

Social Science Research to Support Visitor Use Management at Harpers Ferry National Historical Park

A REPORT ON CLIMBERS AND
CLIMBING MANAGEMENT

2020-2021



Prepared by:

Michala Hendrick, M.S.

Chris Zajchowski, Ph.D.

Eddie Hill, Ph.D.

Ryan Sharp, Ph.D.

James Maples, Ph.D.

Jessica Fefer, Ph.D.

Chandler Berry

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
EXECUTIVE SUMMARY	1
INTRODUCTION	3
METHODS	5
RESULTS	6
I. DEMOGRAPHICS	6
II. SURVEY DISSEMINATION AND MEMBERSHIP AFFILIATION.....	11
III. CLIMBING EXPERIENCE	12
IV. CLIMBING AT HARPERS FERRY NATIONAL HISTORICAL PARK.....	15
V. EXPENDITURES.....	19
VI. LEAVE NO TRACE.....	22
VII. MANAGEMENT AND OPERATIONS	25
IX. OPEN-ENDED RESPONSES	31
MANAGEMENT IMPLICATIONS	33
REFERENCES	35
APPENDICES	38
Appendix A: Online Content Analysis.....	38
Appendix B: Online survey	48
Appendix C: Open-ended comments.....	63

LIST OF TABLES

Table 1 Highest rating of routes climbed (outdoors) 14
Table 2 Highest rating of outdoor bouldering performed 15
Table 3 Visitor expenditures inside the study area 20
Table 4 Visitor expenditures outside the study area 21
Table 5 Leave No Trace perspectives 23
Table 6 Appropriateness of climbing specific behaviors 24

LIST OF FIGURES

Figure 1 Racial demographics.....	7
Figure 2 Gender demographics	7
Figure 3 Age demographics	8
Figure 4 Education demographics.....	8
Figure 5 Military demographics.....	8
Figure 6 Household income	9
Figure 7 State of residence	9
Figure 8 Respondent zip codes	10
Figure 9 Where respondents heard about the survey	11
Figure 10 Membership affiliation	12
Figure 11 Self-reported skill level	12
Figure 12 Experience with outdoor climbing types.....	13
Figure 13 Top preferred type of outdoor climbing	13
Figure 14 Past- and present-use climbing history at HAFE.....	16
Figure 15 Year of first climb at HAFE	16
Figure 16 Most recent climb at HAFE.....	17
Figure 17 Sites climbed at HAFE	17
Figure 18 Other National Capital Area (NPS managed) sites visited.....	18
Figure 19 Self-rated knowledge of Leave No Trace principles	22
Figure 20 Commercial operations support.....	25
Figure 21 Awareness of shuttle services.....	26
Figure 22 Shuttle experience.....	26
Figure 23 Shuttle service factor satisfaction	26
Figure 24 Source for HAFE climbing information	27
Figure 25 Past registration behavior	27
Figure 26 Registration method used	28
Figure 27 Extent that climbing experience was negatively impacted.....	29
Figure 28 Lack of knowledge of barriers and constraints.....	30
Figure 29 Open-ended and content analysis themes	31
Figure 30 Balcony Rock existing infrastructure and sample climbing opportunities	34

EXECUTIVE SUMMARY

This report describes the work and outcomes of two years of social science data collection focused on climbing management at Harpers Ferry National Historical Park (HAFE). The objective of this research is to gather accurate, representative, justifiable information to help inform an eventual Climbing Management Plan at HAFE and to understand current climber perceptions and use of climbing resources.

In 2020, Phase I consisted primarily of a literature review of climbing management frameworks and a content analysis of online representation of rock-climbing closures at HAFE. Phase II consisted of a climber survey of past, present and future climbers of HAFE and took place in 2021. In total, 369 respondents completed the climbing survey. Results were analyzed to characterize respondents' perceptions of climbing opportunities, use levels, constraints, expectations, and attitudes related to management of climbing resources at HAFE. Data were also collected on expenditures, Leave No Trace principles, and management and operations. Key findings include:

Respondents had on average 13.5 years of overall climbing experience, with an average of 5.14 years of climbing experience at HAFE, specifically. 85% of respondents self-identified as intermediate-to-expert in skill level. Expenditure data revealed low spending within the study area. LNT findings were consistent with prior LNT studies; respondents care about LNT principles and support them. By a slim majority, climbers support commercial guiding operations in the park with strong support for restrictions on commercial use of parking areas, climbing sites, and group sizes.

Of note are findings indicating low knowledge of shuttle services and climber registration requirements. Additionally, on average, parking availability, management communication, parking safety, and climber registration policies are the top variables that climbers state negatively impacted their visitor experience at HAFE. 43 percent of respondents cited management communication as negatively impacting their experience. Open-ended responses provide additional valuable insight on the experiences of climbers within the park.

The results of this study indicate that the relationship between park management and climbing stakeholders would benefit from further engagement through science informed decision-making processes, and when appropriate, collaborative climbing resource management. Specific proposed recommendations include, leveraging collaboration with engaged climbing stakeholders, increasing shuttle service stops (i.e., Balcony Rock), enhancing available goods and services to incentivize localized spending, and building stronger relationships between management and stakeholders. The results of this technical report provide a significant source of visitor-based input to inform a Climbing Management Plan and related decision-making at HAFE.

We recommend that this data and the interpretation of the results therein be thoughtfully measured against park mandates and managerial, ecological, and social considerations to aid in the management of park climbing resources. This report is intended to be one of many inputs for HAFE staff in the establishing of eventual management plans and decision-making.

INTRODUCTION

This report describes the research and outcomes of a two-year mixed methods study conducted for Harpers Ferry National Historical Park (HAFE). This research gathers data and science-informed information to help support visitor use planning and management at HAFE. More specifically, this research provides information to understand climbing at and inform future management of climbing resources at HAFE. The research objectives focus on components of visitor use planning and management specific to HAFE that can benefit the most from this data and research. This scoping research focused on rock climbers and climbing resources in the park with the purpose of 1) understanding representations of climbing activities and closures by Park staff and stakeholder groups, 2) disseminating a survey instrument to sample HAFE rock climbers regarding existing use and management perceptions and 3) informing the future construction of a climbing management plan for HAFE.

Project Rationale and Background

Harpers Ferry National Historical Park is rich in cultural, natural, and recreational resources for regional and destination visitors, just 50 miles outside of Washington, D.C. Located at the confluence of the Shenandoah and Potomac Rivers, the village of Harpers Ferry, West Virginia was the host of turning points and major historical events in American history. Now, Harpers Ferry preserves and interprets the history of the landscape, and its natural and cultural resources (National Park Service, 2021a). The Park spans 3,500 acres and provides a mix of visitor opportunities. In 2020, HAFE served 234,473 visitors with diverse interests and intentions (NPS, 2021b). North of the park is the Chesapeake and Ohio Canal National Historical Park which contributes to the recreation corridor of the region and gives visitors access to Maryland Heights, via the canal towpath and park. Aside from the important historical value of the park, HAFE and proximate lands provide visitors with recreational opportunities including climbing, fishing, boating, and hiking (NPS, 2021c).

Ecologically the park acts as many urban-proximate units do and serves as a refuge of green space and biodiversity. Historically peregrine falcons (*Falco peregrinus*) nested on the cliffs of Maryland Heights before their extirpation in the 1970s because of DDT use (NPS, 2021d). In the 1990s, peregrine falcons were beginning to rebound, and in the summer of 2001, the Peregrine Falcon Restoration Project began. Since that time, 12 peregrine falcon chicks have been released and as of 1999, the species was removed from the federal endangered species list due to its preliminary improvements in population along coastal areas of the Eastern US (NPS, 2021d). The National Park Service, acting in accordance with its management mandates, hopes to aid the peregrine falcons in restoring historic nesting sites on Maryland Heights. This mandate has led to seasonal, temporary peregrine falcon closures to climbing sites on Maryland Heights as well as lookout points on hiking trails in years when birds are present in the park (NPS, 2021d). These closures are driven by the sensitivity of the species; human interference, especially during the nesting phase, can cause nest abandonment. Peregrine falcon closures

initially created mixed responses from stakeholders but since, have reached a shared understanding of respect for this management objective. It is the goal of the NPS and stakeholders to both reestablish peregrine falcon populations in the park and serve the climbing community with a shared understanding of responsibility and science-based closures of Maryland Heights.

Harpers Ferry and its climbing opportunities have been regionally significant since 1939, which was the earliest known ascent of the infamous Maryland Heights cliffs (The Access Fund, 2019). As climbing grew more popular as a recreational sport and visitation to the region grew, Rob Savoye, a local climber, wrote the first climbing guidebook, leaving copies with rangers in hopes of aiding visiting climbers (TAF, 2019). Prior to increases in visitation, climbing was not a recreational activity at the forefront of management resources. Now, HAFE is largely considered to host some of the best climbing in the Tri-state area (MD, WV, VA) and requires more management evaluation (NPS, 2021e). Mid Atlantic Climbers (MAC), The Access Fund, and other affiliated local climbing organizations have worked with the NPS on climbing policy, stewardship, and education initiatives that support efforts to control and study recreation impacts in the park, and specifically for HAFE, support seasonal raptor closures (The Access Fund, 2019). In 2017 changes were issued in a superintendent's compendium, closing all climbing in Virginia and West Virginia in the park boundaries in response to several management concerns (Brandyburg, 2017). These sudden closures led to conflict among users and management and MAC and Access Fund partnered with HAFE staff to help find solutions.

These discussions led the park to embark on a formal research inquiry into rock climbers and climbing resources at HAFE. Rock climbing throughout the National Park Service is guided by a series of best practices codified in management frameworks. The U.S. Interagency Visitor Use Management Framework (IVUMF) is an outdoor recreation and natural resource management framework developed by a council of six federal land management agencies representing federally managed lands and water (Interagency Visitor Use Management Council, 2016). The IVUMF framework consists of four elements including 1) *Build the Foundation*, 2) *Define Visitor Use Management Direction*, 3) *Identify management strategies*, and 4) *Implement, monitor, evaluate and adjust*. This framework forms the structure for future climbing management planning design at HAFE (IVUMC, 2016).

Once HAFE managers initiated this research endeavor, scoping research was contracted for a summary analysis of the online representation of rock-climbing closures at HAFE. Additionally, an ongoing parallel process, led by a separate, recreation ecology team, is assessing recreation use impacts to threatened and endangered species. The purpose of our analysis was to 1) understand online representation of closures by the press, the Park, and stakeholders (Appendix A), 2) design a survey instrument to sample HAFE rock climbers regarding existing use and perceptions of possible management actions and 3) inform the constructing of a Climbing Management Plan (CMP) for HAFE. The results of the content analysis were used in the creation of a survey for the climbing affiliated stakeholders and can be found in Appendix A.

Public land management decisions and measures involve social, managerial, and biological factors and considerations, informed by the best available science (Manning, 2011). Perceptions and attitudes of wilderness quality and experiences are subjective and diverse, and managers seek to understand these varied perceptions to anticipate visitor responses to potential changing conditions, regulations, access, and more (Arnberger et al., 2012; Eagly & Chaiken, 1993; Kyle et al., 2004). The findings of this visitor use survey report will serve to inform park managers of the opinions and experiences of stakeholders who have a vested interest in recreation resource management at HAFE. These findings, when evaluated against accepted ecological conditions and park mandates, can direct management decisions in a purposeful way (Borrie et al., 2002; McLaughlin & Paradice, 1980; Monz et al., 2009).

METHODS

Old Dominion University, Kansas State University and Eastern Kentucky University, with considerable assistance from and collaboration with local and national climbing organizations and NPS partner staff, collected data from climbing visitors of HAFE to inform a formal CMP. The online survey was disseminated through local climbing gyms and advocacy organizations to assess visitor experiences, use levels, visitors' expectations and attitudes towards the park unit and its management, as well as their perceptions of recreational impact. This study occurred over a year, with Phase I of scoping research taking place in 2020 (content analysis; (Appendix A) and Phase II (survey; Appendix B) taking place in 2021.

Survey development

Drafts of survey instruments were generated by Old Dominion University based on 1) results of the online content analysis of the representation of rock-climbing closures at HAFE, 2) discussions and information needs of NPS staff regarding climbing in the park and 3) discussions with key climbing stakeholder groups. The questions framed in the survey were established from previous visitor-use surveys as well as original content specific to the scope of HAFE research. HAFE staff and partnering climbing organizations reviewed, helped revise, and approved all drafts of the survey instrument, eventually approving the final draft survey. The Office of Management and Budget reviewed the survey instrument and granted final approval. The review process resulted in a survey focused on rock climbing users in the park and their perceptions, attitudes and preferences of access and management of climbing resources in the park.

Survey distribution and responses

Online survey distribution began on June 22nd, 2021, and lasted through July 16th, 2021 (24 days). Surveys were sent out to respondents over email through the organizational listservs of seven partnering gyms and organizations including, the Access Fund, the American Alpine Club, American Mountain Guide Association, Earth Treks, Mid Atlantic Climbers, Potomac Appalachian Trail Club Mountaineering Section, and Sportrock Climbing Center. Respondents received a total of three correspondences from respective organizations, an initial email and two

reminder emails. A total of 497 individuals responded to the survey. After filtering out responses with a completion rate of less than 80%, the total sample size was 369 responses. Response rates to assess representativeness are not available due to the unknown amount of total climbing use at HAFE. When considering the 2020 total visitation to HAFE ($n = 234,473$; NPS, 2021b), the final sample would reflect a 5.1% confidence interval at the 95% confidence level. However, it is prudent to assume that the number of climbers visiting HAFE annually is far lower, likely yielding a confidence interval below 5%.

Expenditure data cleaning

In terms of economic expenditure data, several common steps were taken to prepare the data for analysis. First, in cases where expenditures were reported but the group size was not provided, the respondent was recoded as having a group size of 1 ($n = 102$). Researchers then excluded all other cases from the dataset reporting no expenditures in any category. This leaves us with 175 usable cases where expenditures were reported before excluding any cases for methodological reasons. Next, for instances where expenditures were reported but categories were left blank in those 175 cases, missing expenditure categories were recoded as zero. Third, the researchers followed United States Forest Service methodology (White, 2017) for excluding atypical cases. These include the following steps: excluding responses indicated groups of eight or larger ($n = 1$), excluding persons who stayed for atypically long stays (here defined as more than 31 days, $n = 0$), and excluding persons living inside the study area ($n = 25$). This leaves 149 usable cases for economic impact analysis.

Adjustments were then needed for economic expenditure variables. In the survey, the questions ask both for the respondent's group size and for their expenditures in camping, fast food purchases, and so forth. To adjust for group sizes, new expenditure categories were created dividing expenditures by the reported group size. This roughly provides individual expenditures for the analysis. Note the mean group size for the analysis was 1.29 persons. Next, the researchers utilized Maples and associates' (2019) standard deviations approach to remove cases above a normal distribution from the mean.

RESULTS

I. DEMOGRAPHICS

Demographic findings are presented in the following section, with results being consistent with previous climber study demographics. Racial demographics are presented in Figure 1 and reflect a predominately white sample (89%). Those that identified as Asian accounted for 5.5% of the sample. Gender was reported as predominately male (70%), with only 24% of the sample identifying as female (Fig. 2).

Figure 1

Racial demographics

N= 362

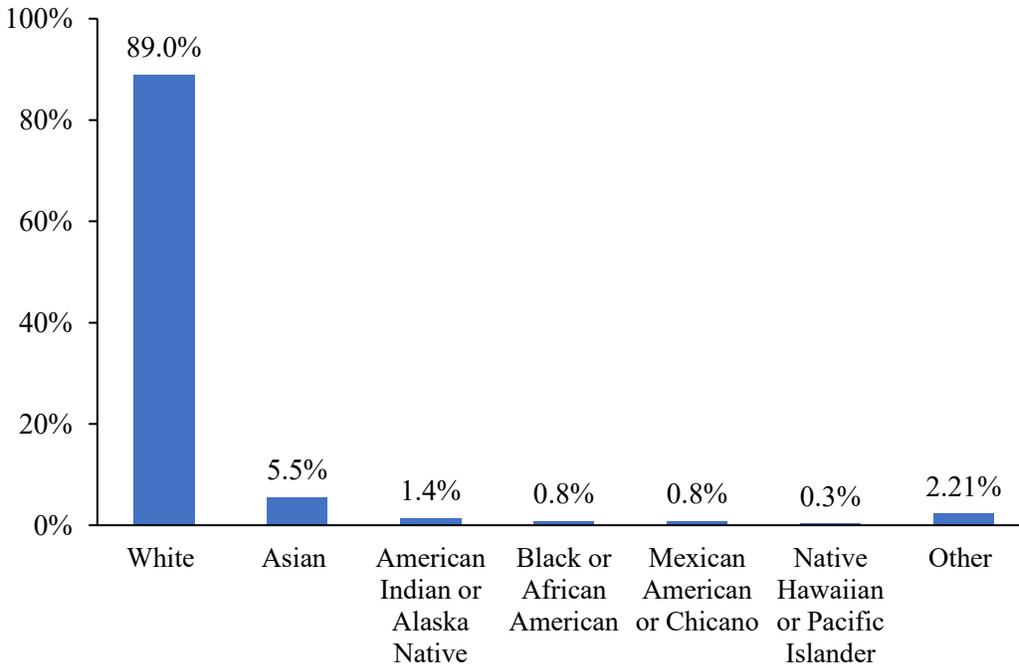


Figure 2

Gender demographics

N= 369

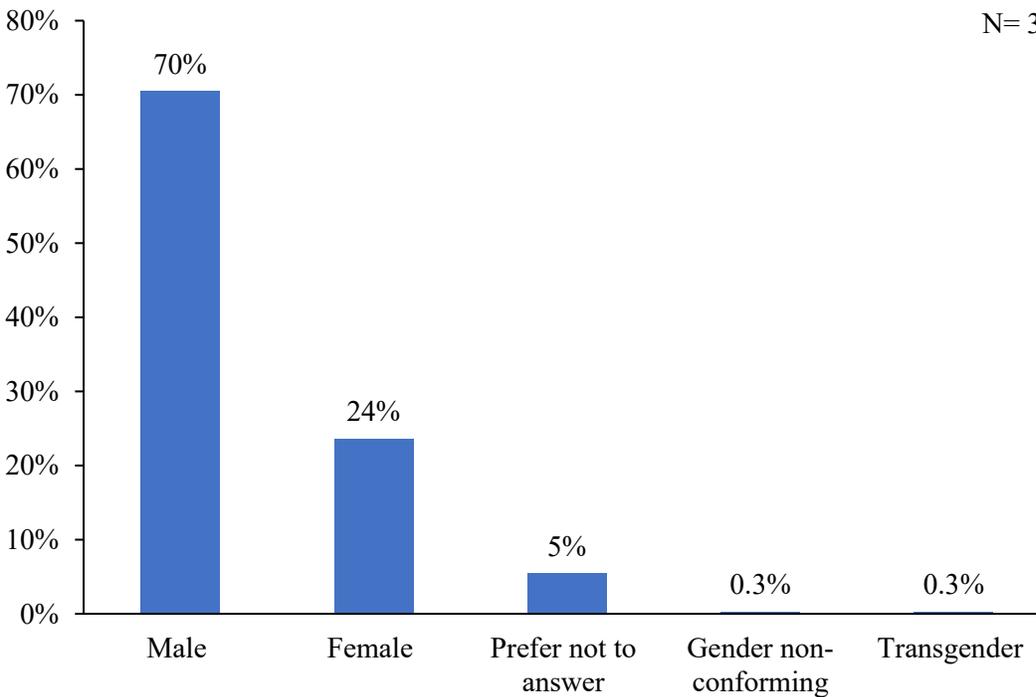


Figure 3

Age demographics

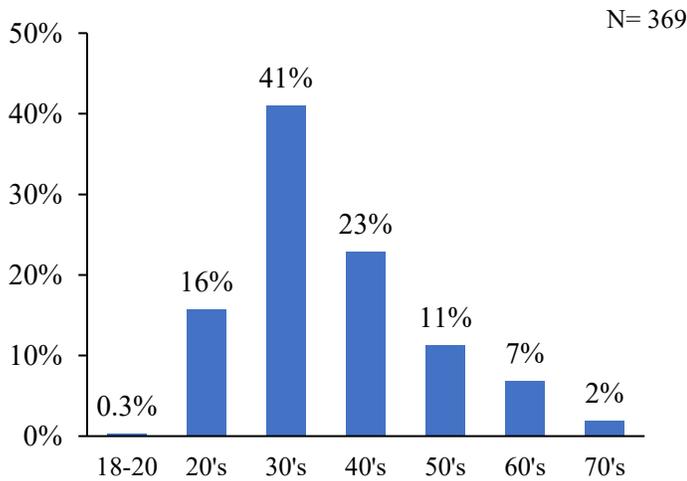
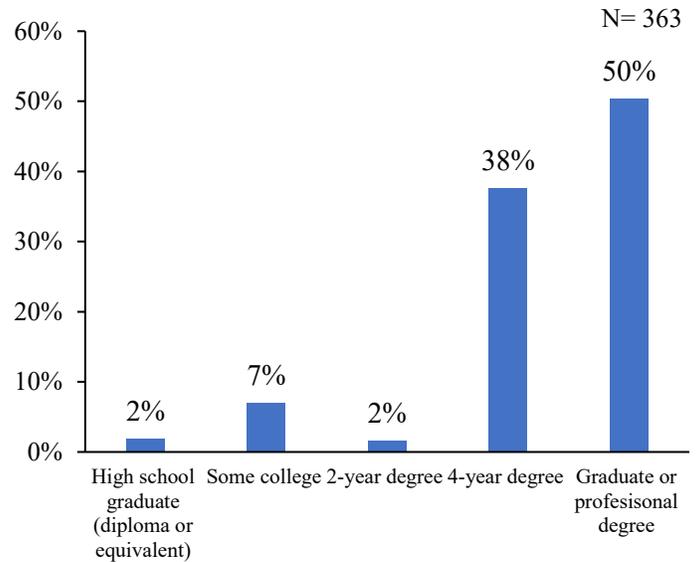


Figure 4

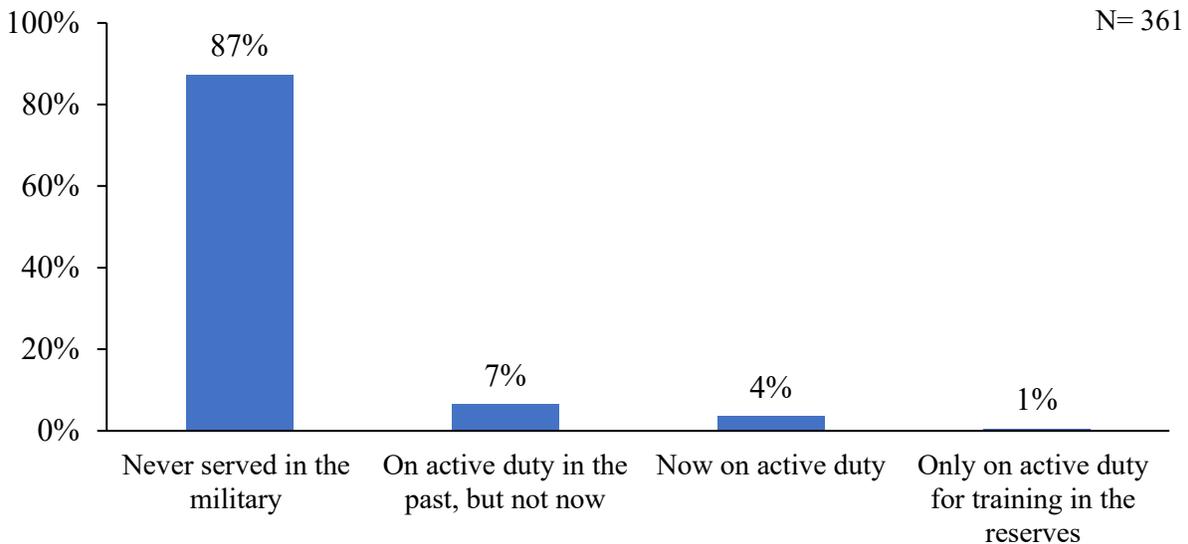
Education demographics



Responses indicated that the largest percentage of the sample were between the ages of 30-39, and 75% of the sample is between 30-60 years old (Fig. 3). The sample was highly educated, with 88% of the sample holding a 4-year, graduate, or professional degree (Fig. 4). Military service was not prominent in the sample, with 87% of the sample indicating that they have never served in the military (Fig. 5).

Figure 5

Military experience



Combined household income data indicated that 53% of the sample had a household income of \$100,000 or more (Fig. 6). These demographic findings are consistent with previous climber surveys, with a survey population that is highly educated, high earning, and predominately white males (e.g., Maples and Bradley 2017; Maples et al., 2019; Clark, 2020). Place of residence for climbers in this study spanned 21 states across the U.S., with use predominately concentrated in Maryland, Virginia, and Pennsylvania (78.2%) (Fig. 7). Figure 8 shows the national and regional distribution of these users.

Figure 6

Household income

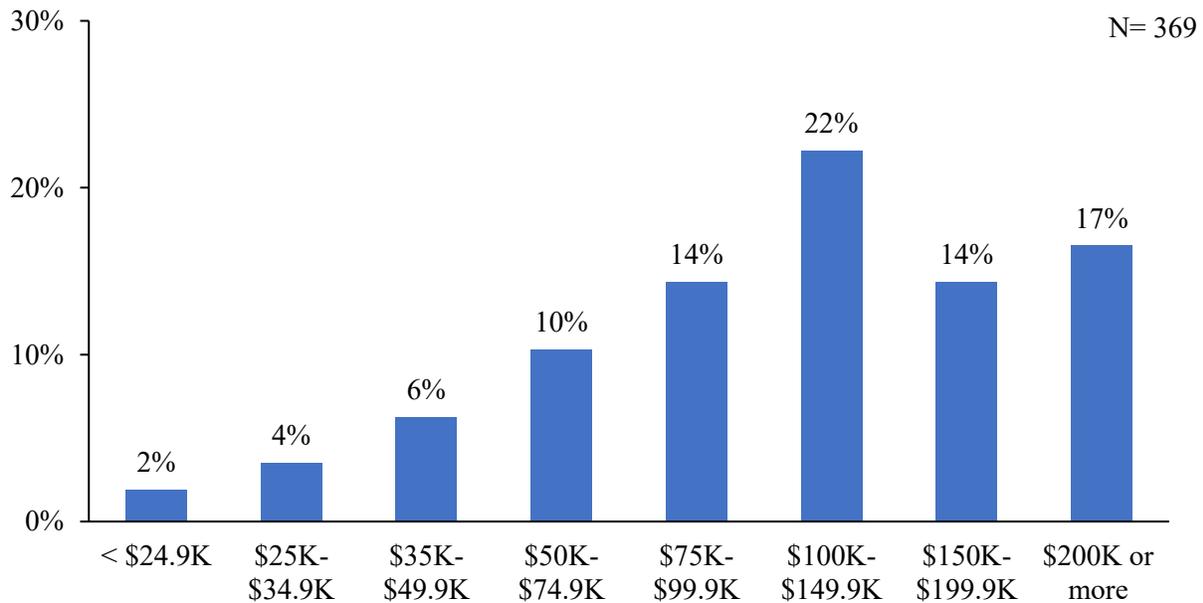


Figure 7

State of residence

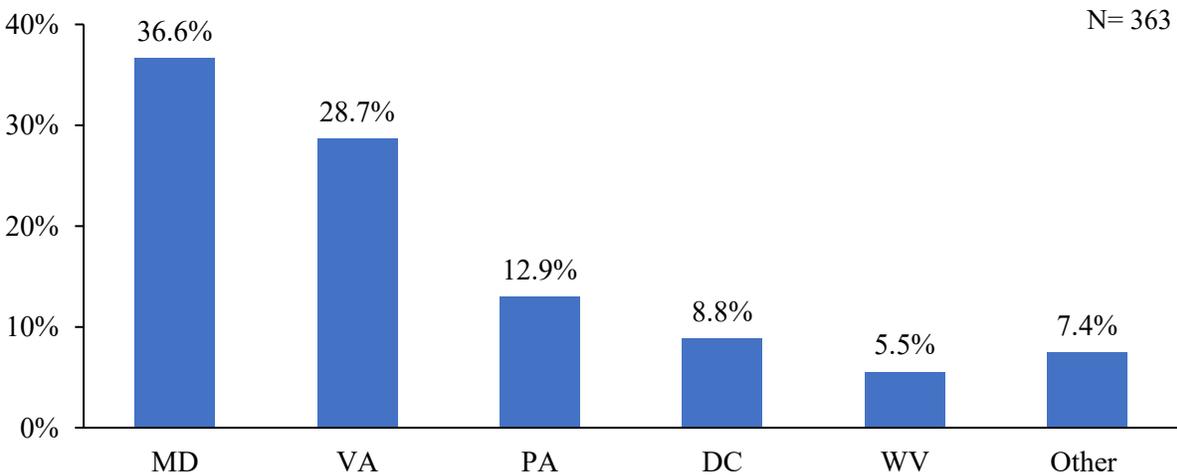
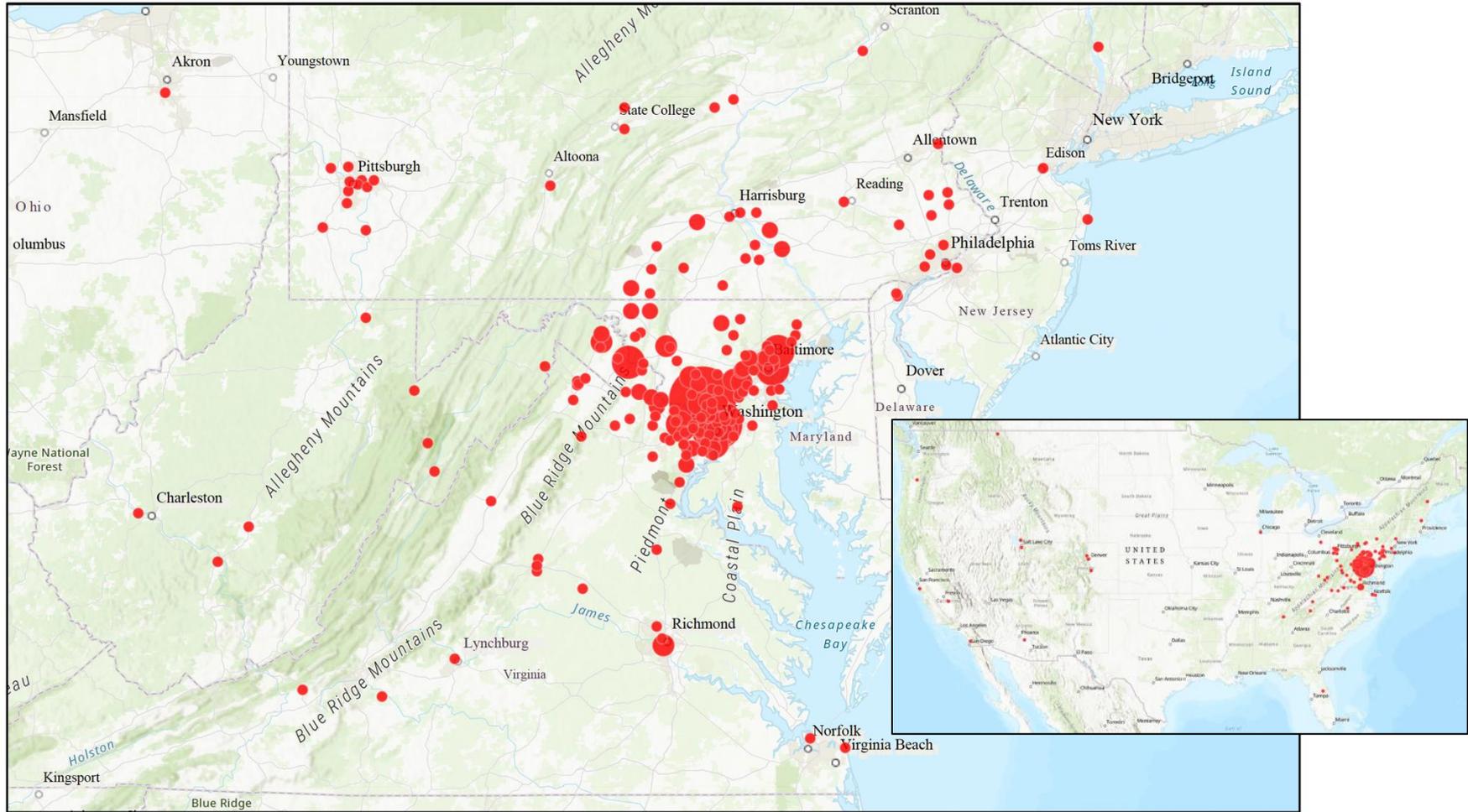


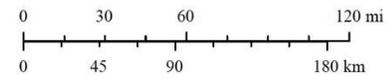
Figure 8

HAFE Zip codes



12/2/2021

1:4,622,324



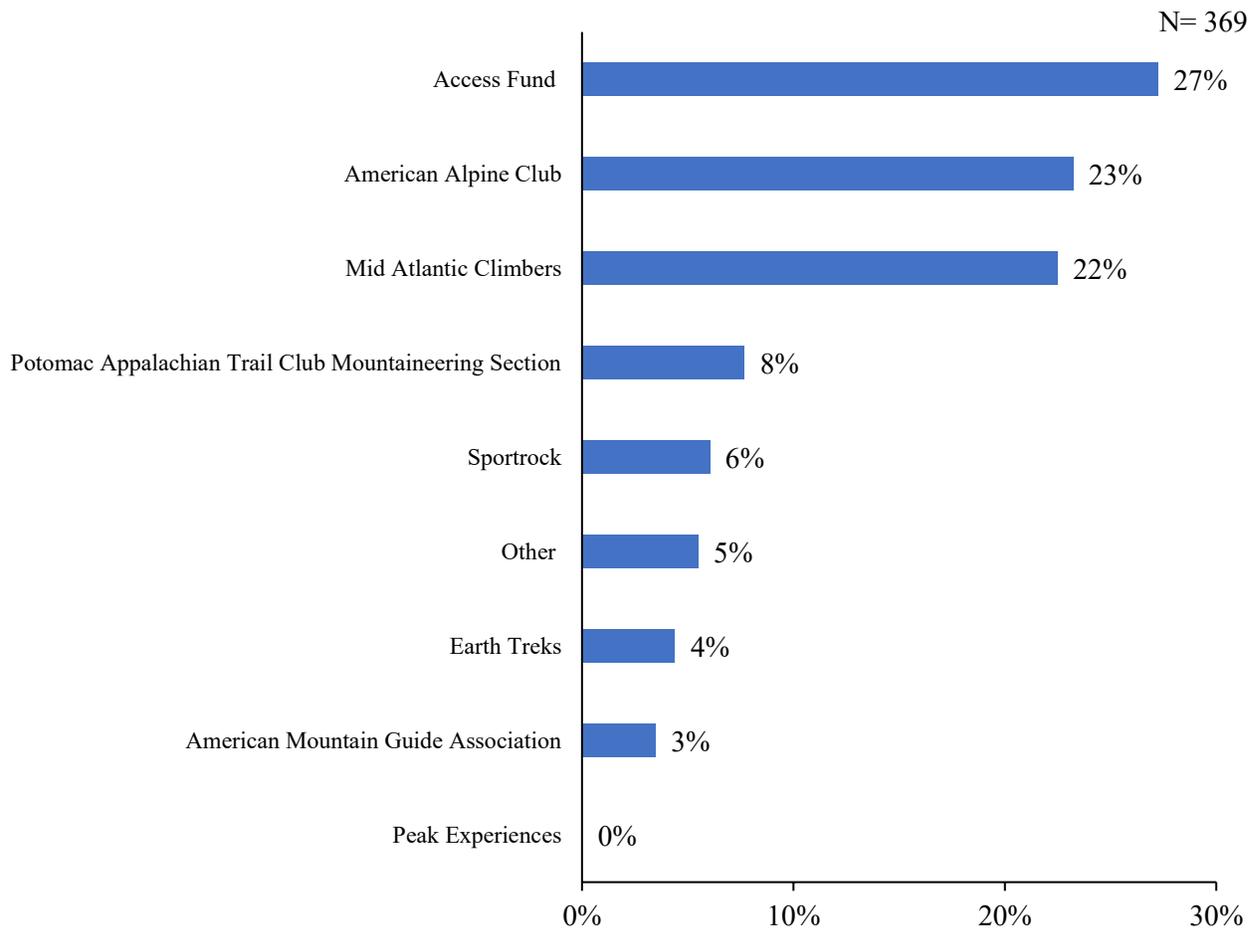
County of Loudoun, VITA, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA.

II. SURVEY DISSEMINATION AND MEMBERSHIP AFFILIATION

Respondents primarily heard about the survey through three organizations including the Access Fund (27%), American Alpine Club (23%), and the Mid Atlantic Climbers (22%) (Fig. 9). These answers are not mutually exclusive; therefore, these individuals could have learned about the survey from more than one organization and be counted in the percentages for both.

Figure 9

Where respondents heard about the survey

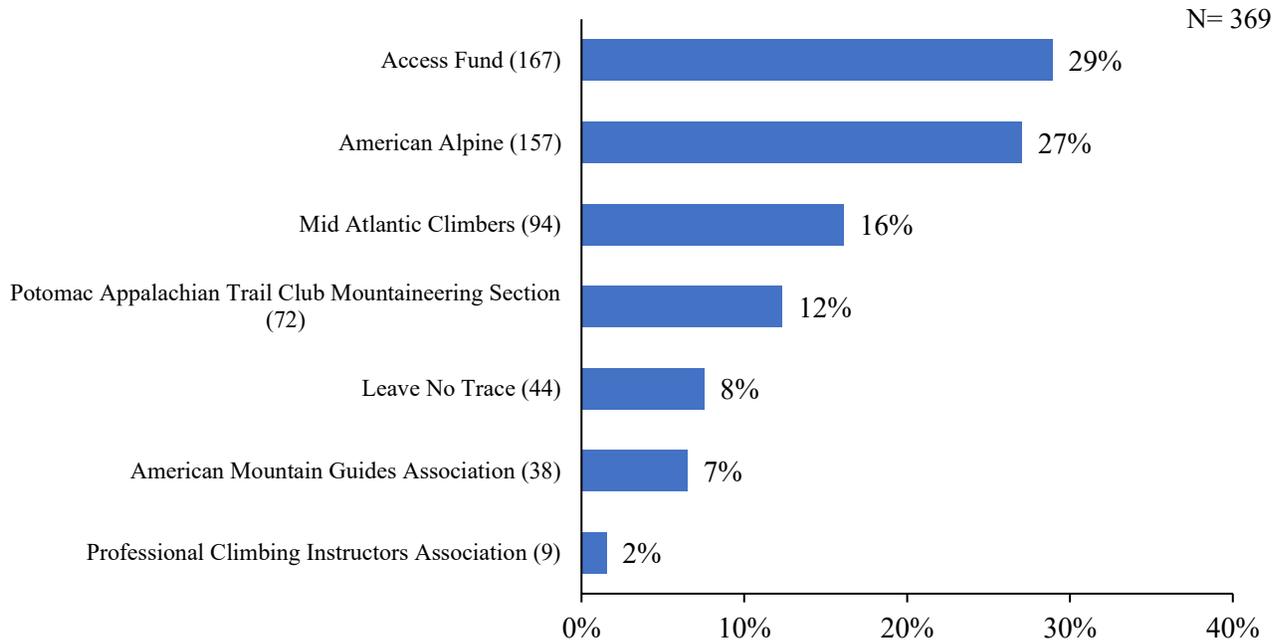


Note. Answers are not mutually exclusive.

Membership affiliation is displayed in Figure 10. It is important to note that membership is also not mutually exclusive, with many respondents belonging to more than one organization. 72% of membership affiliation was collectively attributed to the Access Fund, American Alpine Club, and Mid Atlantic Climbers (Fig. 10).

Figure 10

Membership affiliation



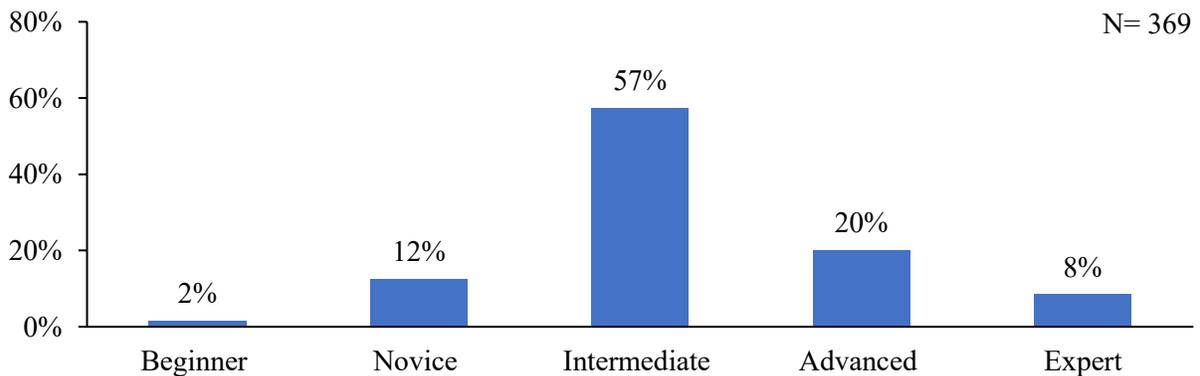
Note. Answers are not mutually exclusive.

III. CLIMBING EXPERIENCE

Climbing experience results were reported across self-reported skill level, experience with outdoor climbing types and climbing type preference, years of experience, frequency of outdoor climbing, and highest level of difficulty of routes accomplished. Skill level was self-reported by respondents on a scale of beginner to expert. 85% of the sample reported their skill level to be “intermediate”- “expert” (Fig. 11).

Figure 11

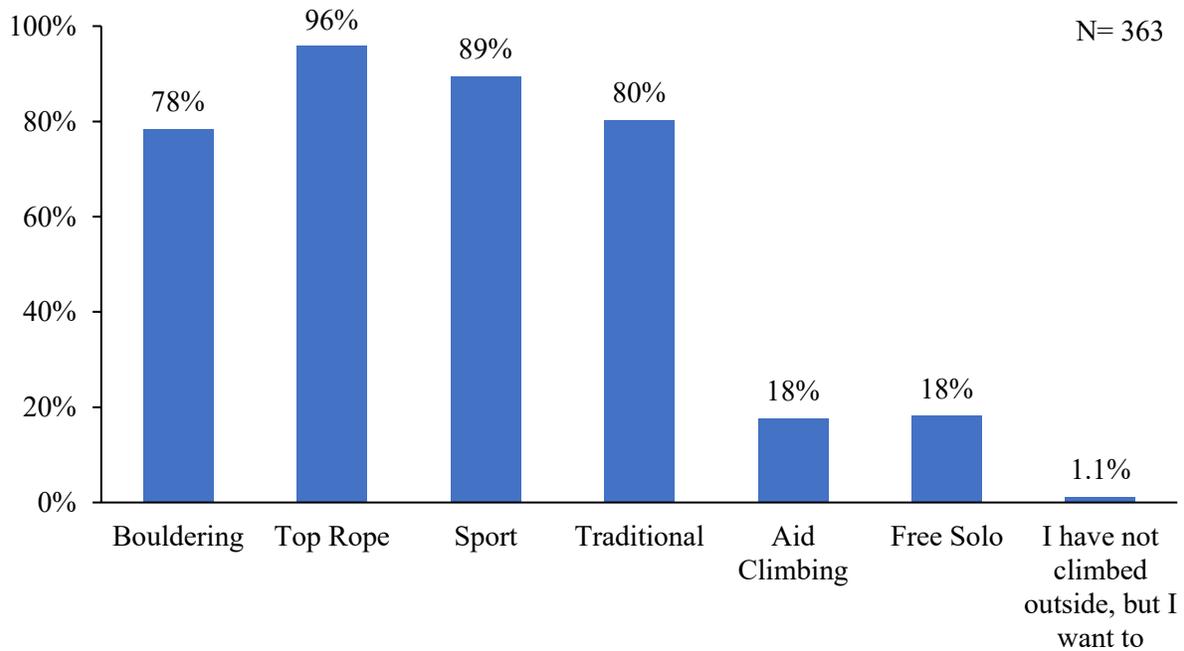
Self-reported skill level



Experience with outdoor climbing types is reported in Figure 12. Responses are not mutually exclusive. Over 75% of the sample had participated previously in outdoor bouldering (78%), traditional ('trad'; 80%), sport (89%), and top rope climbing (96%). Figure 13 communicates respondents top preferred type of outdoor climbing. Traditional (46%) and sport (31%) climbing were the most popular climbing types (Fig. 13).

Figure 12

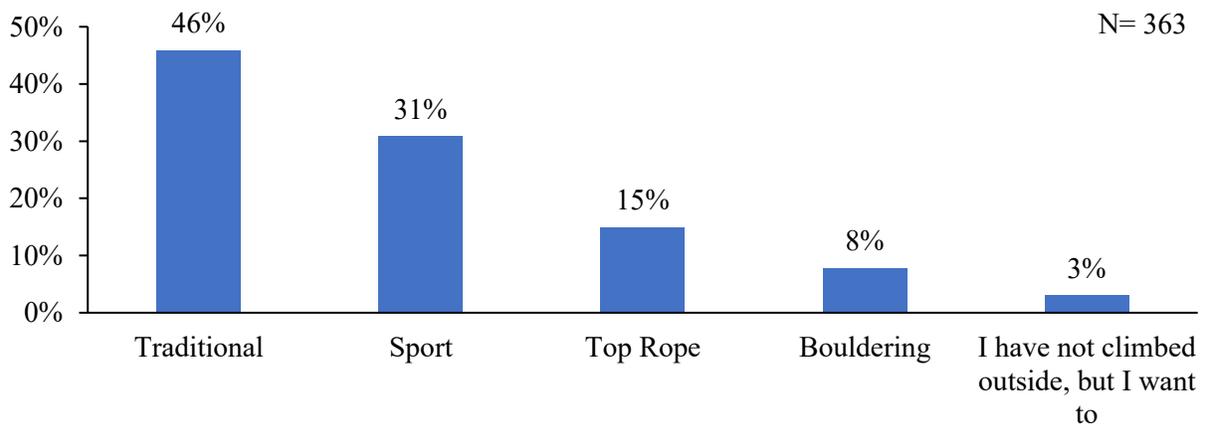
Experience with outdoor climbing types



Note. Answers are not mutually exclusive.

Figure 13

Top preferred type of outdoor climbing



Respondents averaged 13.5 years of experience of outdoor rock climbing (SD = 11.62). Respondents were also asked to share the frequency of their climbing outings, reporting 4.43 days and 8.57 days a month on average climbing outdoors and indoors, respectively (SD = 3.77; SD = 5.23). When asked about their average group size, survey respondents reported an average group size of 3.83 people (SD = 1.41).

Respondents were asked to indicate the highest rating of route they climbed based on their top preferred type of outdoor roped climbing (i.e., trad). These questions were based on the Yosemite Decimal system, which is a widely recognized climbing classification system that accounts for technical difficulty and length of route. 15.1% of respondents cited 5.11a as their highest rated route, followed by 5.9 (12.4%), 5.10a (10.3%) and 5.10c (10.3%) (Table 1).

Table 1

Highest rating of routes climbed based on top preferred type of outdoor climbing

YDS rating	Frequency	%
5.2	1	.03%
5.6	7	1.9%
5.7	8	2.2%
5.8	19	5.1%
5.9	46	12.4%
5.10a	38	10.3%
5.10b	35	9.5%
5.10c	38	10.3%
5.10d	22	5.9%
5.11a	56	15.1%
5.11b	15	4.1%
5.11c	9	2.4%
5.11d	6	1.6%
5.12a	27	7.3%
5.12b	13	3.5%
5.12c	7	1.9%
5.12d	1	.03%
5.13a	8	2.2%
5.13b	7	1.9%
5.13c	2	.05%

Note. Bolded lines indicate answers with the highest frequency.

Table 2 shows the highest rating of outdoor bouldering route (known as ‘bouldering problems’) respondents completed using the V-scale, a rating system for boulder problems that ranges from V0-V17. 18.9% of respondents selected V3 as their highest rated outdoor bouldering experience, V4 followed as the second top choice accounting for 15.4% of respondents and V2 accounting for 11.9% of responses (Table 2).

Table 2

Highest rating of outdoor bouldering performed

V-scale rating	Frequency	%
V0	6	1.6%
V1	27	7.3%
V2	44	11.9%
V3	70	18.9%
V4	57	15.4%
V5	34	9.2%
V6	21	5.7%
V7	21	5.7%
V8	8	2.2%
V9	4	1.1%
V10	1	.3%
V11	4	1.1%
V12	1	.3%
I don't know	49	13.2%

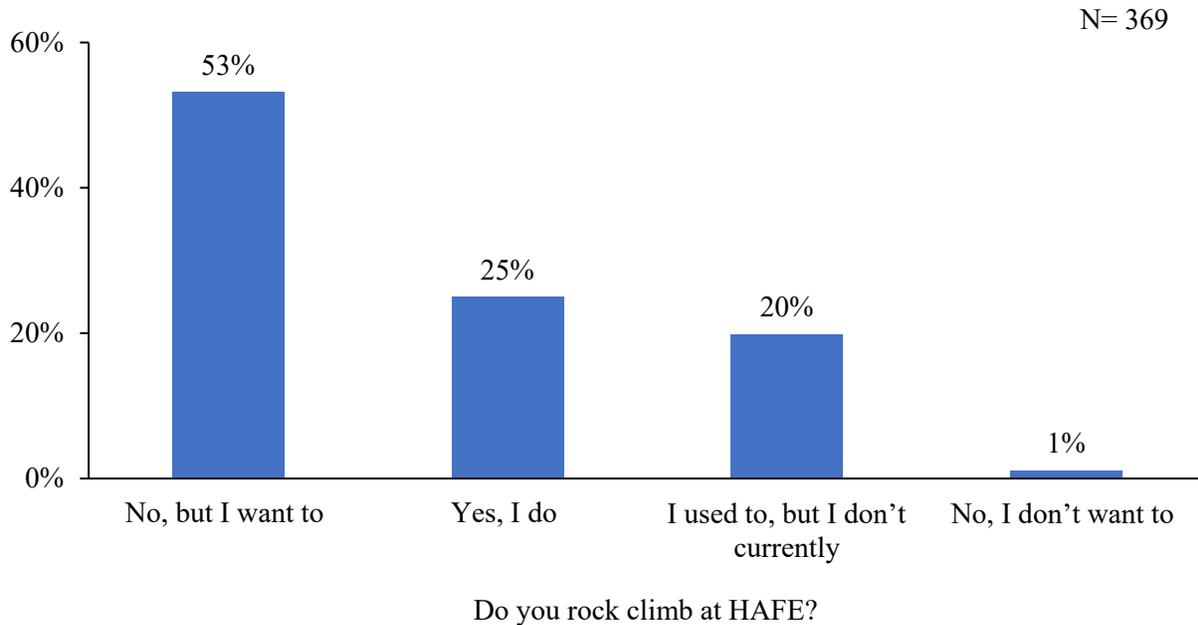
Note. Bolded lines indicate answers with the highest frequency.

IV. CLIMBING AT HARPERS FERRY NATIONAL HISTORICAL PARK

The following section outlines past use history at HAFE climbing sites specifically, and throughout the National Capital Area. Responses are segmented across respondents *with and without climbing experience* at HAFE. Figure 14 communicates past use history and several important variables about the sample population. Notably, 20% of respondents used to climb at HAFE and do not currently (Fig. 14). This could be viewed as a displaced population, or individuals who have stopped climbing at HAFE for any number of reasons (e.g., moving away from the region). 53% of survey respondents have not climbed at HAFE but want to, indicating demand for climbing opportunities (Fig. 14). This group of respondents were excluded from questions that assessed climbing experience at HAFE specifically and is reflected in the question-specific sample sizes, as they have no prior experience of climbing at HAFE.

Figure 14

Past- and present-use climbing history at HAFE



Respondents who currently climb at HAFE, or have in the past, reported an average of 5.14 years of climbing experience at the park (SD = 6.89). Figure 15 represents the year of respondents' first climb at HAFE. Visually, this shows that most survey respondents (64%) climbed at HAFE for the first time after 2014, and 39% climbed for the first time after the superintendent's compendium in 2017 (Fig. 15). Importantly, this does not indicate that these results are reflective of historical climber participation at HAFE from 1973-2021, but rather the trends in participation of survey respondents only.

Figure 15

Year of first climb at HAFE

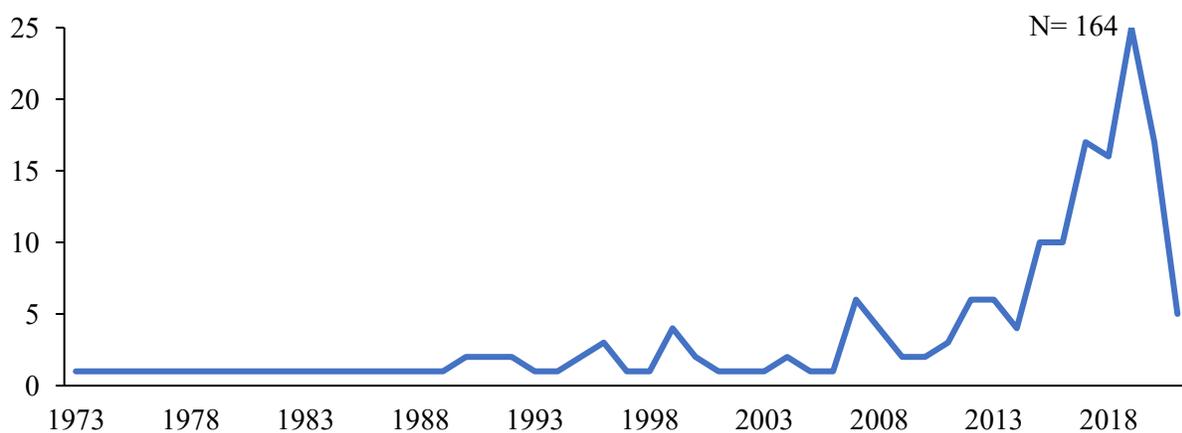
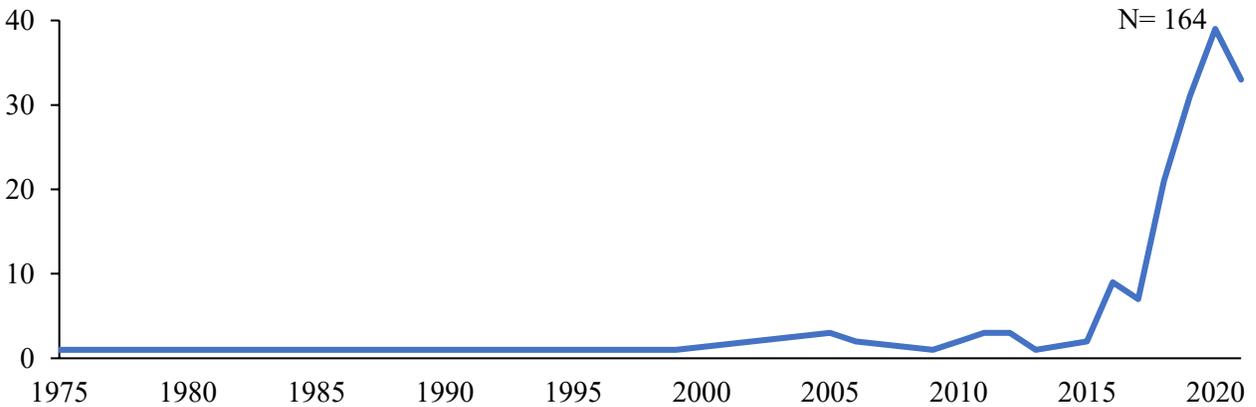


Figure 16 provides additional insight into respondents most recent climb at HAFE. Similar to Figure 15, Figure 16 indicates that a majority of active or former climbers at HAFE have climbed in the park within the last 5 years. Users also cited an average of 7.03 climbing days at HAFE annually (SD = 16.10).

Figure 16

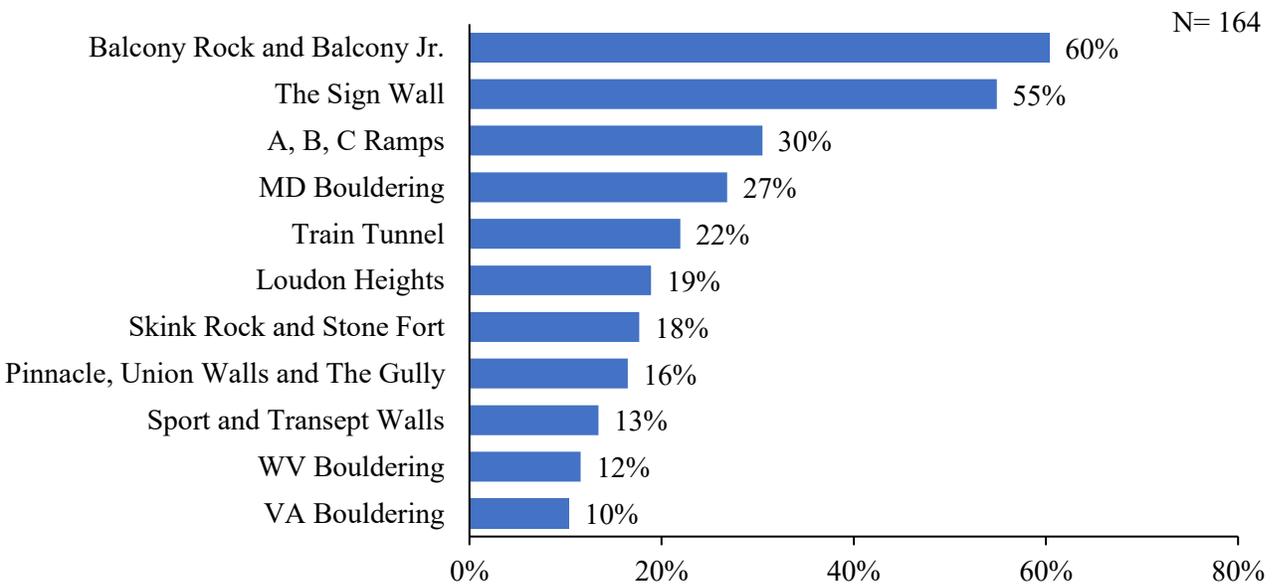
Most recent climb at HAFE



Climbing route specific usage was also of interest. Figure 17 indicates that 60% and 55% of respondents have climbed Balcony Rock / Balcony Rock Jr. and Sign Wall, respectively.

Figure 17

Sites climbed at HAFE



Note. Answers are not mutually exclusive.

Top preferred climbing sites were also rated by respondents and reported as the following ($n = 137$):

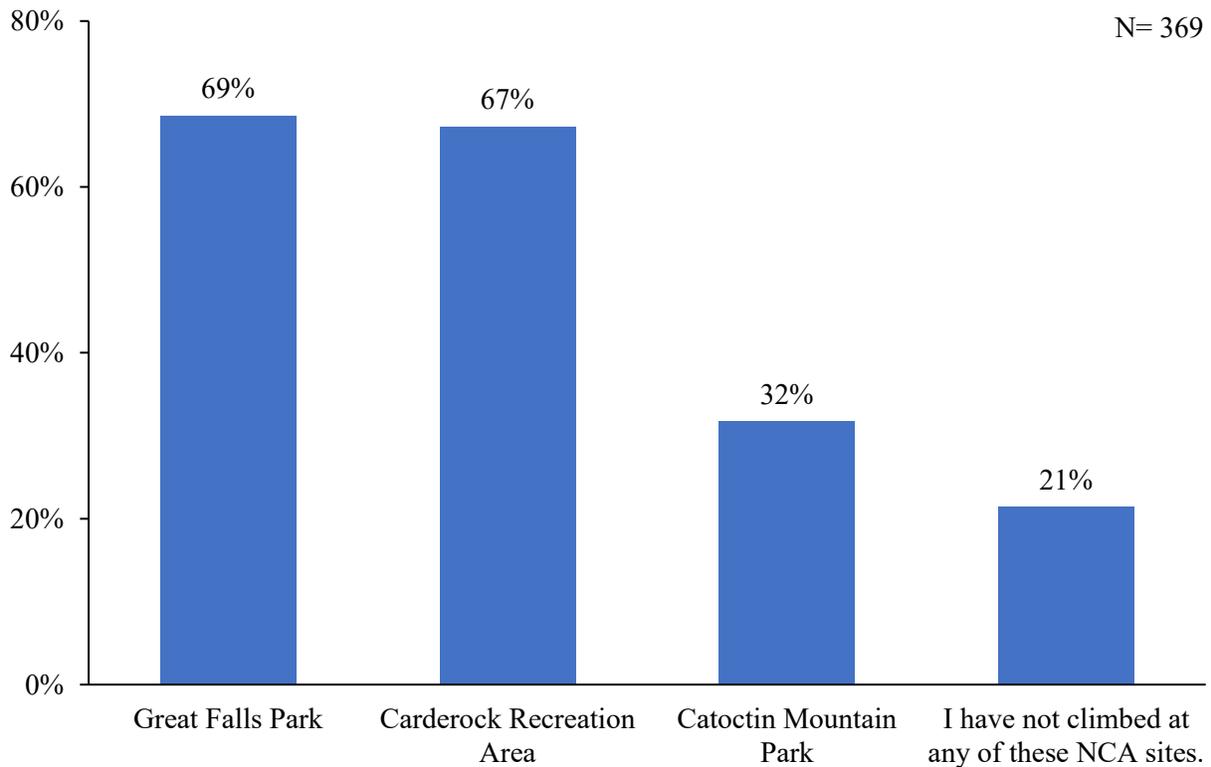
1. Balcony Rock and Balcony Rock Jr.
2. The Sign Wall
3. A, B, C Ramps

Top rated sites should be analyzed with the consideration of site closures and ease of accessibility, as prior closed climbing sites and changes in access may have influenced respondent's choices and preferences.

HAFE exists within the National Capital Area, Region 1, where recreation substitution options exist across sites with varying levels of accessibility. Respondents largely indicated familiarity and experience with other National Capital Area (NPS managed) climbing sites (Fig. 18). Over 65% of respondents had climbed at Great Falls Park and Carderock Recreation Area previously (Fig. 18), indicating more past use of these sites in our sample than at HAFE.

Figure 18

Other National Capital Area (NPS managed) climbing sites visited



Note. Answers are not mutually exclusive.

Climbing experience results, generally, and at HAFE specifically indicate that survey respondents make up a relatively new user group to the site. 45% of total survey respondents had climbed at HAFE previously, with an average of 5 years climbing experience within the park.

V. EXPENDITURES

Economic impact research is built on the premise of a study area: a defined area in which the activity being studied occurs alongside the expenditures that may result from those activities. Study areas should include the main spending areas (such as cities and towns) likely to experience expenditures due to the event being studied as well as any major transit hubs in and out of the area. For this study, the researchers are examining climbers spending funds in the following counties: Jefferson County, WV; Berkley County, WV; Washington County, MD; Frederick County, MD; Loudoun County, VA; Clarke County, VA; Frederick County, VA.

Expenditures Examined

Expenditures studied include the following categories (variables): Lodging (hotel, camping, cabin/house rentals) Gasoline, Food Purchases (fast food, dine in, convenience store food, groceries), Non-food Retail Purchases (retail, recreational retail such as gear) and Services (rental gear, guide, taxi/Uber/Lyft). Expenditures are examined in two ways: within a fifty-mile radius of HAFE and more than 50 miles from HAFE, but still in West Virginia, Virginia, or Maryland.

Findings

Table 3 describes the mean expenditures for climbers visiting HAFE and living outside the study region, and those who reported expenditures. Importantly, 52.6% ($n = 194$) of respondents did not complete this section of the survey, but did complete the following sections, representing additional potential expenditures for climbers who have not yet visited HAFE but want to. Overall, expenditures were greatest in dining out at a full-service restaurant with waitstaff (\$9.96 per person), hotel lodging (\$4.94 per person) and gasoline (\$4.31 per person). The hotel expenditures may seem counterintuitive at first but recall these are averaged expenditures and include cases where visitors did not stay overnight ($n = 59$) or chose to camp (three cases) instead of hotels (six cases). After clearing out abnormal cases, no climbers reported using cabins. In sum, climbers spend approximately \$22 per trip per person.

Table 3

Visitor expenditures inside the study area

Variable	n	M	SD	Min	Max
Hotel	148	\$4.94	28.72421	0	200
Camping	147	\$0.03	0.22071	0	2
Cabin	146	\$0.00	0	0	0
Gasoline	148	\$4.31	9.24984	0	50
Fast Food	148	\$1.47	4.91118	0	30
Dine In	148	\$9.96	18.17382	0	100
Convenience Food	147	\$0.73	2.67487	0	15
Grocery	148	\$0.49	2.41378	0	20
Retail	146	\$0.01	0.08276	0	1
Recreation Retail	146	\$0.00	0	0	0
Rental Gear	149	\$0.00	0	0	0
Guide Services	148	\$0.00	0	0	0
Taxi/Uber/Lyft	149	\$0.00	0	0	0

Note several categories are reported as zero in Table 3: cabins, recreational retail, rental gear, guide services, and taxis. Previous studies (see Maples et al. n.d.; Maples et al. 2019) have had similar findings in that climbers less often use rental gear and guide services, as these are relatively uncommonly used in the region. Taxis and similar transport options are also often unused in favor of climbers carpooling to the crag. Note that zero instances of rental gear or taxi expenditures were reported, while the few cases found in guide services ($n = 1$), recreational retail ($n = 3$) and cabins ($n = 3$) were found to be exceptional cases and excluded as outlined in the methodology section.

Table 4 expands expenditures using the same categories outside of the study area but still in West Virginia, Virginia, and/or Maryland. Here, expenditures are relatively flat and are likely the result of traveling to HAFE. Overall, the greatest expenditures in gasoline (\$8.96 per person) and dine in full-service restaurants (\$3.60 per person). No other category exceeds \$2 per visit. There is a somewhat notable story here regarding lodging, however. Overall, more respondents indicating spending funds lodging themselves outside the study area than inside it. In Table 4, four respondents used hotels, four used cabins, and seven camped. In sum, climbers spent \$22.27 outside the study area because of traveling to HAFE to climb. This is somewhat atypical of other climbing expenditure studies in the Central Appalachian region (see Maples et al. 2021; Maples et al. 2019; Maples et al. 2017) in that expenditures are slightly higher outside the study area versus inside the study area. It is conjecture, but this can often mean climbers are not finding the services they seek inside the study area.

Table 4

Visitor expenditures outside the study area but inside surrounding states

Variable	n	M	SD	Min	Max
Hotel	148	\$1.27	11.36804	0	125
Camping	148	\$1.09	6.46814	0	50
Cabin	148	\$1.69	12.25514	0	100
Gasoline	147	\$8.96	14.09172	0	50
Fast Food	148	\$1.40	5.06521	0	30
Dine In	145	\$3.60	11.32351	0	60
Convenience Food	147	\$1.46	3.92637	0	20
Grocery	145	\$1.15	4.78508	0	37.5
Retail	147	\$0.59	3.28482	0	25
Recreation Retail	146	\$1.06	5.96568	0	50
Rental Gear	149	\$0.00	0	0	0
Guide Services	148	\$0.00	0	0	0
Taxi/Uber/Lyft	148	\$0.00	0	0	0

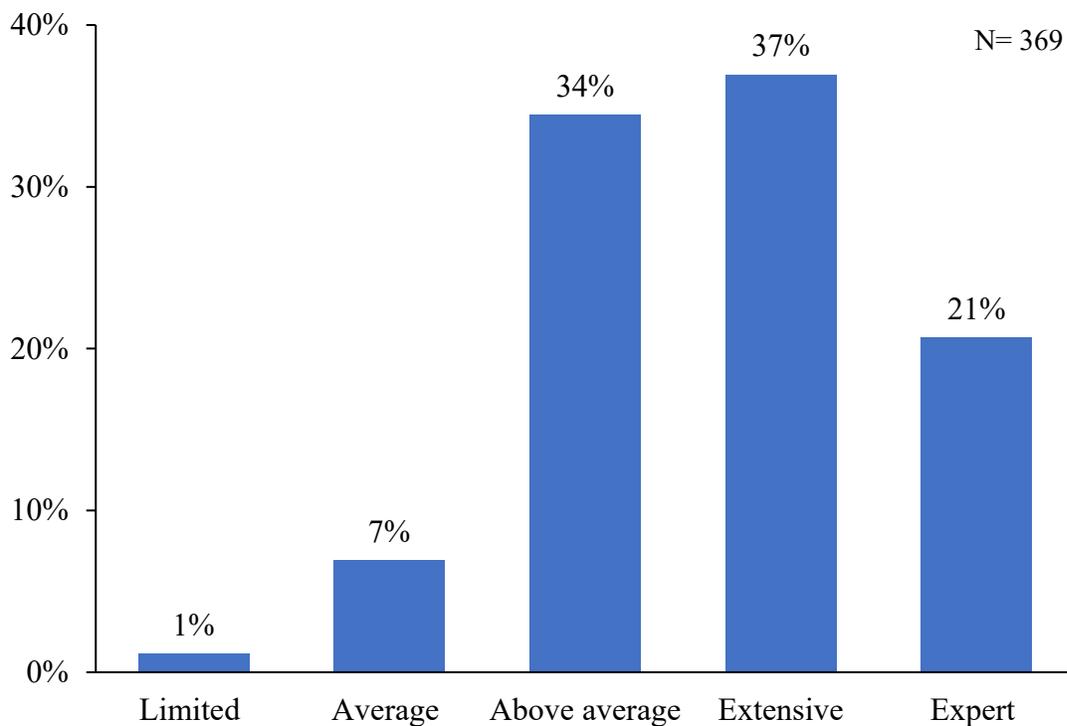
Again, notably, 53% of survey respondents did not provide expenditure data, which is potentially reflective of climbers who haven't yet climbed at HAFE, but want to. In short, finding ways to encourage their visitation, while encouraging local spending vs surrounding area spending, could positively impact Bolivar, Brunswick, and other gateway communities of the park.

VI. LEAVE NO TRACE

The awareness of Leave No Trace (LNT) principles was investigated using a series of scales focused on LNT perspectives and appropriateness of behaviors. Note that the results reported in this section are based on a self-reporting format of data collection. We recognize limitations present in the employment of this self-report method for pro-environmental behaviors. Self-reported knowledge of LNT principles was rated from ‘limited’ – ‘expert’, with 92% of survey respondents self-reporting between ‘above average’ – ‘expert’ (Fig. 19).

Figure 19

Self-rated knowledge of Leave No Trace principles



In sum, the LNT findings of this study are consistent with prior self-reporting LNT studies (e.g., Clark et al., 2020; Sharp et al., 2018). Broadly, the findings suggest respondents care about LNT principles. Specifically, Table 5 lists statements related to perspectives of LNT principles provided to participants, to which they responded on a scale of “strongly disagree” (1) to “strongly agree” (5) (Schwartz et al., 2016). The statement that respondents strongly agree with the most is, “It is important that all HAFE visitors’ practice “Leave No Trace” (SD = .59) (Table 5). The statement that respondents strongly disagreed with the most is, “Practicing “Leave No Trace” violates the rights of individuals to do as they please in the outdoors” (SD = .42) (Table 5). The statement that produced the greatest variance in response was, “In general, the opinions of others have little effect on my practicing of “Leave No Trace” (SD = 3.49) (Table 5).

Table 5

Leave No Trace perspectives

Statement	<i>M</i>	<i>SD</i>
Sometimes it is too difficult to practice “Leave No Trace”	1.58	.812
Practicing “Leave No Trace” takes too much time	1.33	.566
Practicing “Leave No Trace” violates the rights of individuals to do as they please in the outdoors	1.12	.418
Practicing “Leave No Trace” does not reduce the environmental harm caused by recreation	1.43	.748
Practicing “Leave No Trace” effectively protects the environment for future generations to enjoy	4.39	.885
Practicing “Leave No Trace” enhances my outdoor experience	4.43	.773
It is important that all HAFE visitors’ practice “Leave No Trace”	4.74	.593
It is important that Harpers Ferry regulations require all visitors to practice “Leave No Trace”	4.57	.715
The people I recreate with believe it is important to practice “Leave No Trace”	4.62	.620
In general, the opinions of others have little effect on my practicing of “Leave No Trace”	4.25	3.49
I practice “Leave No Trace” because the people I recreate with believe it is important	3.49	1.193
I practice “Leave No Trace” because the park regulations state that I should do so	2.96	1.218

Note. 1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly agree. Bolded lines indicate statements of greatest and least agreeance on average.

The results of a second LNT scale that surveys appropriateness of behaviors is found in Table 6 (adapted from Schwartz et al., 2016; Sharp, 2018; Clark, 2020). The most inappropriate behaviors for respondents on average were, “Breaching Peregrine Falcon nesting trail and cliff closures” ($M = 1.18$) and “Dropping food on the ground to provide wildlife a food source” ($M = 1.23$) (Table 6). The behavior with the most variance of appropriateness for respondents on average was, “Top roping off fixed gear vs. your own gear” ($SD = 1.2$) (Table 6). Those who stated they had more LNT knowledge scored higher on the scales than those with less self-reported knowledge. Survey respondents have high awareness and agreeance of LNT principles.

Table 6

Appropriateness of climbing specific behaviors

Statement	<i>M</i>	<i>SD</i>
Playing music through external speakers	1.68	.757
Stashing gear near climbs for later use	2.27	.962
Moving rocks, trees, or shrubs at the base of a climb to develop a safer landing zone or for better, easier access	2.61	1.047
Leaving chalk marks when finished climbing	2.74	.969
Not matching your chalk color to the rock to avoid detracting from the visual experience of the next user	3.14	.758
Traveling off designated trails to access climbs	2.42	1.061
Breaching Peregrine Falcon nesting trail and cliff closures	1.18	.443
Not walking single file (traveling side-by-side) on trails and cutting switchbacks	1.78	.733
Continuing a climb that disturbs wildlife	1.55	.704
Dropping food on the ground to provide wildlife a food source	1.23	.466
Scheduling a visit during times of high use	2.89	.768
Having no plan B climb if your first option is not available or too crowded	2.32	.839
Taking as much time as desired to climb despite other climbers waiting	2.35	.982
Placing gear or staging equipment on sensitive vegetation (grasses, trees, shrubs, moss, etc.)	1.62	.731
Keeping a single item like a rock, plant, stick, or feather as a souvenir	1.88	.817
Removing/cleaning lichen, moss, or plants from a climb to establish a new route	2.88	1.044
Spreading out gear and equipment to establish a “base-camp” while at the crag	2.18	.872
Not checking with local land management agencies about group size limits, permits, rules and regulations	1.79	.726
Top roping off fixed gear vs. your own gear	2.52	1.2
Spotting and leaving abandoned gear behind from other users	2.35	.798
Climbing despite seasonal route closures	1.29	.512
Climbing cliff edges, cracks, and ledges prone to erosion	1.99	.826

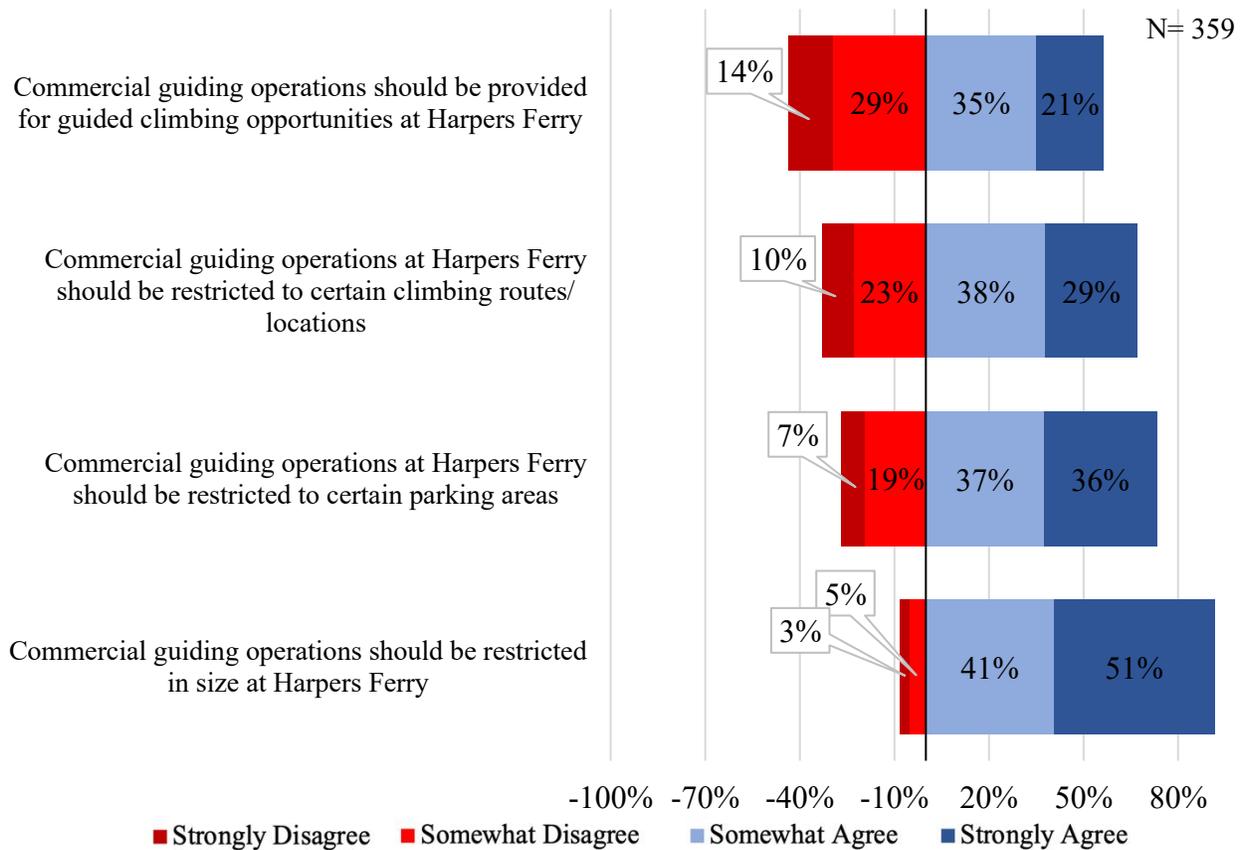
Note. 1= Very inappropriate, 2= Inappropriate, 3= Neutral, 4= Appropriate, 5= Very appropriate. Bolded answers indicate the most and least appropriate behaviors on average.

VII. MANAGEMENT AND OPERATIONS

Management operations encompasses support of commercial climbing operations, awareness and use of shuttle services, and climbing registration behavior and perceptions. Figure 20 shows that by a slim majority (56%), respondents support commercial guiding operations in the park. Most respondents support restrictions on parking areas (73%), locations (67%), and group size for commercial use groups (92%) (Fig. 20). Statements with the highest level of agreement are found in the bottom half of Figure 20 and statements with the highest level of disagreement in the top half.

Figure 20

Commercial operations support



Questions related to awareness and use of shuttle services produced notable findings. Findings indicate that 58% of the sample was unaware of available shuttle services (Fig. 21). Shuttle experience reflected parallel results, with only 13% of respondents indicating experience with park shuttle services (Fig. 22). These findings will be discussed again in the *Barriers and Constraints* section.

Figure 21

Awareness of shuttle services

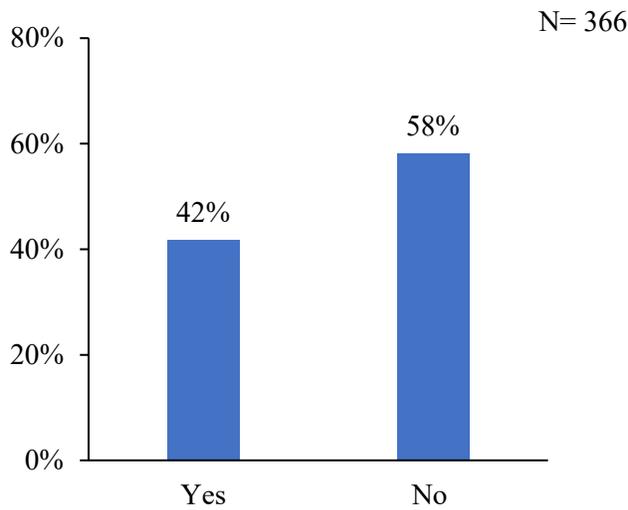


Figure 22

Shuttle experience

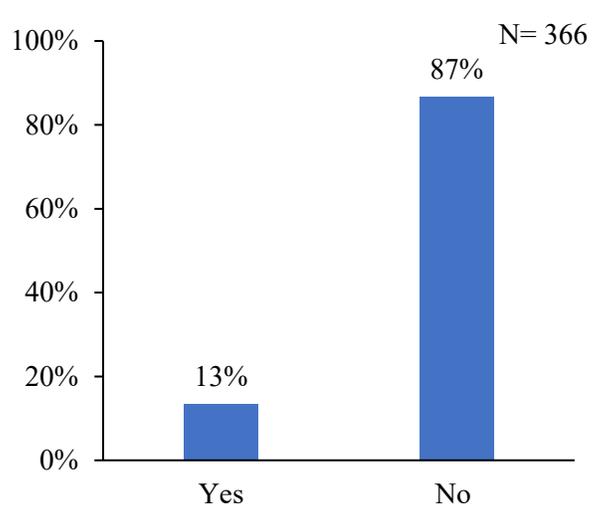
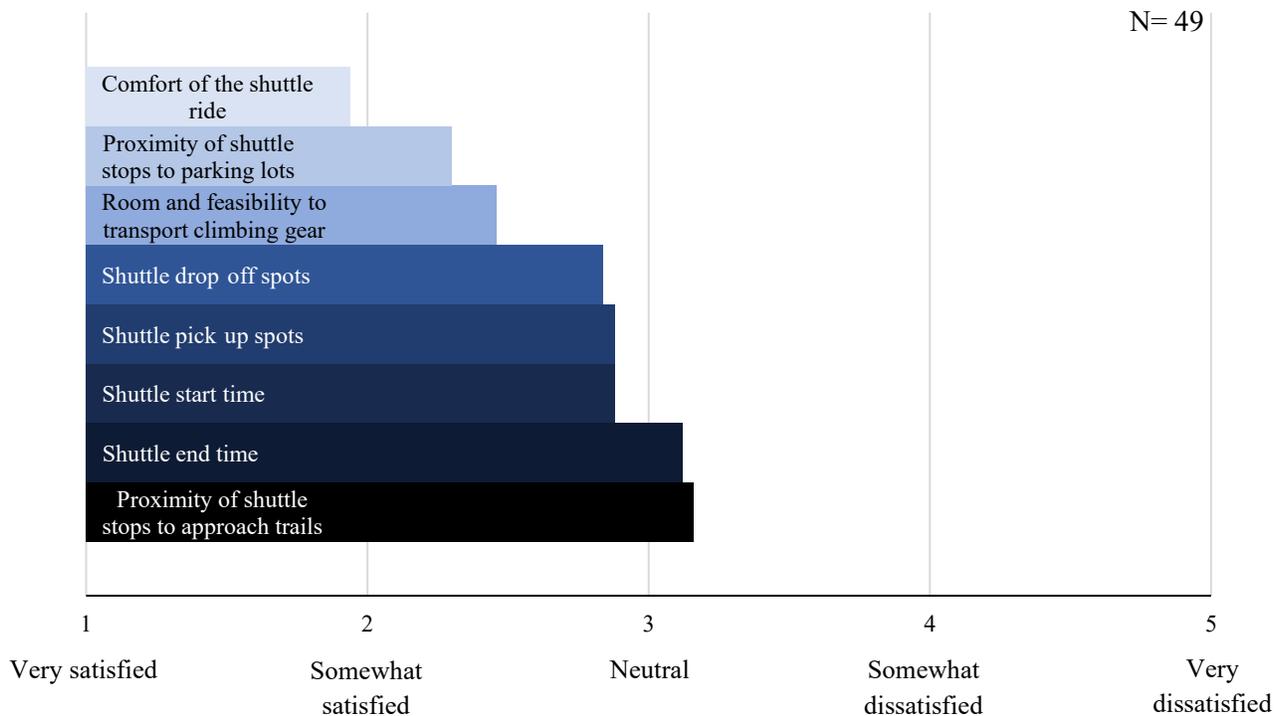


Figure 23 communicates satisfaction with shuttle service factors, including comfort, proximity metrics, and service times. Shuttle factors that lie to the left of the center of the graph indicate factors that respondents are very satisfied, somewhat satisfied, or neutral about (Fig. 23). Shuttle services, based on this sub-sample, seem to be serving respondents well.

Figure 23

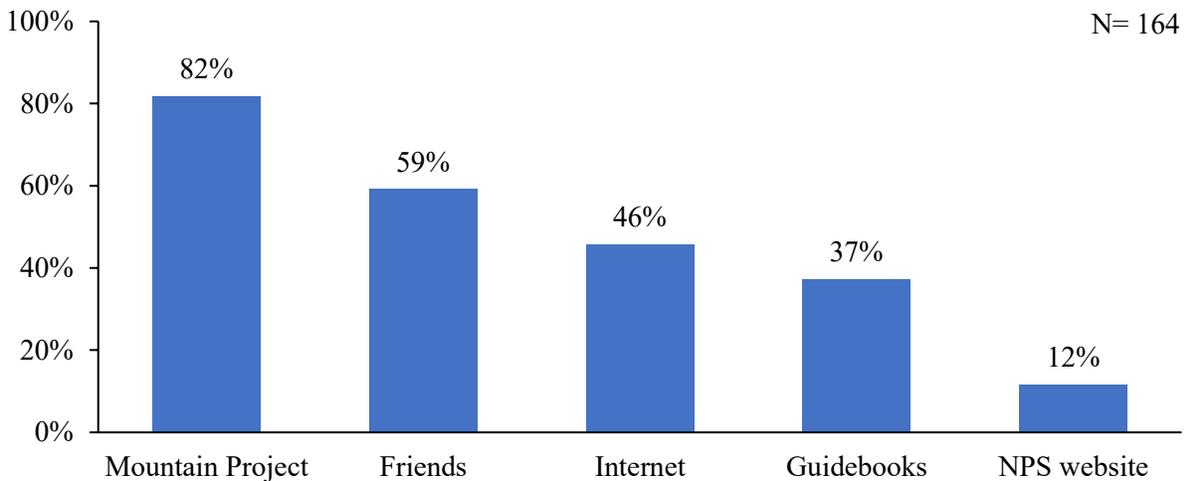
Shuttle service factor satisfaction



We also inquired about respondents' source for climbing information related to HAFE. Results indicate that most respondents are not receiving their HAFE climbing information from the National Park Service, but rather from other climbing organizations, friends, and the internet broadly (Fig. 24). This is relevant to ensure accurate, easy to access, and up to date climbing information, including regulations, registration policies and opportunities, is present.

Figure 24

Source for HAFE climbing information



Regarding climber registration, Figure 25 indicates that nearly the same percentage of respondent's "never" register to climb (33%) as those who "always" register to climb (34%) (Fig. 25). A follow-up question regarding method of registration sheds light on these results, with 19% of the sample not aware of climbing registration requirements (Fig. 26).

Figure 25

Past registration behavior

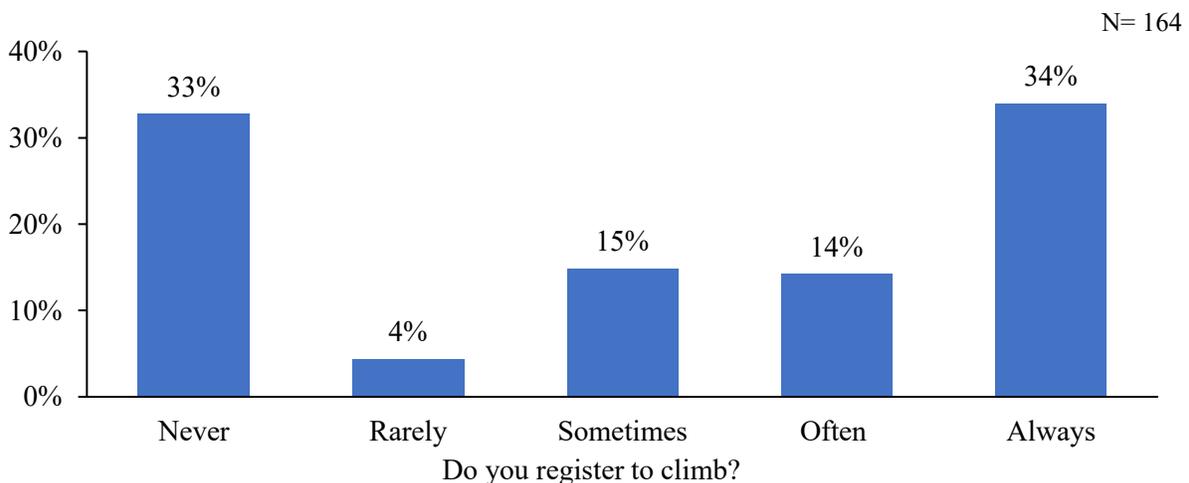
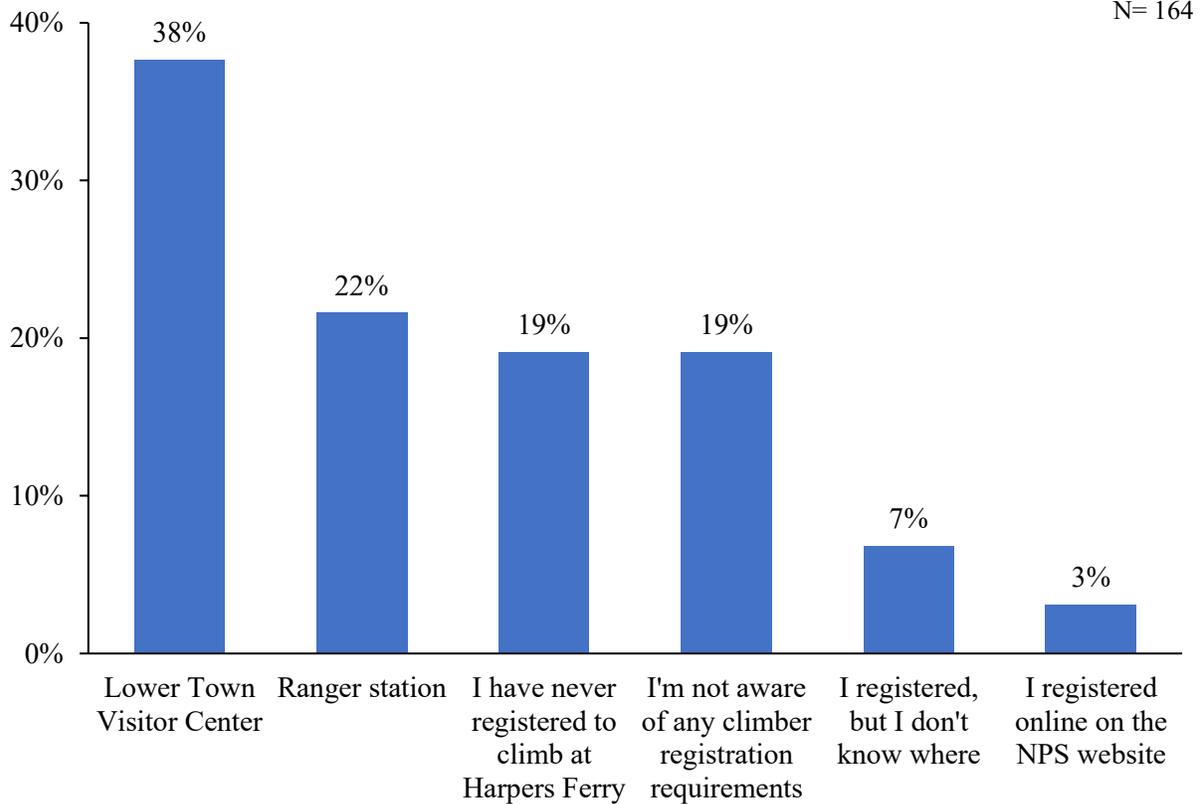


Figure 26

Registration method used



In conclusion, respondents indicated, by a slim majority (56%), they support commercial operations, but overwhelmingly support commercial use restrictions. Low knowledge of shuttle services and registration requirements are evident, and most respondents are seeking their HAFE related climbing information from outside of park service outlets.

VIII. BARRIERS AND CONSTRAINTS

Barriers and constraints data aimed to measure the extent to which respondents' felt their climbing opportunities are limited or impacted. When asked to indicate the extent to which they felt their experiences at HAFE were negatively impacted by the variables in Figure 27, "parking availability", "management communication", "parking safety", and "climber registration policies" were reported as the top variables that *negatively impacted* the climbing experience at HAFE. "Climbing site closures for Maryland Heights", "trail closures for peregrine falcon nesting", "route length" and "search and rescue available" were reported as top variables that *did not* negatively impact climbing experiences (Fig. 27). As noted previously, shuttle awareness and usage were low among survey respondents, thus strategies to address perceived barriers and constraints (i.e., parking availability and safety) may be addressed by improving awareness of shuttle services and adjusting shuttle services.

Figure 27

Extent that climbing experience was negatively impacted

N= 369

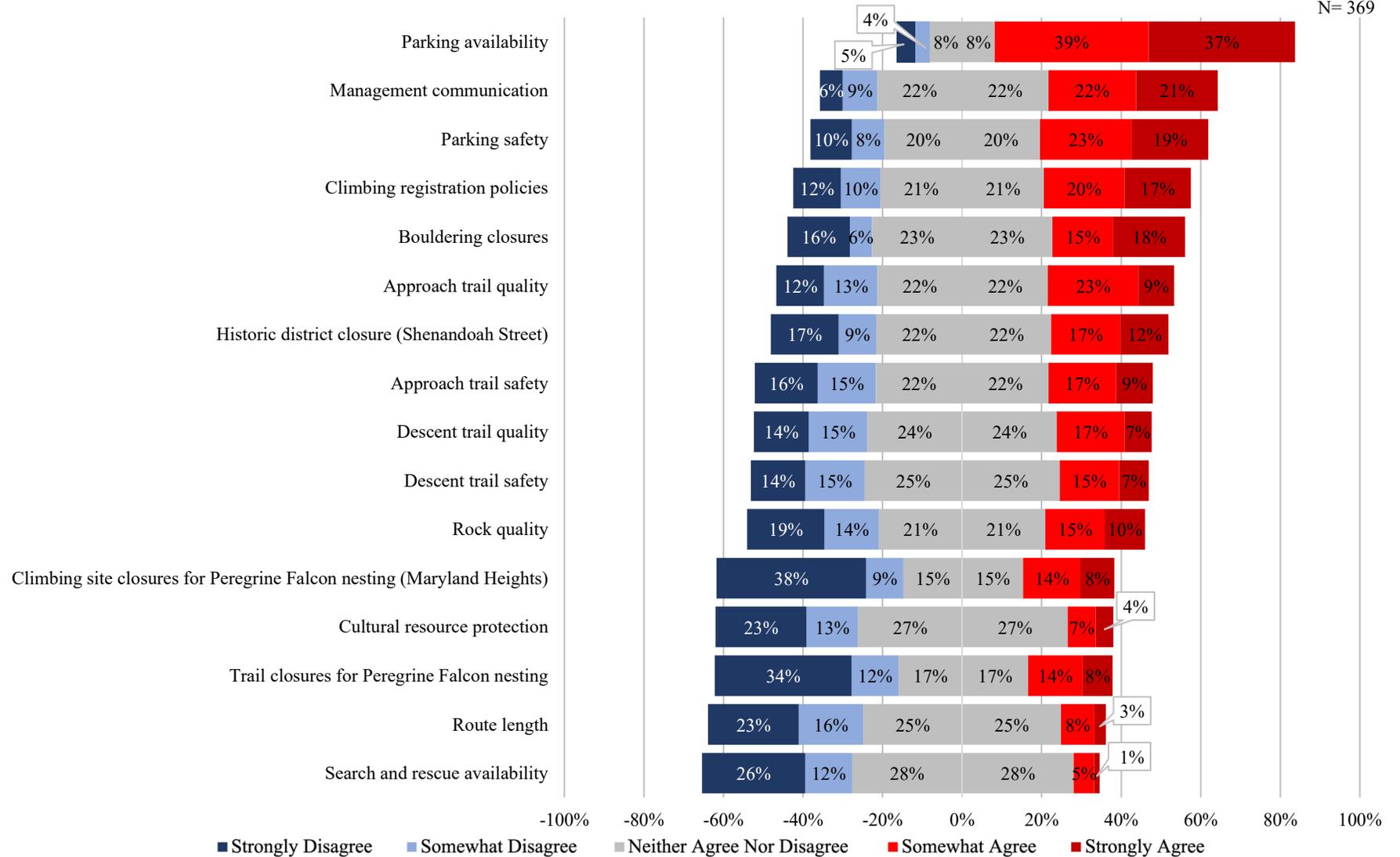
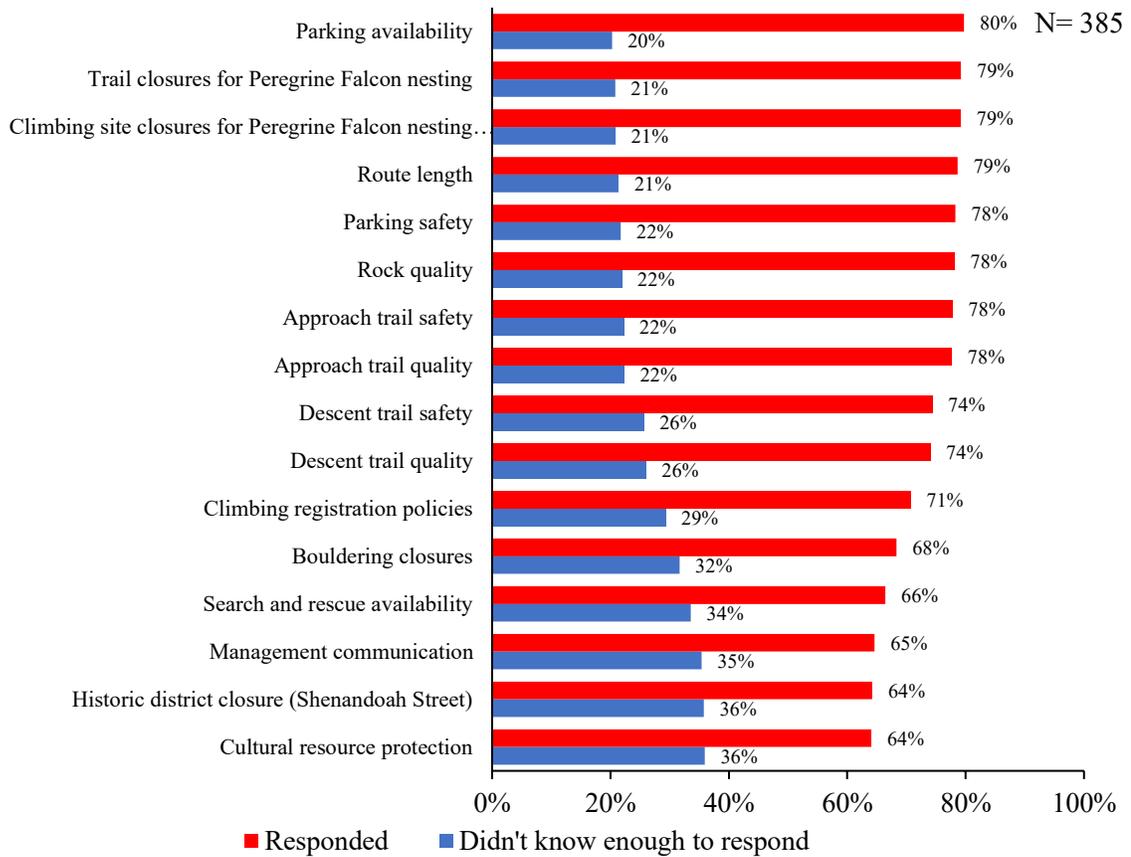


Figure 28 further displays responses extracted from the constraints data in Figure 27; on average, 27% of survey respondents didn't know enough to respond to given barriers and constraints at HAFE. Providing respondents the option to opt out of scales by selecting "I don't know enough to respond", helps increase the usefulness of findings in Figure 27 by isolating respondents with no knowledge to respond to barriers and constraints appropriately. Figure 28 identifies criteria that residents were least knowledgeable about in the bottom half of the graph.

Figure 28

Lack of knowledge of barriers and constraints



Respondents were also asked to rank their top three variables that negatively impacted their climbing experience or opportunities at HAFE. Respondents ranked their top three barriers and constraints as:

1. Parking availability
2. Cliff face closures (Loudon Heights)¹
3. Climber registration policies

¹ "Cliff-face closures (Loudon Heights)" was unintentionally omitted from the barriers and constraints question on the survey but was included in the ranking question.

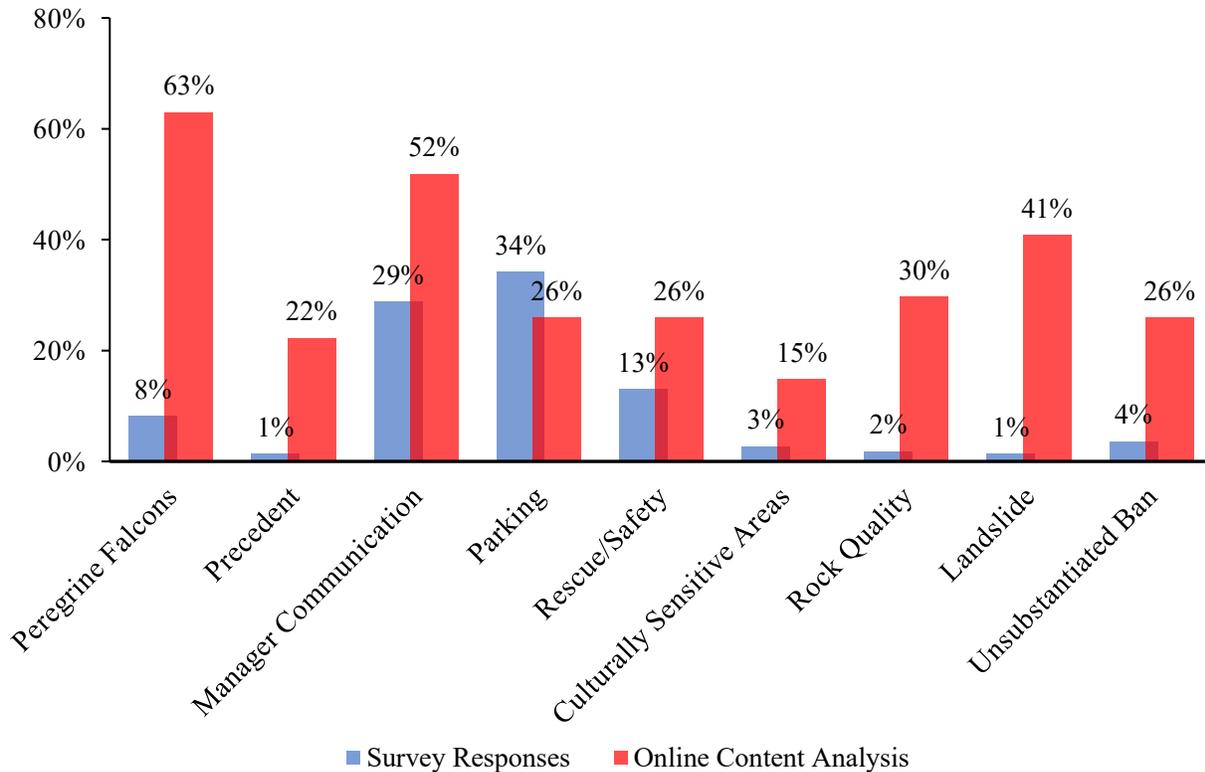
IX. OPEN-ENDED RESPONSES

Roughly a third of survey respondents (29.8%) provided open-ended responses related to the management of climbing opportunities at HAFE. These responses were then coded by two researchers using categories from a previous content analysis of online representation of climbing management at HAFE (see Appendix A). In doing so, our aim was to compare the important themes present in the online representation of climbing management from local and national climbing organizations (e.g., Mid Atlantic Climbers) with what was most important to survey respondents.

Results from frequency coding of these two sources of data are displayed in Figure 29 below. One key distinction between online representation and open-ended responses was the focus on messaging peregrine falcon nesting closures online (63%) and the lack of comments related to peregrine falcons in the survey responses (8%). Those comments that did exist related to peregrine falcon closures were supportive of management efforts by HAFE. Additionally, most open-ended survey responses focused on parking (34%), manager communication (29%), or safety in accessing climbing resources (13%). Representative comments are shared below.

Figure 29

Open-ended and content analysis themes



Management communication

“It's too hard to find accurate info as to what is allowed and what is not. It seems as if you have to go out and try and see if you get in trouble or not. It shouldn't be that way. It wouldn't be hard at all for them to set up a site with maps that clearly show where you can climb and where you can't, as well as where you can park and where you can't.”

“The on and off again permission/denial to climb in this area is frustrating and has been the largest deterrent for me to climb there. I am most frustrated with NPS rangers/management that have enforced seemingly arbitrary prohibition to climbing, when climbers are generally excellent stewards of the outdoors.”

“I haven't gone climbing there because the permit process sounds too limited and too confusing. I don't want to drive out there and not be able to climb.”

“It is helpful to make closures clear with maps so climbers are not confused where they should and should not climb. I am always afraid to climb somewhere I should not at Harpers Ferry, so I don't climb there.”

Parking and Rescue / Safety

“Parking for climbers is an absolute barrier to access. I have been climbing there since 1996 and it is the worst I have ever experienced. It has become prohibitive and saddens me, given my long history and connection with the place. I cannot take my child because the parking is so limited and the access from legal parking is so risky/dangerous.”

“It's a great place to climb. It's just hard to get to because of the parking and registration requirements. I'm fine not climbing when the falcons are nesting.”

“The top issues at Harpers Ferry seem to be parking, both for hikers and climbers, and the approaches to popular rock outcrops like Balcony Jr and MD Bouldering. Some trails need to be formalized, but the biggest safety concern is that the road is extremely narrow in spots making pedestrian travel dangerous. With the increasing number of climbers transitioning from indoor climbing to outdoor climbing in the Baltimore, D.C., Northern Virginia, and Eastern Panhandle areas, I think it is more important than ever to recognize climbers as a legitimate and helpful user group in the park management plan. They could be an impressive source of volunteer labor for projects that would benefit all park users and park sustainability.”

A full list of open-ended responses can be found in Appendix C. Finally, as evidence of the comments shared in the final open-ended response above, 165 ($n = 44.7\%$) climbers shared the email addresses, indicating their willingness to be involved in future climbing management efforts at HAFE and within the Region.

MANAGEMENT IMPLICATIONS

The following are proposed recommendations for HAFE managers informed by the findings of this technical report. While the superintendent's compendium and subsequent revisions to the compendium led to stated confusion and/or displacement for some climbers, 39% of participants who have climbed at HAFE experienced their first visit in 2017 or after the initial compendium. From climbers open-ended comments it appears the relationship between park management and climbing stakeholders necessitates future engagement through science informed decision-making processes. The following recommendations, when considered with park mandates and managerial, ecological, and social considerations, may help direct collaborative climbing resource management in productive ways.

1. Climbers state a strong sense of stewardship towards the resources at HAFE, particularly toward peregrine falcons, which may be leveraged to help with future conservation and collaborative management of climbing sites.
2. Managers may consider formal partnerships with local and/or national climbing organizations to assist with the management and maintenance of climbing areas.
3. A segment of respondents was relatively new to climbing and/or specifically climbing at HAFE. As a result, these climbers are more likely to be receptive to new institutional norms, or changes in management of climbing resources at the park.
4. Increasing shuttle service stops (i.e., Balcony Rock) and general awareness of services may help accommodate parking constraints and safety concerns, as well as simultaneously increase the park's recognition of climbing resources.
5. Climber demographics and annual income reflect opportunity for increased expenditures within the study area and in surrounding communities. Providing supplies and services geared towards climbers (i.e., guidebooks in the visitor center, climbing equipment in local shops etc.) can aid in increasing on-site spending and positive relationships.
6. Managers and stakeholders can contribute to building stronger relationships by engaging in dialogue on-site and generally encouraging climbers that they are welcome and invited.

One potential next step informed by these results, may be to activate the existing Balcony Rock turnout for controlled access, as well as partner with climbing organizations for co-management of trail re-design, as well as installation of fixed interpretative and climber registration resources. Balcony Rock and Balcony Rock Jr. were stated as the most highly visited and top preferred site among respondents. The existing turn out and gated access (Figure 30) could be activated, with access controlled either by park-operated shuttle services or through commercial use authorization with existing private shuttle services. Using Balcony Rock as a test site for future collaboration between the park and the climbing community could continue to build trust, increase safety, and improve recreation opportunities at a site which participants highly valued.

Figure 30

Balcony Rock existing infrastructure and sample climbing opportunities



Note. A) Existing Balcony Rock turn out on Sandy Hook Road; B) Existing exit gate in turn out footprint; C) Existing climber trail on Sandy Hook Road; D) Sample climbing opportunities at Balcony Rock.

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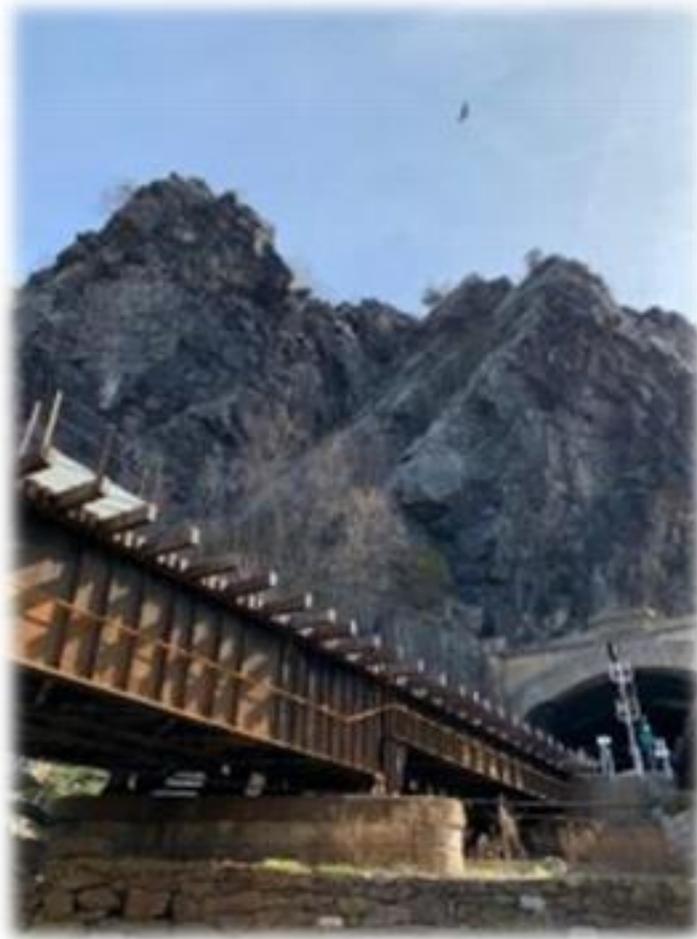
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APPENDICES

Appendix A: Online Content Analysis

CONTENT ANALYSIS OF ONLINE REPRESENTATION OF ROCK-CLIMBING CLOSURES AT HARPERS FERRY NATIONAL HISTORICAL PARK



“Sign Wall and the Ramps of Maryland Heights” (Irwin, 2019)

Chandler Berry, Chris A. Zajchowski, Ph.D., Eddie Hill, Ph.D., & Ryan Sharp, Ph.D. May 8,

2020

Objective

In 2020, Harpers Ferry National Historical Park (HAFE) contracted Old Dominion University and Kansas State University to perform scoping research to understand rock climber perceptions of climbing management within the park. HAFE manages potential sites for rock climbing in Maryland, Virginia, and West Virginia. Several management concerns previously generated rock-climbing closures throughout the park. At the time of this report, existing closures cover all rock-climbing areas in the Virginia and West Virginia areas of the park. There are also seasonal closures in the Maryland Heights area for Peregrine Falcon nesting, and a landslide in 2018 led to a year-long closure of the Maryland Heights area. This Phase I Report documents a literature review of climbing management and frameworks and a content analysis of online representation of rock-climbing closures at HAFE with the purpose of 1) understanding online representations of closures by the press, the Park, and stakeholder groups, 2) designing a survey instrument to sample HAFE rock climbers regarding existing use and management perceptions, and 3) informing the construction of a climbing management plan for HAFE.

Literature Review

Rock climbing management throughout the National Park Service (NPS) is guided by a series of best-practices codified in management frameworks. In this section, we share two frameworks – the U.S. Interagency Visitor Use Management Framework (IVUMF) and the Access Fund Framework – and one example case study of climbing management at the Obed Wild and Scenic River.

1. The IVUMF is an outdoor recreation and natural resource management framework developed by a council of six federal land management agencies (Interagency Visitor Use Management Council, 2016, p. 2). These six agencies represent federally managed lands and waters: Bureau of Land Management, NPS, U.S. Fish and Wildlife Service, U.S. Forest Service, National Oceanic and Atmospheric Administration, U.S. Army Corps of Engineers. The driving philosophy of the framework is grounded in previous frameworks such as Limits to Acceptable Change (IVUMC, 2016, p. 2). Acceptable levels of change dictates that if recreational use is allowed, then there will be environmental impacts and managers must decide what level of impact is seen as acceptable. The sliding scale of analysis is another guiding philosophy (IVUMC, 2016, p. 3). This means that no matter the significance of the impact, all elements of the framework are used but the investment of time and resources depends on the significance of the impact. Criteria to determine placement on the scale includes issue uncertainty, impact risk, stakeholder involvement, and level of controversy.

The IVUMF consists of four elements. These four elements are 1) *Build the Foundation*, 2) *Define Visitor Use Management Direction*, 3) *Identify Management Strategies*, and 4) *Implement, Monitor, Evaluate, and Adjust*. Within each element there are numerous steps to achieving desired goals. *Build the Foundation* is the first element,

and the element for which this scoping research is contracted. This element outlines what and why of the management plan. In this step, managers explain the purpose and need of management, as well as review legislation, agency policies, and possible alternative directions. This step allows the managers to determine what would be acceptable under their mandates. Following those reviews, managers will review current data and conditions, and begin to develop an action plan. *Define Visitor Use Management Direction* is the second element. In this element, managers look to determine desired conditions, define appropriate visitor activities, facilities, and services, and select indicators and establish thresholds. Essentially, this element determines what the end goal is. These indicators are measurable attributes that can be tracked to monitor the desired condition. Thresholds allow managers to use these indicators to set measurable goals. Element three is *Identify Management Strategies*. This element helps managers select what strategies they will use and determine how they will be implemented. First managers must compare the difference between current and desired conditions. Next, they will identify strategies to reach the desired condition, including the possibility of visitor capacities. In practice, visitor capacities are generally used as a last resort because of interest in allowing for recreational opportunities. Last managers must develop a plan to monitor these strategies. The fourth and last element is *Implement, Monitor, Evaluate, and Adjust*. This element is clear, managers implement their plan, monitor, and evaluate the effectiveness, and make any adjustments as needed.

2. The Access Fund Framework is specifically designed for the creation of climbing management plans. Elements of this framework may be vital in the creation of a plan for HAFE alongside the IVUMF. The Access Fund's framework does not follow the same format as the IVUMF, in that this framework is a collection of resources rather than a cyclical planning process. The resources include how to perform assessments, list common impacts and methods to manage those impacts, and how to produce the management plan (The Access Fund, 2008). The Access Fund framework is built specifically for designing climbing management plans, meaning it has more specific resources to climbing related issues. This framework would be a useful resource to use alongside the IVUMF.
3. The Obed Climbing Management Plan was created in 2002 for the Obed Wild and Scenic River. Obed is managed by the NPS; thus, this plan can serve as an example for other NPS management plans. The plan consists of six sections: *Background, Management Actions, Coordination and Preparation of the Plan, Glossary of Climbing Terms, Works Cited, and Figures* (National Park Service, 2002). The *Background* covers information about the park and the reason for the plan. This information is vital to plan as seen in the IVUMF. First managers must understand the history and regulations that will manage, as well as set objectives. Next, managers discuss *Actions*. The first actions are to perform research, such as inventories or routes, sensitive habitats, and visitor use.

Then actions to be taken are discussed. Those actions included implementations of climbing zones, implementation of a permitting system for new route development, and development of regulations designed for different forms of climbing. Regulations tailored to different forms of climbing are used in this plan and discussed in the Access Fund framework. Parking is a major topic in these plans as it has a significant impact on access. Regulations for closures and when a closure may be necessary are included as well. The third section focuses on the *Plan* itself, including who participated in the planning process. The *Glossary of Climbing Terms* is a vital part of any climbing management plan because many of the terms used are not common knowledge outside the climbing community. The *Figures* sections consist of maps and a diagram of the decision tree for sport climbing routes.

Together, these three plans form an overarching structure for future climbing management planning design at HAFE. To begin this integration, this research report details efforts to understand the online representation of rock-climbing closures at HAFE to craft a useful survey to fill social science data gaps related to rock climbers' use of Park resources and perceptions of climbing management at HAFE. This knowledge is vital to the design of a climber survey that gathers accurate and defensible information regarding climbers use and perceptions of possible management actions.

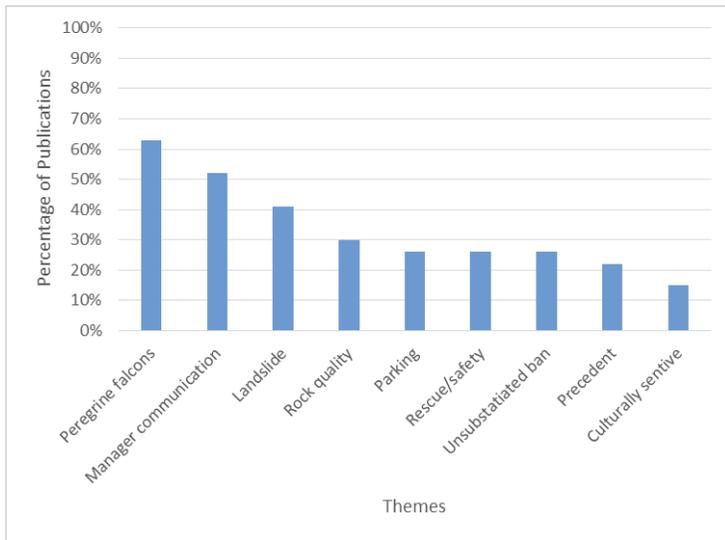
Methods

For this research, a content analysis was conducted using online resources related to the topic. A content analysis is a process of gathering textual resources and analyzing for patterns. This analysis consists of creating a coding scheme generally by identifying key concepts (Sheets, 2016). Next publications are read and coded following the coding scheme. Coding is the process of identifying and grouping concepts found in texts (Sheets, 2016). These values are then used to analyze the data further (e.g., frequency of concept).

Resources related to rock climbing closures at HAFE were gathered through online searching using Google in Spring of 2020. The search terms were both 'place' and 'activity' focused. The search terms used were *Harpers Ferry*, *Climbing*, *Climbing Closures*, *HAFE*, *Landslide*, and *Falcons*. Various combinations of the terms were used. Articles were included in this review if 1) they detailed a climbing closure or 2) a subjective response to said closure. Once an article was selected, a reference search for other resources within the article was conducted to expand the search. The articles were then read and coded manually using a binary code for each theme. The coding scheme used four primary themes and five subthemes: *Peregrine Falcons*, *Precedent*, *Manager Communication*, *Parking*, *Rescue/Safety*, *Culturally Sensitive Areas*, *Rock Quality*, *Landslide*, and *Unsubstantiated Ban*. Following the coding, the frequency distribution for all themes was calculated and charted in a histogram (Figure 1).

Figure 1

Themes found in percentage of publications



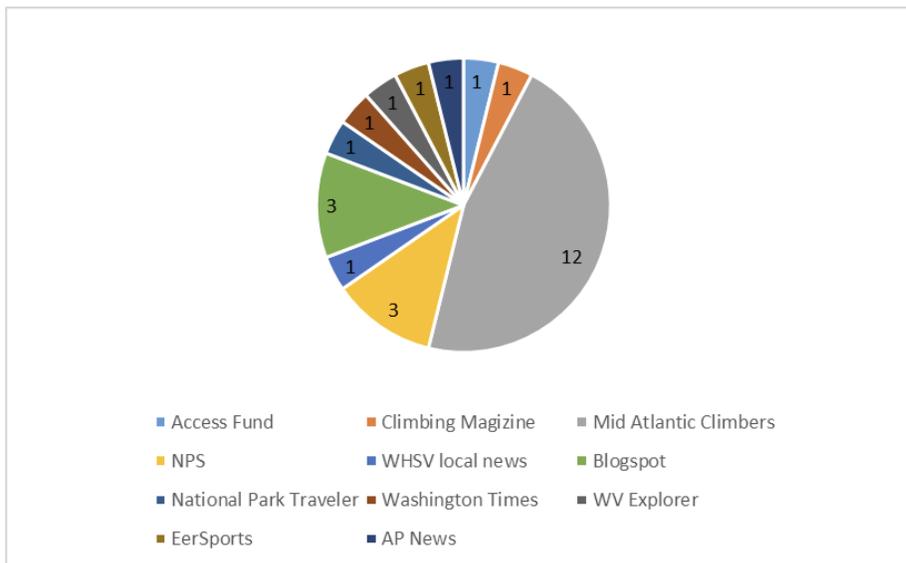
Note. The percentages represent the total articles in which a topic appeared.

Results

Online searches yielded 26 results in 11 publications (Table 1). Publication dates ranged from Spring of 2015 to Spring of 2020. The Mid-Atlantic Climbers (MAC) was the most common source of publication with 11 of the results (40.7% of all publications; Figure 2).

Figure 2

Number of publications from publishers



Note. The value represents how many publications appeared in each publishing source.

Table 1

Publications reviewed in the content analysis

#	Date	Publication	Title
1	4/9/2015	Mid Atlantic Climbers	Temporary Closure at Harper’s Ferry/Maryland Heights Summer 2015
2	3/2/2016	Mid Atlantic Climbers	Harpers Ferry/Maryland Heights Peregrine Falcon Closure 2016
3	3/6/2016	Blogspot	NPS: Closures for Peregrine Falcon Protection 2016
4	9/2/2016	Blogspot	Falcon Nesting Efforts & Rock-Climbing Activity
5	10/18/2016	Mid Atlantic Climbers	Access Fund and MAC meet with Harpers Ferry NPS
6	2/3/2017	Mid Atlantic Climbers	The Best Intentions...
7	2/21/2017	Mid Atlantic Climbers	Maryland Heights Peregrine Falcon Closure 2017
8	7/21/2017	NPS	Superintendent's Compendium
9	7/12/2018	Mid Atlantic Climbers	Mid Atlantic Climbers and Access Fund respond to new climbing closures and restrictions at Harpers Ferry National Historical Park
10	2/12/2019	Mid Atlantic Climbers	Mid Atlantic Climbers and Access Fund respond to lack of public engagement in regards to climbing closures at Harpers Ferry National Historical Park
11	3/1/2019	Blogspot	Take Action to Save Harpers Ferry Climbing!
12	3/4/2019	National Park Traveler	Climbers Take Strong Exception to Closures in Harpers Ferry National Historical Park
13	3/15/2019	Climbing Magazine	Harpers Ferry Climbers Fight to Regain Access After Widespread Closures
14	4/30/2019	Access Fund	Park Service Bans Climbing at Harpers Ferry
15	5/16/2019	Mid Atlantic Climbers	Local Climbers Call on Harpers Ferry National Historical Park to Restore Access
16	8/29/2019	Mid Atlantic Climbers	Progress on Harpers Ferry Campaign – Maryland Crags are Open!
17	12/6/2019	NPS	Climbing
18	12/19/2019	WHSV local news	Harpers Ferry rock climbers worried about closures
19	12/19/2019	Washington Times	Harpers Ferry rock climbers worried about closures
20	12/19/2019	AP News	Harpers Ferry rock climbers worried about closures
21	12/23/2019	247 Sports	Rocking climbing stopping at Harpers Ferry
22	2/14/2020	NPS	Record of Determination for a Temporary Closure and Public Use Limitation to help ensure successful nesting of peregrine falcons on Maryland Heights within the boundaries of Harpers Ferry National Historical Park

Social Science Research to Support Visitor Use Management at HAFE

23	2/15/2020	Mid Atlantic Climbers	Peregrine Falcon Closures at Harpers Ferry NPS and The Narrows
24	2/17/2020	WV Explorer	Harpers Ferry closes some climbing areas to protect falcons
25	-	Mid Atlantic Climbers	Our Campaign to #ClimbHarpersFerry
26	-	Mid Atlantic Climbers	Take Action to Save Harpers Ferry Climbing!

Note. The dates left blank had no publication date.

Publications were analyzed for the following themes:

1. *Peregrine Falcons* (63%) were mentioned in relation to the seasonal closures in Maryland Heights that have occurred each year since 2015, when falcons began nesting on the cliffs. These closures have been well advertised to climbers both by the NPS and the MAC. Online representation indicated the closures for falcons are seen as necessary and generally as positive. The MAC has continued to support the NPS in these closures by informing the climbing community of the closures every year from 2015 to 2017 and 2020 (Irwin, 2015; Irwin, 2016; Irwin, 2017; Irwin, 2020). The MAC has also stated it “supports the National Park Service and Maryland DNR closures” (Irwin, 2020). The NPS has also reported “that climbers have been in 100% compliance during these closures” (Irwin, 2020).
2. *Manager Communication* (52%) was mentioned as an issue in relation to both the change to the Superintendent's compendium in 2017 and the landslide closure in 2018. Jackie Feinberg, communication director for the MAC, stated “We wanted to make sure we were working through official channels and when we didn’t hear anything back our community members were concerned” (Hawkins, 2019). The MAC also sent a letter to the Superintendent of the Park, stating “our input has been largely ignored” (National Park Traveler, 2019). This sentiment was supported by five sub-themes. First, in a smaller percentage of online media, authors shared the ban was *Unsubstantiated* (26%). They felt that the reasons being provided were not substantial enough to warrant the closure and some of the reasons were not true. Those reasons mentioned in articles were lack of legal Parking (26%), limited access for *Rescue* workers (26%), locations near *Culturally Sensitive areas* (15%), and poor *Rock Quality* (30%). Articles stated that parking and proximity to culturally sensitive areas were not debated often but rather simply stated (Harpers Ferry National Historical Park, 2017; Hawkins, 2019). The ability of rescue workers and safety in access were mentioned in relation to debating the validity of the closure (Hawkins, 2019). Rock quality was the reason debated most often (Hawkins, 2019; NPT, 2019). Climbers mentioned that they were unaware of any studies done to come to this conclusion (NPT, 2019).
3. *Landslide* (41%). Articles also referenced a 2018 closure due to the landslide in the park (e.g., Irwin, 2019; Hawkins, 2019; Mid Atlantic Climbers, n.d.). Climbers mentioned the landslide was not near the climbing area and that the hiking trails in the same area were never closed (Feinberg, 2019). This closure lasted more than a year, and many felt it was also an unnecessary closure.
4. *Precedent* (22%). The last topic that was mentioned was the precedent of this closure.

Online media from climbing advocacy groups indicated they believed the closure would set a poor precedent for how the NPS should handle climbing closure in the future (e.g., Hawkins, 2019). Some stated that these areas should be open until a plan is implemented, not closed. Taylor Luneau, policy manager at the American Alpine Club, was quoted saying “It’s open until closed, not closed until open” (Hawkins, 2019).

Discussion

These results present a summary analysis of the online representation of rock-climbing closures at HAFE. The purpose of this analysis is not to verify the validity of the perceptions shared within this analysis, but rather to 1) understand online representations of closures by the press, the Park, and stakeholder groups, 2) design a survey instrument to sample HAFE rock climbers regarding existing use and perceptions of possible management actions, and 3) inform the construction of a climbing management plan for HAFE.

The results from this content analysis were used in the creation of a survey for the climbing community of HAFE. The themes defined in the analysis informed the inclusion of questions related to management concerns and communication concerns with managers. The survey was created to assist managers in creation of a management plan for the climbing areas. It includes climbing management perception scales previously used by Co-PI Dr. Eddie Hill, as well as Leave No Trace items from Schwartz et al. (2019) and Coulson et al. (2019).

Conclusion

This concludes Phase I of the Scoping Research for Climbing Management at HAFE. We look forward to refining survey items with HAFE managers and exploring distribution to climbers through stakeholder groups.

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Appendix B: Online survey

National Capital Region Visitor Survey

Harpers Ferry National Historical Park Climbing Study

2021

PRIVACY ACT and PAPERWORK REDUCTION ACT statement:

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better serve the public. Response to this request is voluntary and anonymous. Your name will never be associated with your answers, and all contact information will be destroyed when the data collection is concluded. No action may be taken against you for refusing to supply the information requested. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

BURDEN ESTIMATE STATEMENT: Public reporting burden for this form is estimated to average 10-15 minutes per response. Direct comments regarding the burden estimate or any other aspect of this form to:

Dr. Chris Zajchowski czajchow@odu.edu

Hello Harpers Ferry Climbers,

In 2020, Harpers Ferry National Historical Park contracted Old Dominion University and Kansas State University to perform scoping research to understand rock climber perceptions of climbing management within the park. The information gathered in this survey will be useful in making sure your voice is heard in the management of rock-climbing resources at Harpers Ferry.

This questionnaire should only be completed once per person, and by individuals 18 years of age and older. Your responses are completely anonymous and voluntary; there are no right or wrong answers. Do you have 10-15 minutes to share your insight regarding climbing management at Harpers Ferry?

For more information regarding this study, please contact Dr. Chris Zajchowski (czajchow@odu.edu, 757-683-5078) or Dr. Eddie Hill (ehill@odu.edu, 757-683-4881).

SECTION 1: CLIMBING EXPERIENCE

Please tell us about your **climbing experience**.

1. From which organization(s) or company did you hear about this survey? *Please select all that apply.*

- | | |
|--|---|
| <input type="checkbox"/> Access Fund | <input type="checkbox"/> Peak Experiences |
| <input type="checkbox"/> American Alpine Club | <input type="checkbox"/> Potomac Appalachian Trail Club |
| <input type="checkbox"/> American Mountain Guide Association | <input type="checkbox"/> Mountaineering Section |
| <input type="checkbox"/> Earth Treks | <input type="checkbox"/> Sportrock |
| <input type="checkbox"/> Mid Atlantic Climbers | <input type="checkbox"/> Other _____ |

2. How many **years** have you been a climber?

- _____
3. Please select all climbing types you've done outside:

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Bouldering | <input type="checkbox"/> Free Solo |
| <input type="checkbox"/> Top Rope | <input type="checkbox"/> I have not climbed outside, but I want to |
| <input type="checkbox"/> Sport | <input type="checkbox"/> I have not climbed outside, and I don't want to |
| <input type="checkbox"/> Traditional | |
| <input type="checkbox"/> Aid Climbing | |

4. Please select your top preferred type of outdoor climbing:

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> Bouldering | <input type="checkbox"/> Aid Climbing |
| <input type="checkbox"/> Top Rope | <input type="checkbox"/> Free Solo |
| <input type="checkbox"/> Sport | <input type="checkbox"/> I have not climbed outside |
| <input type="checkbox"/> Traditional | |

5. For your **top preferred type of outdoor roped climbing**, please select the highest rating of routes you have climbed using the Yosemite Decimal Scale (YDS), the route rating system used for outdoor and indoor climbing in the US. (i.e., 5.13d).

- | | | |
|--------------------------------|--------------------------------|---------------------------------------|
| <input type="checkbox"/> 5.2 | <input type="checkbox"/> 5.10d | <input type="checkbox"/> 5.13c |
| <input type="checkbox"/> 5.3 | <input type="checkbox"/> 5.11a | <input type="checkbox"/> 5.13d |
| <input type="checkbox"/> 5.4 | <input type="checkbox"/> 5.11b | <input type="checkbox"/> 5.14a |
| <input type="checkbox"/> 5.5 | <input type="checkbox"/> 5.11c | <input type="checkbox"/> 5.14b |
| <input type="checkbox"/> 5.6 | <input type="checkbox"/> 5.11d | <input type="checkbox"/> 5.14c |
| <input type="checkbox"/> 5.7 | <input type="checkbox"/> 5.12a | <input type="checkbox"/> 5.14d |
| <input type="checkbox"/> 5.8 | <input type="checkbox"/> 5.12b | <input type="checkbox"/> 5.15a |
| <input type="checkbox"/> 5.9 | <input type="checkbox"/> 5.12c | <input type="checkbox"/> 5.15b |
| <input type="checkbox"/> 5.10a | <input type="checkbox"/> 5.12d | <input type="checkbox"/> 5.15c |
| <input type="checkbox"/> 5.10b | <input type="checkbox"/> 5.13a | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> 5.10c | <input type="checkbox"/> 5.13b | |

6. Please select the highest rating of **outdoor bouldering** routes you have done, using the V-scale used to rate bouldering routes in the US.

- | | | |
|-----------------------------|------------------------------|---------------------------------------|
| <input type="checkbox"/> V0 | <input type="checkbox"/> V7 | <input type="checkbox"/> V14 |
| <input type="checkbox"/> V1 | <input type="checkbox"/> V8 | <input type="checkbox"/> V15 |
| <input type="checkbox"/> V2 | <input type="checkbox"/> V9 | <input type="checkbox"/> V16 |
| <input type="checkbox"/> V3 | <input type="checkbox"/> V10 | <input type="checkbox"/> V17 |
| <input type="checkbox"/> V4 | <input type="checkbox"/> V11 | <input type="checkbox"/> I don't know |
| <input type="checkbox"/> V5 | <input type="checkbox"/> V12 | |
| <input type="checkbox"/> V6 | <input type="checkbox"/> V13 | |

7. Please select which category best reflects your climbing ability.

- Beginner
- Novice
- Intermediate
- Advanced
- Expert

8. What is your typical **outdoor climbing group size**?

9. On average, how many **days a month** do you **climb outside**?

10. On average, how many **days a month** do you **climb indoors**?

11. Before today, have you rock climbed at any of these National Capital Area (NCA) sites?

*Please select **all** that apply.*

- Catoctin Mountain Park
- Carderock Recreation Area
- Great Falls Park
- I have not climbed at any of these NCA sites.

12. Do you rock climb at Harpers Ferry National Historical Park?

- Yes, I do.
- I used to, but I don't currently.
- No, I don't want to.
- No, but I want to.

Skip logic: if option C or D is selected, respondents jump ahead to the end of this section

13. When was the **last time** you climbed at Harpers Ferry? *Please indicate a year.*

14. When was the **first time** you climbed at Harpers Ferry? *Please indicate a year.*

15. How many **years** have you climbed at Harpers Ferry?

_____ years

16. On average, how many **days a year** do/did you climb at Harpers Ferry?

_____ days per year

17. What **areas** of Harpers Ferry have you climbed? (*Select all that apply*)

- | | | |
|--|---|---|
| <input type="checkbox"/> Balcony Rock and Balcony Rock Jr. | <input type="checkbox"/> The Sign Wall | <input type="checkbox"/> MD Bouldering |
| <input type="checkbox"/> Sport and Transept Walls | <input type="checkbox"/> Pinnacle, Union Walls, and The Gully | <input type="checkbox"/> VA Bouldering |
| <input type="checkbox"/> Train Tunnel | <input type="checkbox"/> Skink Rock and Stone Fort | <input type="checkbox"/> WV Bouldering |
| <input type="checkbox"/> A, B, C Ramps | <input type="checkbox"/> Loudon Heights | <input type="checkbox"/> Other (please specify) _____ |

18. Rank your **top five** favorite climbing areas at Harpers Ferry. 1 being your favorite, 5 being your least favorite (*mark **only 5***)

- | | |
|---------------------------------------|--|
| ___ Balcony Rock and Balcony Rock Jr. | ___ Pinnacle, Union Walls, and The Gully |
| ___ Sport and Transept Walls | ___ Skink Rock and Stone Fort |
| ___ Train Tunnel | ___ Loudon Heights |
| ___ A, B, C Ramps | ___ MD Bouldering |
| ___ The Sign Wall | ___ VA Bouldering |

___ WV Bouldering

___ Other (please specify)

19. Where do you find **climbing information** for Harpers Ferry? *Please select all that apply.*

- Internet
- Mountain Project
- Guidebooks
- Friends
- Local climbing facilities
- HAFE Visitor Center
- NPS website

20. Do you register at the Harpers Ferry Visitor Center before starting your climb?

- Never
- Rarely
- Sometimes
- Often
- Always

21. Please indicate where you have registered before climbing at HAFE. *Please select all that apply.*

- Lower Town Visitor Center
- Ranger Station
- I registered online on the NPS website.
- I registered, but I don't know where.
- I have never registered to climb at HAFE.
- I'm not aware of any climber registration requirements.

22. On your most recent trip to HAFE, how many nights did you stay in the area?

_____ nights

23. Including yourself, how many others did you pay for on this most recent trip?

_____ people

Social Science Research to Support Visitor Use Management at HAFE

24. Please indicate your expenditures for the entire duration of your most recent trip to HAFE. This includes all the money you spent from the beginning to the end of the trip.

Expenditure	At HAFE	Beyond HAFE but in WV/VA/MD
Overnight lodging in campgrounds	_____	_____
Overnight lodging in hotels/motels/lodges	_____	_____
Overnight lodging in rental cabins/Airbnb's	_____	_____
Gasoline purchases	_____	_____
Food and drink at fast-food restaurants	_____	_____
Food and drink at dine-in restaurants/bars	_____	_____
Food and drink at gas stations	_____	_____
Food and drink at grocery stores	_____	_____
Non-food retail purchases (like Walmart)	_____	_____
Climbing gear and similar sport purchases	_____	_____
Rental climbing gear	_____	_____
Shuttles/ Taxis/Uber/Lyft	_____	_____
Climbing guiding services	_____	_____
TOTAL	_____	_____

SECTION 2: ROCK CLIMBING AND MANAGEMENT PRACTICES

25. Please indicate the extent to which you feel your climbing experience at HAFE is **negatively impacted** by the following variables, along the scale of ‘strongly disagree’ that my experience is negatively impacted to ‘strongly agree’ that my experience is negatively impacted. If you ‘don’t know enough to respond,’ please select that option.

	I don't know enough to respond	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat Agree	Strongly Agree
Climbing site closures for Peregrine Falcon nesting (Maryland Heights)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trail closures for Peregrine Falcon nesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bouldering closures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic district closure (Shenandoah Street)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parking availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parking safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approach trail quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approach trail safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rock quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Route length	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Descent trail quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Descent trail safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climbing registration policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Management communication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural resource protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Search and rescue availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Social Science Research to Support Visitor Use Management at HAFE

26. Please rank your top three variables that **negatively** impact your climbing opportunity and/or experience at HAFE (Please **only select three** and rank them appropriately).

Variables	Top three variables that negatively impacted my climbing opportunity and/or experience at HAFE (1 being the most important variable, 3 being the 3 rd most important variable)
Climbing site closures for Peregrine Falcon nesting (Maryland Heights)	_____
Trail closures for Peregrine Falcon nesting	_____
Bouldering closures	_____
Historic district closure (Shenandoah Street)	_____
Parking availability	_____
Parking safety	_____
Approach trail quality	_____
Approach trail safety	_____
Rock quality	_____
Route length	_____
Descent trail quality	_____
Descent trail safety	_____
Climbing registration policies	_____
Management communication	_____
Cultural resource protection	_____
Search and rescue availability	_____

Social Science Research to Support Visitor Use Management at HAFE

27. Directions: Please indicate the extent to which you feel the statement reflects your opinion on the following topics along the scale of ‘strongly disagree’ to ‘strongly agree’.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat Agree	Strongly Agree
Commercial guiding operations should be provided for guided climbing opportunities at HAFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial guiding operations should be restricted in size at HAFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial guiding operations at HAFE should be restricted to certain climbing routes/locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial guiding operations at HAFE should be restricted to certain parking areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. Are you aware of the park operated shuttle services available at HAFE?

- Yes
- No

29. Have you used the park operated shuttle services as a transportation option when climbing at HAFE?

- Yes
- No

Skip logic: if option B is selected, respondents jump ahead to the end of this section

30. Please rank your satisfaction for the following park operated shuttle factors from ‘very dissatisfied’ to ‘very satisfied’.

	Very dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Proximity of shuttle stops to parking lots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proximity of shuttle stops to approach trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle start time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle end time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle pick-up spots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shuttle drop-off spots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comfort of the shuttle ride	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Room and feasibility to transport climbing gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 3: ENVIRONMENTAL KNOWLEDGE, FEELINGS AND ACTIONS

31. How would you describe your current knowledge of “Leave No Trace” practices?

- No knowledge Average Extensive
 Very limited Above average Expert

32. Please indicate the extent to which you feel the statement reflects your opinion on the following topics along the scale of ‘strongly disagree’ to ‘strongly agree’.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Sometimes it is too difficult to practice “Leave No Trace”	<input type="checkbox"/>				
Practicing “Leave No Trace” takes too much time	<input type="checkbox"/>				
Practicing “Leave No Trace” violates the rights of individuals to do as they please in the outdoors	<input type="checkbox"/>				
Practicing “Leave No Trace” does not reduce the environmental harm caused by recreation	<input type="checkbox"/>				

Social Science Research to Support Visitor Use Management at HAFE

Practicing “Leave No Trace” effectively protects the environment for future generations to enjoy	<input type="checkbox"/>				
Practicing “Leave No Trace” enhances my outdoor experience	<input type="checkbox"/>				
It is important that all Harpers Ferry visitors’ practice “Leave No Trace”	<input type="checkbox"/>				
It is important that Harpers Ferry regulations require all visitors to practice “Leave No Trace”	<input type="checkbox"/>				
The people I recreate with believe it is important to practice “Leave No Trace”	<input type="checkbox"/>				
In general, the opinions of others have little effect on my practicing “Leave No Trace”	<input type="checkbox"/>				
I practice “Leave No Trace” because the people I recreate with believe it is important	<input type="checkbox"/>				
I practice “Leave No Trace” because the park regulations state that I should do so	<input type="checkbox"/>				
Spreading out gear and equipment to establish a “base-camp” while at the crag	<input type="checkbox"/>				

33. Please indicate the extent to which you feel the statement reflects your opinion on the following topics along the scale of ‘very inappropriate’ to ‘very appropriate’.

	Very inappropriate	Inappropriate	Neutral	Appropriate	Very Appropriate
Playing music through external speakers	<input type="checkbox"/>				
Stashing gear near climbs for later use	<input type="checkbox"/>				
Moving rocks, trees, or shrubs at the base of a climb to develop a safer landing zone	<input type="checkbox"/>				
Leaving chalk marks when done climbing	<input type="checkbox"/>				
Not matching your chalk color to the rock to avoid detracting from the visual experience of the next user	<input type="checkbox"/>				
Traveling off designated trails to access climbs	<input type="checkbox"/>				

Social Science Research to Support Visitor Use Management at HAFE

Breaching Peregrine Falcon nesting trail and cliff closures	<input type="checkbox"/>				
Not walking single file (traveling side-by-side) on trails and cutting switchbacks	<input type="checkbox"/>				
Continuing a climb that disturbs wildlife	<input type="checkbox"/>				
Traveling side by side in a group on existing trails	<input type="checkbox"/>				
Dropping food in the ground to provide wildlife a food source	<input type="checkbox"/>				
Scheduling a visit during times of high use	<input type="checkbox"/>				
Having no plan B climb if your first option is not available or too crowded	<input type="checkbox"/>				
Taking as much time as desired to climb despite other climbers waiting	<input type="checkbox"/>				
Placing gear or staging equipment on sensitive vegetation (grasses, trees, shrubs, moss, etc.)	<input type="checkbox"/>				
Keeping a single item like a rock, plant, stick, or feather as a souvenir	<input type="checkbox"/>				
Removing/ cleaning lichen, moss, or plants from a climb to establish a new route	<input type="checkbox"/>				
Spreading out gear and equipment to establish a 'base camp' while at the crag	<input type="checkbox"/>				
Not checking with local land management agencies about group size limits, permits, rules, and regulations	<input type="checkbox"/>				
Top roping off fixed gear vs. your own gear	<input type="checkbox"/>				

Spotting and leaving abandoned gear behind from other users	<input type="checkbox"/>				
Climbing despite seasonal route closures	<input type="checkbox"/>				
Climbing cliff edges, cracks, and ledges prone to erosion	<input type="checkbox"/>				

SECTION 4: DEMOGRAPHICS

34. What is your home zip code? (If you are not a US resident, please list your home country)

35. What is your year of birth?

36. What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree
- High school graduate (high school diploma or equivalent including GED)
- Some college
- 2-year degree
- 4-year degree
- Graduate or professional degree
- Do not wish to answer

37. Which of these categories best indicates your race? Answer only for yourself. Please select **one or more**. (*Select all that apply*)

- | | |
|--|---|
| <input type="checkbox"/> American Indian or Alaska Native | <input type="checkbox"/> White or Caucasian |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Mexican American or Chicano |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Native Hawaiian or other Pacific Islander | |

38. What is your gender?

39. Have you ever served on active duty in the U.S. Armed Forces, Reserves, or National Guard?

- | | |
|---|--|
| <input type="checkbox"/> Never served in the military | <input type="checkbox"/> Now on active duty |
| <input type="checkbox"/> Only on active duty for training in the Reserves or National Guard | <input type="checkbox"/> On active duty in the past, but not now |

40. Information about income is very important to understand. Please select which answers best represents your entire household income (in the previous year) before taxes.

- | | | |
|---|---|---|
| <input type="checkbox"/> Less than \$24,999 | <input type="checkbox"/> \$50,000 to \$74,999 | <input type="checkbox"/> \$150,000 to \$199,999 |
| <input type="checkbox"/> \$25,000 to \$34,999 | <input type="checkbox"/> \$75,000 to \$99,999 | <input type="checkbox"/> \$200,000 or more |
| <input type="checkbox"/> \$35,000 to \$49,999 | <input type="checkbox"/> \$100,000 to \$149,999 | <input type="checkbox"/> Do not wish to answer |

41. Are you a current **Access Fund** member?

- Yes
 No

42. Are you a current **American Alpine Club** member?

- Yes
 No

43. Are you a current **Leave No Trace** member?

- Yes
 No

44. Are you a current **American Mountain Guides Association** member?

- Yes
 No

45. Are you a current **Professional Climbing Instructors Association** member?

- Yes
 No

46. Are you a current **Mid-Atlantic Climbers** member?

- Yes
 No

47. Are you a current **Potomac Appalachian Trail Club** member?

- Yes
 No

48. Is there anything else you would like to share about your perceptions of barriers to climbing at HAFE?

THANK YOU VERY MUCH FOR PARTICIPATING!

If you have questions, comments or would like an information from this study, please feel free to contact Dr. Chris Zajchowski (czajchow@odu.edu, 757-683-5078) or Dr. Eddie Hill (ehill@odu.edu, 757-683-4881).

Would you be interested in being a part of an interest group about Harpers Ferry climbing?

Yes

No

Please provide your email if so: _____

Appendix C: Open-ended comments

Respondent	Statement
1	Need more guide services and an appropriate Avenue to obtaining information. As a climbing guide I tried to contact the park for years about permits and never got a call back. Very disappointed in their management and misunderstanding of rock climbing
2	It's a great place to climb, it's just hard to get to because of the parking and registration requirements. I'm fine not climbing when the falcons are nesting.
3	The Park's restrictions on climbing should be lifted and the registration requirement eliminated. It's onerous and out of step with other areas. Park leadership should follow MAC/AAC guidance with respect to climbing.
4	The Park's restrictions on climbing should be lifted and the registration requirement eliminated. It's onerous and out of step with other areas. Park leadership should follow MAC/AAC guidance with respect to climbing.
5	While the peregrine falcon closures are an impact, they are an impact we can live with. Parking, on the other hand, especially now that even more parking has been taken away on Harpers Ferry Road, is a major, major, major concern and impediment to climbing anywhere on Elk Ridge. I've used the shuttle system when climbing at Maryland Heights or Skink/Stone Fort Rocks, but going to Balcony/Balcony Jr, it is extremely out of the way and cumbersome to use. And yes, I recognize that with all the people coming out of the cities due to the pandemic to explore the park has put enormous pressures on what parking is available and is not likely to ease up any time soon, parking has been an issue for long before, and I suspect will remain an issue for years to come.
6	Parking is very tricky.
7	Requiring in person registration to climb at Balcony is a showstopper - it would take an extra 30-45 minutes to drive up to Harper's Ferry and back. Hopefully the new process allows for online or call-in registration. Accessibility is another problem: there's no nearby parking, walking the road is unsafe, and walking the canal and crossing the train tracks isn't a good alternative. If there was a shuttle option for Balcony that would be very helpful.
8	It feels unsafe walking to the MD bouldering entrance trail near balcony rocks on the road.
9	I haven't gone climbing there because the permit process sounds too limited and too confusing. I don't want to drive out there and not be able to climb.
10	These questions were good, but nuance and a complete understanding of my responses aren't possible in this format. Most of the climbers I climb with and know want to preserve, protect, and enjoy these wild spaces. I've climbed long enough to see and understand that humans can't enter a habitat and NOT impact it. I think the costs of that impact are balanced by an increase in understanding of why and how we must help protect wild places that are held in common for all of us. I have long wanted to explore and enjoy Harper's Ferry but honestly the Byzantine regulations and unwelcoming attitude of the locals with regards to parking have kept me away. I'd rather spend my time enjoying climbing than waste energy navigating the kerfuffle of this area. It's too bad really. I would be spending money in the community and feel a need to come help volunteer to protect and preserve the park to offset my presence and

Social Science Research to Support Visitor Use Management at HAFE

impact. Oh well. Maybe the Park management and community will change their mind and try to get to know the broader climbing community and not judge all of us based on some lazy bad actors who may be unaware of best practices.

- 11 The question asking how appropriate it is to move a rock, tree, to make a landing area safer is entirely too broad. I think it is appropriate to move some hazards out of the landing area such as a loose rock, or dead log, but completely inappropriate to remove a live tree. These topics (landing zones for bouldering, and development of new routes) should be discussed with the experts at AF, MAC and AAC.
- 12 I think it extremely important for climbers to follow regulations and LNT, but it is also essential for the park officials to provide flexibility and safe access routes. The access to the climbing areas is dangerous and unmanaged and better safety/access would make it easier for climbers to follow regulations.
- 13 Park management needs to make a better effort to include climbers in discussions of closures and their reasons for closing areas. Falcons absolutely need to be protected, and as a climber will strongly all others to defer to the experts on those... But other closures and policies should be made according to NPS best practices in other states. The vast majority of climbers are legit users of the park and want to preserve and protect it as much as the rangers... We want to work together to educate the tiny handful of bad eggs, who will come even during closures... Working together and consistent commination and a solid management plan is the way to go!
- 14 I would like to be sure that Harpers Ferry manages climbing recreation with care, taking into considerations the needs of all its visitors. Safe, balanced, and environmentally conscious climbing management plans have been successful in many areas, and climbers can be a strong positive influence in an outdoor recreation area. Climbers organize crag cleanups, clean graffiti (as they did in Great Falls last year) and pick up garbage when visiting. Like any other group of visitors, climbers can also be irresponsible, create social trails, and leave trash. A good policy will make clear the rules that climbers should be aware of (don't create new trails, clean chalk marks, leave no trace), while also recognizing that they are legitimate users of the natural resources, and can in fact have a positive influence. Blanket closures, especially those that come without warning or explanation, trouble me as a climber, environmentalist, and citizen. Thank you for your consideration.
- 15 Parking is difficult to find in town, and I'm not aware of any parking on the other side of the river that has access to the cliffs
- 16 the on and off again permission/denial to climb in this area is frustrating and has been the largest deterrent for me to climb there. I am most frustrated with NPS rangers/management that have enforced seemingly arbitrary prohibition to climbing when climbers are generally excellent stewards of the outdoors. I would very strongly support strict enforcement of LNT and adhering to practical and reasonable rules (no bolting unless permitted etc.).
- 17 parking seems to be a huge issue there
- 18 parking can be hard
- 19 Please use social media and FB groups to share updates and updates guidelines about climbing at harpers. Please also share contact info of a place to donate for upkeep and maintenance.

Social Science Research to Support Visitor Use Management at HAFE

- 20 I have only been to Harper's Ferry once but hope to go more often. It was during COVID, and the shuttle wasn't running. We had to park quite far away and that was the worst part. Otherwise, awesome experience. In the future, I'll try to arrive earlier to park closer to the base.
- 21 Parking needs to be made available for kayaking and climbing to avoid damage to natural resources.
- 22 I answered neutral for many of the previous section questions. For the ones regarding establishing new routes, it should be discussed and agreed upon with the land management and climbing groups that help maintain the area prior to creating the route so people don't create a new route in an area marked for preservation. That's my opinion.
- 23 Climbed what you are now calling sign wall a few times in the early 1970s. There was no information, so we just picked things and went up them. We were not the first, as there were some pin scars and maybe one old pin. No one else there and no one cared. Returned sometime in the early-mid 1980s, climbed the overhang up through the sign, and then was cited by the NPS for not having permission. Who knew? Have not been back, since I'm no longer in the area, but it was a great location.
- 24 Parking is the biggest issue, and not knowing what's open and where some areas are located.
- 25 Rock climbing holds tremendous potential to connect folks with public lands and develop an appreciation for shared outdoor spaces that often turns into stewardship. I work for the American Alpine Club in the New River Gorge. Through working with the AAC and the New River Alliance of Climbers, I see first-hand the symbiotic relationship between climbers and land managers. Climbers are a passionate user group that are willing to volunteer for trail and other improvement projects. We often have special skills with rope management that prove an asset in projects like graffiti and trash removal. The top issues at Harpers Ferry seem to be parking, both for hikers and climbers, and the approaches to popular rock outcrops like balcony Jr and Md bouldering. Some trails need to be formalized, but the biggest safety concern is that the road is extremely narrow in spots making pedestrian travel dangerous. With the increasing number of climbers transitioning from indoor climbing to outdoor climbing in the Baltimore, DC, Northern Virginia, and Eastern Panhandle areas, I think it is more important than ever to recognize climbers as a legitimate and helpful user group in the park management plan. They could be an impressive source of volunteer labor for projects that would benefit all park users and park sustainability.
- 26 "Some trails are a mess. I would be willing to help improving those. I answered "neutral" in many questions as in many situations there are alternative solutions."
- 27 Parking for sure. Thanks!!
- 28 Mostly parking and ease of access to the cliffs. Signing in should be near the cliffs not across the river
- 29 "I've climbed at 150ish areas in the US and abroad and Harpers Ferry falls about in the middle of experiences for a government owned property. I think areas to improve would be to provide additional information on designated trails to climbing, providing low impact/long-lasting stainless-steel belay anchors to maximize safety and minimize impact on the cliff and

vegetation, and providing clear information on what sections of cliff are closed to climbing permanently or seasonally.

Many folks try hard to follow the rules but sometimes can't easily find or interpret them, but for others the above suggestion will assist in enforcement. Also, any use of a resources will impact it, so designated trails and established anchors minimize and define where the impact will be. By siting them at convenient locations and in less sensitive areas the NPS can better control the impact users have. By pushing the responsibility for "low impact" to users, the NPS leaves that to their discretion, which may not align with the intended goals or management plan. Like many other NPS locations with climbing, the above practices have led to less impact, better relationships, and less need for "enforcement" which neither the NPS nor users enjoy.

Thanks for trying to figure out how to best share the historical/recreational/etc. resources at Harpers Ferry, its truly appreciated."

- 30 The natural resources need to be made available for all users including hikers, and climbers. The Park management needs to develop a plan that weighs both the access for individual recreation, group recreation, and preservation of natural resources. Park management should also look to local non-profit organizations to help with management, and continued maintenance. The climbing community is general receptive to helping to maintain trails, clean up debris, and maintaining the routes. Signs should also be prominently displayed for all users as reminders of how to use the resources and maintain them for other users.
- 31 Mid-Atlantic Climbers does not represent climbers.
- 32 The parking/access situation to balcony rock and adjacent crags is really awful. This has been an issue for at least a decade and the safety and legality of accessing these crags continues to only get worse. In my opinion the balcony rock is and adjacent crags are some of the highest quality climbing in Harper's Ferry and this situation needs to be addressed quickly.
- 33 "While I have not paid dues into any of the above organizations, I have volunteered my time for trail building on multiple occasions. I view the lack of reasonable parking and access to trails as the primary barriers. I also enjoyed climbing at Loudon Heights and would like to see the area reopened. I consider the cliffs there to be a valuable resource to the climbing community."
- 34 I would LOVE to climb in Harpers Ferry since it's so close to my hometown and my parents, but the routes are poorly marked, I've never found one! Parking is perpetually an issue between tourists and the "lot" off the Maryland heights trail being closed for the past year plus. Harpers Ferry is a quaint and incredibly historical town, and it would be a national tragedy if it were to change simply because of climbers wanting better access. Changes can be made but they can't leave an aesthetic lasting impact on the history that has taken place and the way nature has formed areas to be climbed or not climbed
- 35 Thanks for doing this.
- 36 "I don't know a lot about climbing in your park, but I believe that spreading climbers out of other more crowded areas is important. Climbers do not always take time to understand how their activities affect the environment and outreach from clubs and other organizations can help to educate them to preserve access for future generations.

From what I have read Harper's Ferry has some interesting rock and a particular set of access issues. I believe that partnering with the park service we can get the message out to the community."

- 37 Parking is the biggest concern, next to finding the crags and the trails in the summer. You almost have to actively avoid areas certain times of year to prevent getting poison ivy. Would be great to supply bolts at the top of popular climbs. I primarily use this as a place to visit after work on the weekdays in the summer. The easier it is to get to the crag and start climbing the better.
- 38 "The lack of clarity around what climbing is allowed and where seem to be the primary barriers to climbing at Harpers Ferry. In my 15+ years of climbing, I've found that the vast majority of climbers will be good stewards of the land and will follow the rules when they are clearly laid out and explained.
Establishing clear guidelines that support safe, low-impact climbing, and creating a partnership with the National Park Service, will encourage climbers to become stewards of Harpers Ferry creating a net positive benefit for all visitors, as climbers are generally happy to partner with the NPS assist with maintaining our favorite crags."
- 39 Parking is far and away the biggest issue with all climbing areas in Harpers Ferry
- 40 Too many cooks in the kitchen generally makes for backwards and confusing special use policy. The bottom line is that rock climbs are nothing more than vertical trails and should be managed as such.
- 41 I only tried to climb there once, and a thunderstorm hit before we got there. Beyond weather, I don't know anything about potential barriers at HF.
- 42 Actually just mentioned to MAC Harper's Ferry climbing trails as an area where myself/other climbers would like to be helpful. Establishing trails to reduce erosion and stop social trails to Balcony/Balcony Junior.
- 43 Climbing should be encouraged at Harper's Ferry.
- 44 I think it would be good for the town and good for us climbers.
- 45 Closures, parking, and registration used to be the major issues. As I understand it, registration has become simpler, and the closures were bad recently but not as bad now. The parking limitations are a nuisance but understandable.
- 46 I have not climbed at Harpers Ferry, but I have climbed for 40 years all over the country. For any area easily accessible to urban centers, I believe good, park-maintained access trails and good parking go a long ways towards minimizing conflict and environmental damage. People have to be given good access options or they will make their own and cause problems. Falcon or wildlife closings are never a problem for me. Chalk marks don't bother me. Good, fixed anchors (bolts) are better than tree tie-offs on popular routes. I am not a fan of music played through speakers or groups much larger the 6 or 8. A permitting system for new route development or new bolting is appropriate in heavily used areas.

Social Science Research to Support Visitor Use Management at HAFE

- 47 As indicated in the survey, I have not climbed at Harpers Ferry but would like to do so. I have not researched the area to know about the barriers.
- 48 Increased communication from Harpers Ferry about regulations, and not just blanket restrictions without consulting anyone from the user group, mainly MAC. Also, if they communicate, to not have information fall on deaf ears.
- 49 I thought this survey was pretty confusing. I believe that more areas should be opened to climbing and that climbers need to be responsible. Local land management and the park service can help climbers be responsible by allowing access and making rules regarding access abundantly clear.
- 50 Please make it open for some climbing even if there are rules for access that limit how much and when it is available. Most climbers are good stewards.
- 51 Did not know there were routes at Harpers Ferry. Would be excited to check them out.
- 52 A friend told me registration was not required due to COVID. I'm not sure what the current status is. I typically reference mountain project for updated information regarding closures but would also follow any posted regulations or requests. I would have liked to spend more time in Harpers Ferry, but most things were closed when I visited. Now that I've seen the place, I'd also be interested in biking the Canal trail, doing a float trip, or camping in the area.
- 53 Honestly, climbing at Loudon heights should be restricted unless significant improvements are made to the approach and the routes are cleaned. The primary approach trail to the bottom is very steep and chossy with many large loose rocks/small boulders that could easily tumble to the road below if disturbed. Moreover, a lot of the climbs around HF are super chossy. I've climbed a ton of routes there and even put up some FA's. I'd say that balcony rock/balcony Jr are safe for top rope and sport, the sign wall and ramps are OK for trad if you are careful at the belays, but everything else is too chossy. I recommend to other climbers that they avoid climbing on the other walls (Union walls, Loudon Heights). I've personally had holds break off at Loudon Heights while leading trad routes.
- 54 As far as I've ever heard it has been shut to climbing and I have never been for that purpose. Would love the opportunity to climb responsibly in such a beautiful place.
- 55 "Thank you for getting access back. Parking is tough. Tried to boulder a week ago- access trails are essentially inaccessible right now with summer vegetation. Appreciate you all! "
- 56 "Thank you for asking for our input! And thank you for crafting policies that balance safety, natural beauty, and quality of life for wild animals with the different human contingencies (rangers, climbers, hikers, walkers, tourists, history buffs, etc.) Here are a couple of additional thoughts:
1. Climbers need safe parking on both sides of the river, or plenty of parking on one side, and an easy / safe way of getting to the cliffs and / or registration on the other side.
 2. Registration should be simple - it can be online.
 3. Rules should be simple, easy to find, consistent, and easy to follow.
 4. Climbers love the beauty of Harpers Ferry, and the challenge that the rock formations provide. Some climbers have a very STRONG belief in preserving natural beauty and leaving the world in better shape than we found it. Other climbers will need clear guidelines, and an easy way of following the guidelines. Following the access trail, for instance, is easy if it's

Social Science Research to Support Visitor Use Management at HAFE

- safe, clearly marked, fairly direct, and in good condition. Leaving no trace is easy as well - but some people will do better if you have a couple of animal proof containers at trail heads or parking areas, and if you empty them on a regular basis / don't let them get to over-flowing."
- 57 Climbing of all areas should be allowed as long as it is well cared for and managed.
- 58 I really hope that more of Harper's Ferry is opened, and the management team works with Access Fund and other local climbing organizations on educating climbers so that Harper's Ferry Management can be happy too.
- 59 Love the area for recreation...biking along the Potomac River and tubing down the Shenandoah. Have not yet had the opportunity to climb there yet but would like to and looks like there are some great locations.
- 60 Contact Breaks Interstate Park manager, who recently reopened the park to climbing with seasonal peregrine falcon closures
- 61 Parking and trail to balcony has been confusing last several years.
- 62 As a founding member of the Access Fund (and before that the AAC Access Committee) I have been involved in access issues for decades. I believe open dialogue based on factual evidence is critical to resolving access matters. I no longer climb as often as I used to, but I am outdoors quite a lot. Compromise can be achieved but is difficult to get to without trust. Climbing has evolved over the decades and its popularity boomed. Education of newcomers is key to finding a balance between resource use and resource abuse.
- 63 Until this survey, I thought all climbing at Harper's Ferry was closed.
- 64 Safety first!!!
- 65 I hope climbers continue to respect closures and practice leave no trace ethics, so climbs can reopen safely and be sustained for future climbers.
- 66 We need to be as respectful as possible of the environment we enter to climb. I believe Ethan we can exercise proper climber etiquette and Leave No Trace practices while taking advantage of the beautiful rock that Harpers Ferry has to offer. Climbers are some of the most eco-conscious people I have interacted with. We want to preserve the land and take responsibility for our actions.
- 67 I am less inclined to climb in HF due to the large crowds of non-climbers. At other similarly popular spots in Colorado, there are designated areas for 'climbers only' where hikers and others are asked not to go (this limits people on smaller trails and limits erosion). Garden of the Gods Park in CO does this very effectively and climbers and hikers/tourists interact in a very productive way. It would be interesting to see if HF could do something similar
- 68 Open it up
- 69 "Communication is extremely important, as is communicating the reasons for decisions. Climbing should have to meet the same criteria as hiking. Hiking trails disturb nature, require S&R, lead to noise, obvious signs of human activity, and human traffic. Managing hiking trails appropriately minimizes these impacts while maximizing hikers use of the park. Climbing should be the same. It doesn't need to have zero impact, but it's impact can be and should

Social Science Research to Support Visitor Use Management at HAFE

minimized while maximizing the number of climbers who can use the park. Chalk marks and anchors are a lot less disruptive than hiking trails, benches, and garbage cans in the middle of the wilderness...."

- 70 Ban all the DC and northern Virginia morons that have flocked to the area in the last 5-10 years and give it back to the locals to enjoy. Harpers Ferry used to be a fun spot, now like all other parks it is overrun by tourists. F*ck them.
- 71 The Park management is the main barrier. It was frustrating that the climbing closures at the park occurred without any public process and without working with local organizations who represent the climbing community.
- 72 The NPS does not want climbing at harpers ferry point blank. The rockslide closure proved that. Also, this whole survey seems like someone skimmed mountain project for 15 mins and tried to look well researched. None of these questions will actually drill down to real issues in the community. Should bolting be allowed? Are bolts part of leave no trace? Should guides be restricted to certain routes at certain times. Should group size be regulated? All these issues' climbers have a stance on and instead you're going to let NPS make a verdict on their own. Also, could we not find a local school like WVU or VT to do this study? We had to contract to Kansas State, the great climbing school?
- 73 The absolute biggest barrier is the safety of the approach. And it is highly worrying to me because climbers often underestimate the risk associated with the approach/descent, and only think about the risk of the climbing. Along those same lines, the parking situation is highly confusing on Mountain Project, with no clear instructions (or the instructions don't make sense if you haven't been there before). When certain parking lots fill it is very difficult to have a plan B that is just as safe as plan A. This immediately leads climbers to do what I did, which is to park under the 340 bridge on Sandy Hook Rd. and walk to the Balcony area. Someone is going to get seriously injured doing this and it's only a matter of time. The climbing is an absolute gem, and should be a destination for all, but access issues like these are absolutely not worth it in my opinion.
- 74 I just recently moved to Harpers Ferry and the climbing is one of the things I am most looking forward to.
- 75 Biggest problem: parking.
- 76 Survey is way too long
- 77 I'm very happy that the park is listening to climbers about reopening previous closures. I hope that this trend continues. However, parking, both for river access and climbing access, needs to be improved now that parking along the "wide spot" and bus turnaround are prohibited, and that CSX tickets for crossing the tracks.
- 78 Please keep access to climbing in this special place for future generations. Continue to communicate with the Access Fund and Local Climbing Organizations in order to provide the public with the best possible experience while protecting and conserving the land. Thank you!
- 79 "Parking and parking safety as the primary barrier.
Secondary - seasonal closures for wildlife - have to plan trips around them."

Social Science Research to Support Visitor Use Management at HAFE

- 80 It's too hard to find accurate info as to what is allowed and what is not. It seems as if you have to go out and try and see if you get in trouble or not. It shouldn't be that way. It wouldn't be hard at all for them to set up a site with maps that clearly show where you can climb and where you can't, as well as where you can park and where you can't.
- 81 The DC area has few good places to climb, and extremely few that are not short too rope climbs. Access to climbing at Harpers Ferry, especially the longer routes, is essential to maintain.
- 82 It is helpful to make closures clear with maps so climbers are not confused where they should and should not climb. I am always afraid to climb somewhere I should not at Harpers Ferry, so I don't climb there.
- 83 Access to Balcony Rock and Balcony Jr along Sandy Hook Rd is not good.
- 84 Access has been far less than clear over the years. Clarifying access and rules would be very helpful.
- 85 Please work with climbers to get a good balance between protection and access. We can find a way to keep everyone able to enjoy this natural resource.
- 86 I found the past several years of closures very confusing. The Park did a poor job communicating to the public. I hope this is the start of them doing things better in the future.
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