

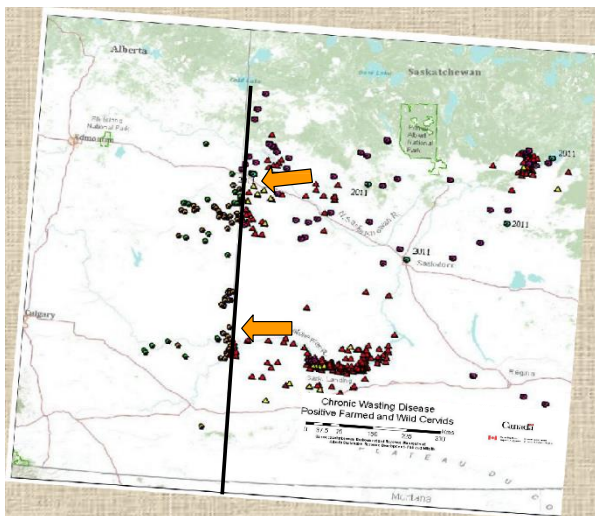
Time (and CWD) marches on

Overview of Alberta chronic wasting disease data patterns

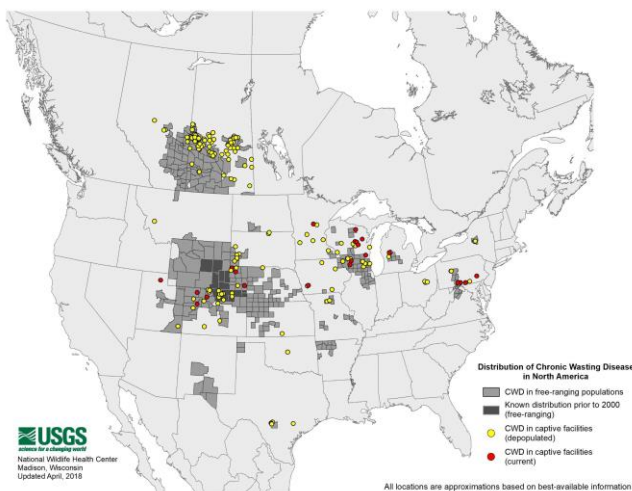
General overview

- Over 68,000 wild deer tested since 1998
- Chronic wasting disease detected in Alberta in 2005
- Relatively recent arrival in Alberta; spilled over from Saskatchewan

Map: CWD cases at Alberta/Saskatchewan border



Map: CWD in North America – April 2018



Chronic wasting disease status in Alberta (as of May 1, 2018)

Total Alberta cases: 919

Breakdown by species: 796 mule deer; 119 white-tailed deer; 1 unknown deer; 1 moose; 2 elk

Breakdown by sex: 698 male deer; 216 female deer; 1 male moose; 1 male elk; 1 female elk

Majority of cases in mule deer and males



Prevalence in hunter surveillance

Disease control applied

- 0.14% in 2006 (n= 2965)
- 0.14% in 2007 (n= 5170)
- 0.16% in 2008 (n= 4347)

No disease control

- 0.25% in 2009 (n= 4817)
- 0.39% in 2010 (n= 5144)
- 1.03% in 2011 (n= 3194)
- 1.03% in 2012 (n= 3402)
- 1.34% in 2013 (n= 3667)
- 2.07% in 2014 (n= 4163)
- 2.40% in 2015 (n= 4929)
- 3.5 % in 2016 (n= 5112)
- 5.2% in 2017 (n= 6340)

Prevalence stable during disease control.

Prevalence increased after control discontinued

Table: Alberta CWD cases by sex from 2005 to 2017

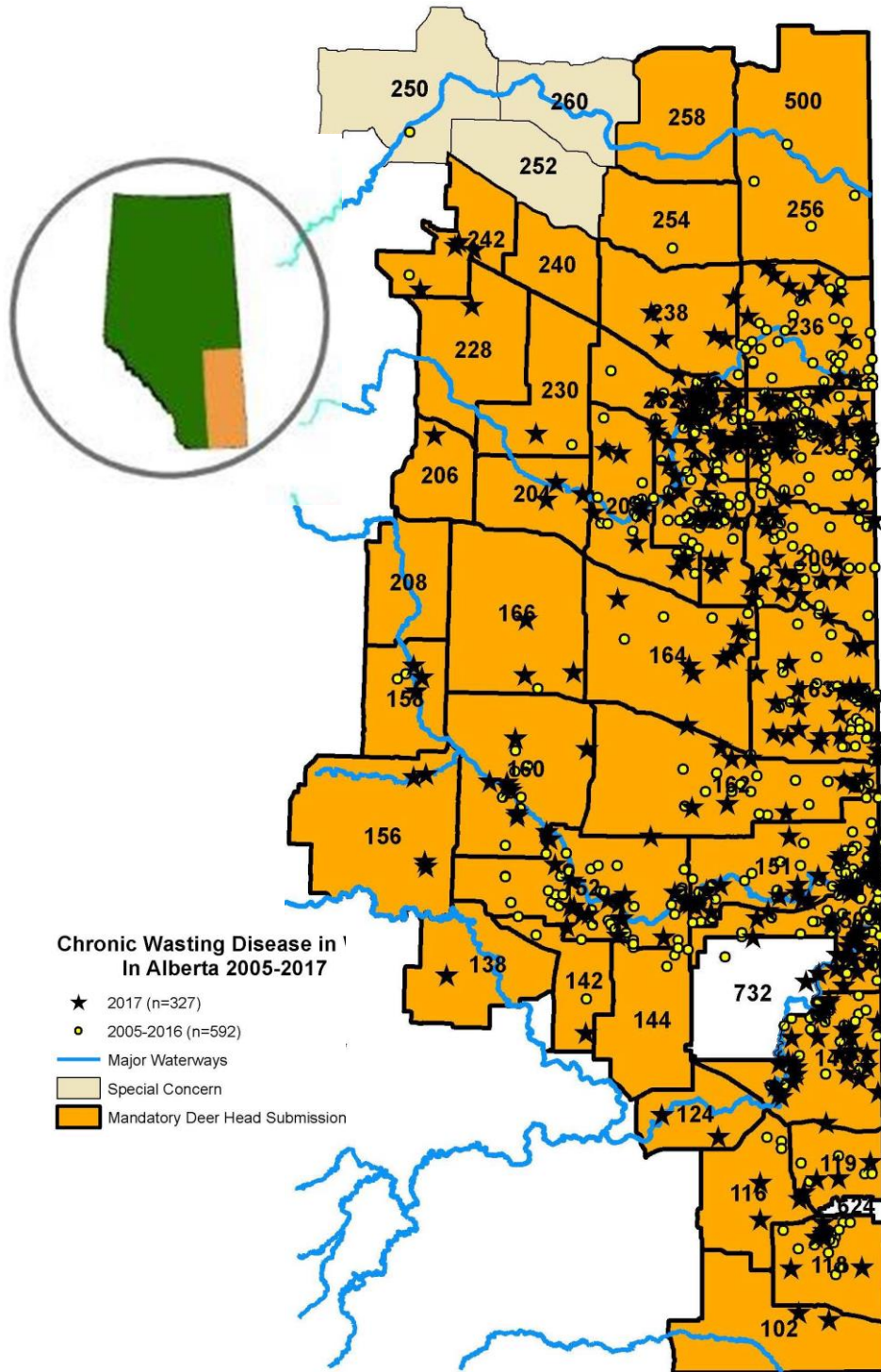
		Sex			
Species	Age	Female	Male	Unknown	TOTAL
Mule deer	Adult	180	567	-	747
	YLG	14	24	-	38
	Unknown	2	-	1	3
	YOY	2	6	-	8
Mule deer total		198	597	1	796
White-tailed deer	Adult	18	94	-	112
	YLG	-	5	-	5
	Unknown	-	1	-	1
	YOY	-	1	-	1
White-tailed deer total		18	101	0	119
Moose	Adult	-	1	-	1
Moose total		0	1	0	1
Elk	Adult	1	1	-	2
Elk total		1	1	-	2
Unknown	Unknown	-	-	1	1
Unknown total		-	-	1	1
TOTAL		217	700	2	919

Conclusions

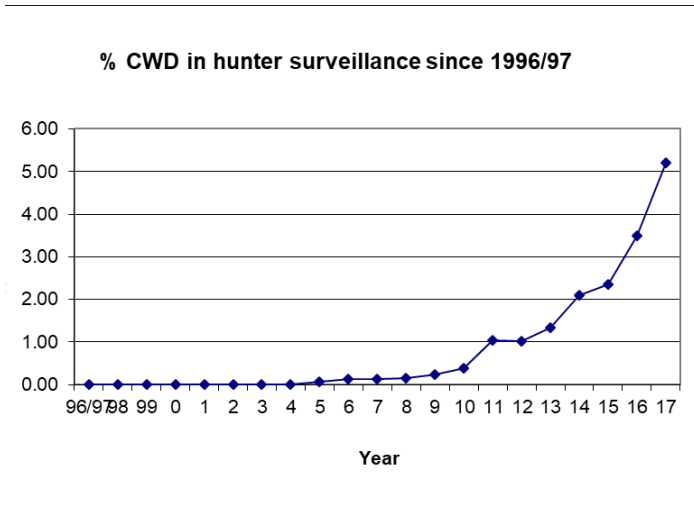
- CWD continues to expand in deer populations in east central Alberta. Mule deer are particularly prone to infection.
- Primary watershed areas affected include, Battle, Milk, Red Deer and South Saskatchewan rivers. No natural barriers to further spread.
- Changes in CWD prevalence and geographic distribution accelerated since targeted control programs were discontinued. With current management approach, CWD will continue to expand in Alberta.
- Hunter harvest is not stopping an increase in prevalence nor a spread in geographic distribution. Along with other jurisdictions, Alberta is moving towards manipulating hunter harvest to reduce rate of spread.

Additional maps and graphs

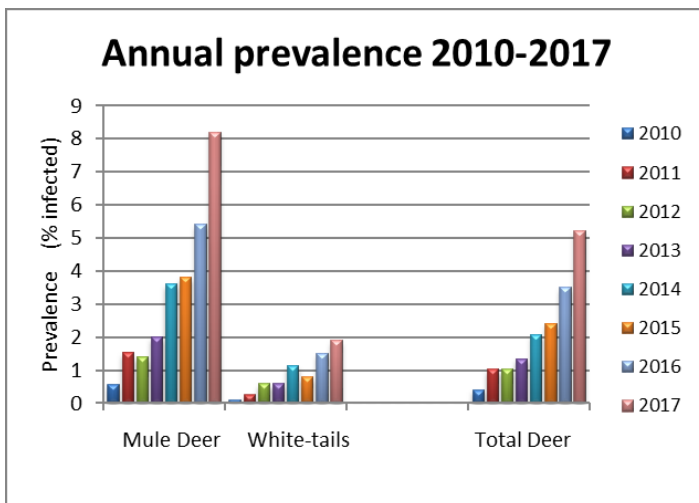
Map: CWD cases in southeast Alberta - 2005 to 2017. Note westward spread in specific watersheds.



Graph: Percentage of CWD cases detected though hunter surveillance – 1996 to 2017



Graph: Annual prevalence of CWD cases by species – 2010 to 2017



Graph: Annual prevalence of CWD cases by species-sex – 2015 to 2017

