

Effect of New Technologies Introduction on Canadian DHI



ICAR Chile - 2016

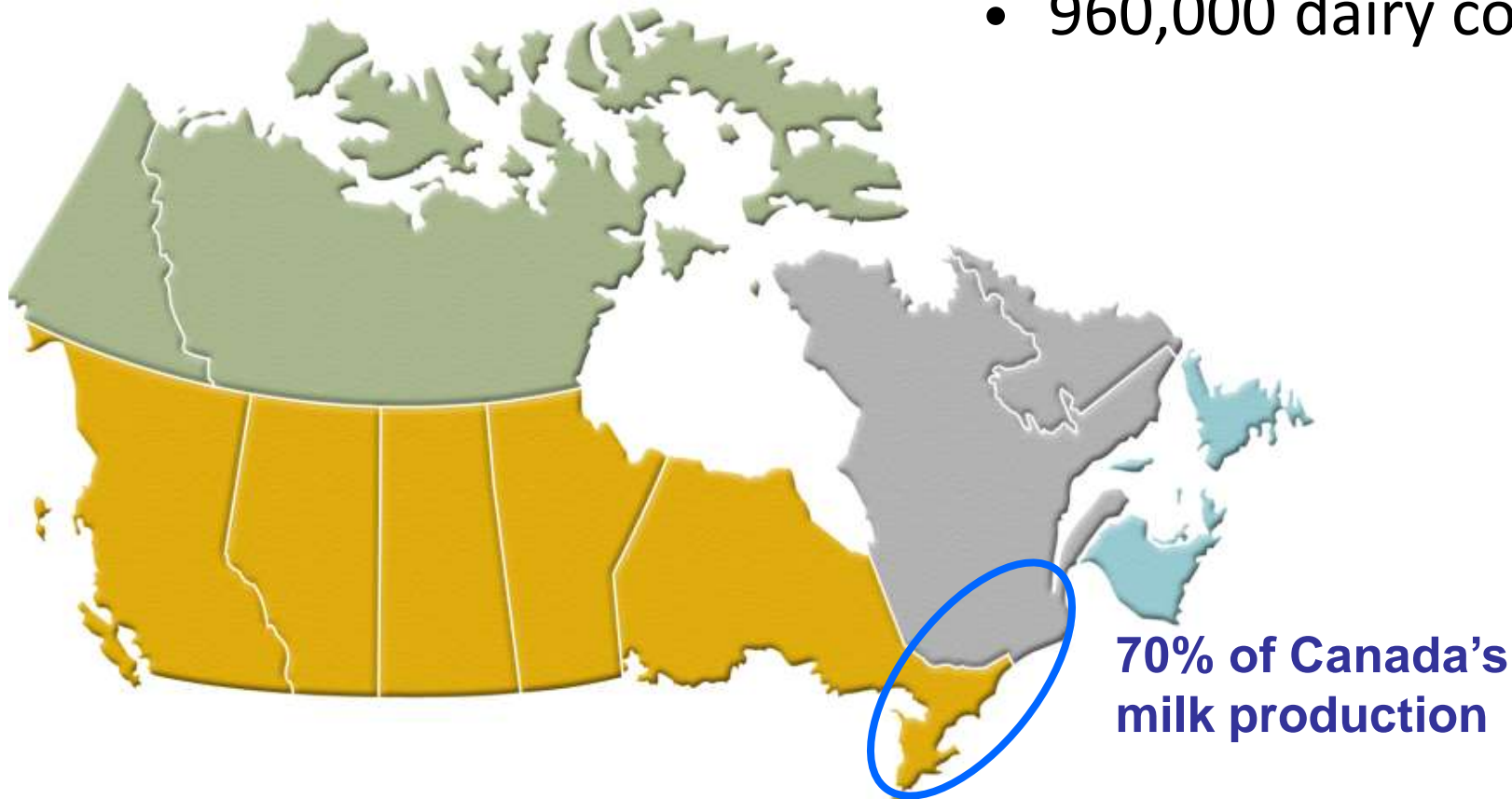
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CanWest DHI**

Agenda

- Overview of Dairy industry & DHI in Canada
- New Technologies & Testing Initiatives
- Benefits
 - For Farmer
 - For DHI
 - For Industry
- Summary

Canadian Dairy Industry

- 11,500 dairy farms
- 960,000 dairy cows







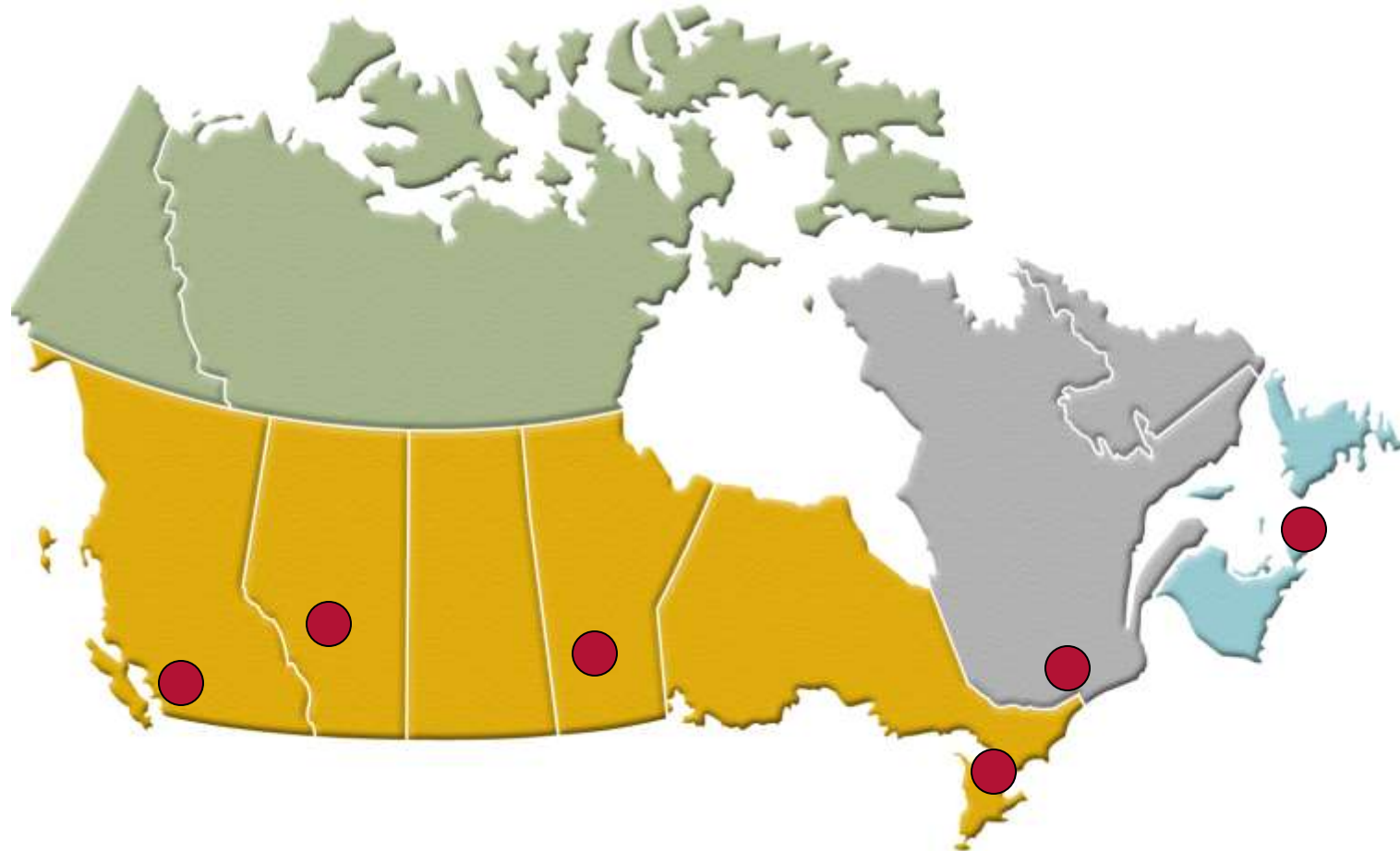




DHI in Canada



Canadian DHI Milk Analysis Labs



DHI Statistics

- 8,500 DHI herds (*~75% enrolment*)
- 710,000 DHI Cows
- >90% Holstein breed
- Herd Demographics:
 - *Herd sizes ave: 60 -175 cows (by region)*
 - *Milking Parlour: 25 – 90% (by region)*

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The Milk Sample

A big part of what we do as DHI is related to the milk sample and what we do with it!



Milk Testing has Changed



Milk Testing has Changed



Evolution of Milk Testing

Electronic Instrument Technologies
opened the door...



- Fat
- Protein
- Somatic Cell Count (SCC)
- Milk Urea Nitrogen (MUN)

Evolution of Milk Testing

ELISA and PCR Technologies
added opportunities...



Health & Disease Testing
through...

- Serum/blood
- Tissue
- Manure
- **Eventually... Milk!**

Evolution of Milk Testing

More recently, renewed Research & Development in Electronic Technologies...



- BHB, Ketosis
- Free Fatty Acids
- Differentiated SCC

Tremendous Progress in Testing Technology



New Testing Services



Fat	1980s
Protein	1980s
SCC	1980s

MUN	1990s
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Paratuberculosis – Johne's	2005
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Leukosis	2007
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Mastitis Bacteria	2009
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Bovine Viral Diarrhea (BVD)	2012
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Milk Pregnancy	2013
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BHB – Ketosis	2014
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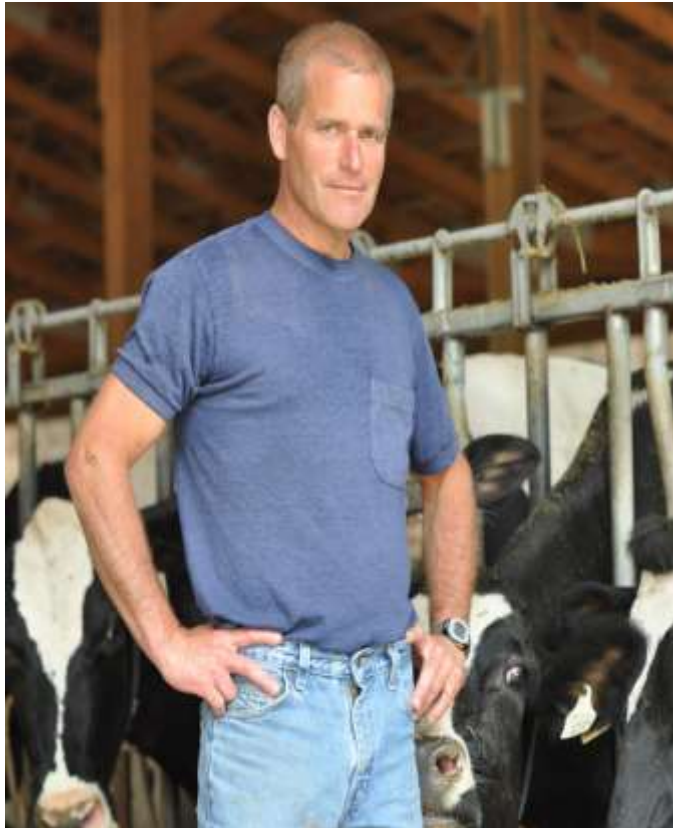
Next ???

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- **Benefits**
 - **For Farmer**
 - **For DHI**
 - **For Industry**
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Benefits

For dairy farmers, additional testing through the milk samples is easy!!!



“Samples are already being collected, so it doesn’t get any simpler.”

“The milk test is both handy and cost effective.”

“We really like the convenience.”

Benefits

For dairy farmers...



- Cost effective: lab analysis cost is usually similar, but...
 - No sample collection costs
 - No shipment costs
- Results in DHI data base
 - Linked with existing cow data for full picture of situation
 - Enhanced reports or E-file
 - Historical reference

Benefits

For Canadian DHI...



Provides the opportunity to do more with the 6.5 million samples per year, that are arriving at our labs.

Benefits

For Canadian DHI...



**Has helped maintain
and grow farmer
participation in our
programs!**

- Value added
 - Adds value to core business
 - Differentiates from on farm technologies
- Profitable business
 - VERY efficient
 - No additional collection or shipment costs

Benefits

For our Dairy Industry as a whole...



- Improved overall health & productivity
 - Without milk tests, many farmers would not test at all
- Data bank
 - Genetic Improvement
 - Disease Surveillance

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Summary

- A big part of what we do as DHI is related to the milk sample and what we do with it.
- New Technologies is allowing us to extract greater value and information from that sample.

Summary

- This has resulted in several new analysis services.

New Testing Services



Fat	1980s
Protein	1980s
SCC	1980s

MUN	1990s
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Next ???

Summary

- Which is producing a win-win situation for dairy farmers, DHI organizations and the entire dairy industry.





**Thank
You!**