

2015
Evaluation of the Decoy-Only Hunting Unit: Lower
Oahe Waterfowl Hunting Access Area

HD-5-16.AMS

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The decoy-only waterfowl unit is a separate unit within the Lower-Oahe Waterfowl Hunting Access Area where hunters are required to register before hunting. This process provides a means for evaluating the use, harvest, and opinions towards this special unit. This evaluation substitutes for an assessment of the entire Lower Oahe Waterfowl Hunting Access Area. When hunting is good at the decoy-only unit, it is most likely good everywhere else in the area, as geese are present in high numbers. This report evaluates the 2015 decoy-only waterfowl unit and compares the findings with the previous sixteen years (1998-2014).

KEY WORDS: Waterfowl; Lower Oahe; Decoy-Only

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Executive Summary

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- The 2015 waterfowl season saw a drop in the number of groups (320) and hunters (973) using the decoy-only waterfowl unit in the Lower Oahe Waterfowl Hunting Access Areas from the 2014 numbers.
- An estimated total of 1,318 Canada Geese were harvested at the decoy-only unit. Down from the 1,808 harvested in 2014.
- Mean satisfaction has been relatively high for the last twelve years. On average, in 2015 hunters were moderately satisfied with their hunting experience. The majority of hunting groups (64%) were very satisfied, and an additional 12 percent were moderately satisfied and 5 percent were slightly satisfied. Overall, 81 percent of hunting groups were satisfied with their hunting experience.
- Hunter satisfaction was statistically related to total number of waterfowl (geese and ducks) harvested. Hunting groups who reported being satisfied with their hunting experience harvested approximately 4 more birds, on average, than groups who reported being neutral or dissatisfied.
- Groups who hunted in late January (01/16 to 01/31) had the highest average harvests with approximately 5.6 waterfowl per group. The vast majority (89%) of the reported harvest of geese and ducks occurred in January and February.

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Introduction

The Lower Oahe Waterfowl Hunting Access Area is a package of varied goose hunting opportunities designed to provide quality locations for goose hunting along the Missouri River. This program was first implemented and evaluated in 1998¹ and again evaluated in 1999². Most quality locations for goose hunting along the Missouri River are on private land. The Lower Oahe Waterfowl Hunting Access Area resulted from the cooperative actions between GFP and several landowners. In return for this new public access for waterfowl hunting, the Legislature authorized the GFP Commission to issue up to 2,000 new, restricted nonresident waterfowl licenses. The money from the sale of these licenses was used to pay for the Lower Oahe Waterfowl Hunting Access Area.

The 1998 and 1999 evaluations showed that hunters strongly supported the effort to provide public goose hunting opportunities in this area. Due to the high costs of conducting a valid, scientific evaluation of the Lower Oahe Waterfowl Hunting Access Area a complete evaluation was not conducted for 2000 to 2015. The decoy-only waterfowl unit,

¹ Gigliotti, L. M. 1999. 1998 Lower Oahe Waterfowl Hunting Access Survey. HD-2-99.SAM, South Dakota Game, Fish and Parks, Pierre, South Dakota

² Gigliotti, L. M. 2000. 1999 Lower Oahe Waterfowl Hunting Access Survey. HD-2-00.SAM, South Dakota Game, Fish and Parks, Pierre, South Dakota

however, is a special unit within the Lower Oahe Waterfowl Hunting Access Area where hunters are required to register before hunting. This process provides an easy (and inexpensive) method for evaluating the use, harvest, and opinions toward this special unit; therefore an evaluation was continued from 2000 to 2015 for the decoy-only waterfowl unit of the Lower Oahe Waterfowl Hunting Access Area. Also, the evaluation of this unit substitutes for an evaluation of the entire Lower Oahe Waterfowl Hunting Access Area. When hunting is good at the decoy-only unit, it is most likely good everywhere else in the area. This report evaluates the 2015 decoy-only waterfowl unit and compares the findings with the previous sixteen years (1998 to 2014).

Methods

The registration trailer was open from November 2, 2015 to February 14, 2016, and was closed on December 25, 2015. Forty fields were available to hunt with one group per field. Daily registration was required to hunt, with a random drawing conducted one hour before sunrise each morning to determine the order in which hunting parties would choose a field. Each hunting group was required to designate one person to handle registration and provide information regarding the other hunters in their group, with a limit of no more than six hunters per hunting group. Registration information included: 1) number of people in the hunting group (including the group leader); 2) name, address, and hunting license number of designated group leader; and 3) hunting license number of each hunter in the group. The group leader was also required to complete and return the harvest report card for their group.

Results

Use and Harvest Report

Sixty-seven percent of groups returned their harvest report. In all, 320 groups for a total of 973 hunters took advantage of this decoy-only hunting opportunity (figure 1 and table 1). The most frequent party size was two hunters, with an average size of three (\bar{x} 3.04; SE 0.078).

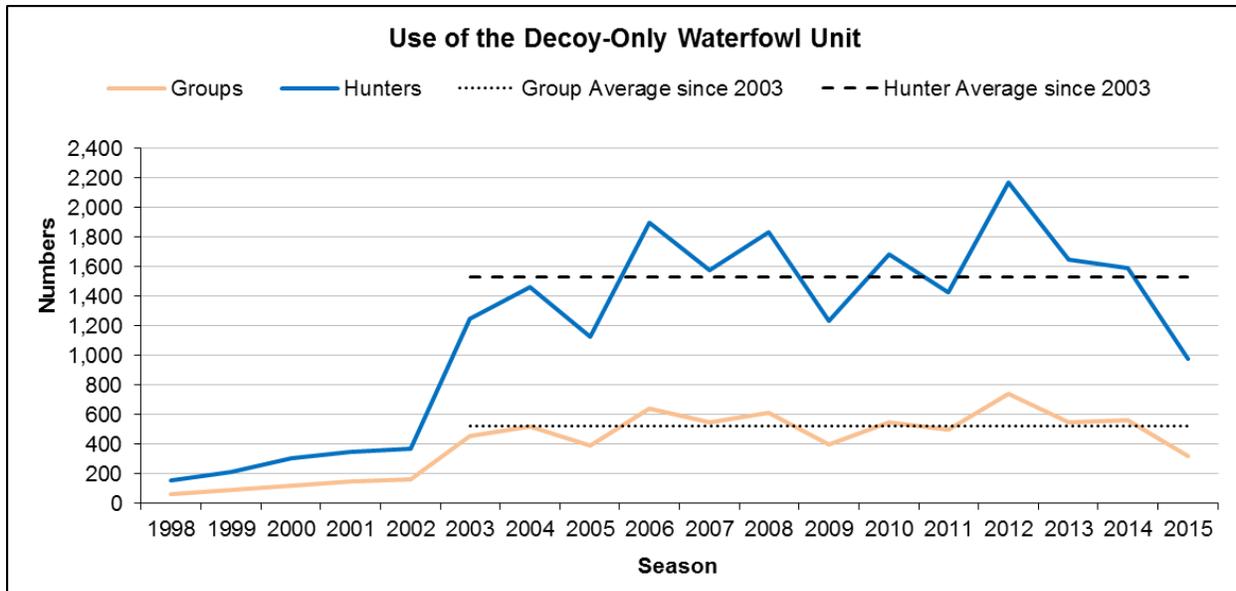


Figure 1: Use of decoy-only waterfowl unit (1998 to 2015)*
 *NOTE: maximum party size increased from 4 to 6 hunters in 2003

An estimated total of 1,318 Canada geese were harvested in 2015 (figure 2). Fifty-three percent of the groups harvested one or more Canada geese in 2015, and the average number harvested per group was 4.12 (SE 0.404) and 1.24 Canada geese per hunter (SE 0.102). Similar to the previous two seasons, the 2015 harvest rate was down from 2012, which was the highest harvest rate during the period from 1998 to 2015 (figure 3 and table 2). In 2013, the daily limit for Canada geese was increased from three to four and remained there for the 2015 hunting season. Thirteen percent of the groups returning a harvest card reported harvesting their limit of Canada geese.

On average, hunting groups were moderately satisfied with their hunting experience (2.19; SE 0.083). Hunting groups' average satisfaction rating in 2015 was statistically similar to ratings from 2003 to 2011, 2013 and 2014 (figure 4). Most (81%) of the groups were satisfied with their hunting experiences, with 47 percent being *very satisfied*; only 1 percent were dissatisfied and the remaining 18 percent were neutral (table 3). Percent satisfied, as reported by the group leader, has been relatively high since 2003 (figure 5).

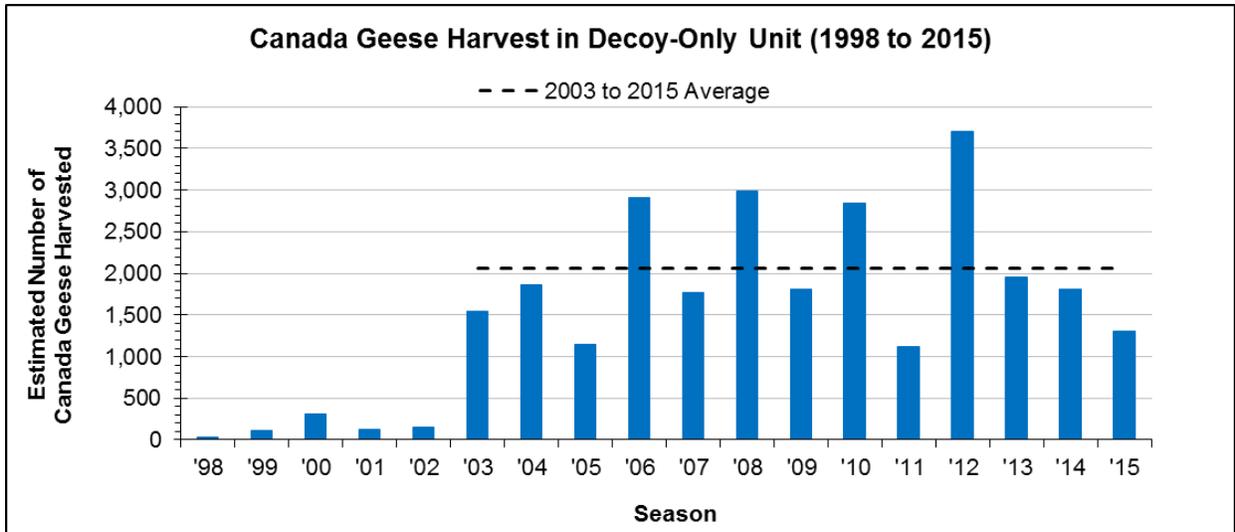


Figure 2: Estimated Canada geese harvest (1998 to 2015)

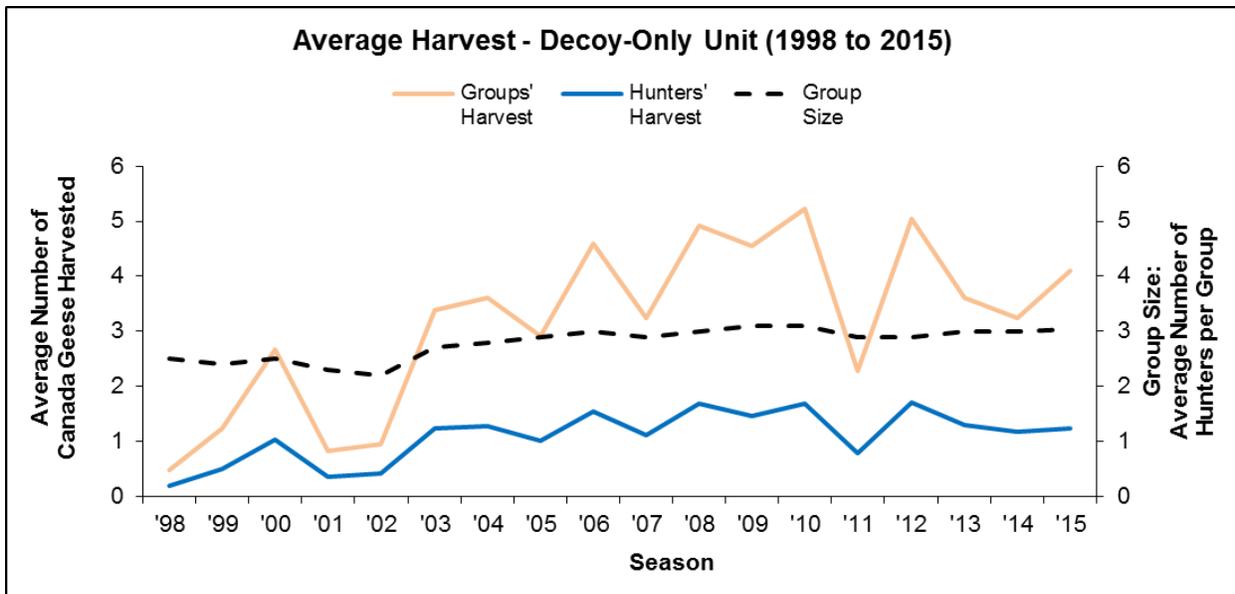


Figure 3: Average Canada geese harvest (1998 to 2015)

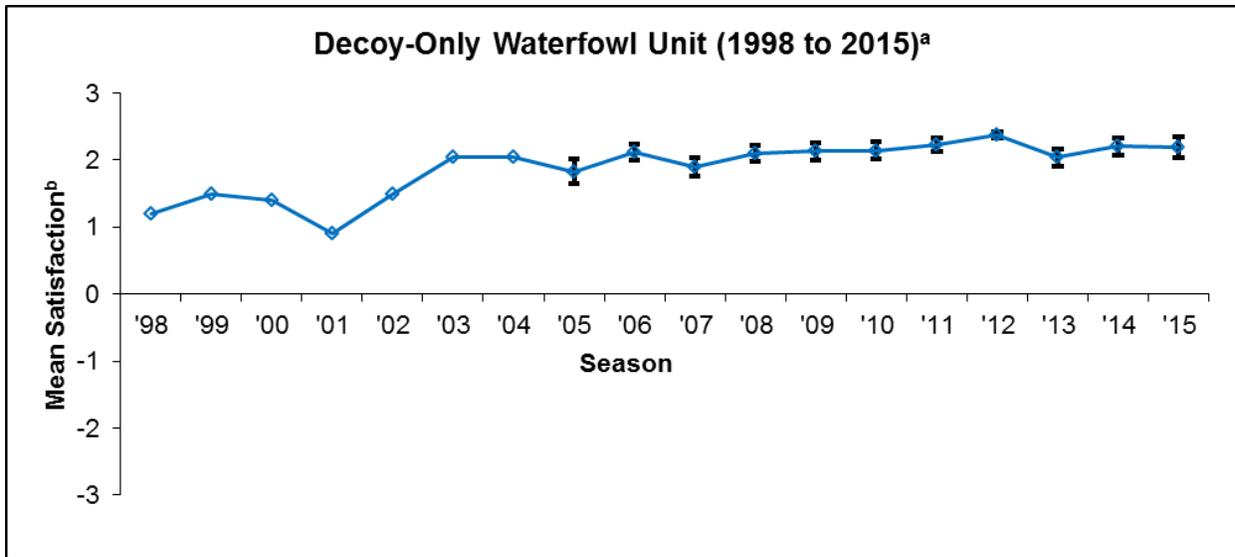


Figure 4: Mean satisfaction of hunters - decoy-only waterfowl unit
^a Error bars represent 95% confidence levels. ^b Scale: -3 Very Dissatisfied; -2 Moderately Dissatisfied; -1 Slightly Dissatisfied; 0 Neutral; 1 Slightly Satisfied; 2 Moderately Satisfied; 3 Very Satisfied

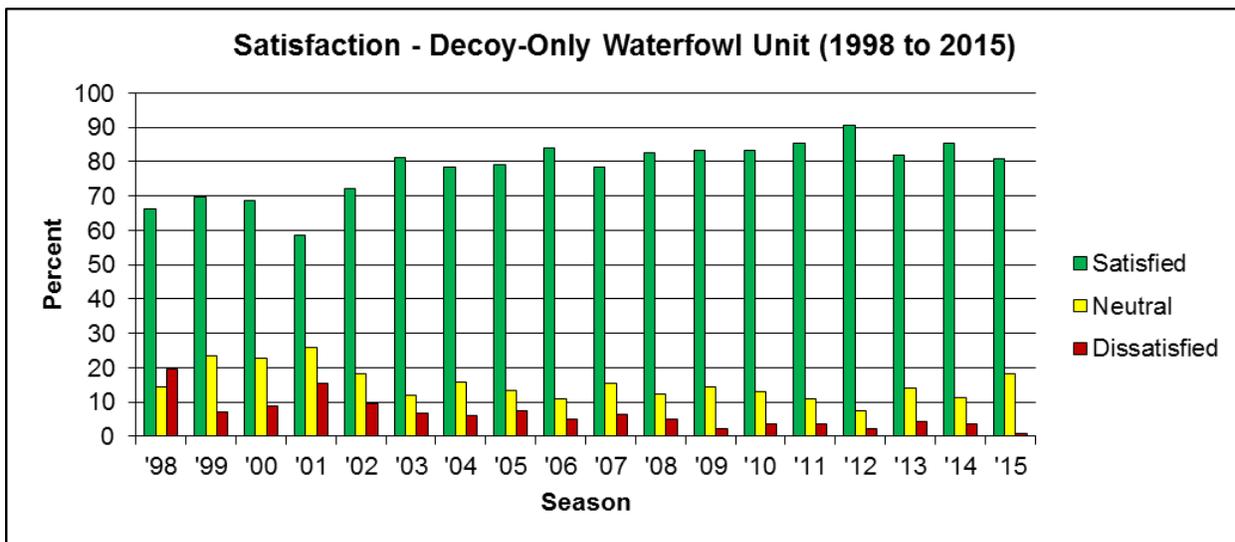


Figure 5: Hunter satisfaction - decoy-only waterfowl unit

Field Use

Twenty-two of the available 40 fields were hunted in 2015. Field 28 (figure 6) received the highest use (18%) followed by fields 38 and 87 (10%), fields 69 and 16 (8%), and fields 50 and 82 (7%) (table 4). The highest reported total harvest (geese and ducks) were in fields 69 (143 geese and ducks), 28 (113 geese and ducks), 46 (102 geese and ducks), and 50 (101

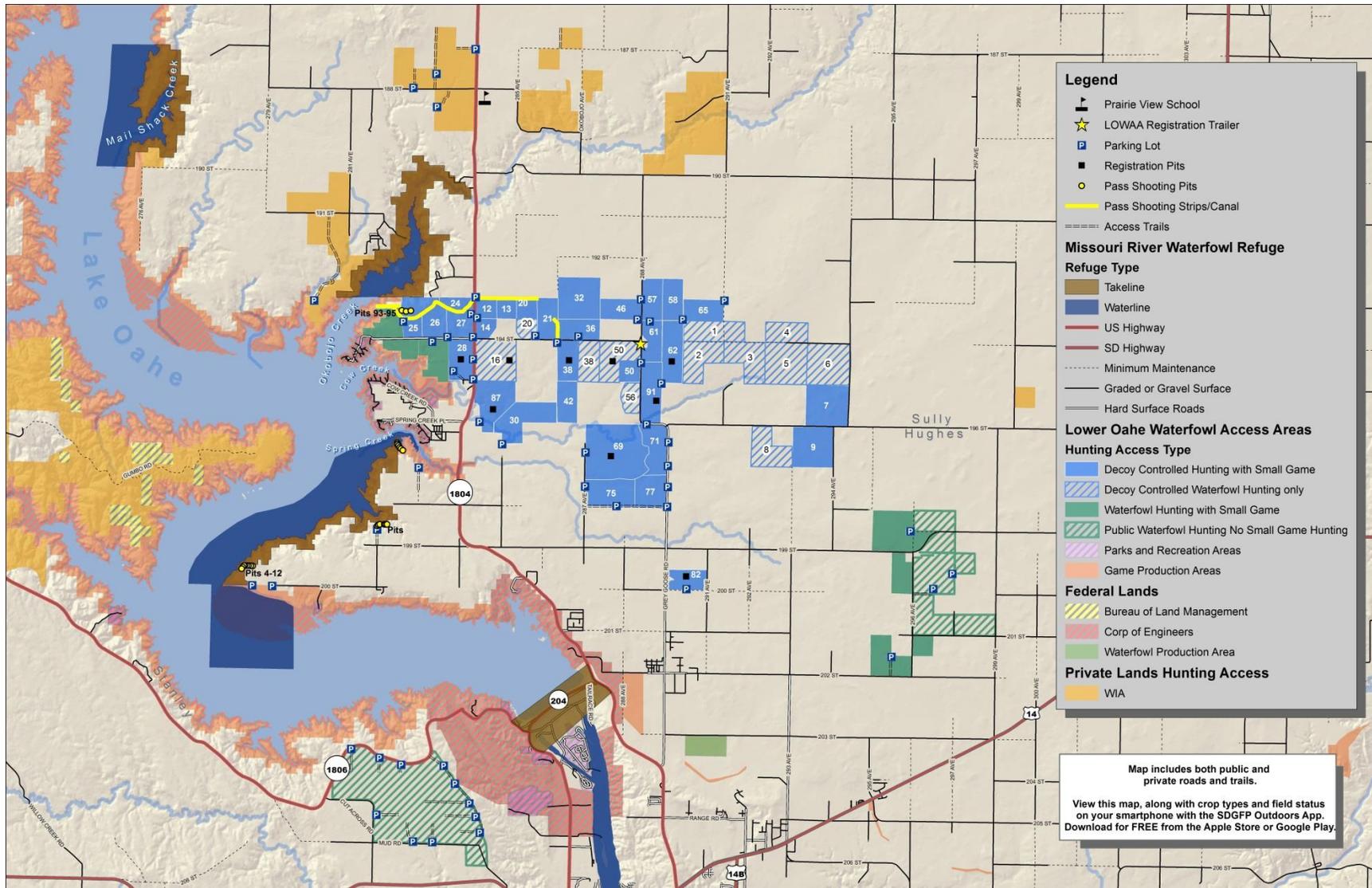


Figure 6: Lower Oahe waterfowl access area field map ^a

^a South Dakota 2015 Hunting Atlas: Including Lower Oahe Waterfowl Access Area. South Dakota Game, Fish and Parks: Pierre, SD.

geese and ducks) accounting for over half (52%) of the total reported harvest. Groups reported harvesting zero geese or ducks in five fields: fields 8 (3 groups; 7 hunters), 24 (1 group; 4 hunters), 36 (7 groups; 20 hunters), 71 (4 groups; 9 hunters), and 77 (4 groups; 9 hunters). In the case of fields 8 and 24 all of the registered groups returned their harvest report card, 43 percent of the registered groups in field 36, 75 percent of registered groups in field 71, and 71 percent of the registered groups in field 77 returned their harvest report cards.

Satisfaction and Harvest

Hunter satisfaction was significantly related to harvest success (figure 7; table 5). Despite not harvesting any geese or ducks, two-thirds (66%) of unsuccessful hunting groups reported they were satisfied with their experience (figure 8). The level of satisfaction significantly increased with harvest success; however, caution should be exercised in interpreting this statistic, as the sample size of dissatisfied hunting groups, regardless of success harvest success (n=4) was small. Hunting groups who reported being satisfied with their experience harvested approximately 4 more geese or ducks, on average, than groups reporting being neutral or dissatisfied.

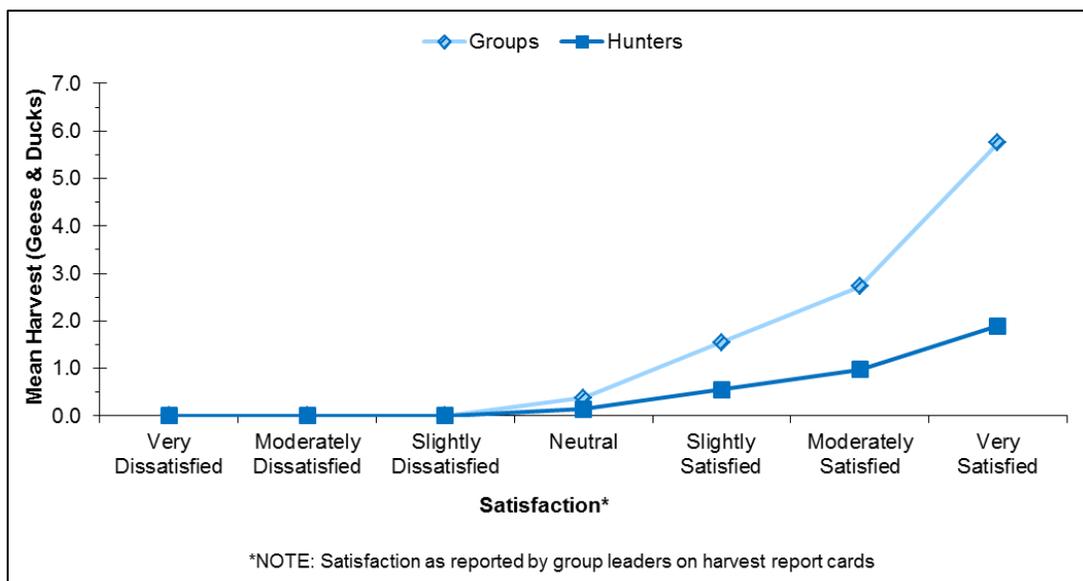


Figure 7: Mean total harvest (geese and ducks) and hunter satisfaction, 2015

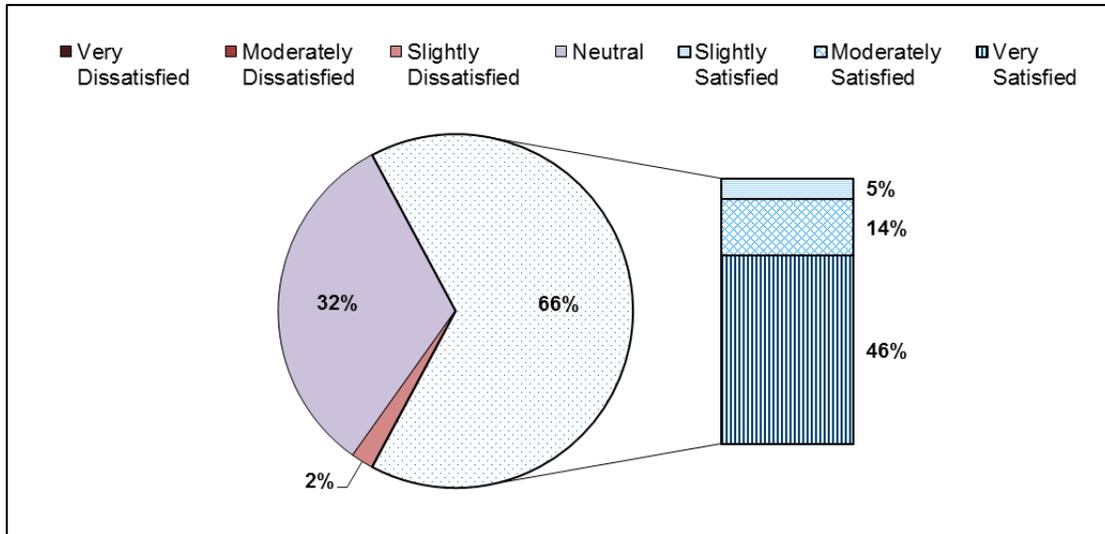


Figure 8: Percent of unsuccessful hunting groups (n=99) by satisfaction level, 2015

Use Trends

The decoy-only waterfowl unit was open for 104 days during the 2015 season, 34 percent of which were weekends or holidays. Saturdays had the highest frequency of registered hunting groups (27%), followed by Sundays (19%), and Fridays with 13 percent (figure 9). Mondays and Wednesdays had the fewest registered hunting groups (8%). The operation of the decoy-only waterfowl unit was divided into 7 approximately equal lengths time periods (table 7). In 2015, use was relatively slow during November accounting for 3 percent of registered hunting groups. Eighteen percent hunted in December, and over half (58%) of registered groups hunted in January, and 21 percent of groups hunted in February. The highest total harvest rates (geese and ducks) occurred during late January (01/16 to 01/31) with 5.6 per group. Nearly half (49%) of the reported harvest occurred during this time period. The vast majority (89%) of the reported harvest of geese and ducks occurred in January and February.

Use, harvest, and hunter satisfaction with the decoy-only unit is likely a good measure of these parameters for the entire Lower Oahe Waterfowl Hunting Access Area. The target satisfaction is 80 percent or more satisfied groups or less than 10 percent dissatisfied groups. The year (2015) 81 percent of groups were satisfied and 1 percent were dissatisfied.

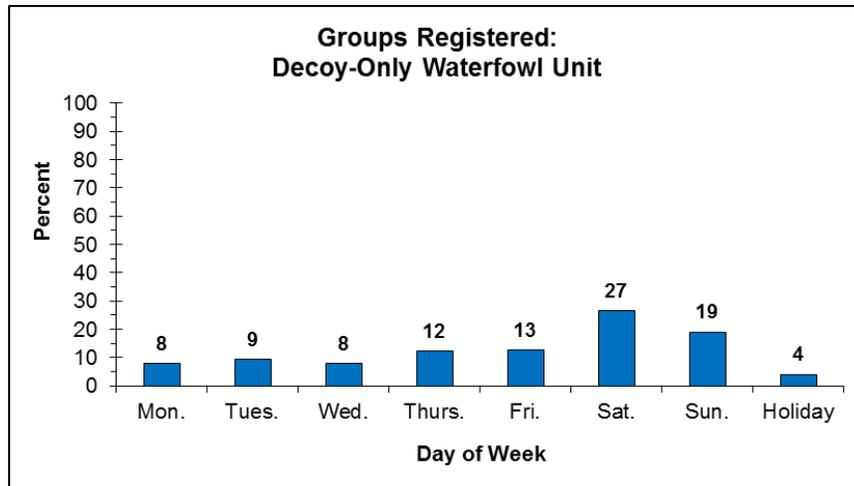


Figure 9: Frequency of groups hunting by days of week, 2015

Groups leaders were asked to indicate their place of residence when registering (table 8). Hunting groups indicating residence in Pierre and Fort Pierre were considered to be local hunters in this analysis. The majority of hunting groups (64%) indicated a non-local residence, of which 3 groups were from out of state. Hunting license numbers for each hunter in a group were used to identify unique hunters and their place of residence. Figures 10 and 11 show the number of unique hunters travelling to the decoy-only waterfowl unit from their respective hometowns.

In 2013 South Dakota Game, Fish and Parks, along with several sponsors³, purchased an enclosed trailer and contents, which consisted of five dozen full body decoys, two dozen shell decoys, four layout blinds, two goose flags, a goose call, and hearing and eye protection (figure 12). Hunters can reserve this trailer by signing up through the Lower Oahe Waterfowl Hunting page on the GFP website. Another trailer was added in 2014, making two trailers (white and black) available for use. The black trailer was reserved for use 47 percent of the total available days, and the white trailer was reserved for 44 percent of the days (figure 13). Across the entire season the loaner trailers were used for about 38 percent of the available days.

³ Sponsors who helped with this project include: HuntSAFE, TIPS, DOA Decoys, Big Foot Decoys, Cabela's, Banded, Delta Waterfowl-Fowled Up Chapter, Pheasants Forever, Runnings, and M&R Signs.

January and February saw the highest use, and November the lowest rate of use with 3 percent of days.

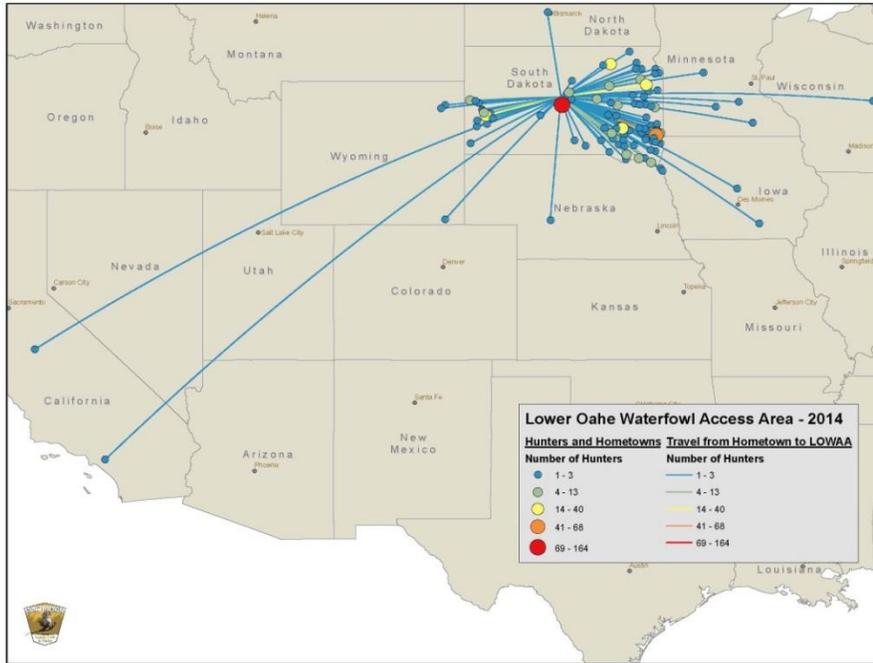


Figure 10: LOWAA hunters' hometowns, 2015

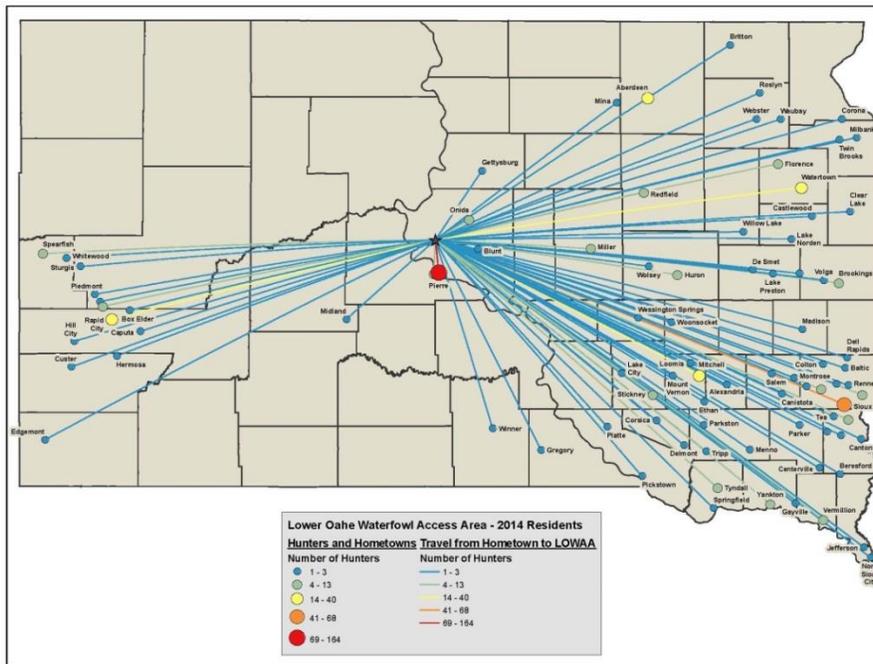


Figure 11: SD Resident LOWAA hunters' hometowns, 2015



Figure 12: Decoy loaner trailer

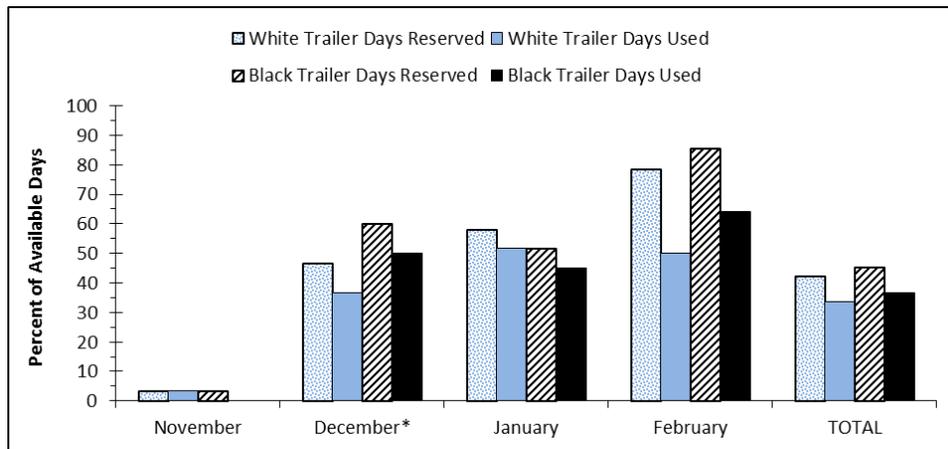


Figure 13: Decoy loaner trailers use - percent of available days by month

*Closed December 25, 2013

Tables

Table 1: Use of the decoy-only waterfowl hunting unit by party size (1998 to 2015)

Party Size	1998		1999		2000		2001		2002	
	Number	Percent								
1	6	10.0	16	18.2	12	10.0	22	15.0	39	23.9
2	30	50.0	32	36.4	48	40.0	69	46.9	63	38.7
3	12	20.0	30	34.1	43	35.8	41	27.9	45	27.6
4	12	20.0	10	11.4	17	14.2	15	10.2	16	9.8
Total	60	100	88	100	120	100	147	100	163	100
Total Hunters	150		210		305		343		364	

Table 1 – continued: Use of the decoy-only waterfowl hunting unit by party size (1998 to 2015)

Party Size	2003 ^a		2004		2005		2006		2007	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	69	15.1	70	13.5	49	12.5	67	10.5	73	13.4
2	172	37.7	188	36.4	139	35.6	202	31.8	183	33.6
3	101	22.2	118	22.8	89	22.8	165	25.9	132	24.2
4	64	14.0	76	14.7	60	15.3	115	18.1	79	14.5
5	28	6.1	34	6.6	36	9.2	54	8.5	44	8.1
6	22	4.8	31	6.0	18	4.6	33	5.2	34	6.2
Total	456	100	517	100%	391	100	636	100	545	100
Total Hunters	1,244		1,460		1,122		1,894		1,575	

a. The maximum number of hunters per group was increased from 4 to 6 in 2003.

Table 1 continued on next page.

Table1 – continued: Use of the decoy-only waterfowl hunting unit by party size (1998 to 2015)

Party Size	2008		2009		2010		2011		2012	
	Number	Percent								
1	65	10.7	43	10.8	67	12.3	84	17.0	102	13.9
2	203	33.4	125	31.5	162	29.7	154	31.2	246	33.4
3	137	22.5	80	20.2	116	21.3	105	21.3	138	18.8
4	102	16.8	77	19.4	101	18.5	63	12.8	132	17.9
5	63	10.4	44	11.1	52	9.5	53	10.8	75	10.2
6	38	6.3	28	7.0	47	8.6	34	6.9	43	5.8
Total	608	100	397	100	545	100	493	100	736	100
Total Hunters	1,833		1,229		1,685		1,428		2,169	

Table1 – continued: Use of the decoy-only waterfowl hunting unit by party size (1998 to 2015)

Party Size	2013		2014		2015	
	Number	Percent	Number	Percent	Number	Percent
1	83	15.3	93	16.7	33	10.3
2	154	28.3	170	30.5	107	33.4
3	109	20.0	143	25.6	72	22.5
4	95	17.5	68	12.2	54	16.9
5	72	13.2	47	8.4	30	9.4
6	31	5.7	37	6.6	24	7.5
Total	544	100	558	100	320	100
Total Hunters	1,644		1,591		973	

Table 2: Harvest by hunters using the decoy-only waterfowl hunting unit (1998 to 2015)

Party Harvest	Canada Goose Harvest ^a														
	1998 (95%) ^b			1999 (98%) ^b			2000 (98%) ^b			2001 (92%) ^b			2002 (92%) ^b		
	#	%	Total	#	%	Total	#	%	Total	#	%	Total	#	%	Total
0	45	78.9	0	56	65.1	0	51	44.0	0	93	68.9	0	95	63.3	0
1	2	3.5	2	6	7.0	6	12	10.3	12	15	11.1	15	22	14.7	22
2	6	10.5	12	5	5.8	10	7	6.0	14	10	7.4	20	11	7.3	22
3	3	5.3	9	8	9.3	24	8	6.9	24	5	3.7	15	10	6.7	30
4	1	1.8	4	1	1.2	4	6	5.2	24	4	3.0	16	3	2.0	9
5	0	0.0	0	3	3.5	15	5	4.3	25	3	2.2	15	3	2.0	15
6	0	0.0	0	6	7.0	36	10	8.6	60	5	3.7	30	4	2.7	24
7	0	0.0	0	0	0.0	0	4	3.4	28	0	0.0	0	0	0.0	0
8	0	0.0	0	0	0.0	0	2	1.7	16	0	0.0	0	1	0.7	8
9	0	0.0	0	0	0.0	0	8	6.9	72	0	0.0	0	1	0.7	9
10	0	0.0	0	0	0.0	0	1	0.9	10	0	0.0	0	0	0.0	0
11	0	0.0	0	1	1.2	11	0	0.0	0	0	0.0	0	0	0.0	0
12	0	0.0	0	0	0.0	0	2	1.7	24	0	0.0	0	0	0.0	0
Total	57	100.0	27	86	100.0	106	116	100.0	309	135	100.0	111	150	100.0	142
Estimated Total Harvest			28			108			315			121			154
Avg. Geese/Party			0.47			1.23			2.66			0.82			0.95
Avg. Geese/Hunter			0.19			0.51			1.03			0.35			0.42
Other Harvest (estimated)															
White-fronted geese			0			1			0			1			2
Light geese			1			3			1			0			3
Ducks			2			33			2			2			1

a. Hunters reported no wounding loss in 1998, while wounding 14 geese and 3 ducks in 1999, 25 geese in 2000, 6 geese in 2001, and 11 geese in 2002.

b. Percent return of harvest survey cards.

Table 2 continued on next page

Table 2 – continued: Harvest by hunters using decoy-only waterfowl hunting unit (1998 to 2015)

Party Harvest	Canada Goose Harvest ^a														
	2003 (90%) ^b			2004 (86.5%) ^b			2005 (77.5%) ^b			2006 (84.7%) ^b			2007 (80.4%) ^b		
	#	%	Total	#	%	Total	#	%	Total	#	%	Total	#	%	Total
0	125	30.5	0	158	35.3	0	129	42.6	0	131	24.3	0	171	39.0	0
1	48	11.7	48	48	10.7	48	33	10.9	33	42	7.8	42	42	9.6	42
2	42	10.2	84	32	7.2	64	28	9.2	56	58	10.8	116	40	9.1	80
3	50	12.2	150	36	8.1	108	25	8.3	75	47	8.7	141	35	8.0	105
4	19	4.6	76	16	3.6	64	10	3.3	40	28	5.2	112	17	3.9	68
5	18	4.4	90	20	4.5	100	11	3.6	55	19	3.5	95	23	5.3	115
6	47	11.5	282	53	11.9	318	19	6.3	114	66	12.3	396	36	8.2	216
7	8	2.0	56	9	2.0	63	8	2.6	56	14	2.6	98	9	2.1	63
8	6	1.5	48	7	1.6	56	3	1.0	24	11	2.0	88	9	2.1	72
9	16	3.9	144	25	5.6	225	10	3.3	90	52	9.7	468	21	4.8	189
10	3	0.7	30	4	0.9	40	2	0.7	20	4	0.7	40	6	1.4	60
11 to 12	14	3.4	167	22	4.9	261	18	5.9	212	41	7.6	484	13	3.0	152
13 to 14	3	0.7	40	3	0.7	40	1	0.3	13	4	0.7	56	1	0.2	14
15 to 16	8	2.0	122	8	1.8	120	4	1.3	60	15	2.8	227	9	2.1	136
17 to 18	3	0.7	53	6	1.3	107	2	0.7	36	6	1.1	107	6	1.4	108
Total	410	100.0	1,390	447	100.0	1,614	303	100.0	884	538	100.0	2,470	438	100.0	1,420
Estimated Total Harves			1,546			1,865			1,141			2,916			1,766
Avg. Geese/Party			3.39			3.61			2.92			4.59			3.24
Avg. Geese/Hunter			1.24			1.28			1.02			1.54			1.12
Other Harvest (estimated)															
White-fronted geese			12			1			2			6			0
Light geese			24			1			0			36			0
Ducks			12			0			22			77			4

a. Hunters reported wounding 71 geese in 2003, and 19 geese and 1 duck in 2004; however, wounding loss was not measured after January 18, 2005.

b. Percent return of harvest survey cards.

Table 2 continued on next page

Table 2 – continued: harvest by hunters using the decoy-only waterfowl hunting unit (1998 to 2015)

Party Harvest	Canada Goose Harvest ^a																				
	2008 (81.6%) ^b			2009(76.6%) ^b			2010 (71.4%) ^b			2011 (70.5%) ^b			2012 (82%) ^b			2013 ^c (73%) ^b			2014 (72%) ^b		
	#	%	Total	#	%	Total	#	%	Total	#	%	Total	#	%	Total	#	%	Total	#	%	Total
0	86	17.3	0	74	24.3	0	84	21.6	0	144	41.5	0	120	20.0	0	143	35.8	0	174	43.5	0
1	35	7.1	35	26	8.6	26	22	5.7	22	45	13.0	45	49	8.2	49	53	13.3	53	38	9.5	38
2	34	6.9	68	26	8.6	52	34	8.7	68	45	13.0	90	55	9.2	110	36	9.0	72	37	9.3	74
3	77	15.5	231	35	11.5	105	40	10.3	120	33	9.5	99	76	12.5	228	25	6.3	75	21	5.3	63
4	29	5.8	116	13	4.3	52	24	6.2	96	18	5.2	72	17	2.8	68	39	9.8	156	36	9.0	144
5	21	4.2	105	10	3.3	50	27	6.9	135	13	3.7	65	27	4.5	135	12	3.0	60	11	2.8	55
6	84	16.9	504	43	14.1	258	53	13.6	318	18	5.2	108	82	13.6	492	9	2.3	54	15	3.8	90
7	14	2.8	98	7	2.3	49	1	0.3	7	5	1.4	35	10	1.7	70	9	2.3	63	3	0.7	21
8	12	2.4	96	4	1.3	32	8	2.1	64	3	0.9	24	14	2.3	112	22	5.5	176	21	5.3	168
9	45	9.1	405	26	8.6	234	29	7.5	261	9	2.6	81	52	8.7	468	6	1.5	54	1	0.3	9
10	6	1.2	60	5	1.6	50	5	1.3	50	6	1.7	60	8	1.3	80	6	1.5	60	5	1.3	50
11 to 12	32	6.5	381	17	5.6	201	31	8.0	369	3	0.9	35	52	8.7	617	19	4.8	223	18	4.5	211
13 to 14	0	0.0	0	2	0.7	27	2	0.5	28	1	0.3	14	7	1.1	93	2	0.5	28	5	1.3	66
15 to 16	12	2.4	180	13	4.3	196	9	2.3	135	2	1.6	30	24	4.0	362	6	1.5	96	3	0.7	47
17 to 18	9	1.8	162	3	1.0	54	20	5.1	360	2	0.6	36	8	1.4	143	3	0.8	52	1	0.3	18
19 to 20																6	1.5	120	6	1.5	120
21 to 22																0	0.0	0	0	0.0	0
23 to 24																4	1.0	96	5	1.3	120
Total	496	100	2,441	304	100	1,386	389	100	2,033	347	100	794	601	100	3,027	400	100	1,438	400	100	1,294
Estimated Total Harvest	2,991			1,809			2,847			1,129			3,707			1,958			1,808		
Avg. Geese/Group	4.92			4.56			5.23			2.29			5.04			3.6			3.24		
Avg. Geese/Hunter	1.63			1.47			1.69			0.79			1.71			1.3			1.18		
Other Harvest (estimated)																					
White-fronted geese	0			0			1			0			0			0			0		
Light geese	7			0			2			0			2			0			22		
Ducks	45			49			66			10			61			34			184		

a. Hunters reported wounding 71 geese in 2003, and 19 geese and 1 duck in 2004; however, wounding loss was not measured after January 18, 2005.

b. Percent return of harvest survey cards.

c. In 2013 the daily limit for Canada geese increased to 4.

Table 2 – continued: harvest by hunters using the decoy-only waterfowl hunting unit (1998 to 2015)

Party Harvest	Canada Goose Harvest ^a		
	2015 (67%) ^b		
	#	%	Total
0	100	46.5	0
1	11	5.1	11
2	14	6.5	28
3	14	6.5	42
4	11	5.1	44
5	4	1.9	20
6	8	3.7	48
7	1	0.5	7
8	10	4.7	80
9	6	2.8	54
10	5	2.3	50
11 to 12	11	5.1	129
13 to 14	3	1.4	39
15 to 16	6	2.8	95
17 to 18	0	0.0	0
19 to 20	5	2.3	97
21 to 22	1	0.5	21
23 to 24	5	2.3	120
Total	215	100	885
Estimated Total Harvest			1,318
Avg. Geese/Group			4.12
Avg. Geese/Hunter			1.24
Other Harvest (estimate)			
White-fronted geese			0
Light geese			0
Ducks			6

a. Hunters reported wounding 71 geese in 2003, and 19 geese and 1 duck in 2004; however, wounding loss was not measured after January 18, 2005.

b. Percent return of harvest survey cards.

c. In 2013 the daily limit for Canada geese increased to 4.

Table 3: Satisfaction with hunting at the decoy-only waterfowl unit (1998 to 2015)^a

Satisfaction	1998		1999		2000		2001		2002		2003		2004		2005	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Very Satisfied	20	35.7	25	29.1	42	36.5	33	24.4	53	35.8	218	53.2	251	56.3	153	52.8
Moderately Satisfied	6	10.7	24	27.9	21	18.3	22	16.3	29	19.6	82	20.0	60	13.5	41	14.1
Slightly Satisfied	11	19.6	11	12.8	16	13.9	24	17.8	25	16.9	33	8.0	38	8.5	35	12.1
Neutral	8	14.3	20	23.3	26	22.6	35	25.9	27	18.2	49	12.0	70	15.7	39	13.4
Slightly Dissatisfied	7	12.5	4	4.7	4	3.5	9	6.7	10	6.8	15	3.7	17	3.8	9	3.1
Moderately Dissatisfied	3	5.4	1	1.2	4	3.5	5	3.7	1	0.7	8	2.0	7	1.6	4	1.4
Very Dissatisfied	1	1.8	1	1.2	2	1.7	7	5.2	3	2.0	5	1.2	3	0.7	9	3.1
Total	56	100	86	100	115	100	153	100	148	100	410	100	446	100	290	100
Mean ^b	1.2		1.5		1.4		0.9		1.5		2.04		2.05		1.83	1.65-2.02

SUMMARIZED RESULTS

Satisfied	37	66.1	60	69.8	79	68.7	79	58.5	107	72.3	333	81.2	349	78.3	229	79.0
Neutral	8	14.3	20	23.3	26	22.6	35	25.9	27	18.2	49	12.0	70	15.7	39	13.4
Dissatisfied	11	19.6	6	7.0	10	8.7	21	15.6	14	9.5	28	6.8	27	6.1	22	7.6

Satisfaction	2006		2007		2008		2009		2010		2011		2012	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Very Satisfied	317	58.9	228	52.1	298	60.1	179	58.9	241	62.0	231	66.6	422	70.2
Moderately Satisfied	91	16.9	82	18.7	78	15.7	46	15.1	48	12.3	38	11.0	74	12.3
Slightly Satisfied	36	6.7	33	7.5	34	6.9	28	9.2	35	9.0	27	7.8	48	8.0
Neutral	57	10.6	67	15.3	61	12.3	44	14.5	51	13.1	38	11.0	44	7.3
Slightly Dissatisfied	11	2.1	15	3.4	12	2.4	6	2.0	6	1.5	6	1.7	4	0.7
Moderately Dissatisfied	10	1.9	6	1.4	4	0.8	1	0.3	7	1.8	6	1.7	2	0.3
Very Dissatisfied	6	1.1	7	1.6	9	1.8	0	0.0	1	0.3	1	0.3	7	1.2
Total	528	100	438	100	496	100	304	100	389	100	347	100	601	100
Mean ^b	2.12	2.00-2.02	1.9	1.76-2.04	2.09	1.97-2.21	2.13	2.00-2.27	2.14	2.01-2.27	2.2	2.10-2.37	2.38	2.29-2.47

SUMMARIZED RESULTS

Satisfied	444	84.1	343	78.3	410	82.7	253	83.2	324	83.3	296	85.3	544	90.5
Neutral	57	10.8	67	15.3	61	12.3	44	14.5	51	13.1	38	11.0	44	7.3
Dissatisfied	27	5.1	28	6.4	25	5.0	7	2.3	14	3.6	13	3.7	13	2.2

NOTE: Statistic in shaded boxes represents the 95% confidence interval for the mean satisfaction score.

a. Satisfaction level as measured by the hunt group leader

b. Scale: -3 Very Dissatisfied; -2 Moderately Dissatisfied; -1 Slightly Dissatisfied; 0 Neutral; 1 Slightly Satisfied; 2 Moderately Satisfied; 3 Very Satisfied

Table 3 continued on next page

Table 3 – continued: Satisfaction with hunting at the decoy-only waterfowl unit (1998 to 2015)^a

Satisfaction	2013		2014		2015	
	#	%	#	%	#	%
Very Satisfied	221	55.3	247	62.8	136	63.6
Moderately Satisfied	71	17.8	57	14.5	26	12.1
Slightly Satisfied	35	8.8	31	7.9	11	5.1
Neutral	56	14.0	44	11.2	39	18.2
Slightly Dissatisfied	10	2.5	7	1.8	2	0.9
Moderately Dissatisfied	5	1.3	6	1.5	0	0.0
Very Dissatisfied	2	0.5	1	0.3	0	0.0
Total	400	100	393 ^c	100	214 ^c	100
Mean ^b	2.04	1.91-2.17	2.20	2.08-2.33	2.19	2.03-2.35
SUMMARIZED RESULTS						
Satisfied	327	81.8	335	85.2	173	80.8
Neutral	56	14.0	44	11.2	39	18.2
Dissatisfied	17	4.3	14	3.6	2	0.9

NOTE: Statistic in shaded boxes represents the 95% confidence interval for the mean satisfaction score.

a. Satisfaction level as measured by the hunt group leader

b. Scale: -3 Very Dissatisfied; -2 Moderately Dissatisfied; -1 Slightly Dissatisfied; 0 Neutral; 1 Slightly Satisfied; 2 Moderately Satisfied; 3 Very Satisfied

c. Not all of the returned harvest cards answered the satisfaction question

Table 4: Field hunted and total harvest (geese & ducks), 2015

Field Number ^a	Times Hunted	% Use	Cards Returned	Reported Harvest	Harvest Percent
8	3	0.9	3	0	0.0
16	24	7.5	14	36	4.1
20	5	1.6	2	48	5.4
21	13	4.1	4	12	1.4
24	1	0.3	1	0	0.0
26	4	1.3	2	4	0.5
28	58	18.1	44	113	12.8
30	10	3.1	9	53	6.0
32	5	1.6	1	8	0.9
36	7	2.2	4	0	0.0
38	31	9.7	20	47	5.3
42	11	3.4	6	54	6.1
46	12	3.8	12	102	11.5
50	21	6.6	17	101	11.4
62	10	3.1	9	9	1.0
69	25	7.8	17	143	16.2
71	4	1.3	1	0	0.0
75	9	2.8	4	40	4.5
77	7	2.2	2	0	0.0
82	21	6.6	14	30	3.4
87	31	9.7	25	80	9.0
91	8	2.5	4	5	0.6
Total^b	320	100	215	885	100

^a See figure 6 or the 2015 Lower Oahe Waterfowl Hunting Access Guide for maps of field locations

^b the total (includes geese and ducks) is based on the returned harvest report cards, not the estimated harvest

Table 5: Hunting group mean total harvest (geese & ducks) by satisfaction, 2015

Satisfaction	Mean Harvest	95% C.I.	Total Harvested	Unsuccessful
Very Satisfied	5.75	4.62, 6.88	782	33.8%
Moderately Satisfied	2.73	1.17, 4.30	71	53.8%
Slightly Satisfied	1.55	0.29, 2.80	17	45.5%
Neutral	0.38	0.09, 0.68	15	82.1%
Slightly Dissatisfied	0.00	-	0	100%
Moderately Dissatisfied	-	-	-	-
Very Dissatisfied	-	-	-	-
Mean/Total	4.12	3.33, 4.91	885	46.5%

Table 6: Decoy-only waterfowl unit use by days of week, 2015

Day of Week	Groups		Total	
	#	%	#	%
Monday	25	7.8	14	13.5
Tuesday	30	9.4	15	14.4
Wednesday	26	8.1	14	13.5
Thursday	39	12.2	13	12.5
Friday	41	12.8	13	12.5
Saturday	85	26.6	15	14.4
Sunday	61	19.1	15	14.4
Holiday	13	4.1	5	4.8
Total	320	100	104	100
SUMMARIZED RESULTS				
Weekends & Holidays	159	49.7	35	33.7
Weekdays	161	50.3	69	66.3

* The first use day was November 20, 2015. The registration trailer operated through February 14, 2016 (closed December 25th).

Table 7: Reported use and harvest (geese & ducks) by time period, 2015

Time Period	Weekend & Holidays	Weekdays	Total	Groups		Harvest		Rate/Party
				#	Daily	#	Daily	
Nov. 02-16	5	10	15	-	-	-	-	-
Nov. 17-30	5	9	14	6	0.4	0	0.0	0.0
Dec. 01-15	4	11	15	9	0.6	5	0.3	0.6
Dec. 16-31	5	10	15	28	1.9	90	6.0	3.2
Jan. 01-15	5	10	15	50	3.3	165	11.0	3.3
Jan. 16-31	6	10	16	76	4.8	429	26.8	5.6
Feb. 01-15	5	9	14	46	3.3	196	14.0	4.3
Total/Avg.	35	69	104	215	2.1	885	8.5	4.1

Table 8: Group leaders' city/town of residence, 2015

City/Town	Number	City/Town	Number	City/Town	Number
Pierre	109				
Ft. Pierre	5				
Rapid City	41	Lake City	3	Out of State	3
Sioux Falls	30	Box Elder	2		
Mitchell	30	Caputa	2		
Watertown	9	Dell Rapids	2		
Black Hawk	8	Gayville	2		
Gregory	8	Harrisburg	2		
Brandon	7	Lennox	2	Total Local: 114 (36%)	
Aberdeen	6	Miller	2	Total Non-Local: 206 (64%)	
Crooks	6	Winner	2		
Arlington	5	Britton	1		
Huron	5	Highmore	1		
Parker	4	Irene	1		
Redfield	4	Madison	1		
Spearfish	4	Platte	1		
Brandt	3	Stickney	1		
Brookings	3	Tyndall	1		
Ethan	3	Valley Springs	1		