



SURVEY OF SOUTHEAST MINNESOTA DEER HUNTERS

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INTRODUCTION

The Section of Wildlife in the Minnesota Department of Natural Resources, in cooperation with the Minnesota Cooperative Fish and Wildlife Research Unit at the University of Minnesota, conducted a survey of southeast Minnesota deer hunters' values, beliefs, attitudes and behaviors associated with deer hunting, chronic wasting disease (CWD), and chronic wasting disease management during the fall and winter of 2018-19. The primary objectives of this study were to 1) assess the acceptability of current and potential management actions and programs proposed to address the threat of chronic wasting disease in the region, 2) evaluate support for financial and non-financial incentives to maintain participation and improve hunting access in the chronic wasting disease management zone, and 3) determine hunters' perceived risks from CWD.

METHODS

Sampling

Two strata were identified as the sample frame for the study: 1) firearms deer hunters who indicated at the time of license purchase that the southeast CWD management zone (deer permit area 603) was their primary deer hunting area, and 2) firearms deer hunters who indicated that one of the 300-series deer permit areas surrounding the southeast CWD management zone was their primary deer hunting area. A census of 603 hunters was conducted ($n=2,195$), and a random sample of 2,800 firearms deer hunters was drawn from the hunters who indicated that they would hunt in 300-series permit areas.

Data Collection

Data were collected following the recommendations of Dillman (2000). Participants were sent a survey packet containing a personalized cover letter, questionnaire and a self-addressed business-reply envelope. Three full survey packets were distributed to non-respondents at roughly 3-week intervals. Following distribution of the third survey packet, a shortened survey was sent to individuals who had not yet responded to assess non-response bias.

RESULTS

Response Rates

A total of 2,086 usable questionnaires were returned (603 = 880, and 300 series = 1,206). This represents an effective response rate of 42% after correcting for non-deliverable addresses and invalid responses. Results presented here are from a non-weighted combined sample.

Support for Potential and Existing Strategies to Manage CWD

Hunters support for existing and potential regulatory options, season structures, and bag limits was quite varied. The current use of professional culling as a tool to manage CWD was opposed by slightly more than 60% of hunters. Alternatively, over 80% of hunters were either neutral or supportive of allowing the take of one buck per season in the CWD management zone. There was also strong support for expanding the venison donation program, banning recreational deer feeding, and prohibiting carcass movement as CWD management tools. So-called earn-a-buck strategies where hunters would be required to harvest an antlerless deer before taking a buck were opposed by most hunters surveyed. Other strategies saw a more even split between support and opposition (Table 1).

Table 1. SE Minnesota hunters' support for current and potential CWD regulations and strategies

	Oppose (%)	Neutral (%)	Support (%)
Professional culling of deer in local areas after the deer season.	61.4	20.7	17.9
Allow hunters to take unlimited bucks in the disease management zone.	46.7	19.6	33.6
Allow hunters to take a buck per season (archery, firearms, muzzleloader).	19.0	20.2	60.8
Implement a ban on recreational deer feeding.	13.3	22.2	64.5
Expanded venison donation program.	5.3	29.0	65.6
Expand the size of the disease management zone.	27.4	39.6	33.1
Hunters must take one antlerless deer before taking a buck (earn-a-buck).	55.0	20.9	24.1
Hunters must take more than one antlerless deer before taking a buck.	74.1	18.2	7.8
Series of short (3-day) post-muzzleloader season hunts.	31.3	39.4	29.3
Longer early antlerless season (currently 4 days).	29.0	40.6	30.3
Longer youth season.	21.7	35.4	42.9
Muzzleloader weekend in October.	37.1	34.3	28.5
Free permits to landowners to use before the regular deer season.	28.6	24.6	46.8
Prohibit export of all carcasses from the CWD management zone, including fawns.	21.4	28.6	50.0
Hunters having the ability to earn extra buck tags by taking multiple does (2 or 3 does earns an extra buck).	46.6	25.4	28.0
Reduce free landowner license acreage requirements (currently 80 acres).	22.0	38.4	39.7
Create hunter/landowner database to connect hunters to landowners who allow hunting access.	18.5	33.9	47.5

Support for Financial and Non-Financial Incentives for Harvest and Access

Hunters, on average, did not support the use of financial incentives to motivate participation, access or harvest in the CWD management zone. Roughly 50% of hunters opposed paying landowners for hunting access, paying landowners that have CWD positive deer shot on their property, or paying landowners for every deer shot

on their property. Similarly, a near majority of hunters opposed offering financial payments to hunters that shoot CWD positive deer. Hunters were more evenly split between opposition and support on the use of non-financial incentives that motivate deer harvest in the CWD management zone including offering free deer licenses or extra tags to hunters that shoot CWD positive deer (Table 2).

Table 2. SE Minnesota hunters' support for financial and non-financial incentives

	Oppose (%)	Neutral (%)	Support (%)
Pay landowners to allow people to hunt their property.	48.4	26.3	25.3
Pay landowners for CWD positive deer killed on their property.	47.4	27.3	25.3
Pay hunters for CWD positive deer they kill.	48.6	25.9	25.5
Expanded venison donation program where meat is distributed to local communities.	8.0	26.8	65.2
Lifetime deer hunting license for killing a CWD positive deer.	51.4	25.0	23.6
For each deer killed in the CWD zone, receive one lottery ticket for entry into a drawing to win equipment.	41.8	25.0	33.3
Pay landowners for every deer shot on their property.	57.2	25.1	17.8
Work with Legislature to develop program to give tax breaks to landowners who allow public hunting.	32.3	25.2	42.5
Financial contribution to a charity of your choice for killing a CWD positive deer.	42.5	35.6	21.9
Provide hunters with an extra buck tag for killing a CWD positive buck.	31.6	22.2	46.3
Provide hunters with an extra buck tag for killing <u>any</u> CWD positive deer.	35.3	24.7	40.0
Provide free deer license for the following year if hunter provides a CWD positive deer.	31.6	24.4	44.1

Perceived Risks from CWD

Hunters perceived a variety of risks from CWD. Of note, hunters were particularly sensitive to the potential for deer and elk farms to spread CWD, with 33.5% indicating that they are “extremely concerned.” Hunters, on average, were not particularly concerned about the risks that CWD poses to land values. Roughly 21% of hunters reported that they were either not at all concerned or extremely concerned that CWD will cause disease in them personally (Table 3).

Table 3. SE Minnesota hunters perceived risks from CWD

How concerned are you that CWD will...	Not at all concerned	2	3	4	5	6	Extremely concerned
...spread throughout the deer population <u>where you hunt</u> .	8.7	11.1	10.5	15.4	18.2	15.9	20.3
...dramatically reduce the deer population <u>where you hunt</u> .	10.3	10.6	12.0	14.9	15.1	17.2	19.9
...affect the health of the deer population <u>where you hunt</u> .	7.8	10.1	10.2	14.9	17.7	18.8	20.6
...have the potential to kill the entire deer population <u>where you hunt</u> .	19.8	13.3	11.7	11.8	11.0	11.7	20.6
...threaten your deer hunting opportunity.	10.8	9.3	10.1	14.0	14.8	16.8	24.2
...threaten the future of deer hunting for your children and grandchildren.	10.7	8.6	8.6	11.4	12.9	18.4	29.4
...affect the future existence of deer on the Minnesota landscape.	13.5	12.5	9.6	12.9	14.3	15.0	22.3
...spread to livestock.	18.9	15.7	10.8	15.0	11.2	11.8	16.6
...have economic impacts on businesses that depend on deer hunting.	13.2	12.0	11.8	18.7	16.3	15.1	13.1
...lead to declining land values.	31.0	17.0	12.0	15.3	8.1	7.9	8.8
...spread because of deer and elk farms.	10.0	8.9	7.3	12.5	11.6	16.2	33.5
...cause your family to stop eating deer meat.	18.4	14.3	11.1	17.4	12.3	12.6	14.0
...cause you to have concerns about eating deer meat.	14.5	12.3	9.4	16.4	14.6	16.4	16.4
...threaten your personal health or the health of my family.	16.8	14.7	9.1	13.7	12.4	12.3	21.1
...cause disease in humans.	17.6	15.8	8.3	12.7	11.2	11.6	22.9
...cause disease in you personally.	21.7	15.8	8.5	11.7	9.6	11.4	21.4

LITERATURE CITED

Dillman, D. (2000). Mail and internet surveys: The tailored design method. New York: Wiley & Sons, Inc.