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Assessment of the Usage of the National Geographic Greater Yellowstone MapGuide

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Assessment of the Usage of the National Geographic Greater Yellowstone MapGuide

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Executive Summary

This study was conducted to gain information about the uses of the Greater Yellowstone MapGuide (both the printed and website versions) and how this tool has influenced those who use it.

People who subscribed via e-mail to the Greater Yellowstone newsletter were the study population. Emails with a survey link were sent to 796 people resulting in a sample of 69 respondents who returned the completed web survey. Of the 297 people who opened the email, 23 percent responded. This is a small sample size and the results should be used with caution. Results of the study show:

- Eighty-seven percent of the sample used the website, print, or both types of MapGuides, while 13 percent reported that they had not used either of the guides.
- The printed MapGuide was mostly used to do planning, both before and during trips (51% for both).
- The website MapGuide was used for pre-trip planning (43%) and learning about the area (36%).
- Of the 13 percent who had not used the MapGuide(s) all of them indicated that they simply did not know about the MapGuides.
- For those who had visited the area, the average number of trips taken by MapGuide “users” was 3.3 and “non-users” averaged 3.0 trips. The average number of nights the “users” spent away from home during their Greater Yellowstone trip was 6.17, while the “non-users” averaged 6.71 nights.
- Some of the respondents were influenced by the MapGuide to extend their trip and four percent indicated that they stayed two or more nights because of the guide.
- About half of the respondents said the MapGuide influenced their choice of travel routes and about a quarter were influenced in their choice of where to spend their nights.
- Forty-one percent of people who used one of the guides visited a natural landmark because they saw it on the MapGuide. Visitor centers were chosen by 35 percent of “users” as a site they visited because they had seen it on the MapGuide and 25 percent cited historic sites.
- Thirteen percent of “users” of the MapGuide indicated that they were prompted by the MapGuide to purchase locally grown food.

The Greater Yellowstone MapGuide appears to be an influential tool on the choices many visitors make for visiting the area. The findings of this suggest that the Geotourism concept, as portrayed by the MapGuide, is a successful tool in visitor management.

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Introduction

Geotourism, or “tourism that sustains or enhances the geographical character of a place: its environment, culture, aesthetics, heritage, and wellbeing of its residents” (Stokes et al., 2003), has been embraced by the state of Montana to allow tourism to flourish in a sustainable manner. The Greater Yellowstone, which includes south central Montana, is one of the regions where a successful Geotourism MapGuide has been implemented. This region includes Montana, Idaho, Wyoming, Utah, and contains Yellowstone and Grand Teton National Parks.

National Geographic’s Center for Sustainable Destinations provides tools through which communities can build a geotourism-oriented tourism industry. The geotourism MapGuides are two-sided, map-brochures and are co-branded by National Geographic and the destination, in this case, the Greater Yellowstone. The MapGuide is intended to be widely distributed free of charge (National Geographic, 2006).

National Geographic creates the map and provides guidelines in all facets of geotourism, but a local alliance is at the heart of this effort and provides all of the content for the guide. For the Greater Yellowstone MapGuide, beginning in 2008, communities from around the region helped identify attributes that are “most distinctive of, or unique to, the locale” (National Geographic, 2006). These attributes highlight the culture and traditions, nature and environment, heritage sites, aesthetics, and visitor experiences within the Greater Yellowstone region. Over 400 sites were originally nominated for inclusion in the guides.

The purpose of this project was to gain information about the uses of the MapGuide (both the printed and website versions) and how this tool has influenced those who use it. The objectives were to:

1. Understand how the printed MapGuide is being used.
2. Understand how the MapGuide website is being used.
3. Determine if the MapGuide use affected the visitor’s length of stay in Montana.
4. Determine if the MapGuide influenced the visitor’s choice of activities, accommodations, dining, sites or events visited.

Methods

A web survey was used for this project with the sample coming from a list of email addresses from people who have subscribed to the Greater Yellowstone newsletter. The survey instrument consisted of questions regarding their usage of the MapGuides, how they used them, and if the guides influenced their decisions. Survey respondents were automatically routed to questions that corresponded with their answers to allow for tailoring the questions to respondents.

The survey was sent out by the Greater Yellowstone Geotourism Coordinator on January 11, 2012. A reminder was sent one week later on January 18, 2012. A total of 796 emails were sent

out with the link to the survey (See Appendix A for survey instrument). Of those emails, 297 (37%) were actually opened. The final sample size of completed surveys was 69 (9% of those sent the email, 23% of those who opened the email). This is a small sample size and the results should be used with caution.

Results

The results of this study are presented below and are arranged with subheadings to allow the reader to follow a logical path through the data. The first section discusses the sample as a whole, in terms of their use of the MapGuide and their background.

About the Sample

The first piece of information collected about the sample concerned their use of the MapGuide. Segmenting the sample by this criterion was crucial to how the survey unfolded. Respondents were more likely to be MapGuide users than not (87% user vs. 13% non-user). Forty-three percent of the sample used both the website and print MapGuides (Table 1). Thirteen percent reported that they had used neither guide. Throughout the remainder of this report, the data is often broken down by “users” and “non-users” of the MapGuides.

Table 1: Uses of the MapGuides

Use of the MapGuide (n=68)	% of respondents
Used both	43% (29)
Used only the printed MapGuide	32% (22)
Used neither the printed or website	13% (9)
Used only the website MapGuide	12% (8)
Total MapGuide Users	87% (59)
Total Non-users	13% (9)

Respondents included 36 males (52%) and 31 females (45%, with 2 not answering the question). Table 2 displays their education level with most holding a Bachelor’s Degree (29%). The average age of the respondents is 58 years with a range from 30 to 81.

Household income levels of the respondents are displayed in Table 3. Most people earn between \$50,000 and \$100,000 a year (41%) in U.S. dollars. Table 4 lists all of the U.S. states, foreign countries, and Canadian provinces represented in the sample by three or more of the respondents. Montana was the residence most often cited, followed by Florida and Idaho.

Table 2: Education Level of Respondents

Education Level	% of respondents (n=68)
Bachelor's Degree	29% (20)
Master's Degree	27% (18)
Some college	22% (15)
Associate's Degree	10% (7)
High School	6% (4)
Doctorate	4% (3)
Some high school	2% (1)

Table 3: Income of Respondents

Income Level	% of respondents (n=62)
Less than \$25,000	4% (3)
\$25,000 to less than \$50,000	10% (7)
\$50,000 to less than \$75,000	19% (13)
\$75,000 to less than \$100,000	22% (15)
\$100,000 to less than \$150,000	16% (11)
\$150,000 to less than \$200,000	12% (8)
\$200,000 or more	7% (5)

Table 4: Place of Residence

Residence**	Total Respondents, (n=69)
Montana	12% (8, with 6, living in the GY region)
Florida	10% (7)
Idaho	7% (5, with 5, living in the GY region)
Mississippi	7% (5)
New Jersey	7% (5)
California	6% (4)
Texas	4% (3)
Washington	4% (3)
Illinois	4% (3)

*percentages are rounded up

**other U.S. states represented: Arizona, Colorado, Georgia, Massachusetts, Minnesota, Missouri, Ohio, Oklahoma.

Canadian Provinces represented: Alberta. Foreign Countries represented: Australia, Canada, Italy, UK.

Greater Yellowstone MapGuide Use

Respondents who indicated they used the printed guide, the website guide, or both were asked how they used the guides. The *printed* MapGuide was used equally for pre-trip planning and during-trip planning (51%) (Table 5). Forty-five percent of respondents used the printed MapGuide to learn about the area and 22 percent viewed the printed MapGuide for directions.

The *website* MapGuide was also used for pre-trip planning (43%) and learning about the area (36%). Sixteen percent of respondents indicated that they used the website guide for directions, followed by 12 percent who viewed the website for entertainment (Table 5).

Table 5: Use of the MapGuides

Reason for use	<i>Printed MapGuide</i>	<i>Website MapGuide</i>
Pre-trip planning	51% (35)	43% (30)
During trip	51% (35)	6% (4)
To learn about the area	45% (31)	36% (25)
For directions	22% (15)	16% (11)
To view for entertainment	20% (14)	12% (8)
Other*	4% (3)	4% (3)

*respondents were asked to check all that apply

**other responses can be found in Appendix B

Respondents who indicated they had not used the MapGuide(s) were then asked why (Table 6). Only 8 people in this sample indicated that they had not used the MapGuide and all of the “non-users” (12% of the sample) indicated that it was due to not knowing about them.

Table 6: Reasons for not using the MapGuides

MapGuide non-users (n=8)	% and # of respondents
Did not know about them	12% (8)
Do not usually use maps	--
Already know the area	--
Find the map confusing	--
Other	--

Visits to the Greater Yellowstone Area

Both groups (those who indicated they used one/both of the MapGuides and those who had not) were asked if they had visited the Greater Yellowstone area for pleasure in the last two years (Table 7). This time frame was set to ensure they traveled when the MapGuide was in existence. Table 7 shows that “users” of the MapGuide were more likely to have visited the Greater Yellowstone area within the last 2 years. Eighty-six percent of “users” had visited in the last 2 years, while 78% of “non-users” had visited. In both cases, most respondents had taken a pleasure trip to the area.

Table 7: Pleasure Trip to the Greater Yellowstone Area in the Last 2 Years

Pleasure trip taken?	% and # of <i>Users</i> (n=59)	% and # of <i>Non-Users</i> , (n=9)
Yes	86% (51)	78% (7)
No	14% (8)	22% (2)

Greater Yellowstone Area Trip Details

For those who had visited the area for pleasure, the average number of trips taken by MapGuide “users” was 3.3 and “non-users” averaged 3.0 trips. On average, “users” utilized the MapGuide for almost all of their trips taken to the Greater Yellowstone area (2.49 trips out of 3.27 trips). The average number of nights the “users” spent away from home during their Yellowstone trip was 6.17, while the “non-users” averaged 6.71 nights.

In order to get a sense of where in the region people spent their time, a map was displayed in the web survey and respondents were asked to click on the towns they drove through on their most recent pleasure trip to the Greater Yellowstone region. Towns that both “users” and “non-users” of the MapGuide indicated they drove through on their pleasure trip are shown in Table 8.

Figure 1 shows the “user” data in a visual format with the percent of visitors being represented by different color schemes. Visitors concentrated themselves in Yellowstone National Park and spread from there. Visitors in this sample tended to spread from Yellowstone National Park to the south into Wyoming but some also ventured north from the park into Montana. Figure 2 shows the “non-user” travel route data visually. The “non-user” data is from an extremely small sample size but it is clear that these people also concentrated themselves in Yellowstone. In this case, a high frequency of respondents traveled south into Wyoming and less spread out in other directions.

Table 8: Percent of Respondents who included these Towns in their Travel Route

Greater Yellowstone Towns Traveled*	% of “user” respondents, n=47	% of “non-user” respondents, n=7
Madison Junction, YNP	70%	71%
West Yellowstone, MT	68%	43%
West Thumb, YNP	64%	57%
Canyon Junction, YNP	57%	71%
Lake Village, YNP	57%	57%
Norris Junction, YNP	57%	57%
Old Faithful, YNP	57%	57%
Jackson, WY	53%	71%
Moran, WY	51%	71%
Gardiner, MT	47%	14%
Mammoth, YNP	47%	29%
Bozeman, MT	45%	14%
Tower Junction, YNP	45%	57%
Livingston, MT	40%	14%
Cody, WY	36%	29%
Ashton, ID	30%	14%
Cooke City/Silver Gate, MT	30%	43%
Island Park, ID	26%	14%
Red Lodge, MT	26%	43%
Driggs, ID	19%	29%
Victor, ID	19%	14%
Ennis, MT	17%	--
Laurel, MT	17%	14%
Rexburg, ID	17%	--
Thermopolis, WY	17%	29%
Billings, MT	15%	14%
Dubois, WY	15%	14%
Idaho Falls, ID	15%	14%
Lander, WY	15%	--
St. Anthony, ID	13%	--
Three Forks, MT	13%	--
Big Timber, MT	11%	--
Meeteetse, WY	11%	14%
Shoshoni, WY	11%	14%
Virginia City, MT	11%	--

*other towns on map: Absarokee, Alpine, Belfry, Big Sky, Bridger, Green River, Hardin, Kilgore, Lava Hot Springs, Lovell, Logan, Montpelier, Pinedale, Riverton, South Pass City, Soda Springs, and Wapiti.

Figure 1: Percent of MapGuide “Users” who included these GY Towns in their Travel Route

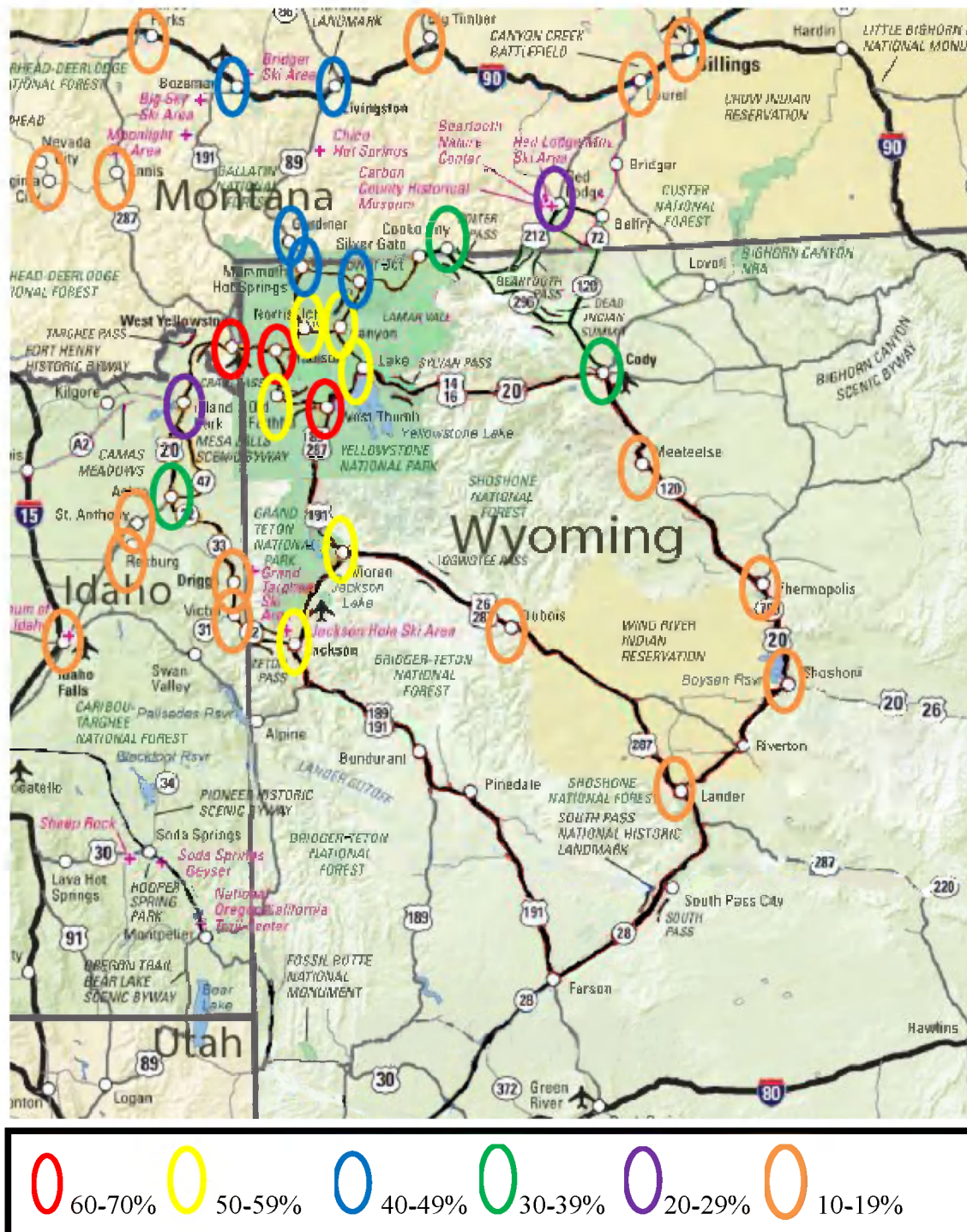


Figure 2: Percent of MapGuide “Non-Users” who included these GY Towns in their Travel Route



Table 9 shows the percentages of respondents spending at least one night in Greater Yellowstone towns. This table is limited to towns where at least 2 respondents reported spending a night. The list of other towns can be found below the table. This data is also broken down by “users” of the MapGuide and “non-users.” West Yellowstone was cited most frequently as a place respondents spent at least one night. This is true for both categories but for “non-users” the same percentage spent one night or more in Jackson, Wyoming as well. For “users” of the guides, Jackson was next highest but for “non-users” the next highest was Old Faithful. Figures 3 and 4 present this data visually with one of the biggest differences between them being the concentration of people north and south of the park area.

Table 9: Greater Yellowstone Towns where Respondents Spent at least One Night

Greater Yellowstone Towns where Nights were Spent*	% of “user” respondents, (n=43)	% of “non-user” respondents, (n=6)
West Yellowstone	30%	33%
Jackson	26%	33%
Old Faithful	21%	17%
Canyon Junction	19%	--
Cody	16%	17%
Bozeman	14%	17%
Cooke City/Silver Gate	9%	--
Lake Village	7%	17%
Mammoth	7%	17%
Madison Junction	5%	--
Gardiner	5%	17%
Tower Junction	5%	--
Island Park	5%	--
Red Lodge	5%	17%
Driggs	5%	17%
Rexburg	5%	--
Billings	5%	--
Farson	--	17%
Thermopolis	--	17%

**Additional nights spent in: West Thumb, Norris Junction, Moran, Victor, Ennis, Thermopolis, Dubois, Idaho Falls, Riverton, Lovell, Livingston, Ashton, Laurel, Lander, St. Anthony, Three Forks, Big Timber, Meeteetse, Shoshoni, Virginia City, Alpine, Swan Valley, Belfry, Nevada City, Pinedale, Farson, South Pass City, Green River, Hardin, Kilgore, Logan, Montpelier, Soda Springs, Absarokee, Belgrade, Big Sky, Cardwell, Chief Joseph, Columbus, Lava Hot Springs, Red Rock, Wapiti, Bondurant, Bridger.

Figure 3: Percent of MapGuide “Users” who Over-nighted in GY Towns

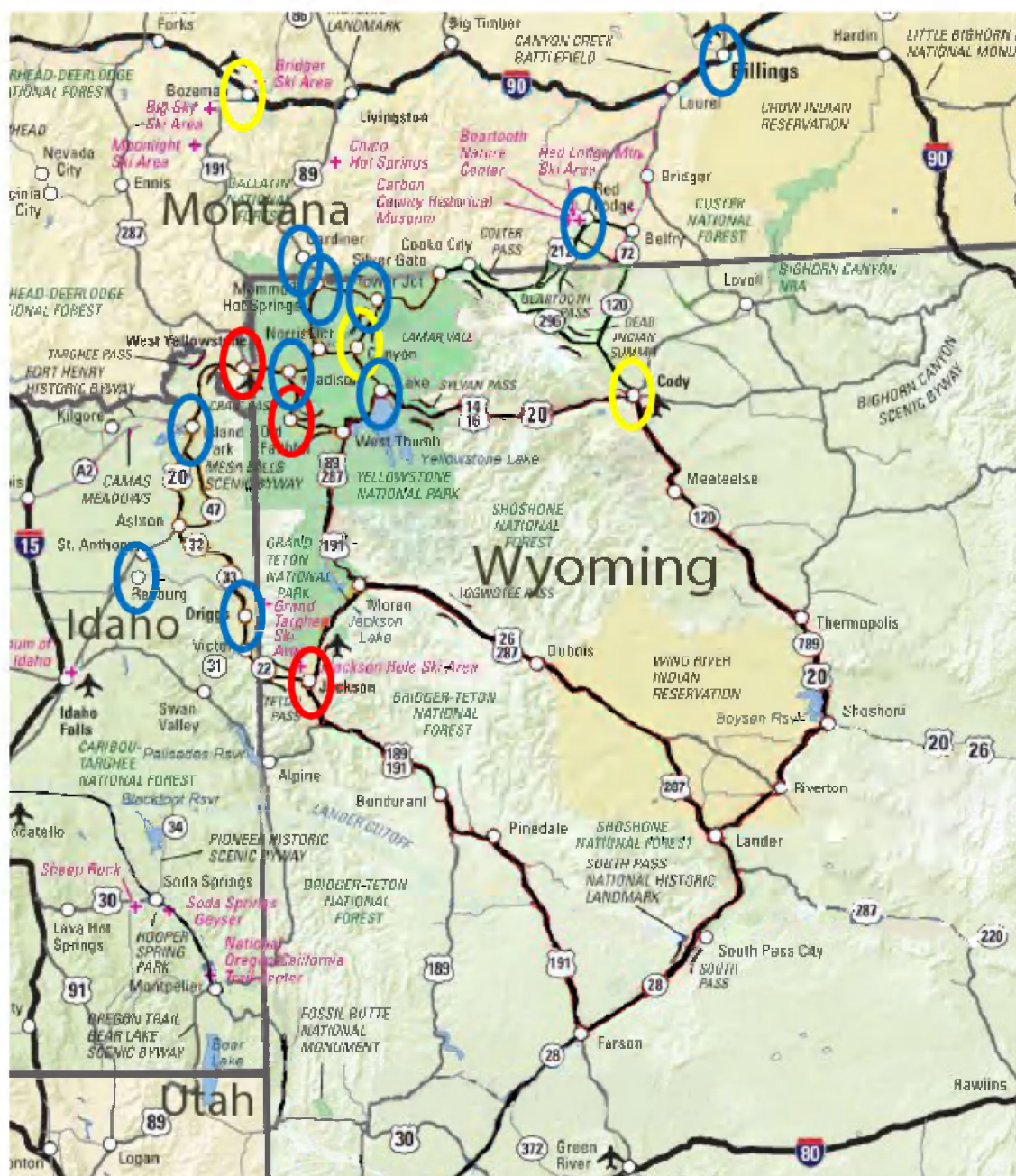
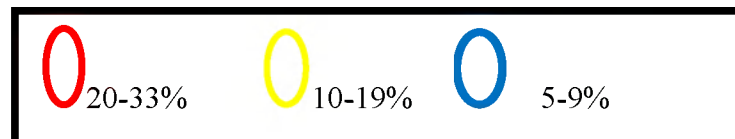
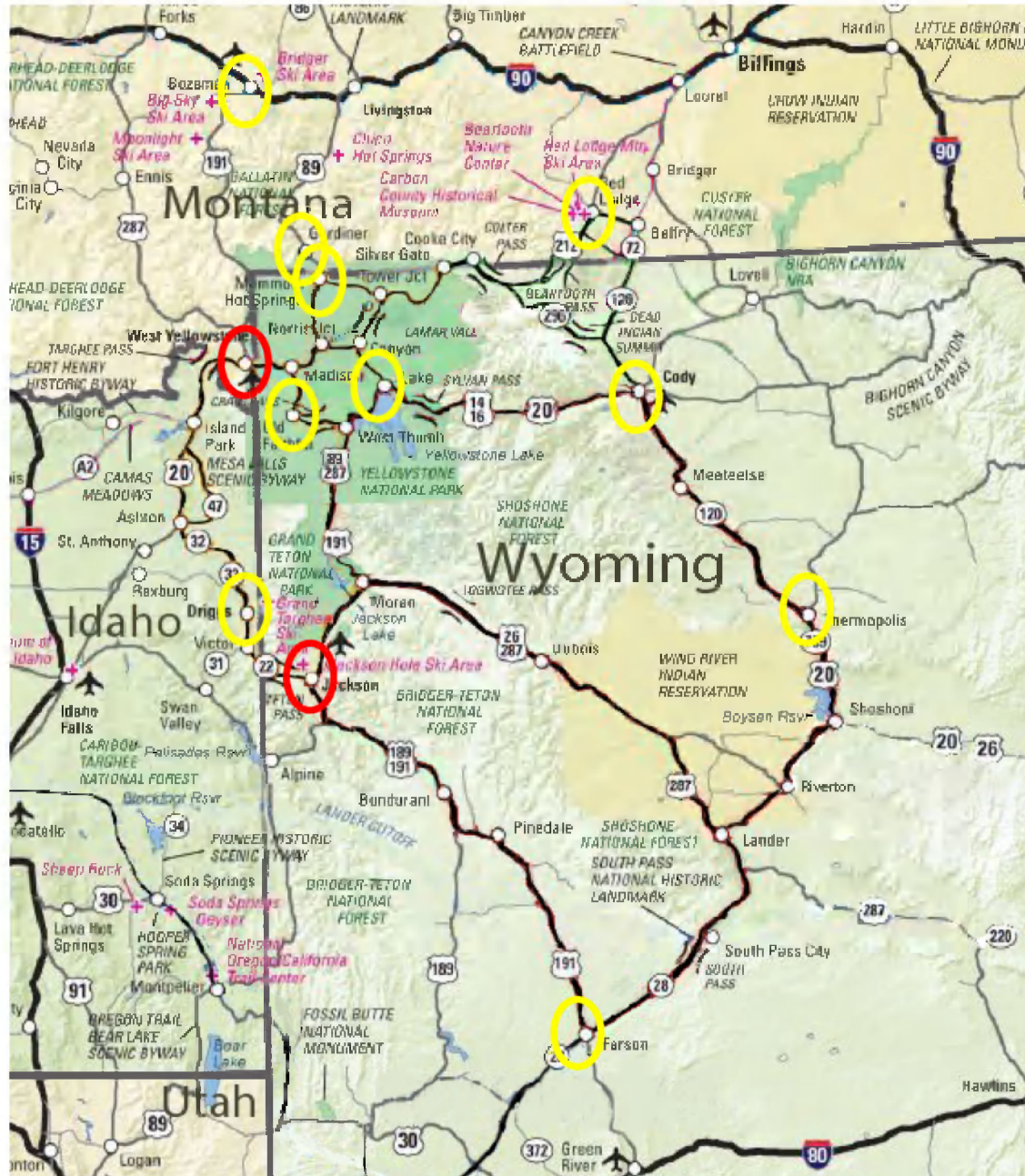


Figure 4: Percent of MapGuide “Non-Users” who Over-Nighted in GY Towns



Influence of MapGuide

One of the main objectives of this study was to determine how the MapGuides are influencing people's travel decisions. To determine this we first asked if the MapGuide (print or website) influenced their length of stay on their most recent trip to the Greater Yellowstone area. If the response was yes, they were asked to identify if the trip was shorter or longer because of the MapGuide (Table 10). Sixteen percent of the respondents (9 visitors) extended their length of stay anywhere between 1 hour and more than two nights. Eighty-four percent of respondents indicated that their length of stay was not influenced by the MapGuide. Two visitors indicated they stayed two or more nights because of the guide.

Table 10: Influence of MapGuide on Length of Stay

Influence on length of stay	% of respondents
No Influence	84% (50)
1 night longer	8% (5)
2 or more nights longer	4% (2)
More than 4 hours but not overnight	2% (1)
1-4 hours longer	2% (1)
Shorter stay	--

About half of the respondents felt the MapGuides influenced their travel route, and as many as 27 percent indicated that the location of their overnight accommodations was influenced by the MapGuides (Table 11).

Table 11: Influence of MapGuide on Travel Route and Overnights

Influence on Travel Route	% of respondents
Yes	46% (27)
No	54% (32)
Influence on where Nights were Spent	% of respondents
Yes	27% (4)
No	73% (43)

As mentioned previously, there are many sites displayed on/in the MapGuide. One of the objectives of the study was to assess if the MapGuide was pointing people to these featured sites. As seen in Table 12, 41 percent of people who used one of the guides visited a natural landmark because they saw it on the MapGuide. Visitor centers were chosen by 35 percent of "users" as a site they visited because they had seen it on the MapGuide and 25 percent cited historic sites. Results show less influence of the MapGuide for art galleries, tours/guided trips, festivals, farmer's markets, and performing arts.

Table 12: Sites Visited because of MapGuide Influence

Site Visited because of MapGuide*	% and # of respondents, (n=43)
A natural landmark	41% (18)
A visitor center	35% (15)
A historic site	25% (11)
A wildlife watching site	25% (11)
A trail/hike	22% (9)
An eating/drinking establishment	19% (8)
A designated wilderness	17% (7)
A museum	17% (7)
A paid accommodation	13% (6)
None	13% (6)
A shop/boutique	9% (4)
An art gallery	4% (2)
A tour/guided trip	3% (1)
Other*	3% (1)
A festival	2% (1)
A farmer's market	1%
A performing arts event	1%

*"other" responses can be found in Appendix B

Activities are also featured on/in the guides. Respondents were asked if they had participated in categories of activities featured on the MapGuides. Eighty-five percent of people indicated they were not influenced by the MapGuide to participate in these activities (Table 13). However, 13 percent said they purchased or ate locally grown food because it is a feature on the guides. One person indicated they donated to a local cause because of the listing on the Mapguide. It is important to add that when respondents indicated that they visited a site or participated in an activity because of the MapGuide, they were encouraged to list the name and location of the site. All of these open-ended responses can be found in Appendix B.

Table 13: Activities participated in because they were on the MapGuide

Activity Participated in because of MapGuide*	%and # of respondents, (n=48)
None	85% (41)
Purchased or ate locally grown food	13% (6)
Donated	1% (1)
Other	1% (1)
Volunteered	===

*"other" responses can be found in Appendix B

Discussion and Conclusions

The first objective for this study was to determine the uses of the Greater Yellowstone printed MapGuide and the website MapGuide. Nearly all of the people in this sample (87%) had used one of the MapGuides. In both cases (print and website), guides were used mostly for planning purposes. However, the printed guide was used equally for before and during the trip planning (51%), whereas, the website guide was used before the trip and to learn about the area. Only six percent of the sample used the website guide during the trip. This is not surprising considering mobile devices are popular but not necessarily the ideal way to view a map during a trip. The paper guide should be made widely available to people prior to their trip to allow them to use this resource in all stages of their trip. The website guide is mostly being used at home by this sample of MapGuide users.

All of those who had not used either MapGuide indicated they did not know about them. It is unclear why these individuals who were on the Greater Yellowstone Geotourism email list were not aware of the guides. It is recommended that the Greater Yellowstone Newsletter write a feature article for their newsletter on the MapGuide and how to use the guide for future trips.

Determining the influence of the MapGuides on travel decisions in the Greater Yellowstone was an important aspect of this study. Influencing traveler decisions is critical to achieving the goals of the MapGuides and Geotourism in general. It was found that most respondents (84%) were not influenced by the guide to extend their trip length. However, 16 percent of the respondents were influenced to stay longer because of the MapGuide. Four percent stayed two or more nights longer. Communities profit if visitors spend a few hours longer, therefore any increase in stay is beneficial. Those who did not extend their trip due to the MapGuide were likely constrained due to time available, money available, or other logistical issues.

Influence of the MapGuides on people's travel routes and location of their overnights were also of interest. Almost one-half (46%) of the sample said that their travel route was influenced by the MapGuides, and about one-quarter (27%) were influenced by the MapGuide on where to spend the night. Travel routes are probably much more flexible than where they will sleep so this finding is not surprising. Both "users" and "non-users" spent between six and seven nights in the Greater Yellowstone area. It is possible that if the "users" of the guides had not seen them, they may not have stayed quite as long.

For analyzing travel routes, the sample sizes for the two sets of respondents are very different with the "users" being represented by more people (47 as opposed to 7). Looking at the travel routes of both, one of the biggest results seen visually is the direction people spread from their most concentrated area, Yellowstone and Grand Teton National Parks. Both groups of respondents who had used the guides were much more likely to be found south of the parks in Wyoming. In terms of concentration in towns, both sets of respondents were found in towns inside the parks. The travel routes of "non-users" extend further south into Wyoming but otherwise the travel route is similar to "users" of the MapGuide.

The location of nights spent was also of interest here. In the case of both sets of respondents, the most popular locations for overnights were Jackson, Wyoming, West Yellowstone, Montana and Old Faithful in Yellowstone National Park. For the “user” of the MapGuide, the concentration of nights spent in the park areas is even more evident than it is for “non-users”. Perhaps additional focus on staying overnight in the periphery of the parks would encourage people to spread out a little more on their next trip.

With the focus of Geotourism as the foundational concept for the MapGuides, goals for the MapGuide would include influencing visitors to behave and make decisions in a manner that is consistent with sustaining the environment, culture, aesthetics, heritage, and wellbeing of the destination and its residents. The guides have influenced many of the respondents in terms of the natural environment and learning about it. Many (41%) said that they visited natural landmarks and visitor centers (35%) because they were highlighted in the guide(s). This is a hopeful sign that the concept of helping to sustain the environment may be realistic for the MapGuides. However, the activities that would have helped sustain the environment (volunteering to pull weeds for example) were not participated by MapGuide “users.” Historic sites, wildlife watching sites, and trails/hikes were also listed by many as something they visited because of the MapGuide. This also draws attention to the natural environment and aesthetics, both components of geotourism. Only 13 percent of respondents indicated they were not influenced to visit any of the sites because of the MapGuide.

From this analysis, it appears that the MapGuide(s) for the Greater Yellowstone were being used by the respondents of the study and it is hoped this sample can be an indicator for the population. As a result, it is predicted that numerous travel decisions can be being influenced by the MapGuide. The results of the study would indicate that local businesses on the MapGuides are more likely to experience geotourists to their business. Perhaps, even, their business has experienced an increase in volume due to the MapGuides. That, however, cannot be determined by this study and it is recommended a study of businesses be conducted to confirm this assumption.

In summary, the Greater Yellowstone MapGuide is an influential tool on the choices many visitors make while visiting the area. The findings of this suggest that the Geotourism concept, as portrayed by the MapGuide, is a successful tool in visitor management.

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- National Geographic. (2006). *How to Develop a National Geographic Geotourism MapGuide*. Retrieved from http://travel.nationalgeographic.com/travel/sustainable/pdf/geotourism_mapguide.pdf.

Appendix A: Survey Instrument

Has anyone in your household used the Greater Yellowstone printed Mapguide or the Greater Yellowstone website Mapguide?

- Used neither the printed or website mapguides
- Used only the printed mapguide
- Used only the website mapguide
- Used both the printed and website mapguides

Why haven't you used the printed or website MapGuide? *(please check all that apply)*

- Did not know about them
- Do not usually use maps
- Already know the area well enough
- Find the map confusing
- Other...please specify below

How was the printed MapGuide used?

- For pre-trip planning
- During trip
- To view for entertainment
- To learn about the area
- For directions
- Other...please specify below

How was the website MapGuide used?

- For pre-trip planning
- During trip
- To view for entertainment
- To learn about the area
- For directions
- Other...please specify below

Where do you currently live in relation to the Greater Yellowstone region? *(Map below represents Greater Yellowstone region)*

- In the Greater Yellowstone region.
- In Montana but outside the Greater Yellowstone region.
- In Idaho but outside the Greater Yellowstone region.
- In Utah but outside the Greater Yellowstone region.
- In Wyoming but outside the Greater Yellowstone region.
- None of the areas mentioned above.

Please click on the town (or nearest town) in which you currently reside. **REFER TO MAP in FIGURE 1 for map example**

In the past four years, has anyone in your household taken a pleasure trip in the Greater Yellowstone area (South Central Montana, Northwest Wyoming, parts of Idaho and Utah)? (*Map below represents Greater Yellowstone area*)

- Yes
- No

How many pleasure trips have been taken to this area in the past four years by members of your household?

- | | |
|---|-----|
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |
| 5 | 10+ |

For how many of these trips was the MapGuide used for planning or for on-the-spot decisions?

- | | |
|---|-----|
| 0 | 6 |
| 1 | 7 |
| 2 | 8 |
| 3 | 9 |
| 4 | 10+ |

For the following questions, please reference the most recent pleasure trip to the Greater Yellowstone area.

On the most recent pleasure trip to the Greater Yellowstone area, did the MapGuide (printed or website) influence your length of stay?

- No influence
- Shorter stay
- 1-4 hours longer
- More than 4 hours but not overnight
- 1 night longer
- 2 or more nights longer

For that most recent Greater Yellowstone pleasure trip, please click on all of the towns driven through. **REFER TO MAP in FIGURE 1 for example**

On that most recent pleasure trip to the Greater Yellowstone region, did the MapGuide influence choice of travel routes in the area?

- Yes
- No

On that most recent pleasure trip, how many nights way from home were spent in the Greater Yellowstone area?

- | | |
|---|-----|
| 0 | 6 |
| 1 | 7 |
| 2 | 8 |
| 3 | 9 |
| 4 | 10+ |
| 5 | |

Please click on all the towns where night(s) were spent. **REFER TO MAP in FIGURE 1 for example**

On that pleasure trip to the Greater Yellowstone, did the MapGuide influence the choice of where to spend nights in the region (e.g. town/general area)?

- Yes
- No

Please check all of the sites on that pleasure trip that were visited specifically because they were listed on the MapGuide or website (*please check all that apply*):

- A paid accommodation
- An eating/drinking establishment
- A festival
- A farmer's market
- An art gallery
- A museum
- A performing arts event
- A historic site
- A natural landmark (lake, river, etc.)
- A designated wilderness area
- A trail/hike
- A shop/boutique
- A visitor center
- A wildlife watching site
- A tour/guided trip
- None
- Other please specify below

Please check all of the activities on that pleasure trip which were done specifically because they were listed on the MapGuide or website. (*please check all that apply*)

- Volunteered (e.g. trail work, weed pulling, habitat restoration)

- Donated to a cause or organization
- Purchased or ate locally grown food
- None
- Other...please specify below

In what U.S. state, Canadian province, or foreign country do you permanently reside?

What is your age?

What is your gender?

- Male
- Female

What is your highest completed level of education?

- Some High School
- Bachelor's degree
- High school diploma or the equivalent (GED)
- Some college
- Associates degree
- Masters degree
- Doctorate or professional degree

What best describes your annual household income? (USD)

- Less than \$25,000
- \$25,000 to less than \$50,000
- \$50,000 to less than \$75,000
- \$75,000 to less than \$100,000
- \$100,000 to less than \$150,000
- \$150,000 to less than \$200,000
- \$200,000 or more

Appendix B: Open-Ended Data

The following is a complete listing of the responses that people typed in to the survey. The question is listed above the responses. These are listed verbatim from respondents.

Question: How have you used the *printed* MapGuide?

1. for classroom discussion
2. To help others becoming oriented to the area. I'm a resident here
3. as a long time visitor I always like to check maps for new ideas and sights that I can check out in the park area.
4. doing some research for future trip planning, making a "bucket list" of the area.
5. get kids excited

Question: How have you used the *website* MapGuide?

1. To contribute Forest Service information for the map.
2. Checked accuracy of sample of locations - mainly museums, historical sites
3. Locate where picture were taken

Question: Please tell us any other comments you have regarding the MapGuides?

1. i don't remember this level of detail
2. Sometimes the Guide confirmed what we learned elsewhere.
3. We own a condo in Big Sky; spend 4 months in the winter and 6-8 weeks in summer there.
4. I have a recreational cabin in Island Park and thus am very familiar with the area already
5. This map was very helpful & easy to read. It was very useful during our trip, & everyone was glad we had it.

Question: Please tell us the name(s) and location(s) of the accommodation(s).

1. Canyon cabins yellowstone park, West Yellowstone lodge, West Yellowstone
2. Chico Springs
3. Canyon Village
4. Rexburg, Americinn Jackson Hole RV Grand Tetons RV Old Faithfull Inn
5. Mammoth Hot Springs Cabins

Question: Please tell us the name(s) and location(s) of the eating/drinking establishment(s).

1. Places in Virginia City, Cooke and Boseman
2. The in park eating establishments inside Yellstone park
3. restaurants in Driggs, ID
4. Jackson Lake Lodge
5. B-J Ranch
6. Emerson Cultural Center (and cafe) in Bozeman MT
7. Jackson Brewery, lots of dinners at hotel, snack bars during day

Question: Please tell us the name(s) and location(s) of the natural landmarks(s).

1. All Gysers, whole of park
2. Lake Yellowstone, Western Gate, Yellowstone River Bison Grazing, Snake River, Grand Teton Parks, Lake Jackson

3. Old Faithful, Mammoth Hot Springs, Yellowstone Falls, Grand Teton National Park
4. Jenny Lake
5. Many geysers and rivers.
6. Geisers
7. Old Faithful Grand Guyser Mammoth Hot springs Yellowstone Canyon
8. Grand Targhee Resort and Palisades Reservoir
9. Old Faithful
10. Yellowstone Grand Tetons
11. Mesa Falls Scenic area
12. Shoshone Lodge in Cody
13. Added several places 6to my list of will see.
14. several in Yellowstone-Grand Teton areas
15. GTNP, YNP, Wapiti Valley, Sunlight Basin, Wind River Canyon, Wyoming Centennial Scenic Byway over Togwotee Pass; Sinks Canyon State Park, Lander; Boysen State Park, Shoshoni; Hot Springs State Park, Thermopolis.
16. Mammoth Hot Springs, Norris Geyser Basin, Old Faithful, Yellowstone Lake, (Made "the loop")

Question: Please tell us the name(s) and location(s) of the Wilderness(s).

1. 90% of yellowstone park
2. Above
3. Much of Yellowstone and Grand Teton National Parks
4. The road between Mammoth Springs that showed that alot of wildlife was available for viewing. Something valley, but can't remember all of the name
5. several in Yellowstone
6. Teton

Question: Please tell us the name(s) and location(s) of the trail(s).

1. Jenny Lake Trail, Lower Yellowstone Falls Trail
2. Around the geyser sites and along river trails.
3. Mt Washburn (tower area)
4. Upper Guyser Basin Upper Terraces Mammoth Hot Spring
5. Forget the name, but it was north of Canyon Lodge
6. a trail up to Mammoth Hot Springs
7. Do not recall

Question: Please tell us the name(s) and location(s) of the festival(s).

1. Wyoming Arts Convergence in Cody Grand Teton Music Festival

Question: Please tell us the name(s) and location(s) of the farmer's market(s).

Question: Please tell us the name(s) and location(s) of the shop/boutiques(s).

1. Old Faithful Inn Shop - excellant products at rational prices
2. Shop at Old Faithful gift shop and Tower gift shop
3. Victor Emporium and many shops in Driggs

Question: Please tell us the name(s) and location(s) of the visitor center(s).

1. Southern Center was the only one
2. Old Faithful, Mammoth Hot Springs, Grand Teton Visitors Center
3. Everywhere we could find one...Cody, Jackson, Dubois
4. Grand Teton Natl Park visitors center
5. Albright Visitor Center at Mammoth Hot Springs Canyon Visitor Center Old Faithful Visitor Center West Yellowstone Visitor Center
6. Don't recall the name of the area, but it was near the west entrance to the park.
7. Wolf and Grizzly Center
8. north gate of Yellowstone, Grand Teton
9. Jackson-Hole, Tetons
10. The Yellowstone National park Visitor Centers in Mammoth and in West Yellowstone
11. Jackson Hole; Craig Thomas Discovery Center, GTNP; Grant Village, YNP; Old Faithful, YNP; Canyon Village, YNP;
12. Do not recall
13. Old Faithful Educational Center

Question: Please tell us the name(s) and location(s) of the wildlife watching site(s).

1. Jenny Lake, Yellowstone River and Lake, Eastern Gateway (Wow)
2. All throughout both parks...mostly from the roads.
3. Mainly in the Tetons
4. Lamar Valley
5. Yellowstone National Park (Road Watching)
6. Again, don't recall the specifics.
7. All over the Yellowstone area
8. several in Yellowstone, Jackson Lake
9. West Yellowstone (and throughout YNP)

Question: Please tell us the name(s) and location(s) of the museum(s).

1. Wild Bill Cody museum in Cody National Museum of Wildlife art in Jackson
2. National Museum of Wildlife Art Old Faithful Lodge
3. West Yellowstone Museum Fort Yellowstone
4. Some railroad museum out the west gate. My husband wanted to see it.
5. Yellowstone Historic Center, West
6. Don't remember name - the one at the visitors' center at the north gate town of Yellowstone.
7. Wind River Heritage Center, Riverton; Dubois Museum; National Big Horn Sheep Interpretive Center, Dubois; National Museum of Wildlife Art, Jackson; Buffalo Bill Historical Center, Cody; Museum of the American West, Lander.

Question: Please tell us the name(s) and location(s) of the art gallery(s).

1. Rocky Mountain in Jackson, WY

Question: Please tell us the name(s) and location(s) of the performing arts venue(s).

Question: Please tell us the name(s) and location(s) of the historical site(s).

1. Fort Yellowstone
2. Wind River Indian Reservation; Chief Washakie cemetery; other cemeteries; Bighorn Sheep museum; Chapel of the Transfiguration; Murie Center.....everything in and around Jackson; Dubois
3. Flat Ranch Roosevelt Arch Yellowstone Historic Center Canyon Visitor Center
4. Virginia City
5. Cowboy Village -Jackson
6. Jackson, Bozeman
7. Elk Refuge
8. South Pass City State Historic Site, various in Yellowstone National Park, Medicine Lodge State Archeological Site-near Manderson, WY
9. Roosevelt Arch (YNP), Old Faithful Inn (YNP), and Downtown Livingston

Question: Please tell us the name(s) and location(s) of the tour guiding company(s).

Question: Please tell us the name(s) and location(s) of the volunteering you did.

1. We volunteered 4 months at the National Elk Refuge as a result of visiting the area for the previous 5 years.
2. I did plein air painting all over the area

Question: Please tell us the name(s) and location(s) of the organization to whom you donated.

1. Wind River Heritage Center; National Park Service

Question: Please tell us the name(s) and location(s) of the establishment where you ate/drank local.

1. Jackson Hole Farmers Market (from Afton, WY Area); Lander, WY Farmers Market; Apple Valley Market, Lander; Gannett Grill, Lander;
2. Emerson Cultural Center (ate local lamb in the Emerson Grill) Bozeman MT