

Wyoming Game and Fish Department Chronic Wasting Disease Activities for 2005

Methods:

The Wyoming Game and Fish Department (WGFD) conducted its third statewide surveillance for chronic wasting disease (CWD) in 2005. The WGFD divides the state into seven administrative regions. Considering each region as a "population," the surveillance goal was to test 500-600 deer from each region. This number provided a 99% probability of detecting CWD if it existed at $\geq 1\%$ prevalence. The overall goal was approximately 4,000 samples statewide.

Samples were collected at points of concentration, i.e., meat processors and check stations. Samples were taken by WGFD personnel from all divisions (wildlife, fish, services, administration). Only retropharyngeal lymph nodes were sampled because these nodes are easily and rapidly taken. Statewide training of WGFD personnel on sample and data collection was conducted prior to the start of the hunting season. The WGFD used the IDEXX enzyme-linked immunosorbent assay (ELISA) to analyze lymph node samples for the first time this year. However, all IDEXX-positive samples were confirmed with the BioRad ELISA. All samples positive on both ELISAs were confirmed by immunohistochemistry.

Results were reported to hunters in less than three weeks of sample submission. Hunters could obtain results by accessing the Department's web site. Hunters submitting a sample were given a unique bar coded number. The hunter could then access the web site, enter the unique number and obtain test results. Hunters having deer or elk testing positive for CWD were also individually notified by letter. The WGFD also notified other state wildlife agencies by mail if a hunter from their state harvested a CWD test-positive animal.

Results:

A total of 4,261 deer, elk, and moose samples were analyzed. Of these samples, 93 tested positive for CWD representing: 75 mule deer, 12 white-tailed deer, and 6 elk.

New cases of CWD were diagnosed in deer hunt areas (HA) 9, 37, 77, 120, and 127 and in elk HA 8. It was presumed that the case in deer HA 9 was an extension of the eastern Wyoming or southwestern South Dakota endemic area. The positives in deer HA 77 and elk HA 8 simply fills in a "gap" of an otherwise contiguous CWD area extending throughout southeastern Wyoming and northeastern Colorado. The cases in deer HAs 37, 120, 127 likely represent a new endemic area of CWD infection. A total of 7 CWD-positive deer were found in 227 samples submitted. This represents a 3% prevalence rate. A prevalence rate of 3% suggests that CWD has existed in the Thermopolis area for several years and that CWD is probably well established in this population.

Other Issues:

The Department has passed regulations to control the transportation and disposal of deer and elk carcasses harvested within the CWD endemic area. Such carcasses must now be disposed of in approved landfills.

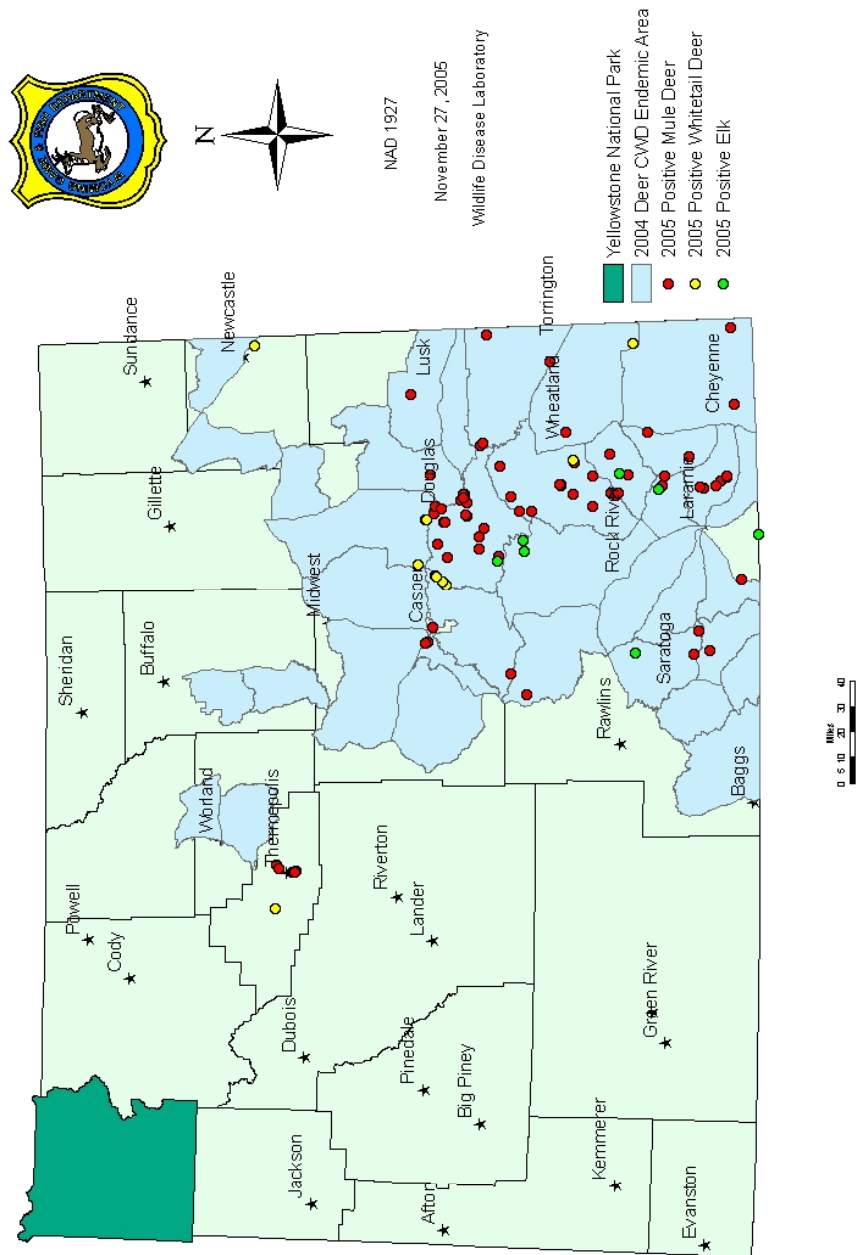
The Department has developed a new draft management plan for CWD, a component of which includes specific management actions regarding the state elk feedgrounds in northwestern Wyoming. The concern is that feedgrounds concentrate animals, which likely will increase the probability of disease transmission.

As of 2005, the Department incorporated moose into the CWD surveillance program.

Mule Deer and White-tailed Deer
 Number positive by Hunt Area
 (New Hunt Areas = yellow)

<u>Hunt Area</u>	<u>2005</u>	<u>1997-2005</u>
6	0	1
8	1	3
9	1	1
10	0	1
13	1	4
14	1	10
15	0	3
16	4	10
22	1	25
30	0	1
33	0	1
34	0	9
37	2	2
41	0	1
55	3	32
57	1	3
59	2	7
60	7	26
61	0	1
62	1	16
63	4	42
64	13	97
65	32	159
66	2	32
70	2	4
73	0	10
74	0	2
75	0	4
76	0	1
77	1	1
78	1	3
79	2	4
80	0	1
81	0	3
82	0	3
88	0	15
89	0	1
120	3	3
127	2	2
158	0	1
164	0	1

2005 Preliminary Positive Chronic Wasting Disease Test Results in Wyoming



Elk
 Number positive by Hunt Area
 (New Hunt Areas = yellow)

<u>Hunt Area</u>	<u>2005</u>	<u>1997-2005</u>
5	1	8
6	0	11
7	3	14
8	1	1
125	1	3