



# **Report: Emergency Response to Disease Outbreaks in Wildlife**

Covering the Period April 1 –June 30, 2021

As required by Minnesota Session Law 2019, 1<sup>st</sup> Special Session, Chapter 4

12/8/2021

## Report to the Minnesota Legislature

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Pursuant to Minnesota Statutes, Section 3.197, we estimate that it cost approximately \$320 produce this report. This includes staff time for drafting and reviewing the report.

*Upon request, this material will be made available in an alternative format such as large print, Braille, or audio recording. Printed on recycled paper.*

## DNR CWD Spending Legislative Report

This report fulfills the quarterly reporting requirement of Minnesota Session Law 2019, 1st Special Session, Chapter 4, Article 1, Section 3, Subdivision 6(b) “\$1,595,000 the first year and \$275,000 the second year are from the general fund, and \$1,125,000 the first year and \$1,675,000 the second year are from the game and fish fund for planning for and emergency response to disease outbreaks in wildlife. The commissioner and board must each submit quarterly reports on the activities funded under this paragraph to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over environment and natural resources and agriculture.” (Table 1)

### CWD Activities, April 1-June 30, 2021

The Minnesota Department of Natural Resources (DNR) spent approximately \$1,070,000 during the fourth quarter of FY21 on Chronic Wasting Disease (CWD)-related activities (Figure 1, Tables 2 and 3). The spending this quarter primarily supported sample collection efforts including salary for full-time staff, fleet, travel expenses, and diagnostic testing in support of the targeted culling operation in southeast Minnesota (Table 2). A detailed list of activities includes:

- DNR contracted with U.S. Department of Agriculture -Wildlife Services (USDA-WS) for \$350,000 to conduct targeted culling within 3 miles of positive wild deer. This effort took place in the southeast and south metro management zones from January 19, 2021 to April 2, 2021; 542 deer were removed of which 5 tested positive (Figure 2). DNR applied for and was awarded a U.S. Department of Agriculture-APHIS (USDA-APHIS) grant of \$250,000 to help offset the overall cost of this management effort. Across the entire project, 76 private landowners and state-owned properties allowed access to just over 14,000 acres of land. All deer with a “not-detected” test result were made available through the Share the Harvest program after being processed and packaged by a contracted meat processor based out of Spring Valley, MN.
- CWD surveillance planning for fall 2021 was a major focus for Wildlife Health Program staff during this reporting period. Significant effort went into summarizing testing results from fall 2020 and developing options for the fall deer season to ensure sampling goals are met for six areas of the state (Figure 3). Decisions were made to conduct mandatory CWD sampling during opening weekend of firearms A and B season, and to provide hunters opportunities to submit samples through in-person check stations, self-service sampling stations, scheduled appointments at DNR offices, and participating taxidermists. Supplies to support the surveillance work were purchased. Staff developed information about CWD sampling for the Hunting and Trapping Regulations Book, websites, and other outreach materials. Staff sent letters to all taxidermists in CWD Surveillance and Management zones encouraging participation in DNR’s sample partner program.
- During this reporting period, several deer studies incurred costs for animal captures, deer collar data fees, supplies, diagnostic and tooth aging services, and survey work. Here is a brief summary of those efforts:
  - The southeast deer movement study continued to monitor collared animals and conduct data analyses on dispersal movements and home range use. While no additional captures occurred this past winter, approximately 25 deer remain in the study and staff monitored their location

data. More information on the study can be found here: [www.dnr.state.mn.us/cwd/deer-movement-study.html](http://www.dnr.state.mn.us/cwd/deer-movement-study.html).

- Biologists conducting the forest deer study, aimed at understanding habitat requirements and drivers of population performance, monitored deer at two study sites in northcentral and northeast Minnesota. A helicopter capture contract was secured and 16 additional collars were deployed this past winter. This brought our peak winter sample sizes back to ~20 deer per site and our total since the study began to 89. Survival (0.767, 95% CI = 0.651–0.905) was higher during winter 2021 than during the previous 3 winters and natural mortality (21.4%, 9 of 42 deer) and wolf predation (16.7%, 7 of 42) were both notably lower, most likely due to the mild winter conditions.
- Newborn deer fawns were collared to assess survival and movement of neonates in the farmland region. Seventy-five fawns were captured using aerial drones. We conducted drone flights for 46.7 hours and covered 2072.6 hectares at 17 WMAs. We captured 76% (57) of fawns in grasslands, 15% (11) in wetlands, 5% (4) in forests, 3% (2) in road sides, and 1% (1) in standing crops. We have 12 mortalities to date, which include 9 coyote-kills, 1 vehicle collision, 1 infection (salmonella), and 1 unknown mortality. We have 2 capture-related mortalities and 8 slipped collars. The 30-day survival rate is 82%.
- We aged teeth from nearly 5,000 deer collected from the CWD Management Zone in southeast MN from 2017-2020 (DPAs 603, 647, 648, and 646) to assess the effects of liberalized harvest strategies on the age-sex structure of the local deer population. A broad goal of CWD management is to decrease population age structure, because older animals, particularly males, tend to have higher CWD prevalence than younger individuals. This work will allow DNR biologists to assess the effectiveness of liberalized hunting regulations in response to CWD, and potential effects of CWD sampling approach (mandatory vs voluntary) on the choice of hunter sample submissions for testing.
- DNR conducted surveys of deer hunters statewide and in the 604 CWD management zone to understand venison processing behaviors, methods of deer carcass disposal, and attitudes and behaviors toward CWD and CWD management. Results show that about a third of hunters used a professional deer processor to handle their venison, while roughly half of hunters processed the entire deer themselves. Hunters disposed of deer carcass remains in variety of ways. Coinciding with the use of deer processors, around a third of deer remains were disposed of by professional butchers. Around 17% of hunters placed deer remains in the trash. Over 20% of hunters statewide, and 15% of hunters in DPA 604 placed deer carcasses on their property to attract birds and other wildlife. Around a quarter of hunters in DPA 604 reported using a DNR carcass dumpster. Results reveal opportunities for increasing hunters' use of best management practices in deer carcass disposal to reduce the risk of the spread of CWD in Minnesota

Table 1. Chronic Wasting Disease Appropriation Allocation FY20-21.

Fund	FY20 Appropriated	FY21 Appropriated	Total App FY20-21
General Fund	1,595,000	275,000	1,870,000
Game and Fish-Emergency Response	1,125,000	1,675,000	2,800,000
Cervid Health – Adopt a Dumpster	50,000	-	50,000
<b>Total</b>	<b>2,770,000</b>	<b>1,950,000</b>	<b>4,720,000</b>

Figure 1. Quarterly spending activity of the Chronic Wasting Disease Appropriation Allocation FY20-21.

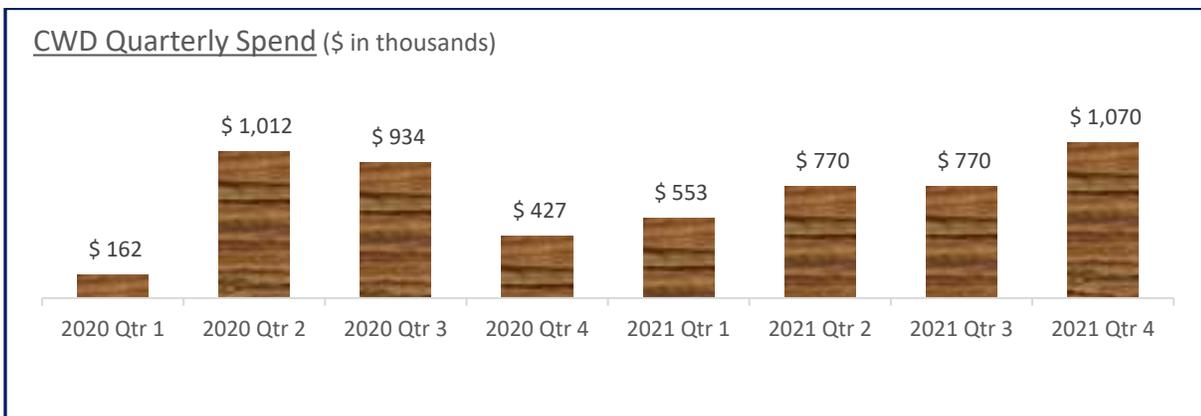


Table 2. Detailed spending by expense type for Chronic Wasting Disease Appropriation, FY21 Quarter 4 only, April 1 through June 30, 2021.

Expense Type	General Fund	Game and Fish-Emergency Response	Other**	Total Spend
Salary	72,931	448,534	(329,169)	192,296
CSU/UW CWD Sample Testing	110,395	11,259	2,115	123,769
USDA-Culling Contract	-	344,732	-	344,732
Travel/Fleet	155	36,210	14,986	51,351
Supplies	7,902	126,355	6,424	140,681
Dumpsters	-	10,295	11	10,306
Contracts: CWD Tissue Sampling	-	-	-	-
CWD Attitude Survey	-	44,000	-	44,000
Meat Processor/Taxidermists	-	33,350	-	33,350
Equipment	-	0	-	0
Printing & Advertising	-	17,023	23	17,046
Deer Collars	-	2,662	-	2,662
Helicopter Deer Capture/Surveys	-	26,190	-	26,190
Crow Wing Landfill	-	-	-	-
CWD Office Lease - Rushford	-	3,599	3,600	7,199
UMN CWD Testing (elk/moose)	-	480	60	540
Other	-	69,128	6,442	75,571
<b>Total</b>	<b>191,383</b>	<b>1,173,818</b>	<b>(295,509)</b>	<b>1,069,692</b>

\*\* Other includes Game and Fish Operating Account, Deer Management Account, Deer/Bear Account, Cervid Health Account, and Heritage Fund. Note: Credit in "Other" was a result of salary transfers to dedicated CWD appropriation.

Table 3. Detailed spending by expense type for Chronic Wasting Disease Appropriation, July 1, 2019, through June 30, 2021.

Expense Type	General Fund	Game and Fish- Emergency Response	Cervid Health- Adopt a Dumpster	Other**	Total Spend
Salary	750,126	573,839	-	663,246	1,987,211
CSU/UW CWD Sample Testing	448,076	53,679	-	120,395	622,151
USDA-Culling Contract	-	549,713	-	95,582	645,295
Travel/Fleet	90,070	268,658	124	127,195	486,047
Supplies	116,017	258,945	-	35,283	410,245
Dumpsters	100,098	262,765	49,876	6,947	419,686
Contracts: CWD Tissue Sampling	130,860	-	-	-	130,860
CWD Attitude Survey	-	142,000	-	-	142,000
Meat Processor/Taxidermists	70,884	117,740	-	-	188,624
Equipment	25,216	41,406	-	-	66,622
Printing & Advertising	51,426	84,820	-	1,731	137,977
Deer Collars	-	80,838	-	-	80,838
Helicopter Deer Capture/Surveys	-	101,028	-	5,112	106,140
Crow Wing Landfill	50,000	-	-	-	50,000
CWD Office Lease - Rushford	19,197	22,796	-	6,000	47,993
UMN CWD Testing (elk/moose)	1,896	480	-	60	2,435
Other	10,133	152,019	-	10,976	173,128
<b>Total</b>	<b>1,864,000</b>	<b>2,710,726</b>	<b>50,000</b>	<b>1,072,526</b>	<b>5,697,253</b>
<b>\$ Encumbered</b>	-	<b>48,785</b>	-	-	-
<b>% of Budget Spent</b>	<b>99.7%</b>	<b>96.8%</b>	<b>100.0%</b>	-	-
<b>% of Budget Encumbered</b>	<b>0.0%</b>	<b>1.7%</b>	-	-	-
<b>% of Budget Spent/Enc</b>	<b>99.7%</b>	<b>98.6%</b>	<b>100.0%</b>	-	-

\*\* Other includes Game and Fish Operating Account, Deer Management Account, Deer/Bear Account, Cervid Health Account, and Heritage Fund.

Figure 2. Locations of deer culled (n=542) during targeted efforts by USDA-WS in southeast and south metro areas of Minnesota, winter 2021.

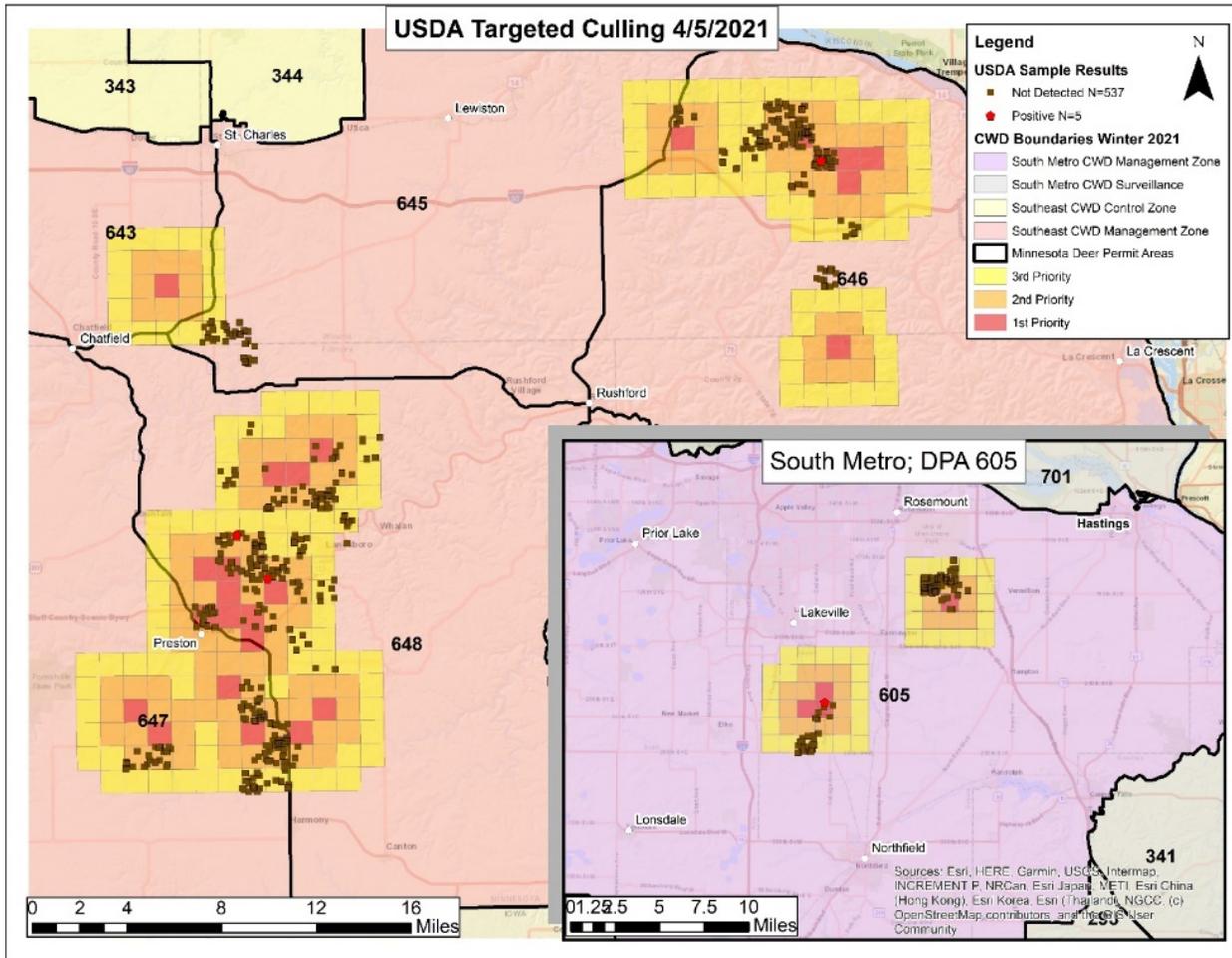


Figure 3. Deer permit areas for chronic wasting disease surveillance during fall 2021.

