

## **Wyoming Game and Fish Department Chronic Wasting Disease Activities for 2006**

### **Methods:**

The Wyoming Game and Fish Department (WGFD) conducted statewide surveillance for chronic wasting disease (CWD) in 2006. 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 5,000 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. 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 4,653 deer, elk, and moose samples were analyzed. Of these samples, 116 tested positive for CWD representing: 88 mule deer, 13 white-tailed deer, and 15 elk.

New cases of CWD were diagnosed deer hunt area (HA) 4 and 11 and elk HA 16 and 22. The new cases in deer HAs 4 and 11 are most likely a natural extension of the Wyoming-western South Dakota-Nebraska endemic area. The new cases in elk HAs 16 and 22 were most likely a natural extension of the historic southeastern Wyoming endemic area. In 2003, new cases of CWD were found around Worland and in 2005, around Thermopolis. The prevalence around Thermopolis last year was 3%, which indicated an established focus of CWD. This area is now referred to as the Thermopolis-Worland endemic area. This year, no new cases were found around Worland (deer HAs 41 and 37), but new cases were found around Thermopolis in deer HAs 120 (3 new cases), 127 (3 cases), and 164 (4 cases) which gave an overall prevalence of 7%. This increased prevalence supports the classification of this area as being an established endemic CWD area.

### **Other Issues:**

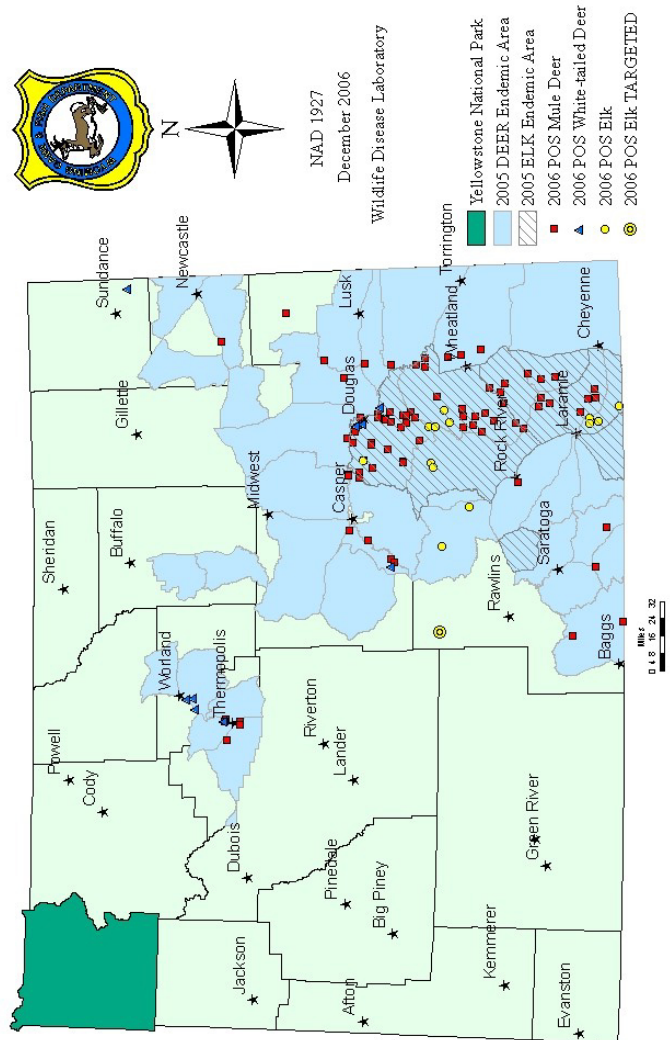
As of 2005, the Department incorporated moose into the CWD surveillance program. In 2006, we surveyed 31 hunter-killed moose and 5 targeted with no positive moose found.

### Mule Deer and White-tailed Deer

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

<u>Hunt Area</u>	<u>2006</u>	<u>1997-2006</u>
4	1	1
6	0	1
8	0	2
9	1	2
10	0	1
11	1	1
13	0	4
14	1	12
15	1	4
16	1	15
22	3	28
30	0	1
33	0	1
34	0	9
37	0	2
41	0	1
55	3	35
57	0	3
59	4	12
60	3	28
61	0	1
62	4	20
63	3	45
64	16	116
65	36	203
66	2	36
70	0	4
73	0	10
74	0	2
75	0	4
76	0	1
77	0	1
78	2	5
79	0	4
80	0	1
81	1	4
82	2	5
88	6	21
89	0	1
120	3	6
127	3	5
158	0	1
164	4	5

2006 PRELIMINARY Positive Chronic Wasting Disease  
Hunter-Killed Surveillance in Wyoming



### Elk

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

<u>Hunt Area</u>	<u>2006</u>	<u>1997-2006</u>
5	0	9
6	4	15
7	8	28
8	0	1
16	2	2
22	1	1
125	0	3