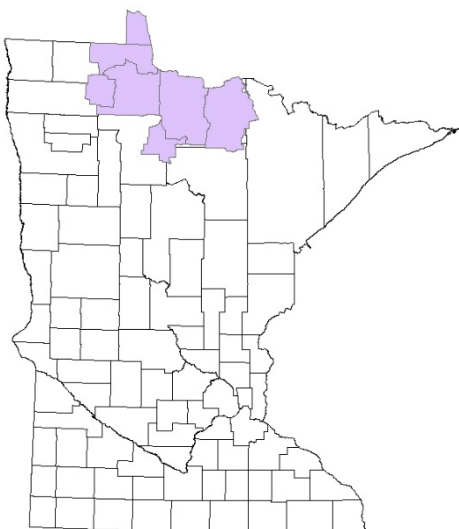




Division of Fish and Wildlife

Attitude Survey Report

Block 6: Agassiz-Littlefork



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Statement of Purpose and Scope of Data

The Minnesota Department of Natural Resources (MNDNR) periodically conducts opinion surveys of deer hunters and landowners to assess preferences for deer populations, experiences with deer hunting and impacts of deer populations to inform the deer population goal setting process. Data from these studies directly inform decision making for deer populations in the future. Landowners and hunters are selected randomly from county tax parcel records, or MNDNR deer license information respectively for participation. Therefore, the results of these studies are representative of a stakeholder group, and differ substantially from results of self-selected public input processes. The values in these reports should be interpreted as the average values for the given question within the population of interest (e.g., Goal Setting Block).

Data Collection Process

Hunters and landowners were surveyed using a mixed mode design that included two waves of letters requesting that participants complete a questionnaire online, and a third mailing that included a paper copy of the survey with a postage-paid self-addressed return envelope.

Hunters

Within a block, hunters were randomly selected from the list of all firearm deer license holders in the given year to receive a goal setting survey. Surveys were only sent to adults over the age of 18 at the time the sample was drawn. The number of hunters selected in each DPA was proportional to the distribution of hunters hunting across DPAs, after accounting for the minimum sample size needed to make statistically valid inference about the population at the goal setting block level. Participants may not be residents of the DPA, but have indicated that the given DPA is the primary location where they hunt deer.

Landowners

Within a block, landowners were randomly selected from a list of all landowners with a parcel greater than or equal to 2 acres in size. The sample was further stratified by acres to ensure a representative coverage of land use types and interests. Land acres strata were: 2-19.9, 20-79.9, 80-319.9, and ≥ 320 acres. Similar to hunters, the number of landowners selected for each DPA was proportional to the total number of landowners in the DPA and after determining the minimum sample size needed for statistically valid inference at the goal block scale.

Data Context

Results presented in this report are from a study conducted in fall 2014 and winter 2015. Therefore, the data refer to deer populations, hunting experience, and deer damage during the 2014 season, but may be applicable to recent experiences with deer hunting and deer damage within the goal setting block. Frequencies are

reported for responses by DPA to show general trends. However, estimates are statistically valid with 95% confidence for the goal block scale only (rows marked total).

Deer population management

Deer population goals for Block 6 DPAs were last set in 2006 (Table 1). A goal was set to stabilize the deer population in one DPA (108), and to decrease in 3 DPAs (103, 105, 110). The remaining DPAs (111 and 114) set a goal to increase the deer population by 10%.

At the time of the attitude survey (2014) deer population density estimates ranged from 2 deer per square mile for DPA 111, to 12 deer per square mile for DPA 110. DPAs were managed as Bucks Only, Lottery and Managed.

Table 1. Historic deer population and management by DPA

DPA	<u>Goal Setting Period - 2006</u>			<u>Attitude Survey Period - 2014</u>		<u>2019</u>
	Year Last Goal Set	Population Est. 2005 (Deer/Sq. Mile)	Population Goal	Population Est. 2014 (Deer/Sq. Mile)	DPA Mgmt. at Time of Survey	Current Population Est. (Deer/Sq. Mile)
101	NA	13	NA	9	Lottery (25)	15
103	2006	7	-10%	3	Bucks Only	5
105	2006	45	-50%	11	Lottery (150)	15
108	2006	10	Stable	5	Bucks Only	8
110	2006	24	-25%	12	Lottery (350)	16
111	2006	6	+10%	2	Bucks Only	3
114	2006	NA	+10%	9	Managed	NM

*Population estimates are derived from the deer population model

Harvest

The total annual deer harvests in 2014 and 2015 were 139,442 and 159,343 animals respectively. The 1990 to 2018 long-term average annual harvest is 204,055 deer. Therefore, the year of survey (2015) and previous year (2014) saw harvests 22% and 32% below the long-term average respectively.

Winter severity

The Winter Severity Index (WSI) is a metric used to track the potential impact of winter conditions on white-tailed deer over winter survival and populations. One point is accumulated for every day with average ambient temperature ≤ 0 degrees Fahrenheit, and/or 15 inches of snow depth on the ground. A WSI greater than 180 is considered a severe winter. The WSI for Block 6 during the winters of 13/14 and 14/15 by DPA is presented in Table 2.

Table 2. Winter severity index by DPA

DPA	WSI 2013/14	WSI 2014/15
101	160	68
103	188	74
105	189	73
108	205	89
110	181	71
111	179	70
114	195	79
Average	186	75

Block 6: Agassiz-Littlefork

The data presented herein are from a statistically representative survey of Minnesota deer hunters and landowners in goal setting Block 6. This area includes deer permit areas: 101, 103, 105, 108, 110, 111, and 114 in the north central part of the state (Figure 1).

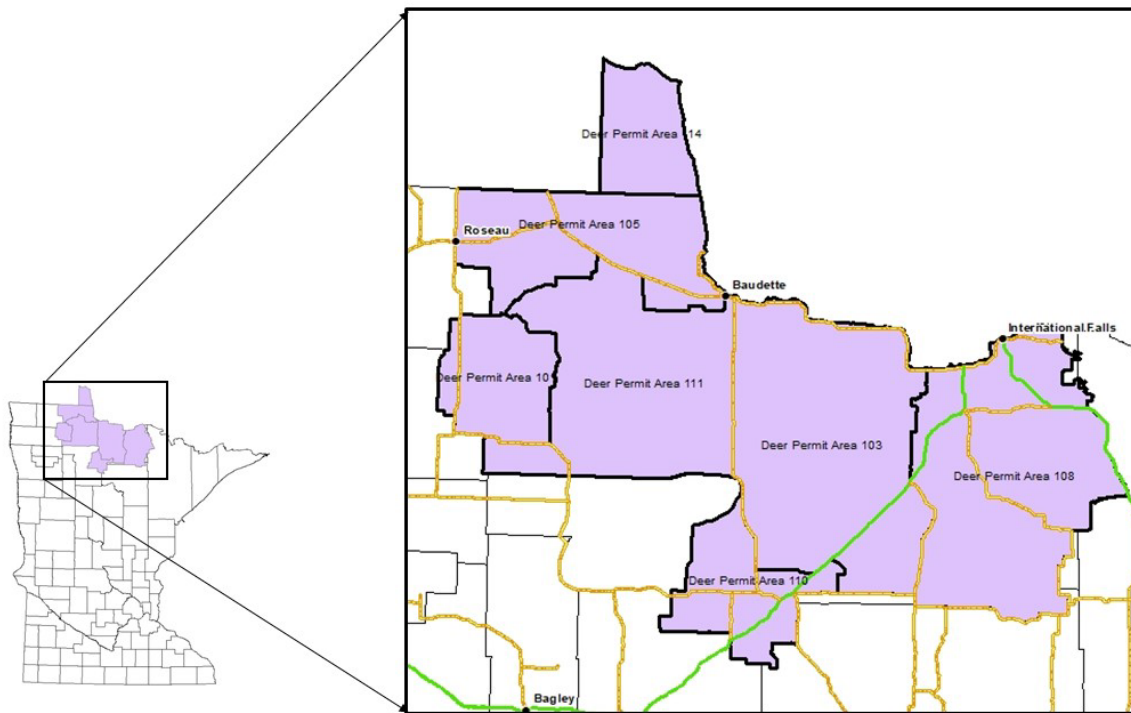


Figure 1. Goal setting Block 6 DPA boundaries

Response Rates

Hunters

A total of 2,600 hunters were originally sampled for participation in the study. The sample frame was reduced by 131 cases after accounting for undeliverable postal address and individuals that has passed away. Survey efforts yielded 1,261 usable responses, for an effective response rate of 51.1%

Landowners

A total of 2,738 landowners were originally sampled for participation in the study. The sample frame was reduced by 107 cases after accounting for undeliverable postal address and individuals that has passed away. Survey efforts yielded 1,048 usable responses, for an effective response rate of 39.8%

Demographics and hunting behavior

Respondents were on average 53.3 years of age at the time the data were collected, and had been living in Minnesota for an average of 49.1 years. The vast majority of respondents were male (89.2%). This disparity, however, reflects the lower participation rate in hunting among females in the state. Nearly 32% of respondents reported that they completed a four year college degree or greater.

Firearms hunters, on average, spent 7.3 days hunting during the firearms season. While, archery hunters and muzzleloader hunters spent 15 and 5.6 days afield respectively. Around a quarter of hunters reported that they spent all of their time hunting on public land (27%) or private land that they own (25%). A small minority of hunters reported hunting on leased land (~8%). Around half of hunters reported spending at least some time hunting on private land that they do not own (Table 3).

Deer population preferences

Hunters were asked their preference for the future of deer populations in the permit area where they primarily hunt. On average, 84% of hunters in goal setting Block 6, preferred an increase in the white-tailed deer population. This result did not vary substantively by DPA (Table 4). The majority of hunters in Block 6 (70%) preferred an increase in the deer population of either 25% or 50% (Table 5).

In addition to future deer populations, hunters were queried about their perception of the change in deer population over the last 5 years (Table 6). Although hunters perceived that there are fewer deer today than there were 5 years ago, hunters' perception of the trend varied somewhat by DPA.

A large majority (81%) of Block 6 hunters reported that the current deer population is too low. This pattern held consistently across DPAs (Table 7). This same sentiment was reflected in hunters' overall satisfaction with deer populations (Table 8). Nearly three-quarters of respondent hunters in Block 6 reported dissatisfaction with current deer populations. While three-quarters of hunters expressed dissatisfaction with overall deer populations, an evaluation of hunters' satisfaction with elements of deer hunting and populations revealed more heterogeneity (Table 9). On average, hunters disagreed with statements about their satisfaction with the number and quality of bucks in the area where they hunt, the number of antlerless deer, and the total number of deer. Hunters were evenly split between agreement and disagreement with a statement measuring their satisfaction with hearing about or seeing bucks.

Finally, hunters evaluated statements about the deer goal setting process in general (Table 10). They were asked how important different priorities were to them when considering goals for deer populations in the area where they hunt. Respondents indicated that hunters' satisfaction, winter mortality, herd health, and deer hunting heritage and tradition were particularly important factors to consider. Whereas, deer impacts on crops and forest, and deer-vehicle collisions were not salient concerns (Figure 4).

Table 3. Amount of time hunters spent hunting on different types of land in 2015

	None	Some	Most	All
Public land	21.9 (231)	30.5 (321)	20.6 (217)	27.0 (284)
Private land that I do not own or lease	50.4 (458)	21.4 (194)	12.3 (112)	15.9 (144)
Private land that I lease for hunting	92.4 (716)	2.7 (21)	2.8 (22)	2.1 (16)
Private land that I own	37.5 (378)	18.0 (181)	19.6 (198)	24.9 (251)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 4. Hunters' preference for future deer population level by permit area, in 2015

DPA	Decrease	No change	Increase
101	7.9 (8)	11.9 (12)	80.2 (81)
103	5.6 (11)	6.1 (12)	88.4 (175)
105	7.3 (15)	17.5 (36)	75.2 (155)
108	5.0 (14)	7.2 (20)	87.8 (244)
110	5.8 (16)	13.1 (36)	81.0 (222)
111	3.8 (6)	1.9 (3)	94.3 (150)
114	6.7 (1)	13.3 (2)	80.0 (12)
Total	5.8 (71)	9.8 (121)	84.4 (1039)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 5. Hunters' preferred future deer population by DPA, in 2015

DPA	-50%	-25%	-10%	No change	+10%	+25%	+50%
101	1.0 (1)	1.0 (1)	5.9 (6)	11.9 (12)	11.9 (12)	29.7 (30)	38.6 (39)
103	-	1.5 (3)	4.0 (8)	6.1 (12)	17.7 (35)	31.3 (62)	39.4 (78)
105	0.5 (1)	2.9 (6)	3.9 (8)	17.5 (36)	16.0 (33)	33.5 (69)	25.7 (53)
108	-	2.2 (6)	2.9 (8)	7.2 (20)	13.7 (53)	39.8 (109)	21.9 (60)
110	2.6 (7)	1.8 (5)	1.5 (4)	13.1 (36)	19.3 (53)	34.6 (55)	52.8 (84)
111	0.6 (1)	1.3 (2)	1.9 (3)	6.9 (11)	6.9 (11)	34.6 (55)	52.8 (84)
114	-	-	6.7 (1)	13.3 (2)	20.0 (3)	13.3 (2)	46.7 (7)
Total	0.8 (10)	1.9 (23)	3.1 (38)	9.8 (121)	15.0 (185)	32.9 (405)	36.5 (449)

**Data are Percent of Respondents and (Total Number of Respondents)*

Figure 2. Hunters' preference for future deer population level, in 2015

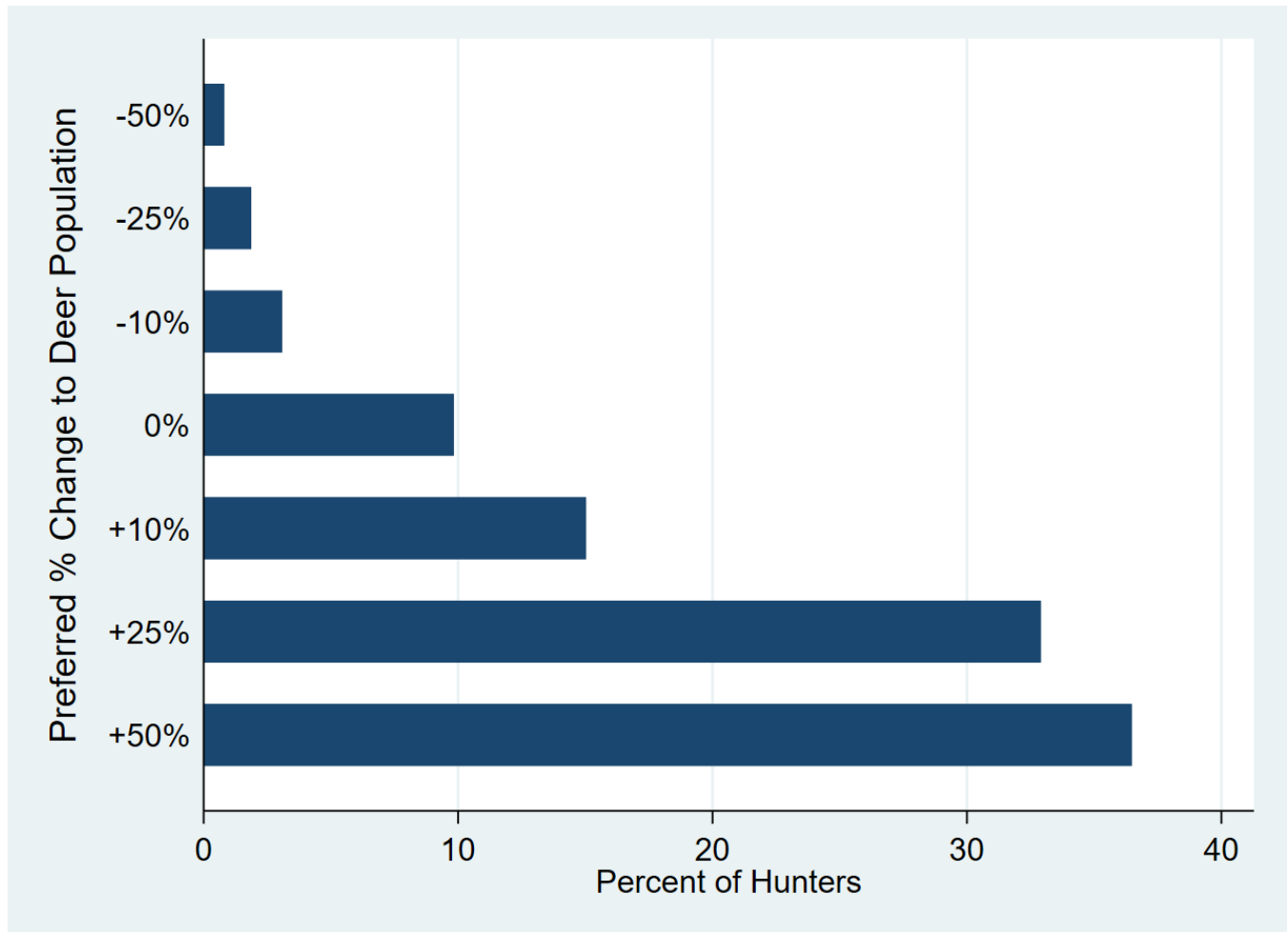


Figure 3. Hunters' preference for future deer population level, in 2015

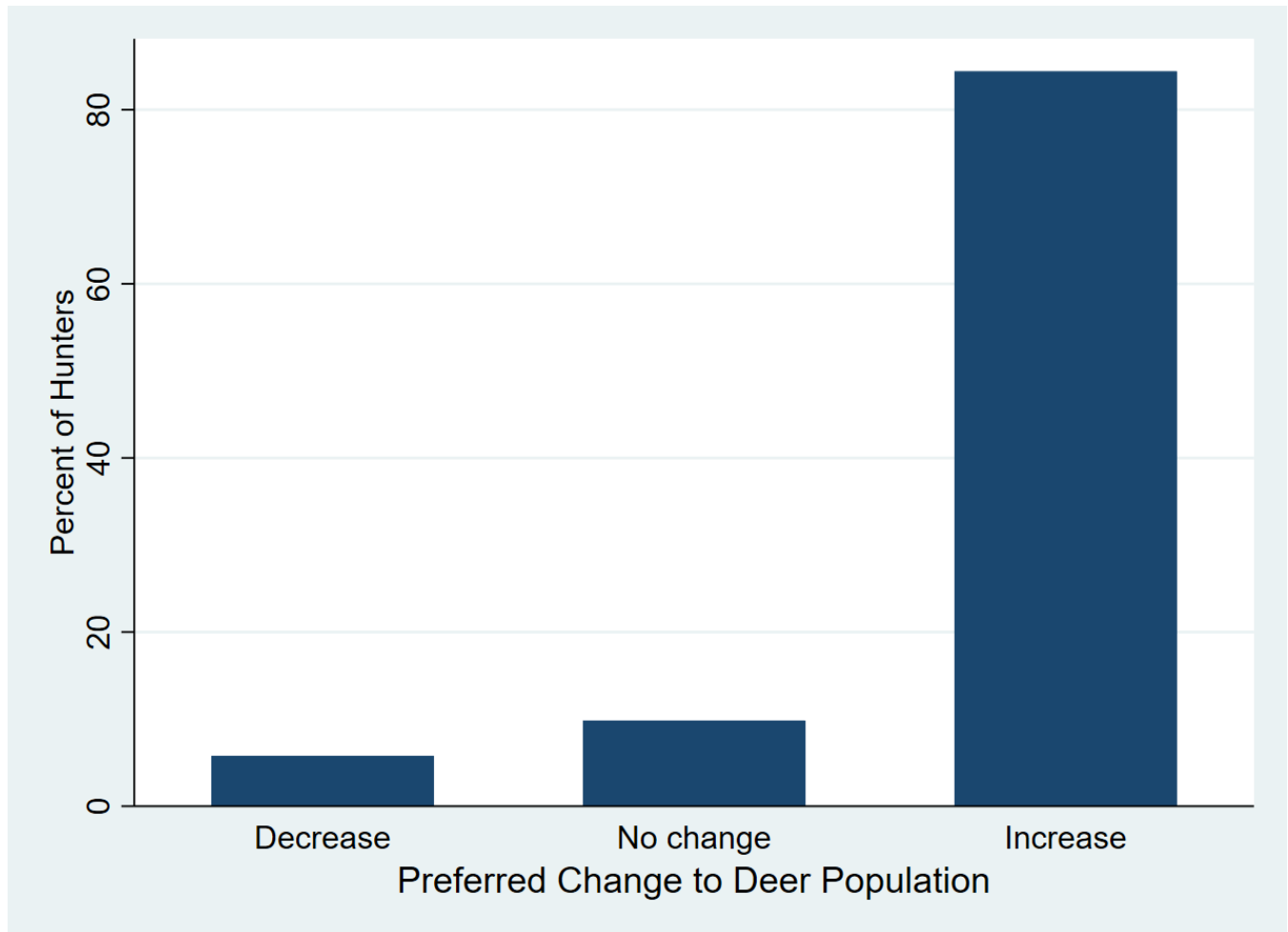


Table 6. Hunters' perception of the deer population over the last 5 years by DPA, in 2015

DPA	Fewer	About the same	More
101	63.7 (65)	6.9 (7)	29.4 (30)
103	77.4 (154)	12.1 (24)	10.6 (21)
105	73.3 (151)	11.7 (24)	15.0 (31)
108	81.3 (226)	9.4 (26)	9.4 (26)
110	83.1 (226)	11.8 (32)	5.1 (14)
111	85.0 (136)	8.1 (13)	6.9 (11)
114	68.8 (11)	12.5 (2)	18.8 (3)
Total	78.6 (969)	10.4 (128)	11.0 (136)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 7. Hunters' perception of the current deer population by DPA, in 2015

DPA	Too low	About right	Too high
101	77.7 (80)	17.5 (18)	4.9 (5)
103	80.9 (161)	16.6 (33)	2.5 (5)
105	74.9 (155)	22.7 (47)	2.4 (5)
108	83.8 (233)	15.8 (44)	0.4 (1)
110	78.8 (216)	19.7 (54)	1.5 (4)
111	91.8 (146)	5.7 (9)	2.5 (4)
114	73.3 (11)	20.0 (3)	6.7 (1)
Total	81.1 (1002)	16.8 (208)	2.0 (25)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 8. Hunters' satisfaction with deer populations by DPA, in 2015

DPA	Dissatisfied	Neither	Satisfied
101	66.0 (68)	18.4 (19)	15.5 (16)
103	75.0 (150)	9.5 (19)	15.5 (31)
105	67.6 (140)	11.6 (24)	20.8 (43)
108	79.7 (224)	9.6 (27)	10.7 (30)
110	70.5 (194)	15.6 (43)	13.8 (38)
111	87.5 (140)	3.8 (6)	8.8 (14)
114	81.3 (13)	-	18.8 (3)
Total	74.8 (929)	11.1 (138)	14.1 (175)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 9. Hunters' satisfaction with deer populations by DPA, in 2015

I was satisfied with the...	Response	101	103	105	108	110	111	114	Total
Number of legal bucks	Disagree	64.6	74.2	56.0	72.8	63.9	81.8	81.3	68.8
	Neither	18.2	11.1	11.6	9.3	15.3	4.4	6.3	11.4
	Agree	17.2	14.6	32.4	17.9	20.8	13.8	12.5	19.8
Quality of bucks	Disagree	64.0	66.7	56.8	61.5	57.7	73.6	73.3	62.6
	Neither	20.0	17.7	15.5	16.5	16.5	10.1	20.0	16.0
	Agree	16.0	15.7	28.2	21.9	25.7	16.4	6.4	21.4
Heard about or saw legal bucks while hunting	Disagree	35.0	41.3	31.1	52.4	40.6	47.8	26.7	42.0
	Neither	19.0	10.2	12.1	9.1	11.1	11.3	6.7	11.3
	Agree	46.0	48.5	56.8	38.5	48.3	40.9	66.7	46.6
Total number of antlerless deer	Disagree	49.0	55.3	46.6	59.4	56.7	66.5	56.3	56.0
	Neither	17.0	9.1	10.8	10.8	10.7	13.9	6.3	11.4
	Agree	34.0	35.5	42.6	29.9	32.6	19.6	37.5	32.6
Total number of deer I saw while hunting	Disagree	58.8	71.1	55.1	73.5	63.9	79.4	62.5	67.3
	Neither	13.7	6.1	13.7	7.9	9.5	4.4	12.5	9.0
	Agree	27.5	22.8	31.2	18.6	26.6	16.3	25.0	23.7

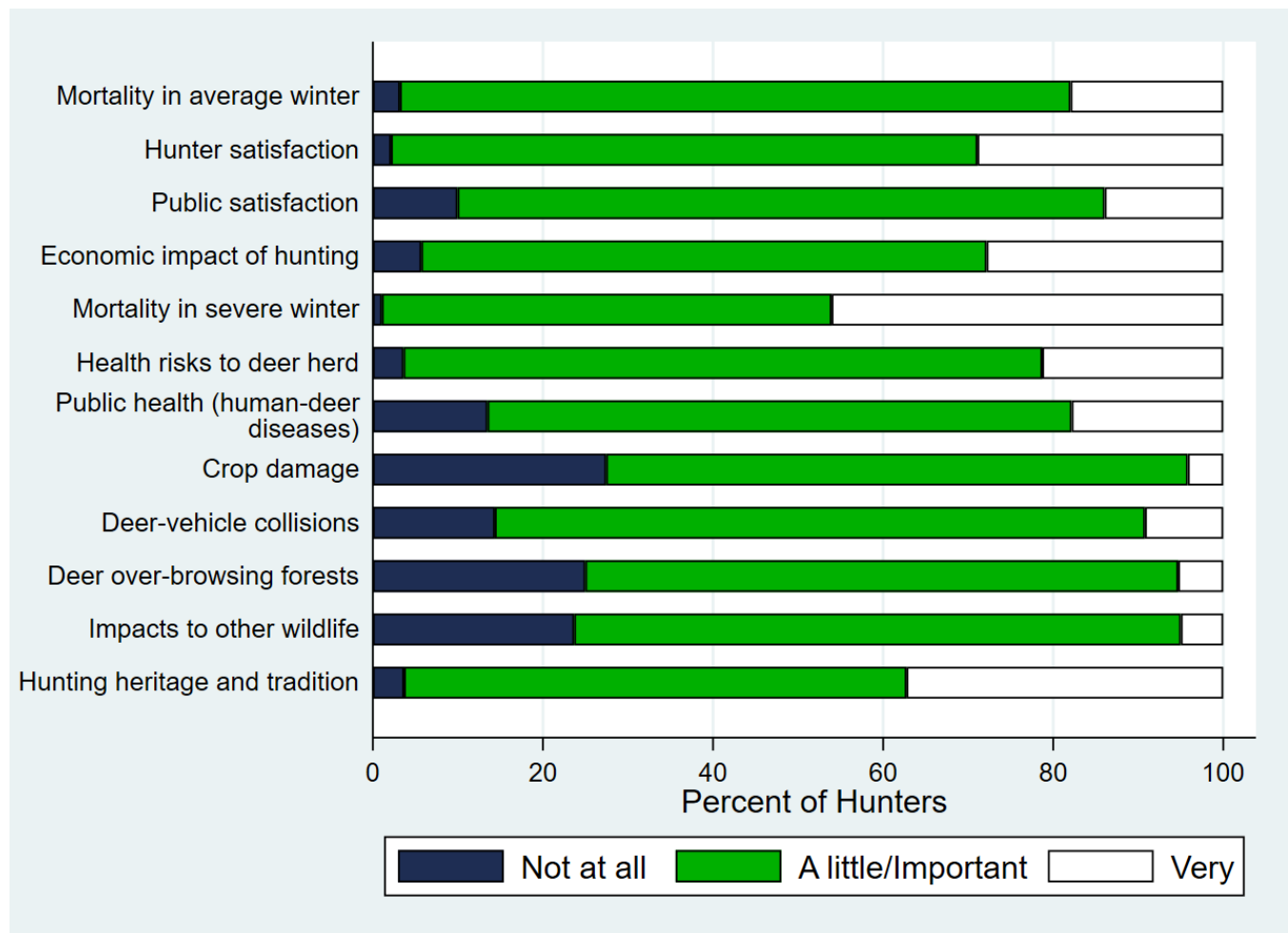
*Data are Percent of Respondents

Table 10. Hunters' reported importance of attributes of deer population goal setting, in 2015

Question	Not at all	A little	Moderately	Important	Very
Amount of deer mortality during an average winter	3.2	11.0	26.6	41.8	17.5
Hunter satisfaction with deer numbers	2.1	7.0	22.0	40.0	28.9
Public satisfaction with deer numbers	10.0	19.5	31.5	25.0	14.0
Impact of deer hunting on the local economy	5.5	11.1	23.3	32.2	28.0
Amount of deer mortality during a severe winter	1.0	3.4	13.6	36.3	45.6
Potential health risks to deer herd	3.7	11.8	26.0	37.7	20.9
Public health (human-deer diseases)	13.6	21.7	20.5	26.5	17.7
Amount of crop damage	26.8	31.1	24.8	13.2	4.1
Deer over-browsing of forests	24.0	26.6	25.5	18.6	5.3
The number of deer-vehicle collisions	14.4	27.5	28.9	19.9	9.2
Impacts of deer on other wildlife species	23.4	28.0	27.2	16.5	4.9
Deer hunting heritage and tradition	3.8	8.4	18.2	33.2	36.5

*Data are Percent of Respondents

Figure 4. Hunters' reported importance of attributes of deer population goal setting, in 2015



Caption: Percent of hunters indicating that each factor is either not at all important, moderately important (collapsed “a little”, “moderately” and “important”) or very important to them as priorities to consider when setting deer population goals.

Landowners

Demographics and hunting behavior

Respondents were on average 60.1 years of age at the time the data were collected, and had been living in Minnesota for an average of 52.3 years. The vast majority of respondents were male (89.6%). Roughly, one third of respondents had completed a college degree or achieved some greater level of education. The mean acres of parcels represented in the sample was 184.6 (self-reported).

Nearly 67% of landowners reported that they had hunted during one of the last three deer seasons at the time of data collection. Substantive differences were observed in the pattern of response by hunting status. Therefore, estimates were made for landowners' population preferences by whether or not they indicated that they were a hunter.

Around half of landowners that hunt spent all of their time hunting on private land that they owned (48%). Nearly 13% reported that they spent some time hunting on land that they lease for hunting. A majority of hunting landowners indicated that they spent at least some of their time hunting either private land that they do not own, or public land respectively (Table 11).

Deer damage

Landowners were asked to indicate whether or not they experienced property damage from deer in three categories; crops, residential, and forests. They were also asked to rate the overall intensity of the damage that they experienced from deer across the three categories. Around 11% of landowners indicated that they experienced damage to crops from deer. A similar amount (14%) reported that they experienced damage to residential property, and 7% reported damage to forest (Table 12). Crop damage was associated with parcel size, where larger landowners were more likely to report experiencing damage from deer. Whereas ~70-80% of landowners reported damage to forest and residential property regardless of the amount of land they owned. Among those that experienced some form of damage, the vast majority reported that the intensity of the damage was minor or moderate (Table 13).

Population preferences

Landowners, on average, expressed a belief that the deer population at the time of survey was too low. This belief, however, was moderated by hunting status. Non-hunting landowners were more likely to indicate the current population was about right (47%) as opposed to hunting landowners (Table 14).

On average, landowners have perceived a decline in the deer population over the last 5 years. Roughly 71% have seen "fewer" as opposed to "about the same" (19%) or "more" (11%) deer compared to 5 years prior (Table 15).

Landowners expressed a preference for an increase in future deer populations (Table 16). Greater than 50% of landowners would like to see an increase of either 25% or 50%, and 74% would like to see an increase of 10% or more (Table 17). Hunting landowners prefer a greater increase in the deer population than non-hunting

landowners. For instance, 34% of hunters would like to see an increase of 50%, whereas 14% of non-hunting landowners indicated the same (Table 18).

Respondents placed relatively high importance on severe winter deer mortality and hunting heritage and tradition as factors DNR should consider when setting deer population goals. Conversely, impacts on other wildlife and over-browsing of forests were given the least importance among factors evaluated (Table 19).

Table 11. Amount of time hunting landowners spent hunting on different types of land, in 2015

	None	Some	Most	All
Public land	28.0 (133)	42.1 (200)	21.9 (104)	8.0 (38)
Private land that I do not own or lease	58.7 (227)	25.1 (97)	10.1 (39)	6.2 (24)
Private land that I lease for hunting	87.3 (289)	4.8 (16)	4.2 (14)	3.6 (12)
Private land that I own	5.5 (39)	19.3 (136)	27.1 (191)	48.2 (340)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 12. Percent of landowners that experienced damage to different land uses by acres, in 2015

	<u>Percent "Yes"</u>				<i>Total</i>
	2-19.9	20-79.9	80-319.9	>=320	
Crops	9.7	13.3	16.2	42.4	11.2
Woods	74.1	85.8	85.1	85.4	6.9
Residential	75.7	68.0	65.0	71.5	14.7

*Data are Percent of Respondents

Figure 5. Percent of landowners experiencing damage from deer by land use, in 2015

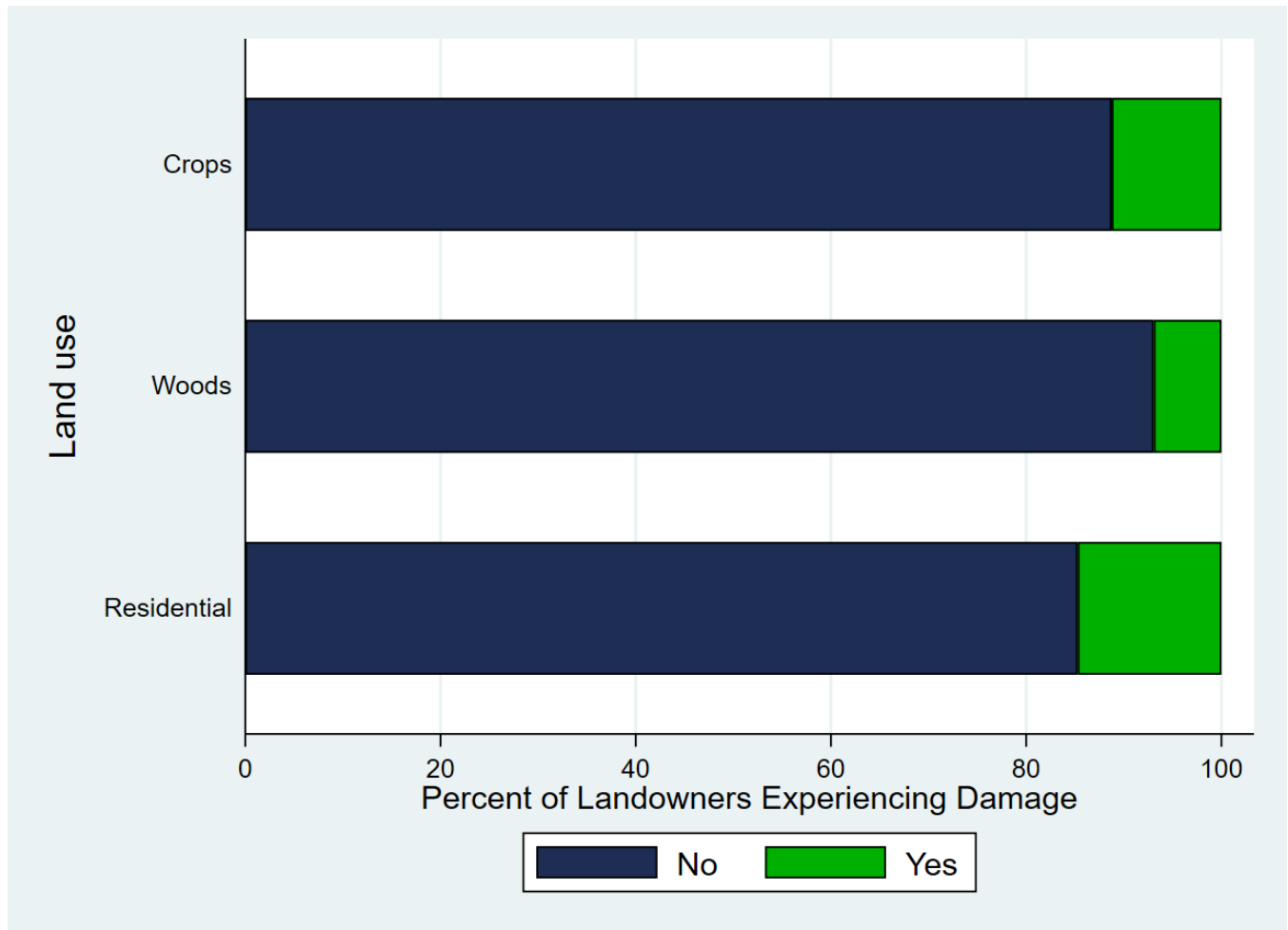


Table 13. Intensity of damage from deer, for those that experienced damage by land use, in 2015

	Negligible	Minor/Moderate	Severe/Very Severe
Crops	12.8 (12)	80.9 (76)	6.4
Woods	8.5 (5)	71.2 (42)	20.3
Residential	8.8 (11)	79.2 (99)	12.0

*Data are Percent of Respondents

Table 14. Non-hunting landowners' perception of the deer population by DPA, in 2015

DPA	Too low	About right	Too high
101	25.0 (1)	50.0 (2)	25.0 (1)
103	45.7 (21)	45.7 (21)	8.7 (4)
105	46.0 (23)	44.0 (22)	10.0 (5)
108	37.3 (41)	51.3 (20)	15.4 (6)
110	33.3 (13)	51.3 (20)	15.4 (6)
111	81.3 (13)	6.3 (1)	12.5 (2)
114	66.7 (14)	28.6 (6)	4.8 (1)
Total	44.1 (126)	46.9 (134)	9.1 (26)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 14 Continued. Hunting landowners' perception of the deer population by DPA, in 2015

DPA	Too low	About right	Too high
101	92.0 (23)	8.0 (2)	-
103	71.3 (87)	25.4 (31)	3.3 (4)
105	74.8 (92)	22.0 (27)	3.3 (4)
108	74.6 (147)	20.3 (40)	5.1 (10)
110	74.0 (114)	22.1 (34)	3.9 (6)
111	88.3 (53)	11.7 (7)	-
114	50.0 (7)	50.0 (7)	-
Total	75.5 (523)	21.3 (148)	3.5 (24)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 14 Continued. Landowners' overall perception of the deer population by DPA, in 2015

DPA	Too low	About right	Too high
101	82.8 (24)	13.8 (4)	3.4 (1)
103	64.3 (108)	31.0 (52)	4.8 (8)
105	66.5 (115)	28.3 (49)	5.2 (9)
108	61.2 (188)	33.2 (102)	5.5 (17)
110	65.8 (127)	28.0 (54)	6.2 (12)
111	86.8 (66)	10.5 (8)	2.6 (2)
114	60.0 (21)	37.1 (13)	2.9 (1)
Total	66.2 (649)	28.8 (282)	5.1 (50)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 15. Landowners' perception over the last 5 years by DPA, in 2015

DPA	Fewer	About the same	More
101	41.4 (12)	20.7 (6)	37.9 (11)
103	69.2 (117)	21.3 (36)	9.5 (16)
105	74.7 (130)	12.6 (22)	12.6 (22)
108	66.8 (209)	22.4 (70)	10.9 (34)
110	75.5 (145)	16.7 (32)	7.8 (15)
111	81.8 (63)	9.1 (7)	9.1 (7)
114	70.6 (24)	29.4 (10)	-
Total	70.9 (700)	18.5 (183)	10.6 (105)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 16. Landowners' preferred future deer population by DPA, in 2015

DPA	-50%	-25%	-10%	No change	+10%	+25%	+50%
101	3.4(1)	-	-	3.4(1)	13.8(4)	34.5(10)	44.8(13)
103	2.9(5)	4.1(7)	1.7(3)	20.3(35)	19.2(33)	22.7(39)	29.1(50)
105	0.6(1)	2.9(5)	4.0(7)	19.0(33)	19.5(34)	31.0(54)	23.0(40)
108	1.0(3)	4.6(14)	4.3(13)	18.7(57)	17.4(53)	25.2(77)	28.9(88)
110	1.0(2)	4.6(9)	2.1(4)	17.4(34)	22.1(43)	28.7(56)	24.1(47)
111	3.9(3)	1.3(1)	2.6(2)	3.9(3)	11.8(9)	34.2(26)	42.1(32)
114	3.0(1)	3.0(1)	3.0(1)	30.3(10)	15.2(5)	18.2(6)	27.3(9)
Total	1.6(16)	3.8(37)	3.1(30)	17.6(173)	18.4(181)	27.2(268)	28.4(279)

*Data are Percent of Respondents and (Total Number of Respondents)

Table 17. Landowners' preferred future deer population by DPA summarized, in 2015

DPA	Decrease	No change	Increase
101	3.4(1)	3.4(1)	93.1(27)
103	8.7(15)	20.3(35)	70.9(122)
105	7.5(13)	19.0(33)	73.6(128)
108	9.8(30)	18.7(57)	71.5(218)
110	7.7(15)	17.4(34)	74.9(146)
111	7.9(6)	3.9(3)	88.2(67)
114	9.1(3)	30.3(10)	60.6(20)
Total	8.4(83)	17.6(173)	74.0(728)

*Data are Percent of Respondents and (Total Number of Respondents)

Figure 6. Landowners' preference for future deer population level by hunting status, in 2015

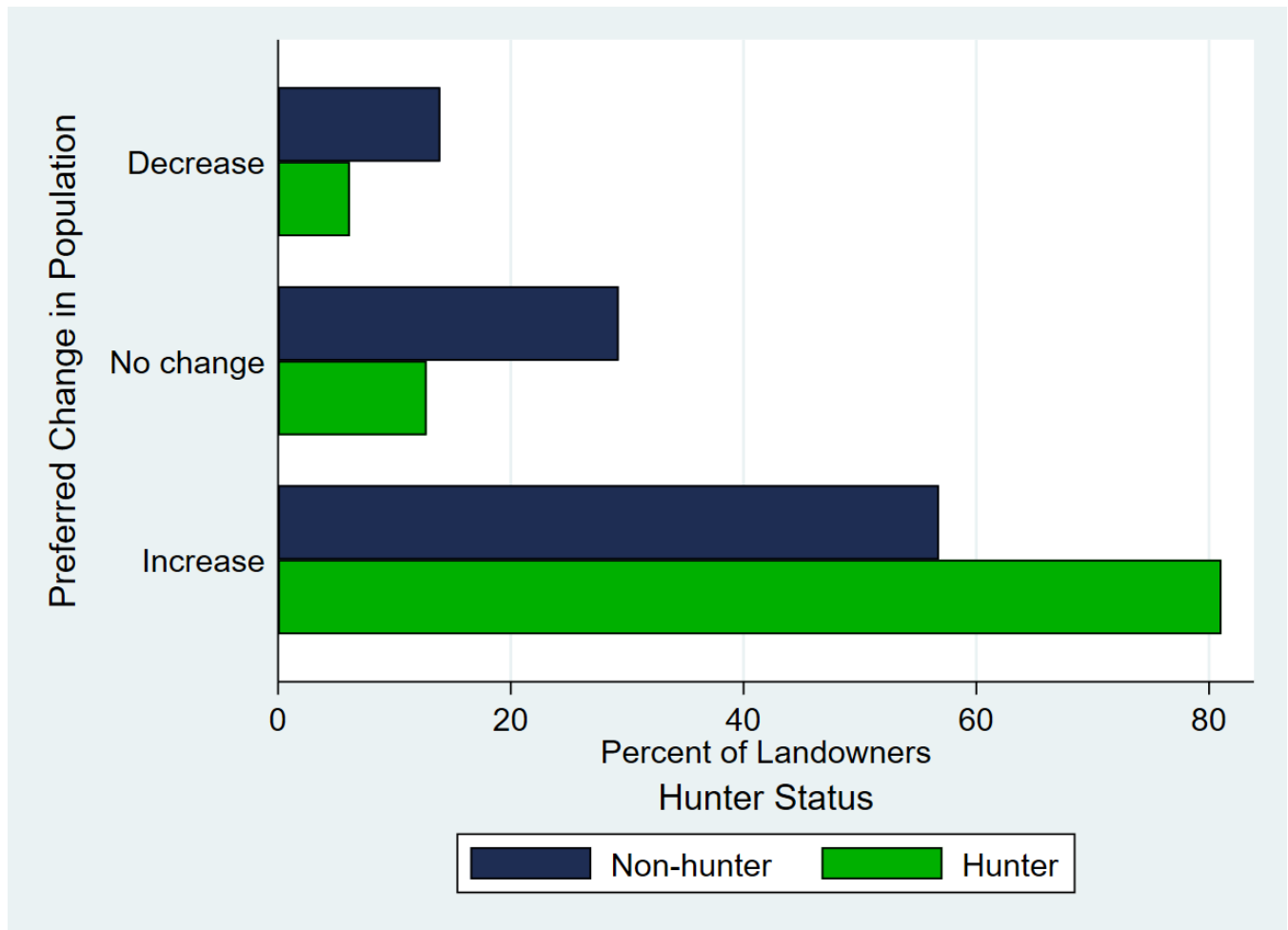


Table 18. Non-hunting landowners' preference for future deer population by DPA, in 2015

DPA	-50%	-25%	-10%	No change	+10%	+25%	+50%
101	25.0(1)	-	-	25.0(1)	25.0(1)	-	25.0(1)
103	4.2(1)	4.2(1)	6.3(1)	37.5(18)	18.8(9)	18.8(9)	10.4(5)
105	-	6.0(3)	6.0(3)	26.0(13)	28.0(14)	22.0(11)	12.0(6)
108	1.8(2)	4.5(5)	5.5(6)	31.8(35)	23.6(26)	18.2(20)	14.5(16)
110	5.0(2)	10.0(4)	2.5(1)	32.5(13)	25.0(10)	15.0(6)	10.0(4)
111	12.5(2)	-	6.3(1)	-	12.5(2)	43.8(7)	25.0(4)
114	5.3(1)	5.3(1)	5.3(1)	21.1(4)	15.8(3)	26.3(5)	21.1(4)
Total	3.5(10)	5.2(15)	5.2(15)	29.3(84)	22.7(65)	20.2(58)	13.9(40)

Table 18 Continued. Hunting landowners' preference for future deer population by DPA, in 2015

DPA	-50%	-25%	-10%	No change	+10%	+25%	+50%
101	-	-	-	-	12.0(3)	40.0(10)	48.0(12)
103	2.4(3)	4.0(5)	-	13.7(17)	19.4(24)	24.2(30)	36.3(45)
105	0.8(1)	1.6(2)	3.2(4)	16.1(20)	16.1(20)	34.7(43)	27.4(34)
108	0.5(1)	4.6(9)	3.6(7)	11.3(22)	13.8(27)	29.2(57)	36.9(72)
110	-	3.2(5)	1.9(3)	13.5(21)	21.3(33)	32.3(50)	27.7(43)
111	1.7(1)	1.7(1)	1.7(1)	5.0(3)	11.7(7)	31.7(19)	46.7(28)
114	-	-	-	42.9(6)	14.3(2)	31.7(19)	46.7(28)
Total	0.9(6)	3.2(22)	2.2(15)	12.8(89)	16.6(116)	30.1(210)	34.3(239)

*Data are Percent of Respondents and (Total Number of Respondents)

Figure 7. Landowners' preference for future deer population level, in 2015

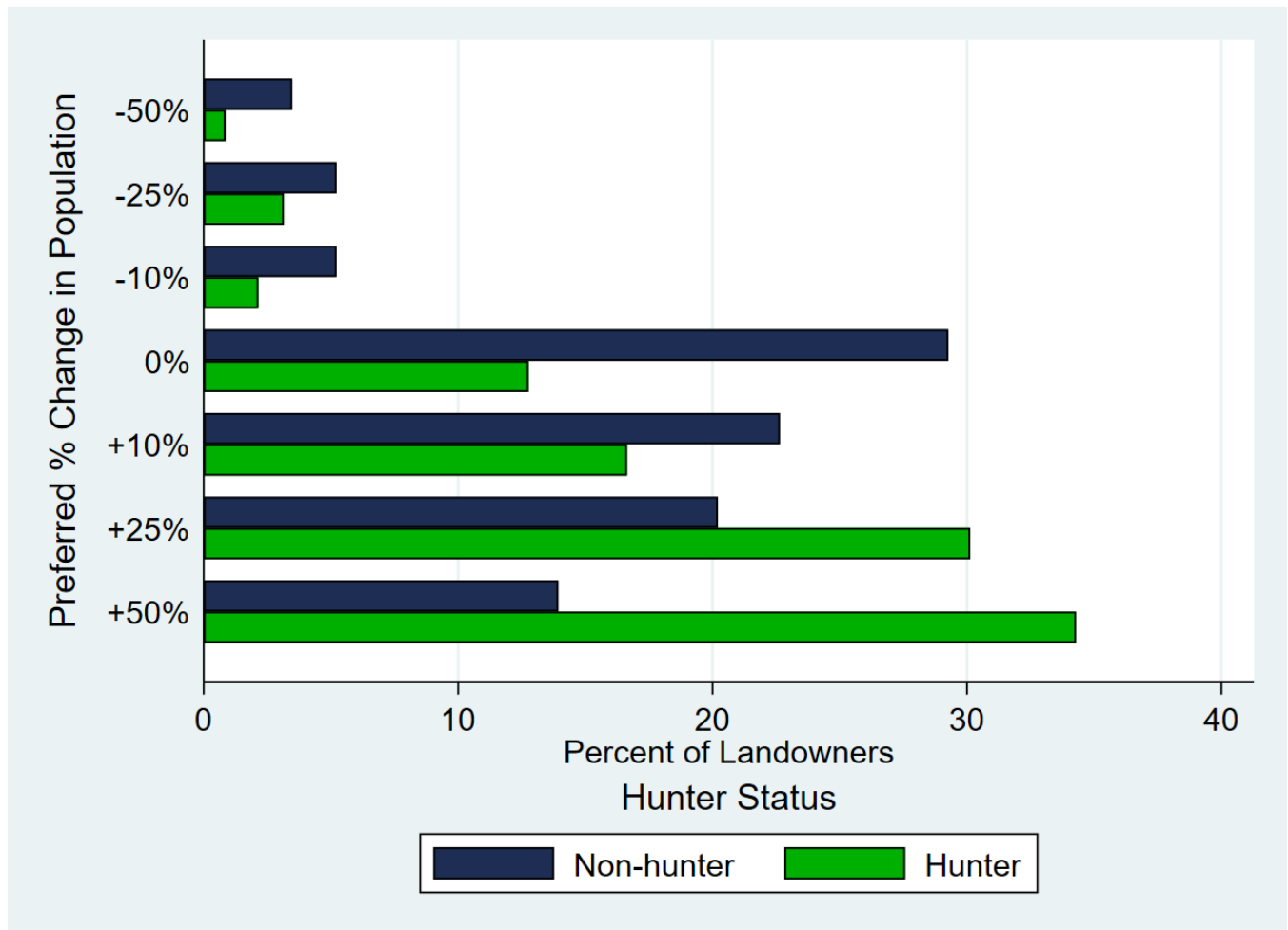
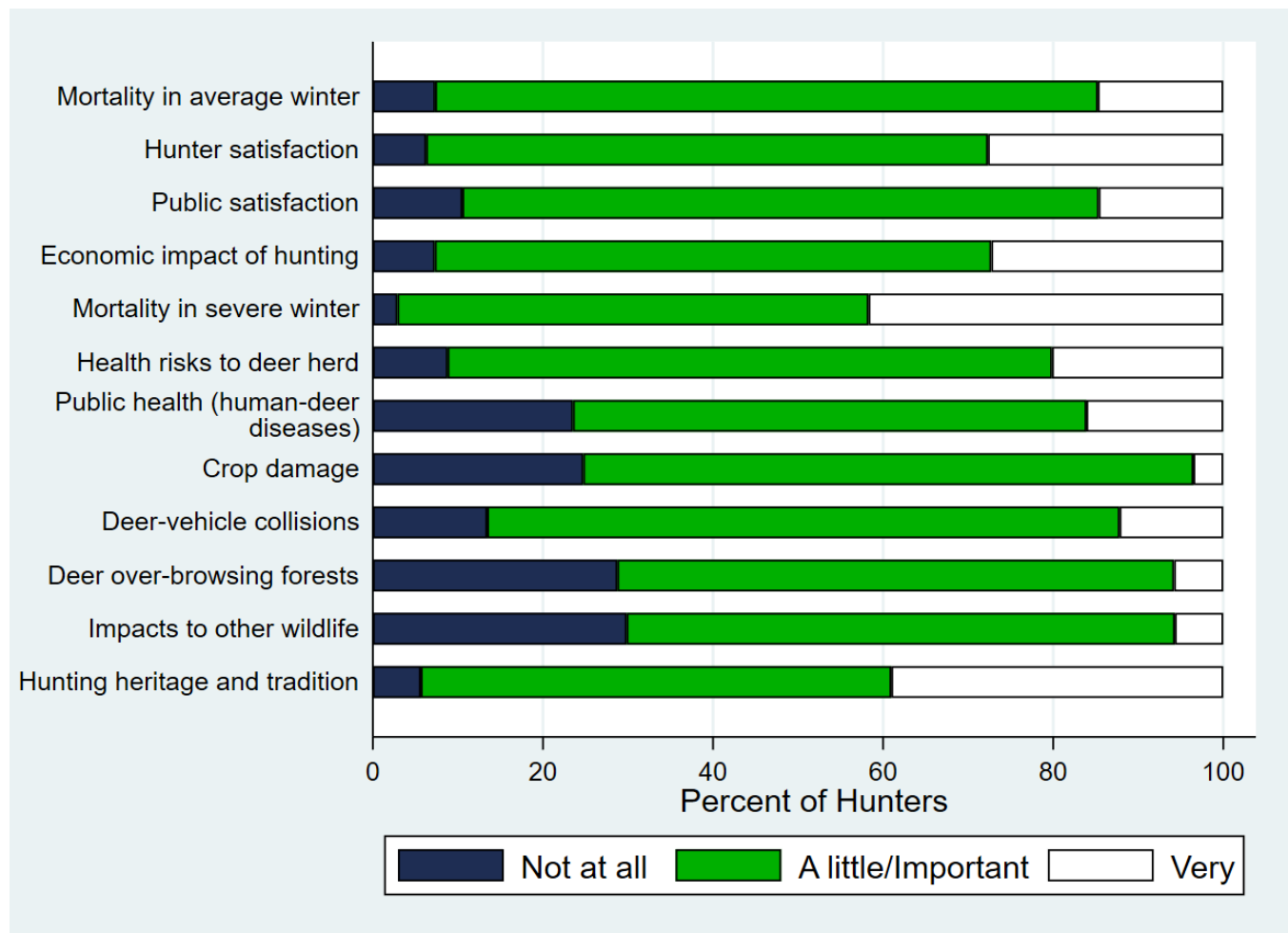


Table 19. Landowners' reported importance of attributes of deer population goal setting, in 2015

Question	Not at all	A little	Moderately	Important	Very
Amount of deer mortality during an average winter	7.0	9.8	28.9	39.8	14.5
Hunter satisfaction with deer numbers	6.2	9.0	21.8	35.7	27.4
Public satisfaction with deer numbers	10.2	17.8	31.0	26.3	14.7
Impact of deer hunting on the local economy	7.3	11.3	22.9	31.3	27.3
Amount of deer mortality during a severe winter	2.6	6.1	15.1	34.4	41.8
Potential health risks to deer herd	8.5	14.6	22.9	33.8	20.1
Public health (human-deer diseases)	23.1	21.0	18.2	21.8	15.9
Amount of crop damage	24.4	31.4	25.6	15.2	3.4
The number of deer-vehicle collisions	13.3	22.9	29.3	22.5	12.0
Deer over-browsing of forests	28.4	23.9	25.3	16.5	5.8
Impacts of deer on other wildlife species	29.0	25.3	25.8	14.3	5.6
Deer hunting heritage and tradition	5.6	7.8	17.7	29.8	39.0

*Data are Percent of Respondents

Figure 8. Landowners' reported importance of attributes of deer population goal setting, in 2015



Caption: Percent of landowners indicating that each factor is either not at all important, moderately important (collapsed "a little", "moderately" and "important") or very important to them as priorities to consider when setting deer population goals.