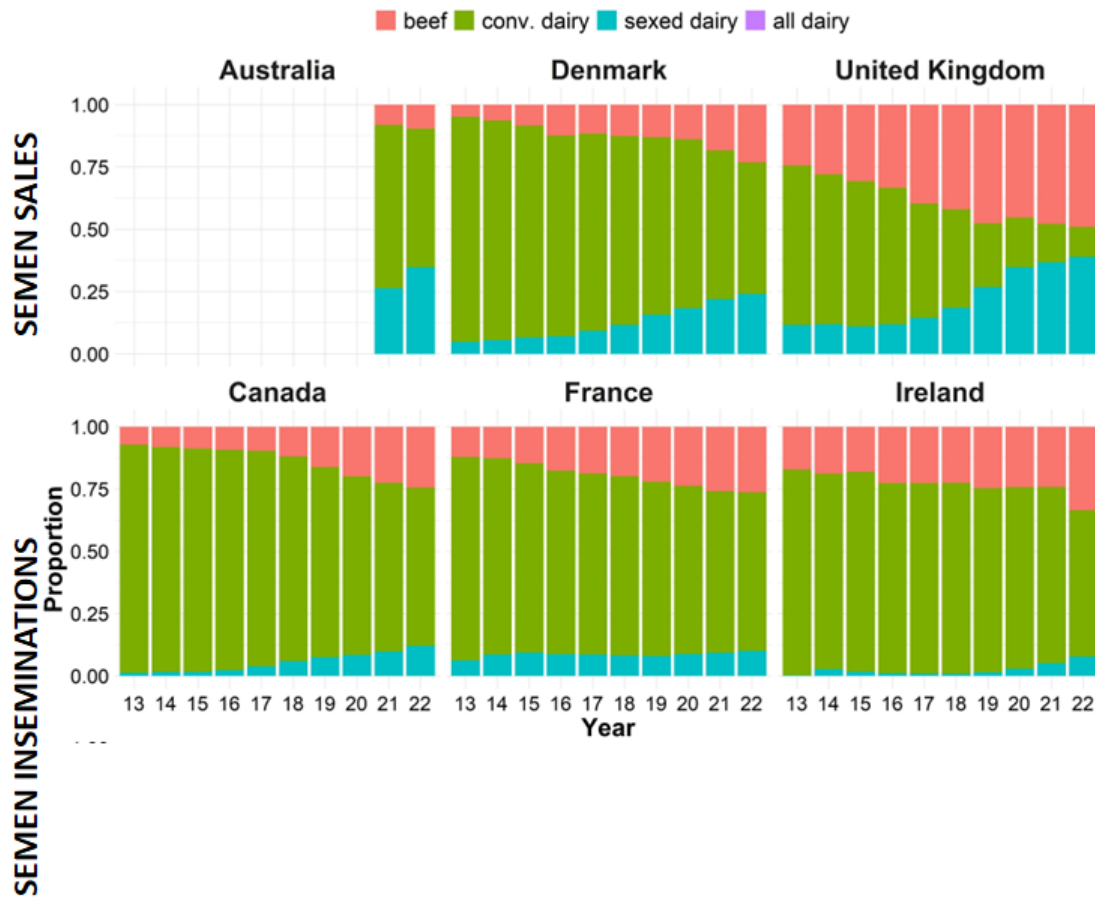
Figure. Trends in semen usage in dairy herds around the world using semen sales data



Data source: AHDB 2023; ANAFIBJ 2023; ANAPRI 2023; Institut de l'Elevage 2023; Lactanet Canada 2023; NAAB 2013 – 2022; NHIA 2013 – 2022; ICBF 2023; Växa Sverige 2016 – 2023; Viking Genetics 2023.



Figure. Trends in semen usage in dairy herds around the world using semen sales and insemination data.

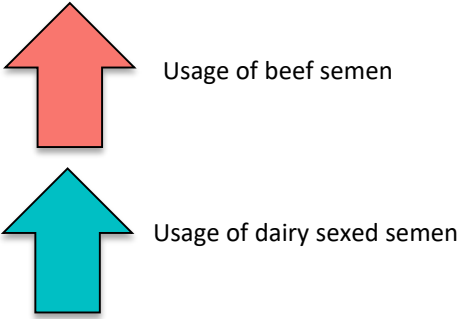


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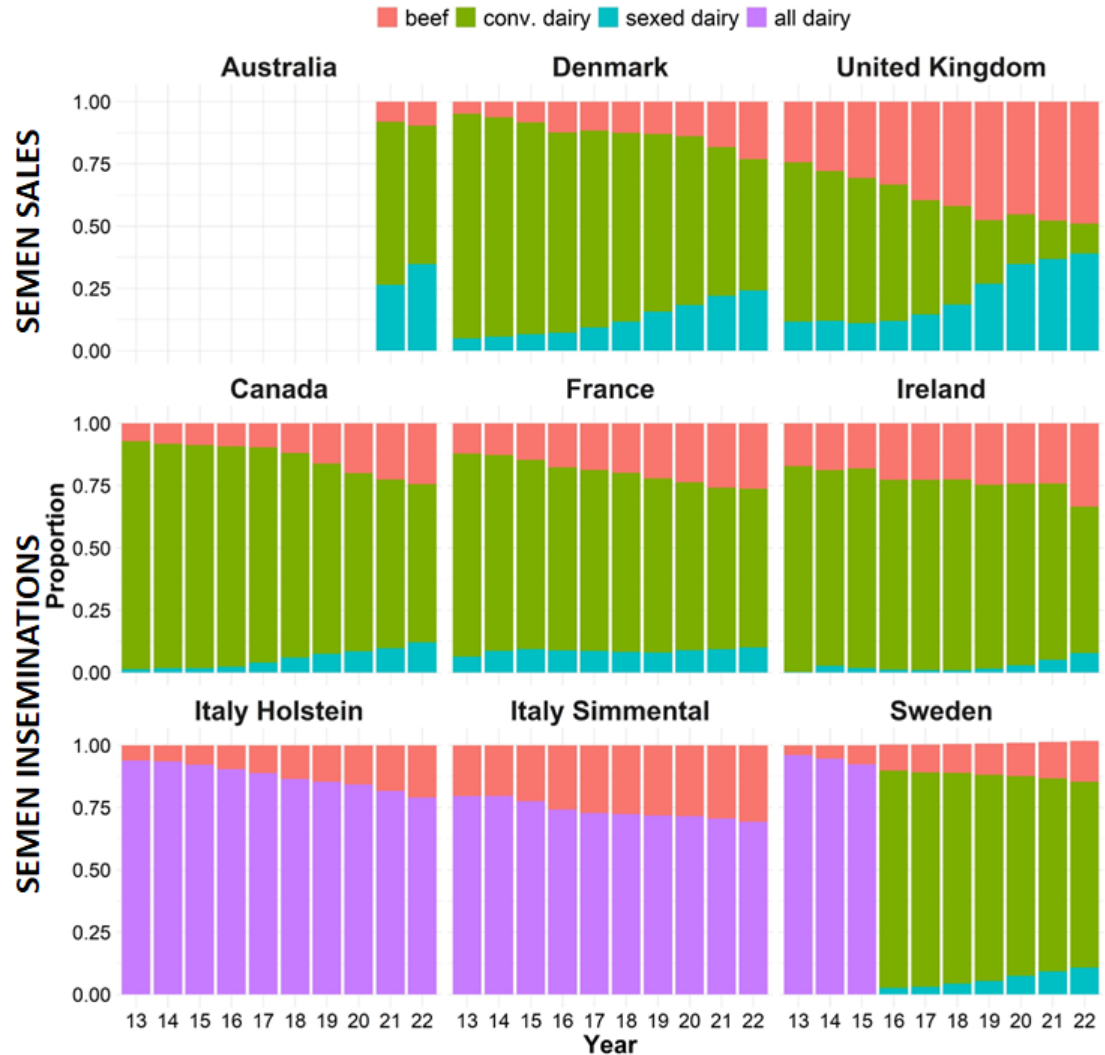


Figure. Trends in semen usage in dairy herds around the world using semen sales and insemination data.

Where a breakdown of conventional and sexed dairy semen usage is not available a combined value is shown (all dairy).



Adoption rate varies across countries



Data source: AHDB 2023; ANAFIBJ 2023; ANAPRI 2023; Institut de l'Elevage 2023; Lactanet Canada 2023; NAAB 2013 – 2022; NHIA 2013 – 2022; ICBF 2023; Växa Sverige 2016 – 2023; Viking Genetics 2023.

beef all dairy

Figure. Total semen sales into both dairy and beef herds

Data source: NHIA 2014 – 2023, NAAB 2014 – 2023

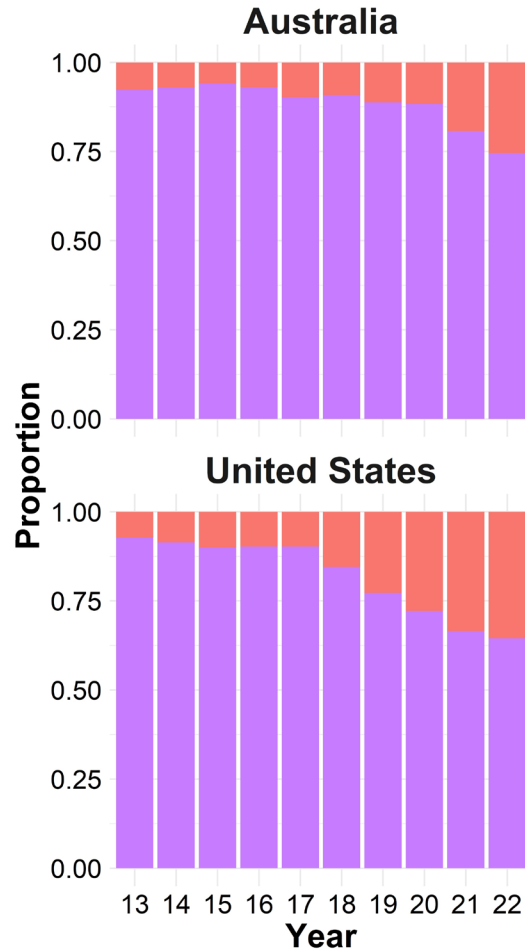
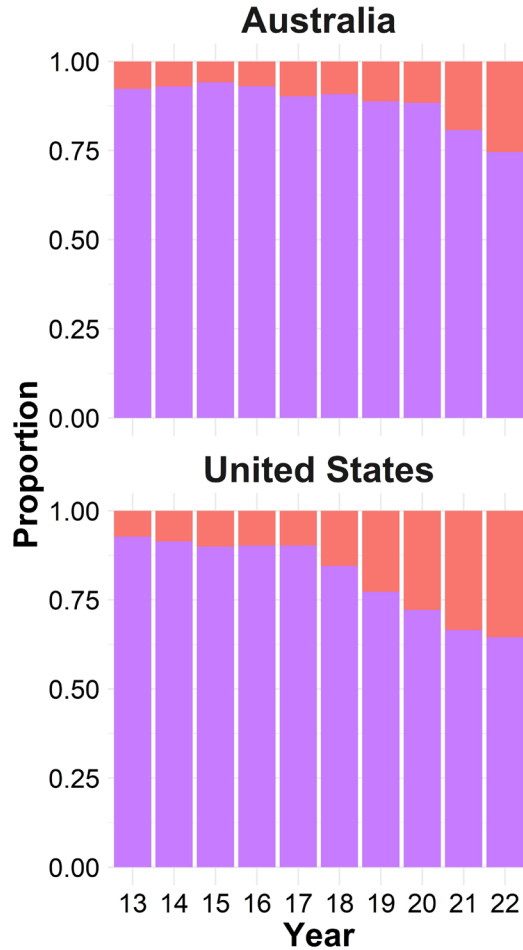


Figure. Total semen sales into both dairy and beef herds and sexed dairy semen sales as a proportion of dairy semen sales.

Data source: NHIA 2014 – 2023, NAAB 2014 – 2023

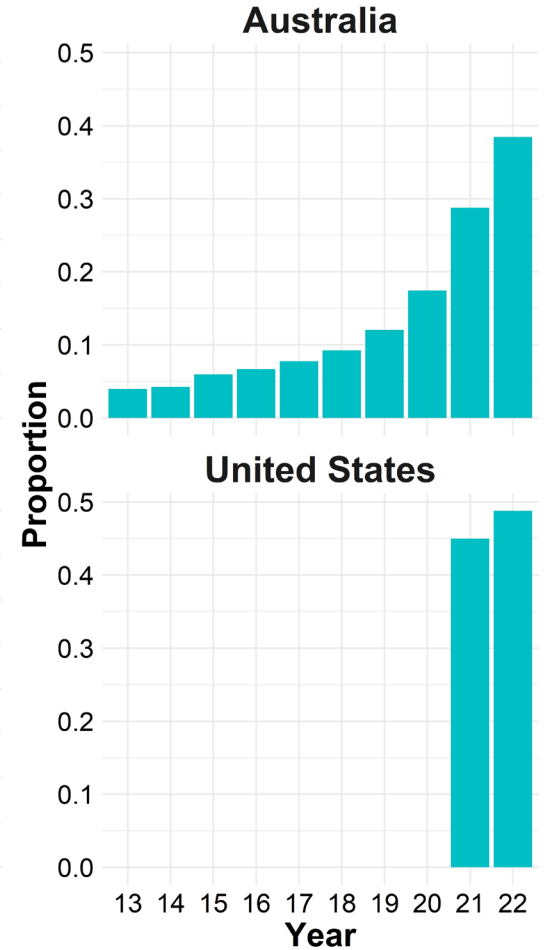
Total semen sales into dairy and beef herds

beef all dairy



Sexed semen as% of dairy semen sales

sexed dairy



Key findings & recommendations delivered in 2023.

Watch the replay:



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Successful beef on dairy integration



“Wicked
problem”

- Multifaceted
- Collaboration across industries
- Collaboration across disciplines



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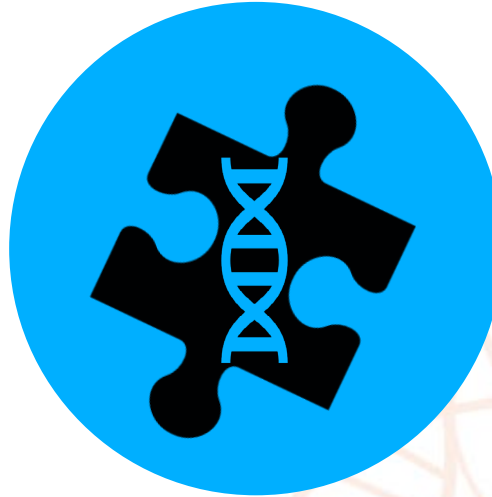


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Successful beef on dairy integration



“Wicked
problem”



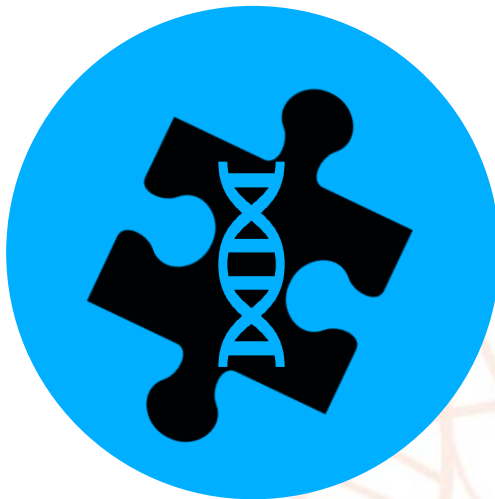
Genetics one of
the pieces

- Identify bulls whose progeny will perform in the beef supply chain
- Support mating decisions on-farm
- Informed calf purchasing
- Improve profitability of beef from dairy

Successful beef on dairy integration



“Wicked”
problem



Genetics one of
the pieces



Data a key barrier

Successful beef on dairy integration



Data a key barrier

- Few combined beef & dairy databases
- Calving traits for beef on dairy
- Dairy-beef progeny performance
 - carcass traits
 - efficiency traits

Monitor trends:

semen usage, genetic trends...

Validation:

understand how existing (genetic) tools perform

Develop:

New tools for local markets

Prioritise establishing data collection pipelines & collecting data on dairy-beef progeny



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Thank-you



BWYPEX Hosts:

- University of California Davis
- Interbull Centre
- ANAFIBJ
- ANAPRI
- AHDB
- ICBF

Interviewees



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ICAR would like to acknowledge the 11 Members who help fund the inaugural Brian Wickham Young Persons Exchange Program



+
New Zealand Animal Evaluation
Limited (NZAEL);
a wholly owned subsidiary of
DairyNZ



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