

**National Park Service  
U.S. Department of the Interior**



**Social Science Program**

**Expedited Approval for NPS-Sponsored Public Surveys**

<b>1. Project Title:</b> On-site Interpretation and Commemoration Practices at Nez Perce Bear Paw Battlefield, Big Hole National Battlefield, and Little Bighorn Battlefield National Monument	<b>Submission Date</b>
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<b>2. Abstract:</b> NPS battlefield units currently lack statistically reliable data about visitor perceptions of the parks, which hampers the effectiveness of interpretation and education. This research seeks to determine the ways that on-site interpretations provided by the NPS contribute to the perception of three battlefields in Montana as significant landscapes. The NPS is requesting permission to collect information at Little Bighorn Battlefield National Monument (LIBI); Big Hole National Battlefield (BIHO); and Nez Perce National Historic Park - Bear Paw Battlefield (BEPA). The study will investigate how visitors relate to a historic place using their personal memories or cultural heritages. All efforts have been made to minimize the public burden of data collection methods. This project will directly benefit these parks by providing managers with statistically reliable visitor feedback for use in creating management plans that will 1) improve park visitors' experiences and 2) continue making the parks socially relevant for the public. <small>(not to exceed 150 words)</small>
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<b>3. Principal Investigator Contact Information</b>
<b>First Name:</b> Helen <b>Last Name:</b> Keremedjiev
<b>Title:</b> Ph.D. Anthropology Candidate
<b>Affiliation:</b> University of Montana
<b>Street Address:</b> P.O. Box 7145
<b>City:</b> Missoula <b>State:</b> MT <b>Zip code:</b> 59807
<b>Phone:</b> 406-599-1899 <b>Fax:</b>
<b>Email:</b> helen.keremedjiev@umontana.edu

<b>4. Park or Program Liaison Contact Information</b>
<b>First Name:</b> Stephanie <b>Last Name:</b> Martin
<b>Title:</b> Park Ranger
<b>Park:</b> Bear Paw Battlefield
<b>Park:</b> National Park Service, U.S. Department of the Interior
<b>Office/Division:</b>
<b>Street Address:</b> Nez Perce National Historical Park P. O. Box 26
<b>City:</b> Chinook <b>State:</b> MT <b>Zip code:</b> 59523
<b>Phone:</b> 406-357-3130 <b>Fax:</b>
<b>Email:</b> Stephanie_Martin@nps.gov

**Project Information**

5. **Park(s) For Which Research is to be Conducted:** Little Bighorn Battlefield National Monument (LIBI); Nez Perce National Historic Park- Bear Paw Battlefield (BEPA); and Big Hole National Battlefield (BIHO)

6. **Survey Dates:** 12/01/2011 to 5/31/2012

7. **Type of Information Collection Instrument (Check ALL that Apply)**

<b>Mail-Back Questionnaire</b>	<b>On-Site Questionnaire</b>	<input checked="" type="checkbox"/> <b>Face-to-Face Interview</b>	<b>Telephone Survey</b>	<b>Focus Groups</b>
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**Other (explain)**

8. **Survey Justification:** *Social science research in support of park planning and management is mandated in the NPS Management Policies 2006 (Section 8.11.1, "Social Science Studies"). The NPS pursues a policy that facilitates social science studies in support of the NPS mission to protect resources and enhance the enjoyment of present and future generations (National Park Service Act of 1916, 38 Stat 535, 16 USC 1, et seq.). NPS policy mandates that social science research will be used to provide an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. Such studies are needed to provide a scientific basis for park planning, development.*

Given that the NPS mission is to preserve "unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations (NPS 2008)," the on-site managers at BEPA, BIHO, and LIBI are interested in knowing how effective their current interpretive efforts are at informing the public during their annual anniversary and commemorative celebrations of the battlefield events. This work will provide park managers a contemporary record of park visitors' experiences and impressions about BEPA, BIHO, and LIBI, and their on-site interactions for learning about and commemorating each historic battlefield. The statistically-reliable survey is a minimal burden on the public, and the project has the support of the park superintendents (see attached emails of support).

This research will provide reliable and accurate data to managers of BEPA, BIHO, and LIBI concerning current interpretative efforts that make the battlefields relevant in today's society.

First, the findings from this research will enable park managers to improve both the educational and enjoyment factors for people visiting these historic sites. This research is complementary to other previous on-site surveys but will have the added benefit of using the latest statistical tools and analyses to provide in-depth information about park visitors. This survey record will provide systematic, targeted, and statistically significant data that will allow the park managers to know more about and better understand the visitors they are serving. Also, because this survey is statistically more reliable than

random visitor comments from previous surveys, this research will be more useful for park managers to incorporate into PMIS and OFS proposals.

Second, given that on-site interpretations and cultural values are continually shifting phenomena, this research will aid the NPS in staying relevant and current. The relationship visitors have with the parks shifts over the years, and older on-site interpretations may no longer be socially relevant. Also, these older interpretations may be inaccurate because the lack of incorporating new archaeological data, historical documentation, and oral accounts that provide more insights into historic events. The data record provided by this research will supply park managers with invaluable information into how visitors today actually interact with and experience historic sites, and demonstrate how effective current interpretation of the site truly is for visitors. The work will also give insights into the ways that park managers can improve visitor interactions with historic sites.

The results of this study will therefore help park managers to better serve their visitors through more effective interpretation, and aid the NPS in their mission of preserving sites for the “heritage education” and enjoyment of all.

**9. Survey Methodology:**  
**(Use as much space as needed; if necessary include additional explanation on a separate page.)**

**(a) Respondent Universe:**

The respondent universe for this collection will be all adult visitors 18 years of age and older who have started or completed their visit at BEPA, BIHO, and LIBI.

**(b) Sampling Plan/Procedures:**

Because this study seeks to gather data from a diverse audience, the PI will sample during battle anniversaries and the summer tourism season. While being stationed at different outdoor locations (e.g., visitor center, or parking lots) at each of the battlefields, the PI will randomly select individual respondents during different hour-long intervals (e.g., weekday mornings, weekend afternoons). A total number of 926 visitors will be contacted on site (BEPA - n=204; BIHO - n=343; and LIBI - n=379) to achieve the expected response rate of 70% (n=648).

**(c) Instrument Administration:**

The PI will approach every “nth” visitor during the designated sampling periods. The PI will briefly explain the purpose of the research and that the survey is part of a study for the National Park Service and an anthropology doctoral work for the University of Montana.

The PI will maintain a survey log that will be used to record gender, state of residency, race, and park visitors’ primary purpose for visiting the park, thoughts on the significance of the battlefield, and reasons for decline (if respondents decline to take the survey). Upon approaching the potential respondent the PI will begin the process by stating:

*“Excuse me, sir/ma’am. I am a doctoral student at the University of Montana and I am conducting a study for the National Park as*

*a part of my research. The managers here at the park would like to better understand how visitors relate to an historic event when visiting a heritage site. Your participation is voluntary and all responses are anonymous. The survey takes a total of ten minutes to complete.”*

*If YES: “Thank you. Who in your group (who is at least 18 years old) has the next birthday (or two people if the group is 5 or larger)? Would you be willing to fill out this survey?”*

*If NO: “Would you be willing to tell me which state you are from and what was your primary purpose for visiting the park today?”*

*If NO: “I understand. I hope you have enjoyed your visit.”*

If they consent to participating, the respondent will be given the survey. Although the questionnaire will be self-administered, the PI will be available to provide assistance when necessary. If respondents refuse to participate and offer a reason, the PI will code that reason in the log.

The survey includes questions about 1) purpose of visit 2) experiences gained during visit 3) visitor expectations; and 4) general demographic information.

The respondent will be asked to complete surveys on-site and return the completed survey to a designated receptacle. The PI will retrieve all deposited surveys at the end of every hour and put them in a secured location until the end of the day

**(d) Expected Response Rate/Confidence Levels:**

For this project, the study predicts a response rate of 70% with a total of 648 completed surveys. In order to achieve a confidence level of 90% for each battlefield, the PI will approach 926 visitors. The table below used the Raosoft Sample Size Calculator (2004) to estimate the sample size for each of the battlefields.

Battlefield	Population during an average 2-week period	Confidence Level	Margin of Error	Response Distribution	Sample Size at each site
BEPA	300	90%	5%	50%	143
BIHO	2,050	90%	5%	50%	240
LIBI	12,500	90%	5%	50%	265
Total Sample Size (70% response rate of 926 visitors)					0

**(e) Strategies for dealing with potential non-response bias:**

Whether the park visitor accepts or refuses to complete a survey, the PI will use a record sheet to complete the following information for each visitor that is approached for the on-site survey:

- gender,
- state of residency,

- race,
- primary purpose for visiting the park,
- thoughts on the significance of the battlefield, and
- reason(s) for declining to participate.

Park managers will benefit from this information because it can be used to compare the park visitors who refused to take the instrument survey, to those who took the instrument and completed it. It will also be used to determine if there is any significant difference between those who took the instrument but did not return it to those who took the instrument and completed it. Future management plans and proposals can use non-respondent information to make the park more relevant and enjoyable for those visitors. Apparent biases in survey responses and potential for skewed data will be explicitly addressed in the study results.

**(f) Description of any pre-testing and peer review of the methods and/or instrument development**

The survey questions have been reviewed and approved by staff members at BEPA, BIHO, and LIBI, including Superintendent Kate Hammond, Superintendent Steve Black, former Chief Historian John Doerner; Lead Park Ranger Mandi Wick, and Park Ranger Stephanie Martin; and members of the PI's doctoral committee. The survey questions have also been pre-tested and peer reviewed by students and faculty from the Department of Anthropology at the University of Montana

**10 Burden Estimates:** **On-site Survey Burden** – The burden on the public is expected to be minimal. The time burden for a non-respondent is a maximum of 2 minutes; the time burden for a respondent is a maximum of 12 minutes.

With an anticipated response rate of 70%, the PI plans to approach 926 individuals. The PI expects that the initial contact time will be two minutes per person (926 x 2 minutes = 31 hours). For those who agree to participate (648), an additional 10 minutes will be required to complete the questionnaire (648 response x 10 minutes = 108 hours).

The total burden for respondents and non-respondents of this collection is estimated to be 139 hours.

Total Number of Initial Contacts	926	Estimated Time to Complete Initial Contact (minutes)	2	Estimated Burden (Hours)	31
Expected number of annual responses	648	Time to complete on-site interview	10	Estimated Burden Hours	108
				<b>Total Annual Burden</b>	<b>139</b>

**11. Reporting Plan:** The final report will offer a series of recommendations concerning the on-site interpretation content and delivery. The recommendation will be based on

responses, including which type of social messages and values each battlefield may want to continue or add in future on-site interpretations. For example, if the majority of park visitor respondents identify strongly with the battlefields being of personal importance, then future on-site interpretation may want to address and acknowledge that social value. Another recommendation will suggest the methods of on-site interpretation park visitors prefer. This information can be incorporated into future park management plans.

This project will provide a copy of the final technical report to the managers at BEPA, BIHO, and LIBI. The data will be used to prepare a peer-reviewed journal article and will be part of the PI's dissertation. All reports related to this project will be archived with the NPS Social Science Program in the Social Science Studies Collection.

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#### **REFERENCES CITED**

National Park Service (2008) The National Park System Caring for the American Legacy. Electronic document, <http://www.nps.gov/legacy/mission.html>, accessed August 6, 2011

Raosoft, Inc. (2004) Raosoft Sample Size Calculator. Electronic document, <http://www.raosoft.com/samplesize.html>, accessed April 26, 2011