EVALUATION OF HUNTER USE OF WALK-IN AREAS (2009)
NORTHWEST REGION OF SOUTH DAKOTA

HD-5-10.AMS

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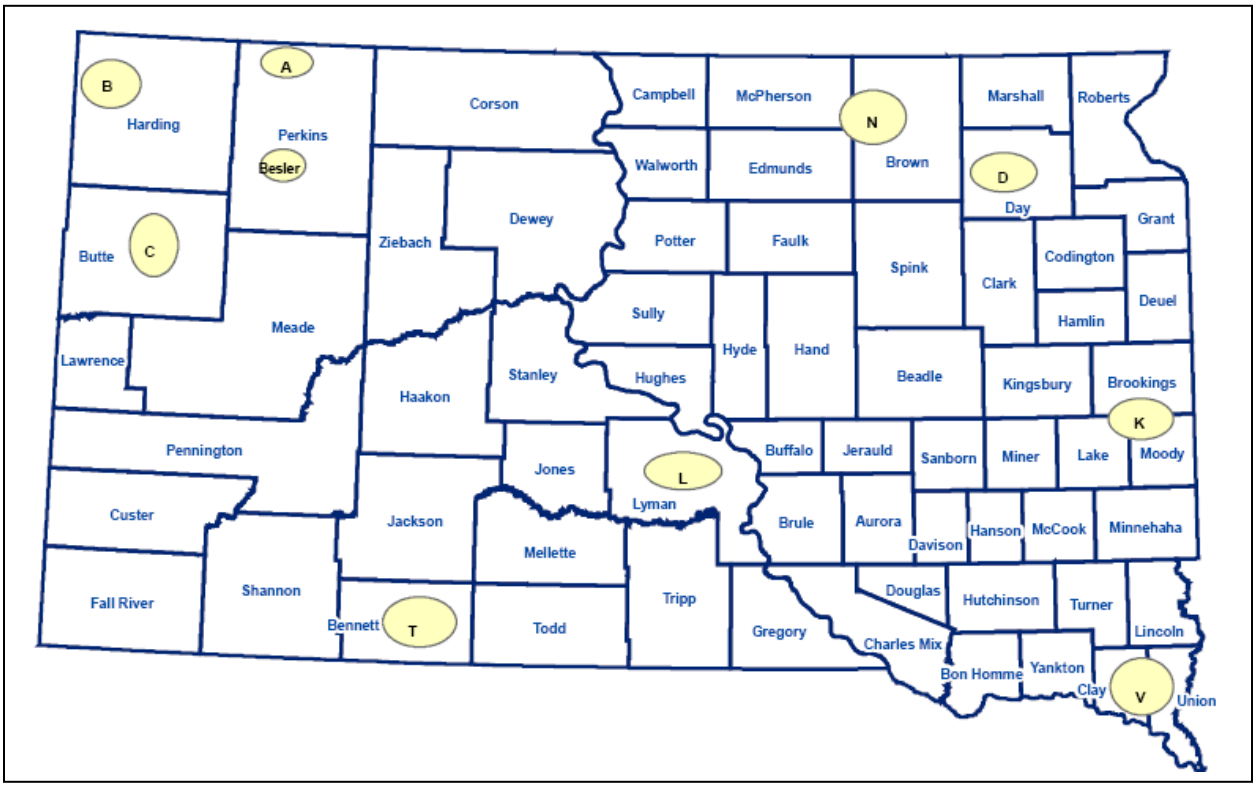

This report was produced for Game, Fish and Parks' wildlife staff and administrators to measure hunter use of Walk-In Areas located in the northwest region of South Dakota and evaluate the Walk-In Areas from the perspective of hunters.

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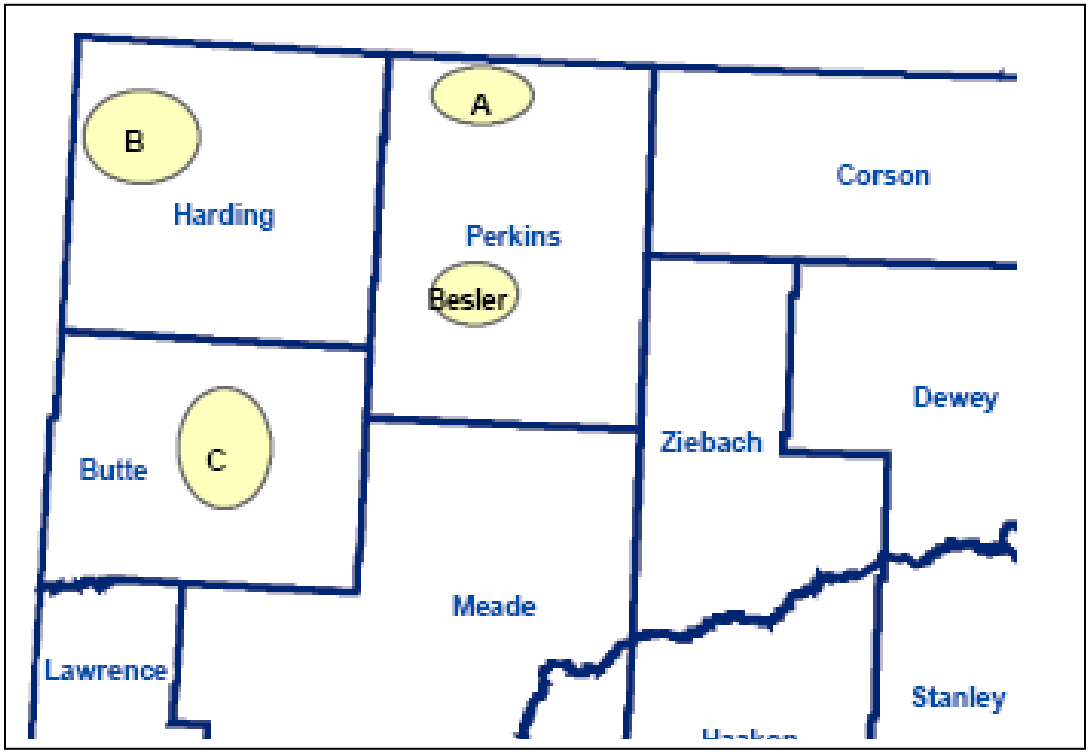
The purpose of this study is to describe the use of walk-in areas located in the northwest region of South Dakota. This information will be used to help identify factors associated with high use walk-in areas that are attractive to hunters and provide for a quality hunting experience. In other words,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

Survey routes were set-up in four zones in the northwest region of South Dakota (Perkins, Harding and Butte Counties) (Map 1). Two full-time wildlife technicians were hired to work the survey routes. Each zone had a prescribed route encompassing several walk-in areas; run three times per day (morning, mid-day and afternoon) and each of the four zones were surveyed one week day and one weekend day per week.



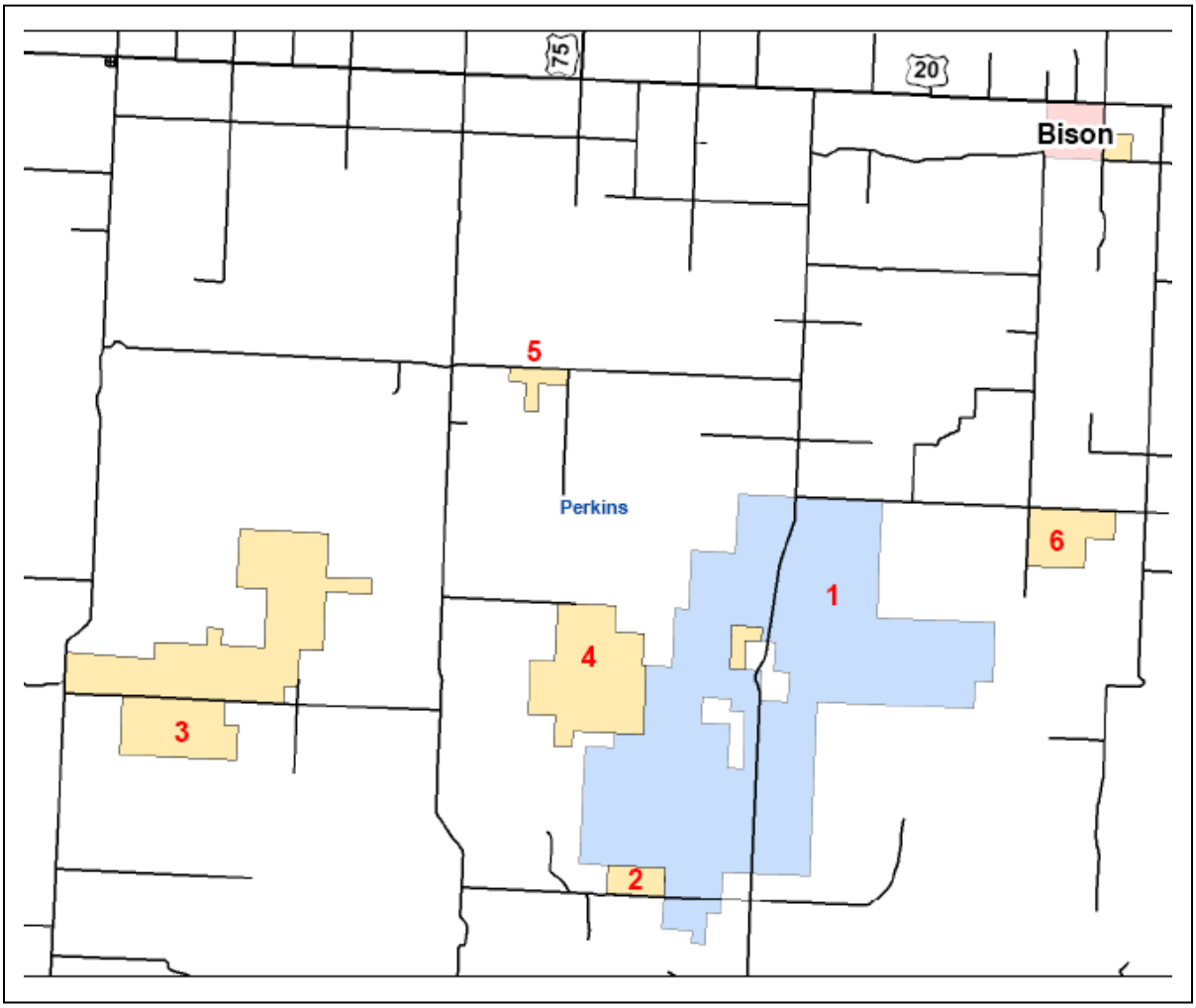
Map 1. Location of Walk-In survey routes in the northwest region of South Dakota.

The study began in mid-August (2009) and ran continuously through mid-January (2010). Survey technicians recorded vehicles parked along walk-in areas on their route, noting license plate number, vehicle types 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. In between survey runs the survey technicians interviewed hunting groups as they finished hunting at that particular walk-in area (Appendix C). Analyses will first describe and compare walk-in areas within each of the four 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 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). Another limitation is that drive-by hunting is not included, i.e., hunters that drive past a walk-in using field glasses or spotting scopes to look for deer or antelope.

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. Surveys left on car windows often have a low response rate.

Besler Zone (Map 2)



This zone was specifically selected to evaluate the Besler Ranch walk-in area (Walk-In # 1 on Map 2) because it is a GFP Special Management Unit. This evaluation only measures hunter use of the areas and does not include additional wildlife and other environmental amenities derived from a Special Management Unit.

Including the Besler walk-in unit (#1) this zone had six total walk-in areas (Map 2). The Besler walk-in unit (#1) comprised almost two-thirds of the total acres in the Besler Zone (Table 1). The walk-ins in this zone mainly featured deer and antelope hunting opportunities and Rapid City was the closest 'major' town/city to this zone.

A total of 107 vehicles were recorded using walk-in areas in this zone during the study period and a total of 47 survey cards/interviews were collected (44%). Except for walk-in #1 (Besler Ranch), we have limited data for describing the overall use of the zone. Relative use of the walk-in areas in this zone was fairly closely matched to the relative size of each walk-in Area (Figure 1). The juxtaposition of walk-in areas #2 and #4 next to the Besler Ranch (#1) may explain the slightly higher relative use versus size compared to walk-in #3, which had slightly lower relative use versus size.

Table 1. Description of Walk-In Areas in the Besler Study Zone (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	Rapid City	16,000	64.1%	70	65.7%	30	42.9%
2	NO	Deer	Rapid City	320	1.3%	6	5.6%	3	50.0%
3	NO	Deer/Antelope	Rapid City	5,240	21.0%	16	14.8%	9	56.3%
4	NO	Deer	Rapid City	2,360	9.5%	14	13.0%	5	35.7%
5	NO	Deer	Rapid City	240	1.0%	0	0.0%	--	--
6	NO	Deer/Antelope	Rapid City	800	3.2%	1	0.9%	0	0.0%
	--	--	Rapid City	24,960	100%	107	100%	47	43.9%

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

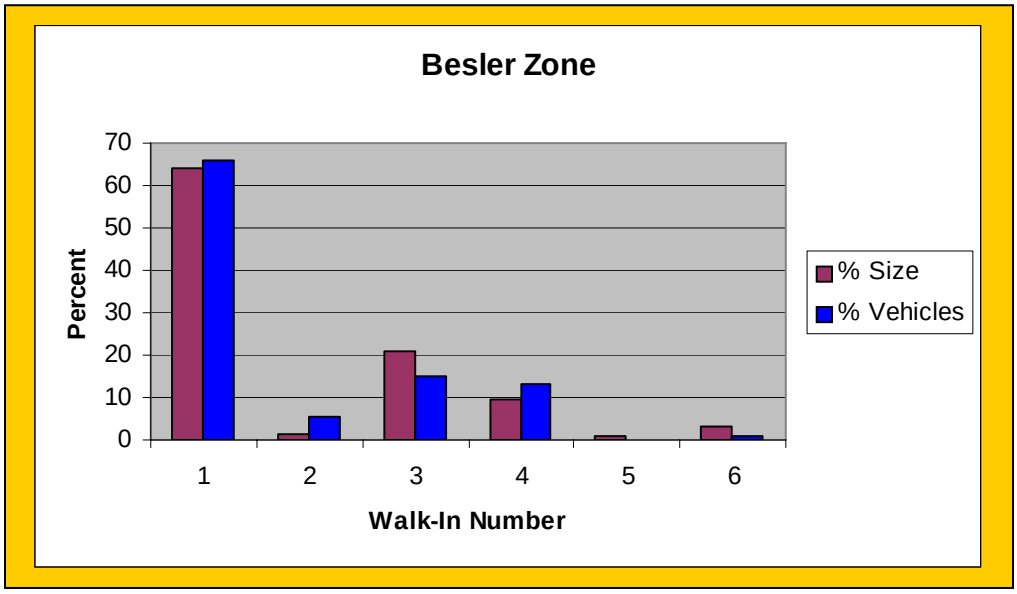


Figure 1. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in the Besler Zone.

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 237 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 the Besler Zone (Table 3).

Almost all use of the walk-in areas in the Besler Zone occurs on the opening of rifle antelope season and rifle deer season (Table 4 and Figure 2). A small amount of archery antelope hunting occurred about 2 weeks before the rifle antelope season opened. 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 2. Estimated number of hunters encountered during the survey of the Besler Zone.

Vehicle Type (code #)	**Average Hunters/ Vehicle**	**Number Vehicles Counted**	**Estimated Hunters**
Regular Truck (single front seat) (1)	1.20	8	10
Extended Cab Truck (3 or 4-door or back seats) (2)	2.39	73	174
Motor-Home / Truck-Camper (3)	2.00	5	10
SUV (4)	2.33	13	30
Van (mini included (5)	2.33	4	9
4-door car / station wagon (7)	1.00	4	4
Overall Average	2.17	107	237[1]

[1]Using the overall average would produce an estimate of 232 hunters.

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

Besler Zone – Walk-In Number		**Number Vehicles**	**Estimated Hunters**
1	**Calculation uses the average of 2.17 hunters per vehicle calculated for the Besler Zone**	70	152
2		6	13
3		16	35
4		14	30
5		0	0
6		1	2
Total		107	231

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

Date	Vehicles Counted		Week	Vehicles Counted
August 15, 2009	**0**		**2**	**0**
August 17, 2009	**0**			
August 23, 2009	**0**		**3**	**0**
August 26, 2009	**0**			
August 29, 2009	**0**		**4**	**0**
September 3, 2009	**0**			
September 4, 2009	**0**		**5**	**0**
September 5, 2009	**0**			
September 12	**1**		**6**	**1**
September 15	**0**			
September 20	**3**		**7**	**6**
September 24	**3**			
September 26	**0**		**8**	**0**
September 29	**0**			
October 3	**21**		**9**	**21**
October 7	**0**			
October 11	**2**		**10**	**5**
October 12	**3**			
October 17	**3**		**11**	**3**
October 19	**0**			
October 23	**0**		**12**	**1**
October 24	**1**			
October 30	**0**		**13**	**1**
October 31	**1**			
November 8	**1**		**14**	**1**
November 11	**0**			
November 14	**46**		**15**	**48**
November 19	**2**			
November 22	**13**		**16**	**16**
November 24	**3**			
November 28	**4**		**17**	**4**
December 1	**0**			
December 5	**0**		**18**	**0**
December 7	**0**			
December 13	**0**		**19**	**0**
December 15	**0**			
December 19	**0**		**20**	**0**
December 21	**0**			
December 27	**0**		**21**	**0**
December 30	**0**			

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Table 4 - Continued. Vehicles counted by survey date and by survey week in the Besler Zone?

Date	Vehicles Counted		Week	Vehicles Counted
January 1, 2010	**0**		**22**	**0**
January 2, 2010	**0**			
January 8, 2010	**0**		**23**	**0**
January 10, 2010	**0**			
January 16, 2010	**0**		**24**	**0**
January 19, 2010	**0**			
January 22, 2010	**0**		**25**	**0**
Total (47 days)	**107**		**23.5 weeks**	**107**

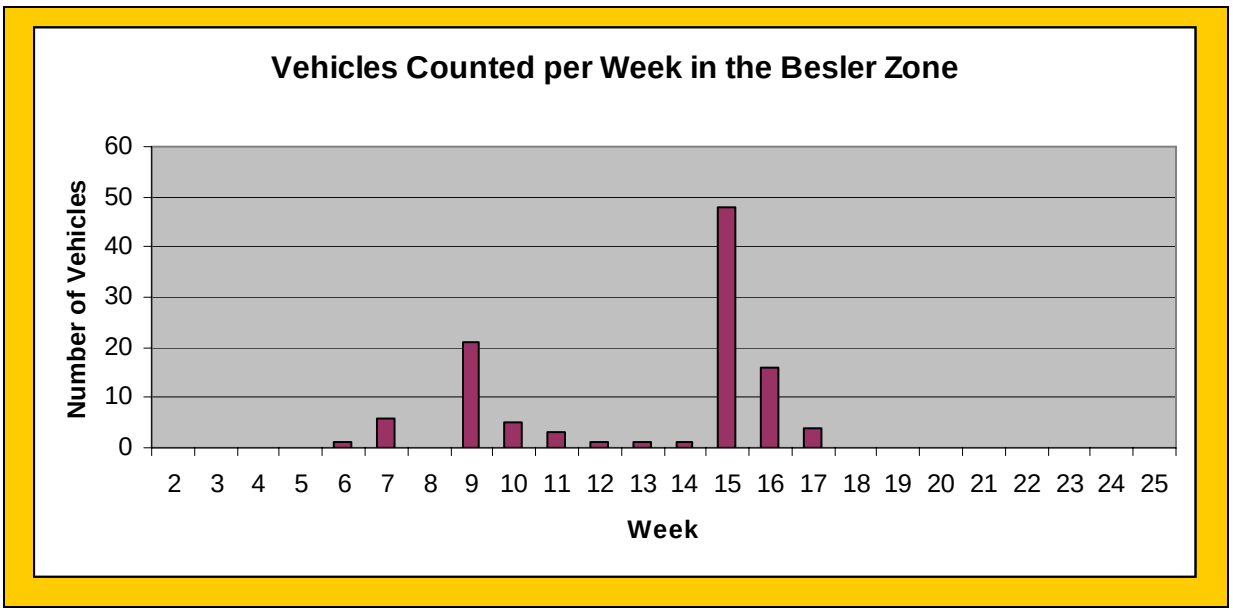


Figure 2. Vehicles counted by week in the Besler Zone (see Table 4).

The majority of hunting on walk-in areas in the Besler Zone was rifle deer and antelope hunting as was the harvest (Tables 5 and 6). About three-fourths of the recorded deer harvest and about half of the recorded antelope harvest in the Besler Zone occurred on the Besler Ranch (Walk-in #1) (Table 7). Walk-in #3 had about 40% of the recorded antelope harvest.

About 11% of the groups hunting in the Besler Zone included a youth hunter (less than 16 years old) (Table 8). About 70% of the groups were South Dakota residents, 23% non-residents and 6% mixed groups of both residents and nonresidents (Table 9). About half of the hunters encountered in the Besler Zone started hunting around 6:00 a.m. and averaged a little over five hours (Tables 10 and 11).

About 70% of the hunting groups reported being satisfied with their hunting experience on walk-in areas in the Besler Zone (Table 12). Comparisons by individual walk-in areas in the Besler Zone are greatly hampered due to small sample sizes (Table 13). Residents were more satisfied than were nonresidents (Table 14). Rifle deer hunters and rifle antelope hunters had similar mean satisfaction levels (Table 14).

Negative comments by hunters were mainly directed at low population of deer and antelope and too many hunters (Table 15).

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

Game Hunted	Number	Percent of Cases
All Deer Hunters	29	61.7%
• **Rifle Deer**	28	59.6%
• **Archery deer**	1	2.1%
• **Rifle Deer & Archery Deer**	1	2.1%
All Antelope Hunters	19	40.4%
• **Rifle Antelope**	16	34.0%
• **Archery Antelope**	3	6.4%
All Pheasant Hunters	5	10.6%
Groups Hunting More than One Type of Game	4	8.5%
• **Pheasant/Rifle Deer/Rifle Antelope**	1	2.1%
• **Rifle Deer & Rifle Antelope**	3	6,4%
Total Cases	47	

Table 6. Harvest by hunters on walk-in areas in the Besler Zone.

Species	Number	Percent
Deer	26	51.0%
Antelope	17	33.3%
Grouse	4	7.8%
Pheasant	3	5.9%
Jack Rabbit	1	2.0%
Total	51	
Total Groups	47	

Table 7. Harvest by hunters targeting deer (rifle) / antelope (rifle) in the Besler Zone by Walk-In Area.

Walk-In #	Harvested Deer[1]	Overall Percent	Number of Groups	Percent Successful[2]	Average Harvest
1	20	76.9%	20	50.0%	1.00
2	2	7.7%	2	50.0%	1.00
3	2	7.7%	3	66.7%	0.67
4	2	7.7%	3	33.3%	0.67
5	0	0.0%	0	--	--
6	0	0.0%	0	--	--
Total	26	100%	28	50.0%	0.93
Walk-In #	**Harvested Antelope[1]**	**Overall Percent**	**Number of Groups**	**Percent Successful[2]**	**Average Harvest**
1	9	52.9%	7	85.7%	1.29
2	0	0.0%	0	--	--
3	7	41.2%	6	100%	1.17
4	1	5.9%	3	33.3%	0.33
5	0	0.0%	0	--	--
6	0	0.0%	0	--	--
Total	17	100%	16	81.2%	1.06

[1]No deer or antelope were harvested by archery hunters
[2]Percent of groups harvesting one or more deer/antelope on the Walk-In.
→Additional Harvest: 3 pheasants, 3 grouse and 1 jack rabbit on Walk-in #1
1 grouse on Walk-in #2

Table 8. Vehicles with hunters less than age 16.

Number of Youth Less than Age 16 in Vehicles in the Besler Zone	**Number**	**Percent**
0	42	89.4%
1	5	10.6%
Total	47	100%

Table 9. Residence of hunters in the Besler Zone.

Residence	**Number**	**Percent**
South Dakota	33	70.2%
Non-residents	11	23.4%
Mixed Group	3	6.4%
Total	47	100%
South Dakota Residents – Cities		
City[1]	**Number**	**Percent**
Rapid City	6	18.2%
Sioux Falls	3	9.1%
Brookings, Piedmont, Spearfish, Webster	2 (each)	6.1% (each)
Wilmot, Florence, Groton, White, Sturgis, Lead, Bison, Pierre, Huron, Watertown, Worthing, Mina, Tea, Belle Fourche, Hill City, Hermosa	1 (each)	3.0% (each)
Total	33	100%
Note: All 5 of the mixed (resident/nonresident) groups listed Aberdeen for their SD town residence.		
Non-Residents – State		
State[1]	**Number**	**Percent**
Minnesota	5	45.5%
Wisconsin	3	27.3%
Indiana	2	18.2%
Colorado	1	9.1%
Total	11	100%

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

Table 10. Start times for hunters in the Besler Zone.

Start Time[1]	Number	Percent
5 a.m.	1	2.1%
6 a.m.	24	51.1%
7 a.m.	4	8.5%
8 a.m.	2	4.3%
9 a.n.	2	4.3%
10 a.m.	1	2.1%
11 a.m.	2	4.3%
12 noon	2	4.3%
1 p.m.	3	6.4%
2 p.m.	4	8.5%
3 p.m.	2	4.3%
Total Groups	47	100%

[1]Start times rounded down to the whole hour.

Table 11. Average total hunt times for hunters in the Besler Zone.

Average Total Hunt Times (hours)	Number	Percent
1.00	2	4.3%
1.50	3	6.4%
2.00	5	10.6%
2.25	3	6.4%
2.50	4	8.5%
2.75	1	2.1%
3.00	5	10.6%
3.50	1	2.1%
4.00	4	8.5%
5.25	1	2.1%
6.00	1	2.1%
7.00	1	2.1%
7.50	1	2.1%
8.00	1	2.1%
8.25	1	2.1%
8.75	1	2.1%
9.00	2	4.3%
9.50	2	4.3%
9.75	2	4.3%
10.25	1	2.1%
10.50	2	4.3%
11.00	2	4.3%
11.75	1	2.1%
Total Groups	47	100%
Average / 95% C.I.	5.16	4.14 – 6.19

Table 12. Overall satisfaction of groups hunting in the Besler Zone

Satisfaction (scale)	**Number**	**Percent**
Very Dissatisfied (-3)	2	4.3%
Moderately Dissatisfied (-2)	2	4.3%
Slightly Dissatisfied (-1)	3	6.4%
Neutral / No Opinion (0)	7	14.9%
Slightly Satisfied (+1)	8	17.0%
Moderately Satisfied (+2)	9	19.1%
Very Satisfied (+3)	16	34.0%
Total	47	100%
Mean / 95% C.I.	1.30	0.79 – 1.81
SUMMARIZED RESULTS		
Dissatisfied	7	14.9%
Neutral / No Opinion	7	14.9%
Satisfied	33	70.2%
Ratio: Satisfied *to* Dissatisfied	4.7 *to* 1	

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

Walk-In ID # (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
1 (30)	13.3%	13.3%	73.3%	1.30	0.67 – 1.92
2 (3)	0.0%	0.0%	100%	2.33	-0.54 – 5.20
3 (9)	22.2%	33.3%	44.4%	1.11	-0.30 – 2.52
4 (5)	20.0%	0.0%	80.0%	1.00	-1.91 – 3.91
5 (0)	--	--	--	--	--
6 (0)	--	--	--	--	--
Total (47)	14.9%	14.9%	70.2%	1.30	0.79 – 1.81

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

Residence (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Resident (33)	12.1%	12.1%	75.8%	1.42	0.80 – 2.05
Nonresident (11)	27.3%	18.2%	54.5%	0.73	-0.40 – 1.86
Mixed (3)	0.0%	33.3%	66.7%	2.00	-2.30 – 6.50
Total (47)	14.9%	14.9%	70.2%	1.30	0.79 – 1.81
Type of Hunting (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Rifle Deer (28)	10.7%	17.9%	71.4%	1.39	0.82 – 1.96
Rifle Antelope (16)	12.5%	12.5%	75.0%	1.50	0.49 – 2.51

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

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
1	**-3**	**0277**	Birds are gone, no sign. Saw one hen pheasant and one dead rooster. Talked to others, same observation for general area (Prairie City to Bison and south). Last year great, this year wasted time.
	-2	**0145**	Very few animals. Why triple tags when numbers were known to be down? Very poor antelope and deer management the last few years.
	-2	**0472**	We covered a lot of ground, only saw a few does and no bucks.
	-1	**0397**	Lots of hunters, saw too few deer compared to the number of miles we walked.
	0	**0112**	Very low antelope populations. For the record, I hunted 9 full days on Walk-Ins and got 2 of these.
	0	**0319**	Too many hunters. Heard reports of people driving on school land.
	0	**0311**	Too many hunters in the Walk-in.
	+1	**0146**	The antelope population was low. I don't think there should have been a season. I heard the population was low, but I didn't realize how low it was until my drive home. I normally see antelope all over. I saw very few. I did not fill my doe tags because of the low numbers.
	+1	**0310**	Fairly crowded
	+1	**0398**	My opinion is that you should spend more money on Walk-in hunting acres program and less on surveys and pencils and plastic covers.
	+1	**0320**	Observed one whitetail deer.
	+1	**0326**	Too many hunters in this area.
	+2	**0476**	I wish there were more sites like this with controlled (no) vehicle access. Can you develop more sites like this? Would landowners participate in an option that paid a little better for fenced out draws and better cover?
	+2	**0331**	Safety Concerns: I believe the GF&P should not put out so many tags in these NW counties of S.D. There are too many people hunting when there are 600 any deer tags and 600 whitetail only tags. I had 2 occasions on this trip where other hunters fired towards me at deer! Please show this survey to game biologists who determine tag numbers.
	+2	**0500**	We wouldn't be able to hunt deer without the Walk-in Program. Overall, deer and antelope numbers are down in this area compared to past years.
	+3	**0318**	Great Walk-In Area.
	+3	**0396**	Thanks for the Walk-in. This is the best Walk-in area in the State. If had some winter kill but I hunt here every year and love it. It seemed more hunters this year used it than ever so it must be working and landowners are very friendly and helpful.
	+3	**0390**	There were a lot of people and very few deer.
	+3	**0313**	Great public hunting area.
	+3	**0067**	SD G,F & P "must" get their game (antelope) populations correct, there wasn't correct reports coming out of Watertown Public Opinion, under reported by about 58% winter kill. I would report 70-80% decline in population (East Harding, West River) and very few fawns and few yearling antelope. Only saw 2 yearling bucks. I did shot a big buck at the Quall Ranch – school land in Perkins County.

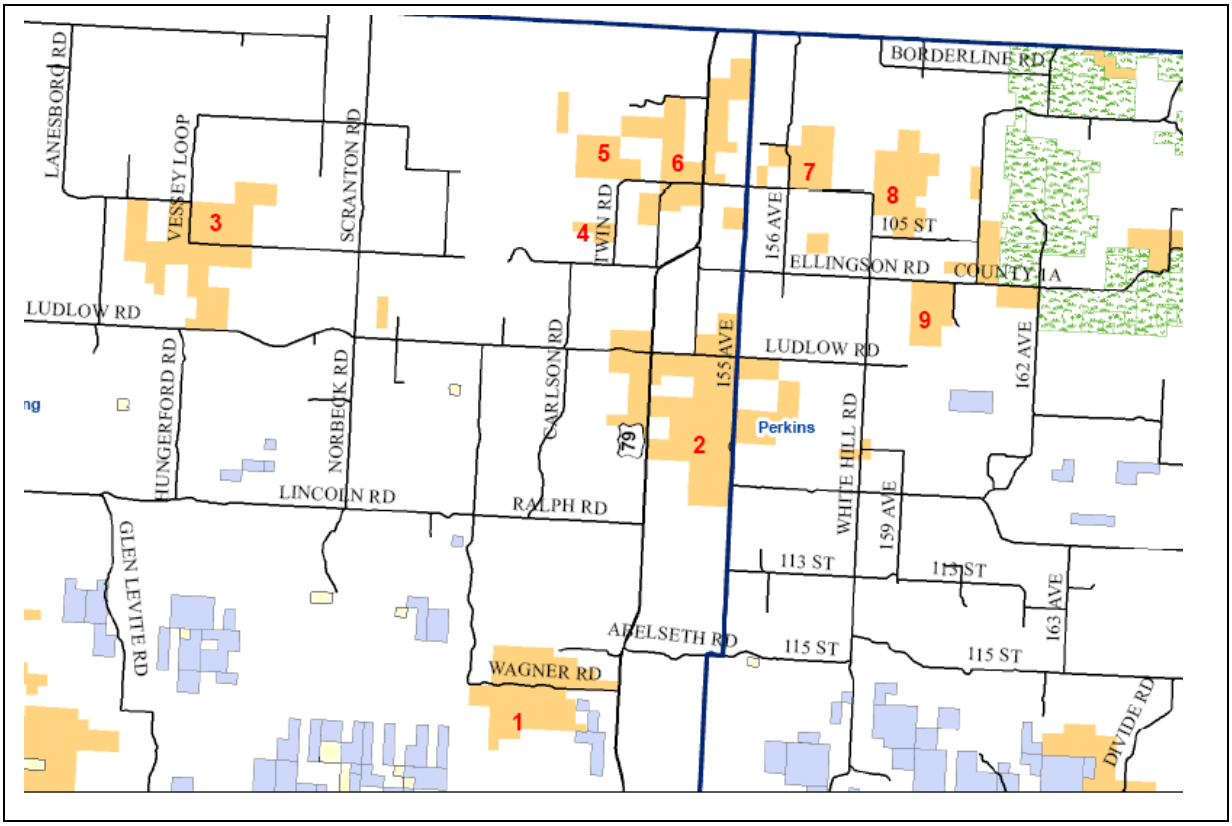
Comments continued on next page…

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

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
2	**+3**	**0309**	Enjoyable hunt. However, a lot of work getting deer out to the vehicle.
3	**0**	**0308**	No deer sign in area.
4	**+1**	**0466**	Seeing deer but on private property.
	+2	**0429**	We rated this site because of the access control. Most sites have been pounded by trucks, 4-wheelers, etc. We really liked this site because we didn't have to compete with vehicles.

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

Zone A (Map 3)



Zone A has 9 walk-in areas (Map 3 and Table 16). The walk-in areas in this zone featured deer and antelope hunting opportunities and Rapid City was the closest 'major' town/city to this zone. Only 47 vehicles were recorded using walk-in areas in this zone during the study period and a total of 31 survey cards/interviews were collected (66%). The small sample sizes will preclude meaningful comparisons of walk-in areas within this zone. Walk-in #2 had a relatively low use compared to size while walk-in #6 had relatively high use compared to size (Table 16 and Figure 3). While this finding may be simply be an artifact of small sample sizes there is a possibility that the difference in relative use could result from features of the walk-in areas (either negative features in walk-in #2 or positive feature found in walk-in #6) that may be discernible with a site visit.

Table 16. Description of Walk-In Areas in Zone A (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	Antelope	Rapid City	3,040	14.8%	8	17.0%	6	75.0%
2	Yes	Deer/Antelope	Rapid City	6,200	30.2%	4	8.5%	1	25.0%
3	Yes	Antelope	Rapid City	3,800	18.5%	5	10.6%	3	60.0%
4	No	Antelope	Rapid City	240	1.2%	0	0.0%	--	--
5	No	Antelope	Rapid City	800	3.9%	4	8.5%	1	25.0%
6	Yes	Deer/Antelope	Rapid City	2,840	13.8%	13	27.7%	12	92.3%
7	No	Deer/Antelope	Rapid City	1,100	5.4%	6	12.8%	2	33.3%
8	No	Deer/Antelope	Rapid City	1,600	7.8%	3	6.4%	3	100%
9	No	Antelope	Rapid City	900	4.4%	4	8.5%	3	75.0%
--	--	--	Rapid City	20,520	100%	47	100%	31	66.0%

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

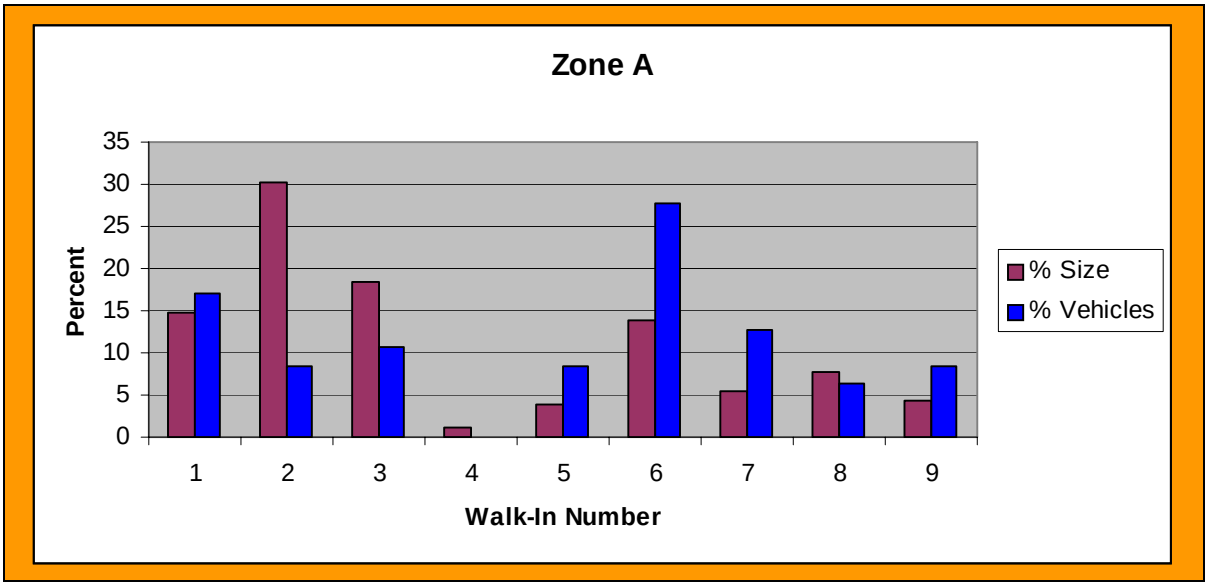


Figure 3. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone A.

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 99 hunters for Zone A (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 A (Table 18).

Almost all use of walk-in areas in Zone A occurred in October and November (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.

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

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Extended Cab Truck (3 or 4-door or back seats) (2)	2.19	34	74
Motor Home / Truck Camper (3)	1.00	1	1
SUV (4)	2.13	11	23
Van (mini included (5)	1.00	1	1
Overall Average	2.10	47	99

[1]Used overall average for calculations for this cell (due to small sample size)
[2]Using the overall average would produce an estimate of 99 hunters.

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

Zone A – Walk-In Number		Number Vehicles	Estimated Hunters
1	**Calculation uses the average of 2.10 hunters per vehicle calculated for Zone A**	8	17
2		4	8
3		5	11
4		0	0
5		4	8
6		13	27
7		6	13
8		3	6
9		4	8
Total		47	98

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

Date	Vehicles Counted		Week	Vehicles Counted
August 16, 2009	**0**		**2**	**0**
August 18, 2009	**0**			
August 22, 2009	**0**		**3**	**0**
August 27, 2009	**0**			
August 28, 2009	**0**		**4**	**0**
August 30, 2009	**0**			
September 6, 2009	**0**		**5**	**0**
September 7, 2009	**0**			
September 13	**0**		**6**	**0**
September 17	**0**			
September 19	**0**		**7**	**0**
September 21	**0**			
September 27	**1**		**8**	**2**
September 30	**1**			
October 4	**7**		**9**	**7**
October 8	**0**			
October 10	**6**		**10**	**7**
October 13	**1**			
October 18	**5**		**11**	**6**
October 22	**1**			
October 25	**7**		**12**	**7**
October 28	**0**			
November 1	**0**		**13**	**0**
November 4	**0**			
November 6	**1**		**14**	**3**
November 7	**2**			
November 15	**5**		**15**	**7**
November 17	**2**			
November 21	**3**		**16**	**3**
November 23	**X**			
November 29	**0**		**17**	**0**
December 2	**0**			
December 4	**0**		**18**	**0**
December 6	**0**			
December 12	**1**		**19**	**1**
December 14	**0**			

Continued on next page

Table 19 - Continued. Vehicles counted by survey date and by survey week in Zone A.

Date	Vehicles Counted		Week	Vehicles Counted
December 20	**3**[1]		**20**	**3**
December 22	**0**			
December 26	**0**		**21**	**1**
December 29	**1**			
January 3, 2010	**X**		**22**	**0**
January 4, 2010	**0**			
January 9, 2010	**0**		**23**	**0**
January 12, 2010	**0**			
Total (42 days)	**47**		**21 weeks**	**47**

[1]**Only the first run was made on December 20, 2009**

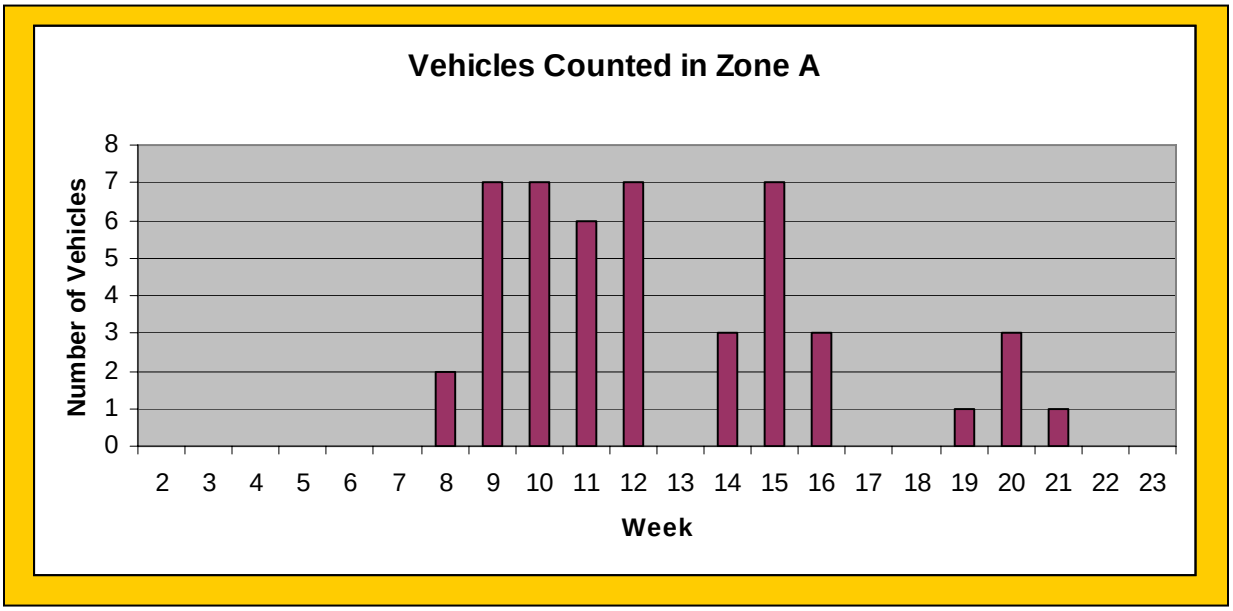


Figure 4. Vehicles counted by week in Zone A (see Table 19).

Pheasant/grouse, rifle deer and rifle antelope were the three main types of hunting on walk-in areas in Zone A (Table 20). Hunters reported a total of 48 pheasants, 5 grouse and 3 partridge harvested on walk-in areas in Zone A (Table 21). Half of the pheasants harvested were from walk-in #6 (Table 22).

A total of 8 deer were harvested by ten groups of hunters targeting deer in Zone A (Table 23). Most of the deer were harvested from walk-in #6 (Table 24).

A total of 6 antelope were harvested by eight groups of hunters targeting antelope in Zone A (Table 25). Most of the antelope were harvested from walk-in #1 (Table 26).

Only 2 of the 31 groups (6.5%) included a youth hunter (less than 16 years old) (Table 27). About 71% of the groups in Zone A were South Dakota residents, 19% non-residents and 10% mixed groups of residents and non-residents (Table 28). Starting times were somewhat spread out between morning and mid-day and hunters averaged 3.5 hours of hunting time in walk-in areas in Zone A (Tables 29 and 30).

None of the groups hunting in Zone A reported being dissatisfied with their hunting experience; 84% were satisfied and 16% neutral (Table 31). Sample sizes were too small to compare satisfaction levels among walk-in areas in Zone A (Table 32). Sample sizes were also too small for accurate comparisons by residence types and hunting type (Table 33).

The few comments collected were mainly positive towards the Walk-In Program (Table 34).

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

Game Hunted	Number	Percent	Percent of Cases
Pheasant / Grouse	16	44.4%	51.6%
Rifle Deer	10	27.8%	32.3%
Rifle Antelope	8	22.2%	25.8%
Archery Antelope	1	2.8%	3.2%
Other	1	2.8%	3.2%
Total (Total Cases = 31)	36	100%	116.1%

Table 21. Harvest by hunters targeting pheasants in Zone A.

Number Pheasants Harvested by Group	Number	Percent
0	6	37.5%
2	1	6.3%
3	4	25.0%
4	2	12.5%
5	1	6.3%
6	1	6.3%
9	1	6.3%
Total Groups	16	100%
Total Pheasants Harvested	42	
Number Grouse Harvested by Group[1]	**Number**	**Percent**
0	12	75.0%
1	3	18.8%
2	1	6.3%
Total Groups	16	100%
Total Grouse Harvested	5	

[1]Also, one group harvested 3 partridge.

Table 22. Harvest by hunters targeting pheasants in Zone A by Walk-In Area.

Walk-In #	Total Pheasants Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	0	0.0%	1	0.0%	0.00
2	--	--	0	--	--
3	--	--	0	--	--
4	--	--	0	--	--
5	9	21.4%	1	100%	9.00
6	21	50.0%	8	75.0%	2.63
7	0	0.0%	1	0.0%	0.00
8	8	19.0%	2	100%	4.00
9	4	9.5%	3	33.3%	1.33
Total	42	100%	16	62.5%	2.63

[1]Percent of groups harvesting one or more pheasants on the Walk-In.
[2]Harvest by group
→ Grouse/Partridge harvest: 1 grouse each in Walk-In numbers 1, 5, and 9, and
2 grouse and 3 partridge harvested in Walk-In number 6.

Table 23. Harvest by hunters targeting deer in Zone A.

Number Deer Harvested by Group	Number	Percent
0	6	60.0%
1	1	10.0%
2	2	20.0%
3	1	10.0%
Total Groups	10	100%
Total Deer Harvested	8	

Table 24. Harvest by hunters targeting deer in Zone A by Walk-In Area.

Walk-In #	Total Deer Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	0	0.0%	1	0.0%	0.00
2	--	--	0	--	--
3	2	25.0%	1	100%	2.00
4	--	--	0	--	--
5	--	--	0	--	--
6	5	62.5%	6	33.3%	0.83
7	1	12.5%	1	100%	1.00
8	--	--	0	--	--
9	0	0.0%	1	0.0%	0.00
Total	8	100%	10	40.0%	0.80

[1]Percent of groups harvesting one or more deer on the Walk-In.
[2]Harvest by group

Table 25. Harvest by hunters targeting antelope in Zone A.

Number Antelope Harvested by Group	Number	Percent
0	3	37.5%
1	4	50.0%
2	1	12.5%
Total Groups	8	100%
Total Antelope Harvested	6	

Table 26. Harvest by hunters targeting antelope in Zone A by Walk-In Area.

Walk-In #	Total Antelope Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	3	50.0%	3	66.7%	1.00
2	1	16.7%	1	100%	1.00
3	1	16.7%	2	50.0%	0.50
4	--	--	0	--	--
5	--	--	0	--	--
6	1	16.7%	2	50.0%	0.50
7	--	--	0	--	--
8	--	--	0	--	--
9	--	--	0	--	--
Total	6	100%	8	62.5%	0.75

[1]Percent of groups harvesting one or more antelope on the Walk-In.
[2]Harvest by group

Table 27. Vehicles with hunters less than age 16.

Number of Youth Less than Age 16 in Vehicles in Zone A	Number	Percent
0	29	93.5%
1	2	6.5%
Total	31	100%

Table 28. Residence of hunters in Zone A.

Residence	**Number**	**Percent**
South Dakota	22	71.0%
Non-residents	6	19.4%
Mixed Group	3	9.7%
Total	31	100%
South Dakota Residents – Cities		
City[1]	**Number**	**Percent**
Rapid City	7	31.8%
Buffalo	3	13.6%
Spearfish	2	9.1%
Watertown, Huron, Black Hawk, Pierre, Sioux Falls, Volga, Tyndall, Hill City, Howard, Milbank	1 (each)	4.5% (each)
Total	22	100%
Non-Residents – State		
State[1]	**Number**	**Percent**
Minnesota	4	66.7%
Iowa	1	16.7%
New York	1	16.7%
Total	6	100%

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

Table 29. Start times for hunters in Zone A.

Start Time[1]	**Number**	**Percent**
6 a.m.	5	17.2%
7 a.m.	4	13.8%
8 a.m.	1	3.4%
9 a.m.	2	6.9%
10 a.m.	2	6.9%
11 a.m.	2	6.9%
12 noon	4	13.8%
1 p.m.	3	10.3%
2 p.m.	2	6.9%
3 p.m.	1	3.4%
4 p.m.	0	0.0%
5 p.m.	3	10.3%
Total Groups (2 missing)	29	100%

[1]Start times rounded down to the whole hour.

Table 30. Average total hunt times for hunters in Zone A.

Average Total Hunt Times (hours)	Number	Percent
0.25	3	10.3%
0.50	4	13.8%
0.75	1	3.4%
1.00	3	10.3%
1.25	1	3.4%
1.50	2	6.9%
2.00	1	3.4%
2.50	2	6.9%
3.50	1	3.4%
4.00	1	3.4%
5.00	1	3.4%
5.50	3	10.3%
5.75	1	3.4%
8.50	1	3.4%
9.00	1	3.4%
10.50	1	3.4%
11.00	2	6.9%
Total Groups (2 missing)	29	100%
Average / 95% C.I.	3.53	2.19 – 4.87

Table 31. Overall satisfaction of groups hunting in Zone A.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	0	0.0%
Moderately Dissatisfied (-2)	0	0.0%
Slightly Dissatisfied (-1)	0	0.0%
Neutral / No Opinion (0)	5	16.1%
Slightly Satisfied (+1)	9	29.0%
Moderately Satisfied (+2)	7	22.6%
Very Satisfied (+3)	10	32.3%
Total	31	100%
Mean / 95% C.I.	1.71	1.31 – 2.11
SUMMARIZED RESULTS		
Dissatisfied	0	0.0%
Neutral / No Opinion	5	16.1%
Satisfied	26	83.9%
Ratio: Satisfied *to* Dissatisfied	N/A	

Table 32. Overall satisfaction of groups hunting in Zone A by walk-in area.

Walk-In ID # (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1 (6)	0.0%	20.0%	83.3%	1.50	0.40 – 2.60
2 (1)	0.0%	0.0%	100%	1.00	--
3 (3)	0.0%	0.0%	100%	2.33	--
4 (0)	--	--	--	--	--
5 (1)	0.0%	0.0%	100%	2.00	--
6 (12)	0.0%	33.3%	66.7%	1.42	0.63 – 2.20
7 (2)	0.0%	0.0%	100%	2.00	--
8 (3)	0.0%	0.0%	100%	2.67	--
9 (3)	0.0%	0.0%	100%	1.67	--
Total (31)	0.0%	16.1%	83.9%	1.71	1.31 – 2.11

Table 33. Overall satisfaction of groups hunting in Zone A by residence and by type of hunting.

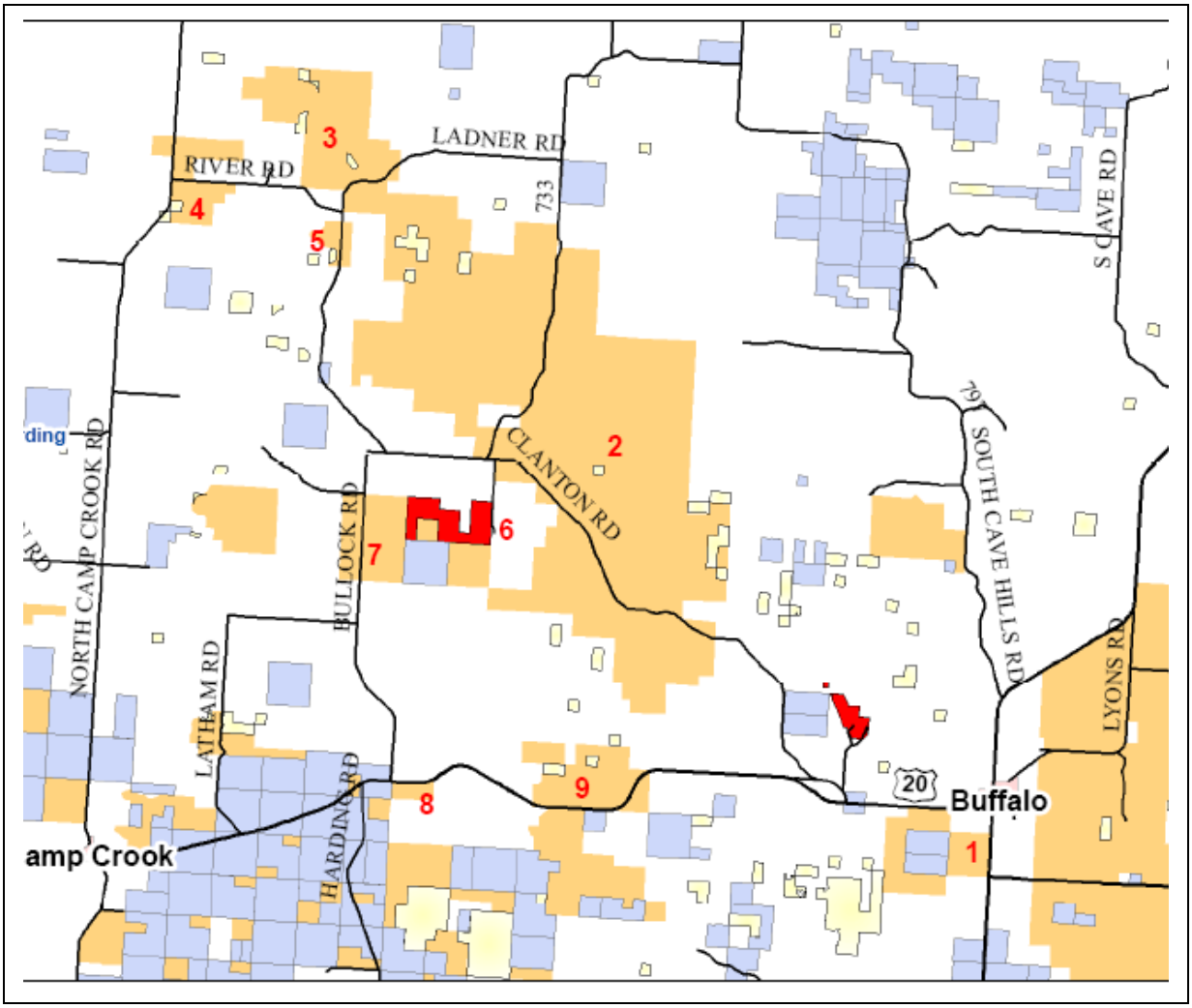
Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (22)	0.0%	18.2%	81.8%	1.64	1.13 – 2.14
Nonresident (6)	0.0%	16.7%	83.3%	1.67	0.58 – 2.75
Mixed (3)	0.0%	0.0%	100%	2.33	--
Total (31)	0.0%	16.1%	83.9%	1.71	1.31 – 2.11
Type of Hunting (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Pheasant (16)	0.0%	12.5%	87.5%	2.00	1.42 – 2.58
Rifle Deer (10)	0.0%	30.0%	70.0%	1.30	0.47 – 2.13
Rifle Antelope (8)	0.0%	25.0%	75.0%	1.50	0.41 – 2.59

Table 34. Comments by hunters in Zone A (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
1	**0**	**0211**	Bad weather (snow), Bad roads, Farmers upset about us driving on roads when wet
	+1	**0212**	More deer than ever seen, lots of grouse & pheasant, low antelope populations
2	**+1**	**0233**	Not as many antelope in Perkins County as prior years. Left on the 12 and were one short of our limit. Beautiful country.
3	**+1**	**0369**	Department should have been more honest and informed the public of over 50% winter antelope loss.
	+3	**0408**	Walk-in areas have been a big part of us hunting in Harding Co. for antelope and deer.
6	**0**	**0225**	The whitetail bucks have bad antlers (small and deformities). Hunted this area since I was 12. I'm now 31 and the deer population is good except for no big bucks; not even decent size bucks. Partridge and grouse numbers are down, antelope are gone (no carcass or bones? – migrate south?), pheasant are young population – very small; little bigger than my hand! (3 hatches).
	+1	**0416**	Seen some birds – just didn't get any shots (good bird habitat)
	+1	**0444**	The area really isn't big enough for serious hunting. Saw 2 Wt. bucks, both just outside the boundaries of the walk-in area.
	+3	**0287**	Thanks to the landowner allowing Walk-In hunting.
7	**+1**	**0443**	More roads to get into the area.
	+2	**0377**	We saw 2 rooster pheasants, no hens, no grouse. The CRP cover is in good shape.
	+3	**0282**	2 of 3 hunters in party limited out for all 3 days – we enjoy the WR hunt!
9	**+3**	**0283**	Have hunted this site & most walk-in within a 25-mile radius for 10 years straight. The availability of public land partridge and grouse range has enticed our group to make the drive to Perkins Co. since 2000. We also have friends who train dogs in the area in the summer. Thank you so much for the opportunity to enjoy the beauty of this unique and beautiful area! Please continue the program!!!

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

Zone B (Map 4)



Zone B has 9 walk-in areas (Map 4 and Table 35). The walk-in areas in this zone featured deer and antelope hunting opportunities and Rapid City was the closest 'major' town/city to this zone. A total of 194 vehicles were recorded using walk-in areas in this zone during the study period and a total of 103 survey cards/interviews were collected (53%). The small sample sizes will preclude meaningful comparisons of walk-in areas within this zone. Hunter use of the walk-in areas in Zone B was relatively proportional to size of walk-in areas (Table 35 and Figure 5).

Table 35. Description of Walk-In Areas in Zone B (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	Antelope	Rapid City	2,460	5.9%	10	5.2%	7	70.0%
2	No	Antelope	Rapid City	24,600	59.3%	106	54.6%	60	56.6%
3	No	Deer/Antelope	Rapid City	4,040	9.7%	28	14.4%	10	35.7%
4	Yes	Deer/Antelope	Rapid City	1,740	4.2%	6	3.1%	3	50.0%
5	No	Deer/Antelope	Rapid City	400	1.0%	9	4.6%	5	55.6%
6	No	Antelope	Rapid City	1,600	3.9%	5	2.6%	2	40.0%
7	No	Antelope	Rapid City	1,920	4.6%	11	5.7%	5	45.5%
8	Yes	Antelope	Rapid City	180	0.4%	9	4.6%	4	44.4%
9	Yes	Antelope	Rapid City	4,530	10.9%	10	5.2%	7	70.0%
--	--	--	Rapid City	41,470	100%	194	100%	103	53.1%

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

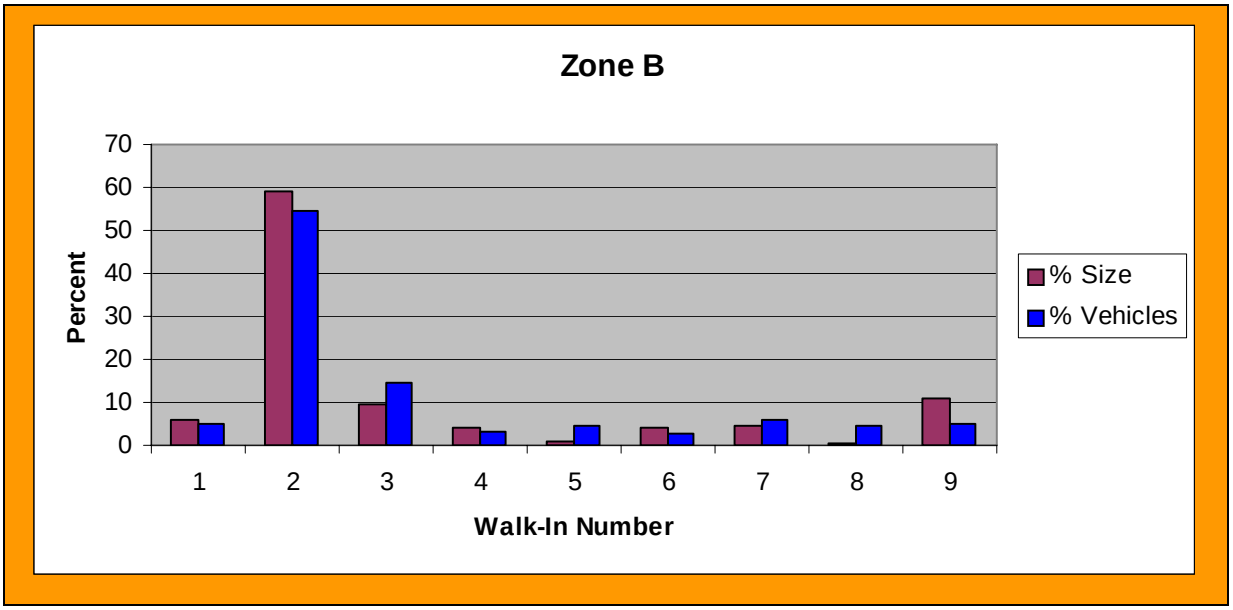


Figure 5. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone B.

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 404 hunters for Zone B (Table 36). 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 B (Table 37).

Almost all use of walk-in areas in Zone B occurred from mid-September through mid-October and mid-November (Table 38 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.

Table 36. Estimated number of hunters encountered during the survey for Zone B.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	2.00	6	6
Extended Cab Truck (3 or 4-door or back seats) (2)	2.09	156	326
Motor Home / Truck Camper (3)	1.80	5	9
SUV (4)	2.13	18	38
Van (mini included (5)	2.80	5	14
2-Dorr Car	2.10[1]	1	2
4-Door Car / Station Wagon (7)	2.10[1]	3	6
Overall Average	2.10	194	404[2]

[1]Used overall average for calculations for this cell (due to small sample size)
[2]Using the overall average would produce an estimate of 407 hunters.

Table 37. Estimated number of hunters encountered by Walk-In for Zone B.

Zone B – Walk-In Number		Number Vehicles	Estimated Hunters
1	**Calculation uses the average of 2.10 hunters per vehicle calculated for Zone B**	10	21
2		106	223
3		28	59
4		6	13
5		9	19
6		5	11
7		11	23
8		9	19
9		10	21
Total		194	409

Table 38. Vehicles counted by survey date and by survey week in Zone B.

Date	Vehicles Counted		Week	Vehicles Counted
August 15, 2009	**5**		**2**	**8**
August 17, 2009	**3**			
August 23, 2009	**2**		**3**	**2**
August 26, 2009	**0**			
August 29, 2009	**2**		**4**	**2**
September 3, 2009	**0**			
September 5, 2009	**3**		**5**	**5**
September 7, 2009	**2**			
September 12	**3**		**6**	**11**
September 15	**8**			
September 20	**10**		**7**	**19**
September 24	**9**			
September 26	**9**		**8**	**13**
September 29	**4**			
October 3	**51**		**9**	**52**
October 7	**1**			
October 11	**16**		**10**	**25**
October 12	**9**			
October 17	**4**		**11**	**4**
October 19	**0**			
October 23	**0**		**12**	**0**
October 24	**0**			
October 30	**0**		**13**	**0**
October 31	**0**			
November 8	**0**		**14**	**1**
November 11	**1**			
November 14	**28**		**15**	**38**
November 19	**10**			
November 24	**3**		**16**	**4**
November 25	**1**			
November 28	**4**		**17**	**4**
December 1	**0**			
December 5	**0**		**18**	**0**
December 7	**0**			
December 13	**0**		**19**	**0**
December 15	**0**			

Continued on next page

Table 38 - Continued. Vehicles counted by survey date and by survey week in Zone B.

Date	Vehicles Counted		Week	Vehicles Counted
December 19	**0**		**20**	**0**
December 24	**0**			
December 28	**1**		**21**	**3**
December 30	**2**			
January 1, 2010	**1**		**22**	**3**
January 2, 2010	**2**			
January 8, 2010	**X**		**23**	**X**
January 10, 2010	**X**			
January 17, 2010	**0**		**24**	**0**
January 21, 2010	**0**			
Total (44 days)	**194**		**22 weeks**	**194**

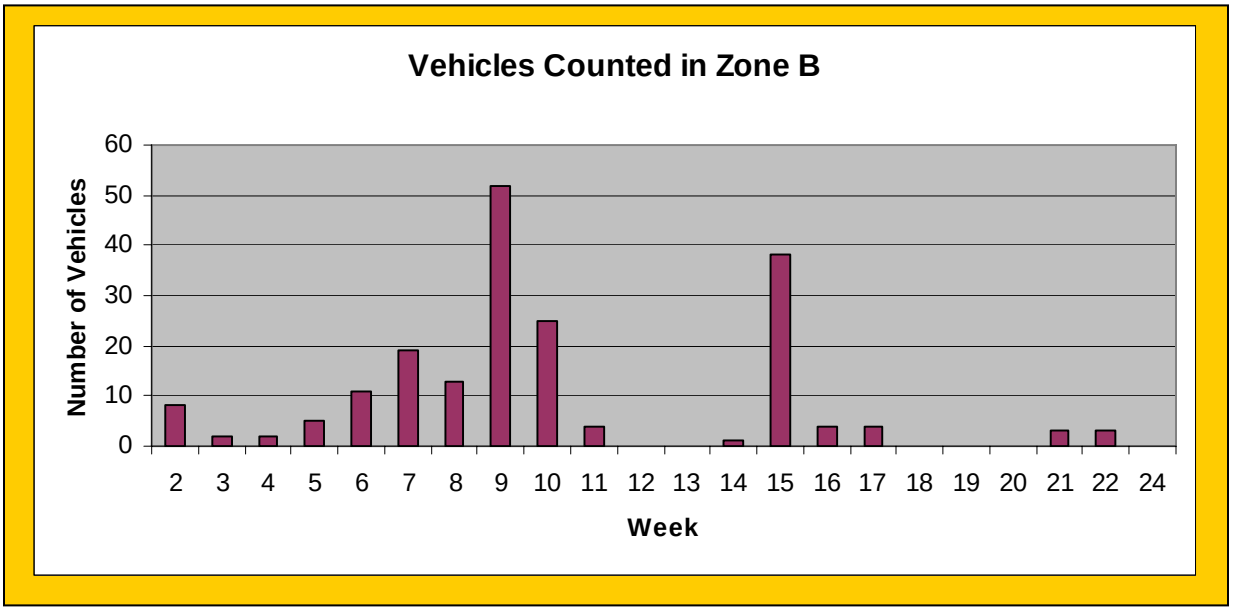


Figure 6. Vehicles counted by week in Zone B (see Table 38).

Rifle antelope, rifle deer and archery antelope were the three main types of hunting on walk-in areas in Zone B (Table 39). Hunters reported a total of 14 deer harvested on walk-in areas in Zone B (Table 40). Over half of the deer harvested were from walk-in #2 (Table 41).

A total of 54 antelope were harvested by 48 groups of hunters hunting antelope (rifle) in Zone B (Table 42). Most (76%) of the antelope were harvested from walk-in #2 (Table 43). Archery antelope hunters reported harvesting four antelope in Zone B, all four from walk-in #2 (Tables 44 and 45).

Only 6 of the 103 groups (5.8%) included a youth hunter(s) (less than 16 years old) (Table 46). About 55% of the groups in Zone B were South Dakota residents, 39% non-residents and 6% mixed groups of residents and non-residents (Table 47). Most hunters started hunting during morning hours and hunters averaged 5.4 hours of hunting time in walk-in areas in Zone B (Tables 48 and 49).

About 57% of the groups hunting in Zone B reported being satisfied with their hunting experience; 29% were neutral and 14% dissatisfied (Table 50). Sample sizes were too small to compare satisfaction levels accurately among walk-in areas in Zone B (Table 51). A higher percentage of nonresidents reported being satisfied with their hunting experience compared to resident hunters in Zone B (70% vs. 49%) (Table 52). Also, antelope hunters tended to be more satisfied than were deer hunters.

Most negative comments were about lack of game (especially compared to previous years) and too many hunters while many of the positive comments were in appreciation of the Walk-In Areas Program (Table 53).

Table 39. Types of hunting on walk-in areas in Zone B.

Game Hunted	Number	Percent	Percent of Cases
Rifle Antelope	48	43.6%	46.6%
Rifle Deer	28	25.5%	27.2%
Archery Antelope	26	23.6%	25.2%
Archery Deer	6	5.5%	5.8%
Turkey	1	0.9%	1.0%
Pheasant / Grouse	1	0.9%	1.0%
Total (Total Cases = 103)	110	100%	106.8%

Table 40. Harvest by hunters targeting deer (rifle) in Zone B.

Number Deer Harvested by Group	Number	Percent
0	20	71.4%
1	5	17.9%
2	2	7.1%
5	1	3.6%
Total Groups	28	100%
Total Deer Harvested	14	

Note: 6 hunting groups were targeting archery deer; no harvest by archery deer hunters

Table 41. Harvest by hunters targeting deer (rifle) in Zone B by Walk-In Area.

Walk-In #	Total Deer Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	--	--	0	--	--
2	8	57.1%	10	30.0%	0.80
3	2	14.3%	5	40.0%	0.40
4	0	0.0%	2	0.0%	0.00
5	2	14.3%	4	50.0%	0.50
6	0	0.0%	1	0.0%	0.00
7	2	14.3%	1	100%	1.00
8	0	0.0%	2	0.0%	0.00
9	0	0.0%	3	0.0%	0.00
Total	14	100%	28	28.6%	0.50

[1]Percent of groups harvesting one or more deer on the Walk-In.
[2]Harvest by group

Table 42. Harvest by hunters targeting antelope (rifle) in Zone B.

Number Antelope Harvested by Group	Number	Percent
0	13	27.1%
1	20	41.7%
2	11	22.9%
3	4	8.3%
Total Groups	48	100%
Total Antelope Harvested	54	

Table 43. Harvest by hunters targeting antelope (rifle) in Zone B by Walk-In Area.

Walk-In #	Total Antelope Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	4	7.4%	3	66.7%	1.33
2	41	75.9%	32	84.4%	1.28
3	0	0.0%	4	0.0%	0.00
4	1	1.9%	1	100%	1.00
5	--	--	0	--	--
6	0	0.0%	1	0.0%	0.00
7	6	11.1%	3	100%	2.00
8	--	--	0	--	--
9	2	3.7%	4	50.0%	0.50
Total	54	100%	48	72.9%	1.13

[1]Percent of groups harvesting one or more antelope on the Walk-In.
[2]Harvest by group

Table 44. Harvest by hunters targeting antelope (archery) in Zone B.

Number Antelope Harvested by Group	Number	Percent
0	22	84.6%
1	4	15.4%
Total Groups	26	100%
Total Antelope Harvested	4	

Table 45. Harvest by hunters targeting antelope (archery) in Zone B by Walk-In Area.

Walk-In #	Total Antelope Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	0	0.0%	4	0.0%	0.00
2	4	100%	20	20.0%	0.20
3	--	--	0	--	--
4	--	--	0	--	--
5	--	--	0	--	--
6	--	--	0	--	--
7	0	0.0%	1	0.0%	0.00
8	0	0.0%	1	0.0%	0.00
9	--	--	0	--	--
Total	4	100%	26	15.4%	0.15

[1]Percent of groups harvesting one or more antelope on the Walk-In.
[2]Harvest by group

Table 46. Vehicles with hunters less than age 16.

Number of Youth Less than Age 16 in Vehicles in Zone B	Number	Percent
0	97	94.2%
1	5	4.9%
2	1	1.0%
Total	103	100%

Table 47. Residence of hunters in Zone B.

Residence	Number	Percent
South Dakota	57	55.3%
Non-residents	40	38.8%
Mixed Group	6	5.8%
Total	103	100%
South Dakota Residents – Cities		
City[1]	**Number**	**Percent**
Rapid City	10	17.5%
Brookings	6	10.5%
Watertown, Milbank	4 (each)	7.0% (each)
Sioux Falls	3	5.3%
Spearfish, Mitchell, Belle Fourche, Buffalo, Huron, Aberdeen, Rosholt	2 (each)	3.5% (each)
Estelline, Vermillion, Dell Rapids, Menno, Ortley, Webster, Sisseton, Harrisburg, Philip, Crooks, Lyons, Tulare, Custer, Martin, Big Stone City, Pierre	1 (each)	1.8% (each)
Total	57	100%
Non-Residents – State		
State[1]	**Number**	**Percent**
Minnesota	19	47.5%
Wisconsin	9	22.5%
Iowa	4	10.0%
North Dakota	4	10.0%
Ohio	2	5.0%
Missouri	1	2.5%
Wyoming	1	2.5%
Total	40	100%

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

Table 48. Start times for hunters in Zone B.

Start Time[1]	Number	Percent
4 a.m.	1	1.1%
5 a.m.	7	7.4%
6 a.m.	23	24.2%
7 a.m.	21	22.1%
8 a.m.	8	8.4%
9 a.m.	6	6.3%
10 a.m.	5	5.3%
11 a.m.	6	6.3%
12 noon	3	3.2%
1 p.m.	2	2.1%
2 p.m.	5	5.3%
3 p.m.	5	5.3%
4 p.m.	2	2.1%
5 p.m.	1	1.1%
Total Groups (8 missing)	95	100%

[1]Start times rounded down to the whole hour.

Table 49. Average total hunt times for hunters in Zone B.

Average Total Hunt Times (hours)	Number	Percent
0.50	5	5.2%
1.00	6	6.3%
1.25	1	1.0%
1.50	3	3.1%
1.75	1	1.0%
2.00	7	7.3%
2.25	1	1.0%
2.50	4	4.2%
2.75	1	1.0%
3.00	3	3.1%
3.50	4	4.2%
4.00	8	8.3%
4.25	1	1.0%
4.50	2	2.1%
5.00	6	6.3%
5.25	1	1.0%
5.50	3	3.1%
6.00	3	3.1%
6.50	2	2.1%
6.75	1	1.0%
7.00	5	5.2%
7.50	3	3.1%
8.00	2	2.1%
8.50	1	1.0%
8.75	1	1.0%
9.00	1	1.0%
9.50	3	3.1%
10.00	1	1.0%
10.50	6	6.3%
10.75	2	2.1%
11.00	3	3.1%
11.25	1	1.0%
11.50	2	2.1%
12.50	1	1.0%
13.00	1	1.0%
Total Groups (7 missing)	96	100%
Average / 95% C.I.	5.40	4.69 – 6.11

Table 50. Overall satisfaction of groups hunting in Zone B.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	6	5.8%
Moderately Dissatisfied (-2)	5	4.9%
Slightly Dissatisfied (-1)	3	2.9%
Neutral / No Opinion (0)	30	29.1%
Slightly Satisfied (+1)	18	17.5%
Moderately Satisfied (+2)	20	19.4%
Very Satisfied (+3)	21	20.4%
Total	103	100%
Mean / 95% C.I.	0.87	0.55 – 1.20
SUMMARIZED RESULTS		
Dissatisfied	14	13.6%
Neutral / No Opinion	30	29.1%
Satisfied	59	57.3%
Ratio: Satisfied *to* Dissatisfied	4.2 *to* 1	

Table 51. Overall satisfaction of groups hunting in Zone B by walk-in Area.

Walk-In ID # (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1 (7)	0.0%	57.1%	42.9%	1.00	-0.31 – 2.31
2 (60)	13.3%	23.3%	63.3%	1.03	0.60 – 1.47
3 (10)	10.0%	30.0%	60.0%	1.30	0.04 – 2.56
4 (3)	33.3%	33.3%	33.3%	0.00	--
5 (5)	0.0%	60.0%	40.0%	0.60	-0.51 – 1.71
6 (2)	50.0%	0.0%	50.0%	-0.50	--
7 (5)	0.0%	0.0%	100%	1.60	0.49 – 2.71
8 (4)	50.0%	0.0%	50.0%	-0.25	--
9 (7)	14.3%	71.4%	14.3%	-0.14	-1.50 – 1.21
Total (103)	13.6%	29.1%	57.3%	0.87	0.55 – 1.20

Table 52. Overall satisfaction of groups hunting in Zone B by residence and by type of hunting

Residence (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
Resident (57)	19.3%	31.6%	49.1%	0.51	0.05 – 0.96
Nonresident (40)	5.0%	25.0%	70.0%	1.38	0.89 – 1.86
Mixed (6)	16.7%	33.3%	50.0%	1.00	-0.63 – 2.63
Total (103)	13.6%	29.1%	57.3%	0.87	0.55 – 1.20
Type of Hunting (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Rifle Antelope (48)	8.3%	29.2%	62.5%	1.04	0.59 – 1.50
Rifle Deer (28)	28.6%	28.6%	42.9%	0.36	-0.43 – 1.14
Archery Antelope (26)	11.5%	26.9%	61.5%	1.04	0.38 – 1.70
Archery Deer (6)	16.7%	16.7%	66.7%	0.83	-0.85 – 2.51

Table 53. Comments by hunters in Zone B (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
1	**0**	**0191**	Too many nonresidents, too many tags issued, better hunting atlases – more defined.
	0	**0073**	Very few antelope in the country compared to other years.
	0	**0021**	Need improvement on the way to buy licenses & lower your nonresident fee
	+1	**0068**	Need more public land. Not many ranchers are letting people hunt.
	+3	**0292**	2 dead cows on property.
	+3	**0083**	Not many goats here this year and too many rifle tags issued for the goats I see! Too many 3-tag rifle tags! Let's get the goat population back!
2	**-3**	**0179**	Unfortunately hunters have lost respect for each other & safety. 4 different guys walked through the pasture I was hunting. Conditions were far too crowded for safety.
	-3	**0358**	Way too many hunters. Need to manage for quality, not quantity. Too much pressure and not enough area to enjoy hunting.
	-2	**0423**	Need to stop the harvest of young bucks and does. This area gets hunted too heavily.
	-2	**0180**	Who did the antelope count in Harding County? Triple tags–Wow????
	-2	**0205**	Why were we not notified about the large winter kill until licenses were bought?!!
	-1	**0357**	Looks like deer numbers are way down, but we still enjoyed being able to hunt this land.
	0	**0271**	I think besides eliminating left-over antelope licenses after 2nd draw, you should have cut the limit from 3 back to 2. No one needs 3. Same with deer unless doe to buck ration is off.
	0	**0022**	I liked the area and saw about 40 antelope but I've been told that the herd is down 60-70% – Why wasn't that published so hunters would know that? I liked the hunt and I probably will come back, mainly because of the country & the people!
	0	**0033**	Need more quality hunting ground.
	0	**0076**	More hunters than antelope.
	0	**0086**	After the severe winter kill on does, they should not have a doe harvest.
	0	**0125**	Need to cut back on tags to recoup losses from the winter & more markers on boundaries
	0	**0134**	In a walk-in area this large there should be designated unarmed motor vehicle game retrieval of animals. The area is too large to justify retrieval.
	0	**0136**	Too many tags – start season in Sept. 2 years I've hunted in rain or snow.
	0	**0178**	Doe tags should never have been issued. I would estimate doe count down 80% from last year, fawns down 90%. We hunted this area for years (archery and firearms).
	0	**0181**	Walk in was good. Antelope herd has been decimated issuing triple tags was a disgrace!
	0	**0197**	More Walk-in land would be nice. Better marking of boundaries on walk-in land and school lands.
	+1	**0024**	Numbers seem to be down drastically since last year.

Continued on next page.

Table 53 - Continued. Comments by hunters in Zone B (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
2	**+1**	**0104**	Didn't see near as many antelope as we saw during our 2007 hunting trip.
	+1	**0107**	Hunted other areas for one week. Thanks to S.D. Walk-Ins. Had great time. S.D. deserves 7+. Thanks.
	+1	**0196**	GFP should have only allowed one any goat tag, not three (population very poor)
	+1	**0298**	Noticed less hunters then last year. We had a party of six and harvested 3 bucks and one doe. Also noticed more COs this year.
	+1	**0365**	WIA program excellent! Great job on public hunting access programs. Game managers failed to do their homework before issuing antelope tag numbers in northwest SD this year. Listen to local COs more.
	+2	**0116**	No does, there should be no antlerless antelope firearms license given until the population comes back. I would estimate does & kids are down 80% to 90% from 2008!
	+2	**0035**	Lots of antelope mainly in Harding County, quite a few in Butte County also.
	+2	**0031**	Saw less antelope this year.
	+2	**0296**	Marking the school and public areas with signs would help.
	+2	**0230**	It would help to mark the school & public lands like walk-in areas.
	+2	**0496**	Having agricultural fields in this area is a big help. No cattle during hunting season would be nice but not enough to give up the program.
	+3	**0426**	Would like to see more Walk-in property along Little Missouri River system in Harding County.
	+3	**0294**	Great program. Harvested 2 nice bucks (>14") at this WIA. Please let the landowner know that we appreciate their participation in the program.
	+3	**0177**	Grateful to the landowner for access!
	+3	**0129**	Would like to see more walk-in.
	+3	**0081**	Not a lot of antelope left, I have a rifle tag and think I would feel bad filling them. Please do a little better survey before issuing so many rifle tags. Thanks.
	+3	**0074**	Keep up this program!
	+3	**0111**	Walk-In Access is great.
	+3	**0102**	Keep this program going! Very rewarding.
	+3	**0026**	Best state program out there. We also hunt MN, ND, KS, IA, WI, WY, and MT.
	+3	**0025**	Please keep Walk-In Areas as much as possible. They make for great hunting!

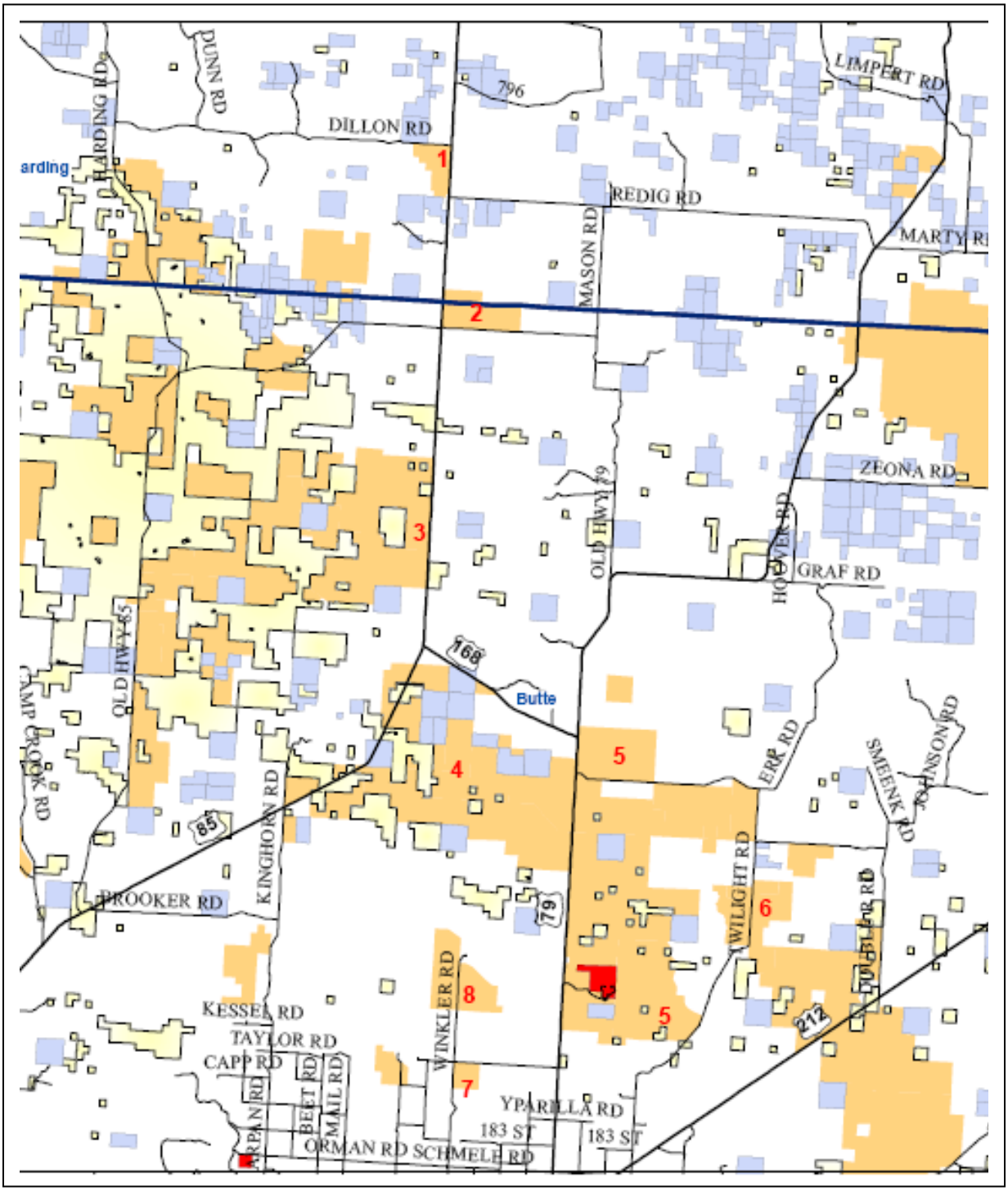
Continued on next page.

Table 53 - Continued. Comments by hunters in Zone B (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
3	**-2**	**0446**	The map showed this place to go back in three miles. I walked back in one mile and sign says, end of walk-in.
	0	**0404**	Crowded. Not enough public areas for whitetail hunting.
	0	**0208**	This site had a good amount of boundary signs, but other walk-in sites need a lot more. It's tough to tell what's public or private.
	+1	**0300**	Antelope densities appear lower in NW Harding Co. Also, some folks have found ways (i.e. section lines) to drive close to Walk-In Areas by accessing private property. Discouraging when others have to walk in 2 miles and see vehicles parked next to Walk-In Areas.
	+3	**0490**	Would like to see more Walk-In Areas in 35A & 35B.
	+3	**0270**	The Walk-in area is an excellent program. We are very thankful for SD commitment to public hunting access.
	+3	**0232**	Reduce the number of antelope tags by ½, I was very unhappy.
4	**-1**	**0386**	Deer numbers way down. Acted like they had been run around and very skittish for opening weekend. But had fun. Thank you.
5	**0**	**0483**	Don't let any hunters take the young bucks out. Making it a better chance to get game that is respectable. Patrol it more.
	0	**0448**	Land shouldn't be available for Walk-in & other programs if it is not accessible.
	0	**0451**	The walk-in books should have the sections marked as in the past. It's too hard to find them in the new books (+ + Put these back w/ more numbers).
	+1	**0372**	Wish I would have had turkey tags!
6	**-3**	**0497**	Very Few Deer.
7	**+1**	**0364**	Shot 2 grouse over the 3-day weekend. Could use more signs indicating boundaries. Public map was not very detailed. I noticed many sections of public land but had no access to them. A lot of roads were not labeled on the public map.
8	**-3**	**0350**	Too many hunters / not many deer (8) 7 does. Land was much better for hunting 4 to 5 years ago!
	-2	**0088**	Winter kill should have made for no season in this area this year.
	+2	**0138**	Seems to be a lot of out-of-state hunters – could you charge them a few dollars more, then use that money to mark Walk-In Areas better? Man of area-signs missing or broke. How about marking other public hunting – like school land?
9	**-3**	**0481**	No Deer. Oversold licenses-tags. No antelope. WHAT were you thinking!
	0	**0189**	The Walk-in program is great. Should not have sold 3 tags to every antelope hunter with the population decline. (we shot 2 mediocre bucks on Sunday).
	0	**0202**	One doe one buck would have been sufficient with lack of fawns this season.

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

Zone C (Map 5)


DUNN RD
HARDING RD
DILLON RD
796
LIMPERT RD
REDIG RD
MARTY RD
MASON RD
ZEONA RD
OLD HWY 79
HOOVER RD
GRAF RD
168
Butte
OLD HWY 85
CAMP CREEK RD
KINGHORN RD
ERR RD
SMEENK RD
JOHNSON RD
85
BROOKER RD
79
WILIGHT RD
FULLER RD
212
WINKLER RD
KESSEL RD
TAYLOR RD
CAPP RD
BEET RD
MAIL RD
ARPAN RD
YPARELLA RD
183 ST
ORMAN RD
SCHMELE RD
1
2
3
4
5
6
7
8

Zone C has 8 walk-in areas (Map 5 and Table 54). The walk-in areas in this zone featured mainly antelope hunting opportunities and Rapid City was the closest 'major' town/city to this zone. A total of 209 vehicles were recorded using walk-in areas in this zone during the study period and a total of 105 survey cards/interviews were collected (50%). Except for walk-in numbers 4 and 5 (n=41 and n=32; respectively), the small sample sizes will preclude meaningful comparisons of walk-in areas within this zone. Walk-in #4 had slightly higher relative use versus size while walk-in #5 had slightly lower relative use versus size (Figure 7). However, the juxtaposition of walk-in areas #4 and #5 having a common boarder clouded the identification of which walk-in areas were actually used based on location of some vehicles. Hunter use of the other walk-in areas in Zone C was relatively proportional to size of walk-in areas.

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 425 hunters for Zone C (Table 55). 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 C (Table 56).

Table 54. Description of Walk-In Areas in Zone C (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	Antelope	Rapid City	1,300	1.6%	5	2.4%	3	60.0%
2	YES	Antelope	Rapid City	1,980	2.4%	9	4.3%	5	55.6%
3	YES	Antelope	Rapid City	13,000	15.6%	25	12.0%	12	48.0%
4	YES	Antelope	Rapid City	24,054	28.9%	85	40.7%	41	48.2%
5	YES	Antelope	Rapid City	34,200	41.0%	61	29.2%	32	52.5%
6	NO	Antelope	Rapid City	4,800	5.8%	7	3.3%	4	57.1%
7	NO	Antelope	Rapid City	640	0.8%	9	4.3%	4	44.4%
8	NO	Antelope	Rapid City	3,380	4.1%	8	3.8%	4	50.0%
--	--	Antelope	Rapid City	83,354	100%	209	100%	105	50.2%

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

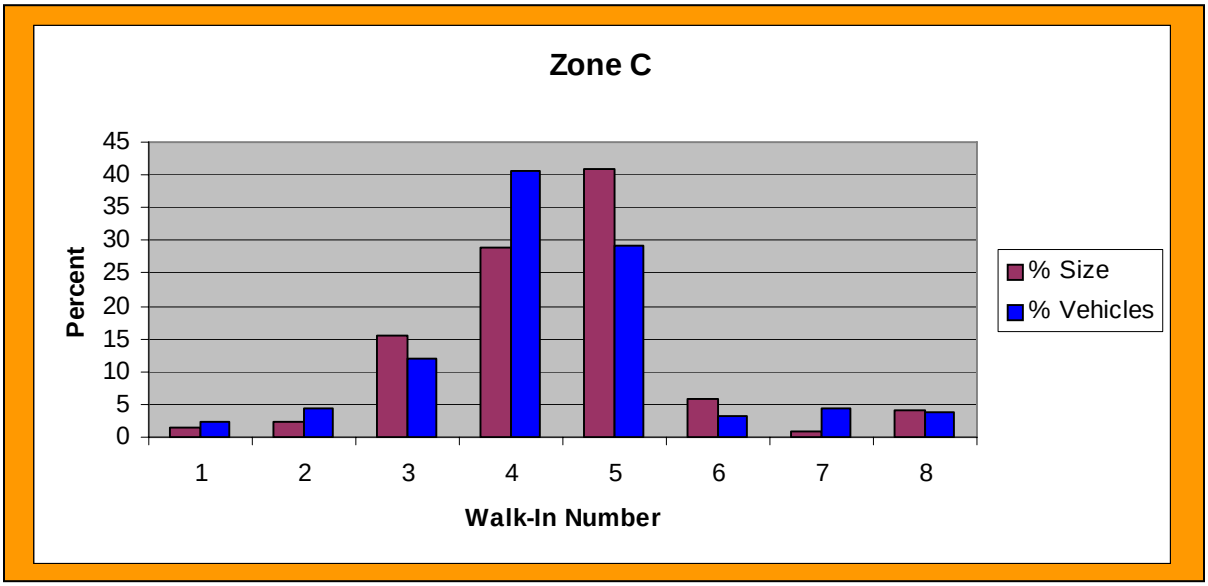


Figure 7. Comparison of relative hunter use (%) of walk-in areas in relation to relative size of each area (%) in Zone C.

Peak use of walk-in areas in Zone C occurred in early October and mid-November, although there was a fair amount of use from mid-August through September (Table 57 and Figure 8). 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.

Rifle antelope, rifle deer and archery antelope were the three main types of hunting on walk-in areas in Zone C (Table 58). Hunters reported a total of 16 deer harvested on walk-in areas in Zone C (Table 59). Most (63%) of the deer harvested were from walk-in #5 (Table 60).

A total of 49 antelope were harvested by 43 groups of hunters hunting antelope (rifle) in Zone C (Table 61). Most (80%) of the antelope were harvested from walk-in #4 (Table 62). Archery antelope hunters reported harvesting four antelope in Zone C, three from walk-in #4 and one from walk-in #3 (Tables 63 and 64).

Only 8 of the 105 groups (7.6%) included a youth hunter(s) (less than 16 years old) (Table 65). About 79% of the groups in Zone C were South Dakota residents, 13%

non-residents and 8% mixed groups of residents and non-residents (Table 66). Most hunters started hunting during morning hours and hunters averaged 4.2 hours of hunting time in walk-in areas in Zone C (Tables 67 and 68).

Table 55. Estimated number of hunters encountered during the survey for Zone C.

Vehicle Type (code #)	Average Hunters/ Vehicle	Number Vehicles Counted	Estimated Hunters
Regular Truck (single front seat) (1)	1.40	8	11
Extended Cab Truck (3 or 4-door or back seats) (2)	2.06	157	323
Motor Home / Truck Camper (3)	2.03[1]	3	6
SUV (4)	2.10	26	55
Van (mini included (5)	2.03[1]	6	12
2-Dorr Car (6)	2.03[1]	1	2
4-Door Car / Station Wagon (7)	2.03[1]	8	16
Overall Average	2.03	209	425[2]

[1]Used overall average for calculations for this cell (due to small sample size)
[2]Using the overall average would produce an estimate of 424 hunters.

Table 56. Estimated number of hunters encountered by Walk-In for Zone C.

Zone C – Walk-In Number		Number Vehicles	Estimated Hunters
1	**Calculation uses the average of 2.03 hunters per vehicle calculated for Zone C**	5	10
2		9	18
3		25	51
4		85	173
5		61	124
6		7	14
7		9	18
8		8	16
Total		209	242

Table 57. Vehicles counted by survey date and by survey week in Zone C?

Date	Vehicles Counted		Week	Vehicles Counted
August 16, 2009	**6**		**2**	**9**
August 18, 2009	**3**			
August 22, 2009	**6**		**3**	**7**
August 27, 2009	**1**			
August 28, 2009	**2**		**4**	**4**
August 30, 2009	**2**			
September 6, 2009	**7**		**5**	**11**
September 8, 2009	**4**			
September 13	**3**		**6**	**9**
September 16	**6**			
September 19	**15**		**7**	**18**
September 21	**3**			
September 27	**0**		**8**	**1**
September 30	**1**			
October 4	**34**		**9**	**40**
October 8	**6**			
October 10	**30**		**10**	**32**
October 13	**2**			
October 18	**3**		**11**	**5**
October 22	**2**			
October 25	**1**		**12**	**1**
October 28	**0**			
November 1	**0**		**13**	**0**
November 4	**0**			
November 6	**1**		**14**	**2**
November 7	**1**			
November 15	**30**		**15**	**34**
November 18	**4**			
November 21	**17**		**16**	**23**
November 23	**6**			
November 29	**6**		**17**	**6**
December 2	**0**			
December 4	**0**		**18**	**0**
December 6	**0**			
December 12	**1**		**19**	**1**
December 14	**0**			

Continued on next page.

Table 57 - Continued. Vehicles counted by survey date and by survey week in Zone C?

Date	Vehicles Counted		Week	Vehicles Counted
December 20	**0**		**20**	**0**
December 22	**0**			
December 26	**0**		**21**	**3**
December 29	**3**			
January 3, 2010	**3**		**22**	**3**
January 4, 2010	**0**			
January 23, 2010	**0**		**24**	**0**
Total (43 days)	**209**		**21.5 weeks**	**209**

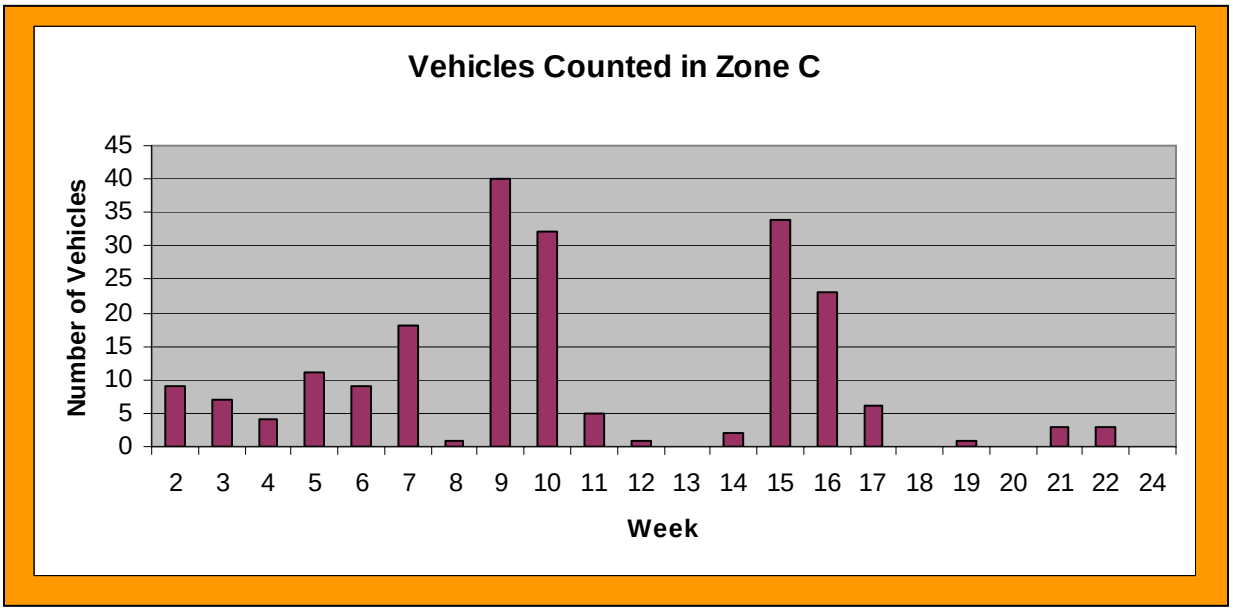


Figure 8. Vehicles counted by week in Zone C (see Table 57).

About 70% of the groups hunting in Zone C reported being satisfied with their hunting experience; 20% were neutral and 11% dissatisfied (Table 69). With the exception of walk-in numbers 4 and 5, sample sizes were too small to compare satisfaction levels accurately among walk-in areas in Zone C (Table 70). Hunters in walk-in #4 had slightly higher satisfaction levels compared to hunters in walk-in #5. While this difference may be due to small sample sizes rather than and real difference in walk-in quality, a comparison of physical attributes of these walk-ins may identify some attributes found in walk-in #5 that detracts from a quality hunting experience.

A higher percentage of nonresidents and mixed hunting groups reported being satisfied with their hunting experience compared to resident hunters in Zone C (Table 71). Also, antelope hunters tended to be more satisfied than were deer hunters.

There were very few negative comments and many of the positive comments were in appreciation of the Walk-In Areas Program (Table 72).

Table 58. Type of hunting on walk-in areas in Zone C.

Game Hunted	Number	Percent	Percent of Cases
Rifle Antelope	43	37.4%	41.0%
Rifle Deer	35	30.4%	33.3%
Archery Antelope	29	25.2%	27.6%
Archery Deer	2	1.7%	1.9%
Pheasant / Grouse	2	1.7%	1.9%
Other (Jack Rabbit / Coyote)	2	1.7%	1.9%
Muzzleloader Deer	1	0.9%	1.0%
Waterfowl (ducks)	1	0.9%	1.0%
Total (Total Cases = 105)	115	100%	109.5%

Table 59. Harvest by hunters targeting deer (rifle) in Zone C.

Number Deer Harvested by Group	Number	Percent
0	24	68.6%
1	6	17.1%
2	5	14.3%
Total Groups	35	100%
Total Deer Harvested	16	

Table 60. Harvest by hunters targeting deer (rifle) in Zone C by Walk-In Area.

Zone C Walk-In #	Total Deer Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	--	--	0	--	--
2	--	--	0	--	--
3	0	0.0%	2	0.0%	0.00
4	4	25.0%	4	50.0%	1.00
5	10	62.5%	20	35.0%	0.50
6	2	12.5%	3	66.7%	0.67
7	0	0.0%	3	0.0%	0.00
8	0	0.0%	3	0.0%	0.00
Total	16	100%	35	31.4%	0.46

[1]Percent of groups harvesting one or more deer on the Walk-In.
[2]Harvest by group

Table 61. Harvest by hunters targeting antelope (rifle) in Zone C.

Number Antelope Harvested by Group	Number	Percent
0	19	44.2%
1	14	32.6%
2	5	11.6%
3	2	4.7%
5	1	2.3%
6	1	2.3%
8	1	2.3%
Total Groups	43	100%
Total Antelope Harvested	49	

Table 62. Harvest by hunters targeting antelope (rifle) in Zone C by Walk-In Area.

Zone C Walk-In #	Total Antelope Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	1	2.0%	1	100%	1.00
2	4	8.2%	4	50.0%	1.00
3	2	4.1%	3	33.3%	0.67
4	39	79.6%	24	70.8%	1.63
5	3	6.1%	8	37.5%	0.38
6	--	--	0	--	--
7	0	0.0%	1	0.0%	0.00
8	0	0.0%	2	0.0%	0.00
Total	49	100%	43	55.8%	

[1]Percent of groups harvesting one or more antelope on the Walk-In.
[2]Harvest by group

Table 63. Harvest by hunters targeting antelope (archery) in Zone C.

Number Antelope Harvested by Group	Number	Percent
0	26	89.7%
1	2	6.9%
2	1	3.4%
Total Groups	29	100%
Total Antelope Harvested	4	

Table 64. Harvest by hunters targeting antelope (archery) in Zone C by Walk-In Area.

Zone C Walk-In #	Total Antelope Harvested	Percent	Number of Groups	Percent Successful[1]	Average Harvest[2]
1	0	0.0%	2	0.0%	0.00
2	0	0.0%	1	0.0%	0.00
3	1	25.0%	7	14.3%	0.14
4	3	75.0%	14	14.3%	0.21
5	0	0.0%	5	0.0%	0.00
6	--	--	0	--	--
7	--	--	0	--	--
8	--	--	0	--	--
Total	4	100%	29	10.3%	0.14

[1]Percent of groups harvesting one or more antelope on the Walk-In.
[2]Harvest by group

Table 65. Vehicles with hunters less than age 16.

Number of Youth Less than Age 16 in Vehicles in Zone C	Number	Percent
0	97	92.4%
1	5	4.8%
2	2	1.9%
4	1	1.0%
Total	105	100%

Table 66. Residence of hunters in Zone C.

Residence	Number	Percent
South Dakota	83	79.0%
Non-residents	14	13.3%
Mixed Group	8	7.6%
Total	105	100%
South Dakota Residents – Cities		
City[1]	**Number**	**Percent**
Rapid City	19	22.9%
Sturgis	11	13.3%
Belle Fourche	9	10.8%
Spearfish	7	8.4%
Madison, Black Hawk	3 (each)	3.6% (each)
Deadwood, Brookings, Box Elder, Colton, Piedmont, Yankton, Sioux Falls	2 (each)	2.4% (each)
Erwin, Centerville, Pierre, Worthing, South Shore, Chamberlain, Vermillion, Kransburg, Brandon, Whitewood, Wagner, Flandreau, Summerset, Martin, Buffalo, Lennox, Aberdeen	1 (each)	1.2% (each)
Total	83	100%
Non-Residents – State		
State[1]	**Number**	**Percent**
Minnesota	5	35.7%
Wisconsin, Illinois	2 (each)	14.3% (each)
Iowa, Indiana, Michigan, Wyoming, Canada	1 (each)	7.1% (each)
Total	14	100%

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

Table 67. Start Times for Hunters in Zone C.

Start Time[1]	Number	Percent
4 a.m.	1	1.0%
5 a.m.	4	3.8%
6 a.m.	19	18.3%
7 a.m.	21	20.2%
8 a.m.	10	9.6%
9 a.m.	11	10.6%
10 a.m.	8	7.7%
11 a.m.	6	5.8%
12 noon	7	6.7%
1 p.m.	8	7.7%
2 p.m.	2	1.9%
3 p.m.	4	3.8%
4 p.m.	3	2.9%
5 p.m.	0	0.0%
Total Groups (1 missing)	104	100%

[1]Start times rounded down to the whole hour.

Table 68. Average total hunt times for hunters in Zone C.

Average Total Hunt Times (hours)	Number	Percent
0.50	7	6.8%
0.75	2	1.9%
1.00	5	4.9%
1.50	6	5.8%
1.75	4	3.9%
2.00	10	9.7%
2.25	3	2.9%
2.50	5	4.9%
2.75	3	2.9%
3.00	5	4.9%
3.25	3	2.9%
3.50	4	3.9%
3.75	1	1.0%
4.00	7	6.8%
4.25	3	2.9%
4.50	2	1.9%
5.00	3	2.9%
5.25	1	1.0%
5.50	3	2.9%
6.00	4	3.9%
6.25	1	1.0%
6.50	3	2.9%
7.00	1	1.0%
8.00	2	1.9%
9.00	1	1.0%
9.75	3	2.9%
10.00	3	2.9%
10.50	3	2.9%
11.00	1	1.0%
11.25	1	1.0%
11.50	1	1.0%
12.00	1	1.0%
12.50	1	1.0%
Total Groups (2 missing)	103	100%
Average / 95% C.I.	4.21	3.59 – 4.83

Table 69. Overall satisfaction of groups hunting in Zone C.

Satisfaction (scale)	Number	Percent
Very Dissatisfied (-3)	3	2.9%
Moderately Dissatisfied (-2)	4	3.8%
Slightly Dissatisfied (-1)	4	3.8%
Neutral / No Opinion (0)	21	20.0%
Slightly Satisfied (+1)	16	15.2%
Moderately Satisfied (+2)	30	28.6%
Very Satisfied (+3)	27	25.7%
Total	105	100%
Mean / 95% C.I.	1.30	1.00 – 1.60
SUMMARIZED RESULTS		
Dissatisfied	11	10.5%
Neutral / No Opinion	21	20.0%
Satisfied	73	69.5%
Ratio: Satisfied *to* Dissatisfied	6.6 *to* 1	

Table 70. Overall satisfaction of groups hunting in Zone C by walk-in area.

Walk-In ID # (N)	Percent Dissatisfied	Percent Neutral	Percent Satisfied	Mean Satisfaction	95% C.I.
1 (3)	0.0%	33.3%	66.7%	2.00	N/A
2 (5)	0.0%	0.0%	100%	1.80	0.76 – 2.84
3 (12)	0.0%	25.0%	75.0%	1.75	0.98 – 2.52
4 (41)	9.8%	19.5%	70.7%	1.44	0.97 – 1.91
5 (32)	15.6%	25.0%	59.4%	0.88	0.26 – 1.49
6 (4)	50.0%	0.0%	50.0%	0.00	N/A
7 (4)	0.0%	0.0%	100%	2.25	N/A
8 (4)	0.0%	25.0%	75.0%	1.00	N/A
Total (105)	10.5%	20.0%	69.5%	1.30	1.00 – 1.60

Table 71. Overall satisfaction of groups hunting in Zone C by residence and by type of hunting.

Residence (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Resident (83)	12.0%	22.9%	65.1%	1.19	0.84 – 1.55
Nonresident (14)	7.1%	7.1%	85.7%	1.64	0.98 – 2.31
Mixed (8)	0.0%	12.5%	87.5%	1.75	0.78 – 2.72
Total (105)	10.5%	20.0%	69.5%	1.30	1.00 – 1.60
Type of Hunting (N)	**Percent Dissatisfied**	**Percent Neutral**	**Percent Satisfied**	**Mean Satisfaction**	**95% C.I.**
Rifle Antelope (43)	7.0%	23.3%	69.8%	1.23	0.83 – 1.64
Rifle Deer (35)	17.1%	22.9%	60.0%	0.86	0.27 – 1.44
Archery Antelope (29)	3.4%	13.8%	82.8%	2.00	1.50 – 2.50

Table 72. Comments by hunters in Zone C (arranged by walk-in # and satisfaction level).

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
1	**0**	**0041**	Would like more Quality hunting ground, not flat, no animals on it.
2	**+3**	**0175**	Sad to see the numbers of antelope down from last year.
3	**-1**	**0267**	Cold – windy – muddy. Goats too few to hunt.
	0	**0265**	Recommend that GFP work with BLM & school lands to get those public lands better identified for public hunting access & cut down on possible innocent trespassing. Especially in areas where there is some, much like Butte County. Really appreciate all of the WIA that GFP provides to walk-in hunters like us.
	+2	**0334**	I am very satisfied in areas I can hunt in Butte Co., yet have had incidents being parked by WIA sign and being asked to leave property.
	+2	**0091**	Very happy to have this huge area for Walk-in. Thanks.
	+3	**0063**	It would be really appreciated if you could airlift the animal to the road for us. Just a suggestions.
4	**-1**	**0163**	The map with the license area was quite deceiving because the actual walk-in land available was small in comparison, which made hunting area much more limited.
	0	**F-4**	Had two misses (archery antelope hunting).
	0	**0017**	Saw 12 antelope does / 2 bucks.
	0	**0264**	Glad to have the Walk-in areas. I filled out my application wrong and got the wrong area – just glad for hunting atlas and area to hunt.
	+1	**0274**	People are driving on Walk-ins on old Hwy 85 (mostly Pennington Co. plates).
	+1	**0262**	There was a lot of hunting pressure in the area. We saw very few animals and a lot of hunters. We were still able to harvest 2 doe antelope. Thanks for giving us a place to hunt.
	+1	**0244**	Saw more hunters than animals. Lots of pressure. We were still able to take a doe antelope. Thanks for giving us a place to hunt.
	+2	**0260**	Walk-n areas are great!
	+2	**0263**	Other the weather, had a great time. Also hauled out a boned-out carcass at the gate.
	+2	**0219**	Would like to see more access for vehicles to recover dead animals.
	+2	**0171**	Walk-in hunting is very valuable; all we hunt is public area and very nice having a place to hunt. THANKS.
	+2	**0167**	I am very satisfied with the large area of public hunting available north of Bell Fourche.
	+2	**0093**	Appreciate the opportunity to hunt in Walk-in Areas.
	+2	**0065**	Antelope numbers down. Keep up the good work with Walk-in.
	+2	**0058**	Public land boundaries are not well marked at all. Especially BLM's, No 2009 Atlas!
	+2	**0014**	More clearly define hunting areas.
	+2	**0335**	It would be nice to have a limited time during the day for animal retrieval with ATV – can get to be a long drag on some of these walk-ins.
	+2	**0484**	Your efforts to maintain & increase walk-in areas is greatly appreciated!!

Continued on next page.

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

Table 72 - Continued. Comments by hunters in Zone C .

Walk-In ID #	Satisfaction (-3 – +3)[1]	ID #	Comments
4	**+3**	**F-6**	I get to hunt with my grand kid!
	+3	**0249**	Many vehicles were driving out into Butte County Walk-Ins to pick up antelope harvested off roads.
	+3	**0172**	Very happy to have drawn buck tags with 2 added doe tags. We filmed an episode of out hunting show here. Hope we did the place justice. Wish there was more land access though 'love' the 'foot access only' lands. Hope to draw again next year.
	+3	**0160**	We really appreciate this area. It is excellent for antelope and we try to keep it clean.
	+3	**0009**	We had a great time today!!! And we are thankful for the Walk-in Program.
	+3	**0039**	Add more land.
	+3	**0037**	Lots of animals, would have been successful had the wind not blown my decoy into the air. Thanks.
5	**-2**	**0454**	Love all of the Walk-in Areas but noticed several other hunters driving on walk-in area (Butte County)!
	-1	**0478**	Seemed to be a lot of hunters in this area.
	0	**0488**	Didn't see but one Jacket Rabbit and sheep.
	0	**0345**	Too many people driving around in vehicles and riding ATVs.
	0	**0346**	Too many hunters without enough walk-in areas and places to hunt.
	+1	**0340**	Deer population down, less mule deer. Almost all whitetail now. Consider no antlerless mule deer to bring them back? Only antlerless whitetail for a year?
	+1	**0064**	Walk-in gives me opportunity to hunt.
	+1	**0174**	I observed fewer antelope from years past. License reduction for this area should be implemented.
	+2	**0339**	I thoroughly enjoy the Atlas and would like more blocs of WAI land available. Also with shooting animals from the highway could be stopped.
	+2	**0437**	Walk-in program is essential for many hunters, but sometimes a walk-in area receives too much pressure, especially during season opener. SD GFP does a great job!
	+2	**0424**	Nice area, but it has a sheep fence on three sides, hard for game to get in & out.
	+3	**0422**	Very satisfied with Walk-In Areas.
	+3	**0047**	Got close.
6	**-2**	**0289**	No ducks in the ponds. Guess they don't like this area. Have found much better WIAs for ducks.
7	**+1**	**0495**	I always enjoy my SD hunt. The one negative this year is that the deer population seems to be down.
	+2	**0487**	Not deer but spent 4 hours watching 6 mule deer, hoping they would cross over to the walk-in. Beautiful.
8	**0**	**0344**	A lot of walking!! Vehicle trails everywhere, would have rather road hunted on these trails, son has very bad asthma and can't walk very far.
	+2	**0290**	Experience was good today with the exception of the landowner(s) to the south and west. Vehicles were patrolling fence line keeping antelope from entering walk-in area. Although I was pleased with the number of antelope spotted in Walk-in Area.

Comparison of Zones

Compared to relative size of each zone, the Besler Zone and Zone B had slightly higher relative use (4.5% and 10.4%; respectively) compared to Zones A and C (Table 73 and Figure 9). Based on only one year of data, the differences do not seem large enough to suggest that one zone is significantly better than another zone based on relative use.

Overall, the walk-in areas in the northwest region of South Dakota mainly provide rifle antelope, rifle deer hunting and archery antelope hunting opportunities, however, Zone A was significantly different from the other three zones studied in that about half the use of Zone A was for pheasant hunting (Table 74). About half of the harvest in the northwest region was antelope and one-fourth was deer (Table 75). Zone B had the highest percent of non-resident hunters (39%) and Zone C the lowest percent (13%) (Table 76).

Satisfaction. Zone A had the highest mean satisfaction and Zone B the lowest (Table 77 and Figures 10 and 11). The mean satisfaction of hunters in Zone A was 14% higher than the mean satisfaction of hunters in Zone B. The mean satisfaction of hunters in the Besler Zone and Zone C was about mid-way between that of Zone A and Zone B.

Mixed groups of resident and non-resident hunters had the highest satisfaction level and resident hunters had the lowest satisfaction level; however, the differences were not significant (Table 78). About 64% of the resident hunting groups were satisfied compared to 72% of the non-residents and 75% of the mixed groups.

Pheasant hunters had the highest mean satisfaction and archery deer hunters the lowest mean satisfaction (Table 79 and Figure 12). About 88% of the groups hunting pheasants on the walk-in areas in the northwest region of South Dakota in 2009 were satisfied compared to 71% of the archery antelope hunters, 68% of the rifle antelope hunters, 67% of the archery deer hunters and 59% of the rifle deer hunters (Table 79 and Figure 13).

Table 73. Comparison of use in Zones studied in the northwest region of South Dakota.

Zone	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Cards Returned	Return Rate
Besler Zone	24,960	14.7%	107	19.2%	47	43.9%
Zone A	20,520	12.0%	47	8.4%	31	66.0%
Zone B	41,470	24.4%	194	34.8%	103	53.1%
Zone C	83,304	48.9%	209	37.5%	105	50.2%
	170,304	100%	557	100%	286	51.3%

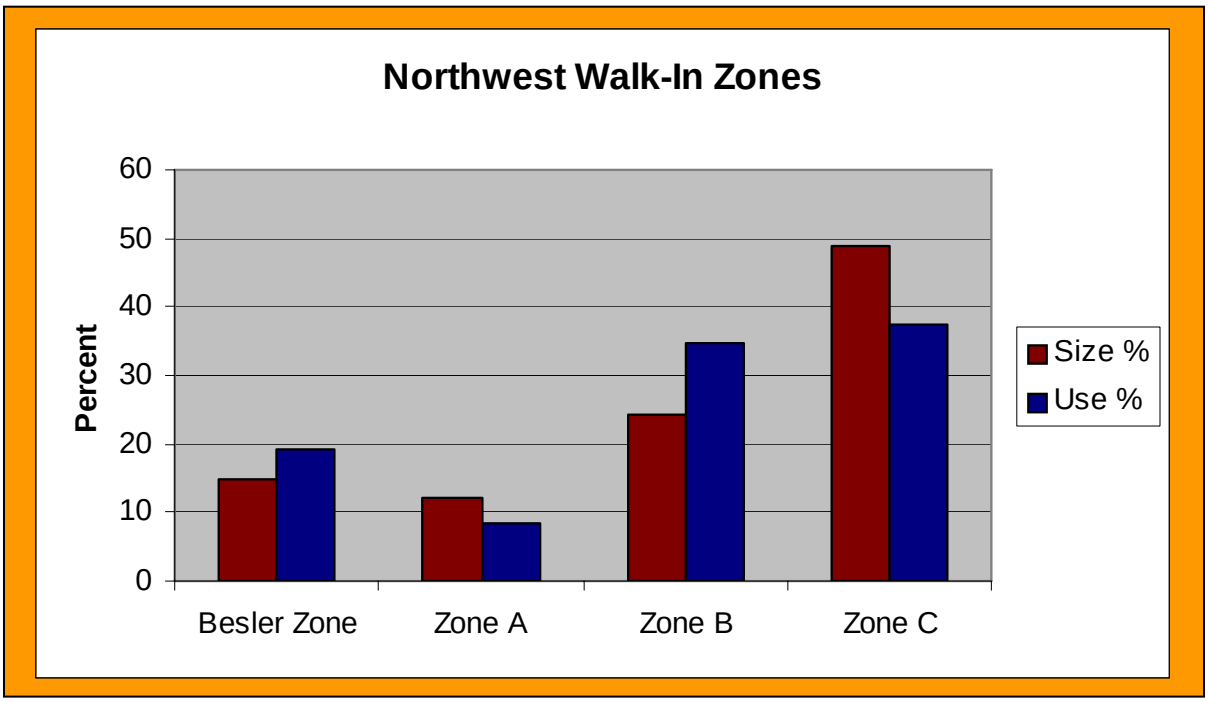


Figure 9. Comparison of relative hunter use (%) of walk-in area study zones in relation to relative size of each zone (%).

Table 74. Type of hunting by Zones studied in the northwest region of South Dakota.

Hunting	Percent of Cases				Combined		
	Besler Zone	Zone A	Zone B	Zone C	Number	Percent	Percent of Cases
Rifle Antelope	34.0%	25.8%	46.6%	37.4%	115	36.6%	40.2%
Rifle Deer	59.6%	32.3%	27.2%	30.4%	101	32.2%	35.3%
Archery Antelope	6.4%	3.2%	25.2%	25.2%	59	18.8%	20.6%
Pheasant	10.6%	51.6%	1.0%	1.9%	24	7.6%	8.4%
Archery Deer	2.1%	--	5.8%	1.7%	9	2.9%	3.1%
other	--	3.2%	--	1.7%	3	1.0%	1.0%
Turkey	--	--	1.0%	--	1	0.3%	0.3%
Waterfowl	--	--	--	0.9%	1	0.3%	0.3%
Muzzleloader Deer	--	--	--	0.9%	1	0.3%	0.3%
Number of Cases	47	31	103	105	314	100%	109.5%
Total Number of Cases					286		

Table 75. Harvest by Zones studied in the northwest region of South Dakota.

Hunting	Percent of Cases				Combined	
	Besler Zone	Zone A	Zone B	Zone C	Number	Percent
Antelope	17	6	58	53	134	51.0%
Deer	26	8	14	18	66	25.1%
Pheasant	3	42	0	0	45	17.1%
Grouse	4	5	0	3	12	4.6%
other	1	3	1	1	6	2.3%
Ducks	0	0	0	0	0	0.0%
Geese	0	0	0	0	0	0.0%
Turkey	0	0	0	0	0	0.0%
Total	51	64	73	75	263	100%

Table 76. Residence of hunters by Zones studied in the northwest region of South Dakota.

Hunting	Percent of Cases				Combined	
	Besler Zone	Zone A	Zone B	Zone C	Number	Percent
South Dakota	70.2%	71.0%	55.3%	79.0%	195	68.2%
Out-of-State	23.4%	19.4%	38.8%	13.3%	71	24.8%
Mixed	6.4%	9.7%	5.8%	7.6%	20	7.0%
Total	47	31	103	105	286	100%
Pearson Chi-Square: X^2=19.118; df=6; p=0.004						

Table 77. Satisfaction of hunting groups by Zones studied in the northwest region of South Dakota.

Satisfaction (scale)	Besler Zone	Zone A	Zone B	Zone C	Combined	
					Number	Percent
Very Dissatisfied (-3)	4.3%	0.0%	5.8%	2.9%	11	3.8%
Moderately Dissatisfied (-2)	4.3%	0.0%	4.9%	3.8%	11	3.8%
Slightly Dissatisfied (-1)	6.4%	0.0%	2.9%	3.8%	10	3.5%
Neutral / No Opinion (0)	14.9%	16.1%	29.1%	20.0%	63	22.0%
Slightly Satisfied (+1)	17.0%	29.0%	17.5%	15.2%	51	17.8%
Moderately Satisfied (+2)	19.1%	22.6%	19.4%	28.6%	66	23.1%
Very Satisfied (+3)	34.0%	32.3%	20.4%	25.7%	74	25.9%
Total	47	31	103	105	286	100%
Pearson Chi-Square: X^2=18.265; df=18; p=0.438						
Mean[1]	$1.30_{b,c}$	$1.71_{a,b}$	0.87_{c}	$1.30_{b,c}$	1.19	
95% C.I.	0.79 – 1.81	1.31 – 2.11	0.55 – 1.20	1.00 – 1.60	1.00 – 1.38	
ANOVA:F=2.700; df=3/282; p=0.046						
SUMMARIZED RESULTS						
Dissatisfied	14.9%	0.0%	13.6%	10.5%	32	11.2%
Neutral / No Opinion	14.9%	16.1%	29.1%	20.0%	63	22.0%
Satisfied	70.2%	83.9%	57.3%	69.5%	191	66.8%
Pearson Chi-Square: X^2=11.701; df=6; p=0.069						

[1]Means that share a subscript are statistically similar.

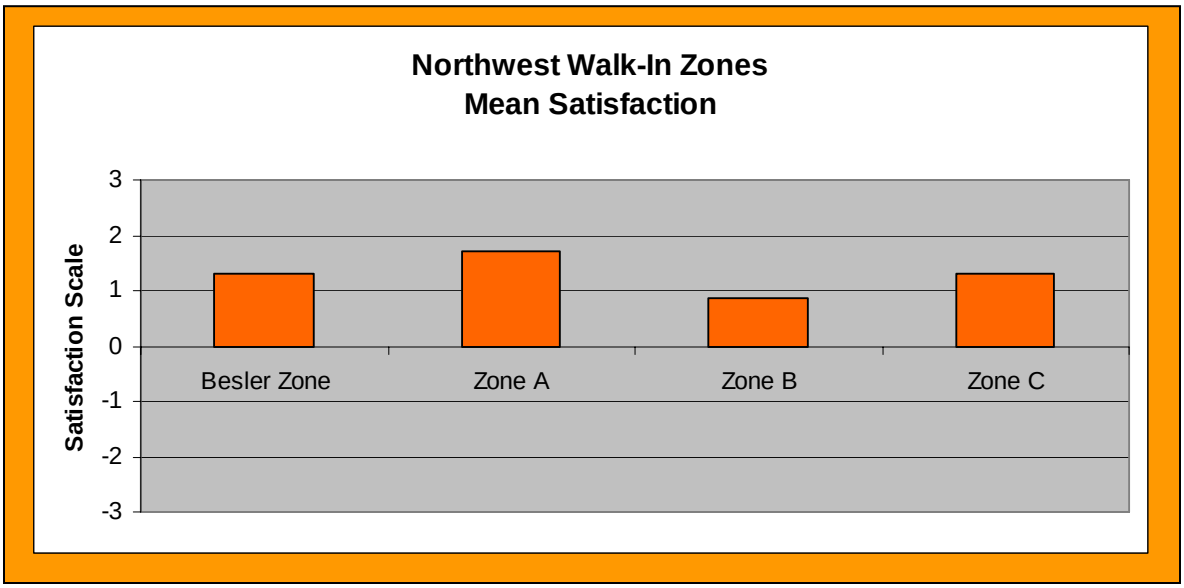


Figure 10. Mean satisfaction of hunters using walk-in areas in the northwest study zones (South Dakota – 2009).

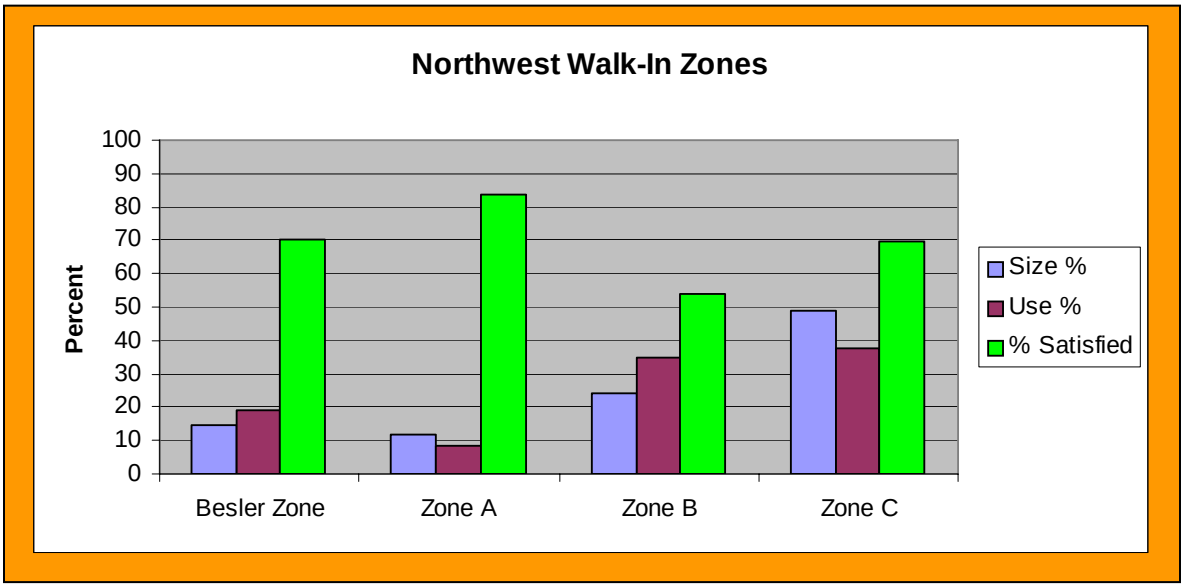


Figure 11. Relative size, relative use and percent satisfied hunters using walk-in areas in the northwest study zones (South Dakota – 2009).

Table 78. Satisfaction of hunting groups using walk-in areas in the northwest region of South Dakota analyzed by residence.

Satisfaction	South Dakota	Non-Resident	Mixed Group
Dissatisfied	12.8%	8.5%	5.0%
Neutral / No Opinion	23.1%	19.7%	20.0%
Satisfied	64.1%	71.8%	75.0%
Total	195	71	20
Pearson Chi-Square: X^2=2.614; df=4; p=0.624			
Mean	1.08	1.35	1.65
95% C.I.	0.85 – 1.32	1.01 – 1.70	1.02 – 2.28
ANOVA: F=1.642; df=2/283; p=0.196			

Table 79. Satisfaction of hunting groups using walk-in areas in the northwest region of South Dakota analyzed by type of hunting.

Satisfaction	Rifle Antelope	Rifle Deer	Archery Antelope	Pheasant	Archery Deer
Dissatisfied	7.8%	16.8%	8.5%	4.2%	22.2%
Neutral / No Opinion	24.3%	23.8%	20.3%	8.3%	11.1%
Satisfied	67.8%	59.4%	71.2%	87.5%	66.7%
Total	115	101	59	24	9
Mean	1.21	0.91	1.51	1.92	0.78
95% C.I.	0.93 – 1.49	0.57 – 1.25	1.11 – 1.91	1.31 – 2.53	-0.54 – 2.11

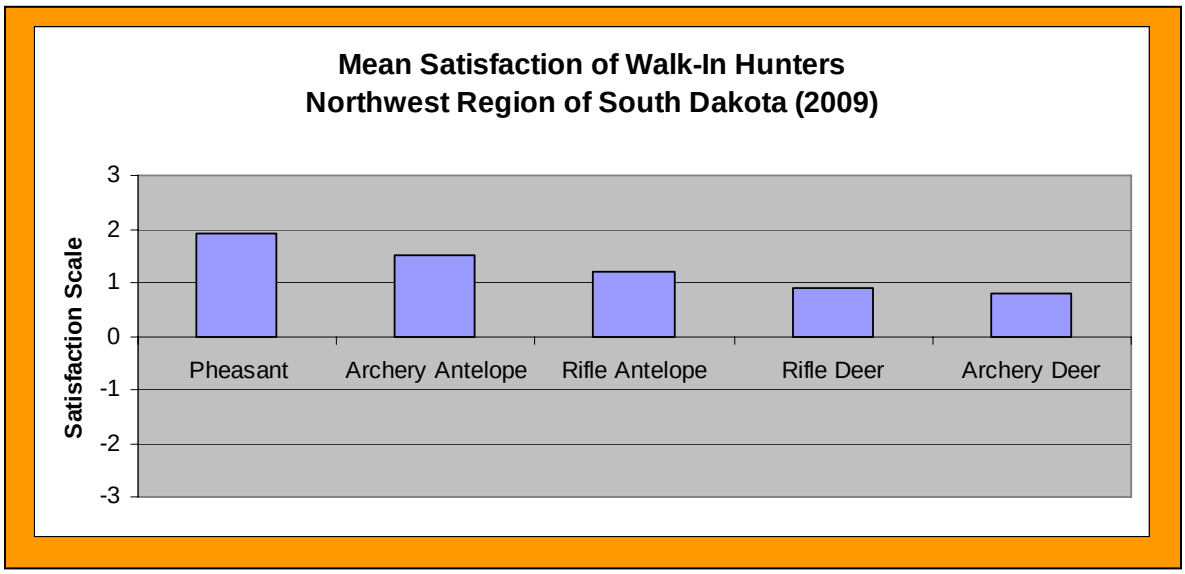


Figure 12. Mean satisfaction of hunters using walk-in areas in the northwest study zones comparing type of hunting (South Dakota – 2009).

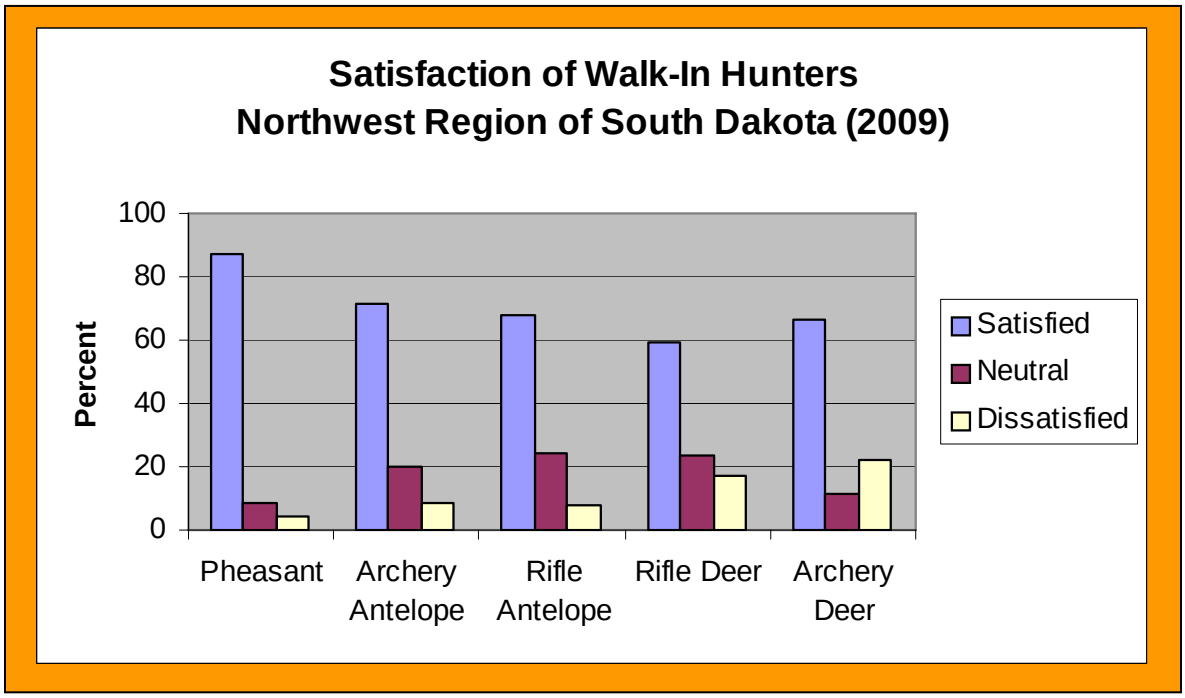


Figure 13. Satisfaction of hunters using walk-in areas in the northwest study zones comparing type of hunting (South Dakota – 2009).

The Besler Ranch

The Besler zone was specifically selected to evaluate the Besler Ranch, which is a Special Management Unit. This zone included five additional, nearby walk-in areas. The relative use of walk-in areas in this zone was approximately equal to the relative sizes of each walk-in area, suggesting that the quality of each walk-in area was approximately equal. Due to low sample sizes of all but the Besler Ranch (walk-in #1), hunter use and satisfaction could not be used to effectively compare the quality of the walk-in areas within this zone. Instead, other walk-in areas in other zones were used as a comparison for the Besler Ranch (Table 80). Hunter use of and satisfaction with the Besler Ranch was relatively similar to use and satisfaction of other similar sized walk-in areas in the northwest region of South Dakota (Figure 14). The slightly higher hunter satisfaction in Zone A compared to the other walk-in areas may be due to the different type of hunting opportunity provided, namely pheasant hunting (compared to mainly deer and antelope hunting in the other walk-in areas in this comparison).

Table 80. Comparison of use and hunter satisfaction with the Besler Ranch with other similar sized walk-in areas in the northwest region of South Dakota.

Walk-In Areas	Size (acres)	Percent Size	Vehicles Seen	Percent Vehicles	Percent Satisfied	Mean Satisfaction
Besler Ranch	16,000	13.4%	70	19.0%	73%	1.30
Zone A (all)	20,520	17.2%	47	12.7%	84%	1.71
Zone B #2	24,600	20.6%	106	28.7%	63%	1.03
Zone C #4	24,054	20.2%	85	23.0%	71%	1.44
Zone C #5	34,200	28.6%	61	16.5%	59%	0.85
	119,374	100%	369	100%		

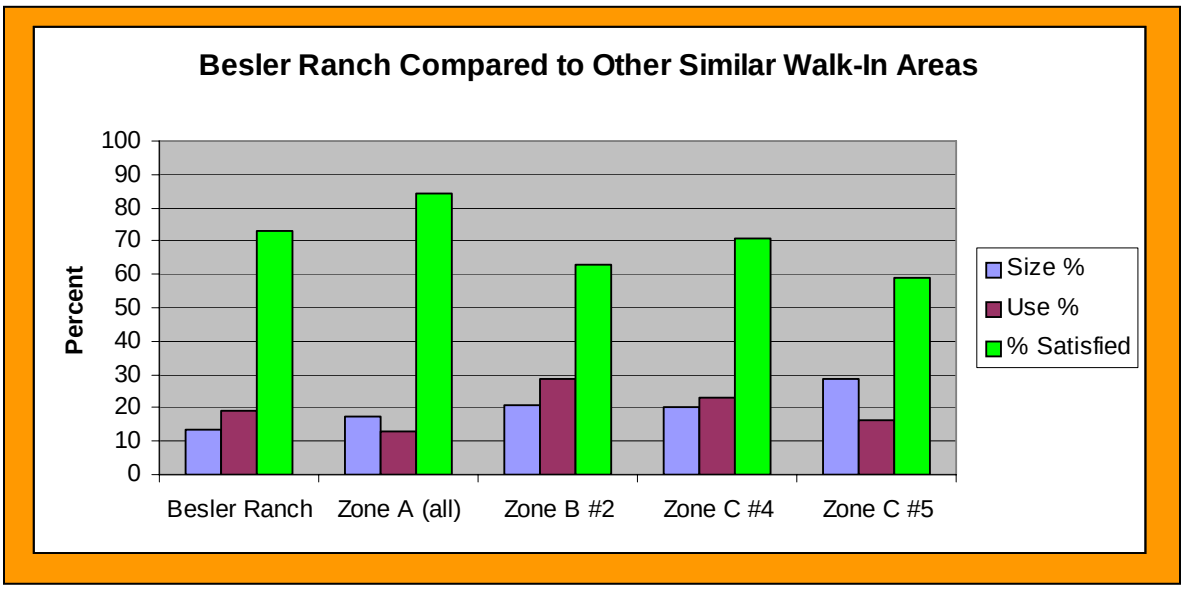


Figure 14. Relative size, relative use and percent satisfied hunters using the Besler Ranch compared to other similar sized walk-in areas in northwest South Dakota (2009).

Discussion and Summary

Four zones containing walk-in areas in the northwest area of South Dakota (Harding, Perkins and Butte Counties) were studied throughout the 2009 hunting season. Overall, this study provides a good description of hunter use of the walk-in areas in the northwest area of 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 the northwest were for antelope (archery and rifle) and rifle deer (although some pheasant hunting opportunities were found in Zone A). Although the archery antelope season is rather long (mid-August through September), most archery antelope hunting occurs mid- to late September. It appears that the walk-in areas in the northwest provide quality archery hunting opportunities. Most use of the walk-in in areas in the northwest occurs the first week of

the rifle antelope hunting season and the first week of rifle deer hunting season. During these two periods the walk-in areas are saturated with hunters (many negative comments were about crowded conditions); however, for all other time periods, except for maybe the short period in mid- to late September, hunter use of the walk-in areas in the northwest is very low. This information can be used to better structure future hunter use studies in the northwest region designed to maximize hunter contacts while minimizing time wasted during exceptionally low hunter use periods.

Hunter Use & Satisfaction. 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 hunted 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 or antelope), but satisfaction is an evaluation of the experience and may be a better use for comparing different types of hunting. Hunter satisfaction for the northwest walk-in areas is compared with other areas studied in 2009 as an overall comparison (Figures 15 and 16). Zone A had the highest mean satisfaction but relatively low overall use. This may be the result of a small number of hunters finding some good pheasant hunting in an area not well recognized for pheasant hunting, and thus not being overrun with hunters, resulting in a relatively high satisfaction score.

Negative comments from hunters using the northwest walk-in areas in 2009 were mainly about crowded conditions (too many hunters) rather than poor habitat quality.

Besler Ranch. Hunter use of and satisfaction with the Besler Ranch was relatively similar to other walk-in areas in the northwest region of South Dakota. Most hunting groups using the Besler Ranch walk-in were satisfied (73%) and only 13% were dissatisfied.

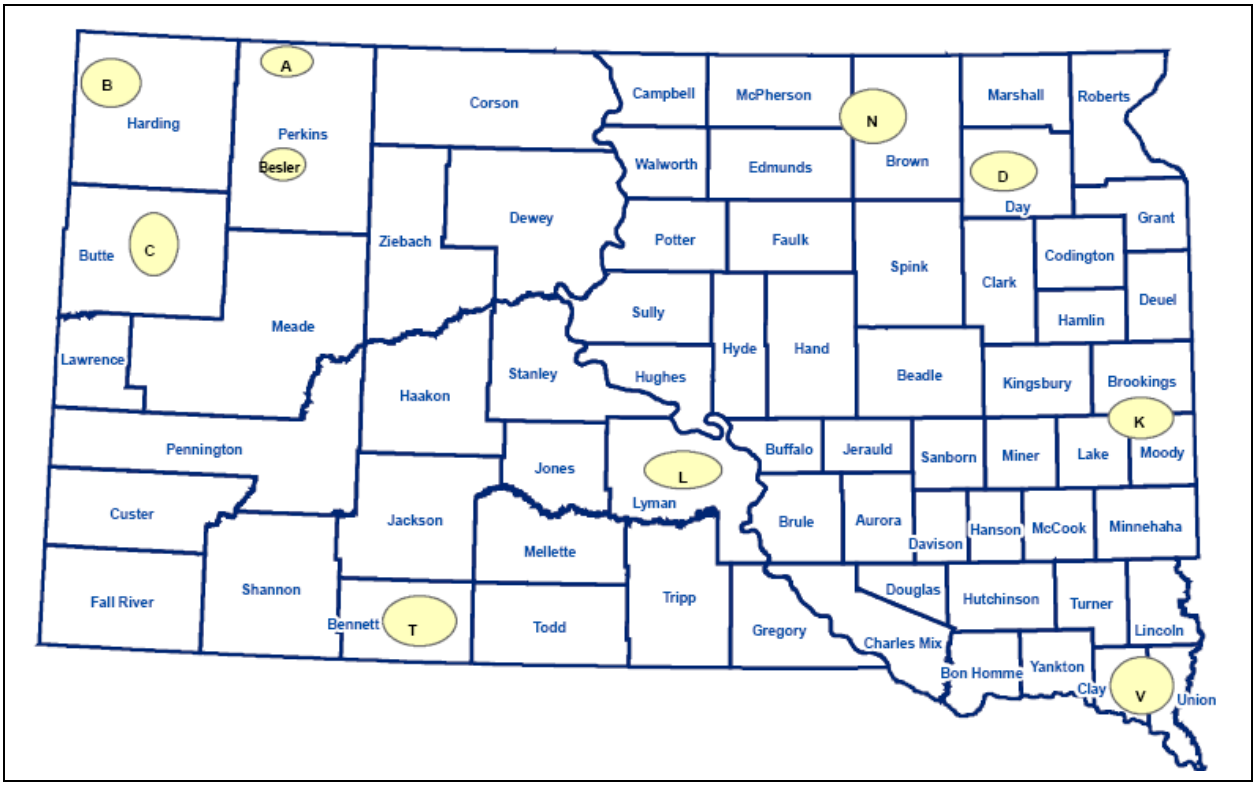


Figure 15. Location of walk-in areas studied in 2009.

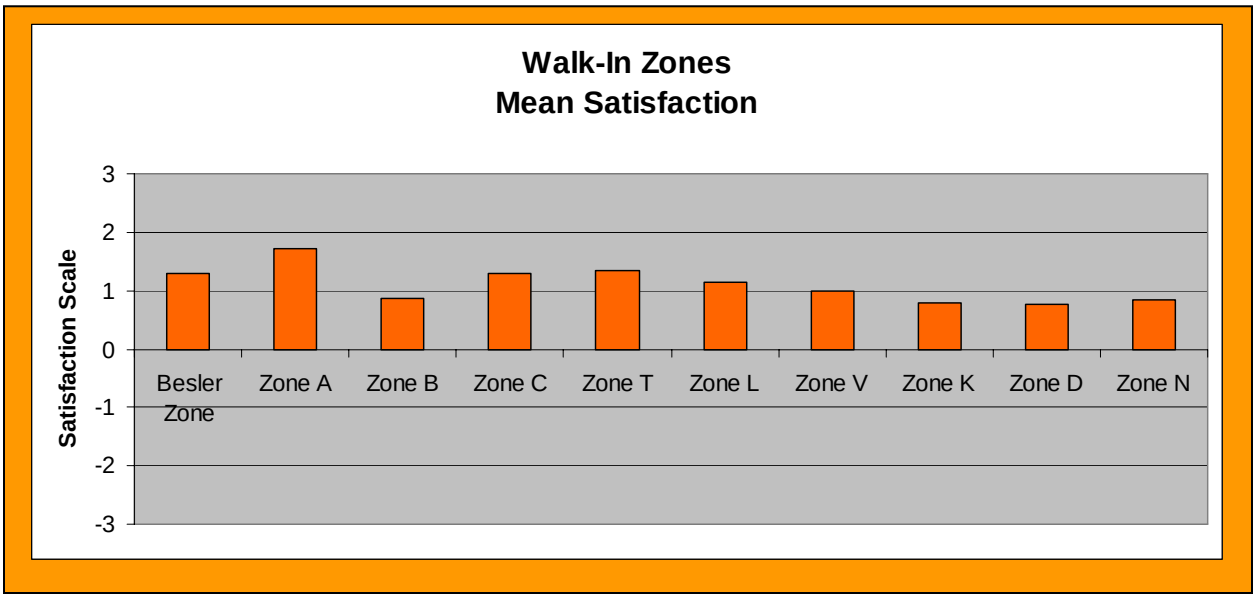


Figure 16. Mean satisfaction summarized for all the walk-in zones studied in 2009.

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

Instantaneous Count

Date:_____ Zone:_____ Run: 1 - 2 - 3 Name:_____

Weather: Temp. _____

Sky: ❑ 1. Clear
❑ 2. Partly Cloudy
❑ 3. Cloudy

Wind: ❑ 1. Calm
❑ 2. Light Breese
❑ 3. Windy
❑ 4. Very Windy

Precipitation: ❑ 1. None
❑ 2. Light Rain
❑ 3. Heavy Rain
❑ 4. Light Snow
❑ 5. Heavy Snow

Walk-In ID Number	Start Time	End Time

Vehicle Type
1 = Regular Truck (single front seat)
2 = Extended Cab Truck (3 or 4-door or back seats)
3 = Motor-Home-type vehicles or Truck with Camper
4 = SUV
5 = Van (mini included)
6 = 2-door car
7 = 4-door car / station wagon
8 = 2/3/4-wheel RV/motorcycle
9 = other

Date:_____ Zone:_____ Run: 1 - 2 - 3 Name:_____

Walk-In ID #	Vehicle Type	License Plate	Survey Number

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**
- ❑ **Other small game**
- ❑ **Turkey**
- ❑ **Waterfowl**
- ❑ **Not Hunting**

Deer: ❑ **Firearm** ❑ **Archery** ❑ **Muzzleloader**

Antelope: ❑ **Firearm** ❑ **Archery**

❑ **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-gong 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

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

Appendix C. Field interview sheet used in the northwest walk-in areas.

Survey #:

Date: _____/_____/_____
Month/Day/Year

Location:
❑ Bessler / _____ (zone)
❑ Area A / _____ (zone)
❑ Area B / _____ (zone)
❑ Area C / _____ (zone)

Start Time: _____ Finish Time: _____ Completed Trip: NO / YES

Total Time: _____ (rounded to nearest quarter hour)

Vehicle Type: [_____] **Party Size per Vehicle: [____] (total)**
Number 16 and older: [____] Number < 16 [____]

Number SD Residents: [_____]: (Town)_____ (driver of vehicle)

Number Non-Residents: [_____]: (State)_____

Type of Hunting/Activity: [_____]

Activity	Code	Activity	Code
Non-hunting: Scouting	1	Rabbit	12
Non-hunting: Wildlife Viewing	2	Pheasant	13
Non-hunting: Hiking	3	Prairie Dog	14
Non-hunting: Fishing	4	Coyote	15
Non-hunting: other	5	Waterfowl	16
Archery Antelope	6	Rifle Antelope	17
Archery Turkey	7	Rifle Deer	18
Archery Deer	8	Gun Turkey	19
Dove	9	Muzzleloader Deer	20
Sage Grouse (season: Sept ?)	10	Hunting: other	21
Grouse	11		

Non-hunting other (#5): _____

Hunting other (#21): _____

For the 'lead' person in the group (the person that you are interviewing that is acting as group spokesperson), read the following question: ***Considering ALL factors, how satisfied or dissatisfied are you with your hunting experience in this area today?*** **And, read the response categories.**

Very Satisfied	**(1)**	**Satisfaction Code: [_____]**
Moderately Satisfied	**(2)**	
Slightly Satisfied	**(3)**	
Neutral	**(4)**	
Slightly Dissatisfied	**(5)**	
Moderately Dissatisfied	**(6)**	
Very Dissatisfied	**(7)**	
No Opinion	**(8)**	
(Blank)	**(0)**	

Harvest by Party:

Species	**Total**	**Adult Buck / Male**	**Adult Doe / Female**	**Male Kid/Fawn**	**Female Kid/Fawn**
Antelope					
Mule Deer					
Whitetail Deer					
Turkey					
Dove					
Sage Grouse					
Grouse/Prairie Chicken					
Pheasant					
Ducks					
Geese					

Other: No/Yes : _____

Names and Addresses of driver of vehicle: