



# Exploring Vertical Wilderness in the Acoustic Environment

## *Acoustic Experiences of Climbers on the Grand Teton*





**ON THIS PAGE**

Photograph of researcher hiking towards the Lupine Meadows Trailhead in Grand Teton National Park.  
Photograph courtesy of Lauren Abbott.

**ON THE COVER**

Photograph of researcher sampling at the Meadows in Grand Teton National Park.  
Photograph courtesy of Lauren Abbott.

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## *Acoustic Experiences of Climbers on the Grand Teton*

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July 2016

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*“I know how far the first pre-dawn croaks of a raven can carry in the utter stillness of a cool morning. I know the incredible cascading clarity of the song of the canyon wren, in the heat of a windless day. I know the heart stopping rip of wings of a white-throated swift shooting past me as I round a bend on a side-canyon promontory. I’ve heard a tiny avalanche started by – what? A lizard? A ringtail? A feeding bighorn? – half a canyon away. Sounds not drowned out by an engine. . .*

*If we understand that planet Earth is the home of humankind – and it surely is – then we can think of national parks as ‘special rooms’ in that home. Most of the Earth is not in national parks. It’s in ‘rooms’ put to a lot of uses that wouldn’t be suitable in national parks. Special qualities are protected in parks – and ‘pretty good’ is not enough.*

*You don’t put a toilet in your kitchen, or a bench lathe and power saw in your bedroom. You don’t park your car in your living room.*

*. . . in this room of the home of humankind, we are to provide natural quiet.”*

- Boyd Evison, March 16, 1994



Photo 1 Researchers campsite in Grand Teton National Park. Photo courtesy of Lauren Abbott.

## Executive Summary

Hearing sounds of nature is an important motivation for visitors to National Parks, such as Grand Teton National Park (GRTE; Newman et al. 2015). Furthermore, managers are required to provide park visitors with a high quality soundscape experience (NPS Soundscape Management Policy 4.9, NPS, 2006). In 2006, Pilcher and Newman conducted a study on visitor perceptions of soundscapes in highly trafficked locations in GRTE, including the Jenny Lake boat dock and Inspiration Point. While this study used similar methods, it aimed to better understand the influence of soundscapes to a unique and important visitor group -- climbers on the Grand Teton. This iconic climbing destination is located in an area that is potentially susceptible to anthropogenic or human-caused noise interruptions because of its proximity to an airport and heavily used highways. In the summer of 2015 researchers from Penn State University used a combination of qualitative interviews and listening exercises, methods that have been used in numerous other soundscape studies (Kariel, 1990; Marin et al., 2011; Pilcher, Newman & Manning, 2009; Taff et al., 2013), with climbers to identify sounds that were being heard during their climbing experience and their emotions related to those sounds. These data provide managers with information about the salient soundscape issues that could inform indicators that can be monitored and managed to preserve both resource and experiential aspects of the soundscape.

### ***Results: Phase One- Semi-Structured Qualitative Interviews***

Findings from the semi-structured qualitative interviews revealed important themes related to sounds heard on the Grand Teton, as well as other experiences associated with climbing on the Grand. Common themes that emerged related to the soundscape on the Grand Teton were soothing water sounds, and emotions related to aircraft and rock fall sounds. Eight of the 18 interviews mentioned hearing aircraft when asked generally about sounds they remembered hearing during their climb. Waterfalls, gear placement and avalanche are examples of sounds respondents enjoyed hearing the most. Rock fall, airplanes and wind are examples of sounds respondents enjoyed hearing the least. Themes that emerged related to other experiences on the Grand Teton included camaraderie wilderness experiences, and crowding.

### ***Results: Phase Two – Listening Exercise and Survey***

The listening exercise identified sounds heard by respondents and their evaluation of sounds. Results from the listening exercise ( $n=234$ ) indicated that voices and walking sounds were the two most frequently heard manmade or anthropogenic sounds (76%). Climbing gear was the third most frequently heard anthropogenic sound as 54% of respondents indicated hearing it. Jet aircraft was the fourth most frequently heard anthropogenic sound. Almost half (41%) of respondents rated the sound as slightly unacceptable and annoying. Vehicle sounds were the fifth most frequently heard anthropogenic sound, with 40% of respondents rating it as slightly unacceptable and annoying. Additionally, the majority of respondents (63%) at the 3-Mile Junction site, located three miles from the Lupine Meadows Trailhead reported hearing vehicle sounds and rated them as neutral and slightly annoying. A majority of respondents heard wind (91%), wind rustling the trees (83%), water (79%), birdsong (77%), voices (76%), and walking

(76%). The natural sounds were rated as acceptable and pleasing, while voices and walking were rated as acceptable but were interpreted as neither pleasing nor annoying. These results identify respondents' positive evaluation of natural sounds.

Results from the related survey indicated that 72% of respondents reported enjoying natural sounds as an important reason for climbing the Grand Teton. Being close to nature (95%) and being where things are natural (94%) were rated as the most important reasons for climbing the Grand Teton. On average respondents felt slightly to moderately crowded during their experience and the number of people they saw neither enhanced nor detracted from their climbing experience on the Grand Teton.

The survey had an overall acceptance rate of 89%. The average age of respondents was 33 years old. The median group size was 3 people. The majority of respondents were male (79%). Most respondents were part of a private climbing party (72%), 23% were in a guided party, and 5% were climbing guides. Seventy percent of respondents were on overnight trips, meaning they spent at least one night out at a backcountry campsite.

## **Acknowledgments**

This project would not have been possible without funding from the Boyd Evison Fellowship for the Greater Yellowstone Ecosystem (Grand Teton National Park and the Grand Teton Association), as well as, support from the UW-NPS Research Station. We would like to thank Jennifer Newton from Grand Teton National Park for her aid in collecting qualitative interviews. We would also like to thank Scott Gunther and the GRTE climbing rangers for their backing of the project, as well as, those affiliated with the Grand Teton Climbers' Ranch, especially William Fetterhof and Debbie and Gary Bunten. Finally, we would like to thank Nat Patridge and the Exum Guides for their good spirits and support throughout the project

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# Chapter 1. Study Background

## 1.1 Introduction

Noise, or the unwanted sound commonly associated with vehicle traffic, construction and airplanes, is on the rise in national parks. In a place where human-caused environmental impacts are kept to a minimum, natural sound is becoming overshadowed by human-induced noise. According to the U.S. National Park Service (NPS), “noise levels in park transportation corridors today are at 1,000 times the natural level” (p.11). National parks and wilderness areas are places where one could expect to find silence or escape from noisy urban environments. In fact, enjoying sounds of nature, silence and escaping noise are often the most common motivations for visitors to parks and protected areas (Driver, Nash and Hass, 1991). With increased visitation to these areas, the amount of unwanted sounds from traffic, airplanes, helicopters, and people, has also increased, thus becoming a topic of concern. The NPS Soundscape Management Policy 4.9 states, “the service will take action to prevent or minimize all noise that, through frequency, magnitude, or duration, adversely affects the natural soundscape or other park resources or values...” (NPS, 2006). National park managers are taking the steps to understand acceptable levels of noise and to mitigate noise so that natural sounds are not compromised. The purpose of this project was to investigate the types of sounds heard by respondents in route to the summit of the Grand Teton in Grand Teton National Park (GRTE), climber perceptions of these sounds, and respondents’ experiences and motivations.

The summit of the Grand Teton is one of North America’s most desirable mountaineering feats. This 13,770 foot peak has a rich climbing history and attracts both advanced and novice climbers craving a more magnificent view of the Teton Range. Since the mountain was first summited in 1898, climbing on the Grand Teton has grown in popularity. Similar to other popular climbing destinations, there are two climbing concessions that operate guided trips to the summit year round. Because this area has faced growing use, it is challenging to provide quality visitor experiences that depend on high-caliber resource and social conditions. The Garnet Canyon trail is frequently used by climbers approaching the Grand Teton and is subject to aircraft and traffic noise given its proximity to the Jackson Hole Airport and two major highways. Additionally, this area of the park is within a recommended wilderness area and is managed by the National Park Service (NPS) as wilderness. Federal wilderness areas are expected to provide “outstanding opportunities for solitude or a primitive and unconfined type of recreation” (National Wilderness Preservation Act 1964, Section 2c). This location is unique in that there is a combination of high climbing use and human caused noise within proposed wilderness, impacts that might counteract a desired wilderness experience. To date, little is known about climbing use on the Grand Teton, as well as visitor experiences in route to the Grand. This project aimed to provide managers with baseline information about the sound impacts in Garnet Canyon and the Grand Teton, as well as, climbers’ motivations and experiences.

### Objectives

1. Identify motivations and types of wilderness experiences climbers are having in route to the Grand Teton.

2. Identify sounds climbers are hearing at different points in route to the Grand Teton summit.
3. Understand the impacts sounds have on the climbing experience (both natural and anthropogenic).
4. Provide park managers with potential indicators of quality for soundscapes in Garnet Canyon and on The Grand Teton specifically

In order to effectively identify potential indicators of soundscape quality and to understand the feelings associated with sounds heard by climbers, two separate methods were used: 1) qualitative interviews with climbers who have recently attempted or successfully summited Grand Teton, and 2) an in situ listening exercise and accompanying survey. This study used qualitative interviews to better understand the types of sounds climbers were hearing throughout their experience on the Grand Teton. The listening exercises and surveys provide managers with information about sounds heard at the two specific sites that were chosen, while the qualitative interviews provide information about sounds heard at other locations throughout the approach and climb on the Grand Teton.

## **1.2 Study Site**

This study was conducted with climbers who had used the Garnet Canyon trail to access the Grand Teton. This area was chosen because of its proximity to the Jackson Hole Airport, as well as major roads within the park. With guidance from NPS staff, two separate sites were chosen for a listening exercise and associated survey.

The 3 Mile Junction site, is located in an area closer to anthropogenic sound sources. At this site, it was possible to view roads within the park and the Jackson Hole Airport. The Meadows site was further into the backcountry and the Garnet Canyon (The 3 Mile Junction site is roughly 3 miles from the trailhead and the Meadows site is roughly 5.2 miles from the trailhead). Two different sites were chosen so that the researchers could analyze perceptions of sound from a site presumed to be more natural (the Meadows) and a site presumed to be less natural (the 3-Mile Junction).



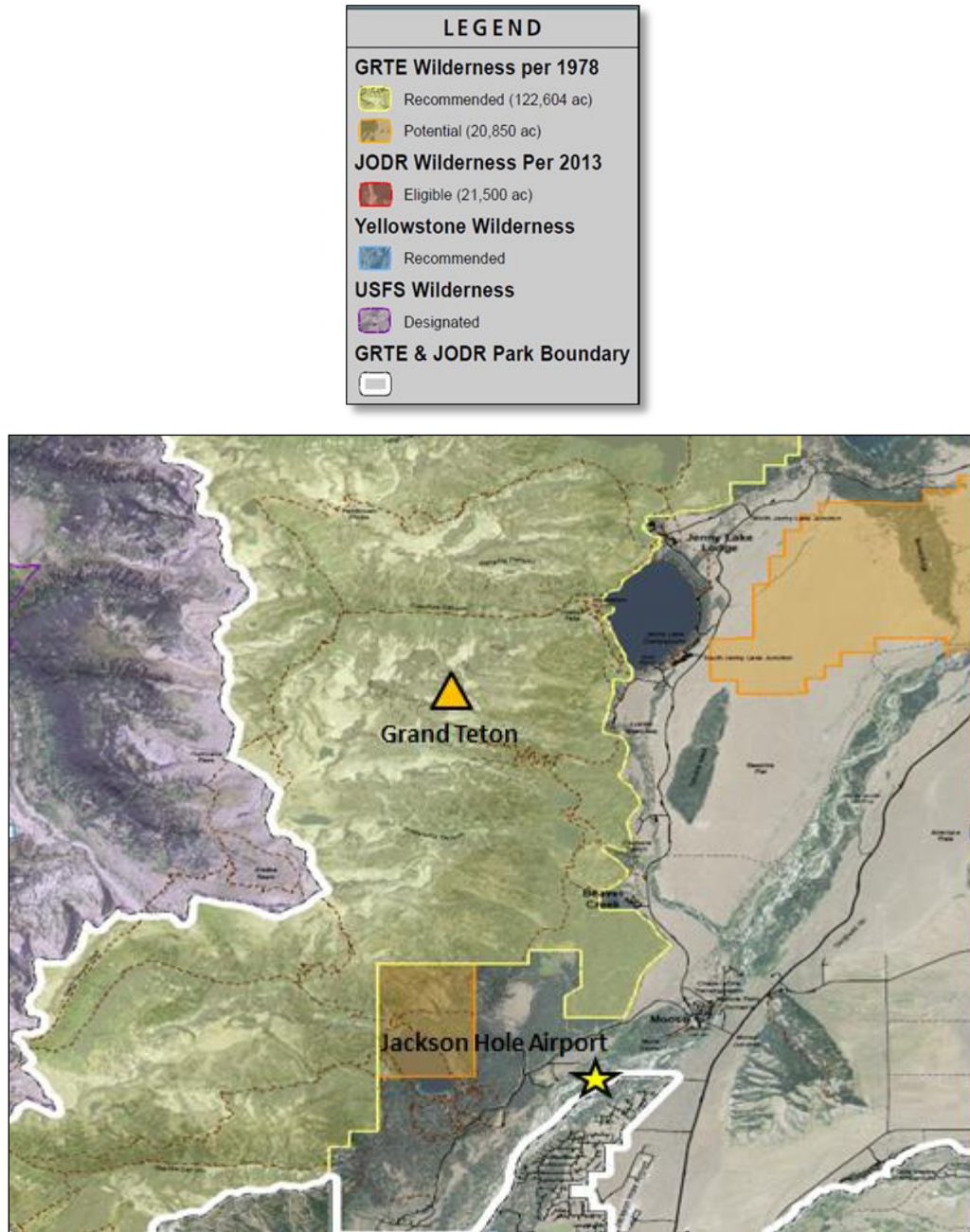


Figure 1.1 Study areas

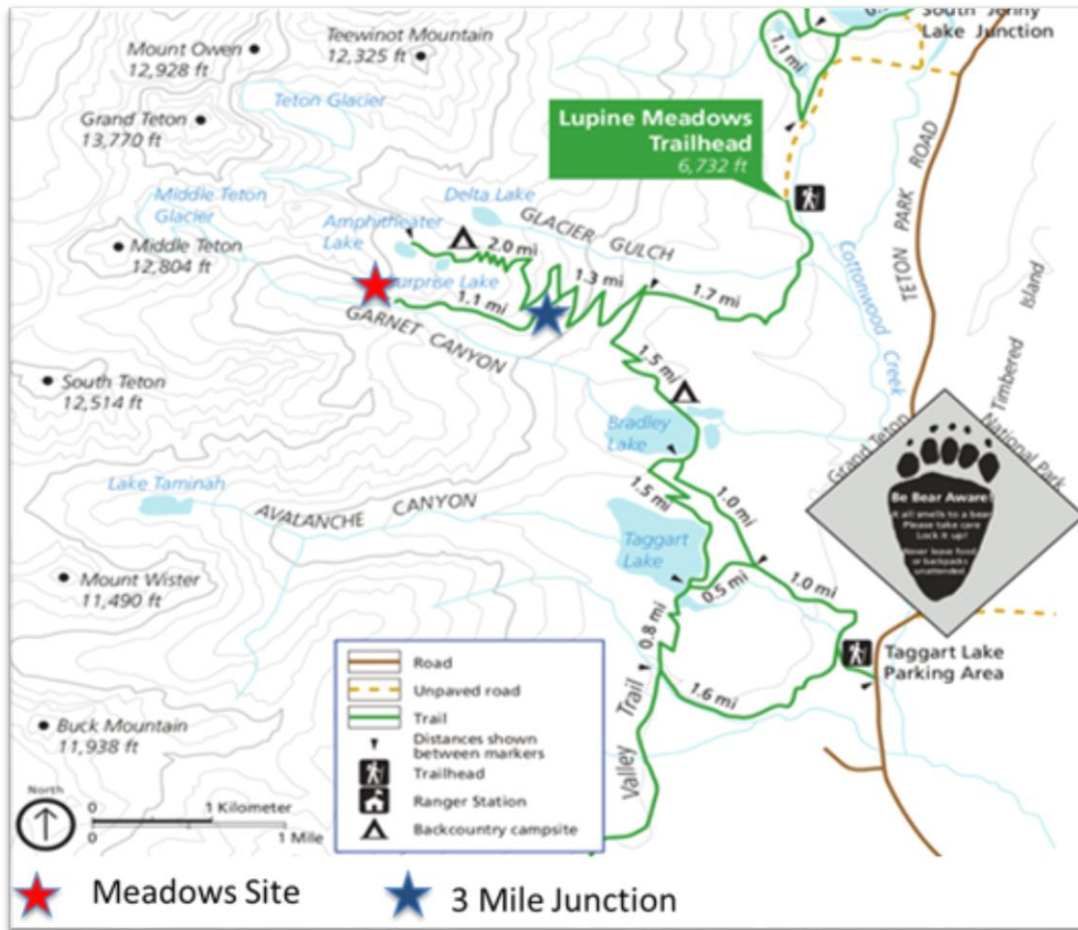


Figure 1.2 Listening survey locations

## **Chapter 2. Phase One – Climber Qualitative Interviews**

### ***Methods***

Thirty-three respondents were interviewed by the lead author through 18 semi-structured ( $n=18$ ) qualitative interviews (Appendix C). They were conducted with climbers after their climb on the Grand Teton from July 3<sup>rd</sup>, 2015 to July 12<sup>th</sup>, 2015 with a 90% response rate. All respondents were interviewed within 24 hours of returning from their climb on Grand Teton. Interviews ranged in length from 7 minutes to 22 minutes. All interviews were conducted within GRTE, at two locations, the Lupine Meadows Trailhead parking lot or the American Alpine Club Climbers' Ranch.

Interview questions were developed based on a similar study that had been conducted with mountaineers on Mount McKinley in Denali National Park and Preserve (Taff et al. 2015). Interviews were recorded and transcribed verbatim by the research team. The purpose of the interviews was to identify sounds heard by climbers and determine their interpretations of sounds, therefore the data was treated as exploratory.

### ***Analyses***

Interviews were audio recorded and transcribed verbatim in preparation for coding. The purpose of qualitative data analysis is to develop an “organizing system that can be used to help determine what individual statements reveal about the phenomenon being studied” (Patterson, Watson, Williams, & Roggenbuck, 1998, p. 429). Rather than seeking to define theoretical implications, interview questions were analyzed inductively to interpret reoccurring themes (Bogdan & Biklen, 1998).

We present the results of these semi-structured interviews by providing several tables that illustrate the nature of this sample. Next, we offer the semi-structured interview questions, in patterned order, with a few selected responses that we found interesting and informative. We then present reoccurring themes. While these themes provide understanding to collective responses, they may not express the thoughts of all respondents. All of the interviews are transcribed and provided for personal interpretation in Appendix C.

### **2.1 Climber Qualitative Interview Results**

The interview respondents ranged in age from 23 to 60, and all but one party (i.e., Canadians) were from the United States. Respondents ranged in self-described experience from beginner to professional, and in years of climbing experience with one climber having 3 days of experience and others having 40 plus years. Eleven respondents had climbed the Grand Teton for the first time and 7 were return climbers. The majority of parties climbed on the Owen Spalding route, and one party climbed the Black Ice Couloir and the East Ridge. Other parties climbed on the Upper Exum Ridge and Direct Petzoldt Ridge (Tables 2.1 and 2.2).



Photo 2.1 Researcher Lauren Abbott at the Lupine Meadows Trailhead. Photo courtesy of Lauren Abbott

Table 2.1. Climber interview details

| #  | Date/Time          | Interview Location | Guided/Unguided | # Interviewed | Climbing Route               | Overnight/Day Trip |
|----|--------------------|--------------------|-----------------|---------------|------------------------------|--------------------|
| 1  | 7/3/15<br>3:30 PM  | Trailhead          | Unguided        | 1             | Owen Spalding                | Overnight          |
| 2  | 7/3/15<br>3:45 PM  | Trailhead          | Unguided        | 1             | Owen Spalding                | Overnight          |
| 3  | 7/3/15<br>5:15 PM  | Trailhead          | Unguided        | 2             | Black Ice Couloir            | Day                |
| 4  | 7/5/15<br>2:45 PM  | Trailhead          | Unguided        | 4             | Owen Spalding                | Day                |
| 5  | 7/5/15<br>4:30 PM  | Climbers Ranch     | Unguided        | 1             | Upper Exum Ridge             | Overnight          |
| 6  | 7/6/15<br>4:00 PM  | Trailhead          | Unguided        | 2             | Owen Spalding                | Overnight          |
| 7  | 7/6/15<br>6:11 PM  | Climbers Ranch     | Unguided        | 1             | Full Exum Ridge              | Overnight          |
| 8  | 7/6/15<br>6:45 PM  | Climbers Ranch     | Unguided        | 1             | Petzoldt Ridge to Upper Exum | Day                |
| 9  | 7/7/15<br>5:22 PM  | Trailhead          | Unguided        | 1             | Petzoldt Ridge               | Overnight          |
| 10 | 7/7/15<br>5:50 PM  | Trailhead          | Unguided        | 2             | Upper Exum                   | Overnight          |
| 11 | 7/7/15<br>6:25 PM  | Trailhead          | Guided          | 2             | Owen Spalding                | Overnight          |
| 12 | 7/11/15<br>3:30 PM | Trailhead          | Unguided        | 2             | East Ridge                   | Day                |
| 13 | 7/11/15<br>4:15 PM | Trailhead          | Unguided        | 2             | Owen Spalding                | Overnight          |
| 14 | 7/11/15<br>5:30 PM | Trailhead          | Guided          | 2             | Owen Spalding                | Overnight          |
| 15 | 7/11/15<br>6:30 PM | Trailhead          | Guided          | 3             | Owen Spalding                | Overnight          |
| 16 | 7/12/15<br>4:00 PM | Trailhead          | Unguided        | 1             | Owen Spalding                | Overnight          |
| 17 | 7/12/15<br>5:00 PM | Trailhead          | Guided          | 3             | Owen Spalding                | Overnight          |
| 18 | 7/12/15<br>5:40 PM | Trailhead          | Unguided        | 2             | Owen Spalding                | -----              |

Table 2.2. Respondent demographics and details

| #  | Gender (M/F) | Origin                | Age   | Self-Described Climbing Experience  | # of Years Climbing | # in Party | 1 <sup>st</sup> Time/R repeat   |
|----|--------------|-----------------------|-------|-------------------------------------|---------------------|------------|---------------------------------|
| 1  | F            | Utah                  | 37    | Non-technical                       | 30                  | 3          | 1 <sup>st</sup> time            |
| 2  | M            | Idaho                 | 33    | Confident                           | 10                  | 6          | 1 <sup>st</sup> time            |
| 3  | 2 M          | North Carolina        | 26    | Very High                           | 11                  | 2          | Repeat                          |
| 4  | 4 M          | Colorado              | 24    | Heavy Novice                        |                     | 4          | Repeat                          |
| 5  | M            | Montana               | 34    | Expert                              |                     | 2          | Repeat                          |
| 6  | 2 M          | Utah/California       | 29    | Medium                              | 4                   | 2          | 1 <sup>st</sup> time            |
| 7  | M            | Wyoming               | 23    | Intermediate                        | 4                   | 2          | 1 <sup>st</sup> time            |
| 8  | M            | Colorado              | 44    | Advanced                            | 24                  | 3          | Repeat                          |
| 9  | M            | Oregon                | 36    | Professional                        | 24                  | 2          | 1 <sup>st</sup> time            |
| 10 | 1M 1F        | Canada                | 33/30 | Expert/medium                       | 13/10               | 2          | 1 <sup>st</sup> time            |
| 11 | F            | California            | 51    | Intermediate                        | 4                   | 3          | 1 <sup>st</sup> time            |
| 12 |              | Utah                  | 60/37 | Pretty high                         | 46/16               | 2          | Repeat                          |
| 13 |              | Wyoming/<br>Minnesota | 29/34 | Moderately experienced/<br>Beginner | 7/3                 |            | Repeat/<br>1 <sup>st</sup> time |
| 14 | 1M, 1F       | Texas                 | 56    | Intermediate                        | 3                   | 3          | 1 <sup>st</sup> time            |
| 15 | M            | Idaho                 | 51    | Novice                              |                     | 5          | 1 <sup>st</sup> time            |
| 16 | M            | Montana               | 33    | Intermediate                        |                     | 3          | Repeat                          |
| 17 | M            | Missouri              | 38    | Novice                              | 4 days              | 14         | 1 <sup>st</sup> time            |
| 18 | 2M           | Wyoming               |       | Extensive/<br>Beginner              | 40+/4               | 2          | Repeat/<br>1 <sup>st</sup> time |

### ***Semi-structured Climbing Interview Question Results***

#### **Understanding Transcriptions**

The following results are described in order of who responded first to a given question. For example, if the interviewer asked a question that was off-script, it is represented by “(Interviewer)”, followed by the particular question. The first respondent, if in a group of climbers, will be denoted as “(Climber 1)”, followed by “(Climber 2)”, and so on. While most interviews followed the pattern found in the questionnaire (Appendix C), some questions were not addressed in that order, or perhaps not addressed at all due to the direction of the respondents’ comments.

The interviews began by asking respondents what role rock climbing plays their life. The purpose of the question was to encourage respondents to begin thinking about why they climb and what their motivations for climbing might be. The following are examples of responses:

*Int.4: It’s a chance to get away. You know? Kind of do something you know you’re kind of confident in, but not a hundred percent. So, there’s like a level of pushing your limits and finding boundaries and, um, just getting out with people.*

Int.11: *I've been rock climbing for a number of years now. I love it because it's kind of all-consuming, you have to really focus on it.*

Int.16: *Um, not much. I prefer skiing and this is just away to stay around here.*

Following the opening question, respondents were asked demographic questions, as well as information about their climbing experience. The results are shown in Tables 2.1 and 2.2. Next, respondents were asked what motivated them to climb the Grand Teton. Motivations for climbing the Grand Teton varied with respondents; here are some examples of the responses we received:

Int.4: *Well, I tried to take Alex up last year and failed miserably and so, I don't know, I got a call like two days ago that he was in town, so I drove up from Denver and I was like, 'let's go. Let's go do it'. So, it was kind of these guys that motivated me.*

Int. 5: *it's a beautiful mountain and Tetons are super iconic, so I try to go around and climb all different mountain ranges in the US, in the Rocky Mountains, so definitely hit list for all climbers.*

Int.8: *Oh, it's just... super physically challenging and you have to be very fit to do it, um, it's obviously gorgeous up there. Um, but it's really putting, for me it's really putting everything that you've practiced together, it's backpacking skills to the extreme, packing things really tight into your pack, losing everything that you don't need, redoing that, um, being able to pace yourself throughout the hike and being able to transition between hiking and climbing and snow and, um, so it really requires you to put all the skills that you've learned into practice and become good at hopefully, um, together.*

Respondents were asked what kind of expectations they had for climbing the Grand Teton. For most respondents, their experience met their expectations; the following are examples of responses:

Int.8: *Well we had hoped to summit, but um essentially the baseline we did set, we set a time that we had to be at a certain point, otherwise we're going to back off and we hit that time and we weren't there and so we rapped down and we got off safely, so as an ultimate thing it was like still to have fun and not to make it an epic and come down safe, so...*

Int. 2: *Oh, it was great. Yeah. Really good route, um, the people I was climbing with are really good people, so yeah... I'm kind of glad I'm not up there right now because of the number of people going up on the holiday weekend, there are a lot. So, it was good going in the middle of the week.*

Int. 6: *Um, I was hoping to get to the top (laughter) that was the number one expectation. No, um, I expected it to be hard and scary and it kind of was both. (Interviewer) So, would you say your expectations met your experience? (Climber 1) Yeah. It was more or less what I thought was going to happen.*

Next, respondents were asked if they knew they were in wilderness or if they chose to climb the Grand Teton because it is within recommended wilderness. Most responded that they did not either know that it

was in wilderness or that they didn't choose to climb there because of its designation. For example, here are some responses:

Int.2: *Nope. Okay. (Interviewer) Yeah, so it's managed like a wilderness area. It's not designated as wilderness. (Climber 1) I would disagree with you on that. Definitely not if you've got permanent (inaudible) that are out there. Have you been up to the upper saddle? So, there's two guiding services that have permanent platforms, they have structures that are for (inaudible), but that doesn't seem like a wilderness area.*

Int. 12: *Yeah I love wilderness areas and I think sublimity that was part of it. I love to go to areas that there are no manifestation of civilization or people, I would say that that's part of coming and part of it is that this is such a wild and alpine mountain range. And you see wildlife and animals and birds.*

Int. 14: *No, I chose to climb it because this guy who's my guide recommended it.*

When asked what respondents enjoyed most about their climbing experience we received some of the following responses:

Int. 3: *Getting to hang out with my buddy. It's always good getting to hang out with him. That was the best part.*

Int. 7: *Waking up on the lower saddle when the sun was coming up. That was probably the best part.*

Int. 14: *I think the camaraderie, a bunch of good guys, men and women, and uh I enjoyed just getting out. Leaving the cell phone at home and just not being bugged for two days.*

Int. 17: *Probably the summit. (Interviewer) The summit? (Climber 1) Yeah for sure standing on the top was the coolest.*

When asked what respondents enjoyed least about their climbing experience we received some of the following responses:

Int.3: *Almost getting smoked by a rock.*

Int.5: *All the people on the route. We were slowed down, but that was expected because we didn't get a super early start. So, just had to show some patience. It was definitely a climb that was recommended to for a while so we were like, 'well, whatever, we just got to go slow and wait for people to get up this thing' and was able to pass a party towards the top, that was nice, but there was a good amount of people on the route and obviously like takes a little bit away from the experience.*

Int.12: *I hate wind when I'm climbing.*

Int.17: *Um coming down actually. Um well you leave the mountain and then it's just kind of a really long walk and your destination is a car not a mountain.*



Next, respondents were asked if they experienced crowding during their experience in the Grand Teton. Here are some of the responses we received:

Int.2: *I'm kind of glad I'm not up there right now because of the number of people going up on the holiday weekend, there are a lot. So, it was good going in the middle of the week.*

Int.7: *Yeah, umm, we got climbed over, or through, by another group. Um, on one of the pitches and we were crowded on like a little belay ledge.*

Int.13: *There's just a lot of people and I know guides and I support guiding but when you get up to places where no one else can get to it just strikes me as a little bit strange at times.*

Int. 15: *No, I mean we had a pretty big group ourselves but the window was pretty small today so everybody go there at the same time and there were people up there who weren't able to summit for three days.*

While some respondents reported experiencing crowding, others mentioned that it was to be expected or acceptable. Here are some examples of those responses:

Int.2: *We saw a lot of people coming up this morning, so. I mean, it is a four-day weekend; it is a weekend in general, so I mean it's not too surprising in some ways,*

Int.5: *All the people on the route. We were slowed down, but that was expected because we didn't get a super early start. So, just had to show some patience. It was definitely a climb that was recommended to for a while so we were like, 'well, whatever, we just got to go slow and wait for people to get up this thing' and was able to pass a party towards the top, that was nice, but there was a good amount of people on the route and obviously like takes a little bit away from the experience*

Int.13: *Its acceptable crowding.*

Int.16: (Interviewer) *you said you kind of expected the crowds?* (Climber 1) *Yeah I did, it was a weekend.*

Next, respondents were asked "Climbing is inherently risky; However, did you feel that any factors other than natural elements, your abilities or team member abilities put you at risk during your trip?" Most climbing parties said that they did not experience any attritional risk. The following are examples the responses we received:

Int.2: *Well, there was a team that went up by us and so, um, I think they used a rope some of the time, but most the time they didn't, um, and they didn't appear to be particularly experienced, so in my mind they were jeopardizing themselves and potentially everyone else on the mountain because someone else would have to rescue them, so I didn't appreciate that.*

Int.3: *I mean, the main rock fall today was caused by people.*

Int.9: *No I would say it was fairly low risk given our experience level.*

Int.17: *Nope, I trust these guys.*

After asking respondents questions about their climbing experience, the interview transitioned into asking respondents about sounds heard during their trip. The first question about sound was general, and did not ask about natural or anthropogenic sounds heard, but rather, let the respondents recall the sounds heard and describe them to the interviewer. Respondents were asked, what kinds of sounds they remembered hearing during their climbing experience on the Grand. Eight of the parties interviewed mentioned hearing aircraft. Three of the parties that heard aircraft mentioned that it sounded like thunder (Table 2.3).

Table 2.3. Sounds heard

| # | Sounds Heard   |
|---|--|
| 1 | <i>There's <b>birds</b> and <b>waterfalls</b> and the little <b>pika</b> in the rocks, they go darting around and they go '[pika sound]' every now and again and, uh, the <b>ravens</b> are up there and they're like [squawking] and looking under rocks and stuff. Then there are the <b>marmots</b>, frisking gaily in the wee hours and, um, it's just amazing it's so peaceful; you hear the <b>wind</b> like whistling around the edge of the mountain as the waterfalls are crashing down, like... it's so amazing. And there's no trees up there, so it's not like, you know, you're hearing <b>tree branches</b>, like it's water and wind off the rock as you're above the tree line. The first tree when I came down, I was like, 'whoa, a tree, that's weird' – all the sudden it seems strange to see a tree.</i> |
| 2 | <i>Other than wilderness sounds, there were a lot of <b>birds</b>, did hear a couple of <b>planes</b>, saw a helicopter, flew by the saddle at some point. That was most of it. You could hear some people's <b>electronic devices</b> at some point, as well, which was kind of annoying. (Interviewer) What kind of electronic devices? (Climber 1) <i>Oh, like their cellphone, or something else. (Interviewer) Like a cellphone ringing?</i><br/><br/><i>(Climber 1) Yeah, some people would bring their <b>cellphones</b> up to the saddle. Evidently, a lot of people had fairly good reception up there. I think that defeats kind of the whole purpose of going up into the mountains, so, yeah.</i></i>  |
| 3 | <i>(Climber 2) Ken <b>yells</b> a lot (laughter). (Climber 1) 'F***** awesome!', um, there was a <b>plane</b> buzzing around at some point. I'm pretty sure I heard a plane, you know, they always fly the 7 o'clock plane out of Jackson Hole. That's like 7 o'clock on the dot. That was when we were at the saddle. Um, not much. <b>Birds, marmots, pikas</b>, you know, pikas yelling at you. Um, yeah. Pretty, I don't know, pretty all natural sounds, I would say.</i>   |

|   |   |
|---|---|
| 4 | <p>(Climber 3) <b>Birds</b> on the way up were sweet right before sunrise. (Climber 1) Exactly an hour before sunrise, they were just going at it. (Climber 2) The <b>rodents</b> were chirping. (Climber 3) And the <b>Pika</b>.</p> <p>(Climber 2) The <b>Pikas</b>, yeah, those furry critters. (Climber 3) <b>Rocks falling</b> were very distinctive to me.</p> <p>(Climber 1): Makes you look where they come from. Like you hear rocks and you're just constantly moving your head. (Climber 2) All that rushing <b>water</b>, definitely. There are certain points where you just like come around a corner and it's super loud and then you go around another corner and it's just <b>silent</b>. (Climber 1) Yeah, it's like it's gone. Just disappeared. I think the <b>wind</b> to when we were up on the lower saddle. Like it was clam in parts and then you would take the next step and it's just like [wind sound effect]. Trying to balance yourself and it's just... it's not that it's blowing rocks or debris around, it's just, you know, blowing against rocks and creating kind of a whistling noise. Like a refs constantly giving you a red card in a soccer game (laughter). All the time, non-stop.</p> |
| 5 | <p>Um, we saw pretty cool <b>rock fall</b> off of Nez Perce across the canyon, on the mountains across the canyon we saw a pretty big chunk of rock come down. This was a boulder probably half the size of these cabins come tumbling down. That's always super cool to see, but you get worried that people are below it, but there was nobody below it, um, saw <b>airplanes</b> flying around. <b>Helicopters</b>, um, the <b>shout of 'on belay, off belay'</b> from other climbers up there. The <b>stream Spalding falls</b> is right there, so you can hear the stream the whole time and it's not a drowning sound because you're high enough off the ground so you can still communicate with your climbing partner. Little bit of <b>wind</b>, it was nice once you got... it was a really hot day, so once we got halfway of the route we got a little bit of a breeze, so you could hear <b>the breeze</b> blowing.</p>  |
| 6 | <p>(Climber 1) A lot of <b>running water</b> and a lot of wind. <b>Thunder</b>...(Climber 2) Lots of small <b>rock falls</b>.</p> <p>(Climber 1) Couple, that was a good one that went down... there was a rock fall this morning from the upper saddle, or from saddle that was above us, so it was cool rumbling noises and some planes, lots of <b>planes</b>. (Interviewer) Yeah, yeah. Pretty close to that airport (Climber 1) Yeah, it sounded like thunder.</p>   |
| 7 | <p>You hear a lot of <b>people yelling</b>, like 'on belay, off belay', like of other groups ahead of or behind you, um, I heard a <b>plane</b>... that's all I can really remember and it was kind of <b>windy</b>, so like a lot of stuff got drowned out, you know? But yeah, that's about it.</p>   |
| 8 | <p>(Climber 1) (laughter) <b>Wheezing!</b> Lots of wheezing. (Climber 2) That'd be me (laughter). (Interviewer) Wheezing? (Climber 1) Uhh, we hiked up in the middle of the night and so it was so quiet except for when the sun, the sun hadn't even shown up on the horizon and the birds were out even at, you know, nine thousand feet you could hear <b>birds</b>, um, little bit of <b>rock fall</b> here and there and then generally it was so quiet that all you heard was you and your partner's <b>feet on the rock</b>, like the moraine and the gravel. So...</p>  |
| 9 | <p>(Climber 2) <b>Airplanes</b>. It was startling. I was like oh I guess the airports really close. (Climber 1) Yeah and it can sound like Thunder or rock fall, the initial load noise is a real concern because I spend so much time on the mountains. I get startled. Yeah the <b>jets</b>. And part of the Marian was collapsing. That made us jump but it was probably just a <b>big boulder shifting</b>.</p>   |

|    |  |
|----|--|
| 10 | (Climber 1) <i>There were <b>birds</b>.</i> (Climber 2) <i>Yeah we heard birds pretty high up this morning, probably around 12,000 feet. So that was pretty neat</i> (Climber 1) <i>We could hear the <b>river</b> from the campsite. We could hear actually. We heard a bunch of airplanes this morning.</i> (Climber 2) <i>At least we think they were, it kind of sounded like Thunder. I don't know how busy that airport is but we heard like five before seven in the morning it was crazy.</i>  |
| 11 | (Climber 1) <i>The <b>thunder</b>! That's an interesting part of it. I kept thinking about weather so you're just kind of waiting for what's coming.</i> (Climber 2) <i>The sound of the <b>falls</b>.</i> (Climber 1) <i>The falls, that's huge one. <b>Birds</b>, kind of stuck out more than any other wilderness sounds. Trying to think what else.</i> (Climber 2) <i><b>Heavy breathing</b>.</i> (Climber 1) <i>Actually the sound of the <b>alarm going off</b> at 3am... that was the best part.</i> (Climber 2) <i>I was actually waiting for that so I could get up and go!</i> (Climber 1) <i>I think its interesting, you'd expect there to be wind and stuff but I think as we were summited I was surprised by how <b>quiet</b> it was near the top which is kind of nice. But yeah.</i> |
| 12 | (Climber 1) <i><b>Rock fall, hail, cracking my helmet, high winds blowing through.</b></i> (Climber 2) <i><b>Marmots</b> chirping.</i> (Climber 1) <i><b>Thunder</b> and lightening, certainly the sound of running <b>water</b>, the beauty of a creek or a small river running is very pleasant. I guess the other sound is just the <b>sound your feet make</b>, especially in a snowfield, just listening to the sounds your feet make.</i>  |
| 13 | <i><b>bird</b> sounds</i>  |
| 14 | <i>I should say a lot of <b>heavy breathing</b>.</i>   |
| 15 | <i>Uh, so on the approach to the climb we heard a lot of <b>wind</b>. On the climb itself we heard a lot of <b>gravel hitting the mountain</b>. And then once we started coming down we started hearing <b>thunder</b> and lightening so we wanted to get the get the hell out of there.</i>   |
| 16 | <i>Uh there was a few people, just <b>chit chat</b>, plenty of <b>pica, marmots</b> as well making noise. There were one or two <b>airplanes</b> maybe, we heard or something.</i>   |
| 17 | <i>Um, today it was really <b>windy</b>. Um so almost deafening wind. A lot of <b>screaming</b> back and forth of like 'I got you,' 'you can climb now' stuff like that. Um, <b>rock fall</b>, echos.</i>  |
| 18 | (Climber 1) <i>A lot of <b>birds</b> and a lot of <b>marmots</b></i> (Climber 2) <i><b>Rushing water, the wind, falling rock</b></i> (Climber 1) <i>And <b>climbers</b></i>  |

Next we asked what sounds they enjoyed hearing. Table 2.4 lists the sounds that were mentioned as enjoyable and the frequency at which those sounds were mentioned in the interviews. The following are examples of common responses:

*Int. 5: I like the drowning sound of the falls a little bit. It's far enough, sometimes it can be, uh, it can break up communication, but it was just a faint noise so it was kind of nice, peaceful.*

*Int. 8: I always enjoy hearing, uh, gear placements in rock, like it's just an enjoyable sound, so in the couple technical pitches we did, um, just hearing carabineers click and ropes, you know, running through carabineers and, you know, all the climbing sounds.*

Int. 18: (Climber 1) *Aw I like all the sounds up there, I like the sounds of the avalanches and the rocks falling its just something primal about it.* (Climber 2) *I like the water* (Climber 1) *You an avalanche coming down and \*inaudible \* its like a present for climbers. More rock falling*

Table 2.4 Sounds enjoyed most

| Sound Source             | Frequency |
|--------------------------|-----------|
| Water, waterfalls        | 9         |
| Birds                    | 6         |
| Wind                     | 5         |
| Rock fall                | 1         |
| Thunder                  | 1         |
| Climbing guide's voice   | 1         |
| 2Climbing gear           | 1         |
| Marmot                   | 1         |
| Yelling "I'm safe"       | 1         |
| Not hearing other people | 1         |

Subsequently, we asked respondents what sounds they enjoyed hearing the least. Table 2.5 lists the sounds that were mentioned as least enjoyable and the frequency at which those sounds were mentioned in the interviews. The following are examples of common responses:

Int. 3: *The sound I enjoy hearing the least is the dude screaming 'rock!' as he kicked that thing off, but like on days off it's nice to not hear other people and just go climb. You know? You don't have to hear questions like, 'oh, what routes are you guys doing? Oh, was it cool?' you know? Shit like that gets old. I guess you can leave that for work.*

Int. 6: *Rock fall is a scary one. That's probably mine*

Int. 10: (Climber 1) *The airplanes.* (Climber 2) *Yeah I mean they didn't bother me that much I was more nervous that it was thunder coming. That's what I enjoyed the least but we were well down by then.*

Int. 13: *The wind is sickening, like I got tired of that sound. Um, but usually a breeze sounds amazing, I usually love that sound. There are local businesses that fly small planes [inaudible from wind] I get a little weirded out about that too.*

Table 2.5 Sounds enjoyed least

| Sound Source           | Frequency |
|------------------------|-----------|
| Rock fall              | 5         |
| Airplane               | 5         |
| People yelling/talking | 5         |
| Wind                   | 3         |
| Thunder                | 2         |

|                            |   |
|----------------------------|---|
| Helicopter                 | 2 |
| Snoring                    | 1 |
| Automated noises           | 1 |
| Foot punching through snow | 1 |

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To better understand sounds heard on or near the summit, climbers were asked if they heard human-caused sounds near the summit and how they felt about it. The following are examples of coming responses:

*Int.2: Not at the summit, but up mid-route we could definitely hear planes flying over a couple of times.*

*Int.6: (Climber 1) Uh, planes. (Climber 2) Yeah, you could hear planes when you were up on the route. (Interviewer) And how did you feel about hearing planes when you were up on the route? (Climber 1) I mean, I'd rather not hear planes while I'm up on the route, but I was also like 'man that'd be cool if my plane flew over the Tetons'. (Climber 2) I was on top ten years ago and had a glider flip over. Standing on the summit, you'd look up and they were looking down from their cockpit it was awesome (laughter).*

*Int.8: Yeah, we definitely heard other climbers, but no aircraft or anything like that that I can remember*

*Int.18: There was a plane, I've been up there with a helicopter and when they were filming a commercial for the backcountry.com. I found that a little annoying, they buzzed the summit, they also got in trouble because they buzzed in and \*inaudible \* They had a permit though so it's not a big deal. It doesn't happen often. There are planes that fly illegally through in park and they go around the canyons and hang low which you're not supposed to do. And they'll go over the range also low which you're also not supposed to do. But it's not often and usually the gliders are the best, you don't even, you just hear the swoosh and that's kind of cool. But it does kind of annoy me to hear the plans buzzing around the mountain. But it's not often. I do go up a lot and I see them just about every year.*

Next, respondents were asked if they found it difficult to communicate with their climbing team because of sound interruptions (from other groups or other sounds). The following are examples of common responses we received:

*Int.5: No, we use a rope-tug system, or we just talk very minimum. We'll just like let each other know when we're halfway through the rope and then the last 20 feet of the rope, but then the pitches are all short enough that we can communicate well.*

*Int.7: (Climber 1) ...it was like frustrating to have a lot of other people yelling like commands to their other partners because then it would be confusing with your partner, um, yeah I don't know about anything like... any enjoyable sounds (laughter). I don't know. (Interviewer) Yeah, um, did any of those sounds disrupt your communication with your partner, or... (Climber 1) Yeah I mean we had to like resort to yelling their name and then the command and, um, so yeah it was a*

*little bit disruptive, but nothing like unmanageable, or like that wrecked anything or made it dangerous.*

Int.14: *Yeah, it was really windy, I mean gale winds, like 40 knots and that made it difficult.*

The final question on the survey asked respondents if they had any recommendations for the park to improve the conditions for the area you were climbing. The following are examples of responses we received:

Int.3: *Gosh, I almost want to say climber registration, or something along those lines. So that they need to like check in with other people, so that they know what the heck they're doing.*

Int.8: *I would have to say the only thing that I see is, right about at the lower saddle there's a lot more erosion then the last four or five years than I ever remember and so, marking – human-caused erosion – and so, marking some designated trails a little bit better and I know that's very difficult given seasons and snow and everybody crosscuts because snow is there and it's tough, but um there's a lot more erosion than I remember seeing up there. The rest of it? It's well maintained, easy access, people tend to stay to the trails and not beat things up, um, that the growing use of, you know, pack it in, pack it out. Leave no trace, I can definitely see the improvements that's made. I don't really see anything other than the trail erosion at the lower saddle.*

Int.11: *No actually, I was thinking about it. We've been to other national parks and this one is really nice. The trails, the signs, everything is really nice. We've had other experiences that aren't the same. We even saw rangers and that was nice.*

Int.13: *Um, I think its pretty well kept, you know for being such a harsh environment and highly trafficked I think they've done a good job. And carrying a backpack is a good policy but in general I think they do a great job so that's awesome.*

## **2.2 Climber Qualitative Interview Emerging Themes**

Additional themes beyond the specific responses from the semi-structured questions outlined above emerged from the interviews. These themes included discussions about camaraderie, wilderness experiences, crowding, soothing water sounds, emotions related to aircraft and rock fall sounds. All themes and concepts are not presented here, nor to the themes represent the entire sample, these themes are examples of salient comments discussed during the 18 interviews.

### Camaraderie

Elements of camaraderie and partnership emerged during most of the interviews. For some respondents, these element emerged when ask what their motivation for climbing the Grand Teton. For example, during Interview 3 a respondent said, “We had a day off, so we had to go have some fun. Nate had never climbed the route before, so I guess that was the motivational part.” In another example, a respondent in Interview 14 stated, “I think the camaraderie, a bunch of good guys, men and women, and uh I enjoyed just getting out.” Elements of camaraderie and partnership also emerged when respondents were asked what they enjoyed most about their experience climbing the Grand Teton was. For example, the respondent in Interview 2 said, “the people I was climbing with are really good people.” Another

respondent in Interview 8 stated, “I would have to say the camaraderie and the partnership and that, so... Yeah, it was good to be just who I was with and go through the whole experience together and come back safe.”

### Wilderness Experiences

Different viewpoints on the wilderness experience emerged. Respondents were asked if they knew that the area they were climbing in was a part of recommended wilderness or if they had chosen to climb the Grand Teton because it was in recommended wilderness. The majority of respondents were not aware that the area they were traveling in was managed as recommended wilderness. However one respondent did state in Interview 12, “Yeah I love wilderness areas and I think sublimely that was part of it. I love to go to areas that there are no manifestation of civilization or people, I would say that that’s part of coming and part of it is that this is such a wild and alpine mountain range. And you see wildlife and animals and birds.” In contrast, other respondents did not feel that the area provided a wilderness experience. For example, a respondent in Interview 2 said, “Umm, it definitely had less of a wilderness feel, had less of a... because you just, you notice other people and so you don’t feel like you’re up in the mountains by yourself. It’s part of the whole point of being up there.” Another example is from Interview 16, when a respondent stated, “I struggle to call it wilderness in that sense, in that setting. For me it’s a little overpopulated for me but um, no it was pretty clean”.

### Crowding

Respondents had different feelings about the level of crowding on the Grand Teton. Some respondents reported feeling crowded during their experience. For example, a respondent in Interview 7 said, “we got climbed over, or through, by another group. Um, on one of the pitches and we were crowded on like a little belay ledge”. Another respondent in Interview 12 reported crowding near a repel location, “yeah crowding, when you get off the Grand, even when there not many people, there’s one repel spot you have to wait a little bit if there’s some people there”. During Interview 14 a respondent stated, “Sometimes I start to think that there are too many guided parties at the Grand. I just think it gets to be a little crazy sometimes. I do think the guides play an important role but in a national park it almost seems like people are able to get into something they shouldn’t be able to”.

Respondents also felt that they didn’t feel crowded or that the level of other visitors they experienced was expected or acceptable. For example in Interview 9 a respondent stated when asked about crowding, “No, I mean I was expecting people from what I’ve heard about climbing the Grand and the upper Exum. I know the weather has been funny and that knocked down the crowds”. Another example was from Interview 11, a respondent said, “[Crowding] No, we were saying that, that we’ve been really lucky. I don’t know personally but it seemed like it was pretty quiet the entire time. The respondent from Interview 12 said, “its acceptable crowding”. Finally, a respondent in Interview 5 stated, “We were slowed down, but that was expected because we didn’t get a super early start. So, just had to show some patience. It was definitely a climb that was recommended to for a while so we were like, ‘well, whatever, we just got to go slow and wait for people to get up this thing’ and was able to pass a party towards the top, that was nice, but there was a good amount of people on the route and obviously like takes a little bit away from the experience”.

### Soothing Sounds of Water

The majority of respondents recalled hearing water sounds during their experience. Most respondents expressed that water sounds were sounds that they enjoyed hearing the most. For example, during Interview 1 a respondent said, “it’s just amazing it’s so peaceful, you hear the wind like whistling



around the edge of the mountain as the waterfalls are crashing down, like... it's so amazing". For another example, during Interview 11 the respondent stated, "The water is nice! And there's so much of it. So much all the way through the entire trip". Finally, during Interview 5 a respondent said, "the stream, Spalding falls is right there, so you can hear the stream the whole time and it's not a drowning sound because you're high enough off the ground so you can still communicate with your climbing partner".

### Feelings about Aircraft Sounds

The majority of respondents recalled hearing aircraft sounds during their experience on the Grand Teton. Respondents expressed a variety of feelings about hearing aircraft. For example, a respondent in Interview 1 said, "the plane was weird. Hearing the plane go overhead. You're like, 'that's odd'". Another respondent in Interview 6 stated, "Yeah, you could hear planes when you were up on the route, I mean, I'd rather not hear planes while I'm up on the route, but I was also like 'man that'd be cool if my plane flew over the Tetons". A respondent in Interview 16 mentioned that aircraft sounds were expected, "well we are right next to an airport so I didn't even think twice about it I just kind of expect it". Respondents also mentioned that sounds from aircraft sounded like thunder. For example, during Interview 10 the respondent said in reference to aircraft sounds, "At least we think they were, it kind of sounded like Thunder. I don't know how busy that airport is but we heard like five before seven in the morning it was crazy". A second respondent in the same interview said, "yeah I mean they didn't bother me that much, I was more nervous that it was thunder coming. That's what I enjoyed the least but we were well down by then. Finally, another respondent in Interview 9 said, "yeah and it can sound like Thunder or rock fall, the initial load noise is a real concern because I spend so much time on the mountains. I get startled. Yeah the jets".

### Emotions Related to Rock Fall Sounds

Many of the respondents also mentioned experiencing rock fall. Similar to aircraft sounds, feelings about rock fall varied amongst respondents. For example, in Interview 4 the respondent stated, "rocks falling were very distinctive to me. Makes you look where they come from. Like you hear rocks and you're just constantly moving your head". During Interview 5 the respondent said, "we saw pretty cool rock fall off of Nez Perce... Rock fall is always – it's cool like when you initially hear it, it's scary because you don't know where it's coming from because you're in a big canyon and the noise is bouncing around, so until you pinpoint where it's coming from and you can see the rock coming down that's intimidating for a little bit, but once you kind of see where it's coming from it's pretty cool to see it from a distance." Another respondent in Interview 6 said, "I've been up here in the past and had like guided groups dropping rocks and things like that depending on which route you're up and on, but it's just part of being up there". The same respondent also mentioned hearing rock fall: "there was a rock fall this morning from the upper saddle, or from the saddle that was above us, so it was cool rumbling noises". Finally, a respondent in Interview 18 said, "I like the sounds of the avalanches and the rocks falling it's just something primal about it...An avalanche coming down and \*inaudible\* it's like a present for climbers".

## Chapter 3. Phase Two – Listening Exercise and Survey

### **Methods**

This study used methods commonly applied to other studies that examine the effects of human caused noise on visitors to protected areas (Kariel, 1990; Marin et al., 2011; Pilcher, Newman & Manning, 2009; Taff et al., 2013). Respondents were asked to participate in the exercise during their descent from the Grand Teton at one of two different locations: near the Meadows Site or the 3-Mile Junction. They were instructed by the researchers to close their eyes and listen to the sounds around them for two minutes, then use the iPad survey to indicate what sounds were heard and to rate whether the sounds were pleasing or annoying and the acceptability of the sounds heard. For example, a respondent may hear other people talking and rate it as annoying, but also rate it as highly acceptable given the location. In addition to answering questions about their perceptions of sounds, respondents were asked to indicate their motivations for climbing, level of climbing experience, specialization related to climbing, perceptions of crowding during their experience, and basic demographic information (Appendix A). Simultaneously, in coordination with the park's bioacoustics engineer, Shan Burson, an acoustic monitoring device was placed near both sampling locations. Sound events were recorded and analyzed on days when the researchers were not sampling. Results from the sound recordings are shown in Appendix B.

### **3.1 Listening Exercise and Survey Results – Combined Results**

Sampling at the two locations (3 Mile Junction and the Meadows) took place between July 13 and August 10<sup>th</sup>, 2015, a time period of high climbing use on the Grand Teton. There was an 89% response rate with a total  $n = 234$ . Table 3.1.1 depicts the five most frequently heard natural sounds at both sites. Wind was the most frequently heard sound, as 91% of respondents indicated hearing this sound. Wind was perceived as acceptable ( $M=2.8$ ) and pleasing ( $M=2.8$ ). Wind rustling in the leaves was the second most frequently heard sound and 83% of respondents indicated hearing this sound. It was rated as acceptable ( $M=2.7$ ) and pleasing ( $M=3.0$ ). Next, water, streams, river, etc. were the third most frequently heard sound. Seventy-nine percent of respondents heard this sound and reported it as acceptable ( $M=2.9$ ) and very pleasing ( $M=3.4$ ). Birdsong was the fourth most frequently heard sound and was rated as very acceptable ( $M=3.0$ ) and very pleasing ( $M=3.2$ ). It was heard by 77% of the respondents. Finally, insects were heard by 62% of respondents and were rated as acceptable ( $M=2.0$ ) and interpreted as neutral ( $M=0.7$ ).



Photo 3.1 Climbers taking the listening survey at the Meadows Site

Table 3.1.1. Combined climber evaluation of the five most frequently heard natural sounds

| Sound Heard                     | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal Interpretation | SD<br>Personal Interpretation |
|---------------------------------|----------|---------------|------------------------------------|---------------------|--|-------------------------------|
| 1. Wind                         | 214      | 91            | 2.8                                | 1.7                 | 2.8  | 1.7                           |
| 2. Wind rustling in the trees   | 195      | 83            | 2.7                                | 1.8                 | 3.0  | 1.4                           |
| 3. Water, streams, rivers, etc. | 185      | 79            | 2.9                                | 1.7                 | 3.4  | 1.1                           |
| 4. Birdsong                     | 181      | 77            | 3.0                                | 1.6                 | 3.2  | 1.2                           |
| 5. Insects                      | 104      | 62            | 2.0                                | 2.3                 | 0.7  | 2.6                           |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable; 0 = Neutral; 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying; 0 = Neutral; 4 = Very Pleasing)

Table 3.1.2 provides the five most frequently heard anthropogenic sounds at both locations. Voices and walking sounds were the two most frequently heard sounds as 76% of respondents indicated hearing these sounds. Voices were rated as acceptable (M=1.4) and interpreted as slightly pleasing (M=0.9). Walking was rated as acceptable and interpreted as slightly acceptable (M=0.7). Fifty-four percent of respondents heard climbing gear, which was the third most frequently heard sound. Climbing gear sounds were rated as acceptable (M=1.9) and slightly pleasing (M=0.85). Jet aircraft were the fourth most frequently heard sound. Forty-one percent of respondents indicated hearing jet aircraft sounds. This sound was rated as slightly unacceptable (M=-0.5) and annoying (M=-1.3). Finally, vehicles were heard by 40% of respondents and was rated as slightly unacceptable (M=-0.5) and annoying (-1.5).

Table 3.1.2. Combined climber evaluation of the five most frequently heard anthropogenic sounds

| Sound Heard      | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal<br>Interpretation | SD<br>Personal<br>Interpretation |
|------------------|----------|---------------|------------------------------------|---------------------|---|----------------------------------|
| 1. Voices        | 179      | 76            | 1.4                                | 2.2                 | 0.9   | 1.9                              |
| 2. Walking       | 178      | 76            | 2.4                                | 1.8                 | 0.7   | 1.9                              |
| 3. Climbing Gear | 126      | 54            | 1.9                                | 2.0                 | .85   | 2.0                              |
| 4. Jet Aircraft  | 97       | 41            | -0.5                               | 2.4                 | -1.3  | 2.1                              |
| 5. Vehicles      | 95       | 40            | -0.5                               | 2.5                 | -1.5  | 2.3                              |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable; 0 = Neutral; 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying; 0 = Neutral; 4 = Very Pleasing)

### 3.2 Listening Exercise and Survey Results – 3-Mile Junction Site

Sampling at 3 Mile Junction took place from July 13, 2015 to August 10th, with a total *n* = 122. Table 3.2.1 provides the five most frequently heard natural sounds at 3 Mile Junction. Wind and bird song were heard most frequently, as 88% of respondents indicated hearing these sounds. The sound of wind was, on average, perceived as acceptable (M=2.8) and very pleasing (M=3.0). Bird song was perceived as very acceptable (M=3.2) and very pleasing (M=3.3). Wind rustling in the trees was the second most frequently heard sound. Eighty-five percent of respondents indicated that they heard wind rustling in the trees; on average these respondents found the sound to be acceptable (M=2.8) and very pleasing (M=3.2). Eighty-four percent of respondents at 3 Mile Junction heard insects, and mean acceptability dropped considerably compared to the sounds of wind or bird song. These respondents indicated that insect sounds were still acceptable (M=2.2), but annoying (M=-0.3). Finally, water was heard by 62% of respondents, and considered acceptable (M=1.8) and very pleasing (M=3.4).

Table 3.2.1. 3-Mile Junction climber evaluation of the five most frequently heard natural sounds

| Sound Heard                     | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal<br>Interpretation | SD<br>Personal<br>Interpretation |
|---------------------------------|----------|---------------|------------------------------------|---------------------|---|----------------------------------|
| 1. Wind                         | 107      | 88            | 2.8                                | 1.7                 | 3.0   | 1.7                              |
| 2. Bird song                    | 107      | 88            | 3.2                                | 1.2                 | 3.3   | 1.2                              |
| 3. Wind rustling in the trees   | 104      | 85            | 2.8                                | 1.7                 | 3.2   | 1.1                              |
| 4. Insects                      | 102      | 84            | 2.2                                | 2.2                 | -0.3  | 2.8                              |
| 5. Water, streams, rivers, etc. | 75       | 62            | 1.8                                | 2.1                 | 3.4   | 1.1                              |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable; 0 = Neutral; 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying; 0 = Neutral; 4 = Very Pleasing)

Table 3.2.2 provides the five most frequently heard anthropogenic sounds on the 3 Mile Junction site.

Walking sounds were heard most frequently, as 78% of respondents indicated hearing this sound.

Walking sounds was on average, perceived as acceptable (M=2.5) and slightly pleasing or almost neutral

(M=0.8). Voices were heard by 76% of respondents and were perceived as slightly acceptable (M=1.7) and slightly pleasing or almost neutral (M=1.4). Sixty-three percent of respondents indicated that they heard vehicles (other than motorcycles). The sounds of vehicles were, on average, considered neutral in terms of acceptability (M=-0.3) and slightly annoying (M=-1.3). The sounds associated with climbing gear were perceived as acceptable (M=2.2) and almost neutral concerning whether those sounds were annoying or pleasing (M=0.9). Fifty-three percent of respondents indicated hearing jet aircraft, on average these sounds were just barely unacceptable (M=-0.2), but slightly annoying (M=-1.3).

Table 3.2.2. 3-Mile Junction climber evaluation of the five most frequently heard anthropogenic sounds

| Sound Heard |               | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal Interpretation | SD<br>Personal Interpretation |
|-------------|---------------|----------|---------------|------------------------------------|---------------------|--|-------------------------------|
| 6.          | Walking       | 95       | 78            | 2.5                                | 1.9                 | 0.8  | 1.9                           |
| 7.          | Voices        | 93       | 76            | 1.7                                | 2.3                 | 0.4  | 1.9                           |
| 8.          | Vehicles      | 77       | 63            | -0.3                               | 2.6                 | -1.3   | 2.5                           |
| 9.          | Climbing Gear | 68       | 56            | 2.0                                | 2.0                 | 0.9  | 1.8                           |
| 10.         | Jet Aircraft  | 64       | 53            | -0.2                               | 2.6                 | -1.3   | 2.4                           |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable – 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying – 4 = Very Pleasing)

### 3.3 Listening Exercise and Survey Results – The Meadows Site

Sampling at the Meadows took place from July 19, 2015 to August 9th, 2015 with a total *n* = 112. Table 3.3.1 provides the five most frequently heard natural sounds at the Meadow site. The sounds of water, streams, rivers, etc. were heard most frequently, as 98% of respondents indicated hearing this sound. These sounds, on average, were perceived as very acceptable (M=3.6), and very pleasing (M=3.4). Wind was the second most frequently heard sound. Ninety-six percent of respondents indicated that they heard wind and, on average, these respondents found the sound to be acceptable (M=2.8) and pleasing (M=2.6). Eighty-one percent of respondents at the Meadows site heard wind rustling in the trees and indicated that these sounds were acceptable (M=2.6) and pleasing (M=2.8). Birdsong was heard by 66% of respondents, and considered acceptable (M=2.7) and very pleasing (M=3.2). Finally, mammals were heard by 38% of respondents, and they indicated that the sounds were acceptable (M=1.9) and pleasing (M=2.4).

Table 3.3.1. The Meadow Site visitor evaluation of the five most frequently heard natural sounds

| Sound Heard                   | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal<br>Interpretation | SD<br>Personal<br>Interpretation |
|-------------------------------|----------|---------------|------------------------------------|---------------------|---|----------------------------------|
| 1. Water                      | 110      | 98            | 3.6                                | 1.8                 | 3.4   | 1.1                              |
| 2. Wind                       | 107      | 96            | 2.8                                | 1.7                 | 2.6   | 1.6                              |
| 3. Wind rustling in the trees | 91       | 81            | 2.6                                | 1.9                 | 2.8   | 1.6                              |
| 4. Birdsong                   | 74       | 66            | 2.7                                | 2.0                 | 3.2   | 1.2                              |
| 5. Mammals                    | 42       | 38            | 1.9                                | 2.3                 | 2.4   | 1.8                              |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable; 0 = Neutral; 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying; 0 = Neutral; 4 = Very Pleasing)

Table 3.3.2 provides the five most frequently heard anthropogenic sounds at the Meadows site. Voices were heard most, by 77% of respondents. These sounds were slightly acceptable (M=1.3), but slightly annoying as well (M=-0.03). Walking sounds, which were heard by 74% of respondents, were perceived as acceptable (M=2.3), but slightly pleasing (M=0.6). Fifty-two percent of respondents indicated that they heard climbing gear, and, on average, considered these sounds to be acceptable (M=1.7) and slightly pleasing (M=0.8). Jet aircraft were heard by 30% of respondents. These sounds were found to be slightly unacceptable (M=-1.0) and slightly annoying (M=-1.5). Twenty-seven percent of respondents indicated hearing propeller aircraft, and, on average, these sounds were just slightly unacceptable (M=-0.9) and annoying (M=-1.4).

Table 3.3.2. The Meadow Site climber evaluation of the five most frequently heard anthropogenic sounds

| Sound Heard           | <i>n</i> | Percent Heard | Mean <sup>1</sup><br>Acceptability | SD<br>Acceptability | Mean <sup>2</sup><br>Personal<br>Interpretation | SD<br>Personal<br>Interpretation |
|-----------------------|----------|---------------|------------------------------------|---------------------|---|----------------------------------|
| 1. Voices             | 86       | 77            | 1.3                                | 2.1                 | -0.3  | 1.9                              |
| 2. Walking            | 83       | 74            | 2.3                                | 1.8                 | 0.6   | 2.0                              |
| 3. Climbing Gear      | 58       | 52            | 1.7                                | 1.9                 | 0.8   | 2.3                              |
| 4. Jet Aircraft       | 33       | 30            | -1.0                               | 2.0                 | -1.5  | 1.7                              |
| 5. Propeller Aircraft | 30       | 27            | -0.9                               | 2.2                 | -1.4  | 1.8                              |

<sup>1</sup>Acceptability based on 9-point scale (-4 = Very Unacceptable – 4 = Very Acceptable)

<sup>2</sup>Personal Interpretation based on 9-point scale (-4 = Very Annoying – 4 = Very Pleasing)

### 3.4 Combined Results from Survey Questions

This section provides results from the other variables evaluated in the listening exercise and survey.

#### ***Trip Information***

The median size for parties climbing the Grand Teton was 3 people, although group size ranged between 1 and 16.

Table 3.4.1. Group size

| Median | Mean | SD  | Range |
|--------|------|-----|-------|
| 3      | 3.27 | 2.4 | 1-16  |

The majority of respondents who participated in the survey were part of a private climbing group (72%). Twenty-three percent of respondents were with a guided group and 5% were climbing guides.

Table 3.4.2. Group type

| Group Type      | <i>n</i> | %  |
|-----------------|----------|----|
| Guided          | 54       | 23 |
| Private         | 168      | 72 |
| Climbing Guides | 12       | 5  |

The vast majority of participants camped overnight as part of their experience climbing the Grand Teton. Seventy percent of respondents camped overnight and 30% climbed the Grand Teton as part of a day-trip.

Table 3.4.3. Trip type

| Trip Type | <i>n</i> | %  |
|-----------|----------|----|
| Day       | 71       | 30 |
| Overnight | 163      | 70 |

The majority of respondents climbed or attempted to climb the Owen Spalding route and the Upper Exum Ridge route. Twenty-five respondents climbed or attempted the Lower Exum Ridge Route. Fifteen respondents climbed or attempted the Pownall-Gilkey route. Other responses are listed below (Table 3.4.4.). It's important to note here that respondents were able to choose multiple responses for this question because they might have climbed more than one specific route in a trip.

Table 3.4.4. Route climbed or attempted

| Route Name       | <i>n</i> |
|------------------|----------|
| Owen Spalding    | 109      |
| Upper Exum Ridge | 95       |



|                       |    |
|-----------------------|----|
| Lower Exum Ridge      | 25 |
| Direct Petzoldt Ridge | 3  |
| The East Ridge        | 1  |
| Pownall-Gilkey        | 15 |
| The Enclosure         | 2  |
| Beyer East Face       | 2  |
| North Ridge           | 2  |
| Upper or Lower Saddle | 3  |
| Other Response        | 4  |

We asked respondents if this current trip was their first time climbing the Grand Teton. The majority of respondents, 62%, indicated that this was their first time climbing the Grand Teton. Thirty-eight percent of respondents indicated that they had climbed the Grand Teton previously.

Table 3.4.5. First time or repeat

| User Type  | <i>n</i> | %  |
|------------|----------|----|
| First time | 145      | 62 |
| Repeat     | 89       | 38 |

There was almost an even distribution between respondents who reached the summit of the Grand Teton and those who did not. Forty-seven percent summited and 53% indicated that they did not summit. Eleven respondents did not answer this question.

Table 3.4.6. Respondents who summited the Grand Teton

| Summit | <i>n</i> | %  |
|--------|----------|----|
| Yes    | 105      | 47 |
| No     | 118      | 53 |

### ***Climbing Experience***

Respondents were asked the number of years they have been climbing. The median number was seven years, but the range was from one to 50 years of climbing experience, with the average being 11.4 years of experience.

Table 3.4.7. Years of climbing experience

| Median | Mean | SD   | Range |
|--------|------|------|-------|
| 7      | 11.4 | 10.9 | 1-50  |

Respondents were asked to indicate the number of days they had rock climbed in the last twelve months. The median number of days was 20, but the number of days ranged between one and 290.

Table 3.4.8. Number of days rock climbing in the last twelve months

| Median | Mean | SD   | Range |
|--------|------|------|-------|
| 20     | 38.4 | 47.2 | 1-290 |

Respondents were asked to rate their overall climbing ability. Most respondents rated their ability as intermediate, as 38% chose this category. Twenty-seven percent rated their ability as advanced and 20% chose novice. Nine percent rated themselves as expert in climbing ability and only 6% rated as beginners.

Table 3.4.9. Overall climbing ability

| Ability      | <i>n</i> | %  |
|--------------|----------|----|
| Beginner     | 14       | 6  |
| Novice       | 44       | 20 |
| Intermediate | 85       | 38 |
| Advanced     | 59       | 27 |
| Expert       | 21       | 9  |

Respondents were asked the difficulty of the hardest rock climb they completed. The level of difficulty was based on the Yosemite Decimal System. Six percent of respondents marked that they did not know the hardest level of rock climb they completed. The majority of respondents marked that they highest grade of climb they completed as 5.11 (24%). Twenty-one percent of respondents marked 5.12 and 18% marked 5.10 as they highest level of difficulty. Other responses are shown in the table below (Table 3.4.10).

Table 3.4.10. Highest level of difficulty

| Climbing grade | <i>n</i> | %  |
|----------------|----------|----|
| 5.4            | 3        | 1  |
| 5.5            | 3        | 1  |
| 5.6            | 10       | 4  |
| 5.7            | 7        | 3  |
| 5.8            | 20       | 9  |
| 5.9            | 19       | 8  |
| 5.10           | 43       | 18 |
| 5.11           | 57       | 24 |
| 5.12           | 49       | 21 |
| 5.13           | 9        | 4  |
| 5.14           | 1        | <1 |
| I don't know   | 13       | 6  |

Table 3.4.11 depicts respondents' level of agreement with variables concerning the role of rock climbing in their lives. Respondents agreed most with the variable "Rock climbing is important to me" (M=4.15). There was also a high level of agreement with the variable, "Rock climbing is one of the most enjoyable things I do" (M=4.14). Respondents agreed the least with the variable "I have little or no interest in rock climbing" (M=1.38).

Table 3.4.11. Centrality to life

|   | Percentage        |          |         |       |                | Mean <sup>1</sup> | SD  |
|---|-------------------|----------|---------|-------|----------------|-------------------|-----|
|   | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |                   |     |
| Rock climbing is one of the most enjoyable things I do                          | 1                 | 3        | 16      | 41    | 40             | 4.14              | 0.8 |
| I have little or no interest in rock climbing                                   | 68                | 27       | 4       | 1     | 0              | 1.38              | 0.6 |
| Rock climbing is one of the most satisfying things I do                         | <1                | 3        | 22      | 39    | 36             | 4.06              | 0.8 |
| Rock climbing is important to me  | <1                | 3        | 14      | 49    | 35             | 4.15              | 0.8 |
| I find a lot of my life is organized around rock climbing                       | 8                 | 24       | 24      | 26    | 17             | 3.20              | 1.2 |
| I enjoy discussing rock climbing with my friends                                | 3                 | 7        | 17      | 50    | 24             | 3.85              | 0.9 |
| Most of my friends are in some way connected to rock climbing                   | 8                 | 26       | 26      | 30    | 10             | 3.09              | 1.1 |
| When I participate in rock climbing I can really be myself                      | 2                 | 9        | 24      | 41    | 24             | 3.75              | 1.0 |
| You can tell a lot about a person by seeing them rock climb                     | 5                 | 18       | 35      | 31    | 11             | 3.26              | 1.0 |
| When I participate in rock climbing others see me the way I want them to see me | 4                 | 8        | 49      | 31    | 8              | 3.33              | 0.9 |

<sup>1</sup>Agreement based on 5-point scale (1 = Strongly Disagree; 2 = Disagree; 3 = Neither; 4 = Agree; 5 = Strongly Agree)

### **Motivations**

To better understand respondents' motivations for climbing the Grand Teton, respondents were asked to rank each motivation based on level of importance. Table 3.4.12 represents the variables used to determine the motivations of respondents. Based on mean values, being close to nature and being where things are natural were the most important reasons for climbing the Grand Teton (M=4.2). Experiencing open space (M=4.0) and doing things with companions (M=3.9) were also important motivations. Seventy-two percent of respondents rated enjoying sounds of nature as moderately to slightly important.

Table 3.4.12 Importance of reasons for climbing the Grand Teton

| Reasons for climbing                              | Percentage           |                    |                      |                |                     | Mean <sup>1</sup> | SD  |
|---|----------------------|--------------------|----------------------|----------------|---------------------|-------------------|-----|
|   | Not at all Important | Slightly Important | Moderately Important | Very Important | Extremely Important |                   |     |
| Experience tranquility                            | 9                    | 13                 | 31                   | 28             | 19                  | 3.3               | 1.1 |
| Experiencing solitude                             | 12                   | 23                 | 30                   | 19             | 16                  | 3.0               | 1.2 |
| To be where it is quiet                           | 13                   | 20                 | 33                   | 22             | 12                  | 3.0               | 1.2 |
| To take risks                                     | 12                   | 17                 | 28                   | 32             | 12                  | 3.1               | 1.2 |
| Experience danger                                 | 24                   | 21                 | 27                   | 18             | 9                   | 2.6               | 1.3 |
| To be close to nature                             | 2                    | 3                  | 13                   | 32             | 50                  | 4.2               | 0.9 |
| To enjoy sounds of nature                         | 9                    | 17                 | 20                   | 27             | 25                  | 3.7               | 1.2 |
| To be where things are natural                    | 2                    | 4                  | 12                   | 33             | 49                  | 4.2               | 0.9 |
| Experience more elbow room                        | 12                   | 17                 | 20                   | 27             | 25                  | 3.3               | 1.3 |
| Experience open space                             | 3                    | 5                  | 18                   | 34             | 40                  | 4.0               | 1.0 |
| To be away from crowds of people                  | 5                    | 11                 | 22                   | 28             | 34                  | 3.7               | 1.2 |
| To get away from the clatter and racket back home | 11                   | 9                  | 21                   | 32             | 27                  | 3.5               | 1.2 |
| To be with friends                                | 7                    | 7                  | 13                   | 36             | 36                  | 3.8               | 1.2 |
| To do things with your companions                 | 8                    | 3                  | 13                   | 39             | 37                  | 3.9               | 1.1 |
| To be with members of your group                  | 9                    | 6                  | 17                   | 36             | 32                  | 3.7               | 1.2 |

| Reasons for climbing                                | Percentage           |                    |                      |                |                     | Mean <sup>1</sup> | SD  |
|---|----------------------|--------------------|----------------------|----------------|---------------------|-------------------|-----|
|   | Not at all Important | Slightly Important | Moderately Important | Very Important | Extremely Important |                   |     |
| Experience natural sounds for health and wellbeing  | 8                    | 10                 | 25                   | 25             | 31                  | 3.6               | 1.2 |
| Experience natural sounds for restorative qualities | 11                   | 13                 | 23                   | 24             | 29                  | 3.5               | 1.3 |

<sup>1</sup>Importance based on 5-point scale (1 = Not at all Important; 2 = Slightly Important; 3 = Moderately Important; 4 = Very Important; 5 = Extremely Important)

### ***Crowding-Combined weekend and week-day***

The following tables depict the combined results from weekend and week-day crowding questions (n=232). Table 3.4.13 shows the results from the question, “How crowded did you feel while on the trail and climbing the Grand Teton today”. The mean response was 5.1 on a nine point scale, meaning that on average, respondents felt slightly to moderately crowded.

Table 3.4.13 Combined- Crowding on the trail and climb

| Percentage         |    |                  |   |   |                    |    |                   |   | Mean | SD  |
|--------------------|----|------------------|---|---|--------------------|----|-------------------|---|------|-----|
| Not at all crowded |    | Slightly crowded |   |   | Moderately crowded |    | Extremely crowded |   |      |     |
| 1                  | 2  | 3                | 4 | 5 | 6                  | 7  | 8                 | 9 |      |     |
| 11                 | 12 | 9                | 4 | 8 | 13                 | 25 | 12                | 4 | 5.1  | 2.5 |

Table 3.4.14 depicts results from the survey question, “How did the number of other people you encountered affect your overall experience today”. The mean response was 4.9 on a nine point scale. This means, that on average, respondents felt that the number of people they encountered neither enhanced nor detracted from their experience.

Table 3.4.14 Combined- People encountered

| Percentage                   |   |                    |   |    |                   |    |                        |   | Mean | SD  |
|------------------------------|---|--------------------|---|----|-------------------|----|------------------------|---|------|-----|
| Detracted from my experience |   | Slightly detracted |   |    | Slightly enhanced |    | Enhanced my experience |   |      |     |
| 1                            | 2 | 3                  | 4 | 5  | 6                 | 7  | 8                      | 9 |      |     |
| 1                            | 7 | 19                 | 9 | 37 | 7                 | 10 | 3                      | 7 | 4.9  | 1.9 |

Table 3.4.15 depicts responses from a series of questions about crowding. For the variables “I had the opportunity to recreate without feeling crowded” (M=3.7) and “I could find places to recreate without conflict from other visitors” (M=3.8), the mean response indicated that respondents neither agreed nor disagreed with the statements. Respondents disagreed most with the variable “There was an unsafe number of climbers on the Grand today” (M=2.3). Respondents also disagreed with the variable, “My experience was impacted by having too many people on the climbing route” (M=2.6).

Table 3.4.15. Combined-Crowding dimension

|  | Percentage        |          |         |       |                | Mean <sup>1</sup> | SD  |
|--|-------------------|----------|---------|-------|----------------|-------------------|-----|
|  | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |                   |     |
| I could find places to recreate without conflict from other visitors       | 1                 | 8        | 20      | 53    | 19             | 3.8               | 0.8 |
| Climbing at some places was dangerous because of the number of climbers    | 12                | 31       | 30      | 18    | 8              | 2.8               | 1.1 |
| My experience was impacted by having too many people on the climbing route | 18                | 32       | 27      | 19    | 3              | 2.6               | 1.1 |

|   |   |    |    |    |   |     |     |
|---|---|----|----|----|---|-----|-----|
| The number of people on the route was about right | 3 | 18 | 34 | 36 | 8 | 3.3 | 1.0 |
|---|---|----|----|----|---|-----|-----|

<sup>1</sup>Agreement based on 5-point scale (1 = Strongly Disagree; 2 = Disagree; 3 = Neither; 4 = Agree; 5 = Strongly Agree)

### **Crowding Week-Day**

The following tables depict the responses from crowding survey questions administered on a week-days during the sampling period (Monday through Friday;  $n=150$ ). Table 3.4.16 shows the results from the question, “How crowded did you feel while on the trail and climbing the Grand Teton today”. The mean response was 4.9 on a nine point scale, meaning that on average, week-day respondents felt slightly to moderately crowded.

Table 3.4.16. Week-day – Crowding on the trail and climb

| Percentage         |    |                  |   |    |                    |    |                   |   | Mean | SD  |
|--------------------|----|------------------|---|----|--------------------|----|-------------------|---|------|-----|
| Not at all crowded |    | Slightly crowded |   |    | Moderately crowded |    | Extremely crowded |   |      |     |
| 1                  | 2  | 3                | 4 | 5  | 6                  | 7  | 8                 | 9 |      |     |
| 9                  | 15 | 11               | 6 | 11 | 13                 | 21 | 11                | 2 | 4.9  | 2.4 |

Table 3.4.17 depicts results from the survey question, “How did the number of other people you encountered affect your overall experience today”. The mean response was 5.0 on a nine point scale. This means, that on average, week-day respondents felt that the number of people they encountered neither enhanced nor detracted from their experience.

Table 3.4.17. Week-day- People encountered

| Percentage                   |   |                    |   |    |                   |    |                        |   | Mean | SD  |
|------------------------------|---|--------------------|---|----|-------------------|----|------------------------|---|------|-----|
| Detracted from my experience |   | Slightly detracted |   |    | Slightly enhanced |    | Enhanced my experience |   |      |     |
| 1                            | 2 | 3                  | 4 | 5  | 6                 | 7  | 8                      | 9 |      |     |
| 1                            | 7 | 17                 | 8 | 37 | 9                 | 10 | 4                      | 7 | 5.0  | 1.9 |

Table 3.4.18 depicts responses from a series of questions about crowding. For the variables “I had the opportunity to recreate without feeling crowded” ( $M=3.8$ ) and “I could find places to recreate without conflict from other visitors” ( $M=3.8$ ), the mean response indicated that respondents neither agreed nor disagreed with the statements. Respondents disagreed most with the variable “There was an unsafe number of climbers on the Grand today” ( $M=2.3$ ). Respondents also disagreed with the variable, “My experience was impacted by having too many people on the climbing route” ( $M=2.6$ ).



Table 3.4.18. Week-day – Crowding dimension

|  | Percentage        |          |         |       |                | Mean <sup>1</sup> | SD  |
|--|-------------------|----------|---------|-------|----------------|-------------------|-----|
|  | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |                   |     |
| I had the opportunity to recreate without feeling crowded                  | 1                 | 7        | 21      | 54    | 17             | 3.8               | 0.8 |
| I could find places to recreate without conflict from other visitors       | 1                 | 6        | 21      | 57    | 16             | 3.8               | 0.8 |
| The behaviors of other people interfered with the quality of my experience | 12                | 39       | 29      | 15    | 4              | 2.6               | 1.0 |
| Climbing at some places was dangerous because of the number of climbers    | 11                | 33       | 31      | 17    | 7              | 2.7               | 1.1 |
| There was an unsafe number of climbers on the Grand today                  | 20                | 43       | 27      | 5     | 5              | 2.3               | 1.0 |
| My experience was impacted by having too many people on the climbing route | 16                | 35       | 28      | 17    | 3              | 2.6               | 1.0 |
| The number of people on the route was about right                          | 3                 | 17       | 34      | 39    | 7              | 3.3               | 0.9 |

<sup>1</sup>Agreement based on 5-point scale (1 = Strongly Disagree; 2 = Disagree; 3 = Neither; 4 = Agree; 5 = Strongly Agree)

### ***Crowding Weekend***

The following tables depict the responses from crowding survey questions administered on the weekends during the sampling period (Saturdays and Sundays;  $n=84$ ). Table 3.4.19 shows the results from the question, “How crowded did you feel while on the trail and climbing the Grand Teton today”. The mean response was 5.5 on a nine point scale, meaning that on average, weekend respondents felt slightly to moderately crowded.

Table 3.4.19. Weekend- Crowding on the trail and climb

| Percentage         |   |                  |   |   |                    |    |                   |   | Mean | SD  |
|--------------------|---|------------------|---|---|--------------------|----|-------------------|---|------|-----|
| Not at all crowded |   | Slightly crowded |   |   | Moderately crowded |    | Extremely crowded |   |      |     |
| 1                  | 2 | 3                | 4 | 5 | 6                  | 7  | 8                 | 9 |      |     |
| 14                 | 8 | 6                | 1 | 3 | 13                 | 32 | 14                | 7 | 5.5  | 2.6 |

Table 3.4.20 depicts results from the survey question, “How did the number of other people you encountered affect your overall experience today”. The mean response was 4.6 on a nine point scale. This means, that on average, weekend respondents felt that the number of people they encountered neither slightly detracted from their experience.

Table 3.4.20. Weekend- People encountered

| Percentage                   |   |                    |    |    |                   |   |                        |   | Mean | SD  |
|------------------------------|---|--------------------|----|----|-------------------|---|------------------------|---|------|-----|
| Detracted from my experience |   | Slightly detracted |    |    | Slightly enhanced |   | Enhanced my experience |   |      |     |
| 1                            | 2 | 3                  | 4  | 5  | 6                 | 7 | 8                      | 9 |      |     |
| 1                            | 7 | 24                 | 11 | 37 | 4                 | 9 | 1                      | 6 | 4.6  | 1.9 |

Table 3.4.21 depicts responses from a series of questions about crowding. For the variables “I had the opportunity to recreate without feeling crowded” (M=3.6) and “I could find places to recreate without conflict from other visitors” (M=3.8), the mean response indicated that respondents neither agreed nor disagreed with the statements. Weekend respondents disagreed most with the variable “There was an unsafe number of climbers on the Grand today” (M=2.2). Weekend respondents also disagreed with the variable, “My experience was impacted by having too many people on the climbing route” (M=2.5).

Table 3.4.21. Weekend- Crowding dimension

|  | Percentage        |          |         |       |                | Mean <sup>1</sup> | SD  |
|--|-------------------|----------|---------|-------|----------------|-------------------|-----|
|  | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |                   |     |
| I had the opportunity to recreate without feeling crowded                  | 1                 | 17       | 20      | 44    | 18             | 3.6               | 1.0 |
| I could find places to recreate without conflict from other visitors       | 1                 | 11       | 18      | 45    | 25             | 3.8               | 0.9 |
| The behaviors of other people interfered with the quality of my experience | 15                | 39       | 18      | 20    | 7              | 2.6               | 1.2 |
| Climbing at some places was dangerous because of the number of climbers    | 14                | 27       | 29      | 20    | 9              | 2.8               | 1.2 |
| There was an unsafe number of climbers on the Grand today                  | 24                | 39       | 27      | 7     | 2              | 2.2               | 1.0 |
| My experience was impacted by having too many people on the climbing route | 23                | 27       | 25      | 23    | 2              | 2.5               | 1.1 |
| The number of people on the route was about right                          | 6                 | 21       | 33      | 30    | 10             | 3.1               | 1.0 |

<sup>1</sup>Agreement based on 5-point scale (1 = Strongly Disagree; 2 = Disagree; 3 = Neither; 4 = Agree; 5 = Strongly Agree)

### **Demographics**

The following sections depict respondents' demographic information. Table 3.4.22 depicts respondents' residence by country. The vast majority of respondents were from the United States.

Table 3.4.22. Residence by country

| Country | %  |
|---------|----|
| USA     | 98 |
| Canada  | <1 |
| UK      | <1 |
| France  | <1 |
| Nepal   | <1 |

Table 3.4.23 depicts respondents' residence by U.S. region. The majority of respondents reside in the Mountain-West (32%). Eighteen percent of respondents reside in the state of Wyoming and 8% were from Idaho. Sixteen percent of the respondents reside in the Midwestern region. Thirteen percent of respondents resided in the Eastern region and 12% resided in the Pacific-West.

Table 3.4.23 Residence by U.S. region

| U. S. Region  | <i>n</i> | %  |
|---------------|----------|----|
| Eastern       | 27       | 13 |
| Midwestern    | 35       | 16 |
| Mountain-West | 68       | 32 |
| Pacific-West  | 26       | 12 |
| Wyoming       | 38       | 18 |
| Idaho         | 17       | 8  |

Table 3.4.24 depicts respondents' gender. The majority of survey respondents were male (79%) and 21% were female.

Table 3.4.24. Gender

| Gender | <i>n</i> | %  |
|--------|----------|----|
| Male   | 184      | 79 |
| Female | 50       | 21 |

Table 3.4.25 depicts survey respondents' age. The mean age was 34 years old, but ages ranged between 18 and 64 years of age.

Table 3.4.25. Age

| Mean | SD   | Range |
|------|------|-------|
| 34   | 11.5 | 18-64 |

### 3.5 Sound Recording Results

While listening surveys were being conducted, audio monitoring devices were simultaneously recording sound events. Sounds were recorded and analyzed by NPS staff. Results can be seen in Appendix B. The purpose of recording audible sounds was to compare them with results from the listening exercise. The

distribution of sounds recorded correlate with results from the listening exercise indicating that respondents were accurately reporting sounds heard.

## Chapter 4. Discussion and Management Implications

### 4.1 Discussion

The objectives of this study were to: (1) Identify motivations and types of wilderness experiences climbers are having in route to the Grand Teton; (2) Identify sounds climbers are hearing at different points in route to the Grand Teton summit; (3) Understand the impacts sounds have on the climbing experience (both natural and anthropogenic); and (4) Provide park managers with potential indicators of quality for soundscapes in Garnet Canyon and on The Grand Teton specifically. This study used two separate methods: 1) qualitative interviews with climbers who had recently attempted or successfully summited Grand Teton, and 2) an in situ listening exercise and accompanying survey.

Findings from the semi-structured qualitative interviews revealed important themes related to sounds heard on the Grand Teton, as well as other experiences associated with climbing on the Grand Teton. Common themes that emerged related to the soundscape were soothing water sounds, and emotions related to aircraft and rock fall sounds. Eight of the 18 interviews mentioned hearing aircraft when asked generally about sounds they remember hearing during their climb. Waterfalls, gear placement and avalanche are examples of sounds respondents enjoyed hearing the most. Rock fall, airplanes and wind are examples of sounds respondents enjoyed hearing the least.

Themes that emerged related to other experiences on the Grand Teton included camaraderie, wilderness experiences, and crowding. Respondents mentioned that being with friends was either a motivation for climbing or what they enjoyed most about their experience. For example, a respondent stated, “I would have to say the camaraderie and the partnership and that, so... Yeah, it was good to be just who I was with and go through the whole experience together and come back safe.” Respondents also had varying viewpoints related to the wilderness experience on the Grand Teton. Most climbers stated that they did not know the area they were climbing in was part of a recommended wilderness area, nor did they choose to climb in the area because of its potential wilderness status. Other respondents felt that it was not a wilderness experience, for example, a respondent stated, “I struggle to call it wilderness in that sense, in that setting. For me it’s a little overpopulated for me but um, no it was pretty clean”. A final theme that emerged was crowding. Some respondents reported feeling crowded, but others said that the crowding was expected or acceptable. For example, one respondent stated, “We were slowed down, but that was expected because we didn’t get a super early start. So, just had to show some patience. It was definitely a climb that was recommended to for a while so we were like, ‘well, whatever, we just got to go slow and wait for people to get up this thing’ and was able to pass a party towards the top, that was nice, but there was a good amount of people on the route and obviously like takes a little bit away from the experience”.

The listening exercise identified sounds heard by respondents and their evaluation of sounds (See Tables 3.1.1 and 3.1.2). Results from the listening exercise (n=234) indicated that jet aircraft was the fourth most frequently heard anthropogenic sound. Almost half (41%) of respondents rated the sound as slightly unacceptable and annoying. Vehicle sounds were the fifth most frequently heard anthropogenic sound, with 40% of respondents rating it as slightly unacceptable and annoying. Additionally, the majority of respondents at the 3 mile site (63%) reported hearing vehicle sounds and rated them as neutral and slightly annoying (Table 3.2.2). A majority of respondents heard wind (91%), wind rustling the trees (83%), water (79%), birdsong (77%), voices (76%), and walking (76%). The natural sounds were rated as acceptable and pleasing, while voices and walking were rated as acceptable but were

interpreted as neither pleasing nor annoying. These results identify respondents' positive evaluation of natural sounds.

Sounds heard at the 3-Mile Junction Site varied slightly from sounds heard at the Meadows Site. Respondents at the Meadows Site reported hearing more wind (96% vs. 88%) and water (98% vs. 62%). More respondents at the 3-Mile Junction Site heard motorized sounds. Vehicles were heard by 63% of the respondents at the 3-Mile Junction compared to 16% of respondents at the Meadows Site. Jet aircraft was heard by only 30% of respondents at the Meadows Site and 53% of respondents at the 3-Mile Junction Site. Similar to what the researchers expected, the Meadows Site had less anthropogenic sound audible than the 3-Mile Junction Site.

Results from the related survey indicated that 72% of respondents reported enjoying natural sounds as an important reason for climbing the Grand Teton. Being close to nature and being where things are natural were rated as the most important reasons for climbing the Grand Teton (Table 3.4.12). On average respondents felt slightly to moderately crowded during their experience (Table 3.4.13) and the number of people they saw neither enhanced nor detracted from their experience on the Grand Teton (Table. 3.4.14).

### **1.1 Management Implications**

The results from this study provide managers with baseline data regarding the sounds that are being heard at locations along the Garnet Canyon Trail and the Grand Teton specifically. These data also begin to define the positive (sound) and negative (noise) components of the local soundscape. This study also surveyed a unique user group, visitors climbing the Grand Teton. Both the natural and anthropogenic sounds heard most often by respondents (Wind, water, birdsong, voices, etc.) could potentially be used to inform the development of indicators of a quality related to the acoustic experience. Indicators of quality are defined as “quantifiable proxies or empirical measures of management objectives” (p.86, Manning, 2011). An example of an indicator for the soundscape quality could be the percent of time that commonly heard anthropogenic sounds like voices or aircraft are heard over natural sounds. These baseline data can be used to inform a future survey that will inform managers of soundscape indicators and standards of quality that can be monitored and managed over time.

The results above show that enjoying sounds of nature is an important motivation for climbing the Grand Teton. Natural sounds heard by respondents were rated as very acceptable and pleasing. However, anthropogenic sounds were rated as slightly unacceptable and annoying. Jet aircraft and vehicle sounds were heard frequently by survey respondents. These sounds signify a priority for managers to address, given the substantial number of respondents who reported hearing these sounds, and generally rated them negatively. A potential solution for increasing climbers' acceptance of anthropogenic sounds could be to increase their awareness of sounds they might hear during their experience. Educational signage regarding aircraft and vehicle sounds could improve their acceptability of those sounds. For example a previous study in Sequoia National Park found that educational signage improved visitors' acceptability of military aircraft sounds (Taff, Newman, Lawson, Bright, Marin, Gibson, & Archie, 2014). Developing an educational program or including educational signage at the

trailhead could improve acceptability of anthropogenic noise and potentially improve the soundscape experience of respondents on the Grand Teton.

This study also defines baseline data regarding respondents' perceptions of crowding. Based on the qualitative data analysis, crowding was expected and acceptable given the popularity of the location. The majority of respondents reported feeling slightly crowded and felt neutral about the number of other climbers they saw. These results can be used as baseline data to monitor over time.

The qualitative interviews resulted in information regarding respondents' knowledge of the area's wilderness designation. The majority of respondents interviewed were not aware that the area they were climbing in was designated as recommended wilderness, nor did they choose to climb in the area because of the wilderness designation. Park management might consider increasing the communication about the area's recommended wilderness designation to climbers. Informing users of the area's wilderness designation could illicit behaviors that better align with the management designation.



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## Appendix A: Listening Survey Climbers' Listening Survey 2015

### Overall Descriptive Results

1. How many years have you been climbing? 11.37 (Mean)

2. Is this your first time climbing the Grand Teton? 62% Yes 38% No

3. How many total days have you rock climbed in the last 12 months? 42.57 (Mean)

4. What category best describes your overall ability as a climber? (Intermediate is the median described ability)

6.3% Beginner 19.7% Novice 38.1% Intermediate 26.5% Advanced 9.4% Expert

5. What is the difficulty of the hardest rock climb that you have completed? (5.10 is the median level of difficulty)

1.3% **5.4** 4.3% **5.6** 8.5% **5.8** 18.4% **5.10** 20.9% **5.12** .4% **5.14**

1.3% **5.5** 3.0% **5.7** 8.1% **5.9** 24.4% **5.11** 3.8% **5.13** 5.6% **I don't know**

6. Please indicate how you feel about rock climbing by responding to each of the statements below.

| Valid Percentages   | Strongly Disagree<br>1 | Disagree<br>2 | Neither<br>3 | Agree<br>4 | Strongly Agree<br>5 | Mean |
|---|------------------------|---------------|--------------|------------|---------------------|------|
| Rock climbing is one of the most enjoyable things I do                          | 0.9                    | 2.6           | 15.8         | 40.6       | 40.2                | 4.14 |
| I have little or no interest in rock climbing                                   | 68.4                   | 26.5          | 3.8          | 1.3        | 0                   | 1.38 |
| Rock climbing is one of the most satisfying things I do                         | 0.4                    | 3.0           | 22.2         | 38.5       | 35.9                | 4.06 |
| Rock climbing is important to me  | 0.4                    | 2.6           | 13.7         | 48.7       | 34.6                | 4.15 |
| I find a lot of my life is organized around rock climbing                       | 8.1                    | 24.4          | 24.4         | 26.1       | 17.1                | 3.20 |
| I enjoy discussing rock climbing with my friends                                | 2.6                    | 6.8           | 17.1         | 50.0       | 23.5                | 3.85 |
| Most of my friends are in some way connected to rock climbing                   | 7.7                    | 26.5          | 25.6         | 29.5       | 10.7                | 3.09 |
| When I participate in rock climbing I can really be myself                      | 2.1                    | 9.4           | 23.5         | 41.0       | 23.9                | 3.75 |
| You can tell a lot about a person by seeing them rock climb                     | 5.1                    | 17.5          | 35.0         | 31.2       | 11.1                | 3.26 |
| When I participate in rock climbing others see me the way I want them to see me | 3.8                    | 7.7           | 48.7         | 31.2       | 8.5                 | 3.33 |

7. Who are you climbing with on this specific trip?

24.3% A guiding service. 5.1% I am a guide

Did you summit the Grand on this trip? (Please select ONE)

47.1% Yes

75.3% A private group.

2.9% No

**8. Did you camp overnight during this specific trip?** 69.7 % Yes 30.3% No

**9. How would you rate your hearing ability?** 7.09 (Mean Score)

|                    |                           |     |     |                |      |     |                  |      |      |
|--------------------|---------------------------|-----|-----|----------------|------|-----|------------------|------|------|
| Valid<br>Percent's | .4                        | 1.3 | 3.4 | 4.3            | 11.5 | 7.3 | 20.1             | 29.1 | 22.6 |
|                    | -4                        | -3  | -2  | -1             | 0    | 1   | 2                | 3    | 4    |
|                    | <b>Extremely<br/>poor</b> |     |     | <b>Average</b> |      |     | <b>Excellent</b> |      |      |

### ---Listening Exercise---

This survey will be used to help the researchers understand the effects of natural and human sounds in the park.

Step 1: Close your eyes and relax, and keep track of each individual sound that you heard for at least **TWO MINUTES**.

Step 2: While holding your concentration, focus on the sounds you have heard. Now, please take a moment to fill out the attached sheet before speaking with other participants about what you have heard. This exercise begins on the next page.

Step 4: Please circle “yes” next to each sound that you heard during the exercise. If the sound is not listed, please write the sound(s) in the blank spaces provided at the bottom of the SOUNDS column on page 4. Again, only put a ✓ check mark next to each sound that you actually heard during the exercise.

Step 5: Under the ACCEPTABILITY OF SOUNDS AT THIS LOCATION column, please circle one number which best describes how unacceptable or acceptable the sound was for this location in the park:

Step 6: Under the PERSONAL INTERPRETATION column, please circle one number which best describes how pleasing or annoying the sound was to you

| Listening start time<br>____:____<br>Stop time ____:____ |               | ACCEPTABILITY OF SOUND AT THIS LOCATION |    |                       |    |         |    |                     |    |                 | PERSONAL INTERPRETATION OF THIS SOUND |    |                   |    |         |    |                   |    |               |
|--|---------------|---|----|-----------------------|----|---------|----|---------------------|----|-----------------|---------------------------------------|----|-------------------|----|---------|----|-------------------|----|---------------|
| SOUNDS   | Did you hear? | Very unacceptable                       |    | Slightly unacceptable |    | Neutral |    | Slightly acceptable |    | Very acceptable | Very annoying                         |    | Slightly annoying |    | Neutral |    | Slightly pleasing |    | Very pleasing |
| Wind   | Yes           | -4                                      | -3 | -2                    | -1 | 0       | +1 | +2                  | +3 | +4              | -4                                    | -3 | -2                | -1 | 0       | +1 | +2                | +3 | +4            |
| Wind rustling in the trees                               | Yes           | -4                                      | -3 | -2                    | -1 | 0       | +1 | +2                  | +3 | +4              | -4                                    | -3 | -2                | -1 | 0       | +1 | +2                | +3 | +4            |
| Wind moving gear (e.g. tent, etc.)                       | Yes           | -4                                      | -3 | -2                    | -1 | 0       | +1 | +2                  | +3 | +4              | -4                                    | -3 | -2                | -1 | 0       | +1 | +2                | +3 | +4            |

|  | Did you | Very Unacce |  | Slightly unacce |  | Neutral |  | Slightly accepta |  | Very Accept |  | Annoyi |  | Slightly annoyi |  | Neutral |  | Slightly pleasin |  | Pleasin |
|--|---------|-------------|--|-----------------|--|---------|--|------------------|--|-------------|--|--------|--|-----------------|--|---------|--|------------------|--|---------|
|--|---------|-------------|--|-----------------|--|---------|--|------------------|--|-------------|--|--------|--|-----------------|--|---------|--|------------------|--|---------|

| <b>SOUNDS</b>                       | <b>hear?</b> |    |    |    |    |   |    |    |    |    |    |    |    |    |   |    |    |    |    |
|-------------------------------------|--------------|----|----|----|----|---|----|----|----|----|----|----|----|----|---|----|----|----|----|
| <b>Water, streams, rivers, etc.</b> | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Rain</b>                         | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Thunder</b>                      | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Avalanche/rock-fall</b>          | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Bird song/chatter</b>            | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Insects</b>                      | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Animals</b>                      | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Walking sounds</b>               | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Voices</b>                       | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Climbing gear sounds</b>         | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Music</b>                        | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Cell phone</b>                   | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Digital camera</b>               | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Aircraft, Jet</b>                | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Aircraft, Propeller</b>          | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Aircraft, Helicopter</b>         | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Traffic sounds</b>               | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Motorcycle</b>                   | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |
| <b>Other (please specify):_____</b> | Yes          | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 |

**10.What route did you take on your most recent climb on the Grand?** (Percent's do not equal 100 because climbers could choose multiple routes)

- |    |                        |    |                             |    |                |
|----|------------------------|----|-----------------------------|----|----------------|
| 1. | 46.6% Owen Spalding    | 2. | 1.3% Direct Petzoldt Ridge  | 3. | .4% East Ridge |
| 4. | 40.6% Upper Exum Ridge | 5. | 10.7% Lower Exum Ridge East | 6. |                |
| 7. | 13.2% Other            | 8. |                             |    |                |

**11. How important to you was each of the following reasons for your approach and climb on the Grand?**

| <b>Valid Percents</b>   | <b>Not at all Important</b> | <b>Slightly Important</b> | <b>Moderately Important</b> | <b>Very Important</b> | <b>Extremely Important</b> | <b>Mean</b> |
|---|-----------------------------|---------------------------|-----------------------------|-----------------------|----------------------------|-------------|
| <b>To experience tranquility</b>                                | 9.5                         | 12.9                      | 30.6                        | 28.0                  | 19.0                       | 3.34        |
| <b>To experience solitude</b>                                   | 12.2                        | 22.6                      | 30.0                        | 18.7                  | 16.5                       | 3.05        |
| <b>To be where it is quiet</b>                                  | 13.5                        | 19.6                      | 32.6                        | 21.7                  | 12.6                       | 3.00        |
| <b>To take risks</b>  | 11.6                        | 16.4                      | 28.0                        | 31.9                  | 12.1                       | 3.16        |
| <b>To experience danger</b>                                     | 24.8                        | 20.9                      | 27.0                        | 18.3                  | 9.1                        | 2.66        |
| <b>To be close to nature</b>                                    | 1.7                         | 3.4                       | 12.9                        | 32.3                  | 49.6                       | 4.25        |
| <b>To enjoy the sounds of nature</b>                            | 3.9                         | 13.4                      | 21.1                        | 26.3                  | 35.3                       | 3.76        |
| <b>To be where things are natural</b>                           | 1.7                         | 3.9                       | 12.5                        | 32.8                  | 49.1                       | 4.24        |
| <b>To experience more elbow room</b>                            | 12.1                        | 16.9                      | 19.5                        | 26.8                  | 24.7                       | 3.35        |
| <b>To experience open space</b>                                 | 2.6                         | 4.8                       | 18.2                        | 34.2                  | 40.3                       | 4.05        |
| <b>To be away from crowds of people</b>                         | 5.2                         | 11.2                      | 21.6                        | 27.6                  | 34.5                       | 3.75        |
| <b>To get away from the clatter &amp; racket back home</b>      | 10.8                        | 9.5                       | 21.1                        | 31.9                  | 26.7                       | 3.54        |
| <b>To be with friends</b>                                       | 7.4                         | 7.0                       | 13.5                        | 35.7                  | 36.5                       | 3.87        |
| <b>To do things with your companions</b>                        | 7.8                         | 3.5                       | 12.6                        | 39.4                  | 36.8                       | 3.94        |
| <b>To be with members of your group</b>                         | 8.7                         | 6.5                       | 17.3                        | 35.9                  | 31.6                       | 3.75        |
| <b>To experience natural sounds for health &amp; well-being</b> | 7.8                         | 10.4                      | 25.1                        | 25.5                  | 31.2                       | 3.62        |
| <b>To experience natural sounds for restorative qualities</b>   | 10.8                        | 12.6                      | 22.9                        | 24.2                  | 29.4                       | 3.49        |

**12. How crowded did you feel while on the trail and climbing the Grand today? (The median is 6/Moderately crowded)**

|            |                           |          |                         |          |                           |          |          |                          |          |
|------------|---------------------------|----------|-------------------------|----------|---------------------------|----------|----------|--------------------------|----------|
| Percentage | 11.1                      | 12.4     | 9.4                     | 4.3      | 8.1                       | 13.2     | 25.2     | 12.4                     | 3.8      |
|            | <b>1</b>                  | <b>2</b> | <b>3</b>                | <b>4</b> | <b>5</b>                  | <b>6</b> | <b>7</b> | <b>8</b>                 | <b>9</b> |
|            | <b>Not crowded at all</b> |          | <b>Slightly crowded</b> |          | <b>Moderately crowded</b> |          |          | <b>Extremely crowded</b> |          |

**14. Please look at this list of statements that address your feelings about this trip to the Grand. Please indicate your level of agreement with each of the statements listed below on a scale from 1 to 5 where 1 is strongly disagree and 5 is strongly agree.**

| Percentage  | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree | Mean |
|---|-------------------|----------|---------|-------|----------------|------|
| <b>I had the opportunity to recreate without feeling crowded</b>                  | 1.3               | 10.7     | 20.5    | 50.4  | 17.1           | 3.71 |
| <b>I could find places to recreate without conflict from other visitors</b>       | 0.9               | 7.7      | 19.7    | 52.6  | 19.2           | 3.82 |
| <b>The behaviors of other people interfered with the quality of my experience</b> | 13.2              | 39.3     | 25.2    | 17.1  | 5.1            | 2.62 |
| <b>Climbing at some places was dangerous because of the number of climbers</b>    | 12.0              | 31.2     | 30.3    | 18.4  | 8.1            | 2.79 |
| <b>There was an unsafe number of climbers on the Grand today</b>                  | 21.4              | 41.9     | 26.9    | 6.0   | 3.8            | 2.29 |
| <b>My experience was impacted by having too many people on the climbing route</b> | 18.4              | 32.5     | 26.9    | 19.2  | 3.0            | 2.56 |
| <b>The number of people on the route was about right</b>                          | 3.8               | 18.4     | 33.8    | 35.9  | 8.1            | 3.26 |

**15. How many people were in your climbing party?** 3.37 (Mean)

**16. In what year were you born?** 1984 (Median)

**17. Do you live in the United States?** 97.9% Yes

2.1% No – In what country do you live? Frequencies:

2 - Canada      1 - Nepal

1 – France      1 – United Kingdom



## Appendix B: Sound Recording Results

| Sound Source 3 Mile Site 7am-7pm (3 days) | Percentage of period audible (Seconds) | Count |
|---|--|-------|
| Bird                                      | 71.0                                   | 386   |
| Wind (light)                              | 63.0                                   | 339   |
| Vehicle                                   | 17.0                                   | 91    |
| Motor                                     | 15.0                                   | 80    |
| People, voices                            | 11.0                                   | 60    |
| Insect                                    | 9.0                                    | 49    |
| Jet                                       | 9.0                                    | 48    |
| Squirrel                                  | 7.0                                    | 36    |
| Wind (heavy)                              | 7.0                                    | 36    |
| Natural (other)                           | 6.0                                    | 32    |
| Motorcycle                                | 6.0                                    | 31    |
| People, walking                           | 6.0                                    | 31    |
| Aircraft, propeller                       | 4.0                                    | 21    |
| Rain/Fog drip                             | 1.0                                    | 7     |
| Aircraft                                  | 1.0                                    | 4     |
| No sound audible                          | 1.0                                    | 4     |
| Natural, unknown                          | 1.0                                    | 3     |
| Raven                                     | 1.0                                    | 3     |
| Thunder                                   | <1.0                                   | 2     |
| Animal                                    | <1.0                                   | 2     |
| Alarm, horn                               | <1.0                                   | 1     |
| Helicopter                                | <1.0                                   | 1     |
| Portable audio device                     | <1.0                                   | 1     |
| Chickadee                                 | <1.0                                   | 1     |
| Mammal                                    | <1.0                                   | 1     |
| All Aircraft                              | 13.7                                   |       |
| All Road Vehicles                         | 22.6                                   |       |
| All non-natural                           | 59.3                                   |       |
| All Natural                               | 90.9                                   |       |

| Sound Source Meadows Site<br>(10 days) 7am-7pm | Percentage of period audible<br>(Seconds) | Count |
|--|---|-------|
| Flowing Water                                  | 98.0                                      | 1760  |
| Wind (heavy)                                   | 30.0                                      | 547   |
| Wind (light)                                   | 17.0                                      | 302   |
| Bird   | 13.0                                      | 237   |
| Rain/Fog drip                                  | 6.0                                       | 116   |
| People, Voices                                 | 3.0                                       | 50    |
| Mammal,  | 2.0                                       | 39    |
| Unkown   | 1.0                                       | 18    |
| Aircraft, Propeller                            | 1.0                                       | 12    |
| Natural Unkown                                 | 1.0                                       | 11    |
| Animal (Natural)                               | 1.0                                       | 10    |
| Aircraft                                       | 1.0                                       | 10    |
| Helicopter                                     | 1.0                                       | 10    |
| People, Walking                                | <1.0                                      | 8     |
| Jet  | <1.0                                      | 8     |
| Motor  | <1.0                                      | 6     |
| Thunder  | <1.0                                      | 4     |
| Natural, other                                 | <1.0                                      | 3     |
| Raven  | <1.0                                      | 1     |
| All Aircraft                                   | 2.2                                       |       |
| All non-natural                                | 5.7                                       |       |
| All Natural                                    | 100.0                                     |       |

## Appendix C: Semi-Structured Interviews

### Interview 01

I: Alright, so, the first question is – what role does hiking and climbing play in your life?

C1: I love it. I'm a runner and this is an awesome cross-training. We just did this (inaudible) last week and I probably should have carried this pack up that mountain in preparation for that. Two of the hardest things (inaudible) my life is to do that on Saturday and do this on Wednesday. Thursday? Wednesday. So I carried that beast up yesterday and my pack is the lightest of all three, which is why I'm down here first (laughter).

I: Do you live in the United States?

C1: I do!

I: Where? What is your zip code?

C1: 84003

I: Where's that?

C1: American Fork, Utah, regrettably. I'm from Montana and I moved to Utah with my husband and now we split the difference and came hiking in Wyoming (laughter).

I: Nice, very nice. What year were you born?

C1: This is confidential, right?

I: It's totally confidential. I won't share.

C1: I just had my birthday. I was born in 1978.

I: Did you use a guided service, or was it a private group today?

C1: Private group.

I: And then, you said, so do you have any climbing experience in the past? No?

C1: Bouldering. Not technical climbing.

I: How many years would you say that you've been bouldering, or climbing, or anything like that?

C1: All of our family vacations were taking hiking trips. So, most of my life. So, can I say 30 years without sounding arrogant? Since I'm 37... 30 years!

I: And then how long do you think you've been like bouldering and scrambling around on rocks like you did today?

C1: Pretty much that whole time.

I: Okay, amazing! That's awesome. The route that you were on today, was that the Owen-Spalding? That you...

C1: That was what we were attempting. Yes. We attempted that and it's very snowy and icy.

I: Is there a certain reason why you chose that route over a different route?

C1: Um, because supposedly that's suppose to be the least technical route, but I don't think that accounts for the snow and ice that's up there.

I: Yeah, yeah. It's kind of early in the season. So, how deep was the snow? Did you need crampons?

C1: It would have been very helpful to have crampons, even before you got to the Owen-Spalding route, because once you have to do the traverse up to the lower saddle, all of that is still a snow field and it's pretty steep.

I: Okay, awesome. Alright, moving along here. So, how many days and how many nights were you on the field?

C1: Two days. One night.

I: What motivated you to want to go up there?

C1: We're celebrating my brother-in-law's 40<sup>th</sup> birthday.

I: (laughter) Oh, what a cool way to celebrate! That's awesome! That's very cool and then did you have any expectations for your trip?

C1: It was more technical than I was lead to believe, especially for short girls with short legs. It's just – coming down is always harder than going up when you get into that kind of stuff, especially with the wet rocks. Safety was my primary concern (laughter). So, when it got too sketchy, we turned around as a group and came down.

I: Yeah, understandable. That's a smart move. Did you know that the area you hiked and climbed in today was part of recommended wilderness? A wilderness area.

C1: A recommended wilderness area? No.

I: What did you enjoy most about your experience?

C1: I'm pretty happy right now being at the car (laughter). It's, it's absolutely beautiful up there. I mean like it's so, like yes there's other campers around there, but it's so remote, it's so removed and once you go around the meadows and you head up there, like you can't see any of this down here, like when you're in the front-side, like you see these tiny little cars like ants like cruising along these little roads, but you're up there and you are literally listening to like water crashing off these glaciated slopes and you're like 'whoa, a plane just went by'. That is so weird, like 'what is that plane doing here?' because it literally just transports you into another time. You lose all sense of what era you're in because you're so remote, you're living off of

what you carried up that mountain by yourself and you're sleeping in a sleeping bag in a tent. Like, it's you and nature. It's amazing. I probably forgot my log-on on my computer now by the time I got back I'll be like, 'oh, no, I was in like timeless glaciers. Literally I was camping in the shadow of a glacier, man! I don't know what my log-on is. ATMs, what's that? I don't know...' (laughter).

I: Is there anything that you found least enjoyable about your experience?

C1: Um, the bugs love me and I do not love them back.

I: You're just too sweet.

C1: I guess, I don't know... I'm pretty ripe, that's what I am. I don't know about sweet, but it's sad to see the people not following, like I've packed out a ton of other people's trash today. It's sad to just see people not following the wilderness rules, I mean, you know leave no trace. Pack it in, pack it out and sure people, you know, might lose a wrapper in the wind, or something, but I mean I've picked up trash along this whole trail and up top on the mountain we carried a [name brand] bottle that somebody left up there. So, that's pretty distressing, you know if you're going to go out there and climb up to 12,000+ feet it's, it's really sad to see people leaving their trash up there. Especially an empty [name brand] bottle up there. Of all the things you've hauled up there, an empty [name brand] bottle is probably the easiest thing you're going to carry out.

I: Exactly and did you experience any crowding on your trip?

C1: No, but I made a lot of friends. There's a cool guy from Argentina who carried way too heavy a pack that I made friends with up there, so... I'm a little bit social, I don't know if you noticed.

I: I noticed that's why I've really enjoyed talking to you (laughter).

C1: Oh, thanks!

I: And then beyond the natural elements of wind, water, ice like you talked about and snow, did anything interrupt or interfere with your hike and your climb?

C1: There were some very frisky marmots up in the boulder field if you could tell them to tone it down at 6 o'clock this morning. No, um, apparently there were some bears at the lower elevations, but I didn't get eaten by any, so... I'm happy, but like three people on the way up were like, 'did you see any bears? Did you see any bears?' I'm like, no but I'm not really afraid of bears as much as I am of moose because I've been charged by moose and bears usually go, 'ooh-la, look, lots of people' and they move on, they run away. So, moose are much more terrifying to me having encountered both frequently. Moose are mean.

I: I agree. We've just heard so many more stories about moose than bears.

C1: And I mean it doesn't even matter. It can be a cow with her calf. It can be a bull moose. It can be (inaudible). They're just all mean! Everybody is like, 'oh, they're just big, dumb cows' and you're like, 'no! They're like giant' and don't hit one with your car because you're not going to survive that, but yeah, no moose are much scarier than bears, but yeah, having never been eaten by a bear I can't tell you (laughter).

I: Yeah, um, and then did you feel like there were any other factors besides the snow and the ice and, um, you know you're climbing abilities that were risky today?

C1: No.

I: No? Okay. And then you talked a little bit about it earlier, but what kinds of sounds did you hear earlier during your trip?

C1: There's birds and waterfalls and the little pika in the rocks, they go darting around and they go '[pika sound]' every now and again and, uh, the ravens are up there and they're like [squawking] and looking under rocks and stuff. Then there are the marmots, frisking gaily in the wee hours and, um, it's just amazing it's so peaceful, you hear the wind like whistling around the edge of the mountain as the waterfalls are crashing down, like... it's so amazing. And there's no trees up there, so it's not like, you know, you're hearing tree branches, like it's water and wind off the rock as you're above the tree line. The first tree when I came down, I was like, 'whoa, a tree, that's weird' – all the sudden it seems strange to see a tree.

I: Yeah, it's this gnarled, funky looking tree.

C1: What are you doing here? Oh, yeah, I'm coming back down (laughter).

I: And then were there any sounds that you least enjoyed?

C1: The plane was weird. Hearing the plane go overhead. You're like, 'that's odd'. Yeah, that's it.

I: And then did you notice any human caused sounds besides the airplane?

C1: Oh, just the campers up there, just saying 'hello' and asking us how we were doing.

I: Yeah, yeah. Nice.

C1: Everybody is pretty friendly. After 11,000 feet, everybody better be nice because you guys all worked hard to get up there (laughter). That was a push, man!

I: Yeah, yeah, um and then did you find it difficult at all to communicate with other people in your party while you were up there?

C1: No. We have walkie-talkies, I just never used it (laughter).

I: Yeah, I was actually telling Jenn, we, I climbed the grand last summer and the guys that I was with brought walkie-talkies and same thing. We brought them but never used them.

C1: Like, eh, extra weight that I didn't have to carry.

I: Yeah, now we know in the future. And then do you have any recommendations for the park to improve conditions for the area?

C1: I've heard this parking area gets pretty crowded, but we came like 8:30 yesterday morning, right after we got our permit at the ranger station then like filled up water then drove right here and it was fine.

I: Yeah, nice, that's a good way to do it.

C1: I can see my car from here! I can't get in it, but I can see it! (laughter)

I: That's always exciting. Yeah, um and then before we end, is there anything else that you want to share, or comments that you have regarding your experience today?

C1: Um, it was beautiful. I'm disappointed that I can't get to the top, but that was through no fault of anybody's, but my inexperience and not being prepared, um, this is the first trip I think that I've been on that I didn't plan it, so I was like, I literally don't know what trail we're going on. I don't know what we're doing. Do we have a campsite? Like this was really like throwing myself at the whim of my brother-in-law and I can't say that I particularly like that, but um, yeah Owen-Spalding, him saying that it wasn't very technical I think that's definitely, um, not true when it's snowy and icy. So, probably if you're going to do that then probably maybe mid-August because when we all pulled up here, we're like 'there's a lot of snow up there' and we got up there and we're like, 'there is a lot of snow up here', so, yeah... which is good! We need the snowpack, right? But, um, it does make the climb far more challenging and safety first! I'd rather be alive than be at the top of a mountain. Actually, I want both, but... right? No 'life-flight' please.

I: Yeah, none of that. Well, thank you very much for sharing with me today.

C1: For sure. You're very welcome ladies.

I: Yeah, I really appreciate it. Thank you very much. So, that was interview 1, on Friday, July 3<sup>rd</sup> at 3:30pm.

## **Interview 02**

I: So, right off the bat the first question is what role does rock climbing play in your life?

C1: It's probably my obsession, so...

I: Yeah? You're number one activity?

C1: Yeah.

I: Awesome! And then not as intimate of a question, but where do you live? Do you live in the US?

C1: Yeah, in Idaho.

I: In Idaho? And what is your zip code there?

C1: I'd have to look that up for you. I don't actually know. Moscow, Idaho.

I: Moscow, Idaho, that helps, for sure. And what year were you born?

C1: 1982.

I: Okay, um and were you just by yourself today? Or were you with a group of people?

C1: No, I was with a party. There were six of us altogether.

I: Six of you? Very cool. Um and was it a personal group, or were you with a guided service?

C1: Oh, it was just us. Yeah.

I: Okay, cool. How would you describe your level of climbing experience?

C1: I'd say fairly confident.

I: Yeah, like expert, novice?

C1: Over 10 years of experience; technical rock.

I: Oh, okay, wow, awesome. And have you ever climbed the Grand before?

C1: No. I've climbed the Middle before, but yeah... weather conditions were just right, which made it safe and reasonable to go this time, so...

I: Were you here before and the weather wasn't safe?

C1: Yeah! The weather was really heinous. This other team that looked really good. They were really confident, but they got completely hosed and we decided to climb the middle instead. It seemed like the right choice. These weather conditions were perfect, so, it was great.

I: Yeah, awesome. Um, and what route did you climb today?

C1: The Owen-Spalding.

I: Yeah, very cool. Why did you guys choose the Owen-Spalding over different routes?

C1: Um, because of the group of people we were with, we figured their experience level, that would be the most appropriate

I: Okay, cool. You and you're party – you guys summited?

C1: Mhm, yeah. Everybody in the party did.

I: Oh, very cool, congratulations! That's awesome.

C1: Yeah! Yeah, thank you.

I: Did you guys spend more than one night, or did you do one night?

C1: We just acclimated for one night on the upper saddle. I would have preferred to use more time, but that just wasn't what the group wanted to do.

I: Okay, um, and what motivated you to climb the Grand Teton?

C1: It's beautiful. It's amazing, I don't know... (laughter). You can see it.

I: It's the jewel. You wanted to see the views up there, or what? And what kind of expectations did you have for your trip to the summit?



C1: Um, I figured I'd probably get altitude sickness to some extent. That it'd be cold. That it'd be marathon paced climbing. It was great! There was a lot more snow and ice than we were kind of expecting, so that was great. Moscow's been over 100 degrees over the last couple days, so it was a really nice change, you know? So, it was good.

I: Get to cool off a little bit?

C1: Yeah! Definitely.

I: Yeah, nice. And do you think you're experiences that you had met your expectations?

C1: Oh, it was great. Yeah. Really good route, um, the people I was climbing with are really good people, so yeah... I'm kind of glad I'm not up there right now because of the number of people going up on the holiday weekend, there are a lot. So, it was good going in the middle of the week.

I: Um, and then did you know that the route that you hiked on and climbed on was part of recommended wilderness?

C1: Nope. Okay.

I: Yeah, so it's managed like a wilderness area. It's not designated as wilderness.

C1: I would disagree with you on that. Um, definitely not if you've got permanent (inaudible) that are out there. Have you been up to the upper saddle? So, there's two guiding services that have permanent platforms, they have structures that are for (inaudible), but that doesn't seem like a wilderness area. Bear boxes. I can see those being there. That seems appropriate. Just to reduce the amount of marmots, that kind of activity, but I don't feel... in some ways, it seems like a wilderness, in other ways it doesn't. It's like a national park. I would prefer more of a wilderness feel, but... You know, some of the raps are bolted and I think that's probably appropriate with the amount of activity that's there for safety. It makes a lot of sense, but... um. Yeah.

I: Do you have any more thoughts about what you saw at the lower saddle?

C1: Umm, well there's just a lot of people moving through that area too, I know it would be very difficult to manage, but, um, yeah you can see where people built their structures to protect their tents all through the rains and there's other areas... Yeah, there's some work to do, I'm not quite sure how you'd do that to improve it, but, yeah.

I: Awesome. Um, what did you find most enjoyable about your climbing experience today?

C1: I think the people that I was with. For sure. Yeah.

I: Yeah. You had a good group?

C1: Yeah, it was a great group. Former (inaudible) professor invited me to come a couple of weeks ago, so it was awesome, so yeah! Lots of different people, so it was really good.

I: Yeah, were they a group of other students, or current students?

C1: Umm, most of them were other professionals. So, yeah.

I: Awesome. Very fun. Did you find anything least enjoyable about your experience?

C1: I did find it really weird that there were these permanent structures that were up there and I can see why if there was a storm, or emergency, that it would be kind of nice to be able to use that if it was really bad, but that did seem out of place.

I: Yeah, yeah. I know what you mean. Um...

C1: And what we thought was really funny is when you go up to the ridge you can see the Exum guide... I don't know what the other guide outfit is, but there was on the opposite ridge... man, I don't know who would pay to go to that ridge 'cause then you've got to hike back down and then back up. That, that seems like... I'm sure they were second in line on the service, but that just seemed unfortunate.

I: Yeah, yeah. And then did you experience any crowding?

C1: Um, I think where we were at, we were pretty good, but then this morning it was impressive. As soon as I broke down my tent and moved it over with the rest of the group, there was immediately someone else right there. We saw a lot of people coming up this morning, so. I mean, it is a four-day weekend, it is a weekend in general, so I mean it's not too surprising in some ways, but yeah. The last time I was here was in, it was several years ago, but it was in September and the weather was a little questionable and so there weren't very many people there, but, um yeah. I don't know how you'd minimize that and still allow access, but it would be nice if you could at least make it feel like there weren't as many people out there.

I: Yeah, so it was mostly on the lower saddle that you saw the crowding?

C1: Yeah.

I: Okay. How did it impact your experience?

C1: Umm, it definitely had less of a wilderness feel, had less of a... because you just, you notice other people and so you don't feel like you're up in the mountains by yourself. It's part of the whole point of being up there.

I: Yeah. Yeah, exactly. Beyond the natural elements, or the team member's abilities, or your abilities, did anything disrupt or interfere with your climbing experience?

C1: I'm not really sure that I can... I mean I could say that height, but I don't think that's quite appropriate. So...

I: Yeah. As we all know, climbing is inherently risky, but, um, did you experience any risk beyond the natural elements?

C1: Well, there was a team that went up by us and so, um, I think they used a rope some of the time, but most the time they didn't, um, and they didn't appear to be particularly experienced, so in my mind they were jeopardizing themselves and potentially everyone else on the mountain because someone else would have to rescue them, so I didn't appreciate that, um, so...

I: Yeah, understandably. And where did that occur?

C1: That was about midway up the Owen-Spalding route.

I: Okay. What kinds of sounds did you hear during your experience?

C1: Other than wilderness sounds, there were a lot of birds, did hear a couple of planes, saw a helicopter, flew by the saddle at some point. That was most of it. You could hear some people's electronic devices at some point, as well, which was kind of annoying.

I: What kind of electronic devices?

C1: Oh, like their cellphone, or something else.

I: Like a cellphone ringing?

C1: Yeah, some people would bring their cellphones up to the saddle. Evidently, a lot of people had fairly good reception up there. I think that defeats kind of the whole purpose of going up into the mountains, so, yeah.

I: Okay, that's interesting. What sounds did you enjoy hearing most?

C1: I like the birds, the wind, rippling water, you know, those kinds of things. The trees, those kinds of noises. For sure.

I: Yeah, nice. Um and then...

C1: Oh, and last time we were hiking off the Owen-Spalding route, I don't know, there's like an insect, I don't know if they're hatching like moths or something, but they were just getting spattered all over the place, it was pretty impressive. I didn't have my headlamp on, the rest of the group did, but every time they would shine their headlamps there were just thousands of them all over the place. It was, that was kind of weird.

I: What kind of insects could those be?

Jenn: I don't know, I'm trying to think of what would be up there.

I: That's crazy.

C1: They were about that long, I want to say.

I: Those were big then!

C1: Yeah, they were big! I was expecting to see bats chasing them. Something, so, yeah, it was cool.

I: That's so interesting. We live at a research station with some biology students, we'll have to ask them. Yeah, that's so cool. And then do you remember hearing sounds that you enjoyed the least?

C1: Well, I mean, the helicopter, all those automated kinds of noises. Couple of people that don't realize they shouldn't be yelling, yeah that kind of thing. Talking loud, that stuff. Yeah.

I: Did hearing those sounds kind of affect your experience in any way?

C1: Well, yeah, if it's someone like yelling at their partner – if it's a rope command, or something like that, I get that, but when it's just... 'I can't find you and I should just walk and look', it's just, that's kind of dumb, but you know, I shouldn't be overly judgmental.

I: Did you notice hearing any human-caused sounds, so like voices, or helicopters, or traffic at the summit?

C1: Not at the summit, but up mid-route we could definitely hear planes flying over a couple of times.

I: And then, did you find it difficult to communicate with your group because of the sounds you were hearing?

C1: No. I don't think that was a challenge there. Um, just typical, like carrying a whistle to hear commands, that kind of thing. I actually kind of like it when you can't actually hear each other. That feels like mountaineering, so yeah, that's, yeah. You know, it really makes you feel like you're in the mountains, you know, I mean you've got vertical training and you to have a partner and everyone else that knows what to expect and your expectations are all lined out, but that makes it more interesting.

I: Yeah. For sure. Do you have any recommendations for the park to improve conditions of the area?

C1: Sure. I think you have poor utilization sanitation that's attempted. I think the concept of actually packing out human waste is probably a good one, but I bet you're um, I don't know how you'd accurately survey it, but I bet it's a very low compliance. And I think they expect people to walk all the way over to the west ridge to urinate on the saddle. No one's doing it. That's completely unrealistic. I think fecal matter is much more of a concern and I don't think that's being adequately addressed by what's currently going on.

I: Yeah. Were you, did anyone at the ranger station suggest that you use a 'wag-bag', or anything like that?

C1: Oh, yeah, yeah. Definitely. That's what I was dropping off here, but um, yeah so I did that. I think most of the people in my party did and I'm pretty sure that's not good compliance. Um, I picked up garbage along the way out too, but um (inaudible). I'm sure if they're a guide, they're probably pretty good, they make sure their clients are doing that sort of thing, but in general I think that's probably a low compliance. You know, the joke is, one of the Exum videos that they have, that I thought was really hilarious, they show like one of the joys is just to fill your water bottle up as you're hiking up and then there's no bloody way! There are so many people up here! There's no way I'm going to drink that water without filtering it and treating it, you know, or something, like everyone watershed your climbing up, you know, how many millions of people have hiked up that before? You just know it's not clean!

I: I know exactly what video you're talking about.

C1: Right. Yeah, someone in our group, they wanted to – they filled up from the hose and they pumped out of it. It's like, why would you out the... it's just like 5 feet of rubber. What's the point? But, you know, whatever.

I: Yeah, it happens. Um and before we end today, is there anything else that you would want to share; any comments?

C1: It's a beautiful mountain.

I: Yeah. It is gorgeous up there. Well thank you very much for participating. It's very helpful.

C1: I'd shake your hand, but uh...

I: Yeah, you need to take care of that! (laughter).

C1: Take care!

I: Yeah, thank you. Have safe travels back.

### **Interview 03**

C1: ... one six.

I: Okay and where's that?

C1: Canton, North Carolina.

I: Nice! So that's why you drive I-80, I guess?

C1: Oh, that's from driving from New Hampshire, but yeah.

I: Okay, cool. And what year were you born?

C1: 1989.

I: Nice and how many people were in your group today? Just the two of you?

C1: Me and my compadre.

I: Okay, cool. How would you describe your level of climbing experience? Like novice, advanced...

C1: Very high. I don't know, Nate, would you concur?

C2: Sure.

I: Okay (laughter). And how many years have you been climbing?

C1: About 11.

I: And you've previously climbed the Grand before, I assume?

C1: Yep.

I: Do you have a count of how many times?

C1: 40+ maybe, yeah something like that.

I: Cool. Can you remember the first year that you climbed the Grand?

C1: Yep. June 21, 2011. The summer solstice.

I: Nice! That was really accurate. That's really awesome.

C1: I froze my ass off on the summer solstice.

I: Did you have snow and ice up there?

C1: Oh, it was covered. Yeah.

I: During your most recent climb, which route?

C1: We climbed the Black Ice Couloir.

I: Oh, how was it?

C1: Icy...

I: Icy? (laughter).

C1: Kind of nasty. Lots of rocks falling down everywhere.

I: Is there a specific reason you chose that route?

C1: Yeah, we wanted to go ice climbing in July.

I: Okay, nice. And then did you guys summit today?

C1: No. Just went to the upper saddle.

I: Okay and was this just a day trip?

C1: Yep.

I: Cool. What motivated you to want to climb today?

C1: Oh, god (laughter). What motivated us?

C2: A day off.

C1: Yeah, we had a day off, so we had to go have some fun. Nate never climbed the route before, so I guess that was the motivational part.

I: Cool. Did you have any expectations for your trip today?

C1: Yeah, not dying.

I: Not dying? And you obviously met those expectations.

C1: We did! We came pretty close once though (laughter). No, I'm serious, yeah.

I: Yeah, you experienced some risk? Rock fall? Or...

C1: Yeah rocks fall down there a bunch. Yeah, it's pretty normal up there.

I: And then did you know that the route that you hiked and climbed in today was a part of recommended wilderness?

C1: Uh, no. What's recommended wilderness? Pulling a fast one on me.

I: It's an area of the park that's managed like a wilderness area, so, it's managed a little bit differently than lets say like the parking lot in the park and stuff like that.

C1: Okay. Cool.

C2: Which is the reason you can't bike the trail and all these other limitations.

C1: Oh, okay. That's why... oh, okay. See, he knew this. I didn't know this.

I: (laughter) Um, what did you enjoy most about your experience today?

C1: Getting to hang out with my buddy, Nate. It's always good getting to hang out with him. That was the best part. Wouldn't you say?

C2: Yes.

C1: Oh, thanks.

I: Um, what did you find least enjoyable?

C1: Almost getting smoked by a rock.

I: Yeah, that does not sound fun. Did you experience any crowding today during your climb? You were probably the only ones up there.

C1: During our climb? No, yeah, there was nobody.

I: Okay.

C1: Nope. It was pretty quiet.

I: Did anything disrupt or interfere with your climbing, other than the rock fall and other natural elements?

C1: Nah. I wouldn't say so.

C2: Some of the rock fall was caused by people.

I: Really?

C1: Some of the rock fall was, yeah, cause by people.

C2: I mean, the main rock fall today was caused by people. So, that depends on how you're defining natural.

C1: Gumbys on the mountain.

I: Okay. That's scary.

C1: Yeah, it happens.

I: Were there any other risky experiences you had up there today?

C1: Yeah, I mean, moving on, roped on moderate terrain. There was a decent fall consequence. A decent probability, yeah.

I: Yeah and then what kinds of sounds do you remember hearing on your hike or climb?

C1: Hm...

C2: Curt yells a lot (laughter).

C1: 'F\*\*\*ing awesome!', um, there was a plane buzzing around at some point. I'm pretty sure I heard a plane, you know, they always fly the 7 o'clock plane out of Jackson Hole. That's like 7 o'clock on the dot. That was when we were at the saddle. Um, not much. Birds, marmots, pikas, you know, pikas yelling at you. Um, yeah. Pretty, I don't know, pretty all natural sounds, I would say. Hm...

I: And what sounds did you enjoy hearing the most?

C2: 'I'm safe!'

C1: (inaudible) 'I'm off belay!' means I can climb. Uh, yeah I guess that would be it. What sounds do I like hearing the most? I don't know. Not hearing other people is what I enjoy hearing the most. It's why we like go on routes like that where we don't hear people. It's just you and your buddy.

I: Is that common when you climb other routes – you hear people yelling at each other?

C1: Oh yeah, totally. Super common here. Especially if you're on the O-S or the Exum, or something. You just hear people all day.

I: Yeah, so, would you say those are the sounds that you enjoy hearing the least?



C1: Today? Yeah! Yeah, totally, I mean we heard... the sound I enjoy hearing the least is the dude screaming 'rock!' as he kicked that thing off, but like on days off it's nice to not hear other people and just go climb. You know? You don't have to hear questions like, 'oh, what routes are you guys doing? Oh, was it cool?' you know? S\*\*\*\* like that gets old. I guess you can leave that for work. You know?

I: Do you remember hearing any other human-caused sounds?

C1: Somebody shooting off firecrackers somewhere.

C2: Other than people talking?

C1: No.

I: You heard firecrackers today?

C1: No, no. We didn't hear anybody, or anything else other than that because where we were, it's pretty far out, so, you're not going to hear anything really.

I: Do you have any recommendations for how the park could improve conditions for the area?

C1: Gosh, I almost want to say climber registration, or something along those lines. So that they need to like check in with other people, so that they know what the heck they're doing. I don't know, what do you think?

C2: Improvements? Is that a completely open-ended question, or is that like in reference to...?

I: No, it's just totally open-ended.

C1: No, just lay it on us. Think of something good.

C2: I need to think about it a bit. Recommendations? Yeah, I can't really think of anything off the top of my head, but I think most of the issues we have with the park are related to our work and not necessarily related to the general public's experience. So, like we have a lot of interactions, as far as restrictions, limitations types of issues that come up that interfere with our ability to work, or do what we do, so I think that would be the main focus for us, but I don't think that's a good representation of the public.

I: Yeah, thank you very much for taking the time to help out.

7/5/15

#### **Interview 04**

I: Alright, so first question here is – what role does rock climbing play in your life?

C1: That's deep. Um, it's a chance to get away. You know? Kind of do something you know you're kind of confident in, but not a hundred percent. So, there's like a level of pushing your limits and finding boundaries and, um, just getting out with people. I haven't seen these guys in (inaudible). Pushing boundaries, finding yourself, I guess. That sort of thing. Yeah, yeah...

I: Awesome. And, we already talked about it, you live in the United States, but what is your zip code?

C1: My zip code. Oh, gosh. Oh, it's 80210.

I: Okay, where is that?

C1: It's Denver.

Jenn: I was going to say, 'that's not Pennsylvania'.

C1: No, no.

I: Okay and what year were you born?

C1: I was born in 1991. That's what my parents told me. I don't know.

I: Okay, you don't remember? (laughter).

C1: The whole process was pretty chaotic, so...

I: And then is it just the 4 of you in the climbing group today?

C1, C2, C3, C4: Yeah.

I: And you climbed... as a private party, you didn't hire a guide or anything?

C1: No.

I: Okay.

C2: We hired these two, but... (laughter).

I: And how would you describe your level of climbing experience?

C1: Oh... you want like a scale from 1 to 10, or? Or is it just like a...

I: Like beginner, novice, expert...

C1: Oh, uh, I'd say novice. I'd say it's a heavy novice. Yeah...

C2: What is, Gumby? (laughter).

C1: I feel comfortable on a lot of things, but there's a lot of things I don't feel comfortable on, but I'm definitely not an expert. To say, no, not at all.

I: And have you previously climbed the grand before?

C1: Yes.

I: Yes? How many times?

C1: Once before.

I: Once before? And what year was that – that you first climbed it?

C1: Uh, 2014.

I: Okay, nice. Um, during this most recent climb, which route did you take?

C1: Uh, Owen-Spalding. Yeah, O-S! Whoever Owen Spalding is, I don't know, but...

I: Nice! He's the first – he was part of the first party who climbed it. Yeah, Owen and Spalding.

C1: Oh, right! Owen and Spalding... great people. They seem like it.

I: Is there a reason you chose that route over...?

C1: We originally chose the Exum Ridge, but when we got up there this morning conditions weren't ideal for it. We thought storm was gonna roll in and the mountain was hanging out in the clouds for a while and the wind was – I don't know, what would you guys say, like 45 [mph]? I mean, I can't guess.

C2: Yeah, it was up there.

C3: No idea.

C1: Maybe 70 mile an hour gusts. I don't know. I'm exaggerating a little, but... I can't tell. The wind was blowing so hard that, if we got onto the ridge then it would have blown us off, or if a storm came in then we would have been kind of, you know, kind of out of luck. We would have had to bail pretty quick. Yeah, so we were just like, 'let's just do the O-S'. Zigzag up it and see how far we can get before lightening strikes.

I: (laughter) And did you make it to the summit today?

C1: We didn't! No. We were probably 300 feet from the summit.

I: Yeah and is that when the storm came in?

C1: Yeah.. it wasn't, I mean, it was stormy conditions all day, it's just the clouds... the mountain was...

C2: Visibility.

C1: Yeah, you couldn't see.

I: Was it icy at all?

C1: I didn't see any ice, but definitely some good snow up in the gullies there. I think if we would have gotten, I think if we could have gotten to the summit, but it was a matter of getting down and finding the

repels, I think. Might have accidentally walked off a cliff, or something. It was that, it was this... it wasn't smart to go on. Got to know when to turn back...

I: Yeah, it's a good call. Yeah...

C1: I don't know. Yeah...

I: And did you guys just do it in a day, or did you spend the night?

C1: Yeah. We did it in a day. We left at... 2:48 [am].

C2: We left at 1:30am.

C3: So, 13 hours.

C1: Yeah, we just got back, yeah...

I: Nice, nice. Um and what motivated you to want to climb the Grand today?

C1: Well, I tried to take AJ up last year and failed miserably and so, I don't know, I got a call like two days ago that he was in town, so I drove up from Denver and I was like, 'let's go. Let's go do it'. So, it was kind of these guys that motivated me.

C2: He's been preparing for months (laughter). To get up here and do it. Yeah...

I: And what kinds of expectations did you have for your climb?

C1: I don't – I don't know if I went in with really any. I think it was just to enjoy it for what it was. At first, it kind of sucked because it was so chaotic. The 40mph wind gusts and everything and it wasn't ideal, but you kind of just take it for what it is and absorb yourself in the moment, you know? And you just, you know? AJ, what'd you say to me? You said 'let's not be timid, but let's not be unsafe'. Yeah!

C3 (AJ): Yeah. Quote it.

C2: You can frame that! (laughter).

C1: Yeah and it was just such a good... After that, I was just like, 'oh s\*\*\*\*', yeah, we're going to push it, but we're not going to put ourselves at a life or death risk', because we want to summit something. It's not what we're trying to do. We want to live another day to summit other things

I: I hear you and when you think of the experiences that you had up there, did it meet your expectations?

C1: I think so, yeah. Yeah, after AJ put that in my mind, I was kind of... I mean, we pushed it pretty far before we said, 'yeah, you know, we should probably go back'. Kind of hung out in one spot for a bit, kind of taking pictures and stuff, but yeah we enjoyed ourselves. We played it safe, but we pushed it a little bit. So, yeah... I'd say so.

I: And did you know that the route that you hiked and climbed in today is part of recommended wilderness?

C1: I did not! No, like make it a wilderness area? Or... oh, okay, I didn't know that.

I: Yeah! It's managed as a wilderness area, but right now it's just recommended.

C1: Interesting. So would that mean that people couldn't go in it? Go hiking, or just it's managed differently?

I: It's just managed differently. Like, right now it's managed like other wilderness areas in that you can't have, um, you know you can't bring bikes up there. If they need to do trail work, they only use hand-tools. No mechanized anything is allowed up there.

C1: No chainsaws, or John Deer tractors?

I: Yeah, yeah things like that. Um, what did you enjoy most about your climb?

C1: Uh, enjoy most? I'm not sure. What did you guys enjoy most?

C2: The nature, right at the top of the saddle, right before you guys dipped. Um, I guess for me it was just like, I had never been to Wyoming before, or hiked to any sort of altitude like that before, so it was just kind of just... push my limits, see if I can... have it in me to, um, make it.

C1: Get up there, yeah.

I: Was there anything that you enjoyed least?

C2: Coming back down (laughter).

C3: The last half mile.

I: When you know you're close to the car?

C3: Yeah, I really liked going up. Going back down was not as fun.

C1: You could have put some spices in those chicken and rice burritos. They were pretty bland (laughter).

C3: They were so dry.

C1: The Jasmine rice was a nice touch, but they needed something.

C3: I was eating mine and I was like, 'this sucks. Why am I even eating mine?'.

C2: (inaudible).

I: And, uh, I assume that because you were the only ones up there you didn't experience any crowding?

C1: No, not at all. We didn't see a soul above the lower saddle. Below that we saw maybe 5 people that were coming off from maybe summiting yesterday? Or these two women that were in front of us. They kind of just played around and then they just thought that it was best that they descended and so we passed them and then, um, after that no there was so no one, there was just solitude. It's a weird feeling because every time I've been up there, there has been other people. You know and sometimes you just follow the flow. You

know, if you see two people, you're just like 'oh, let's follow them to the top' because there's like 8 different ways to get to the top. Like, the Owen-Spalding is a route, but as far as like how many people know the exact one... like, there's a lot of different ways to get to the top. So, it was nice, we explored a little bit. It was exposed, sketchy, wet ledges, you know? Kind of just pushing the boundaries, but tried to go beyond the boundary. Yeah...

I: Was there anything besides weather, um, that disrupted your climb?

C3: (inaudible).

C1: Yeah, Nate's got to take care of his hot spots.

C3: So, I just got some brand new boots and obviously... I was going to tape them up like before they got sore, like tape up my heels before they got sore before I left, but I didn't and, uh, should have but probably about a mile and a half in I realized I needed to do it immediately. That kind of slowed us down a little bit. Yeah...

I: And then, did anything risky occur besides weather, abilities, things like that?

C1: I tried to do a backflip off of a rock onto AJ's shoulders (laughter).

I: (laughter), How did it go?

C1: It went pretty well. He bent his knees to absorb the shock. I was impressed, I didn't think you would do that. I think his shoulders are bruised a little and he's a little shy, so he doesn't want to talk. Um, no, I don't... wait, what was, what was the question again?

I: It's okay, I think you can...

C1: No, keep that in there. Keep it in there.

I: Yeah, um, what kinds of sounds do you remember hearing?

C3: Birds on the way up were sweet right before sunrise.

C1: Exactly an hour before sunrise, they were just going at it.

C2: The rodents were chirping.

C3: And the Pika.

C1: The Pikas, yeah, those furry critters.

C3: Rocks falling were very distinctive to me.

C1: Makes you look where they come from. Like you hear rocks and you're just constantly moving your head.

I: Do you remember where you heard the rock fall?

C2: After the fixed line.

I: After the fixed line.

C1: Yeah, you kicked one down, right?

C3: Yeah I took a step on a rock that was this big and it just rolled out from under my foot. Fortunately, there was no one else up there, so it took a huge crack and we all yelled just in case someone was down there, but...

I: Is the fixed line exposed right now?

C1: Mhm. Like the rope itself, or exposed, as in like it's an exposed area? Or...?

I: No, like you can see it.

C1: Oh, yeah.

I: It's not under snow?

C1: No. It's out and about.

I: I did not realize that.

C2: All that rushing water, definitely. There are certain points where you just like come around a corner and it's super loud and then you go around another corner and it's just silent.

C1: Yeah, it's like it's gone. Just disappeared. I think the wind to when we were up on the lower saddle. Like it was clam in parts and then you would take the next step and it's just like [wind sound effect]. Trying to balance yourself and it's just... it's not that it's blowing rocks or debris around, it's just, you know, blowing against rocks and creating kind of a whistling noise. Like a refs constantly giving you a red card in a soccer game (laughter). All the time, non-stop.

I: I like that one (laughter). Um, what sounds did you enjoy hearing the most?

C1: I like the wind.

C3: Yeah, I was going to say, it's like as much as it cut through you it was still like awesome.

C1: Uh huh... Yeah and it's one of those things where... like, water is awesome, water is one of the coolest sounds like a waterfall being so chaotic, but at the same time you know it's going to stay there. It's going to like come and attack you like a bear or something, you know like, it's this thing that's chaotic, but it's staying there and the wind is like you can't even see it, but you can hear it.

C3: Well, especially up on the top, there's no foliage it's just rocks, so you can't get like any gauge of how fast it is until it's actually hitting you, so that was kind of interesting.

C1: It's a whole other force.

C3: I think he's got a good shot. I'm like, standing up on the saddle with arms wind and the breeze is just like taking all my clothes and just like sucking them backwards.

C1: It's cool. Yeah, the wind for sure.

I: Yeah. And then are there any sounds that you didn't like hearing?

C3: The rocks falling.

C1: That's a good one, yeah.

C3: There was this one time where I was stepping on some snow, right below the fixed line and my left foot just punched through the snow which was that crunching of the snow sound was kind of like, 'oh, s\*\*\*\*', but um...

C1: Or the boulder, when you're going through boulder fields and this rock is, you know, placed in precariously on another rock and you step on it and the whole thing is like a...

C3: [rock teetering sound effect].

C1: Yeah, like [rock teetering sound effect], and you like rock on it, but it's like a hollow sound. I just jump off the rock.

C3: Yeah, it's not a good feeling.

C1: And try to find another one. Yeah, but that's a weird, it's like a hollow rock and you're just teetering on it, but it's only for a split second, you know? As you're jumping from rock to rock.

I: Yeah, you just kind of know it means danger.

C1: Yeah it's just like, I got to get off this thing.

C3: It's just like innate to know, 's\*\*\*\*'. Shouldn't be doing this.

C1: Yeah, then it's just Adam's voice from time to time, is just horrendous.

C3: Worst part of the whole trip (laughter).

I: Do you guys remember hearing any human-caused sounds? Like helicopters, airplanes, things like that?

C3: I don't think so.

C1: I don't remember any helicopters. Airplanes? No. I mean, I have. Not today. Yeah, with the airport. Some helicopters last time we were up here when me and Jared were coming off the summit there was a rescue going on and there was a helicopter just circling us looking for someone, but not today. I don't think so.

I: Okay.



C1: Oh, except, you know what? The, um, so I think the Exum Mountain Guides have 2 tents up there, so you can hear them flapping in the wind.

I: Oh, that tents flapping?

C1: Yeah, when you walk past them, it's just a chaotic tent going at it. So, yeah, there's that up there.

I: Were there any sounds beyond wind that disrupted your party from communicating together?

C2: Not really.

C3: Probably not.

C1: Can't think of anything.

C3: I mean, sometimes the water was loud, but it didn't really matter.

I: Yeah, yeah. Do you have any recommendations for the park to improve conditions of the hike up there, the climb?

C3: See, I would kind of prefer it to be less of like a beaten trail. Like, to still be there, I guess, but it seemed like so traveled that it was almost too obvious. Like when you go into some places as far back as that, I kind of expect it to be like not that easy to find where to go, but it was actually like really... well, with them, it helped a lot, but at the same time the trail was pretty obvious. At certain points, it was less, but...

C1: More of a primitive, kind of...

C3: Yeah, more like backcountry feel, where there's like a general way to go, whereas it was pretty clear where to go, but you can't really do that because there's like a number of people that go up there, but I guess there isn't really anything you could do about that.

C1: I guess like, closing some trails in regards to. Like, through a lot of those boulder fields there's always like 4 different trails you can take. They usually go to the same place. It's just pick one trail and make that the trail and then cover the other trails with rocks because it's not that it's confusing, but it's just unnecessary to have 4 trails that go to the same place up there, but it's hard to maintain. Like that scree, that scree-dirt stuff up top, you step on it and you slide like 3 feet, so... especially when it rains I imagine whatever work you do is just going to go away, it's going to get washed out, but I'd love them to put a clam chowder hut on the lower saddle (laughter).

C3: A Starbucks at the top would be awesome.

C1: Or like a fountain of melted chocolate.

C3: Fondue with like marshmallows (laughter).

C1: Graham crackers, bananas... the whole shebang.

C3: Fresh fruit. Yeah... I don't know why they haven't done that yet. Some wild Salmon, or like Cutthroat Trout would be nice.

C1: Oh, now we're talking.

Jenn: How bad was that burrito you guys had earlier? (laughter).

C3: It was pretty plain.

C1: I have some left, do you want it? There's like 3 bites maybe. You can just pick the chicken out if you want.

C3: Straight carbs and protein.

I: Alright, so do you guys have any like comments that you want to share other than what you've already told me?

C3: We are...

I: Penn State... (laughter).

C3: What else, right?

C1: I don't think so, you guys got anything else to add? AJ, you look like you itching to...

C2: No, I'm good. I think you covered it. Well, for me it's like, climbing is a great combination between a really good physical workout, that works out your whole body, but it's still a lot of fun because for me, if I go to a traditional gym I'm bored within 2 minutes, but if I go to like a climbing gym, it seems more social. Like, the style of workout is better for me, so I'd say that's what mostly appeals to me is that combination between the two. It's like a great workout and being so fun and thrilling at the same time. So, it's that combination that keeps me really coming back.

I: Nice, nice.

C2: But, not much else to add.

I: Alright, well thank you guys so much for helping me out.

C1: Do I get money?

## **Interview 05**

I: So my first question is, what does rock climbing, what role does that play in your life?

C1: Um, I travel a lot of places to go rock climbing and, um, I live next to some local climbing areas, so, uh this – when the snow melts I go climbing. Yeah...

I: That's awesome. And, uh, so my next question is – do you live in the US, obviously, but, um, what is your zip code?

C1: Uh, 59937.

I: Where is that?

C1: Whitefish, Montana.

I: Nice, nice! I have friends that actually just moved there.

C1: Cool, yeah, it's a good place to live.

I: Yeah, do you know the (inaudible)?

C1: Yep. Oh, awesome.

I: My friends name is Molly. Yeah, yeah super cool. Um, what year were you born?

C1: 1981.

I: How many people were (inaudible).

C1: Uh, me and my buddy.

I: Nice and you weren't with a private guide? Okay... um, how would you describe your level of climbing experience?

C1: Um, like, experience?

I: Yeah, if you're a beginner, novice, expert – kind of like something in those...

C1: Expert. Yeah.

I: Expert? Cool. And have you previously climbed the Grand before? How many times?

C1: Yep. Just once on the Owen-Spalding.

I: Yeah and what year was that?

C1: Um, it was probably 2008? It's been a while.

I: Okay, nice. Um, and during this most recent trip, um, what route were you planning on climbing?

C1: Um, Durant's into the Upper Exum.

I: Okay and is there a reason why you chose that route over...

C1: Yeah, it's a classic line and I've been hearing a lot of people say good things about it for a long time. That was the route we intended to do the first time I was there, but we woke up and it was super cold and

we're like not ready to start rock climbing with bare hands, so we decided to hike around and did the easier route just to get to the top.

I: Yeah, what time of year?

C1: It was like August, I think.

I: And it was still pretty chilly up there?

C1: Mhm, yep. It was really chilly up there.

I: Um, and approximately days? Did you just do a day hike and climb this morning?

C1: Uh, we spent last night up there and the time I did it the first time we spent two nights up there because it's a nice place to camp out and I kind of like being up there for a couple days and scouting it out.

I: Yeah, where did you camp?

C1: At the lower saddle.

I: Nice (cough). And what motivated you to want to climb the Grand?

C1: it's a beautiful mountain and Tetons are super iconic, so I try to go around and climb all different mountain ranges in the US, in the Rocky Mountains, so definitely hit list for all climbers.

I: Yeah, yeah. And what kind of expectations did you have for your climb today?

C1: Uh, I knew it was going to be long, um, but figured it was going to be good rock. If it was good weather it would have been awesome to get up on that route, so... it would have been a long day out there, but we would have got up early and, um, yeah was really excited for it.

I: Yeah. So, would you say that your expectations met what you experienced?

C1: Oh, well we didn't get out to do the route, so I got to try again next week.

I: Yeah, yeah. Um, and did you know that the route and the hike that you did is in recommended wilderness?

C1: That it is? Yeah. I'm not sure specific recommended wilderness, but I would expect that being the population of people that come in here and, um, yeah...

I: And did you choose to climb there specifically because it's in wilderness?

C1: No. I don't think... nope. Nope, more so because of the quality of the rock and the iconic peaks.

I: Yeah and did you have the type of experience that you would expect to have in a wilderness area?

C1: Yeah, I would say so. Yeah, I mean, minimum... there's helicopter tours, right? And, um, but that was very minimum. Uh, there's an airport right there, so I heard some planes flying around, landing but yeah it was super pretty, pristine area like even though there's a lot of people that travel up there, there's a lot of

streams that are super pristine and take a couple of sips right out of the stream. Wasn't too afraid because we got up to the top of Spalding falls and it's coming right out of the ground, so, I purified water mostly, but took a couple sips because I was really thirsty. It's tempting

I: (laughter) Yeah, um, what did you enjoy most about your most recent experience?

C1: Probably being up there with my buddy. Yep.

I: And did you find anything least enjoyable, other than the weather?

C1: All the people on the route. We were slowed down, but that was expected because we didn't get a super early start. So, just had to show some patience. It was definitely a climb that was recommended to for a while so we were like, 'well, whatever, we just got to go slow and wait for people to get up this thing' and was able to pass a party towards the top, that was nice, but there was a good amount of people on the route and obviously like takes a little bit away from the experience.

I: Yeah, um, and in your most recent trip did you experience any crowding?

C1: Um, not at camp, but on that route and I said 'hi, how's your day going?' to about 30 different people hiking up just on the trail, so... you just kind of get use to that. I live near Glacier National Park and so you see a lot of people on the trail and you're just like 'howdy, howdy', like to so many people, so you just kind of get use to that in national parks.

I: Yeah, um, and where was that crowding mostly?

C1: On the Garnet Canyon trail.

I: Yeah and you expected that obviously and did it impact your experience at all?

C1: No, nope. It's a national park it's a lot of people here and more hikers than climbers, so...

I: Yeah, yeah. Beyond the natural elements, or your teams abilities, did anything disrupt or interfere with your climbing experience today?

C1: Hmm, nope.

I: And what about anything risky – did you experience anything risky beyond the inherent risks of climbing, or the natural elements?

C1: No, I felt pretty safe the whole time. Yep.

I: Nice and, uh, what kinds of sounds did you hear during your climb and during your hiking experience?

C1: Um, we saw pretty cool rock fall off of Nez Perce across the canyon, on the mountains across the canyon we saw a pretty big chunk of rock come down. This was a boulder probably half the size of these cabins come tumbling down. That's always super cool to see, but you get worried that people are below it, but there was nobody below it, um, saw airplanes flying around. Helicopters, um, the shout of 'on belay, off belay' from other climbers up there. The stream Spalding falls is right there, so you can hear the stream the whole time and it's not a drowning sound because you're high enough off the ground so you can still communicate

with your climbing partner. Little bit of wind, it was nice once you got... it was a really hot day, so once we got halfway of the route we got a little bit of a breeze, so you could hear the breeze blowing.

I: Um, were there any sounds that you enjoyed hearing the most?

C1: I like the drowning sound of the falls a little bit. It's far enough, sometimes it can be, uh, it can break up communication, but it was just a faint noise so it was kind of nice, peaceful.

I: Yeah, yeah. And then what kinds of sounds did you enjoy hearing the least?

C1: Uh, I guess just the helicopter, but I'm use to that. Rock fall is always – it's cool like when you initially hear it, it's scary because you don't know where it's coming from because you're in a big canyon and the noise is bouncing around, so until you pinpoint where it's coming from and you can see the rock coming down that's intimidating for a little bit, but once you kind of see where it's coming from it's pretty cool to see it from a distance.

I: It's a little different if it's closer.

C1: Yeah, you'd be hearing some shrieks. Human shrieks if that was the case.

I: Did you notice hearing any human-caused sounds?

C1: No, just some hollering. People were probably hollering at us from below because they saw some climbers up there and they got excited because the routes pretty exposed, it's right above the trail.

I: Did you find it difficult to communicate with your climbing partner at any time?

C1: No, we use a rope-tug system, or we just talk very minimum. We'll just like let each other know when we're halfway through the rope and then the last 20 feet of the rope, but then the pitches are all short enough that we can communicate well.

I: Do you have any recommendations that the park could do to improve any conditions of the trail, or the climb itself, things like that?

C1: Uh, could I tell you about the permit system? Uh, yeah I think the permit system could be a little cheaper. I know they do \$25 as a flat rate for, no matter how many people, I don't know it's up to 8 maybe and then how many nights you want, so for somebody going in solo or with just a party of 2, they get charged the same amount as a party of 8 going in for 8 nights instead of a party of 2 going in for one night. So, it kind of... I might not spend another night up there because it's \$25, it's going to be \$50 just for two nights up there, so if it was like, I feel like they should take into account, you know maybe \$5 per person, just a suggestion, like... they're still going to get their money from those larger groups and then it will be cheaper for people that are going to go up there for just one night.

I: Yeah, yeah and then do you have any other comments or things you want to share before we end?

C1: Oh, that's it.

I: Yeah, yeah. That's it. Well, thank you for helping! Yeah... so, do you think you're going to go next week and try?

C1: Yeah maybe just a day...

## **Interview 06**

I: Alright, so my first question is... and do you mind being like the primary interviewee and then you can interject, you can interject at any point. Um, so what role does rock climbing play in your life?

C1: Oh, boy (inaudible).

I: We'll get there, this is just the fun opener, you know?

C1: Fun opener, um... Rock climbing gives me a way to get to places that I couldn't normally get. So, I get to get physically and mentally away from everything, so that's what I do it for.

I: Yeah. Awesome and do you guys live in the United States?

C1: We do, more or less, Utah.

I: Yeah, what is your zip code?

C1: Oh, well actually I live in California. So I'm 94141. What are you?

C2: 84109.

I: 84109? Okay. And um what year were you born?

C1: '85.

I: '85? Me too. Almost 30, are you there?

C1: Almost. I'm December 31<sup>st</sup>. I've got time I'm holding onto it.

I: Yeah, I'm September 17<sup>th</sup>. Yeah, we're all right there. Um and was it just the two of you climbing in your party today?

C1: Yep.

I: Nice.

C1: We left the other ones up there.

I: Nice and how would you describe your level of climbing experience?

C1: Medium? Is that a level?

I: Yeah, that works.

C1: Um, I've done some trad. This was like my first big mountain. He's a lot more experienced, which is why he dragged me up here.

I: Yeah, awesome and feel free to unpack, do your thing, just keep doing your thing and we'll get you. Um, and how many years have you been climbing?

C1: Four?...

I: Four years? Nice. And was this your first time climbing the Grand?

C1: Yeah. It's my first time in the Tetons at all.

I: Oh, great. They're amazing, aren't they? Yeah, it's crazy. Um, and during this most recent climb, which route did you guys climb, or did you plan to climb?

C1: I attempted to climb Owen-Spalding.

I: Okay. Nice. And why did you choose that route?

C1: Um, a couple things, I know the weather window was pretty short and that involves the least time like actually on the rock and the ropes. We missed the weather window anyways, so it didn't matter, but um, and I think it's also like a pretty mellow route for like my first time up something big, so both of those things.

I: Yeah, yeah.

C1: Right? Did I miss any reasons?

C2: Nope, you got it.

I: And, so how many nights did you spend up there?

C1: Just the one.

I: Just one night? Okay. And what motivated you to want to climb the Grand?

C1: Have you seen it?! I just looked at it. Then he said it wasn't that hard to get up there. Liar... um, so (laughter). Yeah, I mean it's beautiful it's, I can't imagine standing on the ground that you can get up there and you can. So, I wanted to.

I: Yeah, yeah. And what kind of expectations did you have for your trip?

C1: Um, I was hoping to get to the top (laughter) that was the number one expectation. No, um, I expected it to be hard and scary and it kind of was both, so...

I: So, would you say your expectations met your experience?

C1: Yeah. It was more or less, more or less what I thought was going to happen.

C2: Oh my god, the beer...



C1: That's so warm (laugher).

I: Um, and were you aware that the route that you hiked and climbed in is part of recommended wilderness?

C1: Nope.

I: Yeah, um, and what did you find most enjoyable about your climb and your experience?

C1: Hmm, I think the views. Like it's a really amazing view up there and you get to like, especially when you're up on the saddle you can look over both ways. It's really pretty. Lightening storm was pretty cool actually.

C2: Yeah, it was really cool.

C1: For being a lightening storm in the mountains. Yeah!

I: So, did you guys kind of hunker up there and watch it?

C1: We listened to it. It was...

C2: The first storm was just a lightening storm hanging out in the tent and then we were up um just below the upper saddle this morning kind of hunkered down watching the storms come in.

I: Wow, that's pretty cool. Um and what did you find least enjoyable about your experience?

C1: Well, the part where we got freezing cold rained on and didn't get to go to the top was definitely a bummer. I also don't like the snow fields. Have you done that? It was my first snow field I was like, phew... this is stupid. He's like, 'you're fine', I was like, 'I hate it'.

I: Yeah and then like was it like totally solid this morning when you traversed it?

C1: The snow? Yeah, it was a little slushy.

C2: There was some slush on it. Yeah, it was alright. It loosened up it was pretty good conditions.

I: But it's definitely still scary.

C1: It's definitely still scary it's like, oh my god... give me the axe!

I: Yeah, yeah. Um, did you experience any crowding at all on your hike or your climb?

C1: No. We ran across a lot of people on our way back down that were headed up, but no.

I: Yeah.

C1: I thought we had just one other group up there. It was perfect.

I: Yeah. Nice!

C1: Apparently Monday morning is not the time that people are on the grand.

C2: With the storm rolling in...

C1: With the storm rolling in (laughter).

I: Yeah, um beyond the natural elements of the storm and the lightening um and your climbing abilities did, did anything else disrupt or interfere your climb today?

C1: No.

C2: No...

I: No? Good! What about risk? Was there any risk that you experienced beyond natural elements, climbing abilities, things like that?

C1: Beyond the falling to your death part? No.

C2: No, I've been up here in the past and had like guided groups dropping rocks and things like that depending on which route you're up and on, but it's just part of being up there, so...

I: Yeah.

C1: And there weren't any guided groups where we were today

I: What kind of sounds did you hear during your climb and during your experience?

C1: A lot of running water and a lot of wind. Thunder...

C2: Lots of small rock falls.

C1: Couple, that was a good one that went down... there was a rock fall this morning from the upper saddle, or from saddle that was above us, so it was cool rumbling noises and some planes, lots of planes.

I: Yeah, yeah. Pretty close to that airport

C1: Yeah, it sounded like thunder.

C2: Yeah, keep moving.

I: What sounds did you enjoy hearing the most?

C1: I like the running water sound and the wind when it's just the bringing the mist wind, not when it's like going to blow you off the mountain wind. I suppose that's called a breeze.

I: Yeah... (laughter).

C1: You got any sounds, Nate?

C2: Birds?

C1: Oh, that's nice! We heard a marmot make noise, that was cool. Did you know they make noise?

I: They chirp, right?

C1: It's pretty cute.

I: Yeah, they're really cute. They look really well fed up there, too, which is surprising. Yeah, they get a lot of snacks. Um, and what sounds did you enjoy hearing the least?

C1: Rock fall is a scary one. That's probably mine

I: Yeah, yeah. Um, did you notice hearing any human caused sounds like traffic, voices, helicopter, or airplanes things like that when you were actually on the route?

C1: Uh, planes.

C2: Yeah, you could hear planes when you were up on the route.

I: Yeah, okay. And how did you feel about hearing planes when you were up on the route?

C1: I mean, I'd rather not hear planes while I'm up on the route, but I was also like 'man that'd be cool if my plane flew over the Tetons'.

I: (laughter) Yeah.

C2: I was on top ten years ago and had a glider flip over. Standing on the summit, you'd look up and they were looking down from their cockpit it was awesome (laughter).

I: That's cool. That is really cool. That'd be an amazing view. I can't imagine.

C2: What the heck are you doing here? (laughter).

I: Um and then did you find it difficult to communicate with each other because of any sounds that you heard like beyond with or something like that?

C2: No.

C1: No, the wind would have been the big thing, but you just disqualified that so, no... (laughter).

I: Okay, awesome, and do you have any recommendations to the park to improve conditions um for the area that you were climbing in?

C1: It was pretty good. Do you?

C2: Uh, I don't know that I'd recommend them doing it, but if you have a bunch of beginners going up, having some guidance when you hit the upper saddle, going above that to – that's to the lower Exum, that's to the Valhalla traverse, that's to the saddle, you know? Something like that, but...

C1: That's a good point. If you hadn't been there, I wouldn't have had any idea of where we were going.

C2: But I mean, that's just taking the fun out of going up and exploring, I mean that's just stupid...

C1: (laughter).

I: Yeah.

C2: If you don't get lost once in a while, what the f\*\*\*?

I: Yeah, well cool, thank you guys for sharing...

### **Interview 07**

I: ... We're able to talk about...

C1: Whatever?

I: Yeah!

C1: Alright.

I: So, what role does climbing play in your life?

C1: Umm, I guess it plays a lot of roles, I think. It's something fun to do, but a lot of times it feels like something more than that, you know?

I: Yeah.

C1: Umm, and it's cool because you get to see a lot of stuff you wouldn't see otherwise, I think that... I don't know. It's hard to sum up really.

I: Yeah. Well, it's part of your job a little bit, huh?

C1: Not exactly. Nah, I just sell bunks. Clean toilets (laughter).

I: Not like that guy back there?

C1: Yeah, it's part of his job.

I: Yeah, okay. I wasn't sure if you were a guide too.

C1: No, I'm not.

I: Okay, um, and you live in the United States, right?

C1: I do.

I: And what's your zip code?

C1: I don't know what the zip code is here.

I: Yeah, do you live in Jackson year 'round?

C1: I live here right now, but I just moved here from Michigan.

I: Okay, nice.

C1: Yep.

I: Very cool. Um and what year were you born?

C1: '92.

I: '92... um and how many people were in your personal party that you climbed with the other day?

C1: Including myself?

I: Yeah.

C1: Two.

I: Two? And you went up as a private party, not with a guide or anything?

C1: Nope.

I: And how would you describe your level of climbing experience?

C1: Umm, I would say intermediate. I mean, I'm comfortable in a lot of situations on my own, but there's a lot I don't know, I would say. Um, yeah, so in the intermediate level.

I: And how many years have you been climbing?

C1: Umm, four. Four years. Four-ish. Something like that.

I: Nice and um was this your first time going up the Grand?

C1: Yep. It was.

I: Awesome, congratulations!

C1: Thank you.

I: Yeah and um during this most recent trip which route did you take?

C1: We did the full Exum ridge.

I: Full Exum ridge? (laughter). How long did it take you?

C1: Um, well, I guess like twenty six hours including sleeping for like four hours.

I: Wow. That's a good trip (laughter).

C1: Yeah, it was exhausting mostly, but it was good.

I: Yeah and is there a reason you chose Exum ridge over a different route?

C1: Umm, I chose the Exum ridge because it had a high level of like climbing difficulty, as opposed to like the upper Exum, or the Owen-Spalding. Um and it was straight forward so I figured for my first time I wanted to do something where like I could see the whole route from the ground and it's not like going all over the place, so hopefully I wouldn't get lost.

I: Yeah, yeah... understandable. Um and did you just do it in a day trip, or...

C1: We left when I got off a shift at like eight o'clock at night and then we hiked up and then got to the lower saddle at like 2AM and then slept until like 5:30(AM) or six and then climbed the route and then came down and got back here at like 10PM the next day. So I guess like a day and a half (laughter).

I: Okay, cool! (laughter). And what motivated you to want to climb the Grand?

C1: Umm, I guess I did it because it just seemed like the thing to do on the fourth of July! (laughter). Um, but, I don't know. I wasn't like super interested in climbing it itself, I just wanted to like go to the top of the Grand and just be like, 'well, that's ticked off now'. Um, but I wasn't like psyched on the actual climbed, you know what I mean?

I: Yeah... what kind of expectations did you have for the trip?

C1: Um, I guess I expected it to be fun (laughter). Which is mostly why you do it. Um and probably kind of hard and a lot of hiking. That's what I expected and to see a lot of people. Yeah, I don't know (laughter).

I: And um do you think the experiences you had met your expectations?

C1: Um, it was harder than I expected, like physically more demanding, um, but for the most part, yeah. I would say yes.

I: Yeah, okay. Um and then were you aware that the route that you hiked and climbed in was in recommended wilderness?

C1: I don't know what that is, so I don't, I didn't know that.

I: Um, it's just a different, um, designation in terms of park management, um, so the park manages like Garnet canyon and that area differently than the rest of the park.

C1: Um, I didn't know that. It was just the way that you had to go, you know?

I: Yeah, cool. Umm, what did you find most enjoyable about your experience?

C1: Uh, waking up on the lower saddle when the sun was coming up. That was probably the best part.

I: Yeah, yeah. Mostly because of the views, or...?

C1: Yeah. Mostly just because of the view.

I: Yeah. Good views up there.

I: Did you find anything least enjoyable?

C1: Hiking down in mountaineering boots. That was the least enjoyable and losing half my food. So, being really hungry.

I: How did you lose your food?

C1: I don't know. Uh, I think it fell out of my pack in the night when we were like stopped for a second. I had the top opened and my pack fell over, but when we got like halfway up the thing I realized I didn't have half of what I had brought to eat, so that was pretty not enjoyable (laughter).

I: Ohh, I'm sorry! Um, did you experience any crowding at any points?

C1: Yeah, umm, we got climbed over, or through, by another group. Um, on one of the pitches and we were crowded on like a little belay ledge.

I: Yeah.

C1: And, yeah. Other than that, no.

I: Okay and did you expect that?

C1: Kind of, I mean, I thought maybe it would happen, so somewhat.

I: And did it influence your experience at all?

C1: It was annoying (laughter). Um, but nah, it wasn't that big of a deal.

I: Yeah, yeah. Um, Beyond the natural elements and your team's abilities, did you experience anything that disrupted or interrupted your climb?

C1: Like weather or anything like that?

I: Nothing, anything like human-caused.

C1: Oh. No. Nothing. Yeah, no, I don't think so.

I: Okay and, uh, I mean climbing is inherently risky, um, but did you feel that there were any other factors besides like weather, or your abilities, or your climbing partners abilities that made you feel more at risk?

C1: Umm, I guess like the, some of the old repel stations that you go down are kind of like, eh... (laughter). I don't know if I want to, if I like how that looks, um, so that made me, yeah, for a second it was like I don't know about this and that was like a human factor.

I: Yeah.

C1: But, that's about it, I think.

I: Okay and what kind of sounds do you remember hearing on your climb?

C1: You hear a lot of people yelling, like 'on belay, off belay', like of other groups ahead of or behind you, um, I heard a plane... that's all I can really remember and it was kind of windy, so like a lot of stuff got drowned out, you know? But yeah, that's about it.

I: What sounds did you enjoy hearing the most?

C1: Um, I don't remember anything that I particularly enjoyed hearing, but it was like frustrating to have a lot of other people yelling like commands to their other partners because then it would be confusing with your partner, um, yeah I don't know about anything like... any enjoyable sounds (laughter). I don't know.

I: Yeah, um, did any of those sounds disrupt your communication with your partner, or...

C1: Yeah I mean we had to like resort to yelling their name and then the command and, um, so yeah it was a little bit disruptive, but nothing like unmanageable, or like that wrecked anything or made it dangerous.

I: Yeah, um, did you notice hearing any human-caused sounds, like traffic or helicopters, or planes, or anything like that at the summit, or near the summit?

C1: No. I didn't hear anything up there.

I: Okay, cool. Um, do you have any recommendations for the park to improve conditions for the area where you were climbing?

C1: Like any type of conditions? Um, I think it'd be smart to have bolted repel anchors. Like I understand not wanting to have bolts all over the mountain, but like at least for where you're repelling it seems only logical to have a safe repel station.

I: Mhm... mhm. And then before we end is there anything else that you would like to share, or comments you have regarding your experience on the Grand?

C1: I don't think so. Nope.

I: Okay, cool! Well, thank you very much for helping us out.

C1: Yeah, totally.



I: Yeah, sounds like you had a good one.

C1: Yeah, it was...

### **Interview 08**

I: Alright, so I'm going to set this up here.

C1: Sure.

I: And um what role does climbing play in your life?

C1: Uh, the largest recreation role and also training professionally, as well, so... Yeah.

I: Very cool. So, what do you mean by training professionally?

C1: Uh, I'm going for my AMGA rock guide certification, so I'm partway through that program.

I: Congratulations!

C1: Thank you and I've been climbing for twenty four years, so it's a long lasting love affair, I guess and uh it's a huge part of my wife's and my life, so.

I: Awesome and do you live in the United States?

C1: I do.

I: What is your zip code?

C1: 80453.

I: Where's that?

C1: That it is Idledale, Colorado, right in, right behind Red Rocks the concert venue.

I: Oh, cool. That's a cool spot. Um and what year were you born?

C1: '71 – 1971.

I: Nice. How many people were in your group that you climbed with?

C1: Three.

I: Including yourself? Three people?

C1: Correct.

I: And were you with a guide, or a personal...

C1: Self-guided personal.

I: Okay, self-guided group. Um and how would you describe your level of climbing experience?

C1: Meaning what?

I: Would you say that you're a beginner, novice, I mean you're doing the AMGA certification so...

C1: Yeah, uhh, advanced I guess. Sure, yeah. Yep.

I: Cool. Um, and have you previously climbed the Grand before?

C1: I have.

I: Yeah? How many times?

C1: Uh, two other attempts, one successful.

I: And do you remember the first year that you summited the Grand?

C1: Uhh, 2002. Yeah.

I: 2002? Nice and how many years have you been climbing?

C1: Twenty-four.

I: Twenty-four years? Cool. Um, during your most recent climb, which route did you take?

C1: We were attempting the direct Petzoldt ridge and then followed up by the upper Exum.

I: Nice. Um and is there a reason that you and your group chose this specific route?

C1: Uhh, classic route. A little more difficult and technical challenge throughout, rather than hiking through choss fields and then doing a little bit of climbing, so more actual technical climbing on the climb than hiking.

I: Yeah, gotcha. Um and did you summit on this most recent climb?

C1: We did not.

I: Okay, umm and approximately how many days were you out there?

C1: We were out there for less than twenty-four hours.

I: Less than twenty-four hours? A day trip?

C1: Car-to-car.

I: Car-to-car. Nice. Do you remember how many hours exactly car-to-car?

C2: We left at midnight and we were back by... Laura picked us up, it was about six, wasn't it?

C1: Yeah, midnight to six, so eighteen hours.

I: Eighteen hours, cool. That's awesome. Um and what motivated you to want to climb the Grand?

C1: Oh, it's just... super physically challenging and you have to be very fit to do it, um, it's obviously gorgeous up there. Um, but it's really putting, for me it's really putting everything that you've practiced together, it's backpacking skills to the extreme, packing things really tight into your pack, losing everything that you don't need, redoing that, um, being able to pace yourself throughout the hike and being able to transition between hiking and climbing and snow and, um, so it really requires you to put all the skills that you've learned into practice and become good at hopefully, um, together.

I: Yeah. Very cool. And um what kind of expectations did you have for your trip?

C1: (laughter) Well we had hoped to summit, but um essentially the baseline we did set, we set a time that we had to be at a certain point, otherwise we're going to back off and we hit that time and we weren't there and so we rapped down and we got off safely, so as an ultimate thing it was like still to have fun and not to make it an epic and come down safe, so...

I: Yeah, yeah. That's a good call. Um when you think of the experiences you did have, I mean you did have other than not summing, would you say that your experiences matched your expectations?

C1: Absolutely. Yeah.

I: Yeah? Cool. Um and then did you choose to climb the Grand because it's in a recommended wilderness area?

C1: I would have to say that's not one of my choices, no, no.

I: Okay, nice. Um and what did you enjoy most about your climbing experience?

C1: I would have to say the camaraderie and the partnership and that, so... Yeah, it was good to be just who I was with and go through the whole experience together and come back safe.

I: Yeah, absolutely. Um and what did you find least enjoyable about your experience?

C1: (laughter) Coming down in eighty degree weather.

I: Oof, baking?

C1: Oh, it was just scorching.

I: Yeah, yeah. Gotcha. Um and did you experience any crowding?

C1: I would have to say no actually this is relatively early season, I'm a little surprised at the lack of people that are on the Grand right now and it was very open, very cordial, um, on route at any point, so...

I: Yeah, nice! Um, beyond the natural elements, or your team's abilities, did anything disrupt or interfere with your climbing experience?

C1: Uhh, heat only, just environmental factors, no people experiences that were bad, no wildlife experiences that were bad, so...

I: Yeah, yeah. Did you, um, I mean climbing is inherently risky, but did you experience any risk that you felt outside of natural elements or personal abilities, things like that?

C1: Absolutely not.

I: Cool and what kinds of sounds do you remember hearing?

C1: (laughter) Wheezing! Lots of wheezing.

C2: That'd be me (laughter).

I: Wheezing?

C1: Uhh, we hiked up in the middle of the night and so it was so quiet except for when the sun, the sun hadn't even shown up on the horizon and the birds were out even at, you know, nine thousand feet you could hear birds, um, little bit of rock fall here and there and then generally it was so quiet that all you heard was you and your partner's feet on the rock, like the moraine and the gravel. So...

I: Cool and uh what kinds of sounds did you enjoy hearing the most?

C1: Uhh, I always enjoy hearing, uh, gear placements in rock, like it's just an enjoyable sound, so in the couple technical pitches we did, um, just hearing carabiners click and ropes, you know, running through carabiners and, you know, all the climbing sounds. So...

I: Yeah, um, were there any sounds that you enjoyed hearing the least?

C1: Strangled screams? No (laughter), there was none of that, umm, no actually I can't say on this trip, um, previous trips, uhh, the wind. The wind just scorching over the top at 60MPH and all sorts of good stuff. This time, no, I don't have any un-enjoyable sounds.

C2: It was great weather actually.

I: Yeah, yeah. You guys got a...

C2: It was really hot, the heat coming down.

I: Yeah, you guys picked the day before it started to get gnarly. Yeah! Good luck on your part, um, and at any point did you find it difficult to hear your climbing team because of sounds?

C1: No, not this time. It was bluebird weather. Still, there were no other people on our route. Yeah...

I: Yeah. Do you recall hearing any human-caused sounds near the summit, or on your climb from like helicopters or airplanes, things like that?

C1: I don't remember that, I mean, maybe there...

C2: We heard other climbers.

C1: Yeah, we definitely heard other climbers, but no aircraft or anything like that that I can remember, so...

I: Okay and um do you have any recommendations for the park to improve the conditions of the area that you were climbing in?

C1: I would have to say the only thing that I see is, right about at the lower saddle there's a lot more erosion than the last four or five years than I ever remember and so, marking – human-caused erosion – and so, marking some designated trails a little bit better and I know that's very difficult given seasons and snow and everybody crosscuts because snow is there and it's tough, but um there's a lot more erosion than I remember seeing up there. The rest of it? It's well maintained, easy access, people tend to stay to the trails and not beat things up, um, that the growing use of, you know, pack it in, pack it out. Leave no trace, I can definitely see the improvements that's made. I don't really see anything other than the trail erosion at the lower saddle.

I: Yeah, okay. Cool. Um and before we end is there anything else that you, or that you would want to share in terms of your experience that you had most recently?

C1: I can't think of anything, no.

I: Great! Well, thank you so much for helping us out and participating.

C1: No problem whatsoever.

I: Yeah! Thank you!

Climber Interviews

**Date 11/1/15**

**Interview 150712\_018.MP3**

I: So my interview starts out with a fun question, what role does rock climbing play in your life?

C1: Recreation.

I: Recreation? Yeah.

C1: Pretty much that's it.

I: Yeah, fun.

C2: For me it's just a way for me, you know, necessary for me to get where I want to go. I don't really enjoy rock climbing so much as .. **\*inaudible\***

I: I like it.

C1: Yeah

I: And do you both live in the United States?

C1: Yeah

C2: Yes

I: What are your zip codes?

C1: We live here.

I: Here? Awesome, awesome, like in the park?

C1: No

C2: I live in the park actually

C1: He lives in the park

C2: So mine is 83012.

I: Okay

C1: Do you need Jackson zip code?

I: 830 ...

C1: 0 1

I: 1 3?

C1: No.

I: Oh.

C1: So its 83001

I: Okay, awesome. And was it just the two of you in your climbing party today?

C1: Yeah, just today the two of us.

I: Nice, and is this a private trip or a guided trip?

C1: Private trip

I: Awesome, and, um, how would you describe your level of climbing experience?

C1: Extensive

I: Extensive, nice.

C2: I would say more like beginner/ intermediate.

I: Yeah

C1: It is his first time up here.

I: Oh! Congratulations that's awesome.

C2: Thanks so much.

I: And how many years have you been climbing?

C1: Uh... too many to remember, since high school. It goes back, 40 years since high school so its been a long time.

C2: **\*Laughs\***

I: Yeah

C1: Over 40 years since high school so

I: Wow, that's cool.

C1: So I would say its been a long time.

I: Yeah

C2: I would say more like four years for me

I: Four years?

C2: Yeah

I: Cool

C2: Yeah

I: And you've probably previously climbed the grand before, how many times

C1: Over 100 times

I: Over 100 times?

C1: Over 100 times

I: That is amazing

C1: No, there are guys that do it more than I do

I: That's amazing. Um, and during this most recent trip what rock did you guys climb?

C1: Owens

I: And is there a reason

C1: Well its his first time up here and its an easy route

I: Yeah

C1: Easier, I shouldn't say its easy because there was more ice on it than the upracks, the upracks may have been easier today.

I: Yeah, yeah, yeah I heard you guys were chipping away at some ice earlier

C1: Yeah, I was up last weekend and there wasn't much ice but there was definitely the rain on Friday that made the ice build up on the **\*inaudible\***

I: Yeah, I heard some people talking about snow and sleet up there recently too

C1: It's a little snowy, little ice but you know with the warm temperature it warms up pretty quick so just chip away at the ice or wait and climb later in the day, one or the other. It is still a beautiful day, good day to be out, like you said the only sound we heard was wind. Why do you care about the sounds people hear?

I: Um, its like exploratory more than anything because the park protects sounds in the same way that they protect earth, water and air

C1: Right, right.

I: And its just like a curiosity and more so its my curiosity as a student. I just think Garnett Canyon is beautiful and there are a lot of amazing sounds to be heard and

C1: A lot of birds and a lot of marmots

C2: Rushing water, the wind, falling rock

C1: And climbers

I: Would you say there are any sounds that you enjoy hearing the most?

C1: Aw I like all the sounds up there, I like the sounds of the avalanches and the rocks falling its just something primal about it.

C2: I like the water

I: Yeah



C1: You an avalanche coming down and \*inaudible \* its like a present for climbers

I: Yeah

C1: More rock falling

I: Are there any sounds that you don't enjoy hearing?

C1: \*inaudible \* yeah, people saying things

C2: Personally I don't like when people use the word like too much. So if there's a group of people on the trail and they're like talking like you know like oh my gosh like, no.

C1: I think most of the sounds are other climbers and \*inaudible \* or whatever. It kind of disrupts the peacefulness because you have to \*inaudible \* there's no way you are ever going to get through.

I: Does it ever interfere with you guys communicating with each other?

C1: No, the wind interferes with communicating. It just depends sometimes there's no wind but when there's a lot of wind you can barely hear so that's rough.

I: Do you remember hearing and motorized sounds near the summit? Likes jets or..

C1: There was a plane, I've been up there with a helicopter and when they were filming a commercial for the backcountry.com. I found that a little annoying, they buzzed the summit, they also got in trouble because they buzzed in and \*inaudible \*

C1: They had a permit though so its not a big deal. It doesn't happen often. There are planes that fly illegally through in park and they go around the canyons and hang low which you're not supposed to do. And they'll go over the range also low which you're also not supposed to do. But its not often and usually the gliders are the best, you don't even, you just hear the swoosh and that's kind of cool. But it does kind of annoy me to hear the plans buzzing around the mountain. But its not often. I do go up a lot and I see them just about every year.

I: Do you chose the climb the grand because its part of recommended wilderness?

C1: No it's the tallest thing out here and it's a good day to get out. There's a lot of routes, a lot of variations so it's a mountain to climb.

I: Yeah, super cool, so do you guys before we end have any recommendations for the park to improve um..

C1: Yes, the park can always improve. I can give you a mile long list but I won't.

I: Okay

C1: I mean, there are many things besides climbing in the canyons. I don't think they care honestly so. I've lived here longer so I have more issues with it. It's a bureaucracy so you don't expect too much. They do a

fine job for what they do, its not easy. You can't please everybody. But yeah there are tons of things they could do better.

C2: They could move the parking lots up like a mile higher, cut my time way down you know. 13 hours in a long day, I don't know.

C1: I will say the signage on this trail might be improved a little bit. I know people sometimes get lost. I see them because I'm up here so often. They want to go to middle teton and they end up at the Ampetere Lake or they want to go to lower side and they go to Ampetere Lake. There are some places where they get confused. Yeah but you know for up here mostly everything's okay. There are a couple issues I have but I think just to help people would be the most helpful. Because they can't please everyone and they got a lot of things to do. Find you're funding and whoever pays.

I: Yeah, well thank you guys for taking the time to talk to me.

C1: Yeah enjoy your summer here!

I: Thank you!

**Date 11/1/15**

**Interview 150712\_017.MP3**

I: Alright, so what role does rock climbing play in your life?

C1: Um, I went on a trip with Wilderness Adventures and it was the main pinnacle of the trip, which was climbing the Grand Canyon.

C2: It was all of our first times.

C1: So we basically went in with no experience and then these guys helped us out.

I: Yeah, super cool. So what's Wilderness Adventures?

C2: It just like a teen tour program that does trips kind of all over the U.S. and some foreign trips. Its based in Jackson Hall so mostly the trips are in this area.

I: Oh neat, that's awesome. And do you love in the United States?

C1: Yes, I do.

I: What is your zip code?

C1: Um, 65401

I: And where's that?

C1: Um, Missouri.

I: Nice, and what year were you born?

C1: 1977

I: 1977, and including yourself, how many people are in your group today?

C2: Eight students two leaders

C1: So ten people with leaders.

C3: We got totally left out!

C2: Oh and four guides!

I: They almost left you guys out? Great. And how would describe your level of climbing experience?

C1: Novice.

I: Novice?

C1: Well, slightly above novice.

C2: Novice.

I: Its probably different now than it was yesterday.

C3: Very different than three days ago

I: And how many years have you been climbing?

C2: Um, three days.

I: Three days, great, okay.

C3: Four days!

C2: Four days.

I: And during the most recent climb what route did you take?

C1: Um the Owen-Spaulding to the top of the Grand Teton.

I: So you summited?

C1: Yes.

I: Congratulations, that's great and did you summit today?

C2: Yeah and we summited at 8 o'clock.

C1: I was 8:20, y'all were earlier.

C2: Yeah we were like 7:50.

I: Awe super cool, you guys that's awesome congratulations. And is there a reason that you chose the Owen-Spaulding, or you chose the Owen-Spaulding (referring to guides).

C2: Yeah that's a tough one, we're not part of that decision.

C3: Because its not as advanced

I: Cool, and what motivated you to want to climb the grand?

C1: Um, I thought it would be really cool. Something new to try, I've never done it before so

I: Yeah, did you have any expectations?

C1: I knew it would be tough, and I knew it would be exciting and dangerous but I knew it was something I wanted to kind of conquer the fear of so I did.

I: Yeah, and how would you say your experience has matched up with your expectations?

C1: 100% , perfect, a great experience.

I: Yeah, awesome! And do you by any chance chose to climb the grand because its part of Wilderness or anything like that?

C1: Um, we were looking online and it kinda looked like a cool trip to do. So that's how that decision was made.

I: Awesome, and what did you enjoy most about your trip?

C1: In general or the climbing, the climbing trip.

I: The approach and the climb.

C1: Um probably the summit.

I: The summit?

C1: Yeah for sure standing on the top was the coolest.

I: Neat, and anything you liked least?

C1: Um coming down actually.

\*laughter \*

C1: For many reasons but...

I: What are some of those reasons?

C1: Um well you leave the mountain and then its just kind of a really long walk and your destination is a car not a mountain so...

I: Ah, not as fun

C1: No, not as exciting.

I: I gotcha, and did you experience any crowding at all anywhere?

C1: Yes! Um what was the point where we met up with that other group? Do you guys remember?

C4: That little cluster?

C1: Yeah there was another summitting team, as we were coming down, they were coming up at this, it looked like a (inaudible) I don't know what it was called but

C3: Oh the Sergeant's Chimney

C1: Yeah the Sergeant's Chimney!

I: Oh okay, yeah. Awesome. And beyond the inherent risk of climbing or the natural elements or your abilities do you feel like you experienced any risk?

C1: Nope, I trust these guys

I: Yeah, awesome. And what kinds of sounds during you remember hearing on the approach and on the climb?

C1: Um, today it was really windy. Um so almost deafening wind. A lot of screaming back and forth of like 'I got you,' 'you can climb now' stuff like that. Um, rock fall, echos. Can you think of anything else?

I: Were there any other sounds you were hearing? Birds?

C1: Yeah, yeah at the early part.

I: Were there any sounds that you enjoyed hearing the most?

C1: Um, Amy (the guide), because I knew I was safe, I knew I was roped in, so hat was an enjoyable sound.

I: And any sounds you enjoyed hearing the least?

C1: Rock fall

I: Do you remember hearing an motorized sounds during the climb?

C1: No

I: Like from any helicopters or planes?

C1: Actually yeah, I heard maybe a jet going over because of the airport being so close. But that was it and it was only once.

I: Yeah nice. And how did it make you feel to hear jets up there?

C1: Well it kind of made me realize that I was a civilized human being and that I was connected with everybody. It was interesting, because even though you're in nature they're still going by.

I: Yeah, cool. And before we end here, do you have any recommendations for the park to improve the area that you were hiking or climbing in?

C1: Mm, no, I enjoyed it thoroughly, it was perfect in my opinion.

I: Awesome, well that's it, thank you.

**Date 11/1/15**

**Interview 150712\_016**

I: What role does rock climbing play in your life?

C1: Um, not much. I prefer skiing and this is just away to stay around here.

I: Awesome, so this was

**(inaudible from wind)**

I: What was the zip code there?

C1: **(inaudible from wind)** that's in Montana.

I: And what year were you born?

C1: '82

I: And was it just the two of you in your group today?

C1: No, there were three of us.

I: And were you with a guide or just a personal group?

C1: Solo.

I: Awesome, and how would you describe your level of climbing experience?

C1: Intermediate? **(inaudible from wind)**

I: Nice, nice, and how many years have you been climbing?

C1: Well I've been skiing for years, and I've been climbing for **(inaudible from wind)**

I: Okay nice, and on this most recent trip, did you guys summit?

C1: **(inaudible from wind)**

I: Thank you! That's so kind!

C1: **(inaudible from wind)**

I: Um so did you guys summit on this most recent trip?

C1: No, we got up to about 700 or 800 feet to go and we saw some clouds coming in and just didn't like it so we turned around.

I: I don't blame you. And was that your first time going up the grand?

C1: Um, second time.

I: Second time, did you summit it before?

C1: Yeah

I: Awesome, congrats and um on this most recent climb which route did you chose to take?

C1: Um we were looking for the Upper Exon but found ourselves on the Owen-Spaulding instead.

I: Nice, was that mostly because of conditions or?

C1: Because we are idiots and we missed it.

I: Did you experience any crowding?

C1: Um, there were a few people up there but it wasn't too bad.

I: Okay, nice. Was there still ice up there?

C1: A little bit, not too much.

I: Okay that's good.

C1: Maybe on the upper exum but were not too sure we didn't make it up that high.

I: Okay and did you guys spend the night? How many nights?

C1: Um we crashed in the truck here the first night and then hiked up the second night to the moraine.

I: Oh nice so you spent the night on the moraine? That's a good spot.

C1: Yeah not bad.

I: What motivated you to climb on this most recent trip?

C1: Uh, I had the weekend.

I: Had the weekend off? Is there a reason you chose the grand over something else?

C1: Uh, it's a big pretty mountain and it's not in my back yard so. This weekend just kind of presented itself but no special reason other than it's the grand so I figure that's reason enough.

I: And did you have any expectations for this trip?

C1: Nope.

I: No? You were just out there to have a good time?

C1: Yeah if you summit you summit that's a bonus if not you're still on plan.

I: Yeah nice, and did you chose this route because its in the recommended wilderness area?

C1: Um, no but I would say I do often try to recreate in Wilderness.

I: Is there a reason why you chose Wilderness over...

C1: Less people.

I: Gotcha, so considering this is Wilderness what did you think of the overall experience?

C1: Um, I struggle to call it Wilderness in that sense, in that setting. For me it's a little overpopulated for me but um, no it was pretty clean. Only a little bit of micro-trash up there, so for the amount of people it sees and for the amount of day-trippers I'd say they've done a really great job of keeping it as clean as they have.

I: Yeah, what was your most enjoyable experience?

C1: Um, hanging out with this guy, just all the stories.

C2: Aw don't make me blush dude.



C1: Aw, I can't tell you're too tan. That's all he did this trip was tan, what a weirdo. Are you photographing this? I don't know the best experience? It was probably last night at 2am last night when everything was still and the water was running and the stars were out.

I: That's awesome, anything you enjoyed the least?

C1: Um, this guy! No I'd say the amount of people was probably mine.

(Takes picture)

I: So would you say you experienced some crowding?

C1: Uh, only when we were on the trail itself. Then once we got up there it was fine. Then it was minimal.  
**(Inaudible from wind)**

I: **(inaudible from wind)** A lot less people in Montana.

C1: **(inaudible from wind)**

I: And you said you kind of expected the crowds? C1: Yeah I did, it was a weekend and **(inaudible from wind)**

I: Yeah, um and other than the natural risk of climbing or the natural elements or your own abilities did you experience any addition risk or anything that disrupted your experience?

C1: Nope.

C2: There was no wifi up there!

I: You can definitely get 4G though! And what kind of sounds do you remember hearing? Both on the approach and on the climb.

C1: Uh there was a few people, just chit chat, plenty of pica, marmots as well making noise. There were one or two airplanes maybe, we heard or something.

**(Inaudible from wind)**

I: Were there any sounds that you **(inaudible from wind)**

C1: **(inaudible from wind)**

I: **(inaudible from wind)** did you hear anything that was motorized like helicopters?

C1: Planes **(inaudible from wind)**

I: How did you feel about the planes?

C1: Well we are right next to an airport so I didn't even think twice about it I just kind of expect it.

I: Did you even find it difficult to communicate with each other because of the sounds?

C1: No

I: Okay. And before we end here to you have any recommendations for the park?

C1: Not really. (**Inaudible from wind**) but that's it I enjoyed it thoroughly.

I: Awesome well that's it for all the questions I have!

**Date 11/1/15**

**Interview 150712\_015**

I: What role does rock climbing play in your life?

C1: Um, before this weekend or after?

I: Both, all of it!

C1: Very little, it was just something we wanted to do. We live here, in Victor, and we've been wanting to do it for a long time and wanted to do it with Exum and we got it done.

I: Awesome, very cool, so just curious what is your zip code there in Victor?

C1: 83455

I: And what year were you born?

C1: Uh, '64.

I: And how many people were in your personal group including you, was it just the four of you?

C1: Three and then our guide, you count him right?

I: Yeah yeah, and how would you describe your level of climbing experience?

C1: Uh, brand new, novice.

I: And was this your first time climbing the grand?

C1: Yup.

I: Awesome, and did you guys summit today?

C1: We did!

I: Congratulations that's awesome, that's very cool, and what route did you climb on this most recent trip?

C1: The Owen-Spaulding.

I: And is there a reason you chose that route?

C2: They couldn't handle any other.

C3: There was a lot of ice and snow up there.

C2: Yeah the weather conditions on the mountain.

I: Cool, and did you guys spend a night up there?

C1: Yes.

I: Awesome, and what motivated you to want to climb the grand?

C1: We stare at it everyday and we decided we got to get up to the top of that mountain. Bucket list I guess.

C2: Actually truth be told we had a buddy who climbed it and he wouldn't let us live it down that he had climbed it.

[Laughter]

I: Awesome, and what kind of expectations did you have for this trip?

C1: I don't know, we didn't have any expectation s we just hoped to summit that's all. I mean what do you think the success rate is per year in general?

C2: For a guided party? About three quarters.

I: Awesome, so you summited so would you say that your experience met your expectations?

C1: Oh yeah, exceeded.

I: Awesome, this could help out Exum I don't know.

C1: Good, I hope it does!

I: And did you choose to climb the Grand because its part of the Wilderness area or anything like that?

C1: No, just cause we live here and it's the baddest mountain here so that's what we wanted to climb.

I: Cool, what did you enjoy most about your experience?

C1: The summit, are we making that point clear?

C2: You know what the places going up towards the summit were really awesome.

C1: The what?

C2: Just some of those places, the pitches going up and I mean it was just incredible, it was really beautiful.

I: Did you find anything least enjoyable?

C2: Yup, sleeping in the upper bunks for about 5 hours, next to him.

C1: The cold this morning.

C3: Wait you guys were sleeping in the same little bunk?

C1: Yeh, 21 of us.

C2: No, 15 of us.

C3: Oh I didn't realize how big it was.

C2: Yeah well it started raining which meant it was going icy on the grand so everyone piled into this room and no one would leave. So that was just hard because we had to get up so early.

I: Did you guys experience any crowding anywhere?

C1: No, I mean we had a pretty big group ourselves but the window was pretty small today so everybody go there at the same time and there were people up there who weren't able to summit for three days.

C2: Yeah they weren't guided. It just depends on the weather.

I: Yeah I hate to admit this but I've been in the parking lot for the past four days and I've seen all of the same cars here so I've had a feeling that there are people up there kind of waiting.

C1: Yeah we both had people in our schools that went and didn't make it up. We lucked out.

I: Was there anything besides the natural elements or your abilities that made you feel like you were at risk or anything like that?

C1: Well it's a risky sport.

I: Yeah the inherent risk.

C1: No, no, I mean we didn't see any bears or anything. No one was angry up there or anything like that. I'd say no.

I: And what sounds do you remember hearing on the approach to the climb and then on the climb itself?

C1: Uh, so on the approach to the climb we heard a lot of wind. On the climb itself we heard a lot of gravel hitting the mountain. And then once we started coming down we started hearing thunder and lightening so we wanted to get the get the heck out of there.

I: Did you have any sounds that you enjoyed hearing the most?

C1: Well I have to admit to you that we talked about the crows up there. They were circling around up there and we thought what are they doing up there, there's nothing up there.

I: Any sounds you didn't like hearing?

C1: Thunder and lightening.

I: And before we end here do you have any recommendations for the park to improve?

C1: Yes, a zip line off the top, straight to the parking lot.

[Laughter]

[Stop to take pictures]

I: Do you remember hearing any human caused sounds at the summit?

C1: No, we ended up letting a bunch of other people go first so w were all alone up there.

I: And that's it!

Date 11/2/15

### **Interview 150712\_014**

I: Do you live in the United States?

C1: Yes

I: And what is your zip code?

C1: 78703

I: And where is that?

C1: Austin, Texas.

I: Very cool, and what year were you born?

C1: 1959 if you must know.

I: And in your party today was it just the three of you?

C1: Yes, uhh....

C2: There were a lot of other guided groups up there.

I: Yeah but just in your party it was just the three of you?

C1: Yeah.

I: And how would you describe your level of climbing experience?

C2: I was going to say intermediate but he would probably say beginner.

C1: Not anymore, not after today.

I: And how many years have you been climbing?

C2: Uh, when did I first meet you? Three years ago?

I: And have you previously climbed the Grand before?

C1: No

I: Okay, and during this most recent climb which route did you take?

C1: Owen-Spaulding.

I: Awesome, and is there a reason you chose that specific route?

C1: Yeah it was the only one possible.

I: Oh, nice and did you make it to the summit?

C1: Yes.

I: Awesome, congratulations! That's really exciting. And what motivated you to want to climb the Grand?

C1: My guide recommended it.

I: And you spent how many days and nights?

C1: We spent two days and one night.

I: Cool, and what kind of expectations did you have for your experience?

C1: I didn't have any. Show up and see what happens.

I: Cool, and did you by any chance choose to climb the grand because it's a Wilderness area?

C1: No, I chose to climb it because this guy who's my guide recommended it.

I: And what did you find more enjoyable about your climbing experience?

C1: I think the camaraderie, a bunch of good guys, men and women, and uh I enjoyed just getting out. Leaving the cell phone at home and just not being bugged for two days.

I: Yeah, I hear that. Was there anything that you found least enjoyable?

C1: Well the weather didn't cooperate too well but you know, that's just part of the gig. You know for us coming from the lowlands, the acclimatization is the issue but other than that it was good. I like your Chacos! I've never seen the green ones! And Penn state of course!

I: You know what you can get them custom made. So I ordered the green and then just went to town.

C1: Oh wait that's not Penn State you guys are blue.

I: Yeah you are wearing my color today! So you said the weather was probably your least enjoyable part?

C1: Yeah the weather was tough.

I: Did you experience any crowding at all?

C1: Um, you know it wasn't crowding but there were a lot of people here. Its not like when you go somewhere else any you don't see anyone. There are a lot of people climbing that thing.

I: Was there any place in particular you remember seeing a lot of people?

C1: Yeah, on the Grand. On one or two ledges in particular.

I: Cool, and besides the inherent risk of climbing or the natural elements do you feel like you experience and risk?

C1: Nah.

I: Okay, what kind of sounds do you remember hearing?

C1: Sounds? I should say a lot of heavy breathing.

I: Yeah, do you have any sounds you particularly enjoyed hearing?

C1: I do particularly love the running water. A lot of that.

I: any sounds that you enjoyed the least?

C1: Yeah it was really windy. The hut we stayed in was tin so it was flapping a lot at night. Of course we had earplugs.

I: Oh that was a good call, do you remember hearing any motorized sounds near the summit like helicopters, or,

C1: Just an airplane

I: Okay, how did you feel about hearing that airplane?

C1: I love it, I'm a pilot so,

I: Oh, awesome, cool, did you even find it difficult to communicate with each other because of sounds?

C1: Yeah, it was really windy, I mean gale winds, like 40 knots and that made it difficult.

I: And my last question here is do you have any recommendations for the park to improve conditions for the area that you did your approach in and climbed in?

C1: No, it was always pretty nice. I think they are probably doing a really great job and managing a pretty heavily trafficked deal. And so there is a lot of people going up there and actually everything was in pretty good shape. And so these guides are you know, everything gets packed out. And so I thought the place looked great. Anything else?

I: That's it! Thanks!

Date 11/2/15

### **Interview 150712\_013**

I: Alright so what role does rock climbing play in your life?

C1: You know for me it's a lot of learning. I'd really like to learn things. And I know I'm just really drawn to learning different systems and techniques and that kind of stuff.

I: Cool, and do you love in the United States?

C1: Yes.

I: What is your zip code?

C1: 83002

I: What's yours?

C2: 55414

I: Where are those places?

C1: Jackson

C2: Minneapolis

I: Awesome, and what year were you born?



C1: '85

C2: 1980

I: Nice, and how many people in your group, just the two of you?

C1: Yup.

I: And is this a personal group or is there a guide?

C1: No guides.

I: Awesome, and how would you describe your level of climbing experience?

C1: Moderately experienced.

C2: Mine is beginner I'd say.

I: And how many years have you both been climbing?

C1: 6 or 7 years

C2: 2 or 3

I: And have you climbed the Grand before?

C1: I have.

I: Just once before?

C1: Yup

C2: It's the first time for me.

I: Awesome, very cool. And during the most recent climb which route did you chose to take?

C1: Owen-Spaulding

I: And is there a reason you chose to take that route?

C1: Because its easy

I: Was it icy or snowy?

C1: It was a little icy up there, we got really rained on pretty hard yesterday so.

I: And [inaudible from wind] sorry about that, got to know when to turn back, how far did you guys go?

C1: We got to the upper settle.

I: And did you guys spend the night?

C1: Yeah we spent the night on the lower settle.

I: Oh okay nice, and what motivated you to climb the Grand on this most recent trip?

C1: Um, I was just showing him around.

I: Awesome, nice and what kind of expectations did you have for you trip?

C2: To get into some beautiful places, I think that was the first thing I expected, that's about it I guess.

I: Did you choose the Grand because it is part of the Wilderness area?

C2: [inaudible from wind] Its all amazing and the Tetons are amazing.

I: Yeah, did you have the type of experience you would expect to have?

C2: Yeah

I: And what did you enjoy most about your climbing experience?

C2: I'm from the Midwest so I just like the big views.

I: Where in the Midwest are you from?

C2: Minneapolis

I: Yeah, I'm from Illinois so I can relate. Getting up high and seeing something this vast as the west is pretty cool.

C2: its pretty cool.

I: And what part of your trip has been least enjoyable?

C2: I think the freezing cold all night, not sleeping, that was probably the worst part.

C1: Sometimes I start to think that there are too many guided parties at the Grand. I just think it gets to be a little crazy sometimes. I do think the guides play an important role but in a national park it almost seems like people are able to get into something they shouldn't be able to.

I: And did you experience any crowding anywhere or anything like that?

C1: There's just a lot of people and I know guides and I support guiding but when you get up to places where no one else can get to it just strikes me as a little bit strange at times.

I: Do you have any other comments about what you see up there in the lower settle.

C1: Um, I think its pretty well kept, you know for being such a harsh environment and highly trafficked I think they've done a good job. And carrying a backpack is a good policy but in general I think they do a great job so that's awesome.

I: Do you guys feel like you guys experienced any interruptions or risks while you were up there besides the inherent risk of climbing? [inaudible from wind]

C1: No, no.

I: and what kinds of sounds do you remember hearing?

C1: bird sounds [inaudible from wind]

[inaudible from wind]

I: And any sounds that you particularly enjoyed?

C1: Um, birds. [inaudible from wind] Once you get up there you get to see a lot of cool stuff.

I: Any sounds you enjoyed hearing the least?

C2: The wind is sickening, like I got tired of that sound. Um, but usually a breeze sounds amazing, I usually love that sound. [inaudible from wind]

[inaudible from wind]

C1: There are local businesses that fly small planes [inaudible from wind]  
I get a little weirded out about that too.

I: Yeah, how does that make you feel that a prop plane is flying?

C1: I have mixed feelings about it because as a ride I'm sure its pretty sweet but when its [inaudible from wind] it sort of clashes with that idea.

I: Yeah totally, did you have any trouble communicating with each other because of sound interruptions?

C1: Yes [inaudible from wind]

I: And before I leave is there any recommendations you have for the park [inaudible from wind]

C1: Um no, I think [inaudible from wind]

**Date 11/2/15**

**Interview 150712\_012**

I: Alright, so my first question is, what role does rock climbing play in your life? You can answer too!  
[directed at C2]

C1: It definitely defines our lives.

I: In what way

C2: In that every decision we've made, the jobs we've had the lives we've lived have been done to accommodate climbing.

C1: Pretty much, yup.

I: That's awesome, do you climb for your job?

C1: Um, my job is related to climbing but I don't have to climb for my job. Like I said every decision I've made is to do more climbing and stay involved with it. I have a job in that area but I'm not climbing because of my job, this is personal.

I: Yeah.

C2: Same deal for me.

I: Awesome, and do you live in the United States?

C2: Yes, Salt Lake City

I: What's the zip code?

C2: 84814....

I: Okay and what year were you born?

C1: 1955

I: Okay, and you?

C2: '78

I: And was it just the two of you in your group?

C2: Yes.

I: It was just a personal trip, no guide?

C2: Personal trip.

I: Great, and how would you describe your level of climbing experience?

C2: Um, we've both been doing it our entire lives.

C1: Pretty high.

I: and how many years have you been climbing?

C1: 46

C2: I haven't been quite 46 since I'm not even 46 but almost 15 or 16 something like that.

I: Okay, and was this your first trip on the Grand?

C1: 50<sup>th</sup>

C2: Definitely not.

I: Fiftieth trip?! Awesome! And during this most recent climb which route did you chose?

C2: East Ridge.

I: Is there a reason you chose that route?

C1: Because he'd never done it

C2: And he'd done it 40 years ago and wanted to repeat it.

I: Awesome, and did you summit?

C2: Yes, yes we did.

I: Awesome, congratulations.

C2: So who are you with?

I: I'm with Penn State University.

C2: I'm just curious because we're involved with the initiative as well, what is your survey for?

I: So, I'm not studying climbers as much as I'm studying sounds in the park

C2: Sounds?

I: Yeah.

C2: Wow.

C1: So why the questions about the climbing?

I: Because I'm interested in your background and your wilderness experiences kind of relate to the sounds that you hear while you're climbing. So did you guys do an overnight trip or was it just the day?

C2: Car to car

C1: Day trip

I: Day trip, awesome and what motivated you to want to climb the Grand on this most recent trip?

C1: I love climbing and I love being in the mountains in these beautiful alpines.

C2: The Tetons is probably my favorite mountain range in the world, we try to come her every chance we get.

I: Um, and what kind of expectations did you have for this trip?

C2: Well not to get rained on but that didn't happen.

C1: I guess what I would say is, hope for the best but prepare for the worst. So you climb, you know you're not going to make it every time but you have to know when to back off.

I: And would you say your expectations met your experience?

C1: Yeah

C2: Oh yeah, it was a wonderful trip

I: Awesome, and did you chose to climb and hike in this area because its part of a recommended wilderness area?

C2: Yeah I love wilderness areas and I think sublimity that was part of it. I love to go to areas that there are no manifestation of civilization or people, I would say that that's part of coming and part of it is that this is such a wild and alpine mountain range. And you see wildlife and animals and birds.

I: Did you see the bear?

C1: We did see the bear.

C2: Unfortunately he was busy raiding what looked like an ant nest under some roots. He looked at us and realized that whatever he was digging at was more tasty than us.

I: [ laughter] What did you enjoy most about your climbing experience?

C1: I think it's a combination of being in a spectacularly beautiful and wild place, being in the wild and in tune with nature. I think part of it is succeeding in a big root that is both mental and physical. The third part is just doing it in a partnership with someone you enjoy being with.

I: Is there anything you enjoyed the least?

C2: Least enjoyable? I hate wind when I'm climbing.

C1: The way my knees feel by the time I get down, that's least enjoyable.

I: Yeah, did you experience any crowding while on this trip?

C1: Yeah crowding, when you get off the Grand, even when there not many people, there's one repel spot you have to wait a little bit if there's some people there.

C2: Yeah we had to wait ten minutes.

C1: Its acceptable crowding.

I: Yeah.

C1: The trail we were climbing had what we call normal hikers. Not a lot of people out today. Not like what I've seen on other nice days in July, it can get crazy out there.

I: Beyond the natural elements or your own abilities did anything disrupt or interfere with your climbing experience today.

C1: No, not that I know of.

I: Did you experience any risk besides the inherent risk of rock climbing and the natural elements?

C1: Nope.

C2: No.

I: And what kind of sounds do you remember hearing during your experience?

C1: Rock fall, hail, cracking my helmet, high winds blowing through.

C2: Marmots chirping.

C1: Thunder and lightening, certainly the sound of running water, the beauty of a creek or a small river running is very pleasant. I guess the other sound is just the sound your feet make, especially in a snowfield, just listening to the sounds your feet make.

I: What kind of sounds did you enjoy hearing the most?

C2: The creek.

C1: The water flowing is number one. And when it wasn't too strong the sound of the wind and the feeling of the wind.

I: Any sounds you remember not enjoying hearing?

C1: Thunder and rock fall. Those are both scary. It raises your awareness and makes you on your game

I: Do you remember hearing any human caused sounds near the summit?

C2: Yes, definitely.

C1: Yeah.

I: What did you guys hear?

C2: there were two other people at the summit when we got there, we heard people.

I: Okay, was it ever hard to communicate with each other because of sounds?

C1: Sometimes the wind make it pretty hard to hear but not any people sounds no, it was natural sounds.

I: Before we end do you have any recommendations for the park to improve the conditions that you were hiking and climbing in?

C2: Wow that's big question. I think this area is very well maintained. I think it's a shame that trails were used in the seventies aren't here anymore so I think a more extensive trail system.

I: Yeah, anything else?

C2: That's all I can think of. Good luck!

**Date 11/18/15**

**Interview 150712\_011**

I: Alright, so what role does rock climbing play in your life?

C1: Oh my goodness, I've been rock climbing for a number of years now. I love it because its kind of all consuming you have to really focus on it.

I: And do you live in the United States?

C1: Yes, we live in southern California.

I: What is your zip code?

C1: 92677

I: And where is that?

C1: Laguna, Orange County.

I: Oh awesome, I moved here from San Diego. And what year were you born?

C1: Uh, '64. Wow I am really tired.



[laughter]

I: And how many people were in your party including you?

C1: Three of us.

C2: Yeah the third one is coming down right now.

I: And you used a guiding service yes?

C1: Yeah.

I: And how would you describe your level of climbing experience?

C1: Oh god.

C2: You're experienced! She's experienced!

C1: I'm a little more intermediate, we'll leave it at that.

I: Okay, and you said you've been climbing for four years?

C1: Yeah, I haven't tried lead, I do it more for recreation.

I: So during this most recent climb which route did you choose?

C1: Owen-Spaulding.

I: Awesome, and is there a reason you or your group chose this route?

C1: Because our guide recommended it.

I: Awesome, and did you guys summit?

C1: Yes, we did.

I: Awesome guys congratulations, that's really awesome. And approximately how many days and how many nights were you out?

C1: Two

C2: We left yesterday morning, we were at the upper settle by five last night and then we got up at three this morning and we left the hut at 3:55 and we summited at about 9:30.

C1: And you just saw us coming down.

C2: Yeah and we just arrived. We stopped for lunch and a couple other little stops.

I: Nice, and what motivated you to want to climb the Grand Teton?

C1: Well, I've never been to Wyoming, I've always wanted to go to Wyoming first and foremost. And then I like when we do vacation trips to do some kind of adventure. We always like to do something...

C2: She can't just sit with an umbrella drink on the beach

C1: Exactly. So it just seems like if we were coming here it combines mountaineering, rock climbing, hiking, all that so it was kind of the best of everything we've been working on for a couple years now.

I: Nice! I like it, I love your style. And what expectations did you have for your trip?

C1: Well we wanted to summit, that's first and foremost I guess. Um, I don't know that's probably it really.

C2: For the climb yeah, for the trip we wanted to climb and experience the Grand Teton.

I: And would you say your experience met your expectations?

C1: Yeah

C2: Yes.

I: Awesome, cool. And then did you choose to hike and climb the Grand because it's part of a recommended Wilderness area?

C1: No

C2: No, that didn't have an impact.

I: Okay, just curious. Um, what did you enjoy most about your climbing experience?

C1: Oh my gosh, it had a little bit of everything in it.

C2: That's probably what I enjoy most, it had a little of everything.

C1: And we had an amazing guide. That's part of it too because we worked with a guide service, that's part of our success too. That's not something we would have taken on ourselves. I really do mean that! But it really does the experience for us, yeah it has everything. I mean we were just talking about that in the way down. I mean you get the beauty of the hike...

C2: You get a huge hike you get all different kind of rock climbing techniques, it was fun.

I: Cool, did you find anything least enjoyable?

C1: At some point the walk down gets a little bit long but that's it.

I: And in your experience did you find any crowding like in Garnett Canyon or...

C1: No, we were saying that, that we've been really lucky. I don't know personally but it seemed like it was pretty quiet the entire time.

C2: We were the only ones on the summit.

I: Nice, that's a cool experience. Beyond natural elements or your abilities did anything disrupt or interfere with your climbing experience?

C1: No, it was pretty clockwork.

I: And what kinds of sounds do you remember hearing?

C1: The thunder! That's an interesting part of it. I kept thinking about weather so you're just kind of waiting for what's coming.

C2: The sound of the falls.

C1: The falls, that's huge one. Birds, kind of stuck out more than any other wilderness sounds. Trying to think what else.

C2: Heavy breathing.

C1: Actually the sound of the alarm going off at 3am... that was the best part.

C2: I was actually waiting for that so I could get up and go!

C1: I think its interesting, you'd expect there to be wind and stuff but I think as we were summited I was surprised by how quiet it was near the top which is kind of nice. But yeah.

I: Do you have any sounds you enjoyed hearing?

C1: The water is nice! And there's so much of it. So much all the way through the entire trip. And now I'm actually starting to appreciate the thunder. Now that I'm starting to realize how it fits into the Wyoming ecosystem.

I: Nice, any sounds that you didn't enjoy hearing?

C1: Um, snoring?

[Laughter]

C1: No not that I can think of.

I: Nice, nice. And do you have any recommendations for the park for the areas that you went through on your hike, on your climb?

C1: No actually, I was thinking about it. We've been to other national parks and this one is really nice. The trails, the signs, everything is really nice. We've had other experiences that aren't the same. We even saw rangers and that was nice.

I: Cool! And before we end is there anything else you would like to share in regards to your experience?

C1: I don't know encourage people to come out to Wyoming and to the Grand and experience it.

C2: Hire Exum!

[Laughter]

I: Well thank you very much!

**Date 11/19/15**

**Interview 150712\_010**

I: Alright, so what role does rock climbing play in your life?

C1: For me its recreation and for him its recreation and his job.

I: Oh cool

C2: Yeah it's a pretty big part of our lives I guess

I: Whats your job?

C2: I do rescues for Banff Park

I: Oh nice we were just talking about Banff today, I went when I was a kid but haven't been recently, its high on the list of places to go back to. And so you guys live in Canada?

C2: Yup

I: And what year were you born?

C1: I was born in '82 and he was born in '84

I: Awesome, and was it just the two of you in your climbing party today?

C1: Yup

I: And how would you describe your level of climbing experience?

C2: Um, expert and medium?

I: And how many years have you been climbing?

C2: I've been climbing 13 years and how long have you been climbing [referring to C1] You've probably been climbing longer than me.

C1: Uh, I don't know probably 10 years.

I: And have you climbed the Grand before?

C1 & C2: First time!

I: Oh cool! During this most recent climb which route did you take?

C1: The Exum, the upper Exum.

I: And is there a reason you chose this route?

C2: Its just a classic, we wanted to do the full Exum but the forecast didn't look that good so we thought wed do a bit shorter route and it was definitely long enough.

I: And did you guys summit on this climb?

C1: Yup!

I: Oh very cool congratulations! Did you spend any nights up there?

C2: Yeah we spent one night.

C1: At the cave camp site.

I: Nice, and what motivated you to want to climb the Grand?

C2: Well we were on a road trip and well, its there. It's a pretty cool looking peak and I don't know we were doing a road trip in southern Idaho and we've never been to this area before, we just kind of wanted to check it out.

I: Nice, all good reasons! What kind of expectations did you have for your trip?

C1: I thought we were going to get rained out and not be able to do anything

C2: Well I knew it was going to be very vertical, and it was. I guess I thought it was going to be busy but we got up early and it wasn't too busy so that was good.

C1: I think it was easier than I thought.

I: Nice, and when you think of the experiences that you had did they meet your expectations?

C1: Yeah

I: Other than the weather holding up for you

C1: Yeah, that was nice!

I: And did you chose to climb the Grand because its part of the recommended wilderness area?

C1: I don't know what a recommended wilderness area is so no [laughter]

I: That's funny, I didn't really either. Um but its just an area that's managed the same way that wilderness is. I don't know, are the parks in Canada similar where in a national park there will be sections of the part that are managed in different ways?

C2: I don't know, I don't know if its done purposely or it just happens like that. The do limit development in some areas so that there's more wildlife and less people and they've closed down some trails and stuff like that. So I don't know I'm not really in that part of parks but there probably sis that discussion.

I: Oh okay cool, so what did you enjoy most about your hiking experience that you had on the Grand?

C1: The climbing!

C2: Yeah the climbing, cool positions, beautiful views, yeah. Friendly people.

C1: These chips, taking my boots off....

[Laughter]

I: And what did you find least enjoyable?

C1: My sore feet.

I: Anything else?

C2: Um, I don't know, nope.

I: Nice. Did you experience any crowding at all?

C2: Wasn't bad no. There were a couple folks at that campsite and it looked busy behind us but it wasn't too bad for us.

I: Beyond the natural elements or your team's abilities did anything disrupt or interfere with your climbing?

C1: Nope.

I: What about risk? Did you experience any risk besides the inherent risk of climbing or the natural elements, anything like that?

C2: Nope.

I: Nice, and what kinds of sounds do you remember hearing on your hike or climb?

C1: There were birds.

C2: Yeah we heard birds pretty high up this morning, probably around 12,000 feet. So that was pretty neat

C1: We could hear the river from the campsite. We could hear airplanes actually. We heard a bunch of airplanes this morning

C2: At least we think they were, it kind of sounded like Thunder. I don't know how busy that airport is but we heard like five before seven in the morning it was crazy.

I: And what kinds of sounds did you enjoy hearing?

C2: Oh we heard some rock fall this morning.

C1: And there was a rescue this morning so we heard a helicopter.

I: Was it on the Grand, was it close to you?

C2: No it was lower down on the middle Teton.

C1: I enjoyed the birds.

I: Okay, um what sounds did you enjoy hearing the least?

C1: The airplanes.

C2: Yeah I mean they didn't bother me that much I was more nervous that it was thunder coming. That's what I enjoyed the least but we were well down by then.

I: Yeah, did you notice hearing any of those helicopters or noises from the airplanes near the summit?

C2: We heard the helicopter when we were at the summit. Or was it lower down, I'm not sure.

C1: I don't remember.

I: Did you ever find it difficult to communicate because of outside sound interruptions?

C2: No.

I: Okay, do you have any recommendations for the park to improve the conditions of the area you were hiking and climbing in?

C2: They could make the trails through the boulder fields a little bit more defined. They are quite tricky to get through.

C1: I think that's all.

C2: The climber ranger thing seems good. Packing up your own waste seems to work. Seems pretty easy for them, most people go to the one spot so they can sign in so they can hand out the bags and can control the waste that way. In the Rockies in Canada is much more difficult to control because we don't sign people in. Sounds like it does get busy with guided groups up there but it wasn't too bad. The guides that we ran into were friendly and helpful so that was good.

I: Nice and then before we end do you have any more comments that you want to share?

C1: Um, no.

I: Thank you so much guys!

Date 11/19/15

### **Interview 150712\_009**

I: So what role does climbing play in your life?

C1: Uh, I've been climbing for 23 or 4 years now, its been my profession for the last seven, actually probably more than that, its been my profession since 2001. I was a climbing guide and now I'm a climbing guide for Patagonia climbing company and now I'm a photographer for them as well. So I would say it's a pretty large role.

I: That's awesome! And do you live in the United States?

C1: I do, I live in Oregon.

I: And what is your zip code there?

C1: 97756

I: Cool and what year were you born?

C1: 1979

I: Cool, and how many people were in your party?

C1: Just one other girl.

I: Okay, and how would you describe your level of climbing experience?

C1: Professional.

I: Have you ever previously climbed the Grand before?



C1: Nope.

I: Wow congratulations!

C1: Thanks!

I: What route did you chose the climb on this most recent trip?

C1: We did the Petzel direct ridge. We chose it because a friend who lives here said that's one we should do. I hadn't even looked at the guide book until we started packing up yesterday, we had no idea what we were going to do.

I: Cool, and did you summit on this trip?

C1: Yup, we did at noon today.

I: Awesome, and did you guys spend the night up there last night?

C1: Yup, at the moraine camp.

I: Nice, that's a good spot.

C1: Yeah! It started pissing rain as soon as we got there. We were going o go to the lower saddle but it just got way too rainy.

I: Um, what motivated you to want to climb the Grand Teton?

C1: Um, I mean it was one of the peaks I had always heard about growing up, its pretty iconic, it also happened to be in between where I'm coming from and where I'm going. It was an easy stop because I'm coming from Washington and going to Lander, I made the plan like three days ago.

I: Awesome, and what kind of expectations did you have for your trip?

C1: Um, not many. We were just going climbing.

I: That's good! Did you chose to climb the Grand because its in a recommended Wilderness area?

C1: Uh, no.

I: Just curious. And what did you enjoy most about your climbing experience?

C1: Uh, I don't know, fun day out on the mountains. Out there, there wasn't many people around. I heard that rock can be really busy but we were the only people out there really. Yeah just getting to see a new area. Checking out an area I've never been to.

I: Nice, and was there anything that you enjoyed the least?

C1: Uh, the pissing rain, we got everything wet. Walking down right now. Too many miles on the feet lately. It was a little long coming down but that's okay.

I: And you said you didn't experience any crowding while you were up there.

C1: No, I mean I was expecting people from what I've heard about climbing the Grand and the upper Exum. I know the weather has been funny and that knocked down the crowds I'm assuming but we kind of passed one team that was it and they were off to the side and that was it. I mean by the amount of people hiking up there right now and I can tell we were lucky today. I just think it was due to the high chance of rain today.

I: Beyond the natural elements or your team's abilities did anything disrupt or interfere with your climbing?

C2: Oh I think they should have a toilet up there!

C1: I was about to say that! I was about to say well I kind of had to go poop on the route and the whole walk back I was really surprised

C2: The parks in Canada does it was better, they fly up like every major climbing area/ well used area they have toilets flown in and flown out.

C1: Yeah there toilets all over the place, almost every possible busy area there was a toilet. I was really surprised to see they don't have toilets up there. It was an issue.

I: Yeah, and what about risk. We all know climbing is inherently risky but did you experience any risk other than natural elements or your team members abilities?

C1: No I would say it was fairly low risk given our experience level.

I: And what kinds of sounds do you remember hearing?

C2: Airplanes. It was startling. I was like oh I guess the airports really close.

C1: Yeah and it can sound like Thunder or rock fall, the initial load noise is a real concern because I spend so much time on the mountains. I get startled. Yeah the jets. And part of the Marian was collapsing. That made us jump but it was probably just a big boulder shifting.

I: And what kinds of sounds did you enjoy hearing the most?

C2: The birds.

C1: Yeah there were a lot of birds up there. That was nice. I also like the sound of the water.

I: And what kinds of sounds did you enjoy hearing the least?

C1: Those airplanes.

I: What about near the summit, do you remember hearing any human caused sounds near the summit? From things like planes, helicopters...

C1: I mean just the planes. That seemed like that was it.

I: Did you find it difficult to communicate with each other at all because of sounds that were too loud?

C1: Nope.

I: That's good. Um, do you have any recommendations for the park to improve the conditions you were climbing, besides the toilets?

C1: Besides the toilets, um no it actually seems pretty well managed. Signage wise, trail building is good, they've done the right level of trail building where it's not just like a total highway. The erosion control seems to be adequate. For the amount of traffic up there I thought it was really well done.

I: And before we end is there anything else that you guys want to add as far as sounds that you heard or experiences you had on the Grand?

C1: Nope, nothing stands out.

I: Well thank you so much for sharing!