



## **Role of infectious diseases in the resilience of *Rangifer* herds**

**Summary of proceedings from the workshop held  
2 Aug 08, University of Alberta  
Edmonton, AB, Canada**

**Danna Schock, University of Calgary**

2 Dec 08, Vancouver



## Workshop Participants

Andy Dobson  
Anne Gunn  
Bjornar Ytrehus  
Bob White  
Brett Elkin  
Danna Schock  
David Lee  
Jane Harms

Julie Ducrocq  
Kimberlee Beckmen  
Nathan deBruyn  
Patricia Curry  
Rebecca Davidson  
Ryan Brook  
Susan Kutz

## Contributors

Annti Oksanen  
Christine Cuyler  
Dorothy Cooley  
Eric Hoberg  
Leslie Witters  
Morten Tryland

## Over-arching question

What roles do infectious diseases play in herd resilience?

## Workshop Objectives

- **Identify** and then **prioritize questions**
- **Gather** and then **disseminate information** about on-going pathogen related projects
- **Coordinate** sample/data collection
- Foster **new collaborations**

## Context

- 10% of the literature on cervids deals with *Rangifer*

*Surely, we have this all figured out by now, no??*

## Pathogen Matrix

- sent to ~40 people in advance of the workshop; asked for their “expert opinion”
- “experts” = wildlife veterinarians, researchers, biologists, managers
- numerous pathogens, several questions related to the basic ecology/epidemiology of the pathogens
- matrix + responses used as a tool during the workshop



## Pathogen Matrix

- most people didn't respond
  - of those that did, most said that they didn't know much about most of the pathogens
  - more comments for physically large pathogens
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### *Differences*

- e.g., differences in how *Besnoitia* is affecting and/or is perceived across herds
- differences of opinion – whose “counts” more?

## Matrix consensus ranking activities – Greatest impacts on herds

warbles

abomasal nematodes

*Brucella*

*Besnoitia*

nose bots

*Parelaphostrongylus*

Setaria

\*very\* little resolution among these 7,  
not everyone agreed

## Matrix consensus ranking activities –

### Greatest concerns over increased impacts due to climate change

*Elaphostrongylus*

*Fascioloides*

insects

*Neospora*

*Pasteurella*

*Babesia*

*Anaplasma*

other nematodes

foot rot



Relative to our consensus ranking,  
**are we studying & publishing** about the  
pathogens we think are most important?

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Say!  
Have you heard...?  
Parasites are important!

Oohh – I know!

Beautiful: Hunter-collected  
Samples for Caribou Health Monitoring

COMMUNITY-BASED SURVEILLANCE  
FROM THE LEAF RIVER AND THE GEORGE RIVER HERDS IN THE NORTHWEST TERRITORIES

Authors: [Names]

**MATERIALS & METHODS**

**RESULTS & FUTURE**

**CONCLUSION**

**REFERENCES**

