

**EVALUATION OF HUNTER USE OF WALK-IN AREAS (2009)
EASTERN & CENTRAL SOUTH DAKOTA**

HD-6-10.AMS

LARRY M. GIGLIOTTI, PH.D.

WALK-IN AREA

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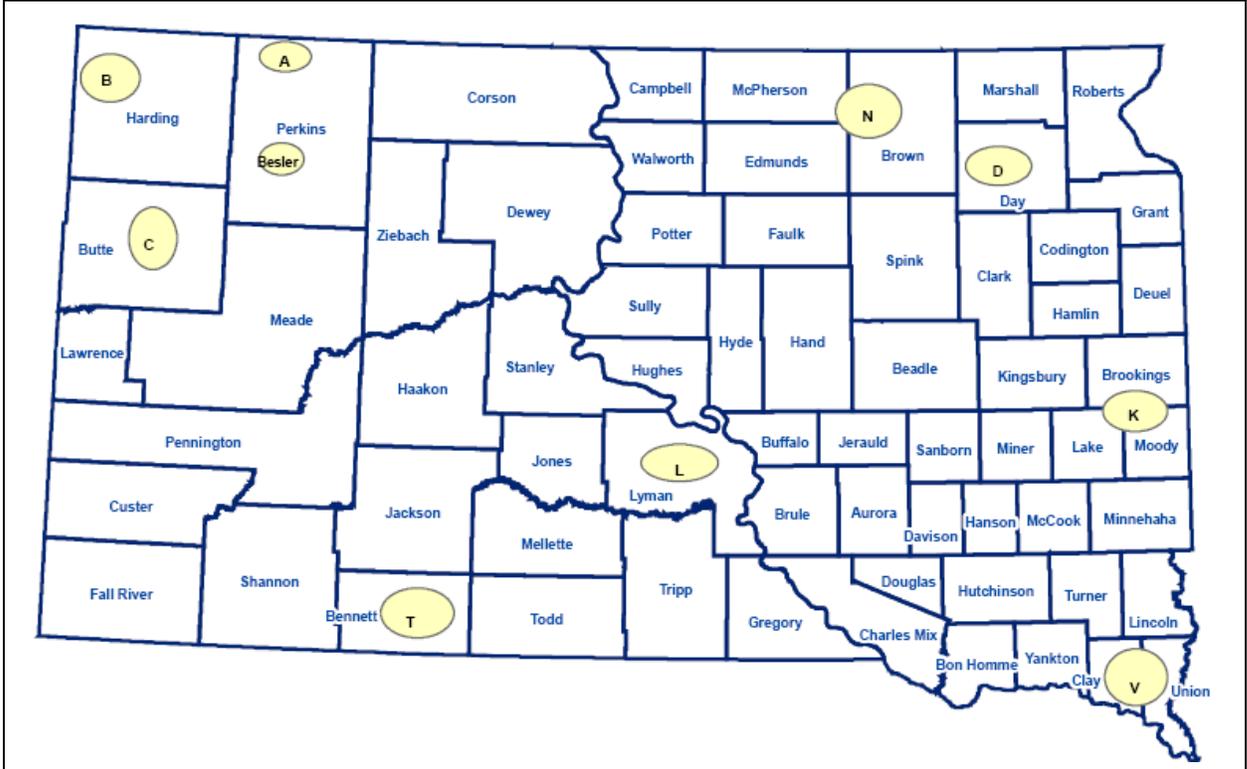
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**SOUTH DAKOTA
GAME, FISH AND PARKS
DEPARTMENT**



**Game, Fish & Parks
523 E. Capitol
Pierre, SD 57501**



This report was produced for Game, Fish and Parks' wildlife staff and administrators to measure hunter use of Walk-In Areas located in the northwest region of South Dakota and evaluate the Walk-In Areas from the perspective of hunters.

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Table of Contents

Introduction.....	1
Some Limitations.....	1
Map 1	2
Zone V – Clay & Union Counties (Map 2).....	3
Figure 1. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone V.....	5
Figure 2. Vehicles counted by week in Zone V Zone (see Table 4).....	7
Zone K – Brookings County (Map 3).....	14
Figure 3. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone K.....	15
Figure 4. Vehicles counted by week in Zone K (see Table 19).....	17
Zone D – Day County (Map 4).....	27
Figure 5. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone D.....	28
Figure 6. Vehicles counted by week in Zone D (see Table 34).....	30
Zone N – Brown County (Map 5).....	41
Figure 7. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone N.....	42
Figure 8. Vehicles counted by week in Zone N (see Table 49).....	44
Zone L – Lyman County (Map 6).....	55
Figure 9. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone L.....	56
Figure 10. Vehicles counted by week in Zone L (see Table 63).....	58
Zone T – Bennett County (Map 7).....	70
Figure 11. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone T.....	72
Figure 12. Vehicles counted by week in Zone T (see Table 77).....	74
Comparison of Zones.....	84
Satisfaction.....	84
Figure 13. Comparison of relative hunter use (%) of walk-in area study zones in relation to relative size of each zone (%)......	87
Figure 14. Mean satisfaction of hunters using walk-in areas in eastern And central South Dakota (2009).....	91
Figure 15. Relative size, relative use (vehicles) and percent satisfied hunters using walk-in areas in the eastern and central study zones (South Dakota – 2009).....	92
Figure 16. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing residence (South Dakota – 2009).....	94
Figure 17. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing residence (South Dakota – 2009).....	94
Figure 18. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing type of hunting (South Dakota – 2009).....	95
Figure 19. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing type of hunting (South Dakota – 2009).....	95

Figure 20. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing month hunted (South Dakota – 2009)96

Figure 21. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing month hunted (South Dakota – 2009) ...96

Discussion & Summary97

Hunter Use & Satisfaction97

Map 8 (Location of all walk-in areas studied in 2009).....99

Figure 22. Mean satisfaction summarized for all walk-in zones studied in 200999

Appendix A–Field data sheet used to record vehicles at walk-in areas along survey route.....101

Appendix B– Postage-paid survey card and directions left on vehicle windshields used in the 2009 evaluation of Walk-In Areas103



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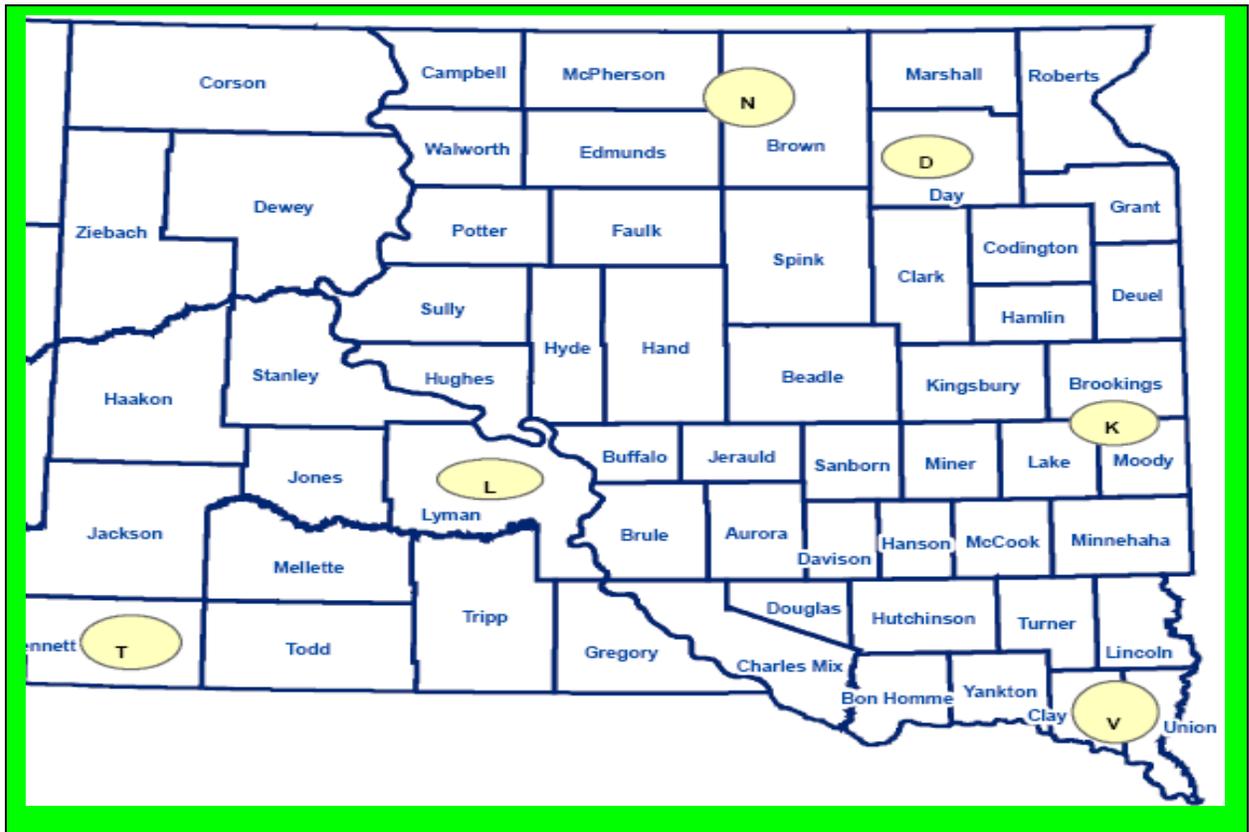
The purpose of this study is to describe the use of walk-in areas located in the eastern and central regions of South Dakota. This information will be used to help identify factors associated with high use walk-in areas that are attractive to hunters and provide for a quality hunting experience. In other words, what factors make for a ‘good’ vs. ‘poor’ walk-in area?

Survey routes were set-up in six zones in eastern and central South Dakota (Map 1). Division of Wildlife staff biologists and technicians ran the survey routes. Each zone had a prescribed route encompassing several walk-in areas; run three times per day (morning, mid-day and late afternoon) and each of the four zones were surveyed one week day and one weekend day per week.

The study began in mid-September (2009) and ran continuously through early January (2010)¹. Survey technicians recorded vehicles parked along walk-in areas on their route, noting license plate number, vehicle type and specific walk-in number (Appendix A). A postage-paid survey card along with directions and information about the survey were left in a clear plastic notebook sheet-protector (golf-pencil included) on the wind-shield of each vehicle encountered (Appendix B). Vehicles were only counted once per day per location. Analyses will first describe and compare walk-in areas within each of the six zones followed by comparisons across zones.

Some Limitations. The count of vehicles parked along walk-in areas on the survey routes represents a snapshot of use three times per day and thus are only an index of relative use. Larger walk-in areas can not only hold more hunters but also allow

¹ The schedule for Zone T ran a couple weeks longer to include goose hunting activity important in that area during January.

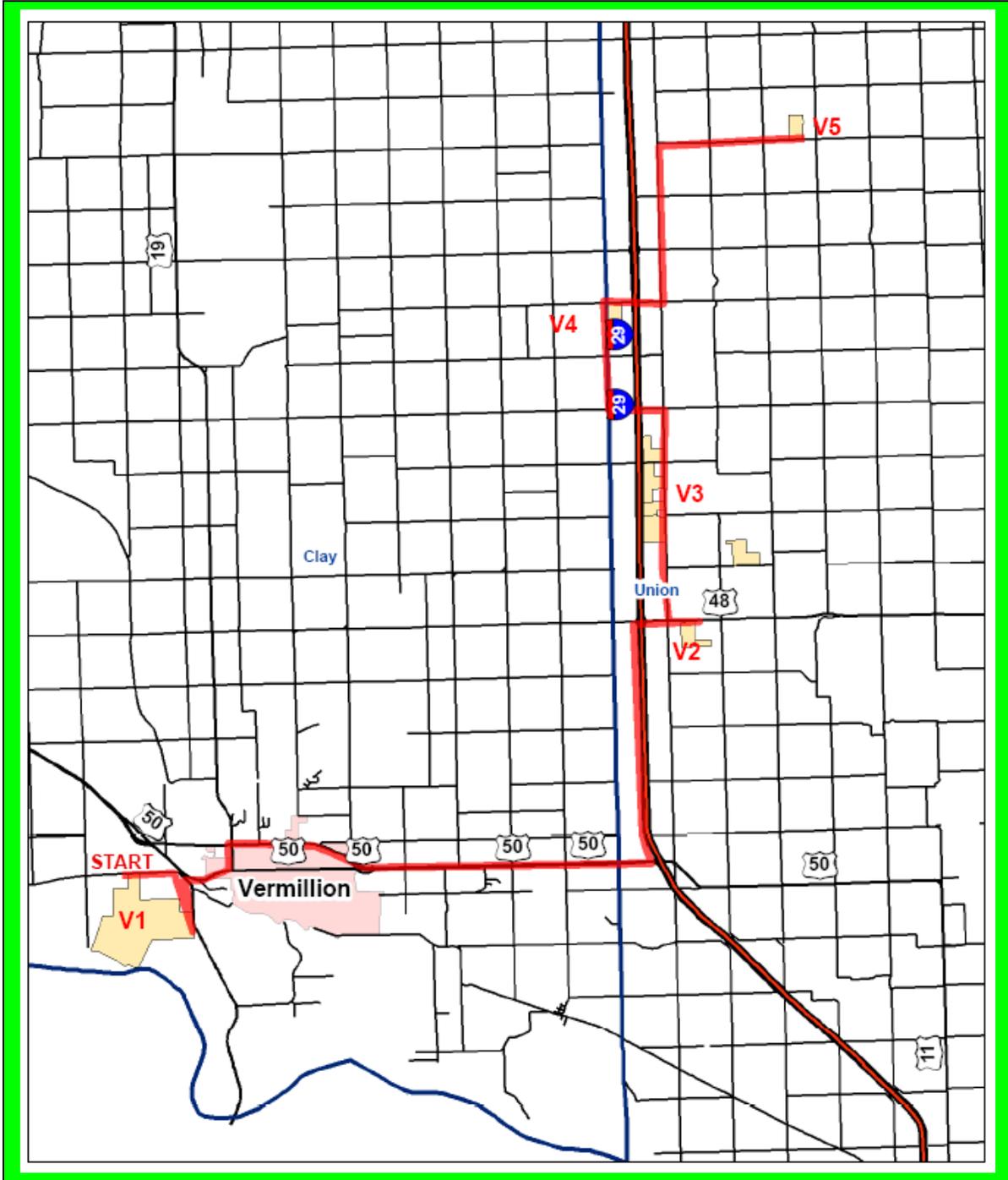


Map 1. Location of Walk-In survey routes in eastern & central of South Dakota.

hunters to spend more time at that walk-in compared to smaller walk-in areas, thus increasing the likelihood of being included in the survey count. Type of hunting, size of group, and likelihood of success are all factors that can contribute to the total amount of time spent at any particular location, thus impacting the instantaneous counts of vehicles. In other words, comparing walk-ins with very different types of hunting may not be appropriate (e.g., deer vs. pheasant hunting).

A different type of limitation results from not getting enough data from some walk-in areas, i.e. small sample-size limitations. No use was recorded from some small walk-in areas and several walk-ins had very low use and few to zero surveys returned—the lower the use of an area the greater the effort that must be made to obtain an accurate estimate of use. Also, surveys left on car windows often have a low response rate.

Zone V – Clay & Union Counties (Map 2)



Zone V had five walk-ins with Vermillion being the closest major town (Table 1). Pheasant was the main species for four of the walk-ins (#s 2–5) and deer the main species for walk-in #1, which was the largest walk-in in this study zone comprising almost 62% of the total acres in Zone V.

A total of 63 vehicles were recorded using walk-in areas in this zone during the study period and a total of 24 survey cards were collected (38%). We have limited data for describing the overall use of the zone. Hunter use of walk-in #1 was relatively low based on relative size of the five walk-ins in Zone V and hunter use of walk-in #3 was relatively high compared to relative size (Figure 1). Too few hunters were observed using walk-in numbers 2, 4 and 5 to make any meaningful analyses.

Average number of hunters by vehicle type was used to estimate the number of hunters observed during the survey. This method estimated a total of 101 hunters (Table 2). Since most vehicles encountered were extended-cab trucks and SUVs, which averaged a similar number of hunters the overall average party size can also be used to estimate the number of hunters encountered. Overall average party size was used to estimate the number of hunters at each Walk-in in Zone V (Table 3).

Use of the walk-in areas in Zone V was somewhat spread out over most of the study period (Table 4 and Figure 2). Note that a zero count does not mean that there was no use, only that no use was observed during the dates and times that observations were made.

Table 1. Description of Walk-In Areas in Zone V (2009).

ID #	Paved-Road Access?¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	Yes	Deer	Vermillion	1,150	61.7%	27	42.9%	5	18.5%
2	Yes	Pheasant	Vermillion	100	5.4%	1	1.6%	1	100%
3	Yes	Pheasant	Vermillion	460	24.7%	28	44.4%	13	46.4%
4	NO	Pheasant	Vermillion	75	4.0%	2	3.2%	1	50.0%
5	NO	Pheasant	Vermillion	80	4.3%	5	7.9%	4	80.0%
	--	--	Vermillion	1,865	100%	63	100%	24	38.1%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

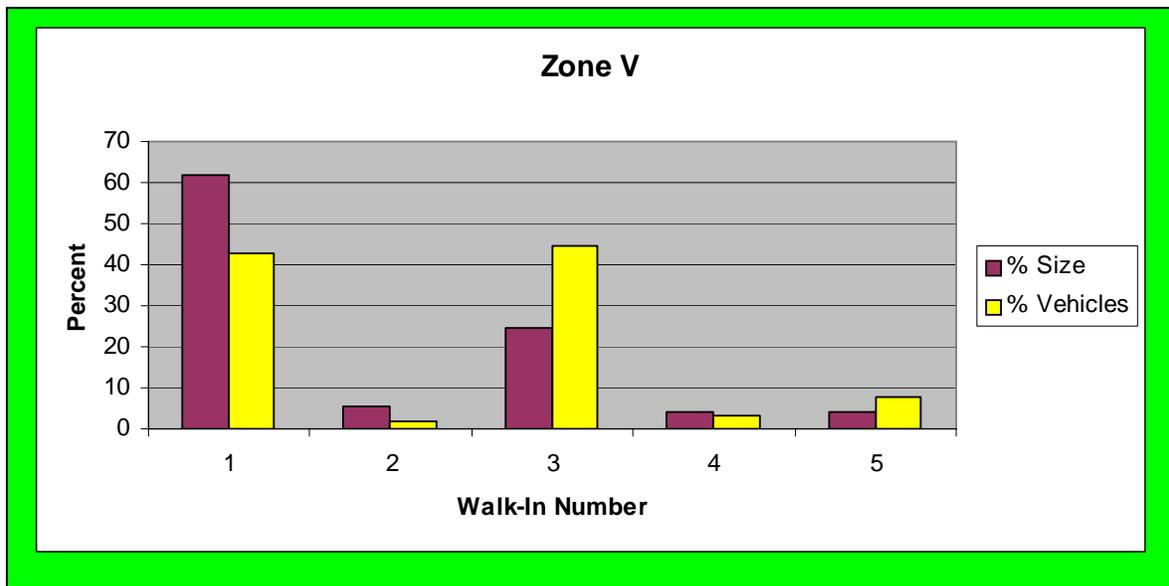


Figure 1. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone V.

Table 2. Estimated number of hunters encountered during the survey of Zone V.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	N/A ¹	2	3
Extended Cab Truck (3 or 4-door or back seats) (2)	1.50	31	47
SUV (4)	1.75	18	32
Van (mini included) (5)	2.00	3	6
4-door car / station wagon (7)	1.40	9	13
Overall Average	1.58	63	101 ²

¹Used 1.50 for this value

²Using the overall average would produce an estimate of 100 hunters.

Table 3. Estimated number of hunters encountered by Walk-In for Zone V.

Zone V – Walk-In Number	Number Vehicles	Estimated Hunters
1	27	43
2	1	2
3	28	44
4	2	3
5	5	8
Total	63	100

Table 4. Vehicles counted by survey date and by survey week in Zone V.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	1		7	1
September 24	0			
September 26	1		8	2
September 29	1			
October 3	3		9	4
October 7	1			
October 11	2		10	5
October 12	3			
October 17	9		11	10
October 19	1			
October 23	3		12	6
October 24	3			
October 30	0		13	4
October 31	4			
November 8	2		14	4
November 11	2			
November 14	5		15	5
November 19	0			
November 22	3		16	6
November 24	3			
November 28	5		17	5
December 1	0			
December 5	4		18	4
December 7	0			
December 13	3		19	3
December 15	0			
December 19	4		20	4
December 21	0			
December 27	0		21	0
December 30	0			
January 1	0		22	0
January 2	0			
Total (32 days)	63		16 (weeks)	63

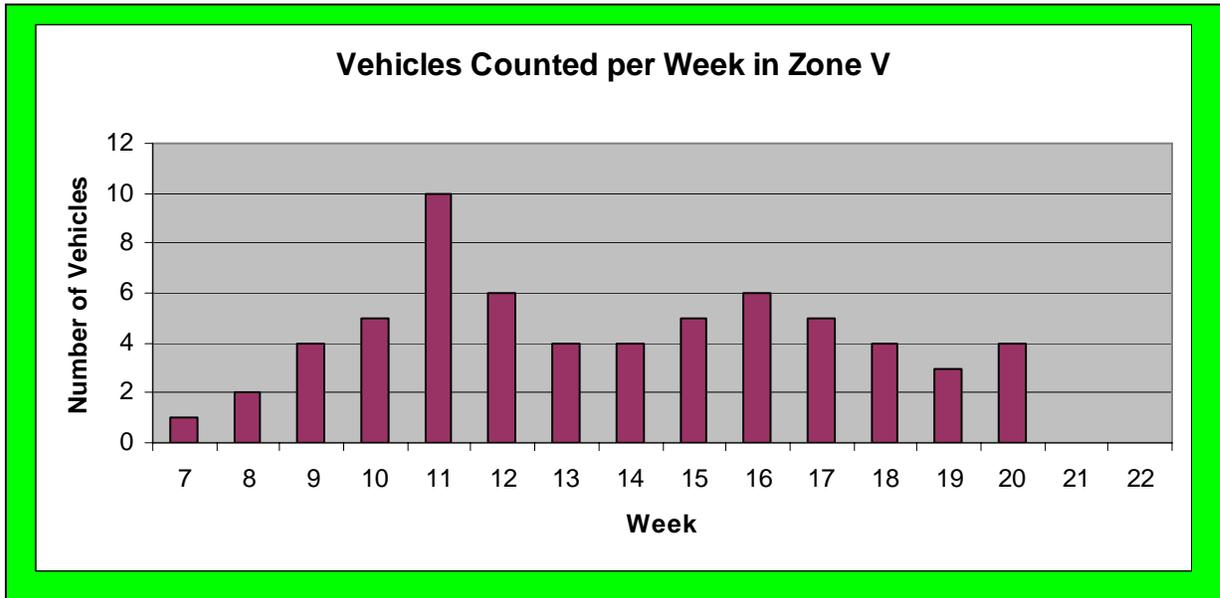


Figure 2. Vehicles counted by week in Zone V (see Table 4).

Most use of walk-in areas in Zone V was for pheasants: 75% of the hunters were pheasant hunting and 25% were deer hunting (Table 5). Only six pheasants and three deer were harvested by the hunters that returned their report cards (Table 6). The six pheasants harvested were from walk-in #3 and the three deer harvested were from walk-in #1 (Tables 7-A and 7-B).

About 29% of the groups hunting in Zone V included a youth hunter (less than 16 years old) (Table 8). About 88% of the groups were South Dakota residents, 12% non-residents and 0% mixed groups of both residents and nonresidents (Table 9). Most of the hunters encountered in Zone V started hunting in the afternoon and averaged about 1.7 hours of hunting (Tables 10 and 11).

About 58% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone V (Table 12). Comparisons by individual walk-in areas in Zone V are greatly hampered due to small sample sizes (Table 13). Residents were more satisfied than were nonresidents (Table 14). Deer hunters were more satisfied than pheasant hunters (Table 14). Only a small number of comments were provided by hunters (Table 15).

Table 5. Type of hunting on walk-in areas in Zone V.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	18	75.0%
• Pheasant Only	16	66.7%
• Pheasant + Other Small Game	2	8.3%
Archery Deer Hunting	3	12.5%
Rifle Deer Hunting	2	8.3%
Muzzleloader Deer Hunting	1	4.2%
Total Cases	24	

Table 6. Total harvest by hunters on walk-in areas in Zone V.

Species	Number	Percent
Pheasant	6	66.7%
Deer	3	33.3%
Total	9	100%
Total Groups	24	

Table 7-A. Harvest by hunters targeting pheasants in Zone V by Walk-In Area.

Number Pheasants Harvested by Group			Number	Percent	
0			12	66.7%	
1			6	33.3%	
2			0	0.0%	
Total Groups			18	100%	
Total Pheasants Harvested			6		
Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	0	0.0%	0	N/A	N/A
2	0	0.0%	1	0.0%	0.00
3	6	100%	12	50.0%	0.50
4	0	0.0%	1	0.0%	0.00
5	0	0.0%	4	0.0%	0.00
Total	6	100%	18	33.3%	0.33

¹Percent of groups harvesting one or more pheasants on the Walk-In.

Table 7-B. Harvest by hunters targeting deer in Zone V by Walk-In Area.

Number Deer Harvested by Group	Number	Percent
0 (Walk-Ins Hunted: 1 (3) & 3 (1) (archery, rifle & muzzleloader)	4	66.7%
1 (Walk-In #1 (archery)	1	16.7%
2 (Walk-In #1 (rifle)	1	16.7%
Total Groups	6	100%
Total Deer Harvested	3	

Table 8. Vehicles with hunters less than age 16 (Zone V).

Number of Youth Less than Age 16 in Vehicles in Zone V	Number	Percent
0	17	70.8%
1	7	29.2%
2	0	0.0%
Total	24	100%

Table 9. Residence of hunters in Zone V.

Residence	Number	Percent
South Dakota	21	87.5%
Non-residents	3	12.5%
Mixed Group	0	0.0%
Total	24	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Vermillion	5	25.0%
Beresford	3	15.0%
Sioux Falls	2	10.0%
Yankton	2	10.0%
North Sioux City	2	10.0%
Elk Point	2	10.0%
Centerville	1	5.0%
Hudson	1	5.0%
Brandon	1	5.0%
Canton	1	5.0%
Total (1 missing)	20	100%
Non-Residents – State		
State¹	Number	Percent
Kansas	2	66.7%
Minnesota	1	33.3%
Total	3	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 10. Start times for hunters in Zone V.

Start Time¹	Number	Percent
6 a.m.	1	4.2%
7 a.m.	2	8.3%
10 a.m.	1	4.2%
11 a.m.	1	4.2%
12 noon	2	8.3%
1 p.m.	1	4.2%
2 p.m.	6	25.0%
3 p.m.	6	25.0%
4 p.m.	3	12.5%
5 p.m.	1	4.2%
Total Groups	24	100%

¹Start times rounded down to the whole hour.

Table 11. Average total hunt times for hunters in Zone V.

Average Total Hunt Times (hours)	Number	Percent
0.25	1	4.2%
0.50	0	0.0%
0.75	1	4.2%
1.00	5	20.8%
1.25	3	12.5%
1.50	4	16.7%
1.75	0	0.0%
2.00	6	25.0%
2.25	0	0.0%
2.50	2	8.3%
3.50	1	4.2%
5.00	1	4.2%
Total Groups	24	100%
Average / 95% C.I.	1.72	1.30 – 2.13

Table 12. Overall satisfaction of groups hunting in Zone V.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	0	0.0%
Moderately Dissatisfied (-2)	2	8.3%
Slightly Dissatisfied (-1)	3	12.5%
Neutral / No Opinion (0)	5	20.8%
Slightly Satisfied (+1)	3	12.5%
Moderately Satisfied (+2)	5	20.8%
Very Satisfied (+3)	6	25.0%
Total	24	100%
Mean / 95% C.I.	1.00	0.30 – 1.70
SUMMARIZED RESULTS		
Dissatisfied	5	20.8%
Neutral / No Opinion	5	20.8%
Satisfied	14	58.3%
Ratio: Satisfied to Dissatisfied	2.8 to 1	

Table 13. Overall satisfaction of groups hunting in Zone V by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(5)	20.0%	0.0%	80.0%	2.00	-0.15 – 4.15
2	(1)	0.0%	0.0%	100%	1.00	N/A
3	(13)	23.1%	7.7%	69.2%	1.15	0.14 – 2.17
4	(1)	0.0%	100%	0.0%	0.00	N/A
5	(4)	25.0%	75.0%	0.0%	-0.50	-2.09 – 1.09
Total	(24)	20.8%	20.8%	58.3%	1.00	0.29 – 1.70

Table 14. Overall satisfaction of groups hunting in Zone V by residence and by type of hunting.

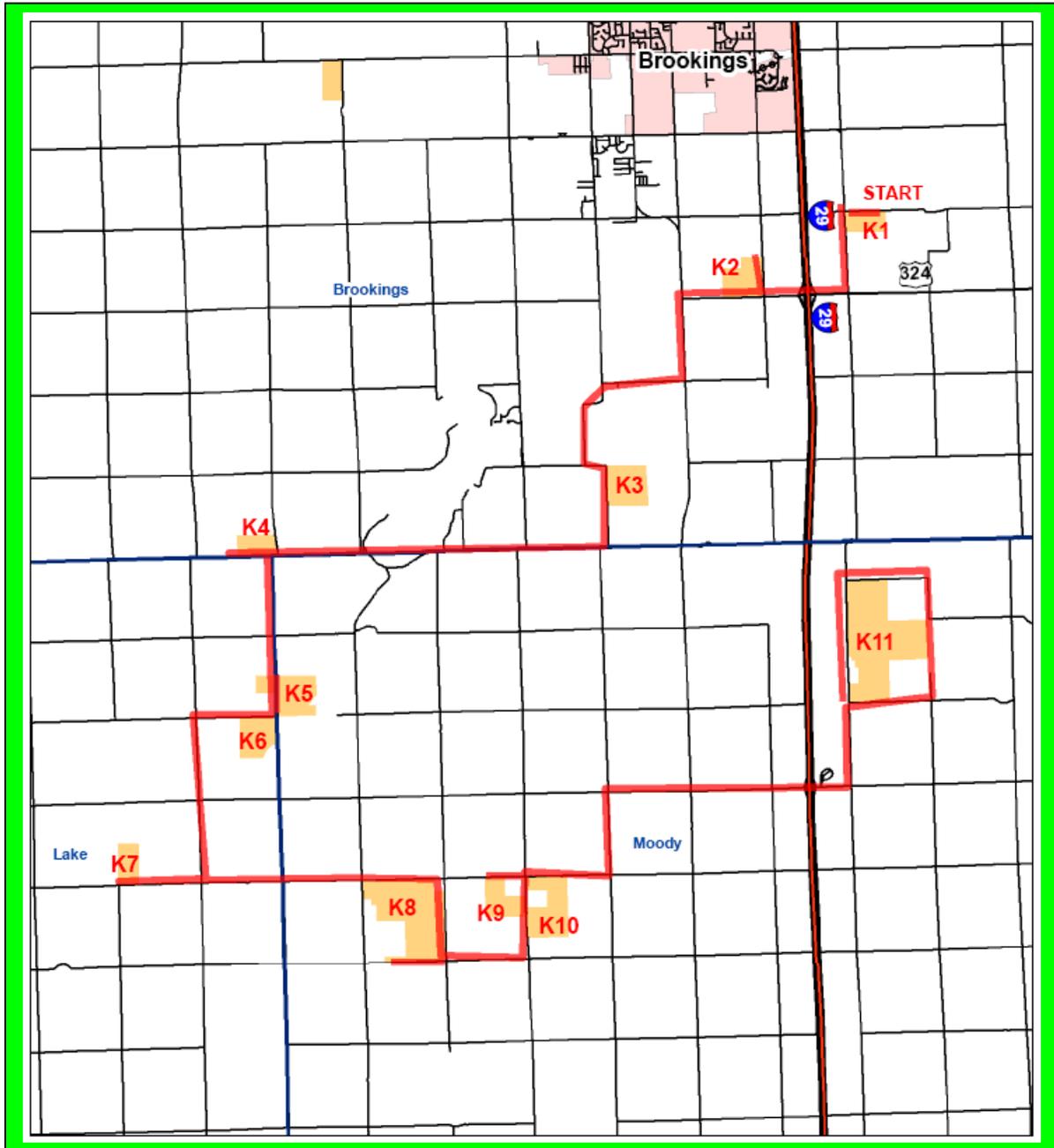
Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (21)	19.0%	19.0%	61.9%	1.10	0.32 – 1.87
Nonresident (3)	33.3%	33.3%	33.3%	0.33	-3.46 – 4.13
Mixed (0)	N/A	N/A	N/A	N/A	N/A
Total (24)	20.8%	20.8%	58.3%	1.00	0.29 – 1.70
Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (18)	22.2%	27.8%	50.0%	0.61	-0.15 – 1.38
Rifle Deer (6)	16.7%	0.0%	83.3%	2.17	0.49 – 3.85

Table 15. Comments by hunters in Zone V (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
1	-1	4069	Could see un-harvested crops for wildlife (food plots).
2	+1	4119	Good location, no parking.
3	-2	4151	12° F, Windy, 8-12 inches snow, difficult conditions, saw two roosters out-of-range.
3	-1	4333	Crops aren't out of the field so the hunting is harder, plus weather.
3	-1	4285	Flushed only 1 rooster and about 3 hens. Standing crops may have affected this. Would like to know what this grass/grain is and why it is so prevalent in this part of the state. Maybe its better winter cover than switch-grass/bluestem, but my experiences has been that pheasants prefer switch-grass. Wouldn't think cover this dense would be necessary in an area that has lots of thick cattails around. Also, the stuff is so consistent – no cover variation (broadleaves, etc.). Is it really good nesting cover? I think this grass smothers everything else that may want to grow, like switch-grass/bluestem. Very difficult walking, especially for somewhat older hunters. Please focus Walk-In acquisition on areas more than 45 minutes from major populations (Sioux Falls, Yankton, Brookings, etc.) in southeast & east central part of the State. Northeast and West River have plenty already – Thanks!
3	0	4282	Standing water almost everywhere on this WIA.
3	+1	4324	Think area is over hunted.
3	+1	4327	Tough hunting – Walk-In is mostly slew with standing water – great cover, but most of it has no access by foot.
3	+2	4290	South Dakota has excellent WIA hunting! I especially appreciate the GPS files to help locate these areas.
3	+2	4329	It would be nice to have some “structure”, i.e., food plots, shelterbelt, etc. But, this is a <u>GREAT</u> area and a <u>GREAT</u> program. If it's a choice between land without structure or no land at all, we can live without the structure. THANKS GFP.
3	+3	4061	Flushed 11 birds of which 8 were hens.
3	+3	4180	Flushed 9 birds – 2 roosters.
4	0	4211	You need to watch this area at night because we found truck tracks.
5	-2	4287	All hunting area under water. Most of dry areas harvested and no cover.
5	0	4120	Corn still in on three sides. Will try again after corn is harvested.
5	0	4048	Too small of a huntable area for winter.

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Zone K – Brookings County (Map 3)



Zone K had eleven walk-ins with Brookings being the closest major town (Table 16). Pheasant was the main species for all eleven of the walk-ins.

A total of 173 vehicles were recorded using walk-in areas in this zone during the study period and a total of 89 survey cards were collected (51%). We have limited data for describing the overall use of the zone. Hunter use of walk-ins #8 and #11 was relatively low based on relative size of the eleven walk-ins in Zone K and hunter use of walk-ins #6, #9 and #10 was relatively high compared to relative size (Figure 3).

Table 16. Description of Walk-In Areas in Zone K (2009).

ID #	Paved-Road Access? ¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	YES	Pheasant	Brookings	80	3.5%	3	1.7%	3	100%
2	YES	Pheasant	Brookings	140	6.1%	8	4.6%	2	25.0%
3	NO	Pheasant	Brookings	160	7.0%	16	9.3%	6	37.5%
4	YES	Pheasant	Brookings	80	3.5%	9	5.2%	5	55.6%
5	NO	Pheasant	Brookings	200	8.8%	17	9.8%	12	70.6%
6	NO	Pheasant	Brookings	130	5.7%	17	9.8%	12	70.6%
7	NO	Pheasant	Brookings	80	3.5%	8	4.6%	6	75.0%
8	NO	Pheasant	Brookings	455	20.0%	21	12.1%	9	42.9%
9	NO	Pheasant	Brookings	120	5.3%	17	9.8%	9	52.9%
10	NO	Pheasant	Brookings	245	10.7%	28	16.2%	12	42.9%
11	NO	Pheasant	Brookings	590	25.9%	29	16.8%	13	44.8%
	--	--	Brookings	2,280	100%	173	100%	89	51.4%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

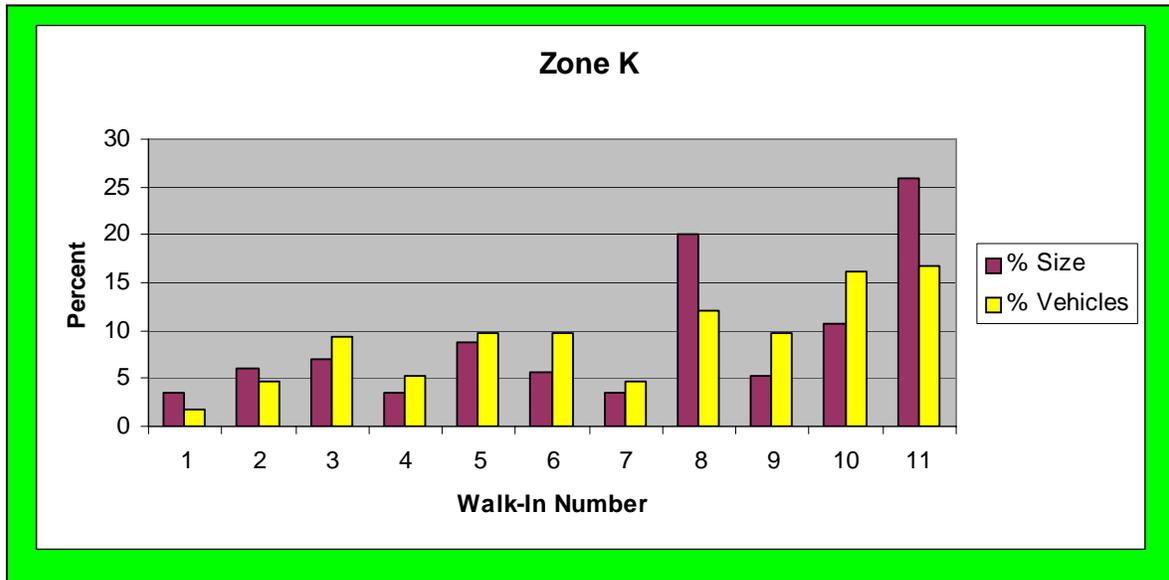


Figure 3. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone K.

Average number of hunters by vehicle type was used to estimate the number of hunters observed during the survey. This method estimated a total of 297 hunters (Table 17). Since most vehicles encountered were extended-cab trucks and SUVs, which averaged a similar number of hunters the overall average party size can also be used to estimate the number of hunters encountered. Overall average party size was used to estimate the number of hunters at each walk-in in Zone K (Table 18).

Table 17. Estimated number of hunters encountered during the survey of Zone K.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	1.44	21	30
Extended Cab Truck (3 or 4-door or back seats) (2)	1.59	83	132
SUV (4)	1.92	48	92
Van (mini included) (5)	N/A ¹	3	5
2-door car (6)	N/A ¹	3	5
4-door car / station wagon (7)	2.20	15	33
Overall Average	1.69	173	297

¹Used overall average for calculations for this cell (due to small sample size)

²Using the overall average would produce an estimate of 292 hunters.

Table 18. Estimated number of hunters encountered by Walk-In for Zone K.

Zone K – Walk-In Number	Number Vehicles	Estimated Hunters
1	3	5
2	8	14
3	16	27
4	9	15
5	17	29
6	17	29
7	8	14
8	21	35
9	17	29
10	28	47
11	29	49
Total	173	293

Use of the walk-in areas in Zone K had relatively high use in mid-October with a lower level of use spread out over most of the study period (Table 19 and Figure 4). Note that a zero count does not mean that there was no use, only that no use was observed during the dates and times that observations were made.

Most use of walk-in areas in Zone K was for pheasants: 92% of the hunters were pheasant hunting and 18% were deer hunting (Table 20). A total of 47 pheasants and three deer were harvested by the hunters that returned their report cards (Table 21). Pheasant harvest was somewhat spread out among the walk-in surveyed in Zone K (Table 21-A). Two deer were harvested from walk-in #6 and one from walk-in #3 (Table 21-B).

About 11% of the groups hunting in Zone K included a youth hunter (less than 16 years old) (Table 22). About 81% of the groups were South Dakota residents, 10% non-residents and 9% mixed groups of both residents and nonresidents (Table 23). Hunters using Zone K started hunting throughout the day and averaged about 1.6 hours of hunting (Tables 24 and 25).

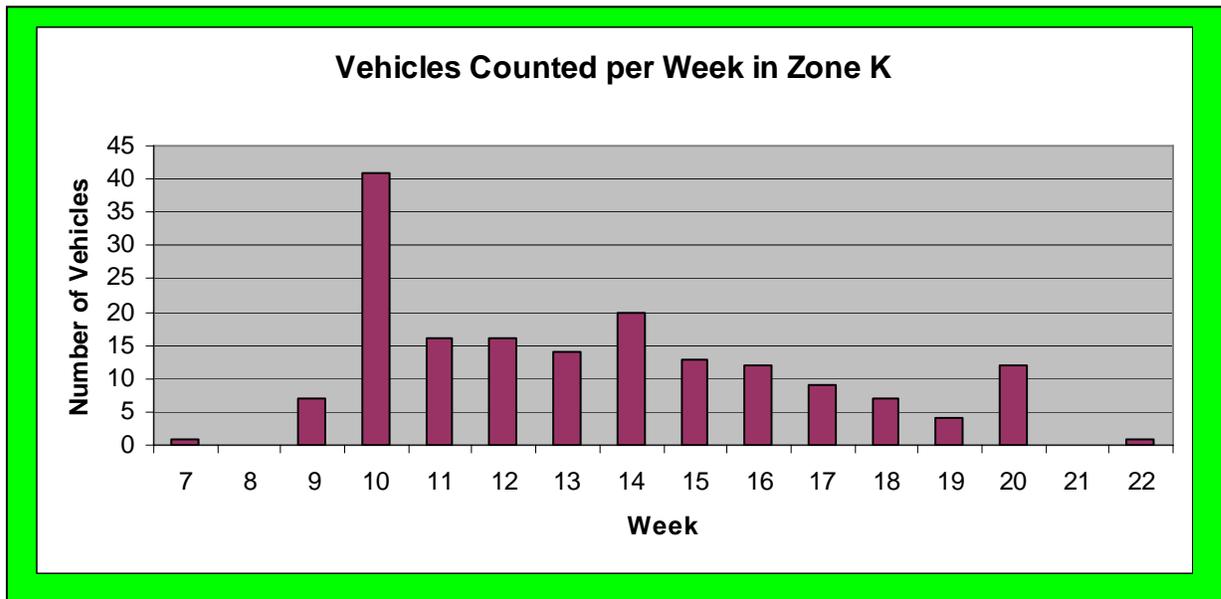


Figure 4. Vehicles counted by week in Zone K (see Table 19).

Table 19. Vehicles counted by survey date and by survey week in Zone K.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	1		7	1
September 24	0			
September 26	0		8	0
September 29	0			
October 3	6		9	7
October 7	1			
October 11	25		10	41
October 12	16			
October 17	16		11	16
October 19	(not run)			
October 23	5		12	16
October 24	11			
October 30	1		13	14
October 31	13			
November 8	9		14	20
November 11	11			
November 14	11		15	13
November 19	2			
November 22	8		16	12
November 24	4			
November 28	8		17	9
December 1	1			
December 5	7		18	7
December 7	0			
December 13	4		19	4
December 15	0			
December 19	9		20	12
December 21	3			
December 27	0		21	0
December 30	0			
January 1	1		22	1
January 2	0			
Total (31 days)	173		16 (weeks)	173

About 55% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone K (Table 26). Comparisons by individual walk-in areas in Zone K are greatly hampered due to small sample sizes (Table 27). Residents were more satisfied than were nonresidents, but mixed groups of residents and nonresidents had the highest mean satisfaction level (Table 28). Deer hunters were more satisfied than pheasant hunters (Table 28). Only a small number of negative comments were provided by hunters mainly mentioning a lack of game, but many hunters had positive comments about the Walk-In Program in general (Table 29).

Table 20. Type of hunting on walk-in areas in Zone K.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	73	92.0%
• Pheasant Only	71	79.8%
• Pheasant + Deer	2	2.2%
Deer Hunting (All Types)	16	18.0%
• Rifle	15	16.9%
• Muzzleloader	1	1.1%
Other Small Game (Dove)	1	1.1%
Other (Coyotes)	1	1.1%
Total Cases	89	

Table 21. Total harvest by hunters on walk-in areas in Zone K.

Species	Number	Percent
Pheasant	47	94.0%
Deer	3	6.0%
Total	50	100%
Total Groups	89	

Table 21-A. Harvest by hunters targeting pheasants in Zone K by Walk-In Area.

Number Pheasants Harvested by Group		Number	Percent
0		49	67.1%
1		13	17.8%
2		6	8.2%
3		3	4.1%
4		1	1.4%
9		1	1.4%
Total Groups		73	100%
Total Pheasants Harvested		47	

Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	0	0.0%	3	0.0%	0.00
2	2	4.3%	2	50.0%	1.00
3	0	0.0%	3	0.0%	0.00
4	5	10.6%	5	80.0%	1.00
5	12	25.5%	10	30.0%	1.20
6	4	8.5%	8	25.0%	0.50
7	2	4.3%	5	40.0%	0.40
8	7	14.9%	9	44.4%	0.78
9	5	10.6%	8	37.5%	0.63
10	9	19.1%	10	40.0%	0.90
11	1	2.1%	10	10.0%	0.10
Total	47	100%	73	32.9%	0.64

¹Percent of groups harvesting one or more pheasants on the Walk-In.

Table 21-B. Harvest by hunters targeting deer in Zone K by Walk-In Area.

Number Deer Harvested by Group		Number	Percent
0 (1 Muzzleloader & 12 Rifle Deer)		13	81.3%
1		3	18.8%
Total Groups		16	100%
Total Deer Harvested		3	

Walk-In #	Total Deer Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	--	--	0	--	--
2	--	--	0	--	--
3	1	33.3%	3	33.3%	0.33
4	--	--	0	--	--
5	0	0.0%	2	0.00%	0.00
6	2	66.7%	4	50.0%	0.50
7	--	--	0	--	--
8	0	0.0%	1	0.00%	0.00
9	0	0.0%	1	0.00%	0.00
10	0	0.0%	2	0.00%	0.00
11	0	0.0%	3	0.00%	0.00
Total	3	100%	16	18.8%	0.19

¹Percent of groups harvesting one or more deer on the Walk-In.

Table 22. Vehicles with hunters less than age 16 (Zone K).

Number of Youth Less than Age 16 in Vehicles in Zone K	Number	Percent
0	79	88.8%
1	8	9.0%
2	2	2.2%
Total	89	100%

Table 23. Residence of hunters in Zone K.

Residence	Number	Percent
South Dakota	72	80.9%
Non-residents	9	10.1%
Mixed Group	8	9.0%
Total	89	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Brookings	37	52.1%
Sioux Falls	23	32.4%
Aurora	3	4.2%
Rapid City, Huron, Flandreau, Dell Rapids, Chester, Colman, Volga, and Baltic	1 (each)	1.4% (each)
Total (1 missing)	71	100%
Non-Residents – State		
State¹	Number	Percent
Wisconsin	4	44.4%
Iowa, Michigan, Minnesota, Ohio, and Oklahoma,	1 (each)	11.1% (ech)
Total	9	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 24. Start times for hunters in Zone K.

Start Time¹	Number	Percent
7 a.m.	6	6.9%
8 a.m.	0	0.0%
9 a.m.	2	2.3%
10 a.m.	13	14.9%
11 a.m.	3	3.4%
12 noon	9	10.3%
1 p.m.	10	11.5%
2 p.m.	3	3.4%
3 p.m.	16	18.4%
4 p.m.	16	18.4%
5 p.m.	8	9.2%
6 p.m.	1	1.1%
Total Groups (2 missing)	87	100%

¹Start times rounded down to the whole hour.

Table 25. Average total hunt times for hunters in Zone K.

Average Total Hunt Times (hours)	Number	Percent
0.50	8	9.2%
0.75	11	12.6%
1.00	13	14.9%
1.25	11	12.6%
1.50	17	19.5%
1.75	4	4.6%
2.00	10	11.5%
2.25	2	2.3%
2.50	3	3.4%
3.00	4	4.6%
3.50	1	1.1%
4.25	1	1.1%
4.50	1	1.1%
10.00	1	1.1%
Total Groups (2 missing)	87	100%
Average / 95% C.I.	1.58	1.33 – 1.84

Table 26. Overall satisfaction of groups hunting in Zone K.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	7	7.9%
Moderately Dissatisfied (-2)	3	3.4%
Slightly Dissatisfied (-1)	5	5.6%
Neutral / No Opinion (0)	25	28.1%
Slightly Satisfied (+1)	11	12.4%
Moderately Satisfied (+2)	23	25.8%
Very Satisfied (+3)	15	16.9%
Total	89	100%
Mean / 95% C.I.	0.79	0.42 – 1.15
SUMMARIZED RESULTS		
Dissatisfied	15	16.9%
Neutral / No Opinion	25	28.1%
Satisfied	49	55.1%
Ratio: Satisfied to Dissatisfied	3.3 to 1	

Table 27. Overall satisfaction of groups hunting in Zone K by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(3)	66.7%	0.0%	33.3%	-0.67	-6.92 – 5.58
2	(2)	0.0%	0.0%	100%	2.50	-3.85 – 8.85
3	(6)	16.7%	33.3%	50.0%	1.00	-1.57 – 3.57
4	(5)	0.0%	0.0%	100%	2.00	0.76 – 3.24
5	(12)	8.3%	50.0%	41.7%	0.50	-0.24 – 1.24
6	(12)	25.0%	25.0%	50.0%	0.58	-0.89 – 2.05
7	(6)	16.7%	33.3%	50.0%	0.50	-1.68 – 2.68
8	(9)	11.1%	11.1%	77.8%	1.22	0.08 – 2.36
9	(9)	11.1%	33.3%	55.6%	0.67	-0.61 – 1.94
10	(12)	8.3%	25.0%	66.7%	1.25	0.13 – 2.37
11	(13)	30.8%	38.5%	30.8%	0.23	-0.47 – 0.93
Total	(89)	16.9%	28.1%	55.1%	0.79	0.42 – 1.15

Table 28. Overall satisfaction of groups hunting in Zone K by residence and by type of hunting.

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (72)	18.1%	26.4%	55.6%	0.78	0.38 – 1.18
Nonresident (9)	22.0%	44.4%	33.3%	0.11	-1.49 – 1.72
Mixed (8)	0.0%	25.0%	75.0%	1.63	0.63 – 2.62
Total (89)	16.9%	28.1%	55.1%	0.79	0.42 – 1.15

Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (73)	20.5%	28.8%	50.7%	0.59	0.18 – 1.00
Rifle Deer (15)	6.7%	20.0%	73.3%	1.53	0.81 – 2.25

Table 29. Comments by hunters in Zone K (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
1	-3	4268	Put the corn back in.
1	-1	4395	No birds or any sign of any birds here.
1	+2	4198	Saw no birds but place looked good.
2	+3	4374	No pretty birds today. Hens were there and my dog loved working the area and I loved watching him work. Can't be anything but very satisfied.
3	-1	4042	Not very much thick cover to hold pheasants, plus no crops anywhere in the area to attract wildlife.
3	+3	4183	My first deer.
3	+3	4185	Love the Walk-In Area program!
4	+1	4266	Seemed to be good habitat. Surprised hunting with two dogs, only raised one rooster and no hens. It is great to have the Walk-In Areas available though. Need to try to maintain them.
4	+3	4316	Good area for coverage. Saw several pheasants.
4	+3	4129	Flushed 8 total birds – missed. I have hunted this area many times.
5	-2	4055	It is very disappointing how devoid of wildlife or sign of wildlife these Walk-Ins are. Most days I don't even see a bird. Thank you are acquiring this property and attempting to get us more access.
5	0	4358	Great to have a place to hunt. Working two good dogs, did not raise one bird. Seemed to be nice habitat.
5	0	4161	Would like to see more Walk-In Area with good cover. Disappointed in some Walk-In Area that are mowed or have no cover.
5	+2	4415	It is nice to have a place to hunt. Need more signs.
5	+2	4016	I hate skunks but my stupid dogs love them.
6	-2	4353	No birds for the 2 nd weekend I've been out.
6	0	4199	Too many crops up yet.
6	0	4405	Nothing today. Too much corn in. This is a good field to hunt in.
6	+1	4317	With most crops still standing, hunting is not as good as it could be. Still a nice spot. Probably gets a lot of pressure.
6	+1	4308	I hunt deer every year at this location, usually with success! Standing corn near this location was a problem (today). Good pheasant & deer hunting at this Walk-In! I will continue to hunt here.
6	+2	4362	I like the "Walk-In" program a lot. Please keep it up.
6	+3	4197	Great cooperation and safety of the multiple hunting parties.
6	+3	4275	Walk-In Area excellent program. Need more of them.
6	+3	4350	Corn was harvested on both sides of Walk-In Area and I saw a total of six deer (all does). Much better this time.
6	+3	4153	You are doing an excellent job of providing quality pheasant hunting. Food plots may also help.
7	-3	4392	No birds anywhere.
7	0	4391	Keep-up the good work signing up landowners for Walk-In Areas.
7	+2	4390	Scared up 3 doe, saw numerous hens, 1 rooster and a skunk.
7	+3	4411	Keep going with the program.

Comments continued on next page...

Table 29 – Continued. Comments by hunters in Zone K (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
8	-2	4135	I hunt with a dog, like to walk. I think pheasants were in close corn field.
8	+2	4312	Lots of birds – but are still in corn.
8	+2	4407	“Walk-In” is a great program.
8	+3	4311	We hunt this area every year. We love it. It was a hard hunt but dogs enjoy it. Normally I get birds here!
9	-3	4108	Worst trip ever, no birds and too much standing corn.
9	0	4035	A lot of very young birds.
9	0	4377	We need to save CRP and Walk-In Areas!
9	+1	4279	Walk-In Areas are a great program – hate to see them all plowed for corn.
9	+2	4095	Crops still in.
9	+2	4194	It is nice to have a place to hunt. More signs.
9	+2	4008	Great area. Just a tough day (weather). I appreciate all the public lands. I do almost all my hunting on them. Thanks You! Keep up the good work.
10	0	4229	Tough hunting with crops still in and too early in the day.
10	0	4404	Deer population appears to be down this year. We do like the Walk-In Area.
10	+2	4320	Area not very well marked on all borders.
10	+2	4294	Please continue purchasing and using other means to obtain Walk-In Areas. Also, consider some kind of gate to keep unauthorized pickups & especially ATV’s out!
10	+3	4319	Very young birds.
11	-1	4394	I like the Walk-In Area.
11	-1	4146	Only saw one bird. Limited opportunity.
11	-1	4417	Area seems to be hunted out of game.
11	-1	4315	Not a lot of birds. Good cover but limited to no food plots.
11	0	4418	Maybe a food plot would be helpful.
11	0	4147	Good land, no birds.
11	0	4397	Great habitat, very few birds. Thank you for leasing this area, but I don’t know where the birds are. I hunt hard with a good dog.
11	0	4355	Did not see any deer today, saw deer in here 12-18-09, but I was out of range, I might be back. Got pheasants up both days I was in here.
11	+1	4354	Good location, a parking area would have been nice. No deer seen on this date/time.
11	+2	4263	Wish there were more Walk-In Areas.
11	+2	4031	Great hunting land. Helpful staff.

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Table 30. Description of Walk-In Areas in Zone D (2009).

ID #	Paved-Road Access? ¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	Yes	Waterfowl	Webster	790	9.8%	19	13.2%	11	57.9%
2	NO	Waterfowl	Webster	160	2.0%	8	5.6%	2	25.0%
3	Yes	Waterfowl	Webster	650	8.1%	2	1.4%	2	100%
4	NO	Waterfowl	Webster	320	4.0%	0	0.0%	-	-
5	Yes	Waterfowl	Webster	2,000	24.9%	29	20.1%	13	44.8%
6	Yes	Pheasant	Webster	158	2.0%	8	5.6%	3	37.5%
7	Yes	Pheasant	Webster	120	1.5%	2	1.4%	1	50.0%
8	Yes	Waterfowl	Webster	170	2.1%	0	0.0%	-	-
9	Yes	Pheasant	Webster	1,180	14.7%	16	11.1%	6	37.5%
10	Yes	Pheasant	Webster	119	1.5%	8	5.6%	6	75.0%
11	Yes	Waterfowl	Webster	952	11.9%	34	23.6%	14	41.2%
12	NO	Waterfowl	Webster	1,230	15.3%	17	11.8%	7	41.2%
13	NO	Pheasant	Webster	180	2.2%	1	0.7%	1	100%
	--	--	Webster	8,029	100%	144	100%	66	45.8%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

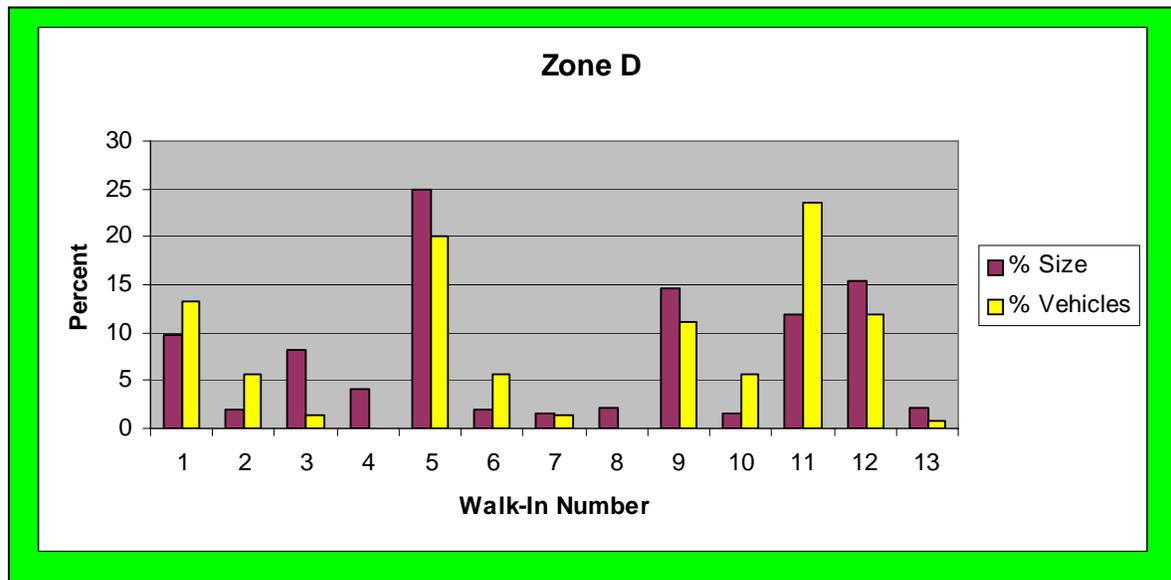


Figure 5. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone D.

Table 31. Estimated number of hunters encountered during the survey of Zone D.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	N/A ¹	4	8
Extended Cab Truck (3 or 4-door or back seats) (2)	1.91	95	181
SUV (4)	2.00	38	76
Van (mini included) (5)	N/A ¹	4	8
4-door car / station wagon (7)	N/A ¹	3	6
Overall Average	1.91	144	279

¹Used overall average for calculations for this cell (due to small sample size)

²Using the overall average would produce an estimate of 275 hunters.

Table 32. Estimated number of hunters encountered by Walk-In for Zone D.

Zone D – Walk-In Number	Number Vehicles	Estimated Hunters
1	19	36
2	8	15
3	2	4
4	0	0
5	29	55
6	8	15
7	2	4
8	0	0
9	16	31
10	8	15
11	34	65
12	17	32
13	1	2
Total	144	274

Use of the walk-in areas in Zone D had relatively high use during the early part of the waterfowl season and from mid-October through November (Table 34 and Figure 6). Note that a zero count does not mean that there was no use, only that no use was observed during the dates and times that observations were made.

About 61% of the hunters using walk-ins in Zone D hunters for pheasants, 30% for waterfowl, and 20% for deer (some hunting groups did more than one type of hunting) (Table 35). A total of 84 ducks, 29 pheasants and 2 geese were harvested by the hunters that returned their report cards (Table 36). Most of the ducks were harvested in walk-in numbers 1 and 5 and most pheasants were harvested in walk-in numbers 11 and 12 (Tables 37-A and 37-B). No deer were reported harvested by the hunters returning survey cards from Zone D (Table 37-C).

Only about 6% of the groups hunting in Zone D included a youth hunter (less than 16 years old) (Table 38). About 39% of the groups were South Dakota residents, 56% non-residents and 5% mixed groups of both residents and nonresidents (Table 39). Hunters using Zone D started hunting throughout the day and averaged about 2.3 hours of hunting (Tables 40 and 41).

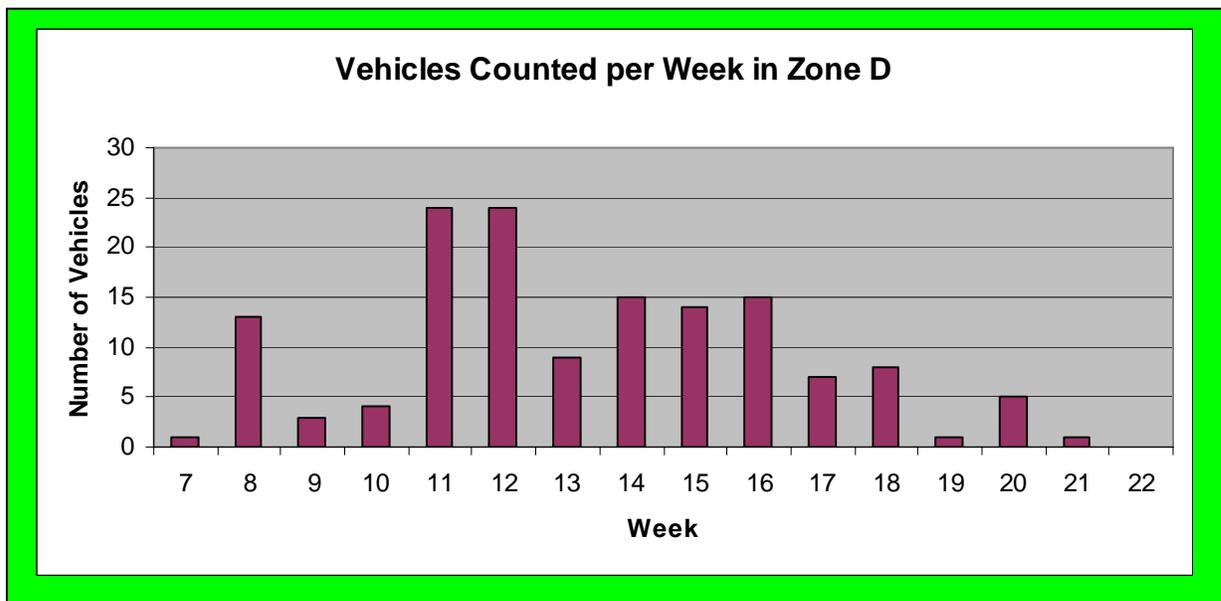


Figure 6. Vehicles counted by week in Zone D (see Table 34).

Table 34. Vehicles counted by survey date and by survey week in Zone D.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	1		7	1
September 24	0			
September 26	13		8	13
September 29	0			
October 3	3		9	3
October 7	0			
October 11	2		10	4
October 12	2			
October 17	15		11	24
October 19	9			
October 23	12		12	24
October 24	12			
October 30	3		13	9
October 31	6			
November 8	8		14	15
November 11	7			
November 14	7		15	14
November 19	7			
November 22	14		16	15
November 24	1			
November 28	7		17	7
December 1	0			
December 5	6		18	8
December 7	2			
December 13	0		19	1
December 15	1			
December 19	5		20	5
December 21	0			
December 27	0		21	1
December 30	1			
January 1	0		22	0
January 2	0			
Total (32 days)	144		16 (weeks)	144

About 59% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone D (Table 42). Comparisons by individual walk-in areas in Zone D are greatly hampered due to small sample sizes (Table 43). Residents were more satisfied than were nonresidents (Table 44). Deer hunters reported the highest level of satisfaction followed by waterfowl hunters while pheasant hunter satisfaction was relatively low (Table 44). Only a small number of negative comments were provided by hunters mainly mentioning a lack of game or wet habitat conditions, but many hunters had positive comments about the Walk-In Program in general (Table 45).

Table 35. Type of hunting on walk-in areas in Zone D.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	40	60.6%
• Pheasant Only	32	48.5%
• Pheasant + Waterfowl	8	12.1%
Waterfowl – All Hunters	20	30.3%
• Waterfowl Only	12	20.0%
Deer Hunting (All Types)	13	19.7%
• Archery	7	10.6%
• Rifle	6	9.1%
Other	1	1.5%
Total Cases	66	

Table 36. Total harvest by hunters on walk-in areas in Zone D.

Species	Number	Percent
Ducks	84	73.0%
Pheasants	29	25.2%
Geese	2	1.7%
Deer	0	0.0%
Total	115	100%
Total Groups	66	

Table 37-A. Harvest by hunters targeting waterfowl in Zone D by Walk-In Area.

Number Ducks Harvested by Group		Number	Percent
0		7	35.0%
1		1	5.0%
2		2	10.0%
5		3	15.0%
6		2	10.0%
8		1	5.0%
10		2	10.0%
12		2	10.0%
Total Groups		20	100%
Total Ducks Harvested		84	

Walk-In #	Total Ducks Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1²	32	38.1%	9	66.7%	3.56
2	10	11.9%	1	100%	10.00
3²	15	17.9%	2	100%	7.50
4	-	-	-	-	-
5	20	23.8%	2	100%	10.00
6	-	-	-	-	-
7	-	-	-	-	-
8	-	-	-	-	-
9	5	6.0%	1	100%	5.00
10	0	0.0%	1	0.0%	0.00
11	2	2.4%	4	25.0%	0.50
12	-	-	-	-	-
13	-	-	-	-	-
Total	84	100%	20	65.0%	4.20

¹Percent of groups harvesting one or more ducks on the Walk-In.

²One goose each was also harvested on Walk-In numbers 1 and 3.

Table 37-B. Harvest by hunters targeting pheasants in Zone D by Walk-In Area.

Number Pheasants Harvested by Group		Number	Percent
0		25	62.5%
1		8	20.0%
2		5	12.5%
3		1	2.5%
8		1	2.5%
Total Groups		40	100%
Total Pheasants Harvested		29	

Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	0	0.0%	4	0.0%	0.00
2	0	0.0%	1	0.0%	0.00
3	-	-	-	-	-
4	-	-	-	-	-
5	0	0.0%	2	0.0%	0.00
6	3	10.3%	3	100%	1.00
7	0	0.0%	1	0.0%	0.00
8	-	-	-	-	-
9	3	10.3%	4	50.0%	0.75
10	2	6.9%	6	16.7%	0.33
11	10	34.5%	14	42.9%	0.71
12	11	37.9%	4	75.0%	2.75
13	0	0.0%	1	0.0%	0.00
Total	29	100%	40	37.5%	0.73

¹Percent of groups harvesting one or more pheasants on the Walk-In.

Table 37-C. Harvest by hunters targeting deer in Zone D by Walk-In Area.

Number Deer Harvested by Group¹	Number	Percent
0 (7 Archery Deer & 6 Rifle Deer)	13	100%
1	0	0.0%
Total Groups	13	100%
Total Deer Harvested	0	

¹7 Archery deer hunter groups hunting Walk-In Numbers: 5 & 12
 6 Rifle deer hunter groups hunting Walk-In Numbers: 5, 9, & 12

Table 38. Vehicles with hunters less than age 16 (Zone D).

Number of Youth Less than Age 16 in Vehicles in Zone D	Number	Percent
0	61	93.8%
1	3	4.6%
2	1	1.5%
Total (1 missing)	65	100%

Table 39. Residence of hunters in Zone D.

Residence	Number	Percent
South Dakota	26	39.4%
Non-residents	37	56.1%
Mixed Group	3	4.5%
Total	66	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Webster	9	34.6%
Aberdeen	5	19.2%
Groton, Watertown	2 (each)	7.7% (each)
Bristol, Chancellor, Crooks, Eden, Lennox, Milbank, Mina, Sioux Falls	1 (each)	3.8% (each)
Total	26	100%
Non-Residents – State		
State¹	Number	Percent
Minnesota	20	54.1%
Wisconsin	5	13.5%
Iowa, Michigan	2 (each)	5.4% (each)
Alaska, Colorado, Idaho, Illinois, Ohio, Kentucky, North Carolina, North Dakota	1 (each)	2.7% (each)
Total	37	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 40. Start times for hunters in Zone D.

Start Time¹	Number	Percent
6 a.m.	7	11.1%
7 a.m.	6	9.5%
8 a.m.	1	1.6%
9 a.m.	1	1.6%
10 a.m.	14	22.2%
11 a.m.	6	9.5%
12 noon	3	4.8%
1 p.m.	3	4.8%
2 p.m.	10	15.9%
3 p.m.	3	4.8%
4 p.m.	6	9.5%
5 p.m.	3	4.8%
Total Groups (3 missing)	63	100%

¹Start times rounded down to the whole hour.

Table 41. Average total hunt times for hunters in Zone D.

Average Total Hunt Times (hours)	Number	Percent
0.25	1	1.6%
0.50	6	9.5%
0.75	4	6.3%
1.00	13	20.6%
1.25	1	1.6%
1.50	3	4.8%
2.00	9	14.3%
2.25	2	3.2%
2.50	6	9.5%
2.75	1	1.6%
3.00	4	6.3%
3.25	2	3.2%
3.50	2	3.2%
4.00	2	3.2%
4.25	1	1.6%
4.50	2	3.2%
5.50	1	1.6%
6.50	2	3.2%
11.25	1	1.6%
Total Groups (3 missing)	63	100%
Average / 95% C.I.	2.25	1.79 – 2.71

Table 42. Overall satisfaction of groups hunting in Zone D.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	4	6.1%
Moderately Dissatisfied (-2)	3	4.5%
Slightly Dissatisfied (-1)	8	12.1%
Neutral / No Opinion (0)	12	18.2%
Slightly Satisfied (+1)	10	15.2%
Moderately Satisfied (+2)	20	30.3%
Very Satisfied (+3)	9	13.6%
Total	66	100%
Mean / 95% C.I.	0.77	0.36 – 1.19
SUMMARIZED RESULTS		
Dissatisfied	15	22.7%
Neutral / No Opinion	12	18.2%
Satisfied	39	59.1%
Ratio: Satisfied to Dissatisfied	2.6 to 1	

Table 43. Overall satisfaction of groups hunting in Zone D by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(10)	20.0%	30.0%	50.0%	0.60	-0.42 – 1.62
2	(2)	0.0%	50.0%	50.0%	1.50	-
3	(2)	0.0%	0.0%	100%	2.00	-
4	(0)	-	-	-	-	-
5	(13)	7.7%	23.1%	69.2%	1.38	0.66 – 2.11
6	(3)	66.7%	0.0%	33.3%	-1.67	-
7	(1)	100%	0.0%	0.0%	-1.00	-
8	(0)	-	-	-	-	-
9	(6)	16.7%	0.0%	83.3%	1.33	-1.12 – 3.79
10	(6)	33.3%	0.0%	66.7%	1.17	-1.08 – 3.41
11	(14)	28.6%	35.7%	35.7%	0.14	-0.53 – 0.82
12	(8)	12.5%	0.0%	87.5%	1.25	-0.35 – 2.85
13	(1)	100%	0.0%	0.0%	-1.00	-
Total	(66)	22.7%	18.2%	59.1%	0.77	0.36 – 1.19

Table 44. Overall satisfaction of groups hunting in Zone D by residence and by type of hunting.

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (26)	15.4%	11.5%	73.1%	1.31	0.71 – 1.91
Nonresident (37)	27.0%	24.3%	48.6%	0.38	-0.21 – 0.97
Mixed (3)	33.3%	0.0%	66.7%	1.00	-
Total (66)	22.7%	18.2%	59.1%	0.77	0.36 – 1.19
Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (40)	35.0%	22.5%	42.5%	0.15	-0.41 – 0.71
Waterfowl (20)	15.0%	20.0%	65.0%	1.15	0.47 – 1.83
Archery Deer (7)	0.0%	0.0%	100%	1.86	1.51 – 2.21
Rifle Deer (6)	16.7%	16.7%	66.7%	1.33	-0.38 – 3.05

Table 45. Comments by hunters in Zone D (arranged by walk-in # and satisfaction level).

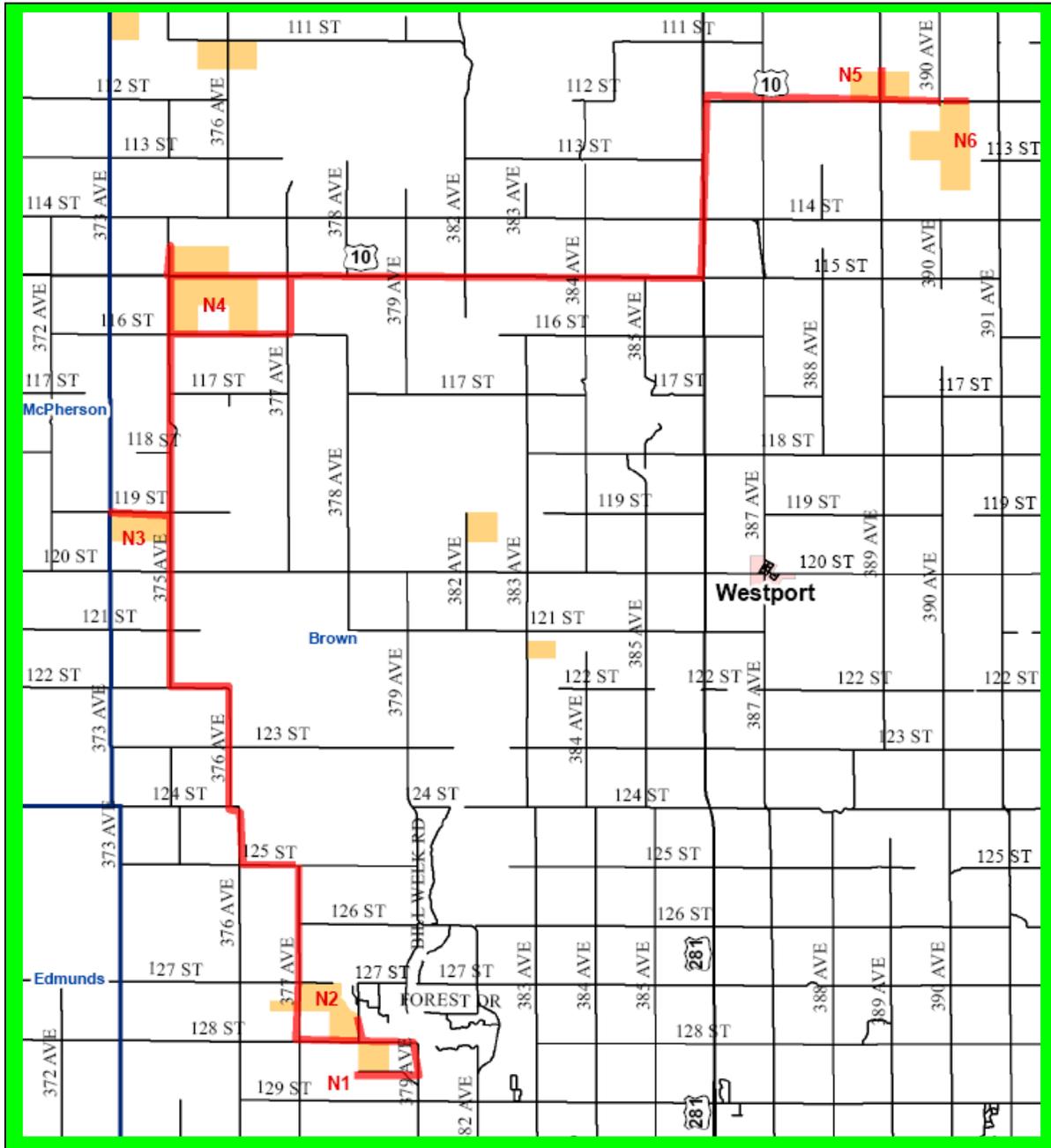
Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
1	-2	8112	The 2009 Hunter's Atlas and 2009 Hunting Handbook do not discuss regulations on the new cooperative management walk-in areas which makes for apprehension in use of the same.
1	-1	8246	Raise the price of waterfowl stamp; please help farmers get more incentives form Fed to put land in CRP, put bounty on coyotes. Thanks.
1	0	8111	Not much around today.
1	0	8153	Turning a wildlife management area into a cow pasture doesn't make a good decision on your part. What's wrong with crops?
1	+2	8216	Glad to see a CO in the area. Normally don't see one all year. Keep up the good work!!!!
1	+2	8108	Good to see CO around. Seen 1 st snow geese (100 snow & blue) & 2 Tundra Swan here today
2	0	8209	Almost all crops up and birds not in usual cover.
5	-1	8231	Not enough grain to be harvested.
5	0	8190	Too much corn still standing.
5	+2	8185	We love these Walk-In Areas & we love to hunt ducks & geese in South Dakota.
5	+2	8178	SD does a very nice job of providing access opportunities – we enjoy ourselves.
5	+2	8228	Very nice place to hunt.
5	+3	8106	Outstanding waterfowl hunt!
6	-3	8229	Needs food plots.
6	-3	8187	More grass/cover should be left along field edges & wetlands on Walk-In areas. No birds in the grass – Corn / Wet
7	-1	8127	Wet.
9	-3	8206	Wet.
9	+3	8212	Can't hit them.
9	+3	8250	Being a non-resident I highly appreciate the Walk-In Program. I always have good hunting!
10	-2	8121	Didn't see any pheasants or grouse.
10	+2	8138	We greatly appreciate the farmers who open up their land to Walk-In hunting. We hunt Walk-In land every day.
10	+2	8158	Good property with a lot of species. Have had success here before.
10	+3	8122	Grass near crops is excellent.
<i>Comments continued on next page...</i>			

Table 45 – Continued. Comments by hunters in Zone D (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)¹	ID #	Comments
11	-2	8160	Suggestions for improvement – limit the amount of grass they can bail and do not allow corn fields in Walk-Ins. Switch to sorghum or something huntable. How do the birds survive the winter when grasslands and fields are harvested? Birds need appropriate cover to survive.
11	-1	8146	I am extremely disappointed in the quality of Walk-In lands. Too much of the land is corn or soybeans and not grass. I was here to hunt pheasants but will not spend that much money next year unless more habitat is provided (and neither will about 10 other people I know).
11	-1	8197	Too much corn for this time of year.
11	-1	8191	Too much standing corn – too much water.
11	0	8136	Crops still in field, so hunting was tough, nothing state could do.
11	0	8157	Too wet and too many crops in the field but a fun trip anyway.
11	0	8139	Too much crop in the field, nice area with potential.
11	+1	8148	Satisfied with this location – disappointed in the amount of grassland in the Walk-In program. You need less crop-land as Walk-In and more grassland. Habitat has declined dramatically in the past 5 years.
11	+2	8181	Hunted the WPA (next to Walk-In). Lucky to catch some birds outside the corn. Most of the Walk-In Was soybeans, very little huntable cover in the Walk-In.
11	+2	8183	Please keep increasing public hunting access opportunities.
12	-3	8207	Wet.
12	+1	8142	Surprised by amount of Walk-In – Pleased.
12	+2	8110	Allow us to complete this survey online.
12	+2	8124	Great for non-resident hunter.
13	-1	8232	Too much corn up, Too wet, hunting very tough...Always appreciate SD public hunting land, just a bad year!!

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Zone N – Brown County (Map 5)



Zone N had six walk-ins with Aberdeen being the closest major town (Table 46). Pheasant was the main species for five of the walk-ins and waterfowl for the sixth walk-in.

A total of 143 vehicles were recorded using walk-in areas in this zone during the study period and a total of 80 survey cards were collected (56%). We have limited data for describing the overall use of the zone. Hunter use of walk-ins #2 and #6 was relatively low based on relative size of the six walk-ins in Zone N and hunter use of walk-in #4 was relatively high compared to relative size, but differences were small (Figure 7).

Table 46. Description of Walk-In Areas in Zone N (2009).

ID #	Paved-Road Access? ¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	Yes	Pheasant	Aberdeen	160	5.3%	9	6.3%	5	55.6%
2	Yes	Pheasant	Aberdeen	456	15.3%	15	10.5%	7	46.7%
3	NO	Pheasant	Aberdeen	320	10.8%	19	13.3%	9	47.4%
4	Yes	Pheasant	Aberdeen	1,081	36.3%	65	45.5%	35	53.8%
5	Yes	Pheasant	Aberdeen	320	10.8%	14	9.8%	5	35.7%
6	Yes	Waterfowl	Aberdeen	640	21.5%	21	14.7%	19	92.2%
	--	--	Aberdeen	2,977	100%	143	100%	80	55.9%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

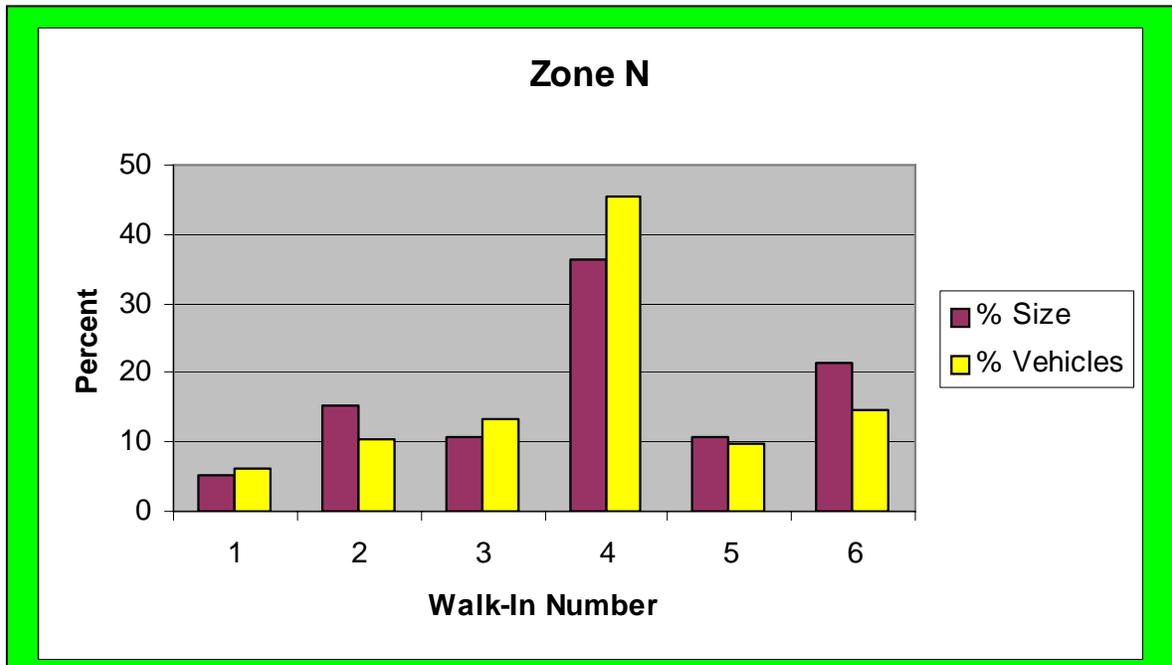


Figure 7. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone N.

Average number of hunters by vehicle type was used to estimate the number of hunters observed during the survey. This method estimated a total of 317 hunters (Table 47). Since most vehicles encountered were extended-cab trucks and SUVs, which averaged a similar number of hunters the overall average party size can also be used to estimate the number of hunters encountered. Overall average party size was used to estimate the number of hunters at each walk-in in Zone N (Table 48).

Table 47. Estimated number of hunters encountered during the survey of Zone N.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	1.50	9	14
Extended Cab Truck (3 or 4-door or back seats) (2)	2.18	83	181
SUV (4)	2.40	40	96
Van (mini included) (5)	2.50	6	15
4-door car / station wagon (7)	N/A ¹	5	11
Overall Average	2.24	143	317 ²

¹Used overall average for calculations for this cell

²Using the overall average would produce an estimate of 320 hunters.

Table 48. Estimated number of hunters encountered by Walk-In for Zone N.

Zone N – Walk-In Number	Number Vehicles	Estimated Hunters
1	9	20
2	15	34
3	19	43
4	65	146
5	14	31
6	21	47
Total	143	321

Use of the walk-in areas in Zone N had relatively high use in mid-October with moderately high use spread out over most of the study period (Table 49 and Figure 8).

Most use of walk-in areas in Zone N was for pheasants: 89% of the hunters were pheasant hunting, 9% were deer hunting and 5% were waterfowl hunting (Table 50). A total of 97 pheasants, 21 ducks and four deer were harvested by the hunters that returned their report cards (Table 51). Most pheasant harvest from Zone N was from walk-ins numbers 4, 6, 2 and 3 (Table 51-A). All the ducks harvested from Zone N were from walk-in number 6 and the four deer harvested were from walk-in number 4 (Tables 51-B and 51-C)

About 11% of the groups hunting in Zone N included a youth hunter (less than 16 years old) (Table 52). About 48% of the groups were South Dakota residents, 46% non-residents and 6% mixed groups of both residents and nonresidents (Table 53). Hunters using Zone N started hunting from 10:00 a.m. through 1:00 p.m. and averaged about 1.9 hours of hunting (Tables 54 and 55).

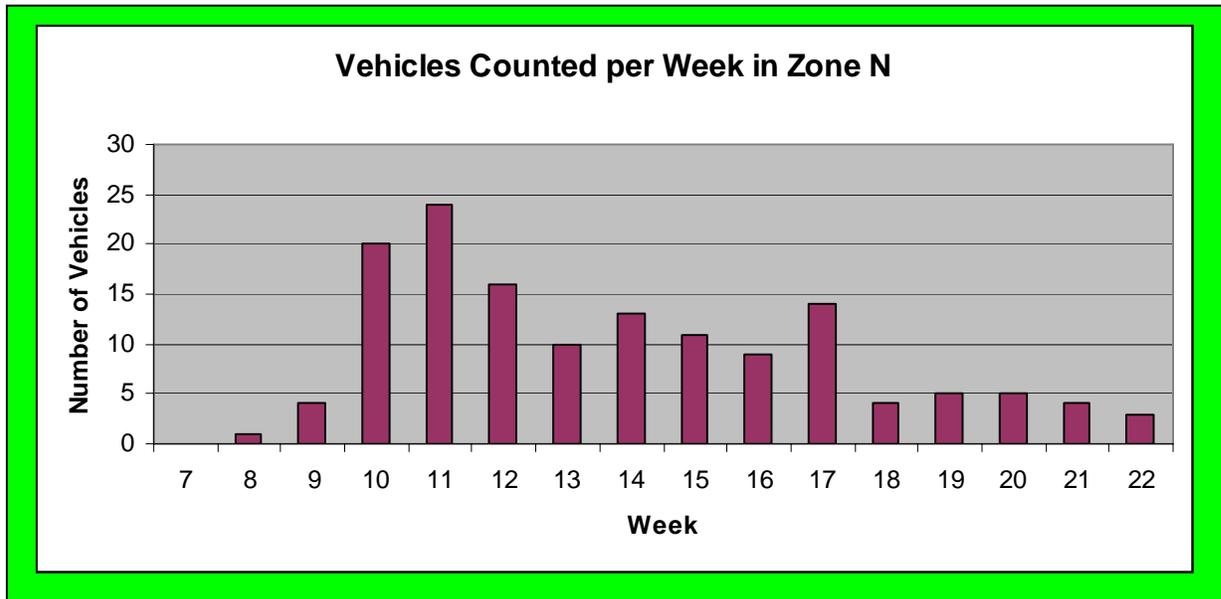


Figure 8. Vehicles counted by week in Zone N (see Table 49).

Table 49. Vehicles counted by survey date and by survey week in Zone N.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	0		7	0
September 24	0			
September 26	1		8	1
September 29	0			
October 3	4		9	4
October 7	0			
October 11	13		10	20
October 12	7			
October 17	16		11	24
October 19	8			
October 23	11		12	16
October 24	5			
October 30	4		13	10
October 31	6			
November 8	11		14	13
November 11	2			
November 14	11		15	11
November 19	0			
November 22	7		16	9
November 24	2			
November 28	11		17	14
December 1	3			
December 5	3		18	4
December 7	1			
December 13	4		19	5
December 15	1			
December 19	2		20	5
December 21	3			
December 27	0		21	4
December 30	4			
January 1	3		22	3
January 2	0			
Total (32 days)	143		16 (weeks)	143

About 59% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone N (Table 56). Comparisons by individual walk-in areas in Zone N are greatly hampered due to small sample sizes (Table 57). Mixed groups of residents and nonresidents had the highest mean satisfaction level (Table 58). Waterfowl hunters had the highest satisfaction level, followed by deer hunters (Table 58). Only a small number of negative comments were provided by hunters mainly mentioning wet conditions or a lack of game, but many hunters had positive comments about the Walk-In Program in general (Table 59).

Table 50. Type of hunting on walk-in areas in Zone N.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	71	88.8%
• Pheasant Only	68	85.0%
• Pheasant + Other Small Game	1	1.3%
• Pheasant + Waterfowl¹	2	2.5%
Waterfowl – All Hunters	4	5.0%
• Waterfowl Only²	2	2.5%
Rifle Deer Hunting (All & Only)³	7	8.8%
Total Cases	80	

¹Pheasant + Waterfowl Hunters (2): Hunted Walk-Ins #4 & #6

²Waterfowl Only Hunters (2): Hunted in Walk-In #6

³Deer Hunters (7): Hunted Walk-Ins #3 (2), #4 (4), & #6 (1)

Table 51. Total harvest by hunters on walk-in areas in Zone N.

Species	Number	Percent
Pheasant	97	78.9%
Ducks	21	17.1%
Deer	4	3.3%
Grouse	1	0.8%
Total	123	100%
Total Groups	80	

Table 51-A. Harvest by hunters targeting pheasants in Zone N by Walk-In Area.

Number Pheasants Harvested by Group		Number	Percent
0		31	43.7%
1		21	29.6%
2		6	8.5%
3		7	9.9%
4		1	1.4%
5		1	1.4%
6		1	1.4%
8		1	1.4%
9		1	1.4%
11		1	1.4%
Total Groups		71	100%
Total Pheasants Harvested		97	

Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	1	1.0%	5	20.0%	0.20
2	12	12.4%	7	71.4%	1.71
3	11	11.3%	7	56.3%	1.57
4	43	44.3%	33	63.6%	1.30
5	4	4.1%	5	60.0%	0.80
6	26	26.8%	14	50.0%	1.86
Total	97	100%	71	56.3%	1.37

¹Percent of groups harvesting one or more pheasants on the Walk-In.

Table 51-B. Harvest by hunters targeting ducks in Zone N by Walk-In Area.

Number Ducks Harvested by Group	Number	Percent
0 (hunted pheasants & ducks in Walk-In #4)	1	25.0%
2 (hunted pheasants & ducks in Walk-In #6)	1	25.0%
5 (hunted only Ducks in Walk-In #6)	1	25.0%
14 (hunted only Ducks in Walk-In #6)	1	25.0%
Total Groups	4	100%
Total Ducks Harvested	21	

¹This group also harvested 3 pheasants.

Table 51-C. Harvest by hunters targeting deer in Zone N by Walk-In Area.

Number Deer Harvested by Group	Number	Percent
0 (Walk-Ins Hunted: 3 (1 group), 4 (3 groups), 6 (1 group))	5	71.4%
1 (Walk-In #4)	1	14.3%
3 (Walk-In #4)	1	14.3%
Total Groups	7	100%
Total Deer Harvested	4	

Table 52. Vehicles with hunters less than age 16 (Zone N).

Number of Youth Less than Age 16 in Vehicles in Zone N	Number	Percent
0	71	88.8%
1	5	6.3%
2	3	3.8%
3	0	0.0%
4	1	1.3%
Total	80	100%

Table 53. Residence of hunters in Zone N.

Residence	Number	Percent
South Dakota	38	47.5%
Non-residents	37	46.3%
Mixed Group	5	6.3%
Total	80	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Aberdeen	32	84.2%
Rapid City	1	2.6%
Westport	1	2.6%
Wetonka	1	2.6%
Columbia	1	2.6%
Lennox	1	2.6%
Tea	1	2.6%
Total	38	100%
Note: All 5 of the mixed (resident/nonresident) groups listed Aberdeen for their SD town residence.		
Non-Residents – State		
State¹	Number	Percent
Minnesota	21	56.8%
Wisconsin	10	27.0%
Illinois	2	5.4%
Georgia	1	2.7%
Iowa	1	2.7%
North Carolina	1	2.7%
Nevada	1	2.7%
Total	37	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 54. Start times for hunters in Zone N.

Start Time¹	Number	Percent
7 a.m.	5	6.4%
10 a.m.	17	21.8%
11 a.m.	10	12.8%
12 noon	10	12.8%
1 p.m.	18	23.1%
2 p.m.	5	6.4%
3 p.m.	5	6.4%
4 p.m.	5	6.4%
5 p.m.	2	2.6%
6 p.m.	1	1.3%
Total Groups (2 missing)	78	100%

¹Start times rounded down to the whole hour.

Table 55. Average total hunt times for hunters in Zone N.

Average Total Hunt Times (hours)	Number	Percent
0.25	2	2.6%
0.50	3	3.8%
0.75	7	9.0%
1.00	8	10.3%
1.25	2	2.6%
1.50	14	17.9%
1.75	4	5.1%
2.00	13	16.7%
2.25	6	7.7%
2.50	8	10.3%
2.75	2	2.6%
3.00	4	5.1%
3.75	1	1.3%
4.00	1	1.3%
5.50	1	1.3%
6.50	1	1.3%
7.00	1	1.3%
Total Groups (2 missing)	78	100%
Average / 95% C.I.	1.92	1.65 – 2.18

Table 56. Overall satisfaction of groups hunting in Zone N.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	3	3.8%
Moderately Dissatisfied (-2)	2	2.5%
Slightly Dissatisfied (-1)	6	7.5%
Neutral / No Opinion (0)	22	27.5%
Slightly Satisfied (+1)	22	27.5%
Moderately Satisfied (+2)	12	15.0%
Very Satisfied (+3)	13	16.3%
Total	80	100%
Mean / 95% C.I.	0.83	0.50 – 1.15
SUMMARIZED RESULTS		
Dissatisfied	11	13.8%
Neutral / No Opinion	22	27.5%
Satisfied	47	58.8%
Ratio: Satisfied to Dissatisfied	4.3 to 1	

Table 57. Overall satisfaction of groups hunting in Zone N by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(5)	40.0%	20.0%	40.0%	0.20	-1.42 – 1.82
2	(7)	0.0%	42.9%	57.1%	0.71	0.02 – 1.41
3	(9)	33.3%	11.1%	55.6%	0.33	-1.43 – 2.09
4	(37)	5.4%	29.7%	64.9%	1.08	0.67 – 1.49
5	(5)	20.0%	40.0%	40.0%	0.20	-0.84 – 1.24
6	(17)	17.6%	23.5%	58.8%	0.94	-0.01 – 1.89
Total	(80)	13.8%	27.5%	58.8%	0.83	0.50 – 1.15

Table 58. Overall satisfaction of groups hunting in Zone N by residence and by type of hunting.

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (38)	10.5%	34.2%	55.3%	0.87	0.41 – 1.33
Nonresident (37)	18.9%	24.3%	56.8%	0.70	0.16 – 1.25
Mixed (5)	0.0%	0.0%	100%	1.40	0.29 – 2.51
Total (80)	13.8%	27.5%	58.8%	0.83	0.50 – 1.15
Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (71)	15.5	28.2%	56.3%	0.72	0.37 – 1.07
Rifle Deer (7)	0.0%	28.6%	71.4%	1.43	0.25 – 2.61
Waterfowl (4)	0.0%	0.0%	100%	2.25	0.73 – 3.77

Table 59. Comments by hunters in Zone N (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
2	0	9134	Not many birds this year – need more Walk-In Areas – Lots of pressure on the ones we have.
2	0	9039	Didn't see a single bird at this site but still enjoyed the outing.
3	-3	9080	Too much water & crops still up.
3	-3	9010	Too wet, they should let residents hunt private land.
3	0	9009	Working with new puppy.
3	+1	9123	Didn't see any deer, 9 grouse.
3	+1	9097	Not many birds, but a great Walk-In Area.
3	+2	9077	Nice place – difficult conditions.
3	+3	9015	Most of the birds harvested were this spring hatch. Also – wear your waders.
3	+3	9143	Excellent location, nice to have a location with standing crops for those of us without access to private land.
4	-2	9044	Very few birds flushed.
4	0	9020	More food plots such as corn should be planted.
4	0	9013	Some other Walk-In Areas in the area were heavily grazed or had cattle present.
4	0	9070	On 10/30/09 several roosters & hens seen and 2 harvested. No pheasants seen today @ this location.
4	0	9132	I was surprised to only see one pheasant in the area – habitat looked good.
4	0	9124	Hoping to see more birds – good habitat with corn and wetlands combo!
4	0	9109	Looks like a great hunting spot for deer & pheasants, but cover for deer full of water, like everything else.
4	0	9101	Deer were in corn next to Walk-In.
4	0	9091	Good area, no birds to speak of, but water and hunting pressure play a big role. Can CRP acres be turned into Walk-In Areas?
4	0	9090	Not your fault it was too wet.
4	+1	9084	The food plots really help.
4	+1	9021	Some hunters are driving vehicles into public hunting areas. They should be arrested & lose hunting privileges.
4	+1	9071	Need more Walk-In with crops.
4	+1	9045	We are hunting and not working so its better than neutral.
4	+1	9037	Mother nature gave lots of rain.
4	+1	9036	Good hunt! Water – water – water!
4	+2	9046	Great to own, would be nice not to have barbwire fence!
4	+3	9040	Poor shots – should have had limit.
4	+3	9035	Just could not hit them – Poor shots.
4	+3	9011	Thank you very much.
4	+3	9141	Your Walk-In program is Great!! Thank-you.
4	+3	9139	Great piece of property – well managed for wildlife.
5	0	9094	Birds were in corn & beans on adjacent grounds.
5	+1	9140	Thank you for all your efforts in making public options available for non-resident visitors. Thanks for all you do! The GFP employee that handed me this survey was exceptionally friendly & helpful!!

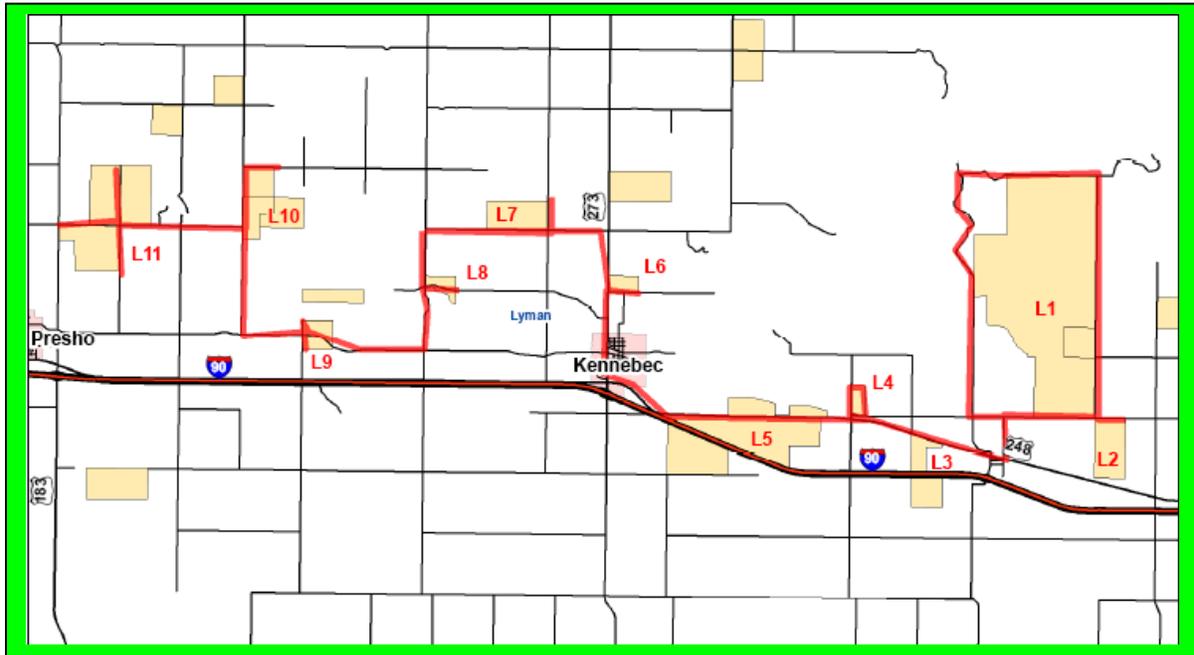
Comments continued on next page...

Table 59 – Continued. Comments by hunters in Zone N (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)¹	ID #	Comments
6	-3	9067	On one's fault, but not birds. All of the unpicked corn makes it impossible to locate pheasants. Will not come back to SD if similar conditions exist.
6	0	9065	Overall disappointed in Walk-In, number of areas declined from last year / harvest of crops impact pheasant – that we understand and accept.
6	0	9068	It was wet!
6	0	9099	A lot of birds in <u>corn</u> . Red tagged.
6	0	9119	Cover looked great but with the standing corn to the west it was hard to find birds.
6	+1	9106	I really miss being able to drive to all the Walk-In Area. A new path should be considered.
6	+2	9064	Need more Walk-In Areas – there was a lot less than last year – increase fees to pay more to get more areas.
6	+3	9049	This Walk-In is my ideal pheasant hunting area providing good habitat and a large area to walk with my dog. Would like to see vehicle traffic restricted to the approach. Thank you.
6	+3	9059	Fantastic quality hunt.
6	+3	9060	Appreciate the Walk-In Access Program. Please add acres in this county.
6	+3	9133	South Dakota GF&P does a great job.

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Zone L – Lyman County (Map 6)



Zone L had eleven walk-ins with Chamberlain being the closest major town (Table 60). The walk-ins in this zone contained a mix of pheasant, deer/grouse, and waterfowl hunting opportunities.

A total of 247 vehicles were recorded using walk-in areas in this zone during the study period and a total of 126 survey cards were collected (51%). With the exception of walk-in numbers 1 and 11, we have limited data for describing the overall use of the zone. Hunter use of walk-in #1 was relatively low based on relative size of the eleven walk-ins in Zone L and hunter use of walk-ins #11 was relatively high compared to relative size (Figure 9).

Average number of hunters by vehicle type was used to estimate the number of hunters observed during the survey. This method estimated a total of 532 hunters (Table 61). Since most vehicles encountered were extended-cab trucks and SUVs, which averaged a similar number of hunters the overall average party size can also be used to

estimate the number of hunters encountered. Overall average party size was used to estimate the number of hunters at each walk-in in Zone L (Table 62).

Table 60. Description of Walk-In Areas in Zone L (2009).

ID #	Paved-Road Access? ¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	NO	Deer/Grouse	Chamberlain	3,840	51.3%	57	23.1%	32	25.4%
2	YES	Pheasant	Chamberlain	320	4.3%	18	7.3%	5	4.0%
3	YES	Pheasant	Chamberlain	100	1.3%	1	0.4%	0	0.0%
4	YES	Waterfowl	Chamberlain	80	1.1%	4	1.6%	2	1.6%
5	YES	Deer/Grouse	Chamberlain	960	12.8%	18	7.3%	13	10.3%
6	YES	Pheasant	Chamberlain	80	1.1%	0	0.0%	--	--
7	NO	Pheasant	Chamberlain	320	4.3%	20	8.1%	11	8.7%
8	NO	Pheasant	Chamberlain	90	1.2%	9	3.6%	5	4.0%
9	YES	Deer	Chamberlain	160	2.1%	15	6.1%	6	4.8%
10	NO	Pheasant	Chamberlain	500	6.7%	31	12.6%	15	11.9%
11	NO	Pheasant	Chamberlain	1,040	13.9%	74	30.0%	37	29.4%
	--	--	Chamberlain	7,490	100%	247	100%	126	51.0%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

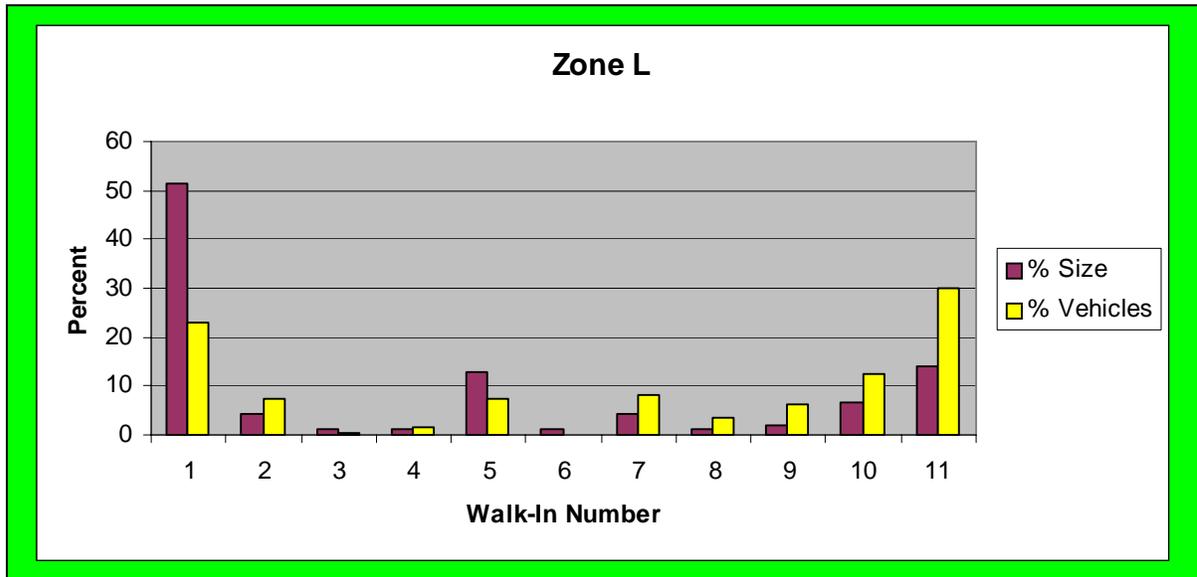


Figure 9. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone L.

Table 61. Estimated number of hunters encountered during the survey of Zone L.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	1.00	7	7
Extended Cab Truck (3 or 4-door or back seats) (2)	2.29	147	337
Motor-Home or Truck w/ Camper (3)	1.50	10	15
SUV (4)	2.08	66	137
Van (mini included) (5)	2.83	7	20
4-door car / station wagon (7)	1.57	10	16
Overall Average	2.15	247	532

¹Used overall average for calculations for this cell (due to small sample size)

²Using the overall average would produce an estimate of 531 hunters.

Table 62. Estimated number of hunters encountered by Walk-In for Zone L.

Zone K – Walk-In Number	Number Vehicles	Estimated Hunters
1	57	123
2	18	39
3	1	2
4	4	9
5	18	39
6	0	0
7	20	43
8	9	19
9	15	32
10	31	67
11	74	159
Total	247	532

Use of the walk-in areas in Zone L had relatively high use in October with a lower level of use spread out over most of the study period (Table 63 and Figure 10). Note that a zero count does not mean that there was no use, only that no use was observed during the dates and times that observations were made.

Most use of walk-in areas in Zone K was for pheasants: 94% of the hunters were pheasant hunting and 6% were deer hunting (Table 64). A total of 181 pheasants, 7 deer, 4 grouse, 2 antelope and one rabbit were harvested by the hunters that returned their report cards (Table 65). Most of the pheasant harvest were from walk-in numbers 1 and 11 (Table 65-A). The seven deer were harvested from walk-in numbers 1, 2, 5 and 10 (Table 65-B). The two antelope were harvested from walk-in number 1 and the grouse were harvested from walk-in numbers 1, 7 and 11.

About 11% of the groups hunting in Zone L included a youth hunter (less than 16 years old) (Table 66). About 47% of the groups were South Dakota residents, 50% non-residents and 3% mixed groups of both residents and nonresidents (Table 67). Most hunters using Zone L started hunting at 10:00 a.m. through 3:00 p.m. and averaged about 1.9 hours of hunting (Tables 68 and 69).

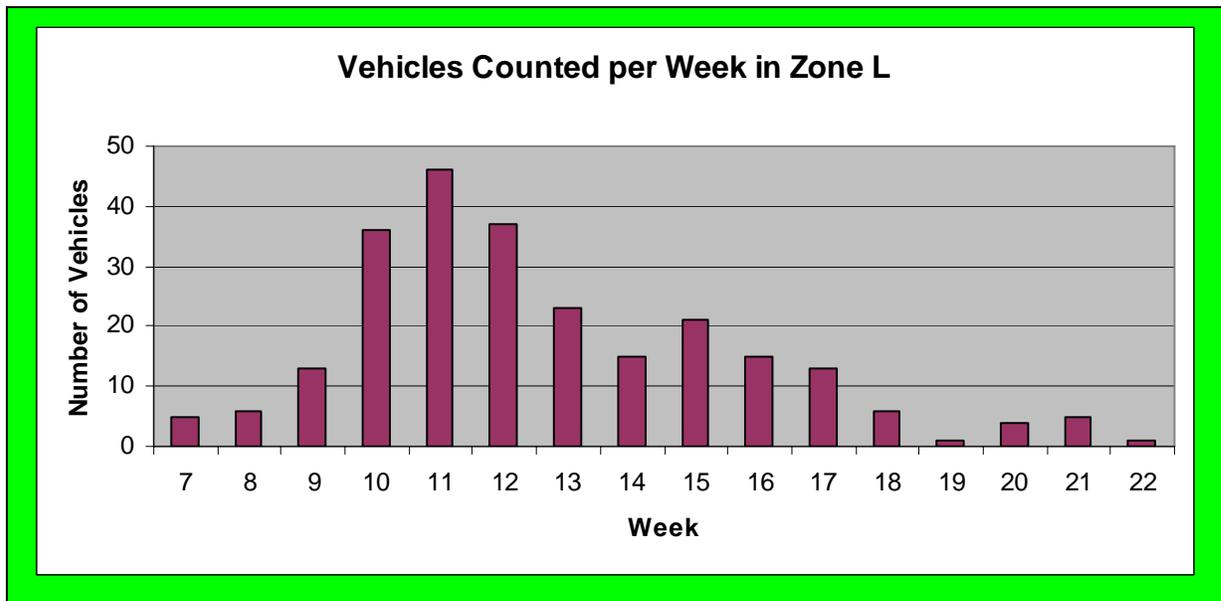


Figure 10. Vehicles counted by week in Zone L (see Table 63). [Note: Week 13 missed the 3rd run (October 30)]

Table 63. Vehicles counted by survey date and by survey week in Zone L.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	1		7	5
September 24	4			
September 26	3		8	6
September 29	3			
October 3	12		9	13
October 7	1			
October 11	29		10	36
October 12	7			
October 17	32		11	46
October 19	14			
October 23	8		12	37
October 24	29			
October 30 ¹	13 ¹		13	23
October 31	10			
November 8	9		14	15
November 11	6			
November 14	18		15	21
November 19	3			
November 22	11		16	15
November 24	4			
November 28	11		17	13
December 1	2			
December 5	5		18	6
December 7	1			
December 13	1		19	1
December 15	0			
December 19	4		20	4
December 21	0			
December 27	0		21	5
December 30	5			
January 2	1		22	1
January 3	0			
Total (32 days)	247		16 (weeks)	247

¹October 30: 3rd run not conducted.

About 68% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone L (Table 70). Comparisons by individual walk-in areas in Zone L are greatly hampered due to small sample sizes (Table 71). Only 2 walk-ins had sufficient sample size for an adequate comparison (walk-in numbers 1 and 11): hunters using walk-in number 1 had a much higher satisfaction level (91% satisfied vs. 60% satisfied). Residents were more satisfied than were nonresidents, but mixed groups of residents and nonresidents had the highest mean satisfaction level (Table 72). Pheasant hunters were a little bit more satisfied than deer hunters (Table 72). Only a small number of negative comments were provided by hunters mainly mentioning a lack of game, but many hunters had positive comments about the Walk-In Program in general (Table 73).

Table 64. Type of hunting on walk-in areas in Zone L.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	119	94.4%
• Pheasant Only	114	90.5%
• Pheasant + Other Small Game	2	1.6%
• Pheasant + Waterfowl	1	0.8%
• Pheasant + Deer	1	0.8%
• Pheasant + Other (Dove)	1	0.8%
Deer Hunting (Rifle & Muzzleloader)	7	5.6%
Antelope (Rifle)	1	0.8%
Total Cases	126	

Table 65. Total harvest by hunters on walk-in areas in Zone L.

Species	Number	Percent
Pheasant	181	92.8%
Grouse	4	2.1%
Deer	7	3.5%
Antelope	2	1.0%
Rabbit	1	0.5%
Total	195	100%
Total Groups	126	

Table 65-A. Harvest by hunters targeting pheasants in Zone L by Walk-In Area.

Number Pheasants Harvested by Group	Number	Percent			
0	52	43.7%			
1	24	20.2%			
2	14	11.8%			
3	12	10.1%			
4	4	3.4%			
5	5	4.2%			
6	6	5.0%			
7	1	0.8%			
9	1	0.8%			
Total Groups	119	100%			
Total Pheasants Harvested	181				
In addition: Two groups harvested 1 grouse/chicken; One group harvested 2 grouse/chicken; and One group harvested 1 rabbit					
Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful¹	Average Harvest
1	74	40.9%	30	80.0%	2.47
2	4	2.2%	3	66.7%	1.33
3	--	--	--	--	--
4	0	0.0%	2	0.0%	0.00
5	21	11.6%	11	72.7%	1.91
6	--	--	--	--	--
7	11	6.1%	11	45.5%	1.00
8	1	0.6%	5	20.0%	0.20
9	3	1.7%	6	33.3%	0.50
10	22	12.2%	14	42.9%	1.57
11	45	24.9%	37	51.4%	1.22
Total	181	100%	119	56.3%	1.52

¹Percent of groups harvesting one or more pheasants on the Walk-In.

Table 65-B. Harvest by hunters targeting deer in Zone L by Walk-In Area.

Number Deer Harvested by Group			Number	Percent	
0			2	28.6%	
1			3	42.9%	
2			2	28.6%	
Total Groups			7	100%	
Total Deer Harvested			7		
Walk-In #	Total Deer Harvested	Percent	Number of Groups	Percent Successful ¹	Average Harvest
1	1	14.3%	1	100%	1.00
2	2	28.6%	2	100%	1.00
3	--	--	0	--	--
4	--	--	0	--	--
5	2	28.6%	2	50.0%	1.00
6	--	--	0	--	--
7	--	--	0	--	--
8	--	--	0	--	--
9	--	--	0	--	--
10	2	28.6%	2	50.0%	1.00
11	--	--	0	--	--
Total	7		7	71.4%	1.00

¹Percent of groups harvesting one or more deer on the Walk-In.

Table 66. Vehicles with hunters less than age 16 (Zone L).

Number of Youth Less than Age 16 in Vehicles in Zone L	Number	Percent
0	112	88.9%
1	14	11.1%
2	0	0.0%
Total	126	100%

Table 67. Residence of hunters in Zone L.

Residence	Number	Percent
South Dakota	59	46.8%
Non-residents	63	50.0%
Mixed Group	4	3.2%
Total	126	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Rapid City	17	28.8%
Sioux Falls	15	25.4%
Chamberlain, Pierre	5 (each)	8.5% (each)
Oacoma, Mitchell, Vermillion, Valley Springs	2 (each)	3.4% (each)
Baltic, Custer, Kennebec, Spearfish, Kyle, Black Hawk, Summerset, Piedmont, Aberdeen	1 (each)	1.7% (each)
Total (1 missing)	59	100%
Non-Residents – State		
State¹	Number	Percent
Wisconsin	11	17.5%
Colorado, Minnesota	9 (each)	14.3% (each)
Iowa	8	12.7%
Michigan	6	9.5%
California, Nebraska, Ohio, Pennsylvania, Wyoming	2 (each)	3.2% (each)
Arkansas, Georgia, Indiana, Missouri, North Carolina, New York, Oklahoma, Oregon, Tennessee, Washington	1 (each)	1.6% (each)
Total	63	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 68. Start times for hunters in Zone L.

Start Time¹	Number	Percent
7 a.m.	3	2.4%
8 a.m.	1	0.8%
9 a.m.	3	2.4%
10 a.m.	26	21.0%
11 a.m.	10	8.1%
12 noon	32	25.8%
1 p.m.	10	8.1%
2 p.m.	17	13.7%
3 p.m.	12	9.7%
4 p.m.	5	4.0%
5 p.m.	5	4.0%
6 p.m.	0	0.0%
Total Groups (2 missing)	124	100%

¹Start times rounded down to the whole hour.

Table 69. Average total hunt times for hunters in Zone L.

Average Total Hunt Times (hours)	Number	Percent
0.25	1	0.8%
0.50	9	7.3%
0.75	12	9.8%
1.00	26	21.1%
1.25	5	4.1%
1.50	14	11.4%
1.75	2	1.6%
2.00	25	20.3%
2.25	2	1.6%
2.50	5	4.1%
2.75	2	1.6%
3.00	7	5.7%
3.50	2	1.6%
4.00	3	2.4%
5.00	2	1.6%
5.50	1	0.8%
6.00	1	0.8%
6.50	1	0.8%
6.75	1	0.8%
8.00	1	0.8%
10.00	1	0.8%
Total Groups (3 missing)	123	100%
Average / 95% C.I.	1.92	1.64 – 2.19

Table 70. Overall satisfaction of groups hunting in Zone L.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	7	5.6%
Moderately Dissatisfied (-2)	6	4.8%
Slightly Dissatisfied (-1)	10	7.9%
Neutral / No Opinion (0)	17	13.5%
Slightly Satisfied (+1)	21	16.7%
Moderately Satisfied (+2)	30	23.8%
Very Satisfied (+3)	35	27.8%
Total	126	100%
Mean / 95% C.I.		
SUMMARIZED RESULTS		
Dissatisfied	23	18.3%
Neutral / No Opinion	17	13.5%
Satisfied	86	68.3%
Ratio: Satisfied to Dissatisfied	3.7 to 1	

Table 71. Overall satisfaction of groups hunting in Zone L by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(32)	9.4%	0.0%	90.6%	1.78	1.24 – 2.32
2	(5)	0.0%	60.0%	40.0%	1.00	-0.76 – 2.76
3	(0)	--	--	--	--	--
4	(2)	50.0%	0.0%	50.0%	0.00	--
5	(13)	15.4%	7.7%	76.9%	1.23	0.10 – 2.37
6	(0)	--	--	--	--	--
7	(11)	27.3%	9.1%	63.6%	1.18	-0.09 – 2.45
8	(5)	20.0%	20.0%	20.0%	0.80	-2.16 – 3.76
9	(6)	33.3%	0.0%	66.7%	1.00	-0.76 – 2.76
10	(15)	26.7%	20.0%	53.3%	0.73	-0.26 – 1.73
11	(37)	18.9%	21.6%	59.5%	0.84	0.22 – 1.45
Total	(126)	18.3%	13.5%	68.3%	1.13	0.82 – 1.45

Table 72. Overall satisfaction of groups hunting in Zone L by residence and by type of hunting.

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (59)	8.5%	11.9%	79.7%	1.75	1.37 – 2.13
Nonresident (63)	28.6%	15.9%	55.6%	0.51	0.04 – 0.98
Mixed (4)	0.0%	0.0%	100%	2.00	0.70 – 3.30
Total (126)	18.3%	13.5%	68.3%	1.13	0.82 – 1.45
Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (119)	18.5%	13.4%	68.1%	1.12	0.80 – 1.44
Rifle Deer (7)	28.6%	14.3%	57.1%	0.86	-0.87 – 2.58

Table 73. Comments by hunters in Zone L (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
1	-1	3011	Only saw one bird. Thank-you for walk-in program. I would stay home if not for Walk-In land!
1	+1	3127	Good Walk-in cover.
1	+1	3296	I enjoy hunting in South Dakota. The public area maps are very nice.
1			
1	+2	3247	Nice cover as this portion but most of this extensive walk-in area is too thickly covered to be good for pheasants.
1	+2	3120	Cover very nice. Saw 3 other pheasants.
1	+2	3040	The area was great cover for pheasants and grouse. It will ensure birds are there in the future. I do not like the land where there is no cover for birds. Why pay a landowner for nothing. This was a great area!
1	+2	3194	Dogs held birds as best they could – this time birds won.
1			
1	+3	3241	I come to Reliance SD about 4 times a year specifically for these walk-in areas.
1	+3	3244	Walk-in program is great – We wish more of those lands contained better pheasant cover – much is bare fields.
1	+3	3121	Hunt a lot of walk-ins. I hate when I arrive at one to find poor cover, was cut for hay.
1	+3	3105	We saw high numbers of pheasants 1 to 10 miles east of this location.
1	+3	3087	Would like to see Resident Only state-wide to include private land. Too many hunters for public grounds – “unsafe”.
2	4	3151	North side walk-in tough cover – switch grass. South side nice cover – easier on dogs & hunters – held more birds.
2	+2	3174	Very nice are for hunting.
4	-2	3295	Saw only 1 cock.
4	+2	3213	Had no full limits but was very good.
5	-3	3119	It seems pretty deceptive to represent this ground as pheasant habitat. The grass is cut so short that pheasants wouldn't probably spend much time here. We drove all the way from Colorado for this and we were really disappointed.
5	-2	3208	Too many hunters.
5	0	3107	We selected a poor location.
5	+1	3033	The Resident-Only pheasant season should be open for a whole week on public and private land. Do it!
5	+1	3104	We didn't see many pheasants at this site, but we appreciate the walk-in program.
5	+2	3234	Keep as many walk-in areas as possible for those of us that can't afford guided hunting – thanks.
5	+3	3291	These Walk-In areas are great for hunters who don't have access to private land & we utilize them every year! Thank you!
5	+3	3031	We really enjoy resident-only weekend. Thanks!
<i>Comments continued on next page...</i>			

Table 73 – Continued. Comments by hunters in Zone L (arranged by walk-in # and satisfaction level).

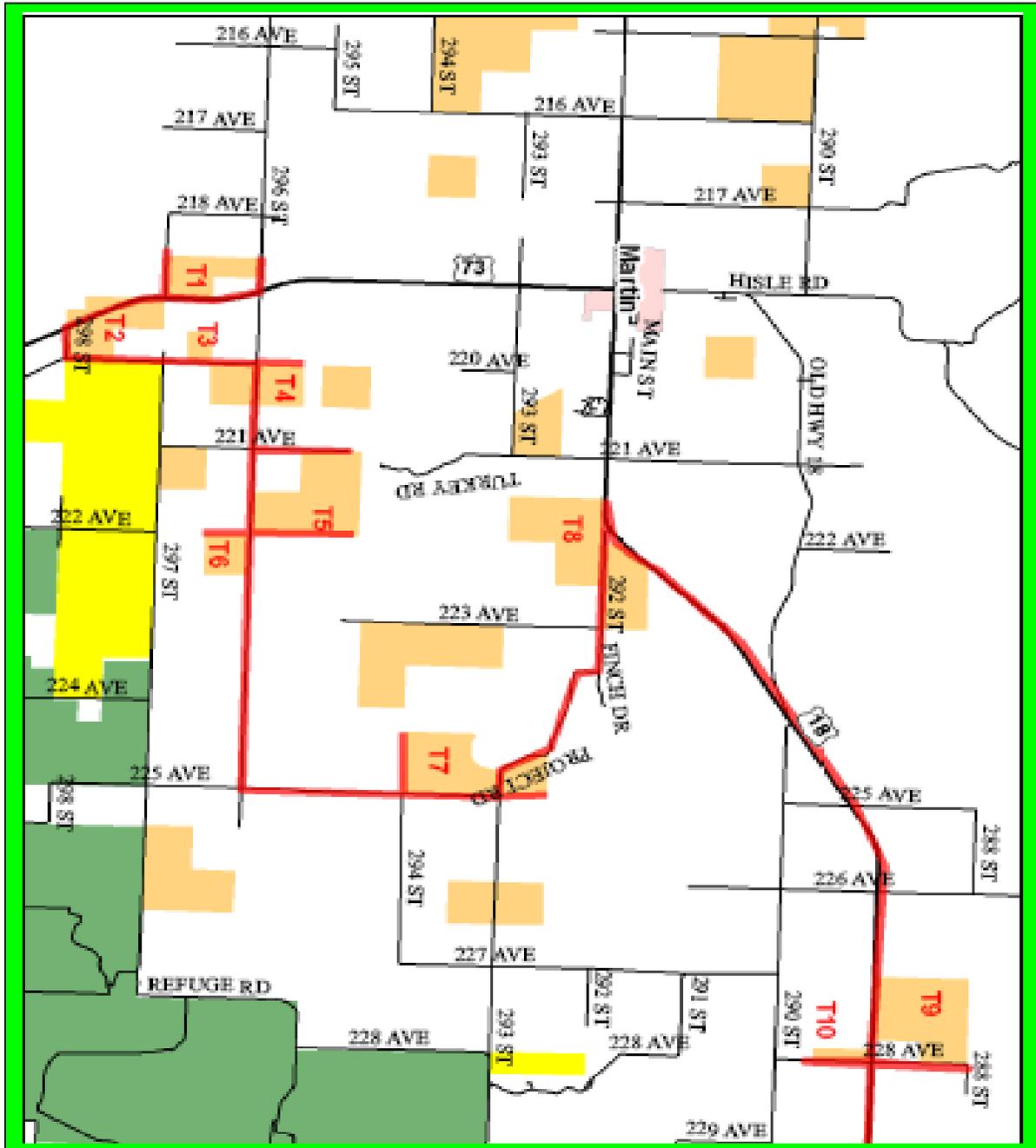
Walk-In ID #	Satisfaction (-3 – +3)¹	ID #	Comments
7	-2	3111	Lack of birds.
7	0	3005	Nice property.
7	+2	3185	The walk-in program is a great program. Keep up the good work.
7	+2	3058	Keep up the good work. The young lady who issued this survey represented the GF&P very well. Thank you!!
7	+3	3136	Saw birds – very windy!
8	-1	3122	1 hen.
8	0	3128	We didn't see a single pheasant.
8	+2	3137	Please keep up the good work! We greatly enjoy hunting in the area. More gravel roads would be nice.
8	+3	3167	No birds in the walk-in.
9	+1	3112	Good area – Just nothing today.
9	+2	3123	Couldn't hunt without the walk-in program . Thanks for the good work.
9	+3	3126	More walk-in areas to hunt. Don't cut side ditches as low as grass. Keep higher so they can hold in there.
10	-3	3200	Sparse cover.
10	-1	3023	It's too thick. I couldn't find my bird. If I would have had my dog she would have found it.
10	-1	3098	Why do you pay walk-in money to farmers for bare pastures and hayfields? What a waste of money. Maybe we need an audit to see who is really benefiting from this. The GFP people that sign up this land probably get hunting rights to the farmers' good land.
10	-1	3148	Cover not bad. Saw 1 prairie chick – no pheasants; hunted with dogs.
10	+1	3287	I down loaded the SD hunting maps for my Lowiance GPS. Its nice, but would be better it is was color-coded like regular maps, or have a darker green for more visibility.
10	+2	3228	Seen birds, couldn't get close. Sign-up more land!!
10	+2	3022	Would have hunted more areas but some roads were nearly impassable due to mud.
10	+3	3159	Great spot, great location!
11	-3	3154	Same old problem, too many hunters for the amount of public access land. Need more private property access to where the birds are, not where they are not.
11	-3	3210	Public hunting area holds very few birds. South Dakota pheasant hunting only available on private property. Very, very limited for non-resident hunter! Lots of birds on private land.
11	-2	3231	Not many birds.
11	-1	3161	No birds – still in crops.
11	-1	3155	No birds – still in crops.
11	-1	3239	Surprised there were not more pheasants in the crops – land looks perfect.
<i>Comments continued on next page...</i>			

Table 73 – Continued. Comments by hunters in Zone L (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)¹	ID #	Comments
11	0	3008	I appreciate all the food plots SDGF&P has planted on the Walk-In Area near Persho & the Walk-In Areas in general. Excellent Program.
11	0	3182	Habitat look good, food plot attractive, however it was too close to road and appeared to be hunted a lot. Was not completely identifiable as a Walk-in area – need better signage. Thanks. Keep up the good work.
11	0	3236	Saw some birds (10 – 15) – thought we would see more!
11	0	3196	Need more crops (harvested or un-harvested) on walk-in areas. By late season these few areas w/ crops are trampled. This area looked to be one of the better habitat areas.
11	0	3205	The walk-in program is a fantastic program. There is an incredible variety of quality habitat open to the public. I think the slow harvest has increased the pressure on the walk-ins making hunting more difficult.
11	0	3206	Heck of a lot better than Iowa. Would be very satisfied if crops were out.
11	+1	3215	The area is nice and well managed. Food plots, cut trails grass, and trees. It is all there.
11	+1	3096	We did better opening day.
11	+1	3066	Much of the field was hayed.
11	+1	3-77	We appreciate game management & land access.
11	+2	3090	I did better here the day before.
11	+2	3091	Too many hunters, not enough land.
11	+2	3242	Much of the walk-in spots are mowed too short.
11	+3	3078	Very happy with walk-in area. Did have problems with paid hunters & guide on another walk-in area. Very unhappy with how many ditchers being mowed this year. Thanks.
11	+3	3044	These walk-in areas are great.
11	+3	3035	I love SD pheasant hunting!!!
11	+3	3088	Plenty of birds. Defiantly making pheasant hunting in the Presho area a yearly tradition.

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Zone T – Bennett County (Map 7)



Zone T located in Bennett County had 13 walk-ins with Rapid City being the closest major town (Table 74). Geese or pheasant were the main species for the walk-ins in this study zone. A total of 83 vehicles were recorded using walk-in areas in this zone

during the study period and a total of 51 survey cards were collected (61%). We have limited data for describing the overall use of the zone. Hunter use of walk-ins numbers 2 and 4 was relatively high compared to relative size of the 13 walk-ins in Zone T and hunters use of walk-in numbers 8 and 9 was relatively low based on relative size of the walk-ins (Figure 11).

Average number of hunters by vehicle type was used to estimate the number of hunters observed during the survey. This method estimated a total of 131 hunters (Table 75). Since most vehicles encountered were extended-cab trucks and SUVs, which averaged a similar number of hunters the overall average party size can also be used to estimate the number of hunters encountered. Overall average party size was used to estimate the number of hunters at each walk-in in Zone T (Table 76).

Table 74. Description of Walk-In Areas in Zone T (2009).

ID #	Paved-Road Access? ¹	Main Species	Closest Major Town	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
1	YES	Geese	Rapid City	235	6.0%	3	3.6%	3	100%
2	YES	Pheasant	Rapid City	340	8.7%	25	30.1%	15	60.0%
3	NO	Geese	Rapid City	60	1.5%	0	--	--	--
4	NO	Geese	Rapid City	320	8.2%	19	22.9%	10	52.6%
5	NO	Geese	Rapid City	560	14.3%	8	9.6%	5	62.5%
6	NO	Geese	Rapid City	160	4.1%	1	1.2%	1	100%
7	NO	Geese	Rapid City	525	13.4%	10	12.0%	7	70.0%
8	YES	Pheasant	Rapid City	780	19.9%	4	4.8%	3	75.0%
9	YES	Geese	Rapid City	560	14.3%	2	2.4%	2	100%
10	YES	Pheasant	Rapid City	52	1.3%	0	--	--	--
11	YES	Geese	Rapid City	40	1.0%	5	6.0%	0	0.0%
12	YES	Geese	Rapid City	80	2.0%	0	--	--	--
13	YES	Geese	Rapid City	200	5.1%	6	7.2%	5	83.3%
	--	--	Rapid City	3,912	100%	83	100%	51	61.4%

¹Does any part of the Walk-In have a paved-road access, i.e., a paved-road that touches the boarder of the Walk-In?

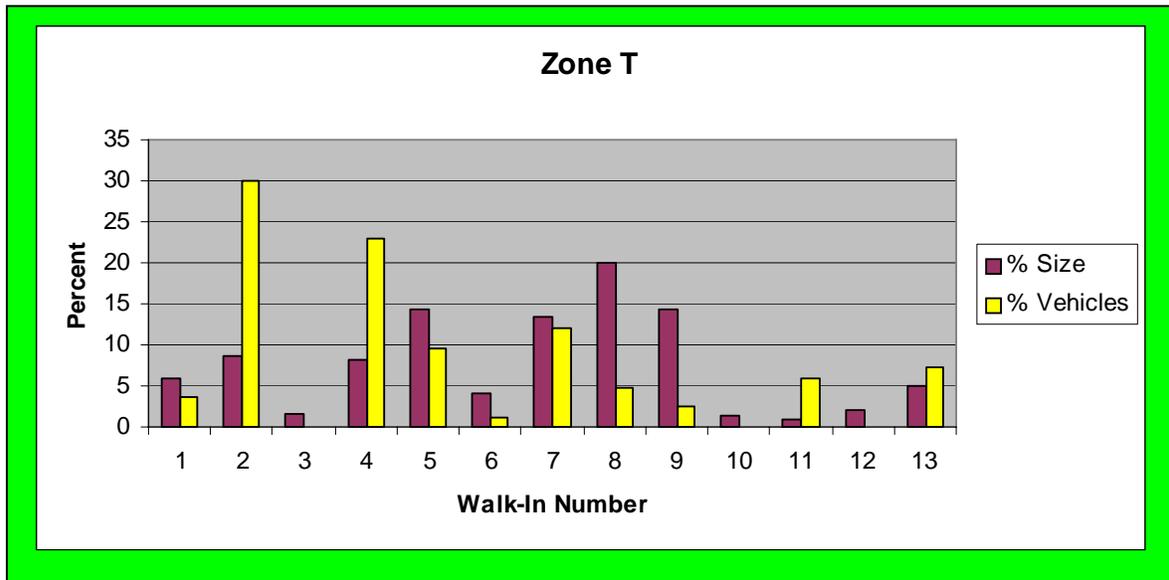


Figure 11. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone T.

Table 75. Estimated number of hunters encountered during the survey of Zone T.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	N/A ¹	2	3
Extended Cab Truck (3 or 4-door or back seats) (2)	1.83	49	82
Motor-Home / Camper (3)	N/A ¹	2	3
SUV (4)	1.38	13	18
Van (mini included) (5)	1.75	5	9
4-door car / station wagon (7)	1.29	12	16
Overall Average	1.67	83	131

¹Used overall average for calculations for this cell (due to small sample size)

²Using the overall average would produce an estimate of 139 hunters.

Table 76. Estimated number of hunters encountered by Walk-In for Zone T.

Zone T – Walk-In Number	Number Vehicles	Estimated Hunters
1	3	5
2	25	42
3	0	0
4	19	32
5	8	13
6	1	2
7	10	17
8	4	7
9	2	3
10	0	0
11	5	8
12	0	0
13	6	10
Total	83	139

Use of the walk-in areas in Zone T had relatively high use starting in early October and running through mid-January (when the study ended) (Table 77 and Figure 12). Note that a zero count does not mean that there was no use, only that no use was observed during the dates and times that observations were made.

About 75% of the hunters using walk-ins in Zone T hunted for pheasants, 24% for waterfowl, and 12% for deer (some hunting groups did more than one type of hunting) (Table 78). A total of 43 pheasants, 18 geese, 10 grouse, 1 duck and 1 deer were harvested by the hunters that returned their report cards (Table 79). Most of the pheasants were harvested in walk-in numbers 2 and 4 and most of the grouse harvested were from walk-in numbers 1 and 4 (Table 79-A). Most of the geese were harvested in walk-in number 2 (Table 79-B). The one deer harvested was from walk-in #4 (Table 79-C).

Only about 6% of the groups hunting in Zone T included a youth hunter (less than 16 years old) (Table 80). About 78% of the groups were South Dakota residents, 20% non-residents and 2% mixed groups of both residents and nonresidents (Table 81). Hunters using Zone T started hunting throughout the day and averaged about 2.4 hours of hunting (Tables 81 and 83).

About 73% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in Zone T (Table 84). Comparisons by individual walk-in areas in Zone T are greatly hampered due to small sample sizes (Table 85). Residents were more satisfied than were nonresidents (Table 86). Deer hunters reported the highest level of satisfaction followed by waterfowl and pheasant hunters (Table 85). Only a small number of negative comments were provided by hunters while most hunters had positive comments about the Walk-In Program in general (Table 87).

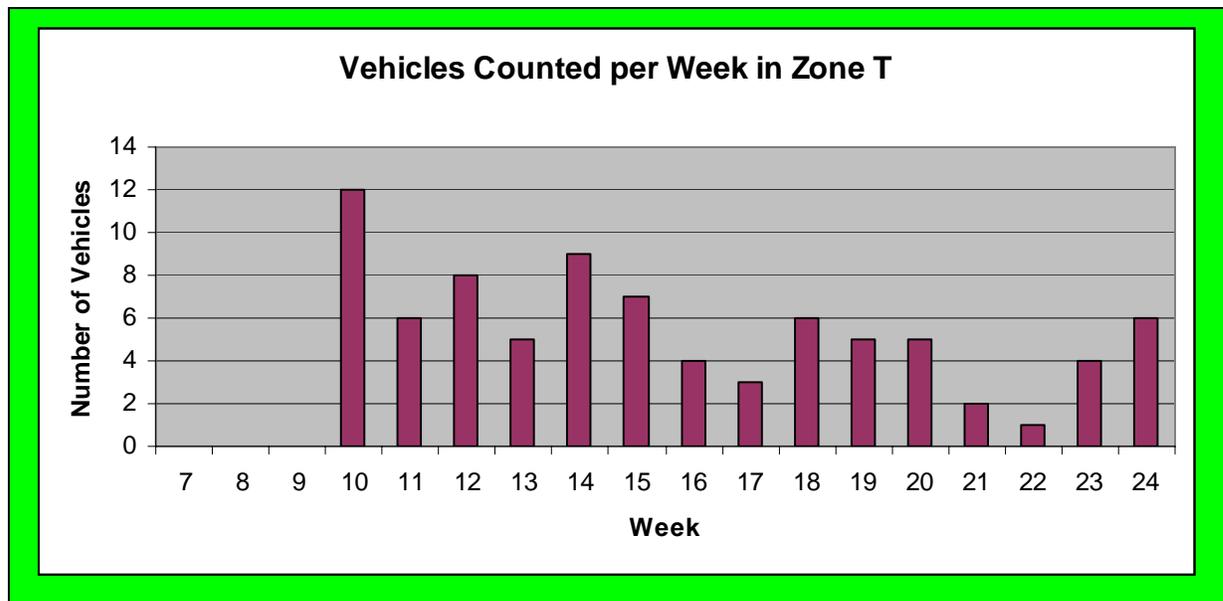


Figure 12. Vehicles counted by week in Zone T (see Table 77).

Table 77. Vehicles counted by survey date and by survey week in Zone T.

Date	Vehicles Counted		Week	Vehicles Counted
September 20	0		7	0
September 24	0			
September 26	0		8	0
September 29	0			
October 3	0		9	0
October 7	0			
October 11	7		10	12
October 12	5			
October 17	4		11	6
October 19	2			
October 23	3		12	8
October 24	5			
October 30	0		13	5
October 31	5			
November 8	3		14	9
November 11	6			
November 14	6		15	7
November 19	1			
November 22	4		16	4
November 24	0			
November 28	3		17	3
December 1	0			
December 5	5		18	6
December 7	1			
December 13	3		19	5
December 15	2			
December 19	5		20	5
December 21	0			
December 27	0		21	2
December 30	2			
January 1	0		22	1
January 2	1			
January 9	4		23	4
January 11	0			
January 15	2		24	6
January 17	2			
Total (36 days)	83		18 (weeks)	83

Table 78. Type of hunting on walk-in areas in Zone T.

Game Hunted	Number	Percent of Cases
Pheasant – All Hunters	38	74.5%
• Pheasant Only	32	62.7%
• Pheasant + Other Small Game	1	2.0%
• Pheasant + Waterfowl	5	9.8%
Waterfowl – All Hunters	12	23.5%
• Waterfowl Only	7	13.7%
Deer Hunting (All Types)	6	11.8%
• Rifle	3	5.9%
• Archery	2	3.9%
• Muzzleloader	1	2.0%
Total Cases	51	

Table 79. Total harvest by hunters on walk-in areas in Zone T.

Species	Number	Percent
Pheasants	43	58.9%
Grouse	10	13.7%
Geese	18	24.7%
Ducks	1	1.4%
Deer	1	1.4%
Total	73	100%
Total Groups	51	

Table 79-A. Harvest by hunters targeting pheasants in Zone T by Walk-In Area.

Number Pheasants Harvested by Group	Number	Percent	Number	Percent	
0	17	44.7%	34	89.5%	
1	9	23.7%	2	5.3%	
2	6	15.8%	0	0.0%	
3	4	10.5%	1	2.6%	
4	1	2.6%	0	0.0%	
5	0	0.0%	1	2.6%	
6	1	2.6%	0	0.0%	
Total Groups	38	100%	38	100%	
Total Pheasants Harvested	43		10		
One duck and 3 geese were also harvested by hunters targeting pheasants and waterfowl.					
Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful²	Average Harvest
1	1	2.3%	2	50.0%	0.50
2	14	32.6%	9	55.6%	1.56
3	--	--	--	--	--
4	14	32.6%	8	87.5%	1.75
5	3	7.0%	5	40.0%	0.60
6	3	7.0%	1	100%	3.00
7	2	4.7%	5	20.0%	0.40
8	1	2.3%	3	33.3%	0.33
9	3	7.0%	2	100%	1.50
10	--	--	--	--	--
11	--	--	--	--	--
12	--	--	--	--	--
13	2	4.7%	3	33.3%	0.66
Total	43	100%	38	55.3%	1.13

¹Five grouse were harvested in Walk-In # 1, one in Walk-In # 2, and four in Walk-In # 4

²Percent of groups harvesting one or more pheasants on the Walk-In.

Table 79-B. Harvest by hunters targeting waterfowl in Zone T by Walk-In Area.

Number Geese Harvested by Group			Number	Percent
0			4	33.3%
1			4	33.3%
2			1	8.3%
3			2	16.7%
6			1	8.3%
Total Groups			12	100%
Total Geese Harvested			18	

Walk-In #	Total Geese Harvested	Percent	Number of Groups	Percent Successful ¹	Average Harvest
1	0	0.0%	2	0.0%	0.00
2	13	72.2%	7	71.4%	1.86
3	-	-	-	-	-
4	-	-	-	-	-
5	-	-	-	-	-
6	1	5.6%	1	100%	1.00
7	-	-	-	-	-
8	-	-	-	-	-
9	-	-	-	-	-
10	-	-	-	-	-
11	-	-	-	-	-
12	-	-	-	-	-
13	4	22.2%	2	100%	2.00
Total	18	100%	12	66.7%	1.50

¹Percent of groups harvesting one or more geese on the Walk-In.

²One duck was also harvested in Walk-In # 2

Table 79-C. Harvest by hunters targeting deer in Zone T by Walk-In Area.

Number Deer Harvested by Group ¹	Number	Percent
0 (3 Rifle Deer, 2 Archery Deer & 1 Muzzleloader Deer)	5	83.3%
1	1	16.7%
Total Groups	6	100%
Total Deer Harvested	1	

¹Rifle deer hunter groups hunted in Walk-In #s 2, 4, and 7 (One deer harvested in Walk-In # 4)

Archery deer hunter groups hunted Walk-In Numbers: 2 & 7

Muzzleloader deer hunter group hunted Walk-In Number: 4

Table 80. Vehicles with hunters less than age 16 (Zone T).

Number of Youth Less than Age 16 in Vehicles in Zone T	Number	Percent
0	48	94.1%
1	2	3.9%
2	1	2.0%
Total (1 missing)	51	100%

Table 81. Residence of hunters in Zone T.

Residence	Number	Percent
South Dakota	40	78.4%
Non-residents	10	19.6%
Mixed Group	1	2.0%
Total	51	100%
South Dakota Residents – Cities		
City¹	Number	Percent
Martin	12	30.0%
Rapid City	11	27.5%
Hermosa	5	12.5%
Custer, Keystone, Chancellor	2 (each)	5.0% (each)
Hot Springs, Pierre, Sturgis, Platte, Yankton, Belle Fourche	1 (each)	2.5% (each)
Total	40	100%
Non-Residents – State		
State¹	Number	Percent
Colorado	6	60.0%
Florida, Tennessee, Utah, Wyoming	1 (each)	10.0% (each)
Total	10	100%

¹Note: If more than one city or state were listed, only the first city or state was encoded.

Table 82. Start times for hunters in Zone T.

Start Time¹	Number	Percent
5 a.m.	1	2.0%
6 a.m.	2	4.1%
7 a.m.	8	16.3%
9 a.m.	6	12.2%
10 a.m.	3	6.1%
11 a.m.	9	18.4%
12 noon	5	10.2%
1 p.m.	7	14.3%
2 p.m.	3	6.1%
3 p.m.	2	4.1%
4 p.m.	2	4.1%
5 p.m.	1	2.0%
Total Groups (2 missing)	49	100%

¹Start times rounded down to the whole hour.

Table 83. Average total hunt times for hunters in Zone T.

Average Total Hunt Times (hours)	Number	Percent
0.25	2	4.2%
0.50	4	8.3%
0.75	7	14.6%
1.00	7	14.6%
1.25	2	4.2%
1.50	4	8.3%
2.00	3	6.3%
2.50	2	4.2%
3.00	5	10.4%
3.75	1	2.1%
4.00	1	2.1%
4.50	2	4.2%
5.00	2	4.2%
5.50	1	2.1%
5.75	1	2.1%
6.50	1	2.1%
7.00	2	4.2%
8.50	1	2.1%
Total Groups (3 missing)	48	100%
Average / 95% C.I.	2.42	1.81 – 3.03

Table 84. Overall satisfaction of groups hunting in Zone T.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	2	3.9%
Moderately Dissatisfied (-2)	2	3.9%
Slightly Dissatisfied (-1)	2	3.9%
Neutral / No Opinion (0)	8	15.7%
Slightly Satisfied (+1)	9	17.6%
Moderately Satisfied (+2)	12	23.5%
Very Satisfied (+3)	16	31.4%
Total	51	100%
Mean / 95% C.I.	1.35	0.89 – 1.82
SUMMARIZED RESULTS		
Dissatisfied	6	11.8%
Neutral / No Opinion	8	15.7%
Satisfied	37	72.5%
Ratio: Satisfied to Dissatisfied	51	

Table 85. Overall satisfaction of groups hunting in Zone T by walk-in area.

Walk-In ID #	(N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1	(3)	33.3%	0.0%	66.7%	0.33	N/A ¹
2	(15)	0.0%	26.7%	73.3%	1.67	0.92 – 2.41
3	(0)	-	-	-	-	-
4	(10)	10.0%	0.0%	90.0%	2.10	1.18 – 3.02
5	(5)	0.0%	40.0%	60.0%	1.20	-0.42 – 2.82
6	(1)	0.0%	0.0%	100%	3.00	N/A ¹
7	(7)	14.3%	0.0%	85.7%	1.57	-0.34 – 3.49
8	(3)	0.0%	33.3%	66.7%	1.00	N/A ¹
9	(2)	50.0%	0.0%	50.0%	0.50	N/A ¹
10	(0)	-	-	-	-	-
11	(0)	-	-	-	-	-
12	(0)	-	-	-	-	-
13	(5)	40.0%	20.0%	40.0%	-0.40	-2.97 – 2.17
Total	(51)	11.8%	15.7%	72.5%	1.35	0.89 – 1.82

¹Insufficient sample size.

Table 86. Overall satisfaction of groups hunting in Zone T by residence and by type of hunting.

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (40)	5.0%	20.0%	75.0%	1.55	1.10 – 2.00
Nonresident (10)	30.0%	0.0%	70.0%	1.00	-0.43 – 2.43
Mixed (1)	100%	0.0%	0.0%	-3.00	N/A ¹
Total (51)	11.8%	15.7%	72.5%	1.35	0.89 – 1.82
Type of Hunting (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Pheasant (38)	13.2%	18.4%	68.4%	1.16	0.64 – 1.68
Waterfowl (12)	8.3%	25.0%	66.7%	1.25	0.10 – 2.40
Deer – All Types (6)	0.0%	0.0%	100%	2.50	1.62 – 3.38

¹Insufficient sample size.

Table 87. Comments by hunters in Zone T (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3) ¹	ID #	Comments
1	+2	2079	We had a good day with some shooting. Without the Walk-In my grandkids would get to do little hunting.
2	0	2080	Not property's fault that we didn't get anything, geese just not decoying in.
2	+1	2041	We came across a lot of birds at other locations. We will be back. Not familiar with this area, but will remedy that. Had a great time!
2	+3	2082	I can't believe a person can have this kind of public decoy opportunity.
2	+3	2078	Leave this unit alone with tags and January season.
2	+3	2077	Would rate this a 10 on a scale of 1–7, beyond great.
2	+3	2073	We harvested 5 roosters at other locations. SDGFP does a great job with these areas. Thank you.
2	+3	2067	Great! A wonderful place! Lots of birds! I love coming to South Dakota.
4	-1	2020	Daily non-resident small game licenses would be nice!
4	+1	2016	Most Walk-Ins in Bennett County don't have any habitat. I hunted one that did. Most are no good to hunt.
4	+2	2072	Keep up the good work.
4	+3	2066	The SD Walk-in program has kept me in hunting in SD. I am a very big fan of the Walk-in program.
4	+3	2029	I love coming to S.D. The people are friendly – I have been coming for 15 years.
4	+3	2040	Way too many hunters in this area.
4	+3	2045	I love hunting GPAs & Walk-Ins around Martin.
5	0	2049	I doubt if area contains any pheasants – It may have grouse even though I did not see any (harvested small grain field).
5	+3	2038	Another great day in Martin. Officer Beck is always pleasant and professional! Hunting would be tough without the Walk-In Program.
7	-3	2028	Walked mile and half – didn't see one bird. Sun flower still in field. Wasn't one bird on fence rows or section line.
7	+2	2039	Numerous deer, just not in the right place.
7	+3	2044	This program is absolutely essential to provide non-landowners the chance to hunt.
8	0	2006	Area will be easier to hunt once sunflowers are harvested.
8	+1	2017	A lot of open land is planted & seeded. Saw many more roosters than hens. That's strange.
8	+2	2059	Thank you for having Walk-In Areas. This had good cover + birds (pheasant & grouse) but all legal flushed wild.
9	-1	2023	Do all you can to keep Walk-n Areas for hunting. Areas may be up one year, down the next, up again. Also your hunting atlas is important. Put the 'plus' (+) marks back in for marking each mile.
9	+2	2025	Nice range. Nice area. Need my buddy to help hunt it. My 62 year old knees kept me from walking the whole thing. Martin area is interesting; prairie chickens!
13	-3	2070	Too few Walk-In areas. Access to Walk-Ins too restrictive.
13	0	2007	LaCreek Refuge not open for this weekend – Didn't have a good hunting experience.

¹Satisfaction: -3=Very Dissatisfied, -2=Moderately Dissatisfied, -1=Slightly Dissatisfied, 0=Neutral or No Opinion, +1=Slightly Satisfied, +2=Moderately Satisfied, +3=Very Satisfied.

Comparison of Zones

Compared to relative size of each zone, Zones K and N (Brookings and Brown Counties; respectively) had higher relative use (11.7% and 5.6%; respectively)¹ while Zones D and T (Day and Bennett Counties; respectively) had lower relative use (13.3% and 5.0%; respectively) and relative hunter use of Zones V and L (Clay/Union and Lyman Counties; respectively) was about equal to their relative size (Table 88 and Figure 13). These differences in relative hunter use may be more related to type of hunting opportunities offered in each area rather than other factors, such as quality of hunting opportunity or proximately to towns/cities. For example, the two zones with lower relative hunter use (Zones D and T) offered more waterfowl hunting opportunities while the other zones provided mainly pheasant hunting opportunities (Tables 89 and 90).

The percent of resident to non-resident use of the walk-in areas in eastern and central South Dakota varied greatly among the six study zones ranging from about 88% resident use of Zone V (Clay/Union Counties) to only 39% resident use at Zone D (Day County) (Table 91). The overall average was about 59% resident use, 37% non-resident use and 5% mixed groups of residents and nonresidents. The percent of youth hunters (less than 16 years old) in the hunting groups ranged from about 29% for Zone V (Clay/Union Counties) to 6% for Zones T and D (Bennett and Day Counties; respectively) (Table 91). The overall average for the percent of hunting groups having one or more youth hunters in their group was about 11%.

Satisfaction. Zone T (Bennett County) had the highest mean satisfaction and Zone D (Day County) the lowest, however due to small sample sizes the differences were not significant (Table 92 and Figures 14 and 15). The mean satisfaction of hunters in Zone T was 10% higher than the mean satisfaction of hunters in Zone D.

Mixed groups of resident and non-resident hunters had the highest satisfaction level and non-resident hunters had the lowest satisfaction level (Table 93 and Figures 16 and 17). About 66% of the resident hunting groups were satisfied compared to 54% of the non-residents and 81% of the mixed groups.

¹ Measurement is based on hunter group (vehicle) use, not individual hunter use.

Deer hunters (archery and rifle) had the highest mean satisfactions and pheasant hunters the lowest mean satisfaction (Table 94 and Figures 18 and 19). All of the archery deer hunters and 73% of the rifle deer hunters were satisfied with their hunting experience on walk-in areas in eastern and central South Dakota in 2009, 68% % of the waterfowl hunters and 59% of the pheasant hunters.

There was a slight decline in mean satisfaction as the season progressed from September through December with a sharp increase in satisfaction a January (Table 95 and Figures 20 and 21). However, the satisfaction measurement in January largely consists of hunters in Zone T (Bennett County). Many of the walk-ins in this area offered goose hunting opportunities and goose hunting tends to be good during this time period. Also, the sample sizes in both September and January were small and the observed relationship may be due to random chance.

Table 88. Comparison of use in Zones studied in eastern and central South Dakota.

Zone & County	Number of Walk-Ins	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate	Estimated Number of Hunters	Percent Hunters
V – Clay/Union	5	1,865	7.0%	63	7.4%	24	38.1%	101	6.1%
K – Brookings	11	2,280	8.6%	173	20.3%	89	51.4%	297	17.9%
D – Day	13	8,029	30.2%	144	16.9%	66	45.8%	279	16.8%
N – Brown	6	2,977	11.2%	143	16.8%	80	55.9%	317	19.1%
L – Lyman	11	7,490	28.2%	247	29.0%	126	51.0%	532	32.1%
T – Bennett	13	3,912	14.7%	83	9.7%	51	61.4%	131	7.9%
	59	26,553	100%	853	100%	436	51.1%	1,657	100%

Table 89. Type of hunting by Zones studied in eastern and central South Dakota.

Hunting ¹	Percent of Cases / Zone						Combined		
	V Clay/Union	K Brookings	D Day	N Brown	L Lyman	T Bennett	Number	Percent	Percent of Cases
Pheasant	75.0%	82.0%	60.6%	88.8%	94.4%	74.5%	359	77.5%	82.3%
Rifle Deer	8.3%	16.9%	9.1%	8.8%	5.6%	5.9%	40	8.6%	9.2%
Waterfowl	0.0%	0.0%	30.3%	5.0%	0.8%	23.5%	37	8.0%	8.5%
Archery Deer	12.5%	0.0%	10.6%	0.0%	0.0%	3.9%	12	2.6%	2.8%
Small Game	8.3%	1.1%	0.0%	1.3%	1.6%	2.0%	7	1.5%	1.6%
Muzzleloader Deer	4.2%	1.1%	0.0%	0.0%	0.8%	2.0%	4	0.9%	0.9%
other	0.0%	1.1%	1.5%	0.0%	0.8%	0.0%	3	0.6%	0.7%
Rifle Antelope	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	1	0.2%	0.2%
Responses	26	91	74	83	132	57	463	100%	106.2%
Number of Cases	24	89	66	80	126	51	436		

¹Hunters can select more than one type of hunting.

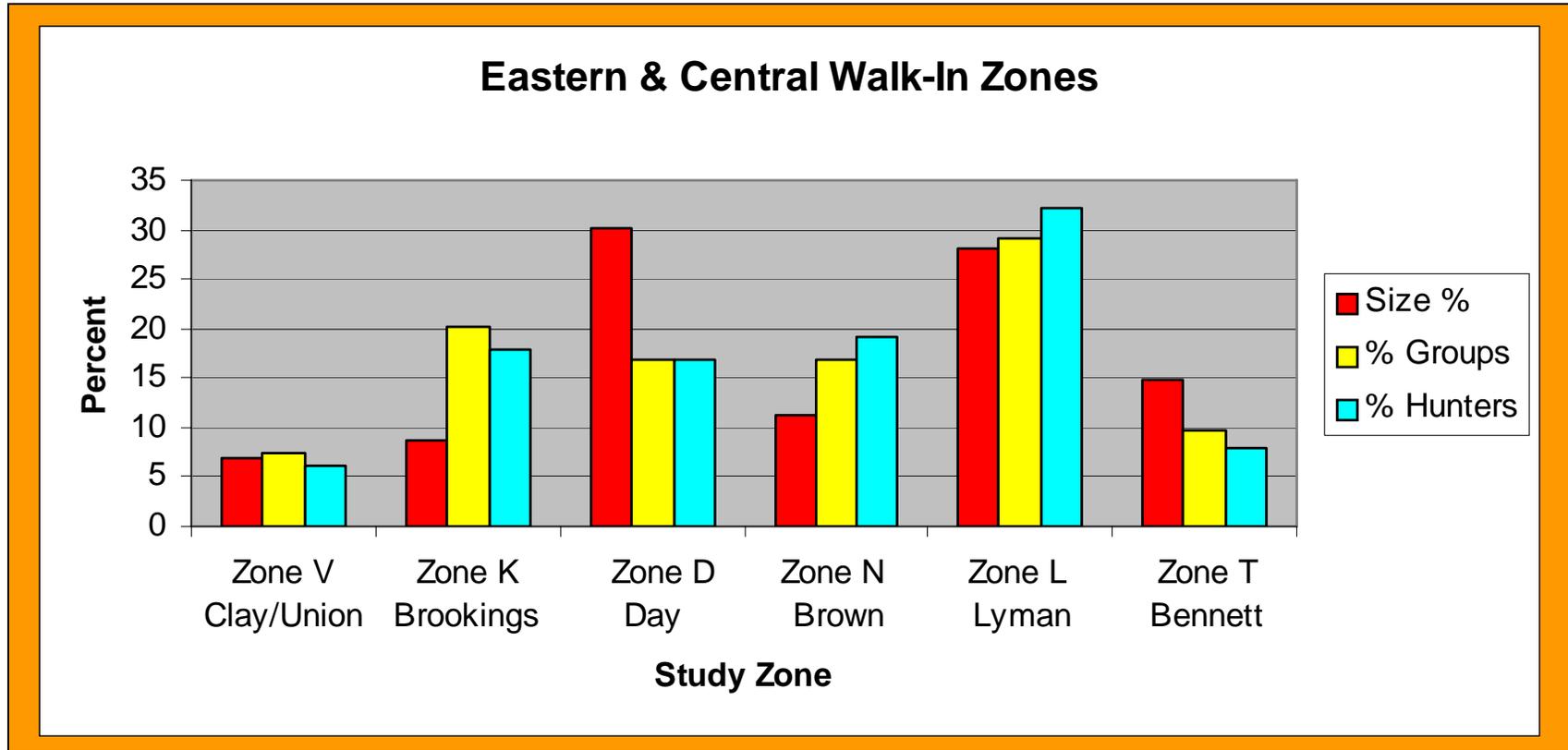


Figure 13. Comparison of relative hunter use (%) of walk-in area study zones in relation to relative size of each zone (%).

Table 90. Harvest by Zones studied in eastern and central South Dakota.

Harvest	Number / Zone						Combined	
	V Clay/Union	K Brookings	D Day	N Brown	L Lyman	T Bennett	Number	Percent
Pheasant	6	47	29	97	181	43	403	71.3%
Ducks	0	0	84	21	0	1	106	18.8%
Geese	0	0	2	0	0	18	20	3.5%
Deer	3	3	0	4	7	1	18	3.2%
Grouse	0	0	0	1	4	10	15	2.7%
Antelope	0	0	0	0	2	0	2	0.4%
Rabbit	0	0	0	0	1	0	1	0.2%
Turkey	0	0	0	0	0	0	0	0.0%
Total Harvest	9	50	115	123	195	73	565	100%
Total Groups	24	89	66	80	126	51	436	

Table 91. Residence of hunters and youth hunters by Zones studied in eastern and central South Dakota.

Residence	Zone						Combined	
	V Clay/Union	K Brookings	D Day	N Brown	L Lyman	T Bennett	Number	Percent
South Dakota	87.5%	80.9%	39.4%	47.5%	46.8%	78.4%	256	58.7%
Out-of-State	12.5%	10.1%	56.1%	46.3%	50.0%	19.6%	159	36.5%
Mixed	0.0%	9.0%	4.5%	6.3%	3.2%	2.0%	21	4.8%
Number of Cases	24	89	66	80	126	51	436	100%
Pearson Chi-Square: $X^2=69.540$; $df=10$; $p<0.001$								
Group includes one or more youth hunter(s) (<16)	Zone						Combined	
	V Clay/Union	K Brookings	D Day	N Brown	L Lyman	T Bennett	Number	Percent
NO	70.8%	88.8%	93.8%	88.8%	88.9%	94.1%	388	89.2%
Yes	29.2%	11.2%	6.2%	11.3%	11.1%	5.9%	47	10.8%
Number of Cases	24	89	65	80	126	51	435	100%
Pearson Chi-Square: $X^2=11.184$; $df=5$; $p=0.048$								

Table 92. Satisfaction of hunting groups by Zones studied in eastern and central South Dakota.

Satisfaction (scale)	Zone						Combined	
	V Clay/Union	K Brookings	D Day	N Brown	L Lyman	T Bennett	Number	Percent
Very Dissatisfied (-3)	0.0%	7.9%	6.1%	3.8%	5.6%	3.9%	23	5.3%
Moderately Dissatisfied (-2)	8.3%	3.4%	4.5%	2.5%	4.8%	3.9%	18	4.1%
Slightly Dissatisfied (-1)	12.5%	5.6%	12.1%	7.5%	7.9%	3.9%	34	7.8%
Neutral / No Opinion (0)	20.8%	28.1%	18.2%	27.5%	13.5%	15.7%	89	20.4%
Slightly Satisfied (+1)	12.5%	12.4%	15.2%	27.5%	16.7%	17.6%	76	17.4%
Moderately Satisfied (+2)	20.8%	25.8%	30.3%	15.0%	23.8%	23.5%	102	23.4%
Very Satisfied (+3)	25.0%	16.9%	13.6%	16.3%	27.8%	31.4%	94	21.6%
Total Number	24	89	66	80	126	51	436	100%
Pearson Chi-Square: $X^2=36.014$; $df=30$; $p=0.208$								
Mean	1.00	0.79	0.77	0.83	1.13	1.35	0.97	
95% C.I.	0.30 – 1.70	0.42 – 1.15	0.36 – 1.19	0.50 – 1.15	0.82 – 1.45	0.89 – 1.82	0.81 – 1.13	
ANOVA: $F=1.287$; $df=5/430$; $p=0.268$								
SUMMARIZED RESULTS								
Dissatisfied	20.8%	16.9%	22.7%	13.8%	18.3%	11.8%	75	17.2%
Neutral / No Opinion	20.8%	28.1%	18.2%	27.5%	13.5%	15.7%	89	20.4%
Satisfied	58.3%	55.1%	59.1%	58.8%	68.3%	72.5%	272	62.4%
Pearson Chi-Square: $X^2=13.743$; $df=10$; $p=0.185$								

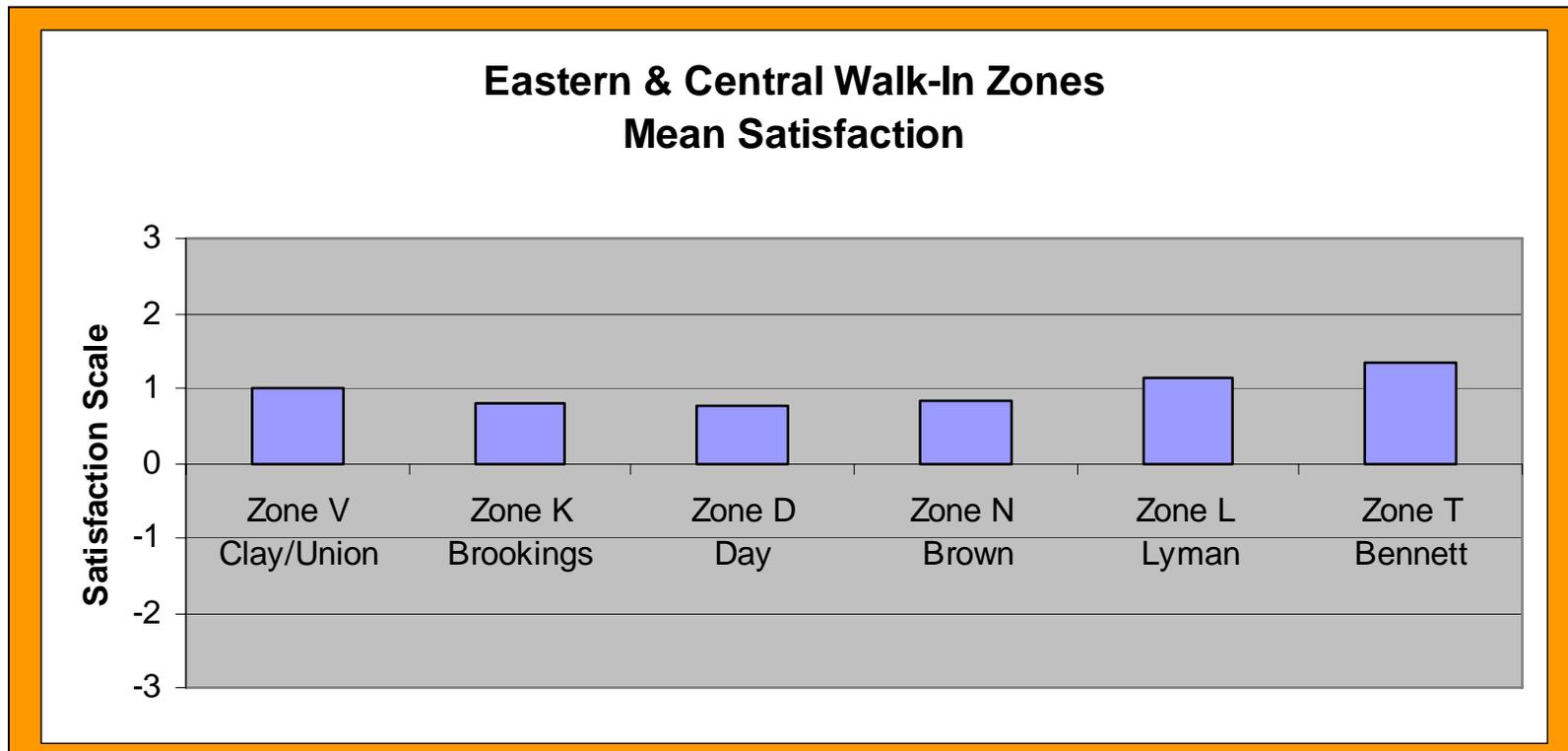


Figure 14. Mean satisfaction of hunters using walk-in areas in eastern and central South Dakota (2009).

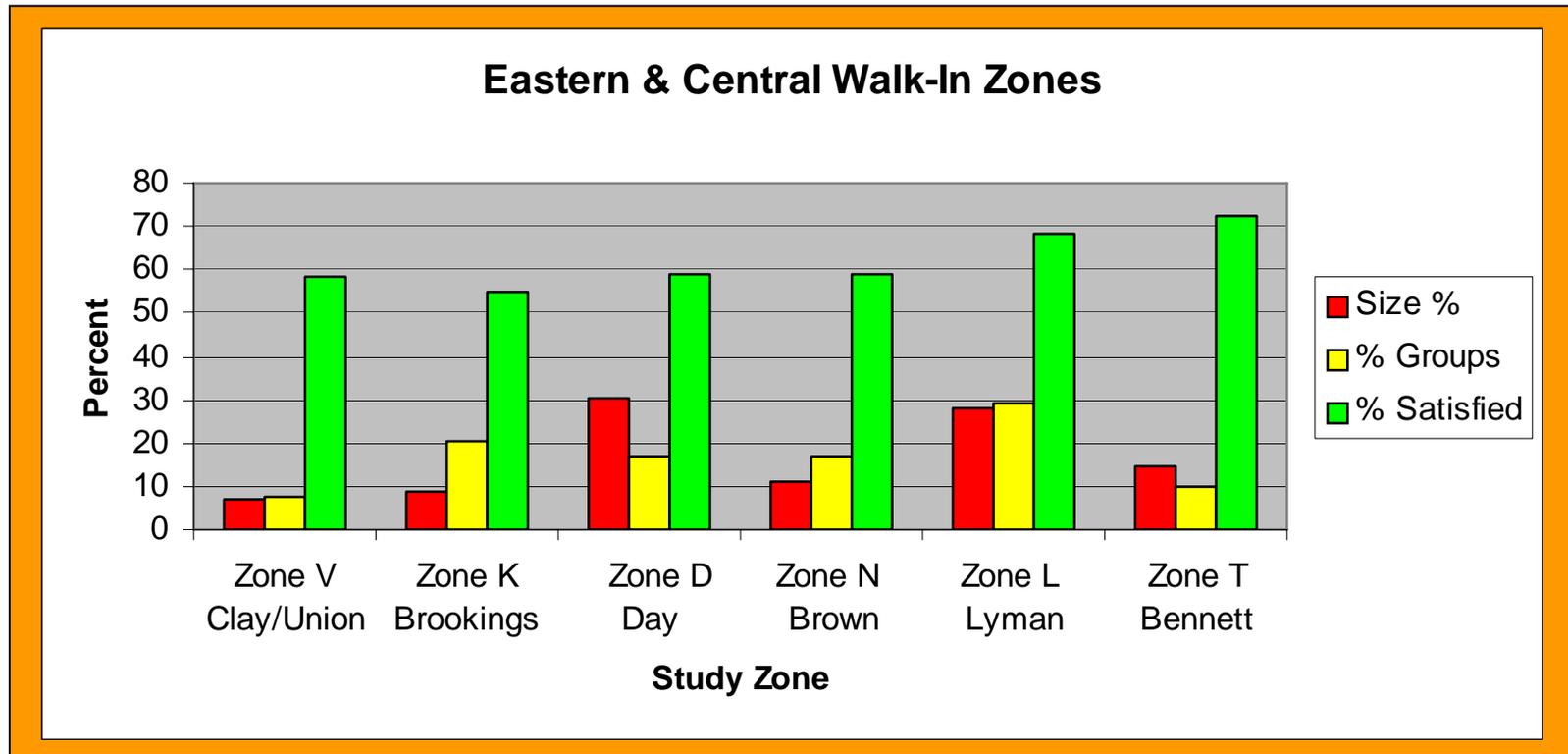


Figure 15. Relative size, relative use (vehicles) and percent satisfied hunters using walk-in areas in the eastern and central study zones (South Dakota – 2009).

Table 93. Satisfaction of hunting groups using walk-in areas in eastern and central South Dakota analyzed by residence.

Satisfaction	South Dakota	Non-Resident	Mixed Group
Dissatisfied	12.5%	25.8%	9.5%
Neutral / No Opinion	21.1%	20.8%	9.5%
Satisfied	66.4%	53.5%	81.0%
Total	256	159	21
Pearson Chi-Square: $X^2=15.963$; $df=4$; $p=0.003$			
Mean	1.21	0.53	1.33
95% C.I.	1.02 – 1.41	0.25 – 0.81	0.67 – 2.00
ANOVA: $F=8.989$; $df=2/433$; $p<0.001$			

Table 94. Satisfaction of hunting groups using walk-in areas in eastern and central South Dakota analyzed by type of hunting.

Satisfaction	Pheasant	Rifle Deer	Waterfowl	Archery Deer
Dissatisfied	19.8%	10.0%	10.8%	0.0%
Neutral / No Opinion	21.7%	17.5%	21.6%	0.0%
Satisfied	58.5%	72.5%	67.6%	100%
Total	359	40	37	12
Mean	0.80	1.55	1.27	2.00
95% C.I.	0.63 – 0.98	1.09 – 2.01	0.76 – 1.78	1.62 – 2.38

Table 95. Satisfaction of hunting groups using walk-in areas in eastern and central South Dakota analyzed by month.

Satisfaction	September	October	November	December	January
Dissatisfied	14.3%	17.5%	15.9%	22.8%	0.0%
Neutral/No Opinion	14.3%	20.1%	24.6%	15.8%	10.0%
Satisfied	71.4%	62.4%	59.5%	61.4%	90.0%
Total	14	229	126	57	10 ¹
Mean	1.36	0.97	0.90	0.77	2.40
95% C.I.	0.33 – 2.39	0.75 – 1.19	0.62 – 1.17	0.27 – 1.27	1.71 – 3.09

¹Most hunting in January occurred in Zone T (Bennett County), which included two extra weeks of data collection during January since many of the walk-ins in that area offered goose hunting opportunities.

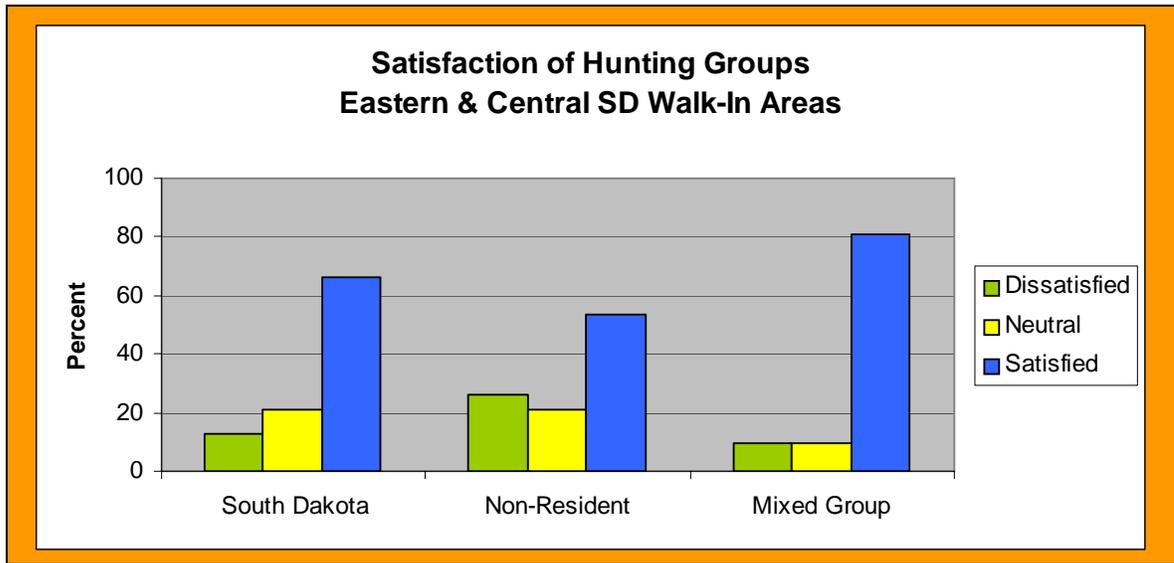


Figure 16. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing residence (South Dakota – 2009).

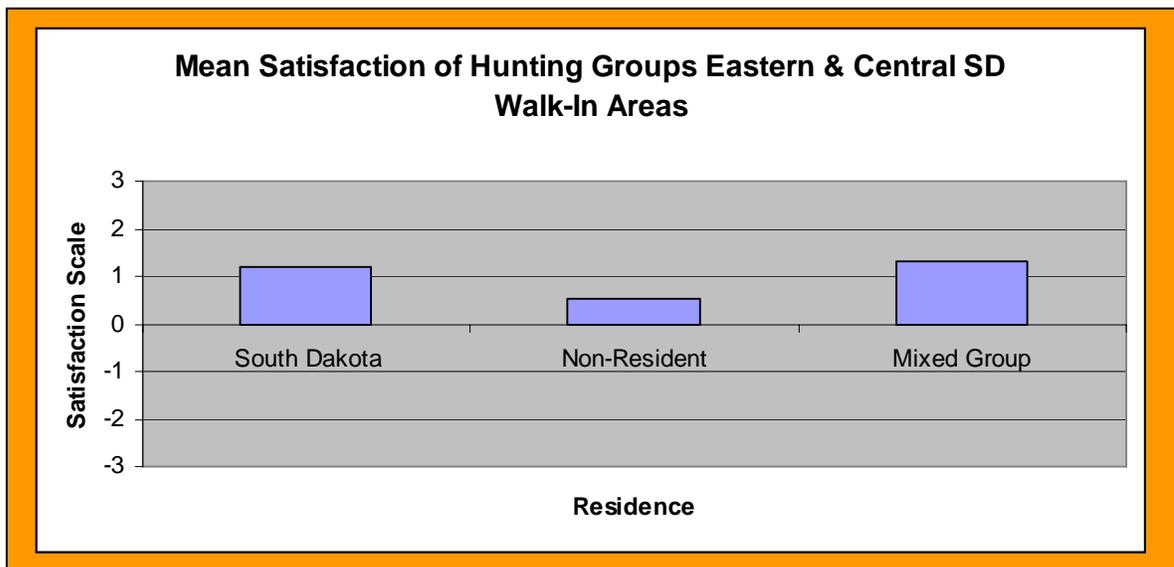


Figure 17. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing residence (South Dakota – 2009).

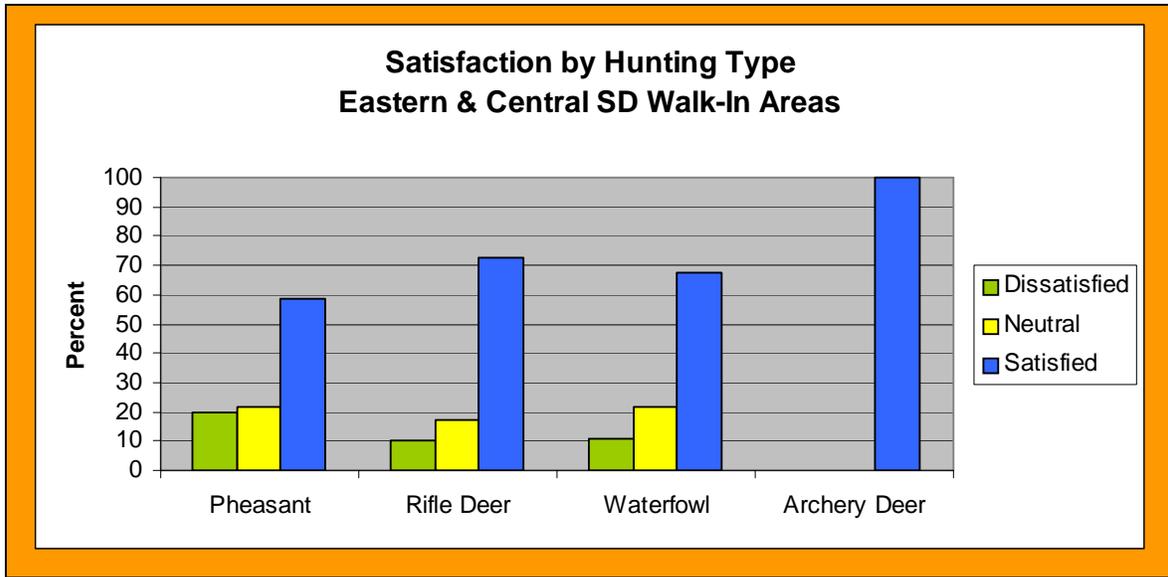


Figure 18. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing hunting type (South Dakota – 2009).

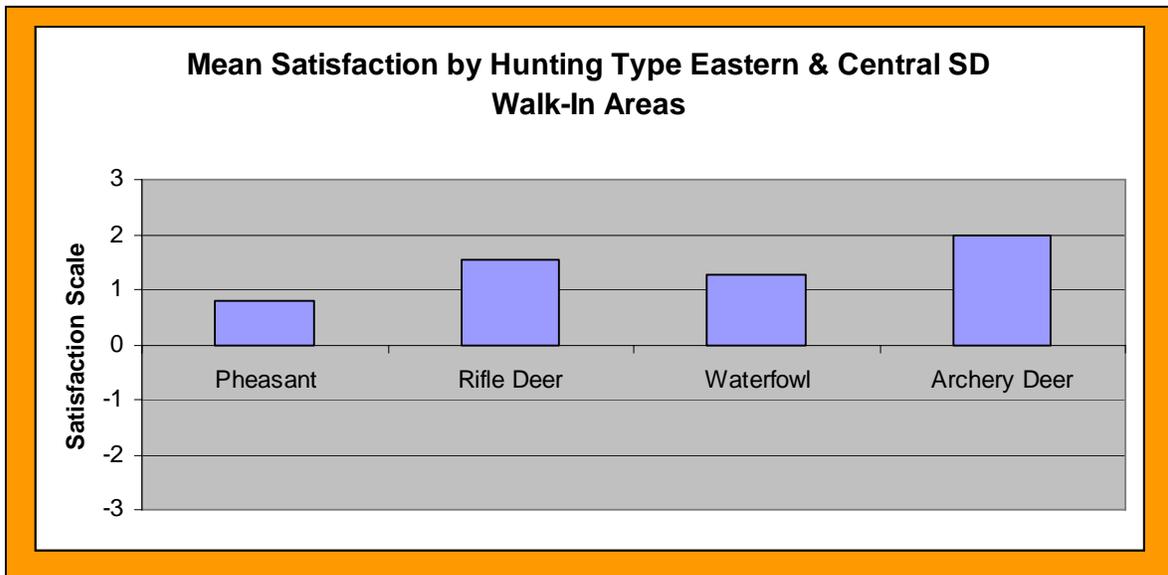


Figure 19. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing hunting type (South Dakota – 2009).

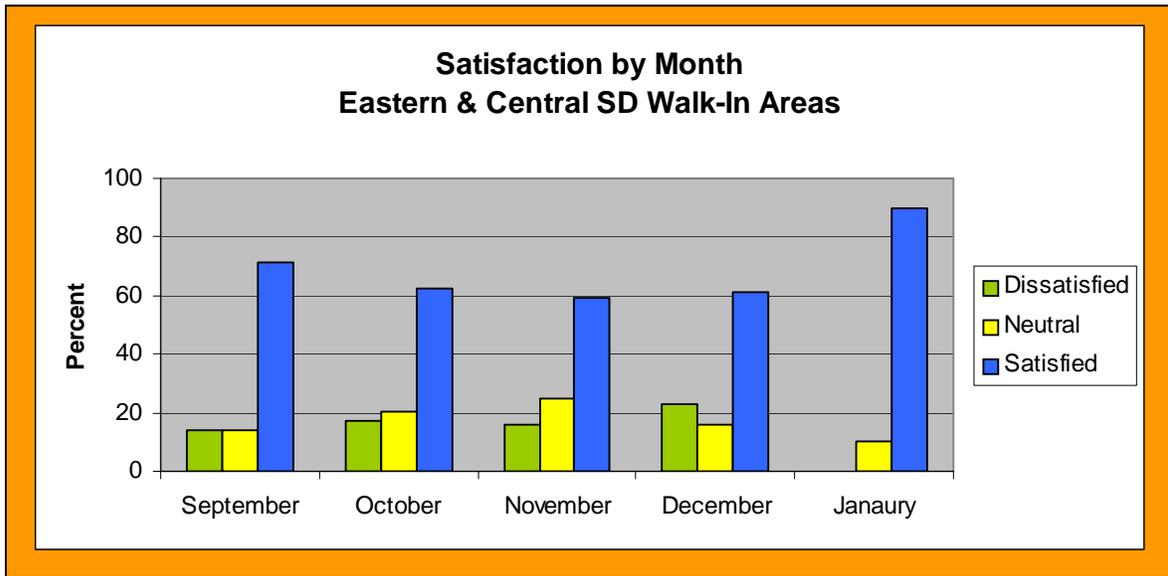


Figure 20. Satisfaction of hunters using walk-in areas in the eastern and central study zones comparing month hunted (South Dakota – 2009).

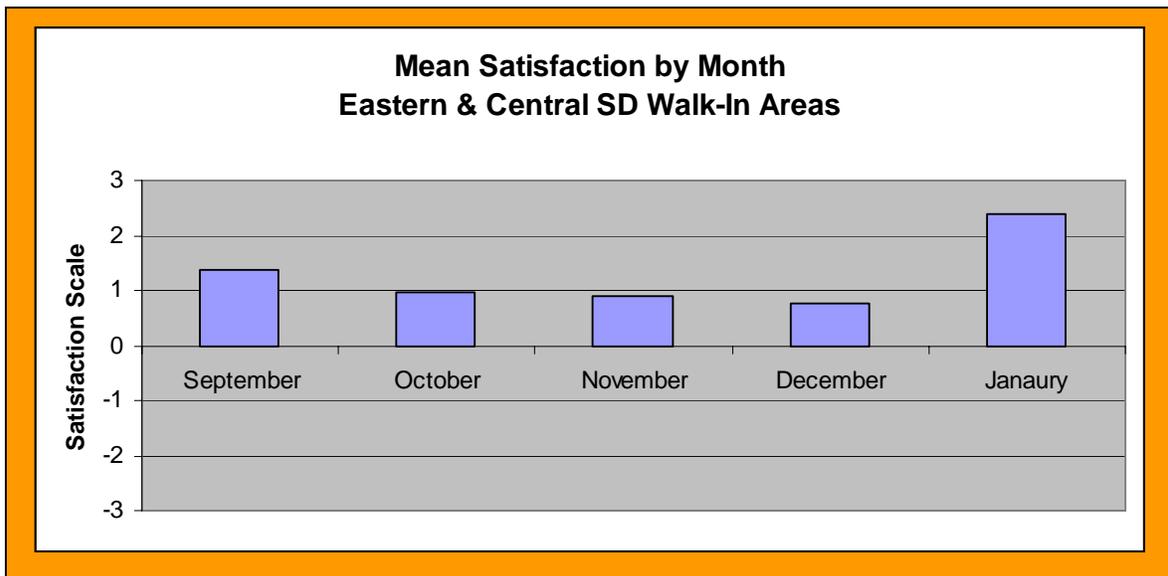


Figure 21. Mean satisfaction of hunters using walk-in areas in the eastern and central study zones comparing month hunted (South Dakota – 2009).

Discussion and Summary

Six zones containing a total of 59 walk-in areas in eastern and central South Dakota were studied throughout the 2009 hunting season. Overall, this study provides a good description of hunter use of the walk-in areas in eastern and central South Dakota. It is very likely that uses of specific walk-in areas are influenced by association of other nearby walk-in areas, making it difficult to evaluate the use and value of walk-in areas as single functioning units. In other words, hunters may select an area based on the number and sizes of walk-in areas as a complex rather than a single walk-in area.

Overall, most hunting on the walk-in areas in eastern and central South Dakota was for pheasant hunting with some limited opportunities for deer and waterfowl hunting. Hunter use was somewhat spread out over the season compared to the northwest region that exhibited peak use during the antelope opener and the rifle deer opener (Gigliotti, 2010a).

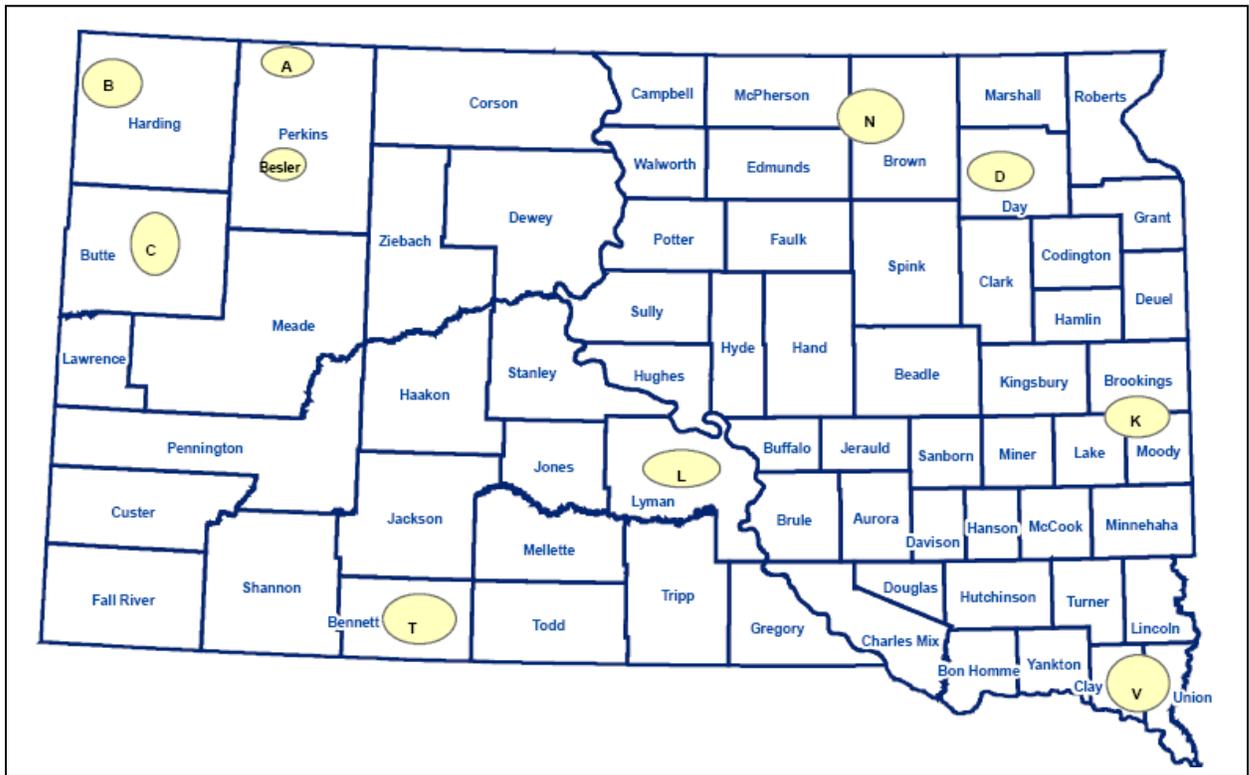
Except for a few examples mentioned in the report, most of the walk-in use was correlated with size of the walk-in. Further examination of the few walk-in areas that had higher or lower relative use compared to relative size may identify positive or negative attributes of the walk-ins that affect hunter use. However, one factor that may affect differential hunter use would be the type of hunting opportunities offered.

Hunter Use & Satisfaction. Hunter use is only one evaluation of the value of walk-in areas. Some of the walk-in areas with lower hunter use had higher hunter satisfaction. Hunter satisfaction is a good complementary measure of the value of walk-in areas. Hunter use and satisfaction were the two variables used to evaluate the walk-in areas. Hunter use can be considered one type of 'quality' measurement because hunters will self-select walk-in areas that they perceive have good habitat and they return to previously hunted walk-in areas that provided a good hunting experience. However, during very high use, even in spite of an areas having good quality habitat, too much use can produce a negative experience. Satisfaction is a measure of quality based on the hunters' experiences and benefits received measured at the conclusion of their hunt. Hunter comments may be used to help identify what, if any, factors or attributes of the area or hunting experience contributed to a positive or negative hunting experience.

Hunter use of an area can be very different for different types of hunting (e.g. pheasant hunting vs. deer vs. waterfowl), but satisfaction is an evaluation of the experience and may be a better measurement for comparing different types of hunting. Hunter satisfaction is compared with all areas studied in 2009 as an overall comparison (Figures 22 and 23). Overall, all zones studied had relatively similar mean satisfaction scores. Overall, only a few comments mentioned poor habitat quality of specific walk-in areas.

Hunter satisfaction may be strongly related to expectations. Hunters expecting to find lots of birds may be dissatisfied when only a few birds are seen while hunters with more realistic expectations may be satisfied the same hunting experience. One interesting finding was resident hunter satisfaction hunting walk-in areas was higher than non-resident hunter satisfaction. Previous studies always found higher non-resident satisfaction for all types of hunting (Gigliotti 2004, Gigliotti 2010b). A higher proportion of non-resident pheasant hunting occurs on private land compared to resident hunters and non-resident hunters tend to have better hunting based on having a higher harvest rate and thus are more satisfied overall (Gigliotti 2006). It appears that non-resident hunters may have higher expectations compared to resident hunters and thus tend to less satisfied when hunting walk-in areas.

One recommendation would be to increase the amount of information available to hunters better describing the kinds of hunting available on each walk-in and some type of measurement of the quality of the habitat and/or the expected hunting experience. There will probably always be a few complaints, but overall hunters are very appreciative of the Walk-In Program and want to see it expanded.



Map 8. Location of all walk-in areas studied in 2009.

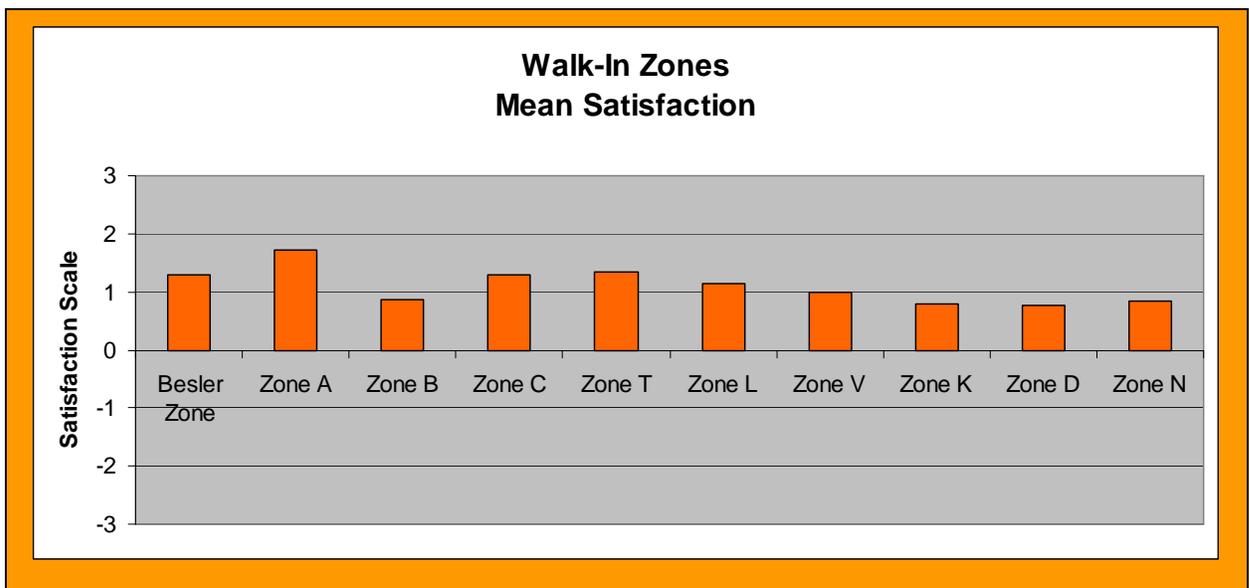


Figure 22. Mean satisfaction summarized for all the walk-in zones studied in 2009 (see Map 8 above for locations of each study zone).

References

- Gigliotti, L.M. 2004. South Dakota pheasant management survey 2003: Evaluations of resident and nonresident pheasant hunting. Report ID#: HD-1-04.AMS. South Dakota Game, Fish and Parks. Pierre, SD.
- Gigliotti, L.M. 2006. Hunter evaluation of the 2005 Walk-In Areas. Report ID#: HD-7-06.AMS. South Dakota Game, Fish and Parks. Pierre, SD.
- Gigliotti, L.M. 2010a. Evaluation of hunter use of walk-in areas (2009): Northwest region of South Dakota. Report ID#: HD-5-10.AMS. South Dakota Game, Fish and Parks. Pierre, SD.
- Gigliotti, L.M. 2010b. 2009 Black Hills deer hunter survey report. Report ID#: HD-3-10.AMS. South Dakota Game, Fish and Parks. Pierre, SD.

Appendix B. Postage-paid survey card and directions left on vehicle windshields used in the 2009 evaluation of Walk-In Areas.

Please answer this survey for your hunting today at this location only. ID # A:

Species Hunted: (Check ALL that apply)
 Pheasant/grouse Deer: Firearm Antelope: Firearm
 Other small game Archery Archery
 Turkey Muzzleloader
 Not Hunting Waterfowl Other: _____

Date: _____ Time you started hunting at this location: _____ Time hunt finished at this location: _____

Total number of hunters in this vehicle: _____ Number hunters in vehicle under age 16: _____

South Dakota Resident: (Town) _____ Non-resident: (State) _____

Harvest: Please indicate the **total number** of animals harvested today by the hunters in this **vehicle at this location only**:
Pheasant [____] Grouse/Prairie Chicken [____] Ducks [____] Geese [____] Turkey [____] Deer [____] Antelope [____]
Please list any other animals harvested: _____

Rate your satisfaction with this hunting trip:
(Please circle only one number)

Very Dissatisfied				Neutral			Very Satisfied
1	2	3	4	5	6	7	

Optional comments: _____

Thank you for helping us with this survey. **Turn In Poachers (TIPs) Hotline – 1-888-683-7224**

Dear Hunter:

Game, Fish and Parks is conducting an evaluation of the Walk-In Access Program. This evaluation will be on-going for the entire fall 2009 hunting season. A survey was placed on your vehicle because it was parked near a Walk-In Access area during a survey count of vehicles in the area.

If no one in your vehicle was hunting in a Walk-In Access area today then please check the ‘Not Hunting’ box on the survey and mail back the postage-paid survey card.

If any hunting occurred at the Walk-In Area at this location please complete the survey and mail back the postage-paid survey card. This survey pertains only to today’s hunting by people in this vehicle at the Walk-In Area at this location.

If your hunting today involves multiple locations you may receive more than one survey card in a day. Since each card is for a specific location we ask that you complete ALL cards that you get for each location.

Thank you. Your cooperation with this evaluation will be greatly appreciated.

If you have questions about this evaluation you can contact:

e-mail: Larry.Gigliotti@state.sd.us

phone: 605-773-4231

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