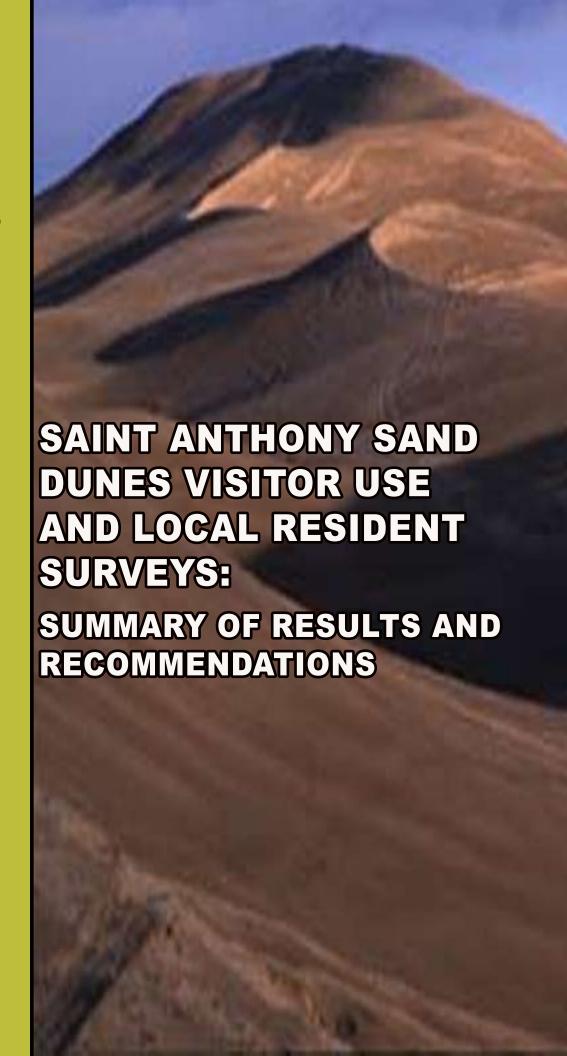
INSTITUTE FOR OUTDOOR RECREATION AND TOURISM

DEPARTMENT OF ENVIRONMENT AND SOCIETY

UTAH STATE UNIVERSITY

PROFESSIONAL REPORT IORT-PR-2006-2



SAINT ANTHONY SAND DUNES VISITOR USE SURVEY: SUMMARY REPORT AND RECOMMENDATIONS

NATHAN M. WAGONER

DALE J. BLAHNA

STEVEN W. BURR

DOUGLAS K. REITER

Utah State University

Department of Environment and Society
Institute for Outdoor Recreation and Tourism

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I. INTRODUCTION

The Saint Anthony Sand Dunes (SASD) offer a wide variety of recreation locations and opportunities in a relatively small area. The Dunes are located 10 miles west of St. Anthony, Idaho and 15 miles north of Rexburg, Idaho (Figure I-1). The SASD are part of a 21,000 acre Wilderness Study Area (WSA), which includes vital sage grouse habitat, as well as a Bureau of Land Management (BLM) Special Recreation Management Area (Figure I-2). These designations mean that the area is under special federal mandates to provide for both the needs of recreationists and on-site environmental conditions. A paradoxical situation arises because, while WSAs are by definition roadless areas, the Special Recreation Management Area designation also codifies the importance of the area to motorized recreationists. The Dunes are part of the larger Sands Ecosystem Management Area, which contains over 300,000 acres of BLM land in Eastern Idaho.

Geologically unique, the SASD have several attributes that make them extremely popular with recreationists. The nearly 11,000 acre quartz sand dunes formed after the prehistoric Mud Lake, located 40 miles west of the dunes current location, dried up, leaving only sand (Idaho Public Television, n.d.). At a rate of eight feet per year, the prevailing wind is gradually moving the dunes eastward. This movement means that the dunes are constantly changing, allowing even repeat visitors to feel as if they are discovering a new landscape. The huge variety of dunes, ranging from only a few feet in height to over 400 feet, attracts visitors of different skill levels and interests looking to test their abilities in their chosen recreation activity (Idaho Public Television, n.d.). Visitors are also able to find extremely different conditions by moving a few

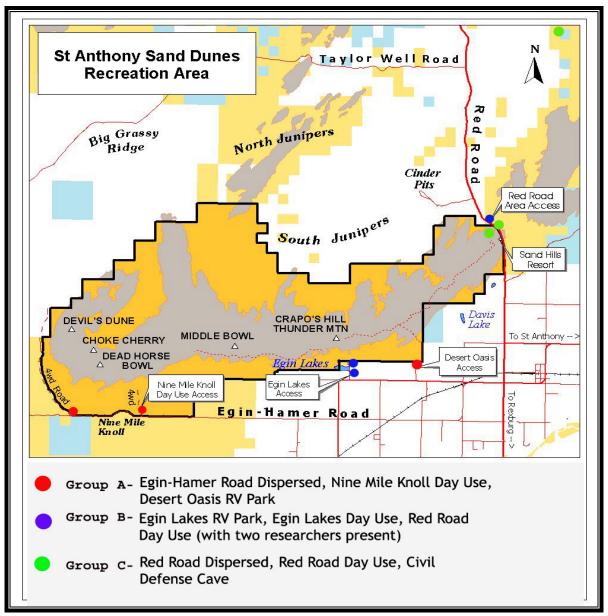


Figure I-1: Map showing the locations of sites in each of the three sampling groups (A, B and C)

miles. The western half of the dunes are predominantly made of larger dunes and sand bowls, while the eastern half of the dunes contains smaller dunes.

Visitation at the SASD has been increasing yearly. Approximately 100,000 visitors visited in 2003 (Bill Boggs, personal communication, 2004). Annual visitation increases by

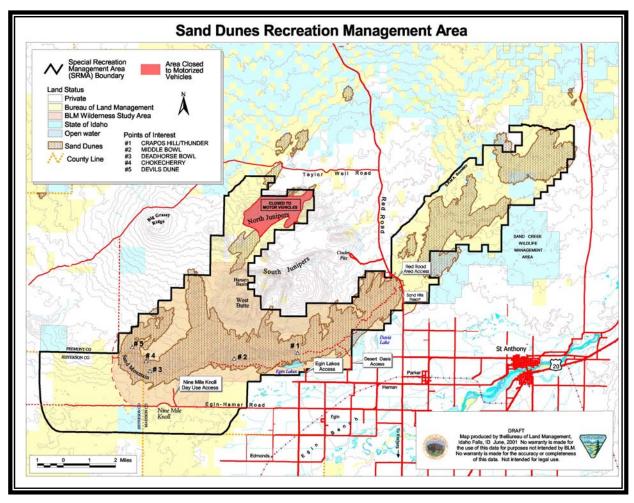


Figure 1-2: Map of Saint Anthony Sand Dunes Special Recreation Management Area

approximately seven to 10% each year. The largest growth in visitation comes from off-highway vehicle (OHV) users—primarily riders of all terrain vehicles (ATVs), motorbikes, and dune buggies. Eighty-seven percent of individuals listed riding an OHV as their primary activity at the SASD during the on-site interview portion of this research. Horseback riders, hikers, campers, bonfire enthusiasts, cavers, hunters, photographers, horn and rock hunters, and sledders and tubers make up the remainder of the area's visitors.

Study Purpose

Out of a desire to better understand recreation and recreationists in the area, the BLM, Idaho Falls Field Office asked the Institute for Outdoor Recreation and Tourism (IORT) at Utah State University to conduct a study of visitors to the SASD. Information that the BLM requested included: user preferences, use patterns, willingness to pay for use/facilities, visitor satisfaction, and perceived crowding/carrying capacity information. IORT was informed that this information would be used to draft new management plans and to make decisions regarding future on-site management actions. This paper presents findings related to this information. Implications for future management and research needs are also discussed. Additional detail on research methods and results related to crowding, conflicts, and OHV group characteristics and behavior may be found in Wagoner (2006).

Survey Instruments

Two surveys were conducted as part of this research: a visitor intercept interview and a visitor mail survey. Both survey instruments were reviewed and approved through the human subjects review process of the Utah State University Institutional Review Board.

Intercept surveys occurred in two different forms: an overnight survey and a day use/local resident survey. Both of the intercept surveys asked questions about respondents' recreation activities, expected/encountered conditions, trip characteristics, routes traveled (via a "mapping exercise" that graphically represented areas visited), group characteristics, perceived conflict, perceived crowding, and personal demographics (see Appendix A for intercept survey instruments). Overnight surveys differed from day use surveys in that they asked about crowding and expected-encountered conditions at camping areas/RV parks and contained questions about

length of stay and camping/hotel locations. Depending on the number of different locations a respondent had visited and the level of detail in the description he/she chose to give, the intercept surveys took anywhere from 10-35 minutes to complete.

On-site surveys were collected between July 4th, 2004 and January 7th, 2005. Sampling days were selected to ensure a relatively even sampling of both weekdays and weekends. Sampling periods covered mornings, afternoons, and evenings. Since the study focus was on summer OHV use, a higher portion of summer and early fall days were selected and the results under-represent winter visitors.

The visitor mail survey contained detailed questions about different aspects of the area's management. Questions in this survey asked respondents to rate the quality of a variety of management services and answer questions about use fees, expenses they accrued during their trips, and the extent to which they achieved a number of recreation goals (see Appendix B for the complete mail survey instrument).

Names and addresses used for the mail survey were acquired from willing intercept survey participants (see subsection *Sample Population and Sampling Locations* below for sampling methodology). A three wave sampling design—a modified version of the Dillman (2000) mail survey system—was used for the mail survey. Individuals who indicated their willingness to participate were sent a survey three to four weeks after their initial contact. If the individual did not return a survey after two weeks, a reminder postcard was sent. If this post card failed to elicit the return of a completed survey, a final mail survey was sent two weeks later.

Sample Population and Sampling Locations

The intercept and mail surveys were intended to capture a random, representative sample of visitors to BLM-managed areas in and around the SASD recreation area. The survey was

administered to visitors at least 18 years of age and capable of understanding either a spoken or written version of the survey instrument. Only one visitor per group was asked to complete both the intercept and mail survey. Researchers requested that the first individual they encounter as they approached a group who was eligible to complete the survey do so. In this way, respondents were randomly selected.

Because of the relatively compact nature and restricted access points associated with the SASD, the majority of recreationists could be sampled by covering eight locations (Figure I-1). Survey locations included three day use parking areas, two developed overnight camping/RV areas, two short stretches of dune-abutting road with dispersed undeveloped camping/RVing and dune access, and one high-use lava tube cave. Table I-1 lists the number of surveys collected at each of the eight sampling locations. A ninth location, The Sand Hills Resort RV Park, was originally included in the sampling schedule; however, the private owner of this sampling site revoked permission to access the site. On sampling days that would have included this site, one of two highly used day use locations (Egin Day Use and Egin-Hamer Road) was sampled in alternation in its place.

The original nine sampling locations were divided into three sampling groups (A, B, and C), with each group representing a full day of surveying (see Figure I-1for a graphical representation of the sampling locations). Two of the three sampling locations in each sampling group were placed together due to their proximity to one another. By having these sites so close, a single researcher was able to cover both locations with little chance of missing recreationists. To limit the possibility of missing a visitor who had not yet returned from recreating as a researcher moved between sites, self-addressed and stamped postcards were left under the windshields of unsurveyed vehicles explaining the project and asking the visitor to provide their

Table I-1: Number	of each type	of intercept survey	administered b	v sampling location

Location	Day Use	Overnight	Decline	Site Response	Percent of Total
				Rates	Contacts
Desert Oasis	1	136	5	96.5%	22.2%
Egin Over Night	4	93	7	93.3%	16.3%
Egin Day Use	150	26	15	92.1%	29.9%
Egin-Hamer Road	20	1	5	81.0%	4.1%
Red Road Disp	49	43	9	91.1%	15.8%
Red Road Day Use	41	3	6	88.0%	7.8%
Civil Defense Cave	20	2	0	100.0%	3.4%
Taylor-Well Road	1	0	0	100.0%	0.2%
White Sands	1	0	0	100.0%	0.2%
Road		U	U	100.070	0.270
Sub-Totals	288	304	47		
Totals	Accepted 9	2.6% ¹	Declined 7.4	1%	

¹One intercept survey was completed but no location was marked, this survey has been omitted from the figures presented in this table.

address for a mail survey. If the researcher returned before the recreationist, the postcard was removed.

Response Rates

Tables I-1 and I-2 show the response rates for both the intercept and mail surveys, broken down by survey location and type (day use or overnight). Most surveys were administered at four of the nine sampling sites—Egin Day Use, Desert Oasis, Egin Overnight, and Red Road Dispersed. This reflects the highly concentrated use at SASD rather than over-sampling at these locations. The overall response rate for the intercept survey (92.6%; n=592) was better than had been expected based on previous IORT motorized recreation studies (Reiter, Blahna, & Von Koch, 1998; Vilter, Blahna, & Potter, 1996; McCoy, Fujisaki, & Keith, 2001). However, the response rate for the mail survey was lower than expected (46.0%; n=162). The two locations

Table 1-2: Agreement to receive mail survey and response rate by sampling location

Location ¹	Agreed to Mail	Completed	Percentage
	Survey	Mail Surveys	Returned
Desert Oasis	87	39	44.8%
Egin Over Night	59	31	52.5%
Egin Day Use	96	46	47.9%
Egin-Hamer Road	15	8	53.3%
Red Road Disp	62	23	37.1%
Red Road Day Use	19	9	47.4%
Civil Defense Cave	12	5	41.7%
Taylor-Well Road	1	0	0.0%
White Sands Road	1	1	100.0%
Totals	352	162 ¹	46.0%

Four mail surveys were returned with identification numbers removed, making it impossible to determine location.

with the lowest mail response rate (Civil Defense Cave and Red Road Dispersed Recreation Area) were also the locations with the highest number of non-motorized recreationists, indicating that this group may potentially be underrepresented in the mail survey data.

A. DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS

SASD visitors were predominantly male (79.5%) (Figure A-1). Table A-1 lists the age of survey respondents as compared to the general U.S. Population (U.S. Census Bureau, n.d.). Over half of all SASD visitors surveyed were between 25 and 44 years old, with a mean age of 36. Unlike the U.S. population as a whole, very few SASD respondents were 55 years or older (<10% for SASD versus >20% of the U.S. population), indicating the area is less popular with older individuals. As Figure A-2 illustrates, the places respondents grew up varied widely. The most frequent response categories for SASD respondents' childhood residences were small cities of 25,000-100,000 people (22.6%), rural areas (22.0%), and small towns of less than 5,000 people

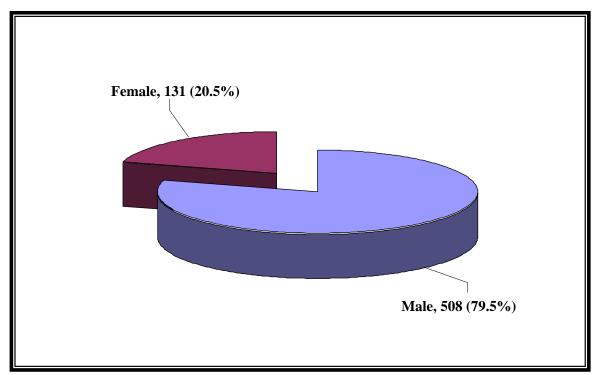


Figure A-1: Gender of respondents (n=639)

Table A-1: Age of intercept survey respondents versus the U.S. population

	Frequency	Percent of Respondents	Percent of U.S. Population from 2000 Census
< 20	30	5.1%	28.6%1
20-24	93	15.9%	6.7%
25-34	148	25.3%	14.2%
35-44	165	28.3%	16.0%
45-54	92	15.8%	13.4%
55-59	23	3.9%	4.8%
60-64	20	3.4%	3.8%
65-74	11	1.9%	6.5%
74-84	1	0.2%	4.4%
85 and over	1	0.2%	1.5%

¹Unlike this survey, which was restricted to those 18 and over, census data includes all individuals 20 and under in the US population.

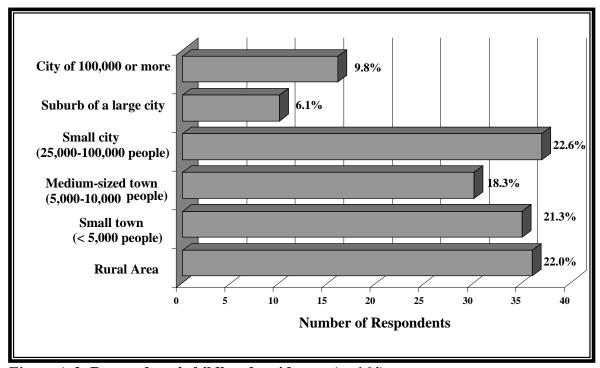


Figure A-2: Respondents' childhood residences (n=164)

Table A-2 contains the states of residence for intercept survey respondents. Almost 80% of visitors came from three adjacent states located within several hours drive of SASD: Idaho (40.5%), Utah (28.7%), and Montana (9.4%). Moreover, 95% of respondents came from 10 western states and Canadian provinces. This suggests that SASD was mostly a local or regional

Table A-2: State of residence for intercept survey respondents (n=588)

Table A-2: State of residence for	Frequency	Percent
Idaho	238	40.5
Utah	169	28.7
Montana	55	9.4
California	21	3.6
Wyoming	20	3.4
Colorado	16	2.7
Washington	16	2.7
Alberta, Canada	10	1.7
Nevada	7	1.2
Arizona	6	1.0
Oregon	5	0.9
Saskatchewan, Canada	3	0.5
Texas	3	0.5
Nebraska	2	0.3
Wisconsin	2	0.3
Kansas	2	0.3
Arkansas	1	0.2
Minnesota	1	0.2
Tennessee	1	0.2
Florida	1	0.2
Virginia	1	0.2
Connecticut	1	0.2
Michigan	1	0.2
New York	1	0.2
Ohio	1	0.2
Indiana	1	0.2
Pennsylvania	1	0.2
North Carolina	1	0.2
Belgium	1	0.2

recreation destination, unlike nearby National Parks such as Yellowstone or Grand Teton.

Survey respondents tended to be well educated with high household incomes. Over three fourths of those respondents at least 25 years old reported they had at least some college and 40% had at least an associate or technical degree (Figure A-3). As can be seen in Figure A-4,

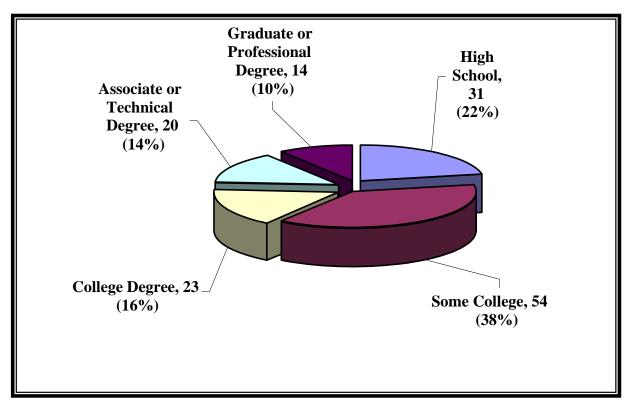


Figure A-3: Respondents' (at least 25 years old) highest level of education (n= 163)

over half of respondents 25 and over (59.7%) made \$60,000 or more, and the most common income category was household incomes of \$100,000 or more.

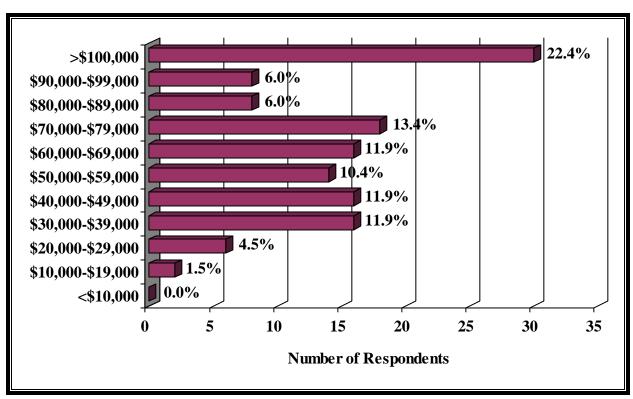


Figure A-4: Respondents' (at least 25 years old) household incomes (n=134)

B. RECREATION EXPERIENCE

Respondents took part in a variety of activities during their visits to the SASD (Table B-1), though OHV riding was by far the most common category of activities. Sixty-seven percent (n=394) of those who visited the dunes rode ATVs during their trip, making it the most popular activity. Motorcycle (38.2%, n=224) and dune-buggy/dune rail (20.7%, n=122) riding were also widely participated in motorized activities. Two other motorized activities, four-wheeling (7.3%, n=43) and snowmobiling (1.2%, n=7), were much less common; perhaps this was because the dunes are not open to street legal vehicles, preventing four-wheeling, and because sampling during the winter of 2004-2005 was limited, thus under-sampling snowmobilers. Recreational vehicle (RV) camping and tent camping were also very common activities (participated in by 30.2% and 13.8% of respondents, respectively). Non-motorized activities such as photography and painting (8.0%), picnics and family reunions (7.0%), hiking (4.6%), caving (4.4%), wildlife watching (2.9%), and horseback riding (2.5%) were participated in by less than 10% of respondents. A handful of other activities listed in Table B-1 were reported by between one and three respondents.

Over three-fourths of visitors' primary reason for visiting Saint Anthony Sand Dunes was either ATV (47.3%), motorcycle (18.1%), or dune buggy/dune rail riding (10.8%). Other activities were listed as the primary reason for visitation by less than three percent of visitors (Table B-2). Of these infrequently mentioned activities, playing on the dunes (2.9%), general OHVing (2.7%), caving (2.6%), horseback riding (2.0%), and hiking (1.7%) were the most common. The preponderance of OHV-centric trips supports the notion that SASD is overwhelmingly a motorized recreation destination.

Table B-1: Activities visitors engaged in during their trip to the SASD (n=592)

	Frequency Participation	Percent Participation
ATV Riding	394	66.9%
Motorcycling or dirt biking	224	38.0%
RV Camping	178	30.2%
Dune Buggy/Dune Rail Riding	122	20.7%
Tent Camping	81	13.8%
Photography or Painting	47	8.0%
4-Wheeling	43	7.3%
Picnic/family reunion/party	41	7.0%
Hiking	27	4.6%
Caving	26	4.4%
Wildlife Watching	17	2.9%
Horseback riding	15	2.5%
Snowmobiling	7	1.2%
Sandboarding	3	0.5%
Mountain Biking	3	0.5%
Antler/Rock/Wood Collecting	2	0.3%
Fishing	1	0.2%
Other reason for visiting ¹	63	10.7%

Other activities included: walking dogs, enjoying dunes, drinking, visiting, spending money, relaxing, reading, getting away, fun, sunbathing, swimming, shooting, sightseeing, strolling, BBQ, driving model cars, looking for horseshoes, bee killing, college students, resting, and drinkers.

We asked respondents how often they participated in the primary activity they reported in Table B-2 during a typical year at any location (Figure B-1). A majority of those surveyed (62%) stated that they participated in their primary activity 20 or fewer times in a typical year, with 11-20 times being the modal response category. The other 38% of respondents described a rather high level of participation—21 or more trips per year—with 13.2% indicating they participated in their primary activity more than 40 times per year. Less than five percent of respondents were unable to report a number of times they participated in their activity per year. These respondents were allowed to make responses such as "every other weekend" or "all the time."

Respondents were asked to rate their level of skill in their primary activity. As can be seen in Figure B-2, most visitors rated themselves either *intermediate* (47%) or *expert* (32%). Very few visitors thought of themselves as *beginners* or *professionals* (6% and 15%, respectively).

Table B-2: Respondents' primary activity at SASD (n=586)

Tuble b-2. Respondents primary activity at SASD (n=380)				
	Frequency Primary Activity	Percent Primary Activity		
ATV Riding	277	47.3%		
Motorcycling/Dirt Biking	106	18.1%		
Dune Buggy/Dune Rail	63	10.8%		
Other Reasons ¹	35	6.0%		
Playing on Dunes (no OHV)	17	2.9%		
General OHVing	16	2.7%		
Caving	15	2.6%		
Horseback Riding	12	2.0%		
Hiking	10	1.7%		
RV Camping	9	1.5%		
Camping	9	1.5%		
4x4	5	0.9%		
Picnic/Family Reunion/Party	3	0.5%		
Hunting	3	0.5%		
Snowmobiling	3	0.5%		
Photography Painting	2	0.3%		
Sandboarding	1	0.2%		

Other activities included: walking dogs, enjoying dunes, drinking, visiting, spending money, relaxing, reading, getting away, fun, sunbathing, swimming, shooting, sightseeing, strolling, BBQ, driving model cars, looking for horseshoes, bee killing, college students, resting, and drinkers.

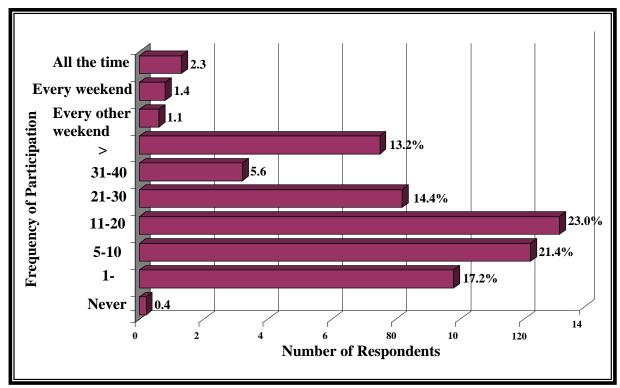


Figure B-1: Respondents frequency of participation in their primary activity at any location (n=569)

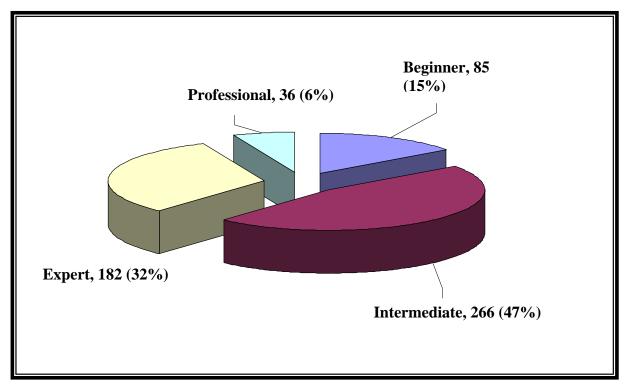


Figure B-2: Respondents self-rated level of skill in their primary activity (n=569)

We next rated the recreation activity difficulty levels of all areas of the SASD accessed by respondents, based primarily on the gradient and elevation of sand dunes (A map of these riding areas can be seen in Appendix E). Areas directly surrounding the Devil's Dune-Choke Cherry-Dead Horse Bowl area were considered *high difficulty*; the area west of Thunder Mountain to Dead Horse Bowl was rated *intermediate difficulty*; and the area from Thunder Mountain east to Red Road, as well as the dirt roads and dunes east and north of Red Road, were rated *low difficulty*. Over 50% of respondents visited the *high difficulty* areas, and nearly 80% visited a *high difficulty* and/or *intermediate difficulty* area (Figure B-3). Less than 20% of visitors confined themselves to the *low difficulty* dunes adjacent to Red Road, the trails and dirt roads surrounding the open dunes complex, and the campgrounds. The low percentage of self-described beginners, the high frequency of activity participation by SASD users (p. 15), and the fact that the majority of visitors used the highest difficulty areas imply that the area is more

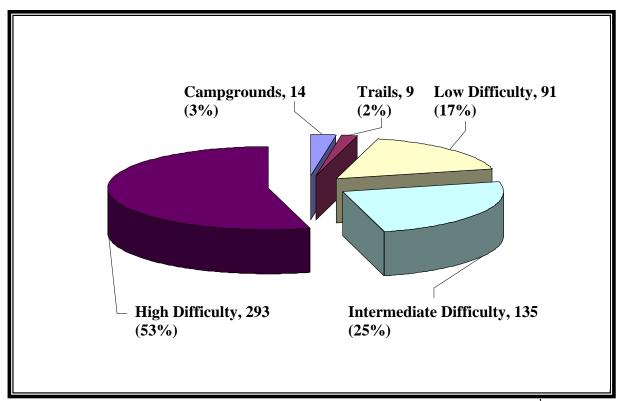


Figure B-3: Highest recreation challenge level of area of SASD visited (n=542)¹ Only reported for respondents surveyed when winter closure of High Difficulty and Trails areas was not in effect.

popular among more experienced individuals with a high level of commitment to their activity (primarily OHV use).

Group Characteristics

Respondents were asked a series of questions about the group of people they were traveling with. First, we asked how many people were in the visitor's group. Responses ranged from one to 60, with a mean group size of 7.35 people and a median of 5 (Figure B-4). The most common group sizes by far were two people (n=101), three people (n=79), and four people (n=74). Nearly one-fourth of respondents (23.1%; n=136) came in groups of ten people or more.

Next, we asked about the types of relationships shared by group members (Table B-3). Groups made of friends and family members were the most common (32.7%), followed by

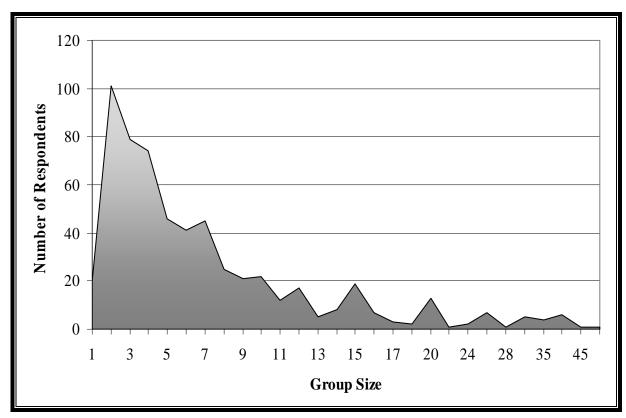


Figure B-4: Group size (n=588)

Table B-3: Primary group makeup (n=589)¹

	Frequency	Percentage
Family	175	29.7%
Friends	178	30.2%
Friends and Family	193	32.7%
Alone	19	3.2%
Couple	19	3.2%
Organized Group	9	1.5%
Other	3	0.5%

¹Respondents were allowed to include multiple categories of group makeup, although the categories of *Family*, *Friends*, and *Friends and Family* were mutually exclusive.

groups of friends (30.2%), and family groups (29.7%). Couples (3.2%), people visiting alone (3.2%), and organized groups (1.5%) were all infrequent relationship types.

Survey technicians also asked respondents about the type and number of OHVs their group had brought on their trip. Figure B-5 displays the total number of OHVs in respondents'

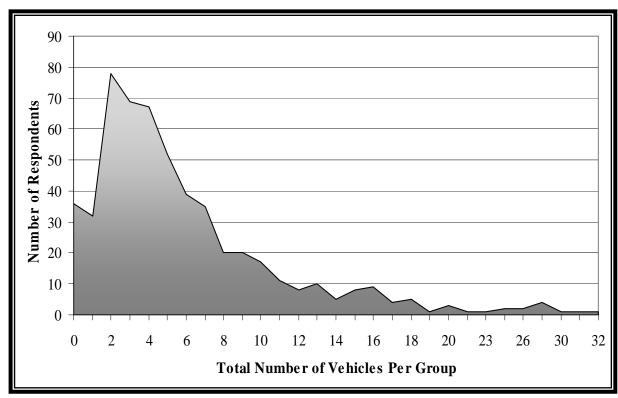


Figure B-5: Number of OHVs with groups at SASD (n=549)

groups. The median number of vehicles per group was four. The mean OHV to person ratio was 1.03 and the median/modal ratio was 1.00, indicating that, in general, groups who engaged in motorized recreation had one vehicle for each person in their group.

Figures B-6, B-7, and B-8 show that the number of vehicles in a group depended heavily upon the type of vehicle. The average number of ATVs groups brought to the dunes (mean 5.04, median 4) tended to be higher than other vehicle types such as motorcycles (mean 3.13, median 2), or dune buggies/dune rails (mean 3.05, median 2). This again underscores the current dominance of ATVs over other types of motorized recreation activities at the SASD.

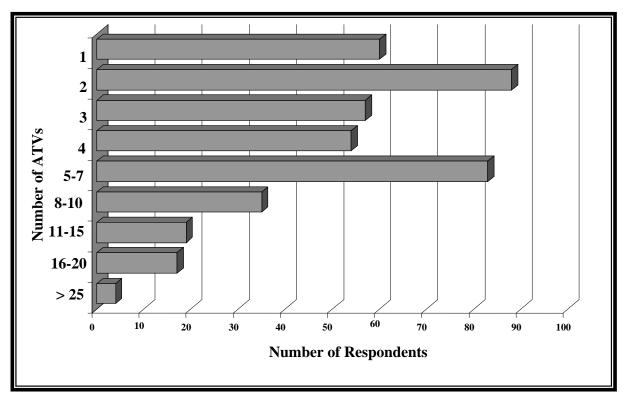


Figure B-6: Number of ATVs in groups using ATVs (n=417)

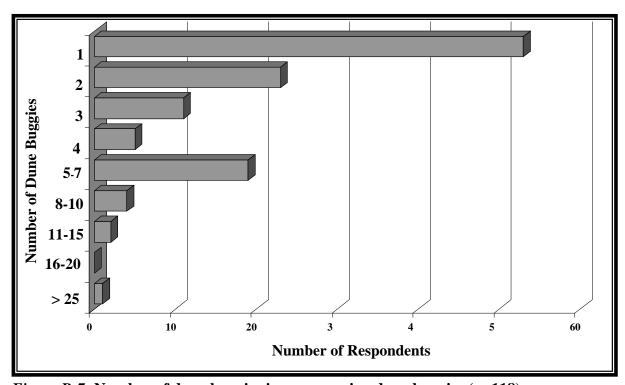


Figure B-7: Number of dune buggies in groups using dune buggies (n=118)

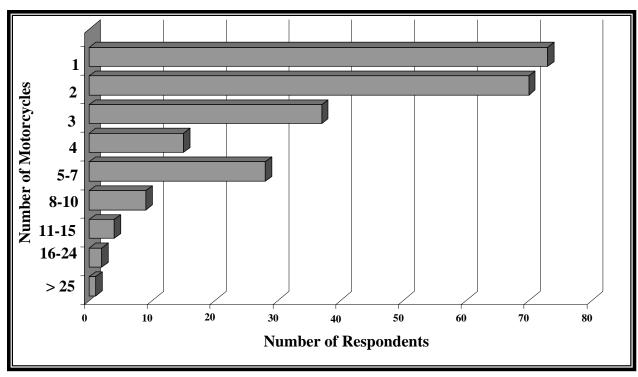


Figure B-8: Number of motorcycles in groups using motorcycles (n=239)

C. SASD TRIP EXPERIENCES

Only 25.8% of respondents (n=151) were first time visitors. The mean number of years since a respondent's first visit was 11.38 years, and the median was six (Figure C-1 gives an overview of these responses). While these numbers indicate many SASD visitors are "regulars" and have been visiting for a number of years, it is also important to note that the most common number of years since a respondent's first visit was between one and three, indicating an influx of many newer visitors. This reflects the increasing use levels managers have seen in recent years, the potential for changing social and recreational characteristics in the area, and possibly increasing conflict and perceptions of crowding as a result of the many new SASD visitors.

Three hundred and four respondents (51.4%) stated they had stayed overnight in the SASD area. The mean number of nights visitors stayed at the SASD was 3.96 and the median

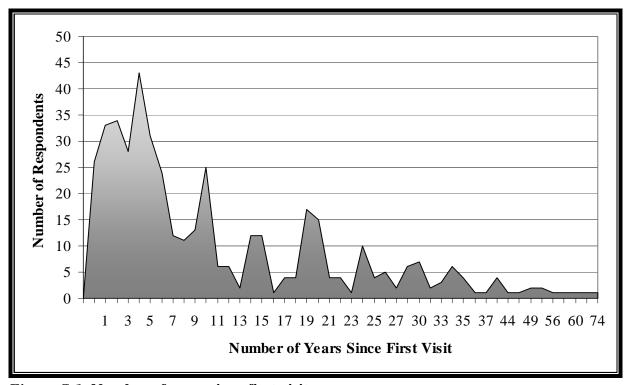


Figure C-1: Number of years since first visit

was three, showing that a relatively large number of overnight visitors appear to spend more than a weekend at the dunes (Figure C-2). Those visitors surveyed stayed at a number of different locations, though two locations, Desert Oasis RV resort (66.9%) and Egin Lakes BLM camping area (18.1%), were by far the most common (Table C-1). Two additional areas, the dispersed camping area along the Red Road (5.8%) and local hotels/motels (4.6%), were also mentioned with relative frequency. It should be noted that permission to sample at the third RV resort in the area, Sand Hills Resort, was denied. Large numbers of visitors used this resort as their base of operations while at the SASD, meaning data on overnight visitation may not provide a complete picture.

In addition to general questions about the SASD, we asked a series of questions about three specific types of areas: the open dunes complex west of Red Road, the trail and dirt road-

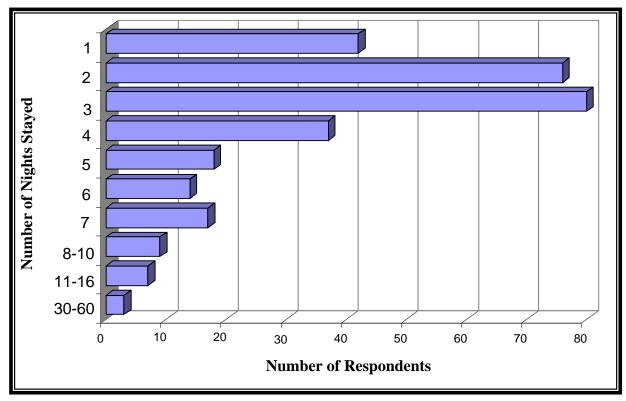


Figure C-2: Total number of nights overnight visitors stayed

Table C-1: Locations overnight respondents stayed (n=496)

	Frequency	Percentage of overnight visitors
Desert Oasis	332	66.9%
Egin Lakes (BLM)	90	18.1%
Dispersed Camping Red Road	29	5.8%
Hotel/Motel	23	4.6%
Local Resident	10	2.0%
Multiple Locations	5	1.0%
Dispersed Camping Egin- Hammer Road	3	0.6%
With Local Resident	3	0.6%
Other Dispersed Camping	1	0.2%

accessible areas surrounding the dunes (including the patchwork dunes east of Red Road), and the camping areas.

A large majority (90%) of respondents visited the open dunes during their visit to SASD (Figure C-3). We asked visitors to the open dunes how many times they had used the dunes

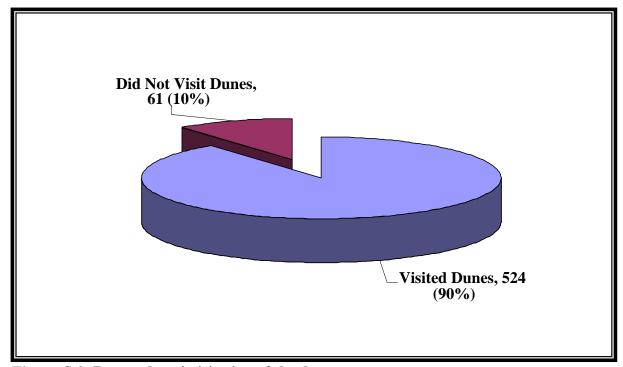


Figure C-3: Respondents' visitation of the dunes

during their trip (Figure C-4). The mean number of trips onto the dunes was 3.45 the median was 2.00, while the most common number of trips was one.

Next, we asked how many people other than those in their own group the respondent had seen while in the open dunes area (Figure C-5). The median number of other visitors seen was 30 and the mean number seen was 65.71 (due to the effects of outliers). When asked the how they felt about the number of people they had seen in the open dunes area, over 72% said the number was *about right*, 20% said there were *somewhat* or *far too few* people, and less than 8% said there were *somewhat* or *far too many* people (Figure C-6). To follow up this question, we asked if respondents felt there was a need to put a limit on the number of people using the open dunes areas (Figure C-7). A majority of respondents (68.6%) felt that there was *definitely no* reason to

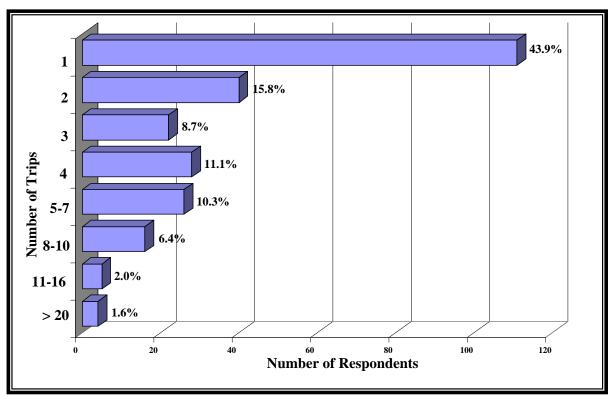


Figure C-4: Number of times during their trip respondents went out on the dunes (n=253)¹

¹One respondent indicated he/she had visited the Dunes, but stated he/she made no trips to dunes area.

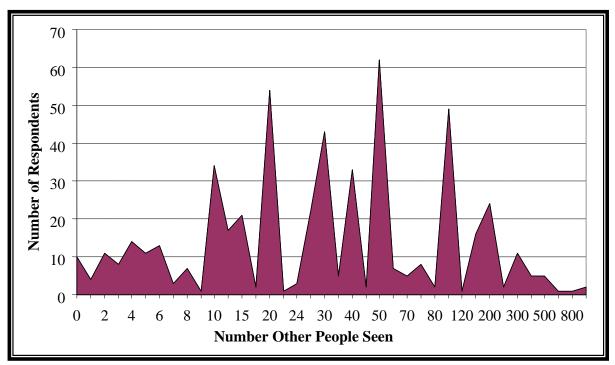


Figure C-5: Number of other people seen at the open dunes area (n=520)

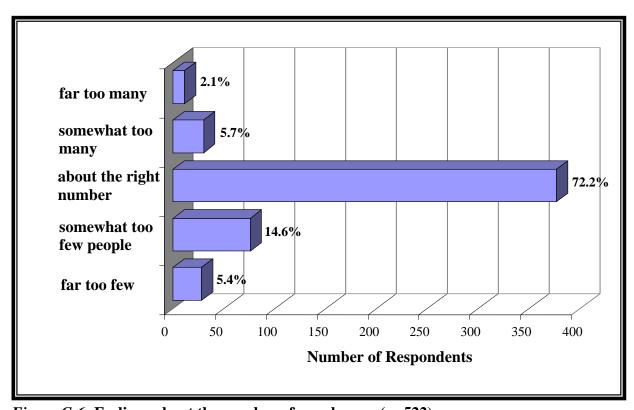


Figure C-6: Feelings about the number of people seen (n=522)

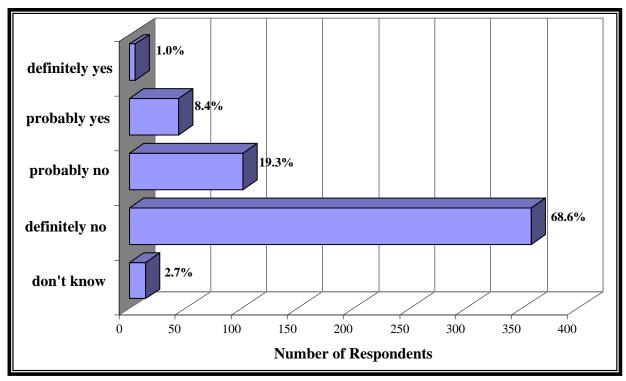


Figure C-7: Is there a need to put limits on the number of people using the dunes area? (n=522)

put limits on use, while an additional 19.3% felt there was *probably no* need to do so. Less than 10% stated there was *probably* or *definitely* a need to set use limits. The high perceived acceptability of the number of people visitors saw and the lack of support for use limits both suggest that crowding-related issues were not problems in the open dunes area during this survey.

Compared to the open dunes area, very few people (8%) visited the trails, dirt roads, or the patchwork dunes east of red road (Figure C-8). We asked respondents who visited these areas how many individual excursions they had made to these areas during the trip on which they were surveyed (Figure C-9). Over three-fourths of respondents reported only a single excursion, resulting in a mean of 1.42 trips.

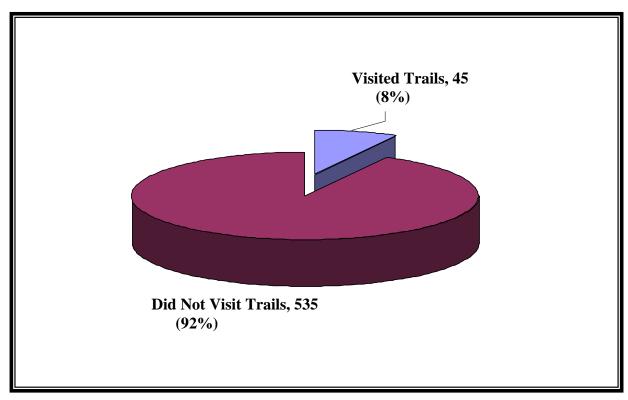


Figure C-8: Respondents' visitation of the trails, dirt roads, and smaller dunes outside the main dunes complex (n=580)

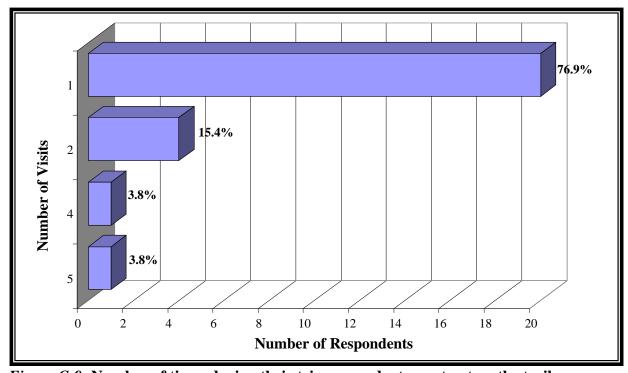


Figure C-9: Number of times during their trip respondents went out on the trails, dirt roads, and smaller dunes (n=26)

Next, we asked visitors who had used the trails and dirt roads to identify the number of people they had seen in these areas (Figure C-10). Most visitors saw very few other people (median=1, mean=1.42) and 45% of respondents saw no other people at all. As Figure C-11 shows, 78% felt that the number of people they saw was *about right*, and only 3 people (7.3%) felt there were *somewhat* or *far too many* other people. No visitors felt there was *probably* or *definitely* a need to place limits on the number of people. In fact, 82.9% of those surveyed said *definitely no* to any use limit (Figure C-12). The near absence of negative opinions about the number of people seen, coupled with the complete lack of visitor desire to impose use limits, suggest crowding on the trails, dirt roads, and smaller dune complexes was not an issue at the time of this survey.

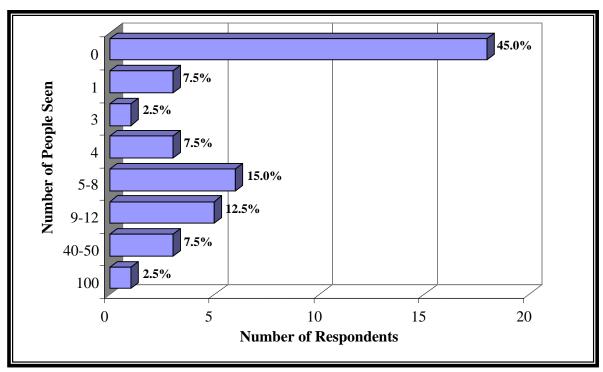


Figure C-10: Number of other people seen on the trails, dirt roads, and smaller dunes (n=40)

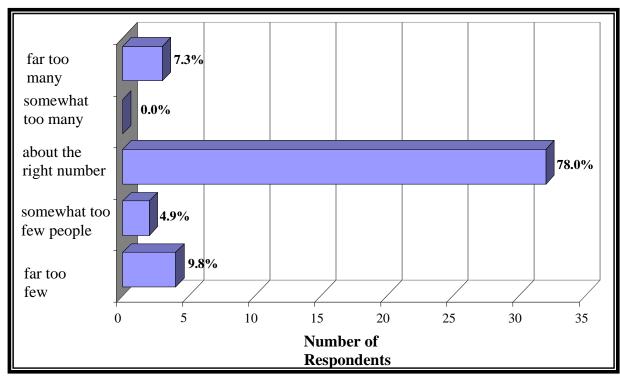


Figure C-11: Feelings about the number of people seen on the trails, dirt roads, and smaller dunes (n=41)

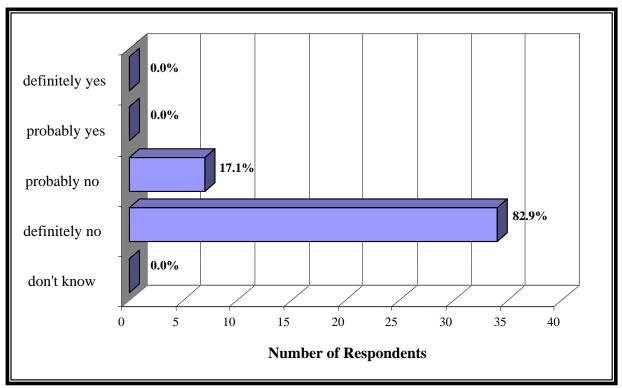


Figure C-12: Is there a need to put limits on the number of people using the trails, dirt roads, and smaller dunes? (n=41)

Of those respondents who stayed overnight in the SASD area, 83% (n=264) visited the camping areas and RV parks (Figure C-13). Questions concerning the number of people seen and use limits were only asked of visitors who used BLM administered camping or RV areas.

Respondents reported seeing large numbers of visitors at the camping and RV areas (Figure C-14). The mean number of people seen was 108, the median was 75. In spite of a significantly higher number of encounters in camping areas versus the open dunes and trails areas, 78.9% of those surveyed felt the number they saw was *about right* and 14.2% said they saw *somewhat* or *far too few* people. Less than 7% of visitors stated they saw *somewhat* or *far too many* people in the camping areas (Figure C-15). Additionally, a majority of visitors felt there was *definitely* (63.3%) or *probably* (23.1%) not a need to put use limits on the number of people at campgrounds and in camping areas, while 11.3% felt such limits would *probably* or

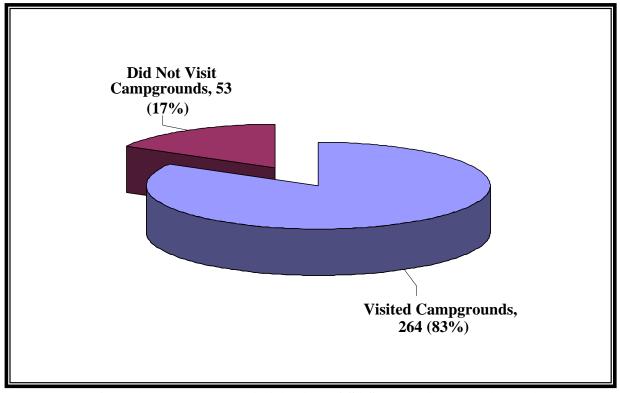


Figure C-13: Overnight respondents' visitation of SASD camping area (n=317)

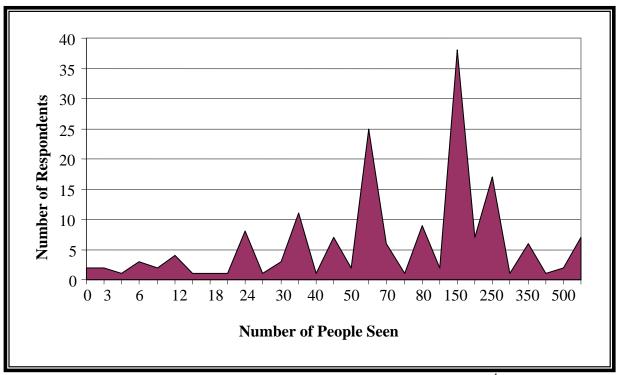


Figure C-14: Number of other people seen in the camping areas (n=172)¹

¹This question was only asked of those respondents who had used BLM managed camping areas.

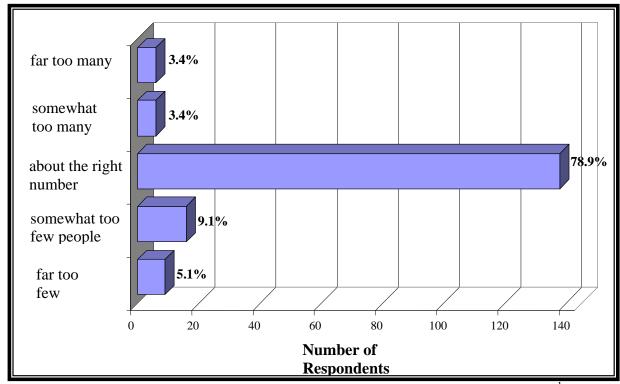


Figure C-15: Feelings about the number of people seen in camping areas (n=175)¹ This question was only asked of those respondents who had used BLM managed camping areas.

definitely be necessary (Figure C-16). Because few people stated the number of visitors was excessive or that use limits were needed, it appears that crowding was not an issue in camping areas at the time of this survey.

We asked respondents whether any recreationists participating in any of a list of activities or BLM or law enforcement personnel had interfered with their trip or made it worse in any way (Table C-2). Nearly all respondents who encountered any of the groups listed in Table C-2 stated that they *never* interfered with their trips. Only when asked about OHV groups did a sizable number of respondents say their trips were negatively impacted (*rarely* (12.0%) or *sometimes-continuously* (8.0%)). A small number of respondents (8.1%) also felt BLM and law enforcement personnel had in some way interfered with their trip, with still fewer respondents feeling other types of user groups interfered (4.0% for horseback riders, 3.8% for campers, and 2.5% for

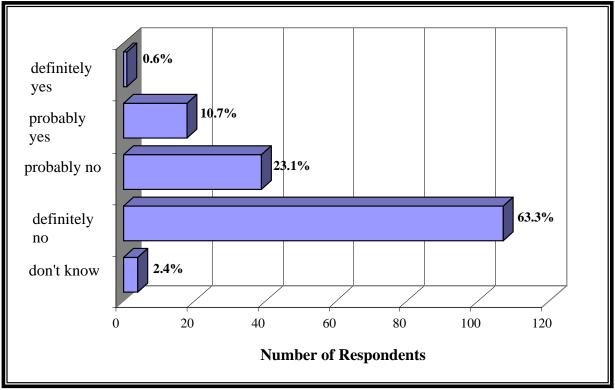


Figure C-16: Is there a need to put limits on the number of people using the camping areas (n=169)?

¹ This question was only asked of those respondents who had used BLM managed camping areas.

Table C-2: Did the following groups of people interfere with, or in any way make worse, your current trip to SASD? If so, how often? (n=573)

	OHVers ¹	Horseback Riders	Hikers, Dune Walkers, Backpackers, Cavers	Campers	BLM or Law Enforcement Personnel
never	452 (80.0%)	264 (96.0%)	266 (97.4%)	350 (96.2%)	346 (92.0%)
rarely	68 (12.0%)	8 (2.9%)	5 (1.8%)	6 (1.6%)	16 (4.3%)
sometimes	32 (5.7%)	3 (1.1%)	2 (0.7%)	6 (1.6%)	6 (1.6%)
often	8 (1.4%)	0	0	1 (0.3%)	4 (1.1%)
continuously	5 (0.9%)	0	0	1 (0.3%)	4 (1.1%)
did not encounter	13	298	300	209	197

OHVers category is out of 578 responses.

hikers, walkers, and cavers). On the mail survey, we also asked if other visitors had been rude or inconsiderate at any time during the respondent's visit. As can be seen in Figure C-17, less than one-quarter of those who responded to the mail survey reported that any other user was rude or

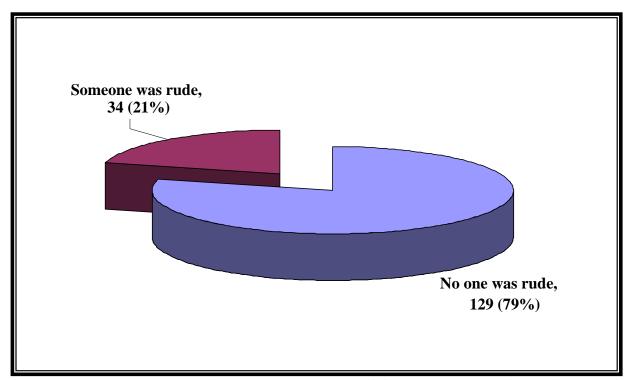


Figure C-17: Were there any instances where other visitors were rude or inconsiderate to you? (n=163)

inconsiderate during their trip. In all, it appears that very little conflict was occurring at the SASD at the time of this survey.

A comparison of mean responses to crowding, use limits, and conflict questions for individuals relatively new to the SASD area (first visit within last five years) and long-term visitors (those whose first visit was six or more years ago) showed little variability (Table C-3). The only crowding variable that showed a statistically significant difference between groups was feelings of crowding at the open dunes area; new visitors were significantly more likely to say there were *too few* people in the area than were longtime users. Both recent and longtime users were opposed to use limits at all locations, with neither group differing statistically significantly in their feelings towards limits at any of the three site types. Finally, although no user group was

Table C-3: Feelings about use limits, crowding, and conflict for new visitors (0-5 years) versus long-term visitors (> 5 years)

	New Users (0-5 years)	Longtime Users (>5)	Statistical Significance of Difference between Means ¹
Crowding ²			
Dunes (n=520)	3.21	3.07	.021
Campgrounds (n=174)	3.09	3.10	.668
Trails (n=41)	3.12	3.08	.902
Need for Use Limits ³			
Dunes $(n=520)$	3.63	3.66	.937
Campgrounds (n=174)	3.54	3.59	.962
Trails (n=41)	3.82	3.83	.687
Conflict ⁴			
OHVers (n=563)	1.29	1.34	.453
Horseback Riders (n=174)	1.01	1.11	.005
Hikers/Back Packers/Cavers (n=272)	1.05	1.02	.238
Campers $(n=362)$	1.07	1.07	.895
BLM/Local Law Enforcement (n=375)	1.10	1.23	.058

¹ Statistical Significance based upon independent sample t-test.

²Measureed on a scale where: 1=far too many, 2=somewhat too many, 3=about the right number, 4=somewhat too few, 5=too few

³Measured on a scale where: 1=definitely yes, 2=probably yes, 3=probably no, 4=definitely no.

⁴Measured on a scale where: 1=never interfered, 2=rarely interfered, 3=sometimes interfered, 4=often interfered, 5=continuously interfered.

reported as causing much conflict, horseback riders were statistically significantly more likely to interfere with the trips of longtime users than new users. As all items were given very low crowding and support for use limits scores by both groups—even those showing statistically significant inter-group differences—it appears that length of experience with the SASD does not substantially alter the extremely low levels of these negative visitor perceptions recorded during this survey.

D. MANAGEMENT PREFERENCES AND PERFORMANCE

Respondents were asked a series of questions on mail surveys regarding the quality of facilities and services they had used during their SASD trip (Table D-1). Quality of facilities was measured on a five-point scale ranging from *very poor* to *very good*. The mean quality score for every service or facility was at least *fair*. The lowest quality ratings were given to the three information related items: visitor information (maps, website, brochures, etc) (3.25), information on rules and regulations (3.53), and directional signs (3.54). Though the overall ratings for these items indicated they were *fair*, each item also received ratings of *poor* or *very poor* from roughly one-fifth of respondents. These numerous *poor* or *very poor* ratings show a sizable group of visitors felt these services were insufficient—something that should taken note of by managers.

Table D-1: How would you rate the following list of facilities and services at SASD?

	very poor (1)	poor (2)	fair (3)	good (4)	very good (5)	Group Mean ¹
Availability of day use and overnight parking	2(1.3%)	3(2.0%)	16(10.5%)	68(44.4%)	64(41.8%)	4.24
Maintenance of parking lots	2(1.3%)	2(1.3%)	17(10.8%)	73(46.2%)	64(40.5%)	4.23
Maintenance of camping/RV locations	2(1.5%)	3(2.3%)	21(16.0%)	60(45.8%)	45(34.4%)	4.09
BLM rangers and staff	3(2.2%)	7(5.1%)	25(18.4%)	61(44.9%)	40(29.4%)	3.94
Roads	1(0.6 %)	5(3.1%)	30(18.5%)	94(58.0%)	32(19.8%)	3.93
Restrooms/port-a-jons	1(0.7%)	13(9.4%)	23(16.5%)	63(45.3%)	39(28.1%)	3.91
Availability of camping/RV locations	7(4.9%)	8(5.6%)	24(16.9%)	60(42.3%)	43(30.3%)	3.87
Maintained trails	3(2.2%)	5(3.7%)	25(18.5%)	75(55.6%)	27(20.0%)	3.87
Local law enforcement	4(3.0%)	11(8.2%)	25(18.7%)	66(49.3%)	28(20.9%)	3.77
Directional signs	6 (3.8%)	19(12.1%)	47(29.9%)	55(35.0%)	30(19.1%)	3.54
Information on rules and regulations	8(5.4%)	17(11.5%)	39(26.4%)	56(37.8%)	28(18.9%)	3.53
Visitor information (maps, website, brochures, etc)	12(9.3%)	21(16.3%)	39(30.2%)	37(28.7%)	20(15.5%)	3.25

¹ Means are measured on a scale from 1-5, where 1=very poor, 2=poor, 3=fair, 4=good, 5=very good.

All other items had mean scores that indicated visitors felt these SASD services and facilities were *good*. The highest ratings were given to items related to parking lots/maintenance of parking lots (4.24), the availability of day use and overnight parking (4.23), and maintenance of camping and RV areas (4.09), all of which were rated above *good* on average. The high ratings given to these items are not surprising given the money the BLM has been spent expanding the Red Road and Egin Lakes parking areas.

Mail respondents who stated that a facility or management service was either *poor* or *very poor* were asked to explain what happened to leave this impression and where; these results can be seen in Table D-2. Unfortunately, many respondents neglected to list the location of the problem they encountered, forcing us to list these comments under a general SASD area category.

Several common issues stood out after these open-ended comments were coded. General SASD comments were most often complaints about the lack of information concerning activities available or supported by the SASD, how to act, and where to go. Reported issues included a lack of visitor information and maps (n=12), the poor quality of onsite directional signs (n=11), a lack of posted rules and regulations (n=6), a lack of information on the BLM website (n=1), and confusing or missing road signs (n=2). Other relatively common general complaints dealt with facilities and upkeep: overflowing or poorly maintained toilets (n=6), poor access and road and trail upkeep (n=5), and too few toilets (n=3). Finally, several comments were made about law enforcement and safety issues, such as: no visible ranger/police presence (n=6), lax law enforcement (n=3), lax alcohol enforcement (n=2), missing safety signage (n=2), too much enforcement (n=3), and pushy officers (n=2).

Table D-2: Explanations of poor or very poor ranking facilities and services

Location	Problem	n
SASD area	No visitor information or maps	1
	Poor quality site/directional signage	2
	Lack posted regulations/rules	1
	Full/poorly serviced toilets	1
	No police/law enforcement in area	6
	Poor trail/access road upkeep	6
	Too few toilets	6
	Too lax in law enforcement	5
	Pushy/poor quality law enforcement personnel	3
	Poor/missing safety signage (speed limits, traffic flow)	3
	Too much enforcement/regulations	3
	Poor quality/missing road signs	5 3 3 2 2 2
	Access roads should be paved	2
	Lack of information on BLM website	2
		2
		1
Egin Overnight	Not enough sites	7
	Full hookups need	2 2
	No trees	2
	Poor quality	1
	No running water	1
	Lack of law enforcement	1
Egin Lakes Day-Use	No camping allowed in day-use parking area	1
	Crowded parking lot-weekends	1
0 10 1	Gravel areas damage tires	1
General Camping	Trash in campsites	1
	After hours noise	1
Esta Hamman David	Too few BLM RV areas	1
Egin-Hammer Road	Winter closure not posted	l
I 1 C	More access roads	1
Local Communities	Poor/limited SASD information	2
Civil Defence Cove	Local roads poor	1
Civil Defense Cave	No information or rules/regulations	2
Descrit Ossis	No directional road signage	1
Desert Oasis	No visitor information or maps No BLM RV sites	1 1
Red Road		1
Open Dunes	Need toilets on dunes	1

Specific areas within the SASD received significantly fewer comments. Respondents who commented on the Egin Camping area seemed most concerned about the lack of sufficient camping sites (n=7), the desire for full hookups (n=2), and the lack of trees (n=2). Very few

comments were made about other locations. Comments tended to concern a lack of information (either about regulations or maps), poor quality signage, limited camping/RV locations, or upkeep issues with roads and toilets.

The mail survey asked respondents to reflect on their trip to the SASD and evaluate the specific management problems listed in Table D-3 on a four-point scale from *not a problem* to *a big problem*. Of the 21 potential problems, only three were rated on average as being at least *a small problem*. All three of these items were related to camping. The most pressing complaints were that there were too few water and electric hookups (2.54), there was excessive noise during quiet hours (2.37), and the availability of camping or RV sites was limited (2.22). It seems likely that some of the issues involving the lack of certain RV camping facilities have been addressed with the recent addition of RV hookups and pads at Egin Lakes. However, if visitation increases continues, these new facilities may become inadequate during peak season.

Mean responses to several other problems approached, but did not reach, *small problem* status. One of these addressed a perceived lack of information on additional local places where respondents could participate in their recreation activities (1.93). This complaint about information availability, given dissatisfaction with information services detailed in Table D-1, is of particular relevance to BLM managers. However, visitors who reported dissatisfaction with the information the BLM and others provided made up only a relatively small proportion of all visitors surveyed.

There were also a number of rule enforcement and maintenance items which neared small problem status: damage to structures and facilities at camping areas (1.85), ineffective enforcement of the rules (1.83), litter in the camping areas or along trails (1.68), motorized recreation impacts to vegetation (1.61), excessive noise from others (1.59), too many horseback

Table D-3: How big of a problem each of the following items were for visitors to SASD?

	not a problem (1)	a small problem (2)	definitely a problem (3)	a big problem (4)	don't know	Group Mean ¹
Too few water and electric hookups	76(46.9%)	27(16.7%)	13(8.0%)	17(10.5%)	29(17.9%)	2.54
Excessive noise from others during quiet hours	91(55.8%)	23(14.1%)	9(5.5%)	9(5.5%)	31(19.0%)	2.37
Availability of camping/RV locations	88(54.3%)	34(21.0%)	9(5.6%)	5(3.1%)	26(16.0%)	2.22
Lack of information on additional places to do my activities	88(54.0%)	42(25.8%)	13(8.0%)	8(4.9%)	12(7.4%)	1.93
Damage to structures and facilities at camping areas	126(77.3%)	10(6.1%)	2(1.2%)	0	25(15.3%)	1.85
Ineffective enforcement of the rules	113(69.3%)	20(12.3%)	9(5.5%)	4(2.5%)	17(10.4%)	1.83
Litter in the camping areas or along trails	88(54.0%)	56(34.4%)	10(6.1%)	5(3.1%)	4(2.5%)	1.68
Motorized recreation caused impacts on plants	123(76.4%)	19(11.8%)	5(3.1%)	0	14(8.7%)	1.61
Excessive noise from others	100(61.7%)	41(25.3%)	12(7.4%)	7(4.3%)	2(1.2%)	1.59
Too many horseback riders	137(84.6%)	5(3.1%)	2(1.2%)	4(2.5%)	14(8.6%)	1.56
Human caused plant damage	127(77.9%)	19(11.7%)	4(2.5%)	1(0.6 %)	12(7.4%)	1.55
Too many OHVs on trails	130(79.8%)	16(9.8%)	6(3.7%)	3(1.8%)	8(4.9%)	1.47
Unsafe behavior of motorized visitors	110(68.3%)	36(22.4%)	9(5.6%)	4(2.5%)	2(1.2%)	1.47
Unclear rules and regulations	117(72.2%)	30(18.5%)	10(6.2%)	2(1.2%)	3(1.9%)	1.44
Too many hikers or backpackers	144(88.9%)	3(1.9%)	0	4(2.5%)	11(6.8%)	1.43
Too many cattle and sheep	147(90.2%)	1(0.6%)	2(1.2%)	1(0.6%)	12(7.4%)	1.42
Too much livestock waste	149(91.4%)	1(0.6%)	1(0.6%)	2(1.2%)	10(6.1%)	1.36
Too many OHVs on dunes	128(79.0%)	20(12.3%)	8(4.9%)	4(2.5%)	2(1.2%)	1.36
Poorly maintained roads or trails	126(79.2%)	26(16.4%)	3(1.9%)	1(0.6%)	3(1.9%)	1.31
Other people were rude or inconsiderate to me	134(82.7%)	21(13.0%)	7(4.3%)	0	0	1.22
Unsafe non-motorized recreationist behavior	147(92.5%)	5 (3.1%)	2 (1.3%)	1(0.6%)	4(2.5%)	1.20

¹Means are measured on a scale from 1-4, where 1=not a problem and 4=a big problem.

riders (1.56), and human-caused vegetation impacts (1.55). Though these latter items were not considered large problems overall, it might be worthwhile for the BLM and local law enforcement to focus on some of these issues, potentially preventing them from becoming more serious problems in the future.

Mail respondents who stated that something was either *definitely a problem* or *a big problem* were asked to explain what happened and where. The results can be seen in Table D-4.

Table D-4: Description and location of issues that respondents felt were definitely a problem or a big problem

Location	Problem	n
SASD area	Dangerous riding	6
	Rude OHVer behavior towards non-motorized users	5
	Lax enforcement (helmets, flags, etc)	4
	Lack of visitor information and maps	4
	No directional signs	3
	Unclear rules/regulations	3 2 2
	Too many people on dunes	2
	Inconsistent rule enforcement (BLM vs. Sheriff)	1
	Poor trail upkeep/maintenance	1
	Speeding in parking lots	1
	Threatened by hunters	1
	Lack of picnic areas	1
General Camping	Partying late at night	2
	Too few full hookups	2
	Generators running late at night	1
	Riding late at night	1
	New resorts/camping areas needed	1
	Poor access trail upkeep/maintenance	1
	Litter	1
Egin Overnight	Lack of camping/RV spaces	4
	Lack of RV hookups	3
	Loud riding through camp	1
Egin-Hammer Road	Lack of usable access road	1
	Lack of camping/RV sites	1
Civil Defense Cave	No visitor information	1
	Litter/vandalism	1
	Partying late at night	1
Desert Oasis	Noise after quiet hours	1
Red Road	Litter (nails and glass)	3
Sand Hills Resort	Rude behavior by management	1

Relatively few problems were reported and, again, many respondents neglected to list the location of the problem they encountered, forcing us to list these comments under a general SASD area category. The most common types of general SASD complaints dealt with behavioral problems, rude behavior (n=5), dangerous riding (n=6), and lax enforcement of rules and regulations (n=5). As was the case when we asked about facilities and services, there were a number of problems reported regarding information availability and quality, such as: lack of visitor information and maps (n=4), unclear rules (n=2), and missing directional signs (n=3). Other general SASD problems involved the consistency of law enforcement, trail upkeep, speeding, lack of picnic areas, and hunter vs. motorized user conflict.

Specific areas within the SASD received significantly fewer comments. Comments about non-specific camping locations were most often about noise and partying after quiet hours, trail and dunes upkeep, and a lack of camping spaces. Egin Lakes problems were most often associated with a lack of sites or RV hookups. One comment dealt with loud OHV riding.

Comments about problems at other specific SASD sites discussed litter, late night noise, a lack of sites, a lack of information, and perceptions of rude management behavior.

Mail survey respondents were also asked whether they would support or oppose a series of 25 potential management actions (Table D-5). The types of items that tended to receive the most support were actions aimed at improving recreation facilities and increasing the amount of information available, while the most strongly opposed items tended to be those dealing with use limits and closures. Three items were particularly unpopular, with mean scores between *oppose* and *strongly oppose*: limiting the number of people on the dunes at a particular time (1.82), limiting the number of ATVs and dune buggies (1.86), and closing certain areas to OHVs (1.86). Given that a large majority of respondents were motorized recreationists who had previously

Table D-5: Support for possible management actions

Table D-3. Support 10	r possible ii	ramagement	actions			
	strongly oppose (1)	oppose (2)	neutral (3)	support (4)	strongly support (5)	Group Mean ¹
Expand parking facilities to keep up with demand	3(1.9%)	12(7.5%)	29(18.1%)	80(50.0%)	36(22.5%)	3.84
Install clearer directional signs	4(2.4%)	5(3.0%)	49(29.7%)	74(44.8%)	33(20.0%)	3.77
Provide more information concerning natural features of the area	4(2.4%)	4(2.4%)	54(32.7%)	87(52.7%)	16(9.7%)	3.65
Construct or expand BLM camping areas	9(5.8%)	14(9.0%)	38(24.4%)	59(37.8%)	36(23.1%)	3.63
Provide information on how to reduce damage to vegetation and animal habitat	5(3.0%)	5(3.0%)	61(36.7%)	76(45.8%)	19(11.4%)	3.60
Provide information on how to reduce impacts on wildlife	7(4.2%)	5(3.0%)	61(37.0%)	69(41.8%)	23(13.9%)	3.58
Designate additional trails for motorized recreation	7(4.3%)	16(9.8%)	48(29.4%)	65(39.9%)	27(16.6%)	3.55
Allow recreational use of the dunes to increase	11(7.0%)	9(5.7%)	49(31.2%)	60(38.2%)	28(17.8%)	3.54
Allow organized rallies and festivals on the dunes	21(13.0%)	16(9.9%)	41(25.5%)	50(31.1%)	33(20.5%)	3.36
Allow use of the dunes to increase indefinitely	8(5.0%)	30(18.9%)	46(28.9%)	58(36.5%)	17(10.7%)	3.29
Enforce rules to prevent soil erosion outside dune complex	11(6.8%)	28(17.4%)	57(35.4%)	56(34.8%)	9(5.6%)	3.15
Increase ranger presence	13(7.9%)	28(17.0%)	65(39.4%)	49(29.7%)	10(6.1%)	3.09
Collect fees to help manage and maintain facilities	25(15.2%)	33(20.0%)	33(20.0%)	64(38.8%)	10(6.1%)	3.01
Increase law enforcement presence	19(11.7%)	31(19.0%)	59(36.2%)	43(26.4%)	11(6.7%)	2.98
Limit the number of livestock	23(16.5%)	16(11.5%)	63(45.3%)	24(17.3%)	13(9.4%)	2.91
Reduce BLM operated camping to encourage private development	15(9.4%)	42(26.3%)	86(53.8%)	11(6.9%)	6(3.8%)	2.69
Restrict camping outside of designated camping areas	41(26.5%)	36(23.2%)	34(21.9%)	34(21.9%)	10(6.5%)	2.59
Close areas with sensitive plant and animal species to visitors	25(15.8%)	52(32.9%)	52(32.9%)	23(14.6%)	6(3.8%)	2.58
Limit the number of horseback riders	35(22.9%)	41(26.8%)	60(39.2%)	7(4.6%)	10(6.5%)	2.45
					((continued)

¹Means are measured on a scale from 1-5, where 1=strongly oppose, 2=oppose, 3=neutral, 4=support, 5=strongly support.

Table D-5 (continued): Support for possible management actions

	strongly oppose (1)	oppose (2)	neutral (3)	support (4)	strongly support (5)	Group Mean ¹
Close heavily used motorized recreation areas to non-motorized recreation	42(26.6%)	32(20.3%)	40(25.3%)	32(20.3%)	12(7.6%)	2.26
Close the wilderness study area to motorized recreation	52(32.9%)	48(30.4%)	34(21.5%)	18(11.4%)	6(3.8%)	2.23
Require safety presentations	63(39.9%)	46(29.1%)	33(20.9%)	13(8.2%)	3(1.9%)	2.03
Close certain areas to OHVs	90(56.3%)	35(21.9%)	13(8.1%)	12(7.5%)	10(6.3%)	1.86
Limit the number of ATVs and Dune Buggies	73(45.9%)	49(30.8%)	25(15.7%)	10(6.3%)	2(1.3%)	1.86
Limit the number of people on the dunes at a particular time	75(46.9%)	52(32.5%)	21(13.1%)	11(6.9%)	1(0.6%)	1.82

¹Means are measured on a scale from 1-5, where 1=strongly oppose, 2=oppose, 3=neutral, 4=support, 5= strongly support.

expressed high levels of opposition to use limits, the unpopularity of these items was not unexpected. Seven other items also had mean scores between *oppose* and *neutral*, indicating potential resistance from visitors: requiring safety presentations (2.03), closing the wilderness study area to motorized recreation (2.23), closing heavily used motorized recreation areas to non-motorized recreation (2.26), limiting the number of horseback riders (2.45), closing areas with sensitive plant and animal species to visitors (2.58), restricting camping outside of designated camping areas (2.59), and reducing BLM-operated camping to encourage private development (2.69). As was the case with the previous items, the majority of these items had to do with restricting visitor access or imposing new regulations. Interestingly, although very few respondents were non-motorized recreationists, limiting horseback riders and other non-motorized users was very unpopular, perhaps signaling SASD visitors' opposition to any type of use limit regardless of who it impacts.

Respondents' mean responses were in the neutral range regarding increasing law enforcement presence, better environmental enforcement, fee collection, unrestricted use increases, and organized rallies and festivals.

Facility- and information-related items were the most highly supported management actions, though no item's mean score was in the *support* to *strongly support* range (a mean of four to five). Three facility-related options were among those with scores between *neutral* and *support*: expanding parking facilities with increases in demand (3.84), constructing or expanding BLM camping areas (3.63), and designating additional trails for motorized recreation (3.55). The popularity of these items seems in keeping with the reported lack of camping facilities and the primarily motorized nature of the visitation. Lack of information was listed as a problem by a small number of visitors, and correspondingly, increasing the availability of information received mild support from respondents. The most highly supported information-related items were: installing clearer directional signs (3.77), providing more information concerning natural features of the area (3.65), providing information on how to reduce damage to vegetation and animal habitat (3.60), and providing information on how to reduce impacts on wildlife (3.58). There was also weak support for allowing visitation at the SASD to increase (3.54), which seems congruent with the low level of crowding discussed previously.

E. FEES AND EXPENDITURES

Mail survey respondents were asked a series of questions pertaining to use fees and camping fees. We asked if respondents would be willing to pay a fee to use the dunes, if that money went directly towards the maintenance of recreation and facilities at SASD (Figure E-1). Respondents' willingness to pay was generally high, with 69% *definitely* or *probably* willing to pay.

Next, mail respondents were asked to state their level of support or opposition to a variety of different types of potential fees. The level of support was measured on a scale from 1, *strongly oppose*, to 5, *strongly favor* (Table E-1). Despite support for fees in the abstract, mean support for daily access fees (2.39) was low, and below *neutral* for weekly (2.61) and yearly fees (2.67). Support for camping fees varied widely based upon the type of site to which they would apply.

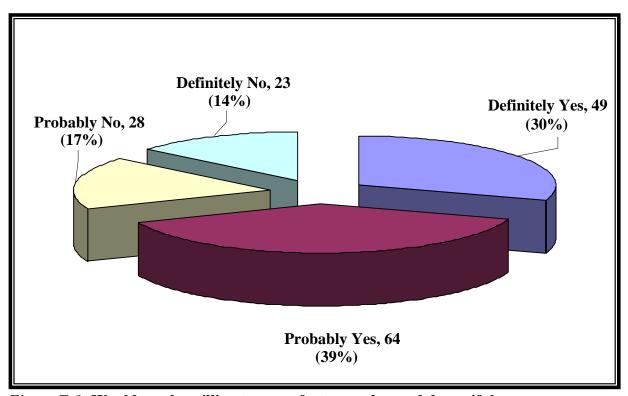


Figure E-1: Would you be willing to pay a fee to use the sand dunes if the money went directly to maintaining recreation and facilities in the area (n=164)

Table E-1: Level of support for various access and camping fees

		_		_	0		
Access Fee	strongly oppose (1)	oppose (2)	neutral (3)	favor (4)	strongly favor (5)	don't know	mean ¹
Daily Fee	58(36.0%)	29(18.0%)	31(19.3%)	36(22.4%)	6(3.7%)	1(0.6%)	2.39
Weekly Fee	52(32.7%)	20(12.6%)	35(22.0%)	37(23.3%)	13(8.2%)	2(1.3%)	2.61
Yearly Fee	45(28.5%)	24(15.2%)	39(24.7%)	36(22.8%)	13(8.2%)	1(0.6%)	2.67
Camping Fee	strongly oppose (1)	oppose (2)	neutral (3)	favor (4)	strongly favor (5)	don't know	mean ¹
Undeveloped	65(39.6%)	44(26.8%)	28(17.1%)	17(10.4%)	3(1.8%)	7(4.3%)	2.04
Semi- developed	24(14.7%)	19(11.7%)	46(28.2%)	63(38.7%)	6(3.7%)	5(3.1%)	3.05
Developed	13(8.0%)	4(2.5%)	27(16.6%)	79(48.5%)	35(21.5%)	5(3.1%)	3.75
High- developed	11(6.7%)	4(2.4%)	15(9.1%)	59(36.0%)	70(42.7%)	5(3.0%)	4.09

¹Means are based upon a scale from 1-5, where 1=strongly oppose, 2=oppose, 3=neutral, 4=favor, 5=strongly favor.

Respondents, on average, opposed fees for camping at undeveloped sites (2.04) and were neutral towards fees at semi-developed sites (3.05). Support for fees at developed (3.75) and highly-developed (4.09) camping sites tended to be moderately high, indicating a willingness to pay for the amenities these types of sites provided (e.g., electrical hookups, fire pits, etc).

In addition to questions addressing a basic willingness to pay fees, mail respondents were asked specifically to share how much they would be willing to spend on each fee type. If they were unwilling to pay a certain type of fee, the respondent was asked to write "zero." Table E-2 shows the frequencies and percentages of both people unwilling to pay any fee and those willing to pay at least a token amount. Again, between 60% and 70% of mail respondents stated they would be willing to pay something for each type of access fee. Camping fees, once again, showed a wider variety of responses. More than 70% of people said they would not be willing to pay anything for an undeveloped camping fee. Only 30% would not pay a semi-developed

Table E-2: Number of respondents willing to pay any amount for each type of fee

Access Fee	Unwilling to Pay	Willing to Pay ≥1\$
Daily Fee	62(37.3%)	104(62.7%)
Weekly Fee	55(33.1%)	111(66.9%)
Yearly Fee	54(32.5%)	112(67.5%)
Camping Fee	Unwilling to Pay	Wiling to Pay ≥1\$
Undeveloped	120(72.3%)	46(27.7%)
Semi-developed	51(30.7%)	115(69.3%)
Developed	31(18.7%)	135(81.3%)
High-developed	32(19.3%)	134(80.7%)

camping fee. Over 80% of those surveyed would be willing to pay something for developed and highly-developed camping fees.

Table E-3 shows the dollar amount respondents who were willing to pay a fee would be willing to spend on each fee type. When those who stated they would pay zero dollars were eliminated, respondents would be willing spend about five dollars (mean \$4.99) for a daily fee, \$10 for a weekly use fee (mean \$18.18), and \$50 for a yearly use fee (mean \$51.58). For camping fees in undeveloped, semi-developed, and developed areas, respondents were prepared to pay somewhere around five dollars per night (mean \$4.17 for undeveloped and \$5.55 for semi-developed). For developed campgrounds, the mean amount respondents were willing to pay was \$8.72 per night. Respondents were willing to pay substantially more per night for highly developed sites. The mean for this was nearly \$15, though the amounts given were still substantially less than what was being charged at nearby private RV resorts during the time of the survey.

Table E-3: Amount respondents who would be willing to pay for each fee type were willing spend (in dollars)

Access Fee	Minimum	Maximum	Mode	Mean	Mean with \$0 Responses Included
Daily Fee	1	20	5	4.99	3.33
Weekly Fee	4	55	10	18.18	13.28
Yearly Fee	2	500	50	51.58	38.77
Camping Fee	Minimum	Maximum	Mode	Mean	Mean with \$0 Responses Include
Undeveloped	1	10	5	4.17	1.25
Semi-developed	1	20	5	5.55	4.20
Developed	1	50	5	8.72	7.79
High-developed	2	50	10	14.75	13.18

The mail survey also asked how much money the group of people with whom the respondent visited SASD spent in the area on various items during the trip (Table E-4). By far, the most common types of expenditures were those related to gas purchases (n=148, median \$80.00), grocery/convenience store purchases (n=135, median \$60.00), and eating and drinking establishments (n=108, median \$50.00). Several other types of purchases were made by roughly one-third of mail respondents: privately owned lodging/camping (n=68, median \$290.00) and OHV parts and equipment stores (n=52, median \$85.00). Four other categories of expenditures were reported by around one-quarter of mail respondents, including: auto parts and equipment purchases (n=44, median \$85.00), government-operated campsite fees (n=41, median \$40.00), sporting goods and outdoor equipment store purchases (n=39, median \$50.00), and souvenir store and gift shop purchases (n=38, median \$60.00). Other purchases (such as pack stock food, OHV rental, hospital costs, and OHV/RV purchases) were reported by only a handful of mail respondents.

Table E-4: Amount spent (in dollars) by respondent's group on the trip during which they were surveyed (n=166)

Service or item	Frequency ¹	Minimum	Maximum	Median	Mean	Standard deviation
Service and gas stations	148	5	15,000	80.00	274.11	1,247.46
Grocery and convenience stores	135	2	5,000	60.00	198.27	567.73
Eating and drinking establishments	108	5	800	50.00	1,15.59	144.13
Privately owned lodging and camping	68	10	12,000	290.00	649.29	1591.57
OHV parts and equipment stores	52	8	8000	85.00	300.98	1107.90
Auto parts and equipment stores	44	7	10,000	77.50	354.45	1503.08
Government operated camping	41	10	4,045	40.00	171.51	626.38
Sporting goods and outdoor equipment stores	39	5	2,500	50.00	201.51	435.66
Souvenir stores and gift shops	38	5	600	60.00	1,17.53	143.44
Food supplies for pack stock	24	5	1500	77.50	157.92	303.05
Additional Expenditures ¹	14	20	19,000	1,150.00	3,898.92	5797.53
Equipment rental stores (OHV related)	4	100	500	325.00	312.50	175.00

¹Additional expenditures included: 2 hospital costs, Bear World entrance fees, tire replacement, RV purchase, new motor for ATV, OHV upgrades, hardware store, SASD donation, new ATV purchase, "race gas," "fees," Yellowstone.

To allow us to calculate per person expenditures, we also asked how many people were in the group for which trip expenditures were being reported (Table E-5). Reported expenditures per person ranged from zero to \$10,110, with an average of \$320.73 and a median of \$55.98 dollars per person per trip. Due to the overnight and motorized use characteristics of SASD visitors, these totals are relatively high. For example, the average expenditure per trip is about two to three times higher than snowmobiling trips in Utah, where most of the trips are day trips and expenditures take place in the area surrounding the visitor's home (McCoy et al., 2001). Due to survey length limitations, we could not ask for specific locations of the expenditures at SASD.

Table E-5: Per person expenditures (n=166)¹

	Minimum	Maximum	Median	Mean
Per person expenditure	\$0	\$10,110	\$55.98	\$320.73

¹Amounts are based on group expenditures divided by total number of persons per group.

F. MOTIVATIONS FOR VISITATION

We asked intercept survey respondents to rate the importance of a series of factors in their decision to come to the SASD on the trip on which they were surveyed (Table F-1). The importance of each item was recorded on a scale ranging from 1 (not at all important) to 5 (extremely important). Three items stood out because their mean importance ratings were between quite important and extremely important: doing something with my family or friends (4.63), getting away from it all (4.51), and finding excitement/thrills (4.28). The importance of freedom, social interaction, and skill/challenge to the SASD experience were illustrated by several other items with mean scores nearing the level of quite important: improving riding skill (3.93), being somewhere where I can make my own decisions (3.59), being unconfined by rules and regulations (3.54), and satisfying others in my group who wanted to come (3.53). The remainder of the motivating factors, which dealt with nature/scenery, convenience, and solitude, had mean ratings indicating they were *moderately important* to respondents. The importance of these items tends to contradict the picture of the typical OHV recreation experience that has emerged in other studies asking similar importance questions (e.g., Reiter, et al., 1998); SASD recreationists sought thrill/challenged-based experiences where riding and social interaction were more important than nature/solitude experiences.

In order to understand the actual outcomes of SASD experiences, mail survey respondents were also asked the extent to which they had been able to achieve each of the experience expectations listed in Table F-1 during their SASD trip. Achievement was measured on a scale ranging from 1 (*not achieved at all*) to 5 (*fully achieved*). The majority of respondents reported they were able to achieve most experience expectations to a great extent (Table F-2). Though only one item's mean approached the level of full achievement (do something with

Table F-1: Experience expectations motivating respondents decisions to come to SASD on the trip they were surveyed (n=505)

	not at all important (1)	slightly important (2)	moderately important (3)	quite important (4)	extremely important (5)	Group Mean ¹
Do something with my family or friends	16(3.2%)	2(0.4%)	26(5.1%)	65(12.9%)	396(78.4%)	4.63
Get away from it all	17(3.4%)	10(2.0%)	34(6.7%)	79(15.6%)	365(72.3%)	4.51
Find excitement/thrills	20(4.0%)	25(5.0%)	60(11.9%)	86(17.1%)	313(62.1%)	4.28
Improve riding skill ²	46 (9.8%)	31 (6.6%)	64 (13.6%)	99(21.0%)	231(49.0%)	3.93
Be somewhere where I can make my own decisions.	68(13.4%)	54 (10.7%)	86(17.0%)	109(21.5%)	189(37.4%)	3.59
Be unconfined by rules and regulations	71(14.0%)	56 (11.1%)	100(19.8%)	88 (17.4%)	191(37.7%)	3.54
Satisfy others in my group who wanted to come here	94 (18.7 %)	37 (7.4%)	75(14.9%)	100(19.9%)	197(39.2%)	3.53
Be in a natural area	55 (10.9%)	57 (11.3%)	114(22.6%)	146(28.9%)	133(26.3%)	3.49
See beautiful scenery	53 (10.5%)	69(13.7)	110(21.8%)	128(25.3%)	145(28.7%)	3.48
Test skills against others	118(23.3%)	46 (9.1%)	82 (16.2%)	95(18.8%)	165(32.6%)	3.28
Find peace and quiet	107(21.1%)	70 (13.8%)	78 (15.4%)	105(20.8%)	146(28.9%)	3.22
Get exercise	91(18.0%)	61 (12.1%)	129(25.5%)	97 (19.2%)	127(25.1%)	3.21
Use outdoor skills	103(20.4%)	90 (17.8%)	124(24.6%)	97 (19.2%)	91 (18.0%)	2.97
Test my skill against nature	132(26.1%)	66 (13.1%)	105(20.8%)	92 (18.2%)	110(21.8%)	2.96
Experience solitude	132(26.1%)	74 (14.7%)	112(22.2%)	92 (18.2%)	95 (18.8%)	2.89
Be able to tell others I have been here	156(30.9%)	76 (15.0%)	93 (18.4%)	56 (11.1%)	124(24.6%)	2.83
It was close to home	199(39.3%)	45(8.9%)	66(13.0%)	59(11.7%)	137(27.1%)	2.78
Learn about nature through experience	164(32.5%)	90 (17.8%)	120(23.8%)	80 (15.8%)	51 (10.1%)	2.53
View wildlife	237(46.8%)	88 (17.4%)	81 (16.0%)	48 (9.5%)	52 (10.3%)	2.19

¹Measured on a scale from 1-5, where: 1=not at all important, 2=slightly important, 3=moderately important, 4=quite important, 5=extremely important.

friends and family), 12 of the 19 items received mean ratings that indicated they had been *achieved*. The remaining seven items, with the exception of viewing wildlife, received mean scores that indicated they were *moderately achieved* by mail respondents.

²Only OHV, horseback, and bicycle riders were asked this question.

Table F-2: Extent to which visitors were able to achieve the following experience expectations during their trip¹

expectations during		7. 7. 7		7. 7	0.11	
	not achieved	slightly	moderately	achieved	fully	Group
	at all	achieved	achieved		achieved	$Mean^1$
	(1)	(2)	(3)	(4)	(5)	
Do something with my family or friends	1(0.6%)	1(0.6%)	3(1.9%)	41(25.3%)	116(71.6%)	4.67
Find excitement/thrills	1(0.6%)	3(1.9%)	6(3.7%)	57(35.4%)	94(58.4%)	4.49
See beautiful scenery	1(0.6%)	3(1.8%)	15(9.2%)	66(40.5%)	78(47.9%)	4.33
Satisfy others in my group who wanted to come here	5(3.1%)	2(1.3%)	15(9.4%)	54(34.0%)	83(52.2%)	4.31
Get away from it all	2(1.2%)	7(4.3%)	19(11.8%)	45(28.0%)	88(54.7%)	4.30
Be in a natural area	1(0.6%)	2(1.2%)	14(8.6%)	80(49.4%)	65(40.1%)	4.27
Be able to tell others I have been here	2(1.3%)	10(6.3%)	17(10.6%)	46(28.8%)	85(53.1%)	4.26
Improve riding skill ²	9(5.7%)	3(1.9%)	14(8.8%)	51(32.1%)	82(51.6%)	4.22
Test my skill against nature	5(3.1 %)	8 (5.0 %)	21(13.1%)	58(36.3%)	68(42.5%)	4.10
Get exercise	4(2.5%)	5(3.1%)	31(19.4%)	54(33.8%)	66(41.3%)	4.08
Be somewhere where I can make my own decisions.	3(1.9%)	10(6.3%)	23(14.4%)	64(40.0%)	60(37.5%)	4.05
Test skills against others	13(8.1%)	5(3.1%)	21(13.1%)	59(36.9%)	62(38.8%)	3.95
Use outdoor skills	5(3.2%)	26(16.7%)	41(26.3%)	45(28.8%)	39(25.0%)	3.56
Be unconfined by rules and regulations	15(9.4%)	13(8.2%)	50(31.4%)	54(34.0%)	27(17.0%)	3.41
Learn about nature through experience	13(8.2%)	22(13.9%)	41(25.9%)	52(32.9%)	30(19.0%)	3.41
Find peace and quiet	14(8.9%)	29(18.4%)	39(24.7%)	45(28.5%)	31(19.6%)	3.32
Experience solitude	18(11.4%)	28(17.7%)	41(25.9%)	41(25.9%)	30(19.0%)	3.23
It was close to home	41(26.1%)	25(15.9%)	23(14.6%)	32(20.4%)	36(22.9%)	2.98
View wildlife	54(34.4%)	32(20.4%)	33(21.0%)	24(15.3%)	14(8.9%)	2.44

¹Measured on a scale from 1-5, where: 1=not at all achieved, 2=slightly achieved, 3=moderately achieved, 4=achieved, 5=fully achieved.

The comparison of mean importance and mean achievement scores in Table F-3 demonstrates that general achievement of the various items was consistently higher than the importance score given to the items. This pattern can be considered a positive finding regarding the recreation experiences provided because it indicates that visitors were not placing great importance on experiences they were not able to achieve. Only two exceptions to this pattern are evident in the data—getting away from it all and being unconfined by rules and regulations—both of which had mean importance scores slightly higher than the level of perceived

²Only OHV, horseback, and bicycle riders were asked this question.

Table F-3: Comparison of mean importance and achievement scores¹

	Mean Importance of item in the decision to come to SASD	Ranked Importance	Mean Achievement of item during SASD trip	Ranked Achievement
Do something with my family or friends	4.63	1	4.67	1
Get away from it all	4.51	2	4.30	5
Find excitement/thrills	4.28	3	4.49	2
Improve riding skill	3.93	4	4.22	8
Be somewhere where I can make my own decisions.	3.59	5	4.05	11
Be unconfined by rules and regulations	3.54	6	3.41	14(tie)
Satisfy others in my group who wanted to come here	3.53	7	4.31	4
Be in a natural area	3.49	8	4.27	7
See beautiful scenery	3.48	9	4.33	3
Test skills against others	3.28	10	3.95	12
Find peace and quiet	3.22	11	3.32	16
Get exercise	3.21	12	4.08	10
Use outdoor skills	2.97	13	3.56	13
Test my skill against nature	2.96	14	4.10	9
Experience solitude	2.89	15	3.23	17
Be able to tell others I have been here	2.83	16	4.26	6
It was close to home	2.78	17	2.98	18
Learn about nature through experience	2.53	18	3.41	14(tie)
View wildlife	2.19	19	2.44	19

¹Bold items were those with mean importance scores higher than the mean achievement scores.

achievement (presented in bold in Table F-3). Both items deal with perceptions of freedom, which were among the most important general motivating factors in visitors' decisions to visit the area (see pp. 51-52).

These motivational items were also looked at by ranking their relative importance and achievement (Table F-3). Generally, items ranked highly on importance also ranked relatively highly in terms of achievement. Improving riding skill, being somewhere where the respondent

could make her/his own decisions, and being unconfined by rules and regulations, however, were exceptions to this and ranked substantially lower on achievement than on importance.

G. SUMMARY AND CONCLUSIONS

Saint Anthony Sand Dunes Special Recreation Management Area is a popular and, at times, very heavily used recreation destination. Most visitors come from within the region and are dedicated participants in ATV, motorcycle, and dune-related OHV recreation. Most visitors rate their skills at intermediate or expert level and over three-quarters participate in motorized recreation at least 10 times per year. Over half of respondents are on overnight trips and those visitors stay an average of four nights. Nearly all overnight visitors stay in developed camping areas or in local hotels and motels. There are also many newer visitors to the dunes; 68% first visited the dunes less then seven years ago.

Despite growing use levels, the mixture of experienced and new visitors, and very concentrated activity areas, few visitors feel crowded or that there are significant conflicts resulting from the behaviors of others. In fact, actions that may limit or restrict use generated the most opposition from among the many potential management actions evaluated in the study. These findings suggest that increasing use densities would be acceptable to the visitors at parking, day use, and camping/RV sites. Encouraging concentrated use in the most appropriate areas could be used as a strategy to limit resource impacts possible with increasing visitation.

While respondents did not seem to find any aspects of SASD management particularly deficient, several items did seem to be seen as somewhat lacking. Topics of specific concern to respondents were: a lack of information (where to ride/participate in primary activity, map/brochures/website visitation information, rules and regulation, and directional signs), inadequate camping facilities (trailer hookups and insufficient RV/camping locations), and rule enforcement and vandalism issues (noise during quiet hours, damage to structures and facilities, and ineffective rule/law enforcement).

Ninety-six percent of the visitors were members of a group, and group sizes were relatively large (mean of 7 and median of 5 per group). This suggests that social interaction is very important and that group educational opportunities may be a valuable management tool.

Due to the overnight and motorized characteristics of this experience, group expenditures in the area are relatively high (about \$320 per person per trip), although we could not determine where exactly those expenditures occurred. This could be a potentially beneficial factor in the local economy, though most visitors appear to come from within the region. Visitors appear to be open to paying fees for both accessing the dunes (69% *definitely* or *probably* willing) and using developed camping areas (70 to 80% acceptable depending on development level), although most were opposed to charging fees for dispersed or undeveloped camping. If managers decided to impose a fee for dune access, a variety of fee structures should be investigated as no one fee type—daily use, weekly use, or annual pass—was preferred over others.

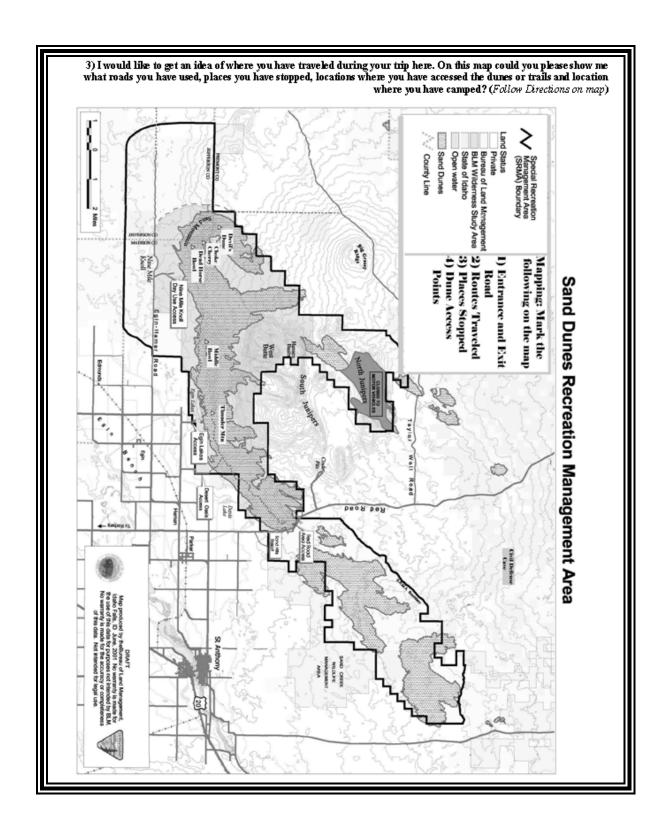
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APPENDIX A: INTERCEPT SURVEYS

DAY USE SURVEY

OMB # 0596-0108 (pending)		
	Local Resident	Date:
		Day:
		Time:
		Location:
		Gender: M F
		Interviewer:
		ID#
		1D II
Hello, My name is and I'm from Utah State Sand Dunes area on behalf of the area's management. If about your current visit here. Any information you provide onsite recreation management decisions. Would you be	you are willing to participate will be kept strictly confide	, I would like to ask you some questions ntial and will be used to help shape future
YES	S NO	
1) Is this your first trip to Saint Anthony Sand Dunes? Yes	No	
la) (If No), When was you first visit?		
1b) (If No), How often do you visit Saint Anthony	Sand Dunes in a typical year	?
2) Which activities are you doing in the St. Anthony Sand I	Dunes Area?	
□ Dune Buggy/Dune Rail Riding	□ Photography/Pai	
□ ATV Riding	□ Antler/Rock/Wo	ood Collecting
□ Hiking	□ Sandboarding	
□ 4-Wheeling	□ Caving	
□ RV Camping	 Snowmobiling 	
□ Camping	□ Skiing	
□ Hunting	□ Motorcycling/di	
□ Fishing	 Picnic/family res 	
 Mountain Biking Wildlife Watching 	□ Other reason you ————————————————————————————————————	u are visiting?
2a) Which activity would you say is the main or po here?	rimary activity you are invo	lved in
More:		
2b) About how often do you participate in this activ	vity at any location during a	typical year? Number of times
2c) How would you describe your level of skill in [respondent's primary activity]?
□ Beginner	□ Intermediate	
□ Expert	 Professional 	
·		



4) Each visitor has many reasons for visiting the Saint Anthony Sand Dunes area. Please indicate how important **each** of the following reasons was for your trip.

	Notatall Important	Slightly Important	Moderately Important	Quite Important	Extremely Important
Be in a natural area		2	3	4	5
See beautiful scenery	1	2	3	4	5
Test my skill against nature		2	9	4	5
It was close to home	1	2	3	4	5
Be somewhere where I can make my own decisions		2	3	4	5
Do something with my family or friends	1	2	3	4	5
Get exercise		2	3	- 4	5
Learn about nature through experience	1	2	3	4	5
View wildlife		2	3	4	9
Experience solitude Use gutdoor skills	1 1	2	3	4 4	5
Be unconfined by rules and regulations	1	2	3	4	5
Test my skill against others in the same activity		2	3	4	
Find excitement/thrills	1	2	3	4	5
Get away from it all		2	9	4	5
Improve my riding skills	1	2	3	4	5
Find peace and quiet	1	2	3	4	5
Be able to tell others I have been here	1	2	3	4	5
Satisfy others in my group who wanted to come here	1	2	3	4	5

Do something with my family or friends	1	Z	3	4)	
Get exercise		2	3	4	5	
Learn about nature through experience	1	2	3	4	5	
View wildlife		2	3	4		
Experience solitude	1	2	3	4	5	
Use outdoor skills		2	3	4	5	
Be unconfined by rules and regulations	1	2	3	4	5	
, ,			100000000000000000000000000000000000000	4	- 	
Test my skill against others in the same activity		2	3	R0000000000000000000000000000000000000		
Find excitement/thrills	1	2	3	4	5	
Get away from it all		2	3	4	5	
Improve my riding skills	1	2	3	4	5	
Find peace and quiet		2	3	4		
Be able to tell others I have been here	1	2	3	4	5	
Satisfy others m my group who wanted to come here	 	2	3	4	5	
Dampia careta att mia Stoccia auto acarrento come trete			7			
5) How many people are in your group?						
5a) How would you describe the makeup of your g						
o Family o	ı Organized gr	oup				
□ Friends □	ı Couple					
□ Friends and Family □	Other?					
□ Alone						
5b) ♥ IF Friends, Family, or Friends and Family	y was indicate	d above ♥ Whic	h of the follow	ing describe	the members	
of your group:				Ŭ		
☐ Immediate Family (Spouses, Children, e	etc)	□ Friends I me	t doing [respon	ıdent's prim	ary activity]	
□ Extended Family (Cousins, Aunts, Uncl		□ Neighbors	0	-		
□ Colleagues/Work Friends	,,	□ Other?				
5c) How often during a typical year do you travel	with this group	of people?				
/	6T			-		
5d) Is this the only activity or type of trip that you	take with this	gmum? In other	words does th	e gmilh voil s	re here with	
get together only for the purpose of doing [respon			, 0000 111	o Promb Your		
Pos sePostar orth for the harbone or searth [sephan.	uomi o primu	, u c ur iyj.				
YES	NO					
123	Whatother	activities do you do?				
5e) ♥ If they have indicated they are involved in	. matariral w	amatians calc	all that another			
How many ATVs are in your group		стечнои▲ ягк	orrerenabhi\u00e4:			
How many Dune Buggies are in y						
How many Dirt bikes/Motorcycles		ւսաբ։				
How many Snowmobiles are in your group?						
How many 4-wheeldrive vehicles		oup?				
		տար?				
		oup?				
		υφ? <u> </u>				

ESTION 7♥) □ YES → If yes, how often? Int Anthony Sand Dunes for this visit, which of the following best describes ber of other people you would find at the OPEN DUNES AREA? have people I would see here. (♥ SKIP TO QUESTION 6D ♥) thout how many people would be here to the work of the people would be here how many other people I would see here. EN DUNES AREA, how similar or dissimilar was the number of people you found ected? How was the number of People different? □ There were fewer than expected □ There were more people than expected □ There were fewer than expected □ There were fewe
How was the number of } people different? □ There were fewer than expected □ There were more people than expected Int Anthony Sand Dunes for this visit, Which of the following best describes are about the the types of activities and behaviors of visitors in the OPEN DUNES AREA? There visitors would be doing here. (♥ SKIP TO QUESTION 6e ♥) thout what other visitors would be doing here. Other visitors would be doing here. Other types of activities and behaviors of the types of activities and the types of activities and types of the types of ty
There were fewer than expected There were more people than expected There were fewer than expected There were more people than expected There were fewer than expected There were fewer than expected There were more people than expected There w
ng about the the types of activities and behaviors of visitors in the OPEN DUNES AREA? other visitors would be doing here. (♥SKIP TO QUESTION 6e♥) bout what other visitors would be doing here. out what other visitors would be doing here. what I would see others doing here. EN DUNES AREA, how similar or dissimilar were the types of activities and behaviors of
} How were the actions
) and behaviors different?
an those in your own group, would you estimate you saw in the OPEN DUNES AREA
t describes your feelings about the number of people you saw in the OPEN DUNES people per of people eople
to put a limit on the number of people who are able to use the OPEN DUNES AREA?
area needs limits on use?
1100

S A DOT AIRITEOT RIG I LEWITTO COLL	SIDE THE MAIN DUNES AREA during your trip?
□ NO(♥SKIP TO QU	
7a) <u>Before you arrived</u> at Sai	int Anthony Sand Dunes for this visit, Which of the following best describes nber of other people you would find on the TRAILS OUTSIDE THE MAIN DUNES
□ I had no idea how r □ I had a vague idea : □ I had a good idea a'	many people I would see here. (♥ <u>SKIP TO QUESTION 7c</u> ♥) about how many people would be here bout how many people would be here how many other people I would see here
7b) Once you arrived on the T. of people you found compared Uery similar	RAILS OUTSIDE THE MAIN DUNES AREA, how similar or dissimilar was <i>the number</i> ito what you had expected?
□ Similar □ Different □ Very Different	} How was the number of } people different? □ There were fewer than expected
	☐ There were more people than expected
	int Anthony Sand Dunes for this visit, Which of the following best describes ling about the <i>the types of activities and behaviors</i> of visitors on the TRAILS OUTSIDE
□ I had a vague idea : □ I had a good idea a'	other visitors would be doing here. (♥SKIP TO QUESTION 7e♥) about what other visitors would be doing here. bout what other visitors would be doing here.
□ I felt certain about	what I would see others doing here.
	RAILS OUTSIDE THE MAIN DUNES AREA, how similar or dissimilar were the types of the resistors compared to what you had expected?
□ Similar □ Different □ Very Different	} How was this area } different?
7e) How many people, other the MAIN DUNES AREA during	han those in your own group, would you estimate you saw on the TRAILS OUTSIDE THE g this visit?
7f) Which of the following bes THE MAIN DUNES AREA?	st describes your feelings about the number of people you saw on the TRAILS OUTSIDE
□ Far too many people □ Somewhat too many □ About the right num	y people
□ Somewhat too few p □ Far too few people	
MAIN DUNES AREA?	to put a limit on the number of people who are able to use the TRAILS OUTSIDE THE
□ Definitely yes □ Probably yes	
□ Probably no	
□ Definitely no □ Don't know	
 Definitely no 	area needs limits on use?

9) During your trip to Saint Anthony Sand Dunes, how often have the actions and behaviors of the following people or groups detracted or negatively impacted from your visit? Unless you checked Never, what did this group do? Some-Never Rarely Often Continuously times ATVers, motorbikers, dunebuggie riders 0 0 В o В Horseback riders Hikers, backpackers, , cavers O 0 D ø Tent campers

0

в

Hunters and Fisherman

BLM staff and rangers

10) Where do you live?: City/townStateZip
11) What kind of job do you do?(type of work, not employer!)
12) When were you bom?
13) Would you be willing to receive a more detailed mail survey to help us gain more information concerning your trip and your opinions about the area's management? YES NO
13a) IF YES, what is your mailing address?
That's all of the questions that I have today, thank you so much for your time. If you have any additional comments you would like to share with the management of Saint Anthony Sand Dunes or about this survey, feel free to tell me now.

OVERNIGHT SURVEY (Sections differing from day use survey)

5) Each visitor has many reasons for visiting the Saint Anthony Sand Dunes area. Please indicate how important each of the following reasons was for your trip.							
	Not at all	Slightly	Moderately	Quite	Extremely		
	Important	Important	Important	Important	Importan		
Be in a natural area	1	2 2	3	4 4	5		
See beautiful scenery Fest my skill against nature	l I				<u>-</u>		
i est my sau agarstnatue It was close to home	1		3	4	5		
it was close to nome Be somewhere where I can make my own decisions	I	_					
Do something with my family or friends	1 1	2	3	4	5		
Set exercise		_	3	4	_		
Learn about nature through experience	1	2	3	4	5		
View wildlife		2	3	4	5		
Experience solitude	1	2	3	4	5		
Use outdoor skills		2	3	4	5		
Be unconfined by rules and regulations	1	2	3	4	5		
Fest my skill against others in the same activity		2	3	4	5		
Find excitement/thrills	1	2	3	4	5		
Get away from it all			3	4	5		
Improve my riding skills	1	2	3	4	5		
Find peace and quiet		2	3	4	5		
Be able to tell others I have been here	1	2	3	4	5		
Satisfy others in my group who wanted to come here	I	2	3	4	5		
Hotel/Motelrigras Dispersed Camping along Egin-Hammer Road 7) How many people are in your group?		zw a local resident					
7a) How would you describe the makeup of your g							
	ı Organized gro ı Couple	nda					
	i Couple i Other?						
□ Alone							
7b) ♥ IF Friends, Family, or Friends and Family was indicated above ♥ Which of the following describe the members of your group: □ Immediate Family (Spouses, Children, etc) □ Friends I met doing [respondent's primary activity] □ Extended Family (Cousins, Aunts, Uncles, etc) □ Neighbors □ Colleagues/Work Friends □ Other?							
7c) How often during a typical year do you travel	with this group	of people?		-			
7d) Is this the only activity or type of trip that you get together only for the purpose of doing [respond YES	take with this ; dent's primar NO,	y activity].		e group you ar	e here with		
	,	Whatother activities do	you đo?				
7e) ♥ If they have indicated they are involved in	ı motorized re	creation♥ ask	all that apply:				
How many ATVs are in your group?	^						
How many Dune Buggies are in your grou How many Dirt bikes/Motorcycles are in y							
How many Snowmobiles are in your group How many 4-wheeldrive whicles are in yo							

10) Have you visited the CAMPING AND RV PARK AREAS during your trip?
□ NO(\blacktriangledown SKIP TO QUESTION 11 \blacktriangledown) □ YES \rightarrow If yes, how often?
· — · · · · —
10a) Before you arrived at Saint Anthony Sand Dunes for this visit, Which of the following best describes
your understanding of the number of other people you would find at the PUBLIC CAMPING AND RV PARK AREAS?
□ I had no idea how many people I would see here. (♥ <u>SKIP TO QUESTION 10c</u> ♥)
□ I had a vague idea about how many people would be here
☐ I had a good idea about how many people would be here
□ I felt certain about how many other people I would see here
10th Onco and amired at the CAMDING AND BURARY ADDAS there similar on dissimilar was the supplier of source.
10b) Once you arrived at the CAMPING AND RV PARK AREAS, how similar or dissimilar was <u>the number of people</u>
you found compared to what you had expected <i>on the first day of your visit</i> ? □ Very similar
□ Very Similar
□ Different } How was the number of
□ Very Different } people different?
□ There were fewer than expected
□ There were more people than expected
a reserve in order product outproduct
10c) Before you arrived at Saint Anthony Sand Dunes for this visit, Which of the following best describes
your knowledge or understanding about the the types of activities and behaviors of visitors at the CAMPING AND RV
PARK AREAS?
□ I had no idea what other visitors would be doing here. (♥SKIP TO QUESTION 10e♥)
☐ I had a vague idea about what other visitors would be doing here.
☐ I had a good idea about what other visitors would be doing here.
□ I felt certain about what I would see others doing here.
10.6 Co
10d) Once you arrived at the CAMPING AND RV PARK AREAS, how similar or dissimilar were the types of activities
and behaviors of other visitors compared to what you had expected on the first day of your visit?
□ Very similar □ Similar
□ Different } How was this area
Using Different Signature of the same of t
a very binerent:
♥♥IF THE VISITOR HAS NOT USED A PUBLIC CAMPING OR RV PARK AREA,
SKIP TO QUESTION 11!♥♥
MILL TO VOLUTION TO
10e) How many people, other than those in your own group, would you estimate you saw in a PUBLIC CAMPING AND
RV PARK AREAS during this visit?
<u> </u>
10f) Which of the following best describes your feelings about the number of people you saw at the PUBLIC CAMPING
AND RV PARK AREAS?
□ Far too many people
□ Somewhat too many people
□ About the right number of people
□ Somewhat too few people
□ Far too few people

APPENDIX B: MAIL SURVEY

UtahState UNIVERSITY

OMB #0596-0108 (pending)

INSTITUTE FOR OUTDOOR RECREATION AND TOURISM 5220 Old Main Hill Logan, UT 84322-5220 Telephone: (435) 797-7094 FAX: (435) 797-4048

Dear Saint Anthony Sand Dunes Visitor,	
On/	oncerning the area's management and his survey will help us to make bout managing natural resources, access
Participation in this study is completely voluntary, but in opinions we need to hear from everyone who agreed to to have your comments and concerns heard by those manathony Sand Dunes.	complete this survey. This is your chanc
Your individual responses will be kept strictly confider whom the survey is addressed answer the following que use only; no record of names corresponding to those nur survey is received.	stions. The survey number is for office
Once you have completed the survey, please fold it leng envelope, seal it and place in the mail. No postage is no	
We greatly appreciate the time you have spent to help sh wonderful and unique area. If you have any questions ab done, please call us at (435) 797-1009 or email us at nm	oout the survey or the research being
Sincerely,	
Nathan Wagoner Research Assistant	Douglas Reiter Research Associate

Thank you again for your help. All information you provide will be kept strictly confidential.

1) How would you rate the following facilities and services at Saint Anthony Sand Dunes? Please circle one number to the right of each item.

	Very Poor	Poor	Fair	Good	Very Good	Don't Know
Restrooms/port-a-jons	1	2	3	4	5	DK
Roads	1	2	3	4	5	DK
Maintained trails	1	2	3	4	5	DK
Availability of day use and overnight parking	1	2	3	4	5	DK
Maintenance of parking lots	1	2	3	4	5	DK
Availability of camping/RV locations	1	2	3	4	5	DK
Maintenance of camping/RV locations	1	2	3	4	5	DK
Directional signs	1	2	3	4	5	DK
Visitor information (maps, brochures, etc)	1	2	3	4	5	DK
Information on rules and regulations	1	2	3	4	5	DK
Local law enforcement	1	2	3	4	5	DK
Bureau of Land Management (BLM) rangers and staff	1	2	3	4	5	DK

IF YOU ANSWERED **POOR** OR **VERY POOR** FOR ANY OF THE ABOVE, please tell us the location and what happened to cause you to rate that particular facility or service poor or very poor.

2)	During	your tr	ip, w	rere t	there	any in	stance	s where	othe	er visitors	were	rude	or in	consid	lerate to
you'	? Pleas	se tell us	(a) ·	what	activ	ity the	other	person	was	engaged	in dur	ing th	ie ind	ident,	as well
as, (Ъ) wha	t happer	ied.												

3) Please indicate to what extent you were able to achieve each of the following during your visit. Please circle one number to the right of each item.

visit. Please circle one number to the	Not at all	Slightly	Moderately	Achieved	Fully
	Achieved				Achieved
Be in a natural area		2	3	4	5
See beautiful scenery	1	2	3	4	5
Test my skill against nature	1	2	3	4	5
It was close to home	1	2	3	4	5
Be somewhere where I can make my own decisions	1	2	3	4	5
Do something with my family or friends	1	2	3	4	5
Get exercise	1	2	3	4	5
Learn about nature through experience	1	2	3	4	5
View wildlife		2	3	4	5
Experience solitude	1	2	3	4	5
Use outdoor skills	1	2	3	4	5
Be unconfined by rules and regulations	1	2	3	4	5
Test my skill against others in the same activity	1	2	3	4	5
Find excitement/thrills	1	2	3	4	5
Get away from it all		2	3	4	5
Improve my riding skills	1	2	3	4	5
Find peace and quite	1	2	3	4	5
Be able to tell others I have been here	1	2	3	4	5
Satisfy others in my group who wanted to come here	1	2	3	4	5

4) During your visit, were any of the following problems for you? Please circle one number to the right of each item.

	Not a Problem	A Small Problem	Definitely A Problem	A Big Problem	Don't Know
Too few water and electric hookups	1	2	3	4	DK
Excessive noise from other recreationists	1	2	3	4	DK
Excessive noise during quiet hours (while you were attempting to sleep)	1	2	3	4	DK
Too many horseback riders	1	2	3	4	DK
Too many cattle and sheep	1	2	3	4	DK
Too much livestock waste	1	2	3	4	DK
Too many ATV and dune buggy riders on the dunes	1	2	3	4	DK
Too many ATV and dune buggy riders on the trails	1	2	3	4	DK
Too many hikers or backpackers	1	2	3	4	DK
Human caused damage to plants	1	2	3	4	DK
Litter in the camping areas or along trails	1	2	3	4	DK
Damage to structures and facilities at camping/RV locations	1	2	3	4	DK
Lack of information on additional places to do my activities.	1	2	3	4	DK
Motorized recreation caused impacts on plants	1	2	3	4	DK
Availability of camping/RV locations	1	2	3	4	DK
Ineffective enforcement of the rules	1	2	3	4	DK

During your visit, were any of the following problems for you? Please circle one number to the right of each item.

	Not a Problem	A Small Problem	Definitely A Problem	A Big Problem	Don't Know
Other people were rude or inconsiderate to me	1	2	3	4	DK
Unclear rules and regulations	1	2	3	4	DK
Poorly maintained roads or trails	1	2	3	4	DK
Unsafe behavior of motorized visitors (ATVs, Dune Buggies, 4-wheelers)	1	2	3	4	DK
Unsafe behavior of non-motorized visitors (hikers, horseback riders, cavers, etc)	1	2	3	4	DK

4a) If you felt any of the above (on this page and the previous) were DEFINIT PROBLEM or A BIG PROBLEM, please tell us the location(s) where you encounted the problem(s) and what happened.	

5) Would you *support* or *oppose* the following **possible** management actions at Saint Anthony Sand Dunes? Please circle one number to the right of each item. (None of the following actions are being planned at this time; we would just like to know your opinion!)

	Strongly Oppose	Oppose	Neutral	Support	Strongly Support	Don't Know
Require safety videos or presentations for those riding on the dunes	1	2	3	4	5	DK
Limit the number of livestock	1	2	3	4	5	DK
Close certain areas to ATVs and motor vehicles	1	2	3	4	5	DK
Restrict camping outside of designated camping areas	1	2	3	4	5	DK
Construct new or expand existing government operated camping areas	1	2	3	4	5	DK
Expand parking facilities to keep up with demand	1	2	3	4	5	DK
Limit the number of ATVs and dune buggies	1	2	3	4	5	DK
Close heavily used motorized areas to hiking, horseback riding and other non-motorized use	1	2	3	4	5	DK
Limit the number of horseback riders	1	2	3	4	5	DK
Limit the number of people on the dunes at a particular time	1	2	3	4	5	DK
Allow recreation use of the dunes to increase	1	2	3	4	5	DK
Allow organized rallies and festivals on the dunes	1	2	3	4	5	DK

Would you *support* or *oppose* the following **possible** management actions at Saint Anthony Sand Dunes? Please circle one number to the right of each item. (None of the following actions are being planned at this time; we would just like to know your opinion!)

	Strongly Oppose	Oppose	Neutral	Support	Strongly Support	Don't Know
Install clearer directional signs	1	2	3	4	5	DK
Provided information on how to reduce damage to vegetation/animal habitat	1	74	37	4	5	DK
Collect fees to help manage and maintain facilities	1	2	3	4	5	DK
Increase law enforcement presence in the area	1	2	3	4	5	DK
Designate additional trails for motorized recreation	1	2	3	4	5	DK
Enforce rules to prevent soil erosion outside of the big dunes area	1	2	3	4	5	DK
Allow use of the dunes to increase indefinitely	1	2	3	4	5	DK
Reduce the number of government operated camping areas to encourage private campgrounds	1	2	3	4	5	DK
Increase ranger and law enforcement presence	1	2	3	4	5	DK
Close areas with sensitive plant and animal species to visitors	1	2	3	4	5	DK
Provide more information concerning natural features of the area	1	2	3	4	5	DK
Close the Wilderness Study Area to motorized recreation	1	2	3	4	5	DK
Provide information on how to reduce impacts on wildlife	1	2	3	4	5	DK

Privately Owned and Operated Motels, Hotels, Lodges, RV Parks. Resorts	\$
Government Operated Camping and RV Parks	\$
Eating and Drinking Establishments	\$ \$
Grocery and Convenience Stores	\$
Service/Gas Stations	\$
Sporting Goods and Outdoor Equipment Stores	\$
Auto Parts and Equipment Stores	\$
OHV Parts and Equipment Stores	\$
Equipment Rental Stores (ATVs, bikes, dune buggies, e	
Souvenir Stores and Gift Shops	\$
Food and Supplies for Packstock	\$
Other Expenditures? (please describe) \$	
\$	
\$	
\$	
6a) These expenditures are for how many people?	people

7)	Would you be willing to pay a fee to use the sand dunes area if the money went directly to
ma.	intaining recreation and facilities in this area?

- □ Definitely Yes
- □ Probably Yes
 □ Probably No
 □ Definitely No

8) How do you feel about each of the following types of fees? Please circle one number to the right of each item

	Strongly Oppose	Oppose	Neutral	Favor	Strongly Favor	Don't Know
A. Daily fee for use of the open dunes area	1	2	3	4	5	DK
B. Weekly fee for use of the open dunes area	1	2	3	4	5	DK
C Yearly one-time fee for use of the open dunes area	1	2	3	4	5	DK
D. Other fee source?(please describe)	1	2	3	4	5	DK

8a) If a fee became necessary to cover St. Anthony Sand Dunes' operating costs, which of the above funding sources would you prefer? (Please circle your choice)

A	В	С	\mathbf{D}
	_		_

9) If a fee became necessary, what would be a reasonable price to pay for each of the following types of fees? If you strongly oppose a certain type of fee put a 0 on that line.

Type of Fee	Price You	ı Feel is Reasonable
A. Daily fee for use of the large dunes area	\$	Please write in
B. Weekly fee for use of the large dunes area	\$amount	Please write in
C Yearly one-time fee for use of the large dunes area	\$	Please write in
 Other fee source (if you entered one in question 7, please tell us an appropriate amount here) 	\$amount	Please write in

10) If the money went directly to the upkeep and management of the area, how would you feel about <u>each</u> of the following camping related fees? Please circle one number to the right of each item

	Strongly Oppose	Oppose	Neutral	Favor	Strongly Favor	Don't Know
Fee for using undeveloped sites (no toilets or other facilities)	1	2	3	4	5	DK
Fee for using semi-developed sites (pit toilets and fire rings)	1	2	3	4	5	DK
Fee for using developed sites (pit toilets, hardened parking surfaces, picnic tables, fire grills, etc)	1	2	3	4	5	DK
Fee for using highly-developed sites (flush toilets, vehicle hookups, showers, etc)	1	2	3	4	5	DK

11) If a fee became necessary, what would be a reasonable price to pay for each of the following types of fees? If you strongly oppose a certain type of fee put a 0 on that line.

Type of Fee	Price You Feel is Reasonable
Daily Fee for using <i>undeveloped sites</i> (no toilets or other facilities)	\$Please write in
Daily Fee for using semi-developed sites (pit toilets and fire rings)	\$Please write in
Daily Fee for using <i>developed sites</i> (pit toilets, hardened parking surfaces, picnic tables, fire grills, etc)	\$Please write in
Daily Fee for using highly-developed sites (flush toilets, vehicle hookups, showers, etc)	\$Please write in

12) Please indicate your level of agreement or disagreement with each of the following statements. Please circle one number to the right of each item *Please note* that your primary activity is simply the thing you came to Saint Anthony Sands to do, like riding ATVs on the dunes or riding horses on the trails.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Participating in my primary activity (ATVing, camping, riding, etc.) is important in maintaining my relationship with the group of people I visited Saint Anthony Sand Dunes with	1	2	3	4	5
Being able to participate in my primary activity (ATVing, camping, riding, etc) with my family is important	1	2	3	4	5
Feeling a sense of community with other people engaged in the same primary activity (ATVing, camping, riding, etc), who are not in my group, is important	1	2	3	4	5
Finding a place to visit that can meet my group's needs is important.	1	2	3	4	5

13a) We would like to know more about the group of people you were with during your trip to Saint Anthony Sand Dunes. Please use the space below to tell us: 13a) Where did all of the members of your group come from (For example, in which state or part of the country do they live? What about towsn especially if nearly all are from Idaho?) 13b) Where did your group meet for your trip to Saint Anthony Sand Dunes (For Example, did you meet up at the Dunes or in some other place(s)) 13c) would you say was the primary leader of your group (your relative, friend, neighbor, etc.) and how did they become the group leader for this trip?	
state or part of the country do they live? What about towsn especially if nearly all are from Idaho?) 13b) Where did your group meet for your trip to Saint Anthony Sand Dunes (For Example, did you meet up at the Dunes or in some other place(s)) 13c) would you say was the primary leader of your group (your relative, friend,	
Example, did you meet up at the Dunes or in some other place(s)) 13c) would you say was the primary leader of your group (your relative, friend,	state or part of the country do they live? What about towsn especially if nearly all are
Example, did you meet up at the Dunes or in some other place(s)) 13c) would you say was the primary leader of your group (your relative, friend,	
Example, did you meet up at the Dunes or in some other place(s)) 13c) would you say was the primary leader of your group (your relative, friend,	
	13b) Where did your group meet for your trip to Saint Anthony Sand Dunes (For Example, did you meet up at the Dunes or in some other place(s))

		ochures or magazines? Did one or more p the others?, Were there several reasons?, e	
7.0 7771 1 Cd Cd		6.1	
check only one box.	est describes the t	ype of places you lived growing up? Pleas	В
check only one ook.			
Rural area		Small city (25,000-100,000 people)	
Small town (< 5,000 people)		Suburb of a large city	
Medium-sized town (5,000-10,	000 people) 🗆	City of 100,000 or more	
15) What is your yearly hous	ehold income? Pla	ease check only one box.	
Under \$10,000 🗆		\$60,000 to \$69,999 🗆	
\$10,000 to \$19,999 a		\$70,000 to \$79,999 🗆	
\$20,000 to \$29,999 a		\$80,000 to \$89,999 a	
\$30,000 to \$39,999 a		\$90,000 to \$99,999 p	
\$40,000 to \$49,999 a		\$Above \$100,000 🗆	
\$50,000 to \$59,999 a		Ψ2120Ve Ψ2 00,000 - Δ	
\$50,000 to \$55,555 L			
16) What is the highest level	l of education you	have completed? Please check only one bo	X.
Did not complete High School		College degree 🗆	
Dia noi complete High School High School			
Some College			
nome conege		Graduate/Professional degree 🛘 🗖	
			mes

APPENDIX C: INTERPECT SURVEY OPEN-ENDED COMMENTS

- Clean Facilities
- SWEET
- Well maintained, nice area.
- Great Dunes!!
- Develop the camping and parking areas further.
- There should be a place to buy stickers here at the campground.
- Why do we have to have flags on bikes?
- We like it the way it is, quit changing it.
- Good time. Courteous. Facilities are nice other than cramped. Pleasant
- Good Time
- More trash dumpsters, A way to dump the RV tanks, fresh water.
- Great Sand Dunes
- Fix the Desert Oasis Access point so it's wider or Double up to have one each way. It's too narrow for rails. Besides this, it's great!!
- No additional campsites, unless they are near choke cherry area, because it is not over used.
- Very pleasant place to visit. We will keep coming back.
- Would be nice to have an area designated for non motorized use: hiking/playing on dunes. Quiet camping area. The reason we went to a hotel the 2nd night was because of the 6 ATVs' riding directly through our camp on Taylor Well Road. This happened more than once we were the only other people camped in the entire area.
- Power to the people who use the area. Let them make the decisions on how to run it. Really unique area, great place to bring kids, fun to just let em run wild because the sand is safe for them to roll on.
- Take the Flags off bikes, charge out Of staters. Bar on the Egin Lakes access.
- The BLM is taking appropriate actions for the increased numbers of people.
- Bring down camping fees, they are too high.
- Don't close.
- It's Awesome!! Flags suck!!
- Great time every time. Pleasant rangers/staff. Dune buggy riders disregard for others disappointing/scary/annoying. Dangerous.
- Nice and Open. Good opportunities to get away from others. Not too crowded like other places.
- Okay for what it is.
- Like it the way it is.
- Husband likes to come ride motorcycles.
- Awesome!!
- It Rocks!
- Keep the area open without lots of restrictions, just have enough to keep people under control
- Keep it open to the public

- Keep up the good work BLM
- Really like what has been done with the parking lot in the area, and the toilets.
- Great Camp
- Maybe the weeds should have been cleaned out
- Keep it open and bring more people/Camping are should be larger/Quiet hours should be enforced, people were too loud.
- Want to make sure that the area stays open to everyone, all the time and forever. The wilderness designation scares me /Want people to clean up after themselves on drives. People can get too loud after hours./Unsupervised children in camp is annoying for others.
- There was too much late night partying they started at midnight and didn't stop till 3:30 it was awful, why wasn't the sheriff out here to stop them? They were setting off fireworks at 3 a.m.
- Fumes and glass are annoying, we would like to see the area sectioned off, motorized from non-motorized so we
 don't have to deal with it.
- Quit the advertisements of the area. We are happy with the people here.
- More campgrounds
- More camping spots. Take fence in campground back to the further fence, which would make a larger campground. Once the campgrounds fill there is nowhere to go. More trees for shade.
- Like what you have done with parking area, and we don't mind paying fees for camping.
- Get rid of large parking area. Not needed.
- We come less now than before because of the Bike Flag Rule. It's a danger to the rider.
- We would like to see the area stay free to use, but will pay a fee if we have to.
- Don't like the flags on Bikes, you sit just as high as the flag. There don't need to be anymore rules on the dunes. Fine the way they are!!
- Nice area, well managed
- Keep it open.
- We like these dunes because we can ride anywhere we want. And we don't have to quit riding by 10:pm
- Desert Oasis is too disorganized in where they allow people to go and there is too much dust from the roads.
- Keep the area open. Glad to see the Rangers out there. Resolve the sticker issue for the sand rails.
- Flags for bikes should be enforced better, they are dangerous.
- Nicer campgrounds could be nice. Trails are better at other place. Like the closeness of town.
- Keep them open
- They accommodate people and keep the area open to users
- The people in the camping area are very respectful and watch out for others, its very nice.
- Open dayuse to camping when the overnight is full. No new regulations
- Too harsh on the night riders, relax the rules on quiet hours. This area is never going to be quiet.
- She likes the patrols of the area. Wants to make it mandatory to wear helmets.

- Don't limit the access to the dunes!
- More group sites are a good idea. Stricter enforcement on speed limit.
- There was trash on the dunes today.
- RV campgrounds with a pool would be nice.
- Wouldn't mind if the BLM charged out of staters for ID tags. I would gladly pay for more enforcement of the area to keep it open. Limiting usage on heavy weekends. (Perhaps putting the campgrounds on a reservation only basis) We are willing to do anything to keep the area open and not abused. Better enforcement of the rules (drinking) is a good idea.
- Enforcement of Helmets. Alcohol is also an issue.
- Good job with the Pond Parking. Need more RV parking @ other resorts "Sand Hills"
- User fees for non-resident offroad permits to cover services required for number of users.
- Too mush regulation by Sheriff/ macho sheriff. Showers here. No flags on the motorbikes.
- BLM is doing a great job. THANKS
- Sheriff gives problems. No more flags on Bikes!!! Alcohol is a bigger problem than the flags, Crackdown.
- I have been coming to these dunes for about 30 years and the # of people is becoming alarming. If out of state people want to experience our dunes lets charge accordingly for OHV stickers and camping. Flag rules may have a purpose but if someone hits another user of the dunes without a helmet the flag is not going to protect them.
- We are having a blast!! THANK YOU!
- Really appreciate the opportunity to come here and enjoy the sand.
- Helmets Laws.
- Sandhills Owner a real jerk. Flags very important!! (8 Feet Tall)
- Helmets should be mandatory for ATV's and Bikes.
- Doing an excellent Job. Hope the area stays open forever.
- There are a lot fewer people here than we thought there would be.
- Don't close or make the dunes smaller (new rules and regulations) Better marking of the access points (Big flags). Watch for loud campers. Lots of trash on the dunes (empty the trash cans on the dunes) Sign for fees for trash. No noise ordinances on the dunes (not fair to the people that make their own vehicles.
- The area is well. The rules and regulation here are great, not too restrictive. Don't start overreacting and installing closures and new rules.
- Keep it all open
- They need to enforce existing laws (drinking, helmets, clothing) Enforce these laws instead of making new ones. The lack of protective gear is the problem not the flags. Enforce the drinking laws. Flag rules aren't well thought out, they are dangerous for bikes. Closures aren't necessary and are confusing. The closures seem to be channeling people into the same area, it makes for accidents. Closures seem to contradict the expansion of the campsites.
- Campground closer to big dunes. Limit the street legal vehicles, we don't want the to be allowed on the dunes.
- Good area, we are coming back. Don't limit the number that use it.
- BLM is doing a wonderful job.

- Great area we never expected to find this in Idaho. Nice to find no fees!!
- More reasonable in the regulation. Leave us alone a little more when it comes to monitoring and regulation. Use
 more common sense when you are designing the route closure.
- We love all efforts to make the wilderness accessible for ATV play and activities. The new day use campground
 and 14 day campground is great. Thanks for all your efforts to keep the dunes open to those of us who love to play
 on them.
- Water and showers at BLM site. Understanding between the various users is needed. (Wilderness vs. Motor Vehicles)
- Keep the area open to users, if you close it down you better close down the highways as well. They are just as dangerous! Why do we need to have flags on the bikes? They bought a flag and if broke off the same day after 2 hours of riding.
- More shade (Egin) Food and Services (Pit stop for example)
- Less regulation the better.
- Fees should be reduced in camping area, we already pay fees for stickers, why isn't that money used for upkeep, etc.?
- It would be nice if the water was maintained throughout the summer. Our children enjoy the beach like environment that can be had in the early summer.
- Had a great timeenjoyed the scenes. Don't like that you couldn't have a campfire in the day use area. More trash pickup on the dunes. Better enforcement of the little rules.
- Like to se the Law Enforcement on patrol here.
- law enforcement should be more understanding with flag rules.
- Picnic tables and facilities by the lake. Running water to wash off at Egin Day use.
- Keep it the way it is.
- Mandatory helmets for all ATV/OHV. Flags are ok, but safety issues aren't all related to if you have a flag! Nice clean bathrooms!!
- I love the Dunes, very clean, Nice people close to a town (Rexburg)
- Flag rule on bikes is pointless, makes about as much sense as flags on ??? Flags affect ability to ride safely.
- Power and water would be nice.
- Tent pads would be nice. Flags on bikes suck they don't stay on well
- I do not want to see restrictions on riding areas.
- Bathrooms are nice
- Keep it open and free.
- Camping with better access further west would help keep down congestion more access to bigger dunes. Water at camp would be nice.
- Here more often because of conflict issues on their own BLM lands.
- Trash is a shame. Road closures seem unnecessary

- If they're going to be very stringent with hunters and fisherman about staying on the open dunes during hunting season they should apply those rules just as much with the motorized users.
- This year has been great because the camping has been so nice. Developments In campground are good. Fees OK paying for what you're using Less people trash the place.
- Better enforcement of the speed limit by the sheriff in the Egin Lakes Parking/camping areas. (He has seen people fly by, and he does nothing.)
- Bigger sign at CIVIL DEFENSE CAVE. And a Porta potty
- Too much harassment at Egin Lakes by BLM Ranger and Sheriffs
- Development of the BLM sites. If you're gonna develop the parking at least put in water. Why charge people
 when all you did was gravel the parking lot. Increase fines on people who leave garbage on the dunes. Someone
 needs to watch those who leave trash.
- Put up signs that say don't litter. Put up trail signs so you don't get lost. *Directional Markers*
- Like the ideas of the full hookups in the camping area (Egin Lakes). More night patrols of the camping area (thorn out a few bad apples.)
- Keep the dunes open. Don't change the management of the area.
- The lake is great.
- Clean campground! Cute Survey!
- Enforce quiet hours more.
- \$8 seems high. No water
- Sheriffs start pestering right when we got here. Sheriffs harassing too much.
- Lots need to be bigger. Circle parking. Fill the lake.
- \$8 too much. Nice barbed wire(YUCK) No water! Or dumpsite. Liked it the way it was before. Sand would be nice not to ruin paddle tire.
- Nice improvements
- Potable Water
- Nice Dunes! Been all over and these are the best I've ever been to.
- Fires and trash on dunes are no good.
- Wonderful resource. People here are very responsible.
- Big dunes! Its cool.
- Wonderful Here. Not Crowded. Not so much restriction. Safe
- Don't shut it down. Care about the resource and respect it. Volunteering to clean the Dunes. Escanbajo Buggy Club. Bary Area California.
- Enjoyed my stay and a new adventure on ATV.
- Don't limit it. We all pay a lot of taxes to use it.
- There are no hookups at the Egin Lakes.
- Really enjoyed the area

- Two way roads to the dunes, to avoid accidents as people pass. Don't mind paying a fee if it goes to the area I am using.
- Like the area.
- Different colored lights at access points (so you know where you are) Porta Potties at several locations throughout the dunes.
- It was great
- Don't close it. Leave it alone. Improvements are fine, but don't over do it with public (BLM rv). It's nice to have a choice of dry camp (BLM) to private RV w/ hookups. Endangered Species Act been used for trying to close other areas we used to go close to home.
- Keep it open! Very good.
- Keep it Open! Keep it proactive!
- Cherish right to come here. Keep it open. Let everyone play. Day fees wouldn't be bad if reasonable, if needed for maintenance
- Trash left out on dunes bad or disappointing.
- Trees in the camping area. At least have some water available. It would be better not to have full hookups so that there isn't a sewage dump problem.
- Don't put anymore restrictions. The fun is being on your own.
- Flags a new thing on motorcycles. Seems pointless because flags break when bikes get dumped. Also, flags bend down when riding and can't be seen anyway. Safety is good, but this doesn't seem feasible because they break so easily in these conditions.
- We think the motorcycles don't need flags. Flags bend back because bikes have to go fast on the sand. Riders stand higher than flags anyway. Wrecks break the poles. Sticks a safety hazard when bikes tumble because they could easily skewer you. If you buy an offroad sticker you should be able to use backcountry area trails (stairs, etc. back by Taylor Will Rd.) They don't use flags because they'd rather get tickets than compromise their safety.
- More camping areas(dispersed) for camping.
- Unaware of flags should be posted!
- Helmet rules would be good. Every time we come down here there gets to be more and more people they will
 probably have to address this issue soon.
- Parking developments nice area is less chaotic.
- Get rid of flags for dirt bikes..
- Water at Day Use and RV camp at Egin Lakes.
- Critique: sign improvement for entering cave road. Also directions from sand dunes.
- VERY VERY NEAT PLACE. Would love to have less broken glass and campfire remnants. Would like to see some kind of interpretive displays to explain areas, formation, history, etc. Better directional signs to the area would make it less stressful to get here.
- Great job, we don't want people to ruin it so be careful with it!!
- I like the way they have control, but yet the BLM leaves you alone. Like the new camping area.

- He is willing to pay. The area should be designated around the people that come here. There's too much day use parking, it should open to overnight if this area becomes too crowded. The dust should be controlled(maybe signs that say please watch your dust) Holiday weekend dumpster would be good. Layout of the RV camping area is not set up in the way that people camp. Instead of having back door to front door, it should have front to front door and this would require pull through. The spaces are too long and narrow. This area needs to be changed to make use of the wasted space before the hook ups are put in. You could have three rows of RV's if it was redesigned. There should have been better design of the camping area to accommodate the types of vehicles that come here.
- This area is very clean and open to use. It's very impressive. It was hard to find the parts that we needed. VW. We would like to see water/electric/and dump stations.
- Too much motorized use, don't want to have it wilderness. But maybe there can be a time for only horses and a time for only motors.
- Like the way the area is now.
- Less regulations are better.
- Like the parking and restrooms. Would like to see water and electric, in the day use area.
- Fewer rule sand regulations and fewer people please. Like there is no fee to use the area. Like that it's open to motors.
- Flags on the bikes are unsafe and inconvenient getting off the bikes is hard and falling on the flag can be dangerous to the rider. Pass a helmet law and forget the flag. Worried about what the survey could be used for. Don't close the areas we us down. The areas out here have been open the 30 years I have been coming here. Want my kids to come here. They are the best in the U.S. The old motor loop road that runs from Thunder to Sandhills should be reopened. More closures mean more people in a smaller area and that means more people getting in accidents.
- Better signs. Grading the road to Civil Defense Cave.
- The new parking area (Red Road) is nice. Nice new restroom and fencing is very well done.
- Like the designated trails that guide you to camps and dunes. Better enforcement of litter laws and better clean up.
- Clean public restrooms (Not porta johns)
- The fees are crappy. Keep the area free.
- No new rules! (Flags and no glass) Dunes are good don't change rules
- Enjoyable area.
- No flags on dirt bikes!!
- No quiet time. Further spaced campgrounds. Need open fire pits. Nice toilets very clean.
- Keep it open. It's great!!
- Nice hands off as far as rules and regs. Challenge of dunes!! Keep it open!! Safety issues w/ drinking DUIs. Keep the fees down.
- Fun.
- We like it, we keep coming back.
- Leave it open. Public campground closer.
- I like all the improvements in the camping area.

- Just leave it alone!! Get rid of flags on bikes.
- Keep it open to the general public. Minimum of rules and regulations(just enough to keep people safe.
- More campsites, hookups for camping
- No more regulations.
- It's awesome here!
- Flags on bikes are silly. Riders stand taller.
- Flags on dirt bikes aren't necessary. Safety issues. Flags on helmets annoying. "Law Enforcement" trying to help, but just being annoying.
- There is a lot of noise and the people out there need to be controlled/limited. There is lots of litter that should be picked up. Why are there no interpretive displays to explain why the dunes are here?
- Lots of Fun!
- Nice
- Country sheriffs were pestering
- Good Place
- At Egin Lakes, I would like to see water available.
- Nice area and facilities
- Keep the area the same and don't close it down.
- Change the rule about burning pallets in the camps
- Sad that by restricting there is a bias towards the rich users. Environmental uproar about area is unjustified. There is too much garbage on the dunes, which hurts all our values of staying here and having the area remain open.
- I didn't get out of camp that much so I can't really say.
- No complaints!! The campground could be much better organized. Example; Put up numbered campspots.
- Separate family camping from those who want to party. Organize the area better to accommodate big groups and put up numbered campsites.
- A lot of trash. Especially glow sticks in Cave. They like how the caves have not been developed. Caves in other states are developed and that ruins the whole experience. Trash cans would be nice, and a sign that says not to litter
- Enforce 5 mph. Oil the parking lot so it's not so dusty. Bathrooms are nice. Surveyors should get ATVs'. Reserved campspots at Egin Lakes.
- Put in trees for shade.
- More outhouses or empty the ones that you have. Put water for the campers.
- The fewer restrictions the better. It's here to be used not shut down.
- Map to help people find the cave easier. Improve the parking area at the cave. Such as put a garbage can so that people don't litter. Also put a fire pit so groups can build fires.
- He had a brother die out here, so he wants people to know how dangerous it can be. Loves the new parking lot. Two thumbs up.

- Loves the Dunes. No need to limit the number of people because there are so many areas where you can be alone.
- Keep it open and the way it is. Don't limit the people.
- It's all good. We like it. No fee on the area.
- It's over managed. It used to be free and nice. Flags are dangerous on the dirt bikes. Running water. Why fence off all the sagebrush areas around the parking/campground area. The horses/ranger parking lots are too big.
- Less government. We don't want to be charged to park. No more advertising. Why try to bring people into a place and ruin it for those who are using it. The improvements are nice, but they definitely are not needed.
- Keep it as it as. No burning of pallets. Don't close it. We won't be happy. We'll go to the guys house who closes it and ride in his backyard. It's clean. Great Dunes!!
- Like everyone I'd prefer less people. But I want to come when I want without waiting for a permit. I'll deal with more people when I'm here so I can come when I want too.
- Bring Jennifer back. Access to the sand without roadbase. Eliminate loose dirt. Water is a good idea and pavilions. First come first serve good idea. Enforce <u>loud</u> music after quiet time.
- More women and two chrome poles. Camp on the sand/around the lake. More trees. More camping/More room to camp. Bigger fire barrels. Flags on dirt bikes/bad idea. Helmet flags. Antibacterial in bathrooms.
- Sell beer ar the "Pit stop" Expand campground. More night rides.
- Keep it open. Rec places are tough to find so this is nice. Signs to get to campground from St. Anthony. Direct traffic inside campground with signs.
- Campground, grave, restrooms are nice. Worried about over-management. Leave us alone. We have been fine for years. Upset about all the trails you have closed around the lake. Great place for kids to ride. Why close it down! Upset about fence on the northern end of the dunes. Reservations are necessary Most people don't need improvement to campground. Don't make it a West Yellowstone. We are a different crowd. We're bikers. Don't harass those who are not a problem. I'm Republican Anti Government
- Cops drove right past us when we broke down. Dumps to empty our RV's. Cops should stop in and get to know us. Put in a play area for the little kids, Not in the parking lot, or in the sticky weeds. Ex. Sandboxes
- Have condos or hotels so you don't have to camp. Real bathrooms with water. But if you put those in more people would come. So maybe we don't want condos or hotels.
- Picnic tables and more shade
- Put more camping spaces
- More parking to spread the people out. Keep it all open because we make money off of them. They are local high school students.
- Like how the area is still open. There should be water at Red Road parking area. Rental information on the BLM site.
- Good and Fun. Helmets should be for everyone they shouldn't be able to double up. Bigger directional signs to guide.
- Awesome and clean dunes.
- Quit improving things. We're fine with the primitive type setting.

- I hate to see it change. Don't push the rules to the point where we don't have fun.
- Toilets are full. Don't close the sand. Keep it open.
- More access to spread the people out. Egin lakes needs to hold more people. Don't cut the number of campsites.
- Bathrooms with flushing toilets. Running water to drink. Fire pits or barrels to have fires in. They don't like the Egin lakes area development. Flags on the bikes are a bad idea.
- We don't want to see change. Leave it the way it is, that's why we come. I am a fan of the flags on bikes. Cops are cool and they handle things well.
- More facilities/full hookups. People are willing to pay. More bathrooms.
- Functioning flush toilets. More facilities. Keep the sand dunes natural. Keep markers/trails away from lava beds.
- Overall I enjoy it. More campgrounds. Diversity in camping from free to luxury.
- Keep it open. More showers. Put in a bar.
- Put more concessionaire stands. Such as gasoline. Better showers/toilets. Keep it open. The people don't hurt a thing.
- Drive too fast in the campground. More patrol to enforce what goes on. Loud music at night. Quiet time 11:00 or 12:00 midnight. More outhouses/garbage cans.
- Wonderful campground. Clean, well taken care of. Great hookups/bathrooms
- Showers, Water, hook ups in BLM campground.
- Campground too developed now.
- Keep it open
- Markers need arrows
- Ouiet and peaceful
- Parking would be nice at Egin Hammer road and gas.
- Keep the dunes open.
- Don't shut these dunes down.
- Flags on dirt bikes aren't good.
- Keep it open.
- · Flags on dirt bikes are stupid
- Water in Day Use or something would be good. Also at other access points.
- Should have season passes. (Locals discount) when BLM are finished. Flags bikes not necessary angle of bike makes it so you can't see flag anyway. Utahans ruin the place. They leave trash.
- A map of usable trails, etc. would be nice.
- Why can't we buy beer on Sunday?
- Thumbs Up!!
- Too many Bonfires and too much trash (glass,nails). Confine the bonfires to a smaller area.

- Keep it open. Get rid of WSA (make wilderness or make it a regular area already!) More campsites –dry sites run by BLM.
- There should be an area at Egin lakes reserved for local/instate people. Some spots should be able to be reserved for in state users. They should look at limiting or teaching sand rails to keep the area safe for the atv/bikes.
- No flags on bikes. Don't close any areas. No more parking lots. No more development. Don't change for parking.
- We bring money to these surrounding towns by buying food, parts for the bikes, etc. and we can't even stay overnight in the parking lot for free. Markers should be set up at dangerous dropoffs, and to lead way back to parking lot.
- Keep it open to everyone.
- They like the parking area, and all the improvements that have been made recently.
- Bikes don't need a flag on the back. Bikes are louder/higher off the ground. Flag wouldn't be much higher than person. A lot of trash. Have people report those who litter. Why don't they require helmets.
- Build tie racks to tie horses to. They like the equestrian parking area.
- Explanation of what has happened here/History of the dunes. Put up signs explaining history and geography.
- No speeding in parking lot. The sand cars drive too aggressively. No aggressive management. Continue to keep law and order. Put up stands around toilets to lean bikes on.
- Keep it open for public. Don't let one group run the place such as don't limit certain types of activities.
- It's public land keep it open.
- Enforce helmet laws and 1 person per vehicle.
- Put in another large parking lot closer to the big dunes. Require helmets. No flags on the bikes.
- No flags on the bikes. Horses have too big of a parking lot. No limit on amount of people. Keep all the dunes open.
- More designated OHV trails (from Beginner to Advanced) The trails should be a mix of baja
 ing and rock climbing with campsites along the way. Would be willing to pay to use the campsites and access the
 area.
- Keep down restrictions and law enforcement. Keep the flags on Quads and Buggies, not on Bikes! (They always break off)
- Keep it open to the public
- Clean bathrooms. Keep it up looks good. Nice place to ride. More access to Beer!
- Like what I have seen over the years. Like the development. You guys aren't closing things like they are in Canada. Use it! That's what God meant it for.
- Thanks for keeping dunes open. Keep up good work.
- Good job on improvement so far. Nice
- More RV spots. Spread out camping or just get more spots. Most people will spend money for camping/parking lots.

- More detailed maps so that we can find all of the caves.
- Regulate the loud music. Smooth out entrance to dunes.
- Hand sanitizers. Bathrooms are clean which is awesome.
- No black top on the road. If we pay to camp we shouldn't pay for fire ring.
- Place is awesome!! Don't change a thing.
- Leave it alone. Well dispersed.
- If we take care of it we'll have it a long while. We're responsible, we'll have it.
- Pleased to see survey being done to solicit public opinion.
- ATV rentals for college students.
- Seem like doing a good job.
- Put up better signage. Couldn't find the main off road.
- BLM is conducive to motorized vehicles it is so nice to keep this use ongoing respectful use to hikers and other groups. We tread lightly. We're conscious of other users, make it good for everyone.
- Really well managed. Had good experience!!
- More signs, clearer signs
- Motorized vehicles are increasingly annoying. Mostly the disregard for others using the similar surroundings. The
 noise from the engines makes virtually impossible viewing animals. Their tracks scare the dune outside the area
 they should be utilizing. The noise also frightens our riding animals occasionally. The exhaust from the engines is
 more intense than car and vehicles. That exhaust impacts air quality and water quality.
- Camped here last 5 years, tried to keep things nice and clean. Nails from pallets are bad (college kids) We keep things clean and tidy don't want to be blamed for others mess. More access to water would be nice.
- Fee is good, keep if free to use. I like the amount of space for riding that is open here.
- The area stays very clean and the camp area they have set up gets better all the time. I like it up here and hope to always be able to enjoy it.
- Fencing off of the trees was pointless. The gravel is too dusty. We liked it better when we could get in the trees. Start out bumps need to be smoothed out.
- A row of trees between the camping area. Fire rings would be nice.
- Better signs to direct. Dump station would be nice for camping.
- Dump station for the RVs
- Joe is a nice guy. We really like him
- I try to keep the area clean and want it to remain open. It's a shame about the litter on the dunes. There should be better regulation of the quiet hours.
- Put some trees into the day use area there were trees here in the 80's
- Don't limit the use.
- More info with GPS. (Campground, Town information) It's hard to come to the area "totally blind" Wonderful place!!
- Avoid the 3 day holidays

- If there get to be too many people, it should be sctioned off so you only limit the number of people in each section, not whole dunes. There should be gas station around here so you can fill up, its hard to ride where you have to go to turn to fill up. I would like to see loading and unloading ramps at all the access points. They don't have to be nice like the one at Egin Lakes. I would even be willing to help build them.
- Like everything about the area. Keep everything here open. I've been coming here since I was 5, so I want it to remain open, so I can keep on using.
- Would like all rider to wear helmets and ride single. More law enforcement presence would be nice.
- I don't like to see the beer bottles cut on the dunes. They should stop it somehow so the place doesn't get shot down.
- Better enforcement. Jumping rules. People need to haul off pallets.
- Dislike dirt bike flags. Restrict movement on dirt bikes.
- Like the area.
- Like how it's maintained. Like it because it's open and you don't stay on trails.
- Better enforcement of the litter laws is needed. There is a lot of trash out there.
- Quit making so we can't ride as fast. Need to stop limiting access.
- Less development=less people=more fun. It's simple
- Unlock gates, right as you get gravel off Egin Hammer road. Access to dunes.
- Flags for the bikes are "gay". They are a hazard for bikers.
- Access to firewood/willing to pay. Sand Hills was very accommodating. We bought water and dumped the trailer.
- Running water. Enforce helmet laws. Enforce noise restrictions in camping area.
- Love the improvements with the parking lot and bathrooms. No need to limit the people now, but in the future busy weekends might need a limit.
- Put water on the dunes. We get thirsty. Tire pump somewhere in parking lot.
- Flatten the entrance to the dunes. It's too bumpy
- Flags on bikes. Flags on bikes. Grass in campground. Water.
- Water/Electricity
- More bathroom facilities are needed. The ramp is a great idea.
- Better permanent toilet.
- Leave it alone. Leave it the way it is.
- Fun place.
- Good times. Amazed at all the dunes.
- I think there is too much gov. control of the area as it is. It's being made too difficult to access areas on public land. It is public land and should be open to public.
- Beautiful and clean.
- Lots of fun.
- Good.

- Grill in the Egin Lakes area for buggies and stuff would be cool.
- Great, clean area.
- No signs, keep it secret!! There should be a sign that states there is a huge fine for littering on the dunes. (There is too much litter out there.
- Fewer rules out here. Most of the people who cause problems drunk and only hurt themselves. The flag rule is also stupid.
- Flag rules are stupid. You can't keep them on. Not practical. Some of the trail closures don't make sense. Don't want to pay a fee.
- Flags on bikes are annoying.
- Better patrolling
- We had a wonderful time today.
- Everything seems pretty good.
- Enforce the flag rule if you are going to have it in place, enforce the drinking and stickers also! We like the area and how it's managed.
- Less environmentalists. This area doesn't ever get overcrowded, so why limit what people can do. Keep all trails open. They want a better trail system with a good map. 1)Loop trails are better than in/out because in/out means two trips on same trail. 2)Make a good map and number the trails. Signs don't work because people vandalize them. They like everything the way it is and don't want to see any of it taken away or closed from the public.
- Handrail going down into the cave <u>For old people</u>. Signs not to litter. Designated places to have campfires.
- More access closer to the Dunes. More hotels in St. Anthony
- Camping areas just south of the middle bowl should be opened. Where did the Trash Can from Thunder get moved to. Open more access on the west end of the dunes area. Egin Day Use is too crowded. More information about information on outfitter ???

APPENDIX	T D:MAIL SU	RVEY OPF	EN-ENDED	COMMENTS

- If there are any meetings on the Sand Dunes in my area I would like to participate.
- Very personable BLM officers. Never had a problem w/ any of them. They always stop long enough to visit and answer questions. Did not give ticket for flag violation but allowed us to get proper equipment. I knew they were around in case of problems.
- In the many years I have been riding the dunes I have helped load quite a number of people on the ambulance and the helicopter. By far the biggest factor in most of the accidents is not looking where you are going single vehicle accidents, also not wearing helmets and <u>alcohol. Not collisions</u> with other ATV's Biker or Buggy's. A motorcycle rider is standing the vast majority of the time making himself more visible plus the fact that there is not a suitable place to fasten a flag on a bike with out it coming into contact with the rider. An ATV and a Buggy both have frames that are east to mount a flag to; they are lower when riding and less visible. One other gripe, don't close trails that have been in use for 30 years!! Those silly plastic strip signs are an eyesore.
- I strongly feel that a helmet law needs to be put in place and enforced at the St. Anthony san dunes. A lot of accidents are the result of inexperience and stupidity. Many accidents could be prevented if proper riding gear was worn. I feel that a helmet is one of the most important pieces of riding gear and the easiest to enforce.
- We traveled a distance to get to the Dunes but some area residents may prefer a yearly fee if they access the area often.
- We already pay to camp there; we pay to license vehicles and run them. Why can't something in life be kept free?
- !!Leave St. Anthony how it is!!
- I wouldn't mind fees for the open dunes if I knew it wouldn't affect my hunting and other activities out in the
 desert.
- I think if you have to charge a fee. There should be a daily, weekly or yearly fee depending how long you plan to stay.
- I would like to see trees in the camping area, because they remodeled the campground. It used to be next to the trees, now it is not. Would like to see more vendors. Would like to see more legal action taken toward drunk drivers and illegal drug use. Would like to see power and water in camp sites.
- The townspeople of SA & Rexburg alike don't seem to want to embrace the dunes. The attitudes just weren't "with it." Huge financial gain could be achieved if these dunes were publicized. In Oklahoma, for example, Waynota is all about the nearby sand dunes. Granted, they are state managed and doing a very poor job with that responsibility, but the point is that there are ATV supplies available on every street corner as well as t-shirts, food, etc. The dunes are their "cash cow" and they're milking away. We hunted all over SA and Rexburg looking for just a t-shirt. No one had any. One business woman at the SA drug store said, "We don't do that stuff here. You have to get sand souvenirs out at those sand dunes." We just didn't understand!
- I think this is a great place to visit. The people are friendly, including law enforcement and BLM people! Please don't change the riding in the dunes. Stress riders to use common sense/safe riding. This is an awesome place where my son and I can bring our hotrod ATV's to ride and challenge other riders from the area and around the country.
- I have been coming to the Dunes for 7 years. 3 years ago when Jennifer was the camp range, she told us they were going to expand it, we were really excited, for more camping space. Yet we didn't know they were going to gravel the whole area, to help ruin our equipment, and the Fee, I don't mind a camping Fee, yet I go to other camping areas and pay \$14 per night, yet that has a fire pit, BBQ grill, Picnic table, Flush toilets, showers and shade. What is the \$8 paying for. To camp on gravel and pay more for a fire pit. The people I come with and others I talk to up there feel you're making this area for the "rich" group. The huge motor homes and fancy travel trailers. We have always camped at Egin Lakes to save money (we camp in a tent) and to have a little freedom. My group and others like to stay up a little later than we normally can and talk, listen to some music and shoot the breeze, which now we

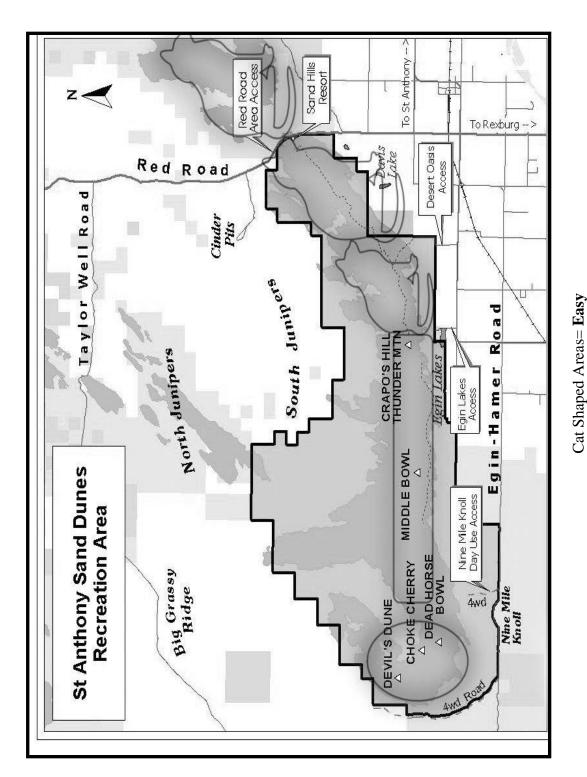
can't because of quiet hour, which to me seems geared for the big, rich, motor homes. Because most of them are owned by someone over 35 to 40 and not for the younger sand dune enthusiasts. They already have Sand Hills resort and Oasis R.V. park. Going back to the \$8 per night, I asked one of the BLM employees, they said it was to maintain the campground. Have you seen the Tent Area, pr what we call prickly weed Area. July 24th weekend my tent and many others were either on gravel or on top of an atv trailer. (We were at the west end of the campground) Because the weeds were too thick. The BLM employee told me to set my tent up on top of them. I challenge anybody to do that without damaging their tent. Please keep in mind that 85%

90% of the people don't come to the sand dunes to relax and enjoy the scenery or wildlife. There are other areas for that. Most people come to ride on some very challenging terrain. Please keep everybody in mind. Maybe have two camping areas, at different ends. One for the quiet family and one for the not so quiet. I bet the not so quiet will fill up a lot sooner than the other. I'm very interested in what happens in St. Anthony. Please keep us all informed. I hope this has helped somewhat.

- If it did become necessary to pay fees for visiting the Sand Dunes area, I would probably find somewhere else to camp/recreate, especially with the scouts, but also with my family. I can understand that all the services and conveniences like water, toilets, electric hookups, etc. cost money, but I don't need them to enjoy myself. Often the more undeveloped areas are more enjoyable.
- Everything is good just the way it is. Do Not Brake something that is already Fixed
- Would like to know where we can ride outside the dunes for one day.
- We would like to see the more popular area's on the dunes like Thunder Mountain and Choke Cherry cleaned up of trash and debris. The last time we were there we noticed broken beer bottles etc. at the base of the hills. This could have caused major problems with our equipment if we have not noticed the broken bottles/glass. It would definitely have cut our ATV tires, ruining out trip. WE noticed trash in other areas as well but not as much as in the more popular areas. We very much enjoy our trips to the dunes and Idaho. Thank you very much.
- An interesting metric might be to compare the responses of local users to those of "out of state" users. In my community, there is a definite negative attitude towards the huge influx of users from the south on any Holiday weekend. The responses from those individuals (mine included) might be skewed to favor management policies to discourage heavy visitation. That having been said, we usually try to work in visits after it has rained, and when the visitor population is lower. I would favor management plans that encourage local use on offpeak times, by nor pricing them out of the market. And additional comment, the survey to me appeared to be skewed towards the long distance user rather than the local resident.
- We have enjoyed the wilderness recreation that the dunes have offered for 15 years. We hope it does not become commercialized like the Oklahoma, California, Oregon, Michigan dunes.
- Please <u>Do not</u> attempt to maintain trails, <u>No</u> trails is what makes the place attractive
- I support Daily us fees if you are not camped there. You should check out how Oregon does this at the Dunes on the Coast. They have very nice facilities. We stay at Desert Oasis. (Nice Place). It would be nice to see a couple more like this. There is a lack of hookups for RV's. Egin Lakes would benefit from revenues generating RV hookups. I would also like to say that the Dunes at St. Anthony are the best in the country. I have been to All of the major dune riding areas and none of them even come close. I hope this place always remains open to ATV's and other recreationists.
- If you fo to another State to ride you pay for another sticker for that state, which is usually very costly because you are out of state. California for instance to ride on Glamis is very expensive. I think out of state users should pay to use, just like out of state hunters, or stay in their own state! I have ridden Utah, California, Arizona. They all hate out of state riders and make us pay so it should work both ways!!!
- If fees were implemented we would not make the 1000 mile one way trip to spend time in the area.
- Lets get a helmet law. Flags don't save your brain.

- I love Egin Lakes! The bathrooms are very well maintained and the camping places are garbage free! Thank you for making my sand dune trips amazing!
- My number on choice is: Pull out all county, state and federal management personnel. Stay out of our faces with all the regulations. Place emergency help information in boxes in selected locations. Nearly everyone has a cell phone now. IF you must manage it: Personnel should be there in advisory/help capacity only. No enforcement powers at all except for breach of peace disputes or other related incidents or to enforce littering/refuse disposal rules. Give it up: It is ridiculous to try to enforce the protection of wildlife and plant species and all exist elsewhere in sufficient numbers. You already have too many "no motorized vehicles" areas. Keep hikers(except for a few fringe areas) horseback riders, etc out of the dunes areas. They already have exclusive access to some of our favorite riding areas. The main thing most hikers/horseback riders do in reference to the dunes is bitch about what we do. Let them go to their exclusive areas and stay out of ours. Another note I hope BLM Officials get: concerning all those areas where only horseback riders and/or hikers are allowed: I have two replaced knees and one replaced shoulder. My doctor has limited me to 1 mile/day on my feet. I see these restrictions as deliberate discrimination against the handicapped. (I can handle and ATV, but a horse is just too difficult) I thought discrimination against the handicapped was illegal! Isn't it?? I dare you to pass this on to the BLM.
- Thanks for asking
 Take care of this special area. We have dunes here in Wisconsin and only hiking is allowed.
- I have been to the dunes 8 times now. I go spring and fall and usually bring 3
 7 others with me. We drive 12 hours to get there and it seems like a huge drive until you see that most beautiful site, the "Dunes." Our experiences at the dunes have always been positive, we haven't run into any people out there that we've seen abusing the land or acting irresponsibly towards others or the land surrounding the dunes. This place is a true treasure, and from what I've seen, people are treating it with the respect that it deserves. Remember that as long as the sun shines and the wind blows, there is no stopping the sand dunes from moving. Continue to let us enjoy one of Gods great creations!
- Keep up the good progress of developing the camp ground!
- The signs on the roads to get to the Dunes could be improved.
- We plan to all go back to St. Anthony's ASAP. Beautiful smooth, big, wonderful dunes. Very friendly, observant, helpful ranger there.
- Thank you for having a great facility. I would like the following enforced for safety reasons. 1- Helmets for all riders regardless of age. 2-No multiple riders on ATV's. 3-Speed in parking area/small children could be hurt. 4 Greater law enforcement presence in area. I believe it is better to be safer and enjoy a more controlled area. We don't need more accidents to have the media publicize the dangers of off road vehicles. Thank you.

APPENDIX E: RIDING DIFFICULTY MAP



Rectangle Areas= Moderate
Oval Areas= Difficult