



Collaboration in Surveillance: Wildlife Surveillance and Farmed Animals

NFAHW Council Forum 2018

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Wildlife health matters

To society



- *Wildlife contribute to income and social status, culture and working conditions*



To the environment



- *Wildlife can warn society of environmental changes*



To agriculture



- *Wildlife can be sources of infectious and non-infectious disease*



Wild animal surveillance challenges



- Detection
 - Wildlife have no “owners”
 - Many wild animals live in remote areas
- Diagnosis
 - Many tests are validated for use in domestic animal species; not all will work in wild animal species
- Need expertise of many disciplines
 - Need to know about wildlife populations and taxonomy

State of wildlife health surveillance in Canada



- Internationally respected
- Well-established surveillance programs
- Engagement of the wildlife sector in joint programs

But...



The world is changing



- Diseases are a more frequent cause of species declines
- Wildlife are a major source of new human infections
- We have an obligation to measure and monitor wildlife health
- Climate change, resource extraction and landscape changes are increasing threats to agriculture, wildlife and public health

Need to evolve



In order to:

- *Assure trading partners and Canadians that wildlife and their environments are safe*
- *Detect and manage risks across a large country with many species and disparate resources*
- *Anticipate the next threat during times of unprecedented change*



Meeting the challenge

Canadian Wildlife Health Cooperative

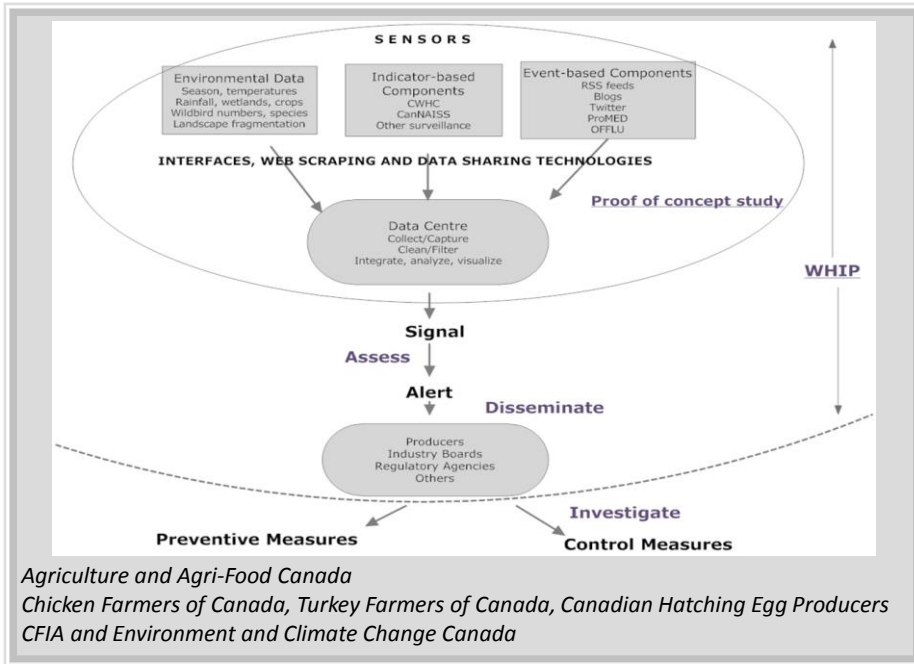
- 6 Regional nodes and a National office
- Using surveillance, investigation & research to assess wildlife health status and find solutions
- Leading voice for wildlife health



Wildlife Health Intelligence Platform

- Transforming a wildlife disease surveillance program into a wildlife health intelligence system
 - Manage data better
 - Do more with the data we have
 - Identify and use new information





To turn information like this....

CWHC (Canadian Wildlife Health Cooperative)

Map (Satellite view of North America)

Science Daily, **Medfyns**, **Outbreak News Today**, **ProMED**

Weather Time Series: Observed weather data over the reporting period from a sample of weather stations in the region.

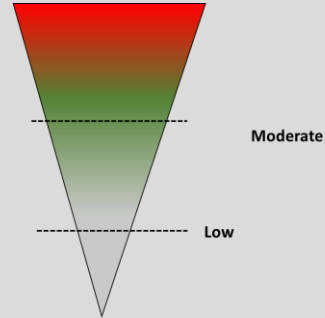
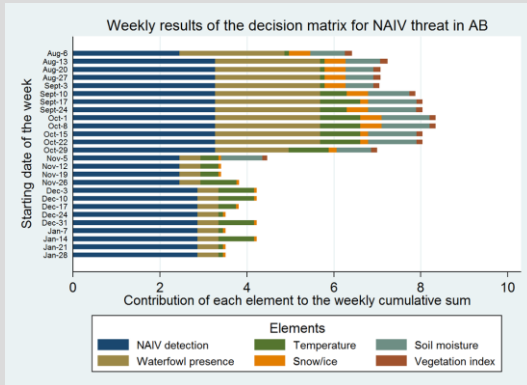
Word Cloud: virus, outbreak, China, poultry, news, egg, spread, got, news, virus, outbreak, poultry, overhauled, D801, breeder, etc.

LIVE BIRD SURVEY 2017
 Number of live birds tested and number positive, H5 and H7 N2 positive* since January 1, 2017

	Tested	Positive*	H5 Positive*	H7 Positive*
British Columbia	0	0	0	0
Alberta	0	0	0	0
Manitoba	0	0	0	0
Ontario	0	0	0	0
Quebec	0	0	0	0
New Brunswick	0	0	0	0
New Scotia	0	0	0	0
Prince Edward Island	0	0	0	0
Newfoundland	0	0	0	0
Yukon Territory	0	0	0	0
Northwest Territories	0	0	0	0
Nunavut	0	0	0	0
Total	0	0	0	0

*Samples from BC include birds for which we reported as well as further listed specimens

Into signals like this....



A Pan-Canadian Approach to Wildlife Health



- To support strong, shared, leadership to protect and promote wildlife health and the values it brings Canadians
- It strives to do this by enabling and sustaining a collaborative science network



Overall goals



- Protect and conserve native fauna from harms due to pollutants and emerging pathogens, as well as the ecological and economic services provided by wildlife
- Provide assurance to Canadians that depend upon healthy wildlife for sustenance and livelihood
- Enable Canada to meet its national and international obligations for disease surveillance in relation to public health, agriculture and trade.

4 pillars



- Health intelligence
 - Information for anticipation and preparedness
- Stewardship
 - Coordinated and responsible management
- Innovation
 - Research, development and transfer of new information and tools
- Governance
 - Effective collaboration to deliver on policy goals and social expectations

Assured
 Prepared
 Coordinated
 Equivalent

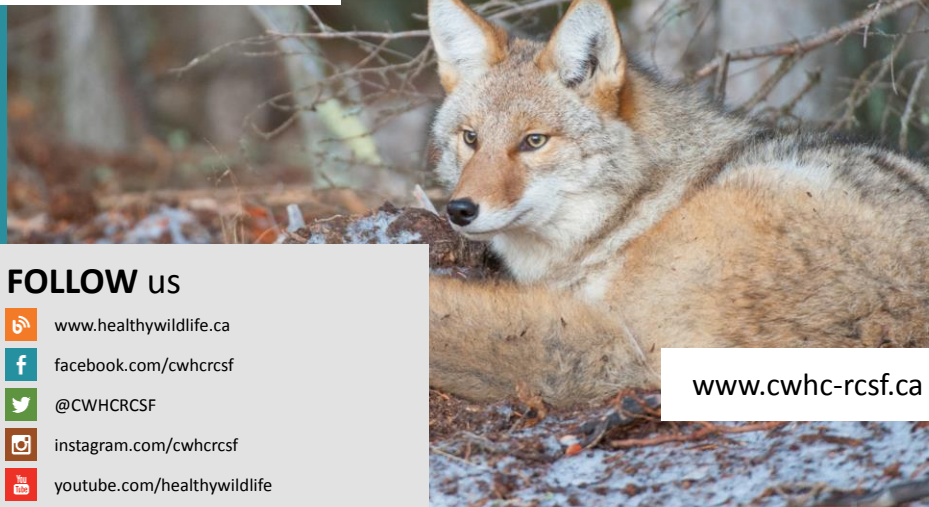
Last words....



- Wildlife health matters
- We need a strong and sustainable wildlife health program
 - To meet internal obligations
 - To be able to manage emerging disease threats
 - To prepare for the unexpected
- This requires involvement and support from all of us:
 - Wildlife, agriculture, environment and public health communities, and more.



CREATING A WORLD
THAT IS SAFE AND SUSTAINABLE
FOR WILDLIFE AND SOCIETY



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