

# Ontario's Preparedness for Chronic Wasting Disease



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Ontario Ministry of Natural Resources



## Ontario's Cervids

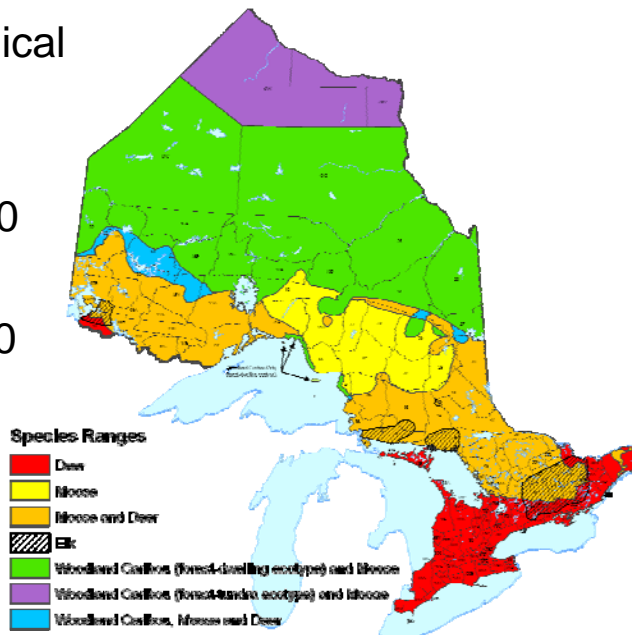
- Cervid Ecological Framework

Deer ~400,000

Moose ~109,000

Elk ~500

Caribou ~20,000



# Ontario's CWD History

## Surveillance

Since 2002, tested over 4,800 wild cervids  
Since 1998, tested over 1,300 captive cervids



All tests  
negative

Dube, C., Mehren, K.G., Barker, I.K., Peart, B.L., and A. Balachandran. 2006. Retrospective investigation of chronic wasting disease of cervids at the Toronto Zoo, 1973-2003. Canadian Veterinary Journal 47(12): 1185-1193.

- Retrospective investigation at Toronto Zoo
- Chronic wasting disease prion antigen was detected in 8 of 105 animals tested: 7 mule deer and 1 black-tailed deer
- Last CWD mortality in 1981
- Most likely introduced by importation from a zoo in the United States.
- Toronto Zoo collection has very low risk of currently being infected with CWD.

## Socio-Economic Impacts of Detection

- 2004 Study (Stratus Consulting)
  - Modelled using MNR's Socio-Economic Impact Model (SEIM)
  - APPENDIX IV of Ontario's CWD Surveillance & Response Plan

### Hunting

- License revenue declines (\$260K to \$1.33M annually)
- Value-added economic impacts (\$2.4M to \$11.8M annually)

### Farming

- Valued-added economic impacts (\$1.4M to \$11.7M annually)
- Loss of employment (31 to 257 person-years)

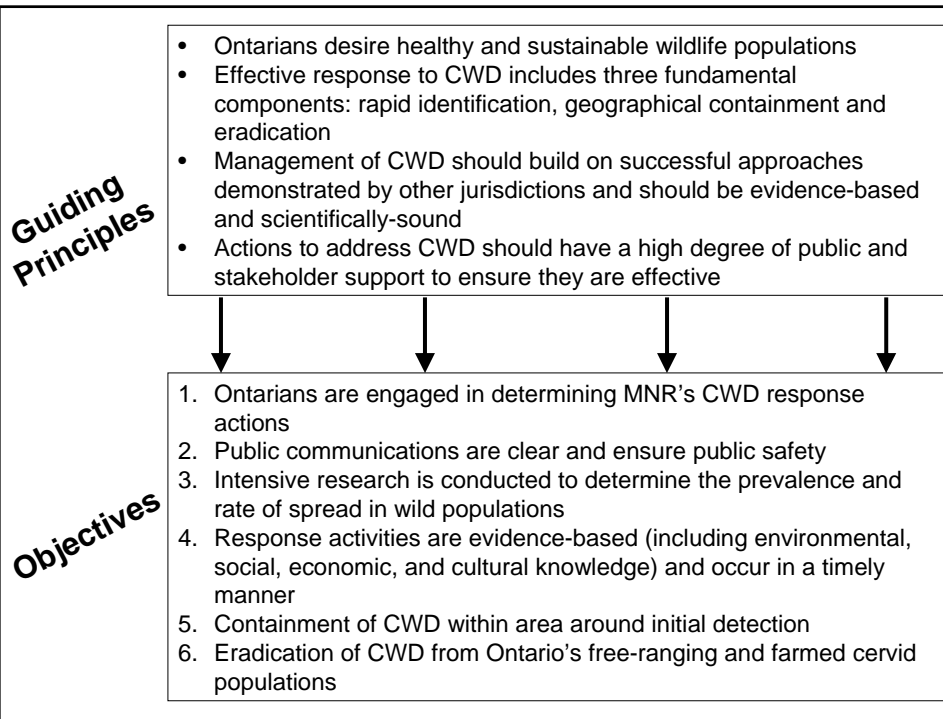
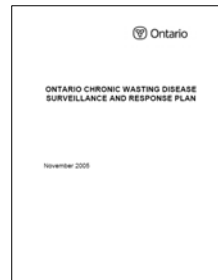


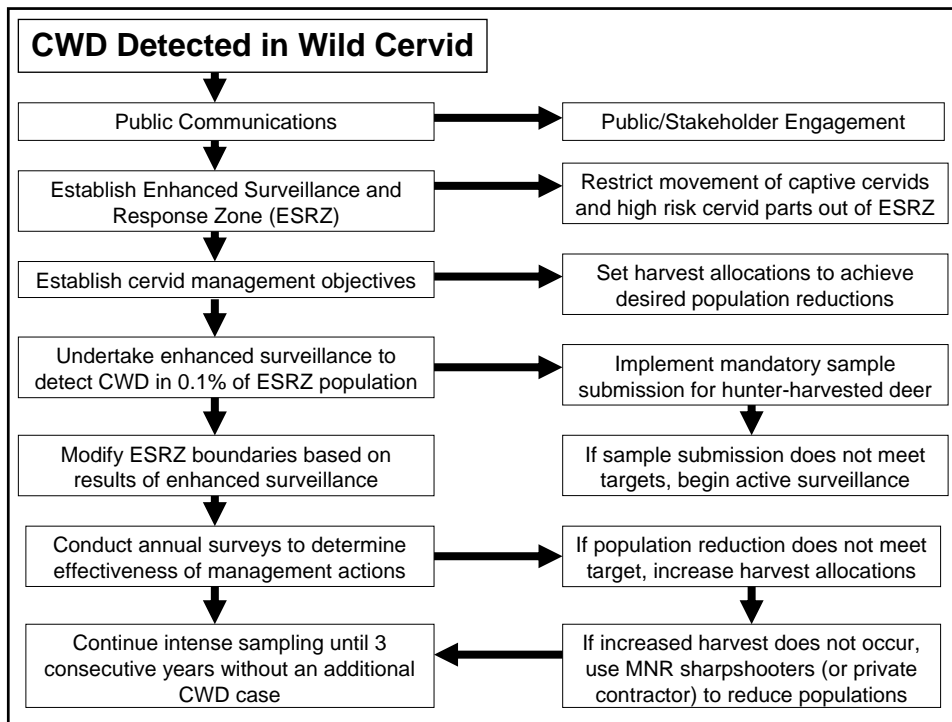
# Ontario CWD Task Team

- Members include:
  - Ministry of Natural Resources (MNR) (*chair*)
  - Ministry of Agriculture, Food, and Rural Affairs (OMAFRA)
  - Ministry of Health and Long-Term Care (MOHLTC)
  - Canadian Food Inspection Agency (CFIA)

## The Ontario CWD Surveillance & Response Plan

- Released in 2005
- Available on our website
- Addresses wild and captive animals
- Further work needs to be done...





- ## Enhanced Surveillance and Response Zone
- **Size**
    - Guided by deer dispersal range (Broadfoot et al., 1996)
      - Southern Ontario: 30km
      - Northern Ontario: 75km
  - **Deer Density Estimation**
    - ~30 hours helicopter time per ESRZ
  - **Population Goal**
    - If prevalence >1%, strive for eradication
    - If prevalence <1%, strive for <2 deer/km<sup>2</sup>
  - **Timeline**
    - ESRZ will be removed after 3 years with no additional CWD cases

## Recovery

- Recovery phase will last 36 months after final CWD detection
- Consist of:
  - Monitoring and surveillance
  - Public and stakeholder engagement
  - Follow-up assessment
    - Impacts on the public and stakeholders
    - Amendments to response plan (lessons learned)
    - Revised provincial deer management strategy
    - New policies or regulations (?)

## Ontario Contact Information

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