



**West Central Prairie
Deer Goal Setting – Block G8
Landowner and Hunter Survey Results**



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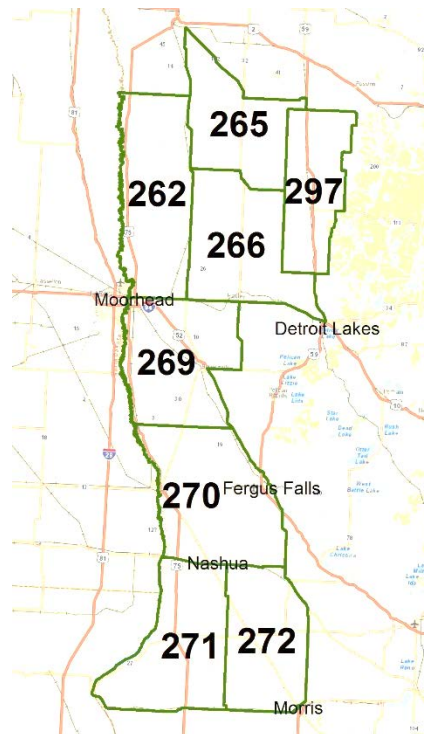
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Public Surveys for Deer Goal Setting

MN DNR periodically conducts stakeholder surveys to collect information about public desires and opinions regarding specific natural resource management issues. Survey recipients are selected randomly and provide a statistically representative sample of stakeholder opinions. Thus, these surveys differ from annual public input opportunities which may include some bias according to self-selection of interested parties. In 2015, both hunters (Appendix A) and landowners (Appendix B) in this goal setting block were surveyed; the resulting information provides a basis for the 2015 deer population goal setting process. This report covers goal block 8, West Central Prairie.



Methods

Hunters and private landowners were surveyed using a mixed mode design that included two waves of letters requesting completion online; the third and fourth wave was mailed using a self-administered mail back questionnaire (Appendices A and B).

For the hunter survey, we randomly selected 2,600 adult 2014 deer license holders who indicated they intended to hunt in deer areas 262, 265, 266, 269, 270, 271, 272, or 297. A total of 123 surveys were undeliverable and we received 1,012 completed responses, which yielded an adjusted response rate of 41%. Landowner parcels were stratified into 4 acreages, 1) 2 – 19.9, 2) 20 – 79.9, 3) 80 – 319.9, and 4) 320+. We selected a simple random sample from strata 1 (n=637), strata 2 (n=616), strata 3 (n=610), and strata 4 (n=624). Overall, there were 177

undeliverable surveys; 751 completed landowner surveys were returned, yielding a 33% adjusted response rate. For both surveys, our error rate at the goal block level was approximately 3%.

Hunter Survey

Demographics

Nearly all respondents (94%) indicated they hunted during the 2014 firearm deer season. Overall 14% indicated they hunted during the archery season and 17% hunted muzzleloader. Firearm hunters spent an average of 5.2 days afield, compared to 5.9 for muzzleloader and 17.7 for archery hunters. Overall, individuals had hunted an average of 27 years in Minnesota and 20 years in the deer area they indicated they hunted most often. Overall, 89% of respondents were male and the average age was 49.9 (range = 19 – 93).

More than half of hunters did at least some of their hunting on their own private land (56%) or other private land that they do not own or lease (77%). More than half (58%) did at least some of their hunting on public land. Another 7.6% indicated they did at least some hunting on lands that they leased for deer hunting. Only 1.3% of respondents hunted exclusively on lands they leased for deer hunting. With respect to future populations; a majority expressed a desire for an increase in deer numbers, regardless of where they hunted (Table 1).

Population trends and perceptions about deer populations

Respondents were asked to indicate their perceptions on deer population trends over the last 5 years. Overall, 75% of respondents indicated there were fewer deer than 5 years ago, 8% indicated more, and 17% believed populations were the same (Table 2). We observed some differences among deer permit areas with deer area 297 was most likely to indicate populations had declined (91%), while respondents from deer area 271 were least likely to indicate that the population had declined (52%). Respondents were also asked for their perceptions of total deer population size as rated by 'too low', 'about right', or 'too high'. More than half (68%) believed the population was 'too low', 28% thought it was 'about right', and 5% indicated the population was 'too high'. We observed statistical differences among deer permit areas with similar patterns as described above (Table 3). Respondents were also asked to indicate their desires for future deer population densities and a majority (75%) wanted to see an increase in deer densities at some level (Table 4, Figure 1). A majority of respondents (82%) would shoot an antlerless deer if given the opportunity.

Table 1. Condensed table of desired deer population trends of hunters, by land type hunted.

Type of land hunted		Desired Population Trend		
		Decrease	No Change	Increase
Private land that I own	None	10%	15%	75%
	Some	7%	17%	76%
	Most	10%	17%	72%
	All	10%	19%	71%
Private land that I lease for hunting	None	9%	18%	73%
	Some	16%	4%	80%
	Most	5%	0%	95%
	All	11%	0%	89%
Private land that I do not own or lease	None	7%	18%	75%
	Some	6%	15%	79%
	Most	8%	14%	78%
	All	12%	18%	70%
Public land	None	12%	19%	69%
	Some	6%	17%	77%
	Most	3%	10%	88%
	All	5%	10%	85%

Table 2. Hunter perceptions of deer population trends over the last 5 years, by deer permit area.

Deer Area	Lower		The Same		Higher	
	N	Percent	N	Percent	N	Percent
262	59	67%	20	23%	9	10%
265	132	68%	45	23%	18	9%
266	140	83%	21	12%	7	4%
269	109	83%	12	9%	11	8%
270	79	79%	14	14%	7	7%
271	50	52%	27	28%	19	20%
272	81	75%	21	19%	6	6%
297	84	91%	6	7%	2	2%
Total	734	75%	166	17%	79	8%

Table 3. Hunter beliefs about current deer population densities, by deer area.

Deer Area	Too Low		About Right		Too High	
	N	Percent	N	Percent	N	Percent
262	46	51%	38	42%	6	7%
265	103	53%	73	38%	17	9%
266	127	75%	39	23%	4	2%
269	107	82%	19	15%	5	4%
270	78	78%	18	18%	4	4%
271	45	47%	44	46%	6	6%
272	74	67%	32	29%	4	4%
297	84	89%	9	10%	1	1%
Total	664	68%	272	28%	47	5%

Table 4. Deer population trend preferences for hunters, by deer permit area.

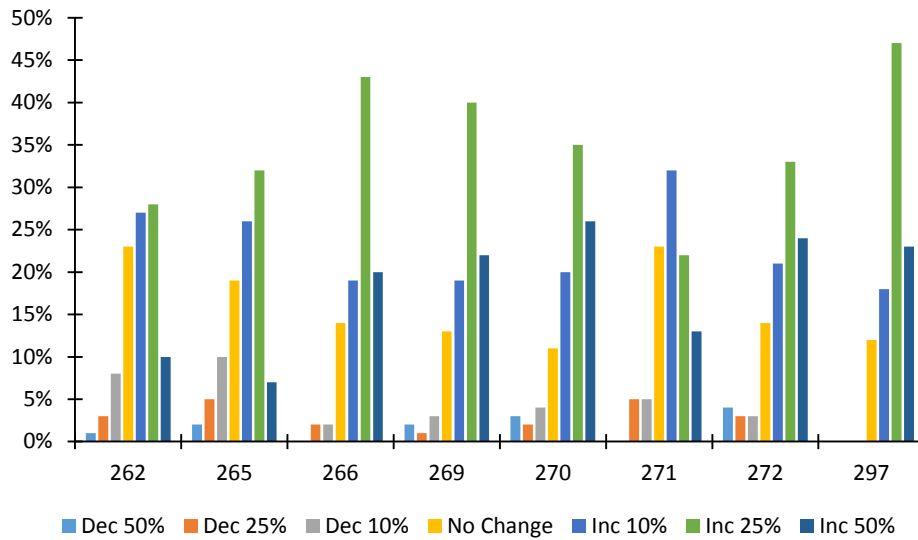
(a) By individual response

Deer Area	Dec 50%	Dec 25%	Dec 10%	No Change	Inc 10%	Inc 25%	Inc 50%
262	1%	3%	8%	23%	27%	28%	10%
265	2%	5%	10%	19%	26%	32%	7%
266	0%	2%	2%	14%	19%	43%	20%
269	2%	1%	3%	13%	19%	40%	22%
270	3%	2%	4%	11%	20%	35%	26%
271	0%	5%	5%	23%	32%	22%	13%
272	4%	3%	3%	14%	21%	33%	24%
297	0%	0%	0%	12%	18%	47%	23%
Total	2%	3%	5%	16%	22%	35%	17%

(b) Summarized by decrease, same, increase

Deer Area	Decrease	Same	Increase
262	12%	23%	64%
265	17%	19%	64%
266	5%	14%	82%
269	6%	13%	81%
270	9%	11%	80%
271	11%	23%	66%
272	9%	14%	77%
297	0%	12%	88%
Total	9%	16%	75%

Figure 1. Graphical representation of hunters' desired deer population trends.



Satisfaction

Hunters were asked to indicate their overall satisfaction with deer numbers, whether they heard about or saw legal bucks, their satisfaction with the number of legal bucks, quality of bucks, total number of deer and total number of antlerless deer. Nearly one-quarter (23%) were satisfied with current deer numbers and a majority (63%) indicated they were dissatisfied (Table 5). In total, less than half of respondents (35%) indicated they were satisfied with the total number of deer they saw while hunting (51% were not satisfied and 14% were neutral). Less than half (46%) were satisfied with the total number of antlerless deer they observed. About one-third (30%) were satisfied with the number of legal bucks observed; more than half were dissatisfied (54%). More than half (60%) indicated they heard about or saw legal bucks while hunting. More hunters (52%) were dissatisfied than satisfied (30%) with the quality of bucks observed (Table 6). Finally, we observed no real differences among land type hunted and satisfaction with total deer numbers; around half were not satisfied with the number of deer they saw while hunting (range = 38% - 65%) (Figure 2).

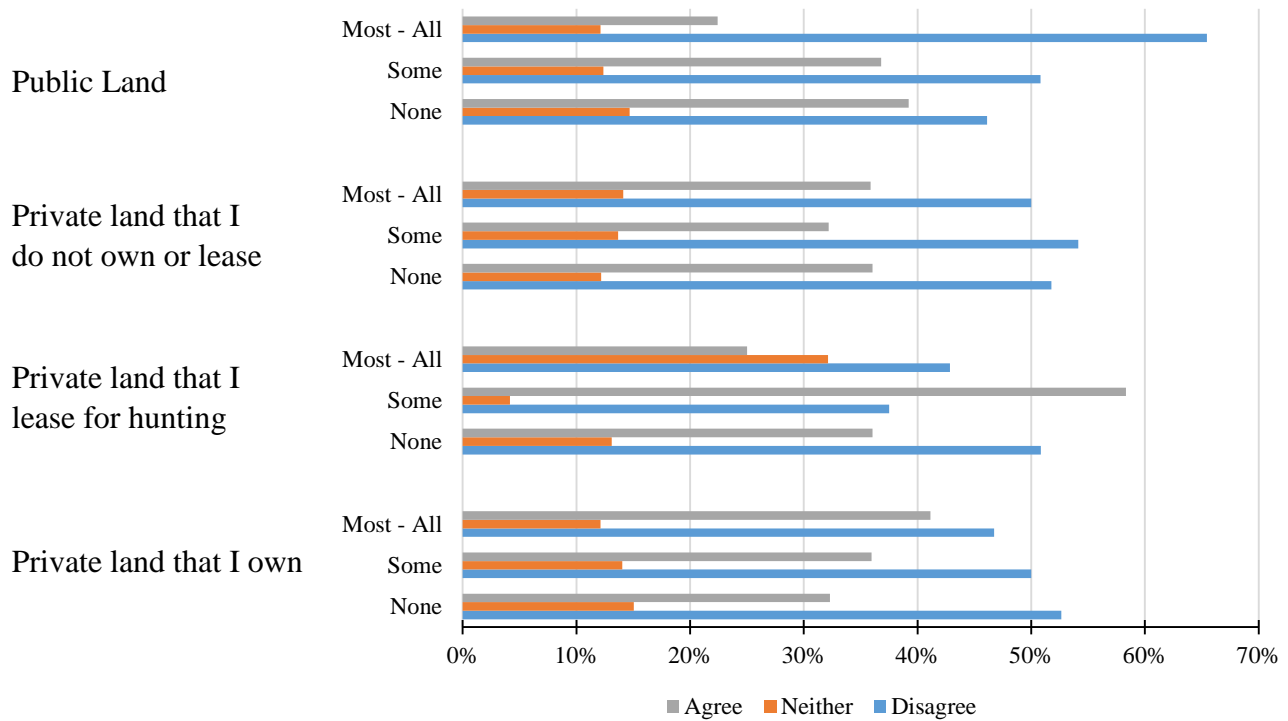
Table 5. Overall hunter satisfaction with total deer numbers, by deer area.

Deer Area	Dissatisfied		Neither		Satisfied	
	N	Percent	N	Percent	N	Percent
262	43	49%	20	23%	25	28%
265	101	52%	32	16%	61	31%
266	116	69%	22	13%	30	18%
269	94	71%	14	11%	24	18%
270	68	67%	11	11%	22	22%
271	49	51%	11	11%	36	38%
272	69	63%	17	16%	23	21%
297	75	81%	10	11%	8	9%
Total	615	63%	137	14%	229	23%

Table 6. Hunter satisfaction with number and quality of bucks, antlerless deer, and total deer numbers, by area.

		Deer Area								
		262	265	266	269	270	271	272	297	Total
I was satisfied with the number of legal bucks	Disagree	53%	48%	57%	58%	47%	45%	61%	68%	54%
	Neither	15%	17%	18%	18%	16%	16%	13%	15%	16%
	Agree	32%	35%	25%	24%	36%	40%	26%	16%	30%
I was satisfied with the quality of bucks	Disagree	45%	49%	54%	59%	43%	46%	51%	63%	52%
	Neither	26%	16%	22%	13%	23%	18%	17%	19%	19%
	Agree	28%	34%	24%	28%	33%	36%	31%	19%	30%
I heard about or saw legal bucks while hunting	Disagree	17%	20%	31%	29%	36%	23%	24%	40%	27%
	Neither	9%	13%	13%	14%	9%	14%	11%	17%	13%
	Agree	74%	67%	56%	56%	55%	63%	65%	43%	60%
I was satisfied with the total number of antlerless deer	Disagree	27%	26%	42%	46%	46%	26%	40%	53%	38%
	Neither	16%	18%	14%	17%	14%	15%	20%	15%	16%
	Agree	57%	56%	44%	36%	40%	59%	41%	32%	46%
I was satisfied with the total number of deer I saw while hunting	Disagree	38%	36%	58%	61%	58%	43%	57%	67%	51%
	Neither	20%	14%	13%	10%	9%	15%	16%	13%	14%
	Agree	42%	50%	30%	29%	33%	43%	27%	20%	35%

Figure 2. Hunter satisfaction with total number of deer seen, based on land type hunted.



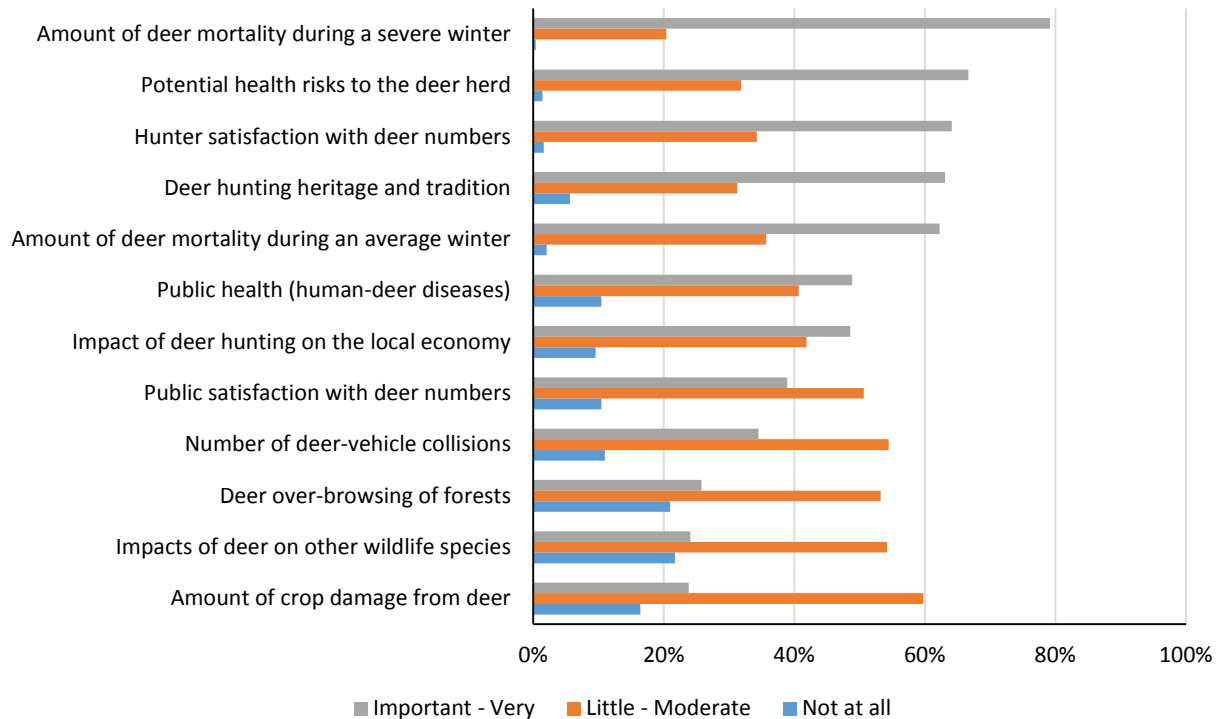
Consideration when setting deer population goals

Respondents were also asked to rate the importance of 12 items when setting deer population goals. They were expressed as items that respondents could consider as relatively important when setting deer population goals. The scale ranges from ‘not at all important’ to ‘very important’ and covered a range of items that would lead to management for either higher or lower deer populations. Overall, respondents viewed severe winter mortality, health risks to deer, and hunter satisfaction as the 3 most important items. The amount of crop damage, impacts on other species, and deer over-browsing of forests were the 3 lowest variables (Table 7, Figure 3).

Table 7. Items that hunters believed should be important when considering setting deer population goals.

Item	Not				
	at all	A little	Moderately	Important	Very
Amount of deer mortality during an average winter	2%	9%	27%	45%	18%
Amount of deer mortality during a severe winter	0%	6%	14%	41%	38%
Potential health risks to the deer herd	1%	9%	23%	45%	22%
Public health (human-deer diseases)	10%	18%	23%	27%	22%
Amount of crop damage from deer	16%	29%	30%	17%	7%
Number of deer-vehicle collisions	11%	24%	31%	23%	12%
Deer over-browsing of forests	21%	23%	31%	21%	5%
Impacts of deer on other wildlife species	22%	26%	28%	20%	4%
Deer hunting heritage and tradition	6%	10%	21%	31%	32%
Hunter satisfaction with deer numbers	2%	9%	25%	36%	28%
Public satisfaction with deer numbers	10%	21%	30%	26%	13%
Impact of deer hunting on the local economy	10%	17%	25%	31%	17%

Figure 3. Graphical importance of items that should be considered when setting deer population goals as defined by hunters. Responses were consolidated into 3 groups and ranked by relative importance from low to high.



Landowner Survey

Demographics

We received 174, 189, 188, and 200 responses from the 4 strata, respectively. In total, 43% of respondents indicated they hunted deer in Minnesota during the 2014 deer season; similar percentages were reported for 2012 (45%) and 2013 (44%). Since those percentages of landowners that hunted did not vary, tables that describe hunter attitudes are based off whether or not they hunted in 2014 only. By stratum, a higher proportion of respondents who owned 20 – 79.9 acres indicated they hunted (55%), as compared to other landowners (2-19.9: 38%; 80 – 319.9: 40%; 320+: 38%). Overall, individuals had hunted an average of 33 years. Overall, 82% of respondents were male and the average age was 60.8 (range = 25 – 92).

Hunting patterns

A majority of landowners did most (23%) or all (43%) of their hunting on their own private land. About half of all landowners did at least some hunting on public land (47%), while 57% hunted private land they did not own or lease. Only 9% hunted on private land that they leased for hunting. A majority of hunting landowners expressed a desire for an increase in deer numbers, except for landowners who did all of their hunting on private land they leased for hunting (33%) (Table 8).

Two-thirds (69%) of landowners indicated they allowed hunting on their property. As expected, individuals with smaller parcels allowed hunting at lower rates (47%) than landowners with at least 20 acres (range = 69% - 80%). Overall, only 2% (n=10) of landowners indicated they leased their property for hunting. With respect to who is allowed to hunt, 45% indicated family members, 41% indicated friends and neighbors, and 9% allowed strangers who asked permission.

Reported damage from deer

The percentage of landowners who had acreage in crops (e.g., row crops, small grains, orchards, vegetables) increased with stratum (range = 64% - 93%). The percentage of respondents who owned residential properties decreased with stratum (range = 78% - 91%), while ownership of woodlands varied among stratum (range = 65% - 80%) (Figure 4). Among landowners who owned cropland, about one-quarter (23%) indicated that they experienced damage to their crops. Landowners who owned at least 320 acres were most likely to indicate they had damage to their crops (28%). A smaller percentage of respondents indicated they had residential (12%) or forest (5%) damage from deer. With respect to residential damage, landowners who owned at least 320 acres were more inclined to indicate damage from deer (Figure 5).

We observed no statistical differences among severity of damage by strata based on land type (crop, woods, residential). Essentially, damage due to deer was typically categorized as ‘negligible’ or ‘minor’, regardless of parcel size (Table 9). We did observe statistical differences among severity of damage by deer permit areas for each land type (crop, woods, or residential) (Figure 6).

Table 8. Condensed table of desired deer population trends for landowners that hunted by land type hunted.

Type of land hunted		Desired Population Trend		
		Decrease	No Change	Increase
Private land that I own	None	6%	11%	83%
	Some	6%	24%	69%
	Most	7%	15%	78%
	All	7%	26%	67%
Private land that I lease for hunting	None	5%	22%	73%
	Some	25%	25%	50%
	Most	0%	0%	100%
	All	0%	67%	33%
Private land that I do not own or lease	None	7%	22%	70%
	Some	6%	22%	72%
	Most	2%	24%	73%
	All	3%	10%	86%
Public land	None	7%	24%	69%
	Some	6%	11%	82%
	Most	0%	24%	76%
	All	10%	20%	70%

Figure 4. Percent of landowners who owned crops, woods, and residential acreage.

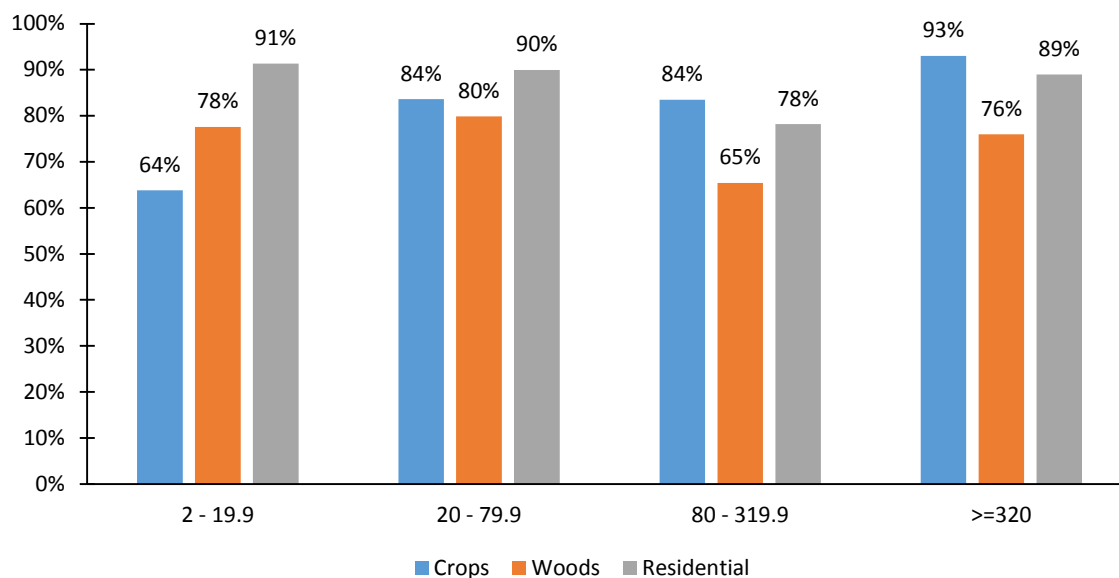


Figure 5. Percent of landowners who indicated they had damage from deer.

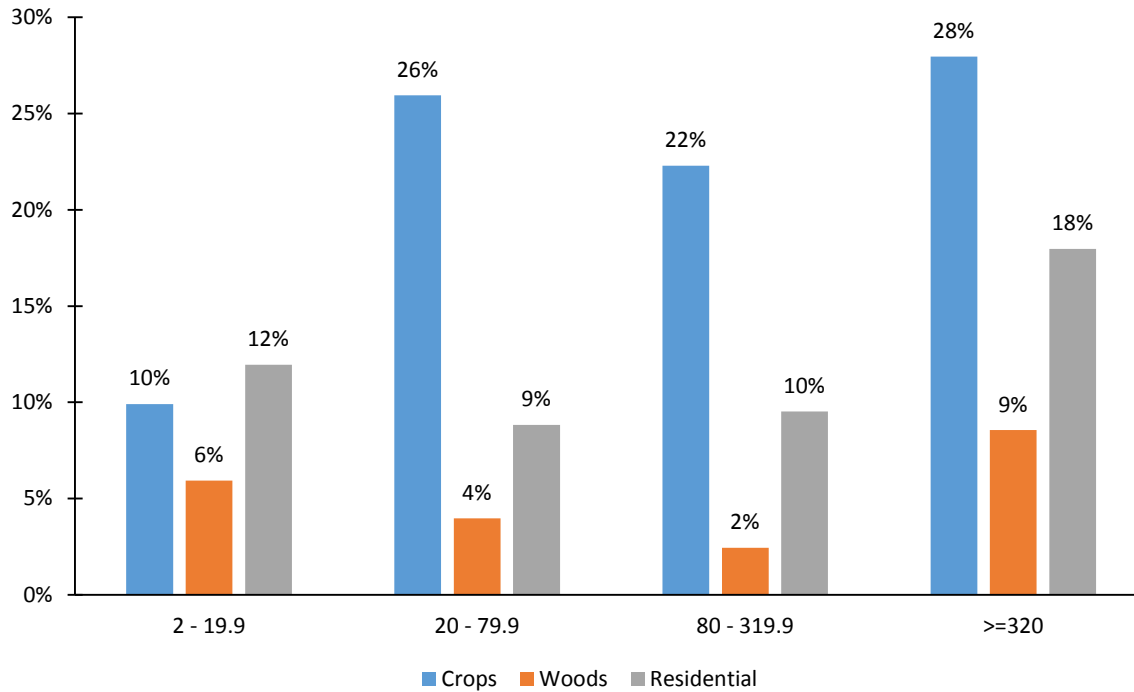
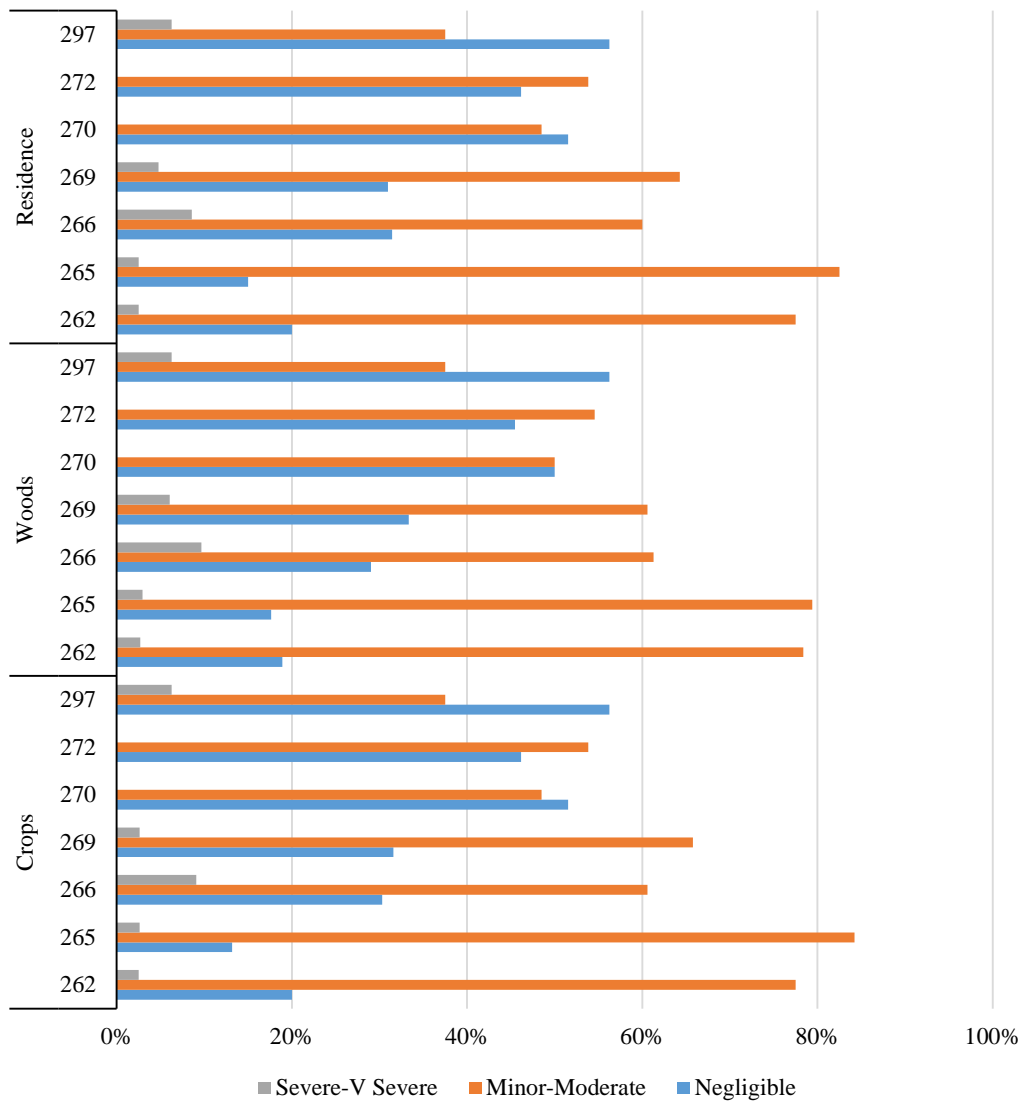


Table 9. Self-described damage caused by deer for crops, woods, and residential land types.

		Strata				Total
		2-19.9	20-70.9	80-319.9	>=320	
Crops	Negligible	23%	24%	40%	33%	31%
	Minor	46%	57%	42%	50%	50%
	Moderate	27%	14%	17%	13%	16%
	Severe	4%	5%	0%	1%	2%
	Very Severe	0%	0%	0%	2%	1%
Woods	Negligible	22%	27%	37%	36%	31%
	Minor	44%	52%	49%	48%	48%
	Moderate	28%	16%	14%	12%	16%
	Severe	6%	5%	0%	1%	3%
	Very Severe	0%	0%	0%	3%	1%
Residential	Negligible	24%	27%	38%	34%	31%
	Minor	47%	54%	44%	49%	49%
	Moderate	24%	14%	19%	14%	16%
	Severe	6%	5%	0%	1%	3%
	Very Severe	0%	0%	0%	2%	1%

Figure 6. Reported damage to crops, woods, and residential acreage, by deer permit area. Deer permit area 271 was excluded due to low response.



Population trends and perceptions about deer populations

Respondents were asked to indicate their perceptions of deer population trends over the last 5 years. Overall, 66% (58% non-hunters, 75% hunters) of respondents indicated there were fewer deer than 5 years ago, 10% (12% non-hunters, 8% hunters) indicated more, and 24% (31% non-hunters, 17% hunters) believed populations were the same. We found statistical differences among deer areas in attitudes toward population trends (Table 10). Respondents were also asked for their perceptions of total deer population size as rated by ‘too low’, ‘about right’, or ‘too high’. Non-hunting landowners were more likely to indicate the deer population was ‘about right’ (58% vs 36%), while hunters were more likely to indicate populations were ‘too low’ (60% vs 32%). Non-hunters were more likely to indicate the population was ‘too high’ (4% hunters, 10% non-hunters). Similar patterns were detected by deer area in that hunting

landowners were more likely to express different population desires than non-hunting landowners (Table 11). Respondents were also asked to indicate their desires for future deer population densities and 54% wanted to see an increase in deer densities at some level (Table 12; Figure 7). We also observed clear differences between hunting and non-hunting landowners with hunting landowners indicating stronger preferences for higher deer populations (Table 13; Figure 8).

Table 10. Perceptions of landowner deer population trends over the last 5 years, by deer area.

Deer Area	Lower		The Same		Higher	
	N	Percent	N	Percent	N	Percent
262	57	55%	32	31%	15	14%
265	49	54%	29	32%	13	14%
266	83	68%	27	22%	12	10%
269	86	72%	27	22%	7	6%
270	80	62%	37	29%	11	9%
271	6	67%	2	22%	1	11%
272	33	77%	4	9%	6	14%
297	53	82%	8	12%	4	6%
Total	447	66%	166	24%	69	10%

Table 11. Landowner beliefs about current population densities, by deer area and whether or not they hunted.

Hunt	Deer Area	N	Too low	N	About right	N	Too high
No (53%)	262	15	22%	42	62%	11	16%
	265	10	28%	18	50%	8	22%
	266	21	33%	37	59%	5	8%
	269	24	35%	40	59%	4	6%
	270	26	37%	42	59%	3	4%
	271	1	20%	4	80%	0	0%
	272	7	35%	10	50%	3	15%
	297	9	41%	12	55%	1	5%
	Sum	113	32%	205	58%	35	10%
Yes (47%)	262	13	37%	17	49%	5	14%
	265	26	49%	22	42%	5	9%
	266	29	50%	28	48%	1	2%
	269	37	73%	14	27%	0	0%
	270	40	74%	14	26%	0	0%
	271	2	50%	2	50%	0	0%
	272	16	73%	5	23%	1	5%
	297	29	71%	12	29%	0	0%
	Sum	192	60%	114	36%	12	4%
Total	262	28	27%	59	57%	16	16%
	265	36	40%	40	45%	13	15%
	266	50	41%	65	54%	6	5%
	269	61	51%	54	45%	4	3%
	270	66	53%	56	45%	3	2%
	271	3	33%	6	67%	0	0%
	272	23	55%	15	36%	4	10%
	297	38	60%	24	38%	1	2%
	Sum	305	45%	319	48%	47	7%

Table 12. Preferred landowner population trends, by deer area.

(a) By individual response

Deer Area	Dec 50%	Dec 25%	Dec 10%	No Change	Inc 10%	Inc 25%	Inc 50%
262	2%	7%	6%	42%	27%	8%	8%
265	6%	8%	4%	33%	21%	18%	10%
266	0%	5%	7%	40%	20%	18%	10%
269	2%	1%	6%	29%	21%	25%	17%
270	1%	4%	4%	36%	14%	30%	11%
271	0%	0%	11%	56%	33%	0%	0%
272	2%	5%	5%	29%	24%	20%	15%
297	2%	0%	0%	23%	18%	30%	27%
Total	2%	4%	5%	35%	21%	21%	13%

(b) Summarized by decrease, stay the same, increase

Deer Area	Decrease	Same	Increase
262	15%	42%	43%
265	18%	33%	49%
266	11%	40%	48%
269	8%	29%	63%
270	9%	36%	55%
271	11%	56%	33%
272	12%	29%	59%
297	2%	23%	75%
Total	11%	35%	54%

Figure 7. Graphical representation of desired deer population trends for landowners.

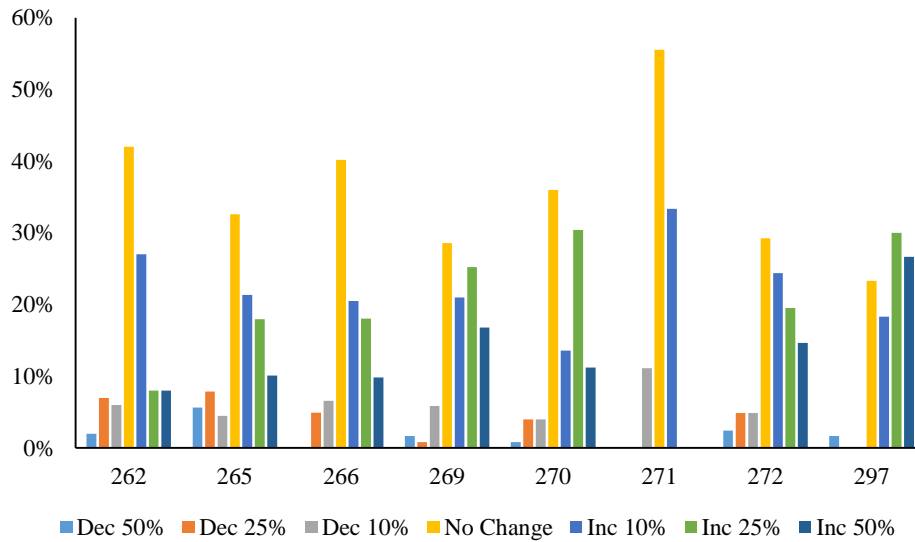
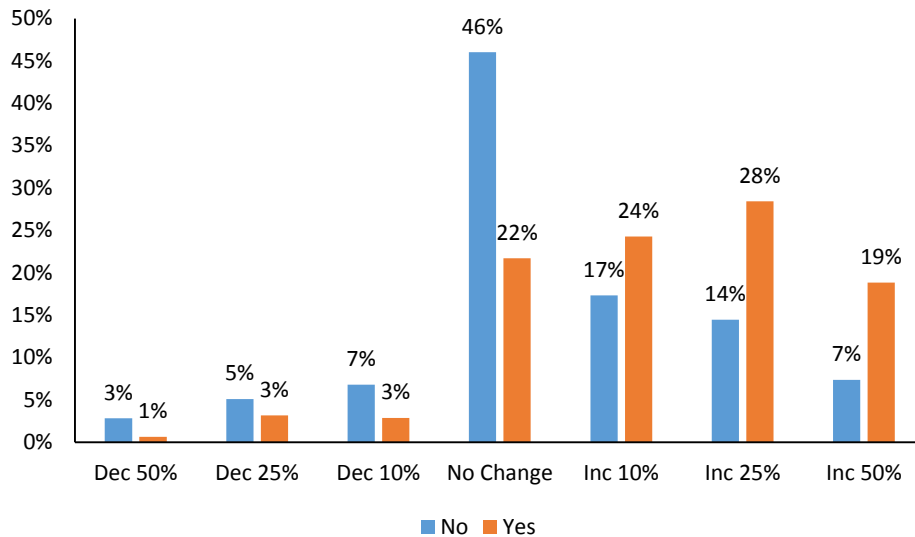


Table 13. Desired deer population trends for landowners, by deer area and whether or not they hunted.

Hunt	Deer Area	Dec 50%	Dec 25%	Dec 10%	No Change	Inc 10%	Inc 25%	Inc 50%
No (53%)	262	3%	6%	8%	46%	25%	3%	9%
	265	8%	11%	3%	43%	19%	11%	5%
	266	0%	8%	6%	50%	19%	12%	5%
	269	3%	0%	10%	41%	16%	21%	9%
	270	1%	4%	7%	51%	8%	24%	4%
	271	0%	0%	20%	60%	20%	0%	0%
	272	5%	10%	5%	45%	15%	15%	5%
	297	5%	0%	0%	38%	24%	10%	24%
	Total		3%	5%	7%	46%	17%	14%
Yes (47%)	262	0%	9%	3%	34%	31%	17%	6%
	265	4%	6%	6%	25%	23%	23%	13%
	266	0%	2%	7%	29%	22%	24%	16%
	269	0%	2%	0%	12%	27%	31%	27%
	270	0%	4%	0%	17%	20%	39%	20%
	271	0%	0%	0%	50%	50%	0%	0%
	272	0%	0%	5%	14%	33%	24%	24%
	297	0%	0%	0%	15%	15%	41%	28%
	Total		1%	3%	3%	22%	24%	29%

Figure 8. Graphical representation of landowner desires for future deer populations, by whether or not they hunted.



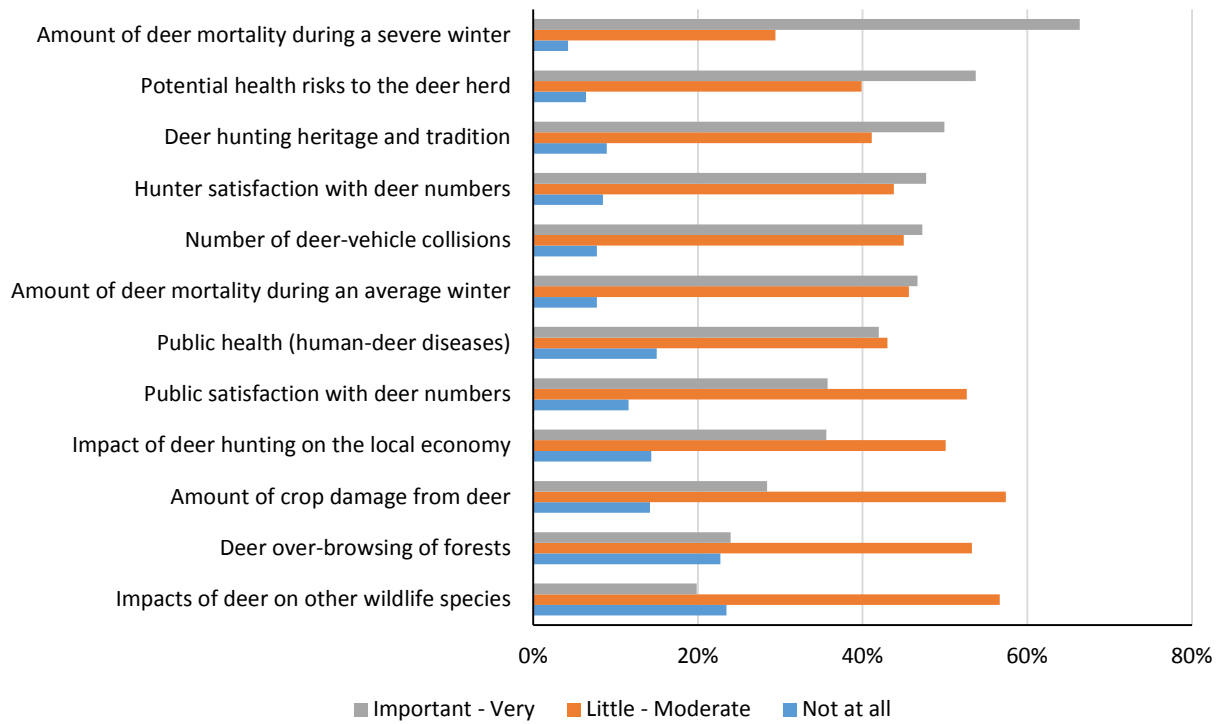
Consideration when setting deer population goals

Respondents were also asked to rate the importance of 12 items when setting deer population goals. The scale ranges from ‘not at all important’ to ‘very important’ and covered a range of items that would lead to both higher and lower deer populations. Deer mortality during a severe winter, potential health risks, and hunting tradition were the 3 most important considerations for landowners. Impacts on other species, deer over-browsing of forests, and the amount of crop damage from deer were the 3 lowest variables (Table 14; Figure 9).

Table 14. Importance of items landowners indicated should be considered when setting deer population goals.

Item	Relative Importance				
	Not at all	A little	Moderately	Important	Very
Amount of deer mortality during an average winter	8%	15%	30%	35%	11%
Amount of deer mortality during a severe winter	4%	10%	19%	39%	28%
Potential health risks to the deer herd	6%	14%	26%	33%	20%
Public health (human-deer diseases)	15%	22%	22%	24%	18%
Amount of crop damage from deer	14%	28%	29%	22%	7%
Number of deer-vehicle collisions	8%	20%	25%	30%	17%
Deer over-browsing of forests	23%	26%	27%	20%	4%
Impacts of deer on other wildlife species	23%	27%	30%	17%	3%
Deer hunting heritage and tradition	9%	15%	26%	28%	22%
Hunter satisfaction with deer numbers	8%	16%	28%	32%	16%
Public satisfaction with deer numbers	12%	19%	34%	28%	8%
Impact of deer hunting on the local economy	14%	22%	28%	25%	11%

Figure 9. Graphical importance of items that should be considered when setting deer population goals as defined by landowners. Responses were consolidated into 3 groups and ranked from low to high by highest importance.



2015 Survey of Minnesota Deer Hunters: Hunters Opinions and Activities

The Minnesota Department of Natural Resources will be evaluating deer population goals in northwestern Minnesota this year. An important component of this project is to collect information from deer hunters regarding their opinions towards deer populations. You have been selected at random to participate in this survey. Please take a few moments to answer the questions below. Your responses will help guide deer population goals in the area you hunt; we are also collecting additional information on hunter perspectives regarding deer management in general. This survey should take less than 20 minutes to complete.

1. Please check the boxes below to report if you hunted deer in Minnesota during the 2012, 2013 or 2014 Minnesota deer season. *(Please check all that apply).*

2012 | 2013 | 2014

I did not hunt deer any of these years → **PLEASE SKIP TO QUESTION 13**

2. Minnesota allows people to hunt deer during all 3 seasons. For the most recent year you hunted, which seasons did you participate? Please mark 'Yes' if you hunted a season and also estimate the number of days you scouted and hunted.

Season	Yes	No	If Yes, Number of Days Scouting	If Yes, Number of Days Hunting
Archery	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Firearm	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Muzzleloader	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____

3. Which **ONE** deer permit area did you hunt most often during the most recent deer season you hunted?

201 | 203 | 208 | 209 | 213 | 214 | 215 | 218 | 239 | 240 | 256 |

257 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 |

270 | 271 | 272 | 273 | 276 | 277 | 297 I hunted a permit area not listed

4. If you did not hunt one of the permit areas listed above, please tell us which one you hunted most often:

_____ Area Number

5. Including 2014, how many years have you hunted deer in the permit area you hunt most often?

_____ Years

6. Including 2014, how many years have you been hunting deer in Minnesota? _____ Years

7. How much of your deer hunting did you do on each of the following types of land during your most recent deer hunting season? *(Please circle one item from each row.)*

	None	Some	Most	All
Private land that I own	1	2	3	4
Private land that I lease for hunting	1	2	3	4
Private land that I do not own or lease	1	2	3	4
Public land	1	2	3	4

8. Please indicate if there are any deer harvest restrictions on the property you hunt most often.

- Antlerless harvest is restricted, but hunters can take any legal buck
- Buck harvest restricted to large antlered bucks, but hunters can take any antlerless deer
- Buck harvest restricted to large antlered bucks, and antlerless harvest is also restricted
- No restrictions on the type of deer that can be harvested
- Other (please explain): _____

9. Please indicate whether you agree or disagree with the following statements regarding your most recent deer hunt. (Please circle one number for each statement below).

	Strongly Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Strongly Agree
I was satisfied with the number of legal bucks	1	2	3	4	5
I was satisfied with the quality of bucks	1	2	3	4	5
I heard about or saw legal bucks while hunting	1	2	3	4	5
I was satisfied with the number of antlerless deer	1	2	3	4	5
I was satisfied with the number of deer I saw while hunting	1	2	3	4	5

10. Will you shoot an antlerless deer if given the opportunity?

- Yes No

11. Over the past 5 years, what trend have you seen in the deer population in the permit area you hunt most often?

- Much fewer deer now than 5 years ago
- Slightly fewer deer now than 5 years ago
- About the same number of deer as 5 years ago
- Slightly more deer now than 5 years ago
- Many more deer now than 5 years ago

12. In thinking about the deer permit area you hunt, please indicate your overall satisfaction with current deer numbers.

- Very Dissatisfied
- Slightly Dissatisfied
- Neither Dissatisfied nor Satisfied
- Slightly Satisfied
- Very Satisfied

13. How much importance should we assign to each of the following considerations when setting deer population goals?
 (Please circle one number for each statement below).

	Not at all Important	A little Important	Moderately Important	Important	Very Important
Amount of deer mortality during an average winter	1	2	3	4	5
Amount of deer mortality during a severe winter	1	2	3	4	5
Potential health risks to the deer herd	1	2	3	4	5
Public health (human-deer diseases)	1	2	3	4	5
Amount of crop damage from deer	1	2	3	4	5
Number of deer-vehicle collisions	1	2	3	4	5
Deer over-browsing of forests	1	2	3	4	5
Impacts of deer on other wildlife species	1	2	3	4	5
Deer hunting heritage and tradition	1	2	3	4	5
Hunter satisfaction with deer numbers	1	2	3	4	5
Public satisfaction with deer numbers	1	2	3	4	5
Impact of deer hunting on the local economy	1	2	3	4	5

14. Please identify up to 3 other factors that you believe are important and should be considered when setting deer population goals.

- 1) _____
- 2) _____
- 3) _____

15. In thinking about the deer permit area you hunt, would you say the deer population is,

- Much too Low Too Low About Right Too High Much too High

16. In thinking about the property you hunt and the surrounding area, at what level do you think the deer population should be managed? (Please circle one).

- | | | | | | | |
|-------------------------------|-------------------------------|-------------------------------|--------------|-------------------------------|-------------------------------|-------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Decrease
Population
50% | Decrease
Population
25% | Decrease
Population
10% | No
Change | Increase
Population
10% | Increase
Population
25% | Increase
Population
50% |
| (Significant) | (Moderate) | (Slight) | | (Slight) | (Moderate) | (Significant) |

17. To what extent would you support or oppose a regulation that would increase the proportion of antlered bucks in the deer area you hunt most often?

- Strongly Oppose
- Slightly Oppose
- Neither Oppose nor Support
- Slightly Support
- Strongly Support

18. Please let us know how you feel about the Minnesota Department of Natural Resources. *(Please circle one response for each of the following statements.)*

	Strongly Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Strongly Agree
The MnDNR does a good job of managing deer in Minnesota.	1	2	3	4	5
When deciding about deer management in Minnesota, the MnDNR will be open and honest in the things they do and say.	1	2	3	4	5
The MnDNR can be trusted to make decisions about deer management that are good for the resource.	1	2	3	4	5
The MnDNR will make decisions about deer management in a way that is fair.	1	2	3	4	5
The MnDNR has deer managers and biologists who are well-trained for their jobs.	1	2	3	4	5
The MnDNR listens to the concerns of deer hunters.	1	2	3	4	5

19. How many years have you lived in Minnesota _____ Years

20. What is your gender?

Male Female

21. What is your age? _____

22. What is the highest level of education you have completed? *(Check one.)*

- | | |
|--|---|
| <input type="checkbox"/> Grade school | <input type="checkbox"/> Some college |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Four-year college (bachelor's) degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Some graduate school |
| <input type="checkbox"/> Some vocational or technical school | <input type="checkbox"/> Graduate (master's or doctoral) degree |
| <input type="checkbox"/> Vocational or technical school (associate's) degree | |

23. Do you have access to the internet at home or another location?

Yes No

If you would be willing to respond to additional questions about deer management and hunting in Minnesota and are willing to provide your email address, please write it below. We will only use your email address for research related to deer management and will not share it with anyone.

E-mail address: _____

I do not have an e-mail address

2015 Survey of Minnesota Landowners: Preference for Deer Management and Management Processes

The Minnesota Department of Natural Resources will be evaluating deer population goals in northwestern Minnesota this year. An important component of this project is to collect information from landowners regarding their opinions towards deer populations and land management. We are also seeking input on public preferences regarding participation in management decisions. You have been selected at random to participate in this survey. Please take a few moments to answer the questions below. This survey should take less than 20 minutes to complete. Your responses will help guide deer population goals in the area you own land and help inform public engagement in general.

1. How many total acres did you own and/or lease at the end of 2014?
 _____ Acres Owned _____ Acres Leased

2. Please make a “rough” estimate as to how many acres of your property (owned and leased) are in each of the following categories. Please also estimate the percentage of that land type you have enrolled in a State or Federal Conservation Program.

Land Type	Acres Owned	Acres Leased	% Enrolled in Conservation Program
Private Residence (house, lawns, associated buildings)			%
Woodlands (natural forest or tree plantings)			%
Brushland (including abandoned, overgrown fields)			%
Hayfields, Pasture, or Grassland			%
Wetlands			%
Row Crops			%
Small Grains			%
Orchards or Vineyards			%
Vegetables or other Truck Crops			%
Prairie (Native or Restored)			%
Wildlife Food Plots			%
Other (please list: _____)			%

3. Did you experience deer damage to land that you own or leased in 2014?

- | | | | |
|-------------|------------------------------|-----------------------------|--|
| Crops | <input type="checkbox"/> Yes | <input type="checkbox"/> No | } IF ALL ARE <u>NO</u> PLEASE SKIP TO QUESTION 6 |
| Woodlands | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| Landscaping | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |

4. How would you describe the total amount of deer damage you experienced in 2014? (Check one)

- Negligible Minor Moderate Severe Very Severe

5. How would you compare the amount of deer damage you experienced in 2014 to what you experienced 5 years ago?
(Check one)
- Much less damage than 5 years ago
 - Slightly less damage than 5 years ago
 - About the same damage as 5 years ago
 - Slightly more damage than 5 years ago
 - Much more damage than 5 years ago
 - I was not farming/managing lands 5 years ago
6. Over the past 5 years, what trend have you seen in the deer population in the area of your property?
- Much fewer deer now than 5 years ago
 - Slightly fewer deer now than 5 years ago
 - About the same number of deer as 5 years ago
 - Slightly more deer now than 5 years ago
 - Many more deer now than 5 years ago
7. In thinking about your property and the surrounding area, please indicate your overall satisfaction with current deer numbers.
- Very Dissatisfied
 - Slightly Dissatisfied
 - Neither Dissatisfied nor Satisfied
 - Slightly Satisfied
 - Very Satisfied
8. How much importance should we assign to each of the following considerations when setting deer population goals?
(Please circle one number for each statement below).

	Not at all Important	A little Important	Moderately Important	Important	Very Important
Amount of deer mortality during an <u>average</u> winter	1	2	3	4	5
Amount of deer mortality during a <u>severe</u> winter	1	2	3	4	5
Potential health risks to the deer herd	1	2	3	4	5
Public health (human-deer diseases)	1	2	3	4	5
Amount of crop damage from deer	1	2	3	4	5
Number of deer-vehicle collisions	1	2	3	4	5
Deer over-browsing of forests	1	2	3	4	5
Impacts of deer on other wildlife species	1	2	3	4	5
Deer hunting heritage and tradition	1	2	3	4	5
Hunter satisfaction with deer numbers	1	2	3	4	5
Public satisfaction with deer numbers	1	2	3	4	5
Impact of deer hunting on the local economy	1	2	3	4	5

9. Please identify up to 3 other factors that you believe are important and should be considered when setting deer population goals.

- 1) _____
- 2) _____
- 3) _____

10. In thinking about your property and the surrounding area, would you say the deer population is,

- Much too Low Too Low About Right Too High Much too High

11. In thinking about your property and the surrounding area,, at what level do you think the deer population should be managed? (*Please circle one*).

1	2	3	4	5	6	7
Decrease Population 50% (Significant)	Decrease Population 25% (Moderate)	Decrease Population 10% (Slight)	No Change	Increase Population 10% (Slight)	Increase Population 25% (Moderate)	Increase Population 50% (Significant)

12. Did you allow hunting on your property during the 2014 deer season? (*Check only one*)

- Yes
 No → PLEASE SKIP TO QUESTION 16

13. Do you lease any of your property for deer hunting?

- Yes
 No

14. Who did you allow to hunt deer on your property? (*Check all that apply*). Please also estimate the number of people who hunted your property in 2014.

- Myself or family members _____ people | Strangers who ask permission _____ people
 Friends or neighbors _____ people | People who lease my property _____ people
 Other (please list: _____) _____ people

15. Please indicate if you impose any deer harvest restrictions on your property. (*Please check one only*)

- Antlerless harvest is restricted, but hunters can take any legal buck
 Buck harvest restricted to large antlered bucks, but hunters can take any antlerless deer
 Buck harvest restricted to large antlered bucks, and antlerless harvest is also restricted
 No restrictions on the type of deer that can be harvested
 Other (please list: _____)

16. Please check the boxes below if you hunted deer in Minnesota during the 2012, 2013 or 2014 Minnesota deer season? (*Please check all that apply*)

- 2012 | 2013 | 2014
 I hunt deer but did not hunt any of these years → Please skip to Question 20
 I do not hunt deer at all → Please skip to Question 21

17. Which **ONE** deer permit area did you hunt most often during the most recent deer season you hunted?

- 201 | 203 | 208 | 209 | 213 | 214 | 215 | 218 | 239 | 240 | 256 |
 257 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 |
 270 | 271 | 272 | 273 | 276 | 277 | 297 | I hunted a permit area not listed

18. If you did not hunt one of the permit areas listed above, please tell us which one you hunted most often:

_____ Area Number

19. How much of your deer hunting did you do on each of the following types of land during your most recent deer hunting season? (*Circle one number for each row*)

	None	Some	Most	All
Private land that I own	1	2	3	4
Private land that I lease for hunting	1	2	3	4
Private land that I do not own or lease	1	2	3	4
Public land	1	2	3	4

20. Including 2014, how many years have you been hunting deer in Minnesota? _____ Years.

21. To what extent would you support or oppose a regulation that would increase the proportion of antlered bucks in the area you own property? (*Check one*)

- Strongly Oppose
 Slightly Oppose
 Neither Oppose nor Support
 Slightly Support
 Strongly Support

22. Please let us know how you feel about the Minnesota Department of Natural Resources. (*Please circle one response for each of the following statements.*)

	Strongly Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Strongly Agree
The MnDNR does a good job of managing deer in Minnesota.	1	2	3	4	5
When deciding about deer management in Minnesota, the MnDNR will be open and honest in the things they do and say.	1	2	3	4	5
The MnDNR can be trusted to make decisions about deer management that are good for the resource.	1	2	3	4	5
The MnDNR will make decisions about deer management in a way that is fair.	1	2	3	4	5
The MnDNR has deer managers and biologists who are well-trained for their jobs.	1	2	3	4	5
The MnDNR listens to the concerns of landowners.	1	2	3	4	5

23. How many years have you lived in Minnesota? _____ years

24. What is your gender?

- Male Female

25. What is your age? _____

26. What is the highest level of education you have completed? (*Check one.*)

- | | |
|--|---|
| <input type="checkbox"/> Grade school | <input type="checkbox"/> Some college |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Four-year college (bachelor's) degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Some graduate school |
| <input type="checkbox"/> Some vocational or technical school | <input type="checkbox"/> Graduate (master's or doctoral) degree |
| <input type="checkbox"/> Vocational or technical school (associate's) degree | |

27. What was your annual household income from all sources, before taxes, in 2014?

\$ _____

28. Do you have access to the internet at home or another location?

- Yes
 No

If you would be willing to respond to additional questions about deer management and hunting in Minnesota and are willing to provide your email address, please write it below. We will only use your email address for research related to deer management and will not share it with anyone.

E-mail address: _____

Please write any comments you may have in the space below: