OMB Control No. 1024-0224 Expiration Date XX/XX/XXXX



# PROGRAMMATIC REVIEW AND CLEARANCE PROCESS FOR NPS-SPONSORED PUBLIC SURVEYS



The scope of the Programmatic Review and Clearance Process for NPS-Sponsored Public Surveys is limited and will only include individual surveys of park visitors, potential park visitors, and residents of communities near parks. Use of the programmatic review will be limited to non-controversial surveys of park visitors, potential park visitors, and/or residents of communities near parks that are not likely to include topics of significant interest in the review process. Additionally, this process is limited to non-controversial information collections that do not attract attention to significant, sensitive, or political issues. Examples of significant, sensitive, or political issues include: seeking opinions regarding political figures; obtaining citizen feedback related to high-visibility or high-impact issues like the reintroduction of wolves in Yellowstone National Park, the delisting of specific Endangered Species, or drilling in the Arctic National Wildlife Refuge.

**SUBMISSION DATE:** 5-11-2018

PROJECT TITLE: Denali National Park and Preserve Paleontological Resource Management Study

# ABSTRACT: (not to exceed 150 words)

Denali National Park and Preserve (DENA) is home to some of the most abundant and well-preserved paleontological resources (e.g., fossils) in North America. However, visitor use in areas with paleontological resources has anecdotally increased, leading to a variety of concerns related to resource impacts. The purpose of this research is to better understand the human dimensions of paleontological resources and their relationships to visitor use and experience. This data will be used to inform the DENA Paleontology Resources Management Plan, a document that guides the protection and management of the valuable and unique paleontological resources of the park. From this, managers at DENA will be better prepared to address the visitor-related management aspects of paleontological resources in the park.

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Where will the collection take plane? Denali National Park and Preserve						
Sampling Period Start Date: July 10, 2018 Sampling Period End Date: August 31, 2018						
Type of Information Collection Instrument: (Check ALL that Apply)						
☐ Mail-Back Questionnaire ☐ Face-to-Face Interview ☐ Focus Groups						
On-Site Questionnaire						
Other (List)						
Will an electronic device be used to collect information? No X Yes - Type of Device: iPad tablet; recorder						

#### **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 and development.

Denali National Park and Preserve (DENA) contains a variety of paleontological resources, such as fossils of plants and dinosaurs that continue to yield globally significant scientific discoveries. In recent years, visitation at DENA has increased because the occurrences of dinosaurs and other fossils has captured considerable attention. Growing public interest in these unique resources and the recent disclosure of discoveries may result in even wider public and media attention. Due to this, the park is becoming recognized as a "paleontological frontier" by the scientific community, the media, and the public. DENA mangers requested this project because social science research is needed to understand the human dimensions of paleontological resources and their relationships to visitor use and experience. Visitor use and expectations associated with these paleontological resources. To date, managers have relied on anecdotal information to anticipate and plan for potential visitor use challenges related paleontological resources.

This project will use surveys and interviews to understand visitor use challenges in DENA related to paleontological resources. Information linking visitor's attitudes, interests, motivations, experiences, sources of information, and support for management actions to paleontological resource management is essential for park planning. The data generated from this collection will be used to inform the DENA Paleontological Resources Management Plan, which is used to guide the protection and management of these valuable and unique resources.

## **SURVEY METHODOLOGY:**

# (A) Respondent Universe:

All adults (18 years of age and older) visiting the Wilderness Access Center (WAC), the DENA Visitor Center (DVC), or hiking near the Tattler Creek (TC) fossil site from July 10, 2018 to August 31, 2018.

# (B) Sampling Plan / Procedures:

The proposed sample will include two populations: a general sample of park visitors obtained at the WAC and DVC exiting the DVC/WAC, and a targeted sample of hikers near TC near the fossil area. From July 10, 2018 until August 31, 2018, sampling days will be evenly stratified by day of week (Monday through Sunday), time (7AM to 7PM), and location. Data collection will not occur for both WAC/DVC visitors and TC hikers on the same days.

**Table 1. On-site Sampling Schedule** 

	Sampling Days Per Site					
Location	July	August	TOTAL			
Wilderness Access Center (WAC)	3	7	10			
DENA Visitor Center (DVC)	4	6	10			
Tattler Creek (TC)	3	7	10			
Total	10	20	30			

## **Wilderness Access Center and DENA Visitor Center**

Trained research assistants will recruit study participants by contacting a random sample of every *n*th visitor group as they exit the WAC/DVC area. All visitors that agree to participate will be administered a verbal questionnaire via iPad. The estimated in Table 2 (below) are based on contacting about 25 people per day. This is based on previous research in national parks and reflects the limitation of our staffing and not low visitor use.

## **Tattler Creek Hikers**

TC was chosen as a location in consultation with park managers because the area is rich in paleontological resources, is experiencing increased day hiking and overnight camping, and has seen negative resource impacts related to visitor use. Trained research assistants will recruit study participants by contacting a sample of hikers near the TC area. Because there is no designated trail to TC, a roving approach will be used. This means that a researcher will hike into the area using existing social trails and opportunistically intercept groups of hikers near the fossil area. As shown in Table 2, we estimate that the researcher will be able to interview about 2 to 3 groups per day, resulting in a total of 24 interviews collected.

Table 2. Estimated Number of Visitor Contacts during Sampling Period

	Estimated Number of Visitor Contacts				
Location	July	August	TOTAL		
Wilderness Access Center (WAC)	75	170	245		
DENA Visitor Center (DVC)	95	130	225		
Tattler Creek (TC)	8	16	24		
TOTAL	178	316	494		

## (C) Instrument Administration:

This collection will use a multi-method approach that involves an on-site survey (quantitative) and face-to-face interviews (qualitative). Because there is so little information related to the field of paleontological resource protection and recreation management and planning, the combination of both methods, in this case, will help add context to corroborate the findings in the survey. In each case, if a group is encountered the person in the group with the most recent birthday will be asked to complete the survey.

## **Wilderness Access Center and DENA Visitor Center**

Trained research assistants will use an iPad to verbally administer the on-site questionnaire at the WAC/DAC. During initial contact, visitors will be asked they would be willing to complete a questionnaire by responding to questions asked by the research assistant. If the visitor agrees they will be read the instructions, and the survey will be administered. Visitors who are unwilling or unable to participate in the study will be asked a non-response bias questions (see sections below). The surveyors will also capture additional observational information that will be recorded in a contact log: 1) time of contact, 2) gender, 3) group size, 4) number of adults and children in group, and 5) potential language barrier. This information combined with the non-response bias questions (see Section E below) will be used to determine any non-response bias.

The following sample script will be used during the initial contact to recruitment WAC/DVC visitors:

"Hello, I am conducting a study for Denali National Park and Preserve to better understand visitor experiences related to paleontological resources. Your participation is voluntary and your responses will be anonymous. In total, the responses to a series of questions will take about 5 minutes to complete. Would you be willing to help us today?"

- If NO: "Do you mind if I ask you a question? Please rate how aware you are about Denali's fossil resources. Thank you for your time and consideration. I hope you enjoy your visit."
- If YES: "Thank you for your willingness help us. Who in your group (who is at least 18 years old) has the most recent birthday? Would you be willing to participate in the study?

A semi-structured interview schedule will be used to collect information from hikers at TC. For the semi-structured interviews, data will be recorded with a digital recorder. During initial contact, visitors will be asked for their participation, and if they agree they will be read the instructions, and the interview will begin. The responses to the interview questions will be recorded using a digital recorder. Because visitor use in the area is so dispersed, the researcher will move throughout the area looking for another group to contact.

Visitors unwilling or unable to participate will be asked if they would be willing to answer the non-response bias questions (see Section E below). The interviewers will also capture additional observational information that will be recorded in a contact log: 1) time of contact, 2) gender, 3) group size, 4) number of adults and children in group, and 5) potential language barrier. This information combined with the non-response bias questions (see below) will be used to determine any non-response bias.

The following script will be used to for TC hiker recruitment:

"Hello, I am conducting a study for Denali National Park and Preserve to better understand visitor experiences related to paleontological resources. Your participation is voluntary and your responses will be anonymous. In total, this study will take you about 30 minutes to complete. Would you be willing to participate?"

- If NO: "Do you mind if I ask you a question? Can you describe what influenced you to visit Tattler Creek? Thank you for your time and consideration. I hope you enjoy your visit."
- If YES: "Thank you for your willingness to assist with this study. Who in your group (who is at least 18 years old) has the next birthday? Would you be willing to participate in the study?

# (D) Expected Response Rate / Confidence Level:

Based on previous research in numerous national parks (including DENA), DENA staff input, and limitations of staffing, we anticipate that we will approach 494 visitors during the sampling period. This includes 24 visitor contacts at TC, and a collective 470 visitor contacts at the WAC (n=245) and DVC (n=192). Based on previous research using both questionnaires and interviews in other national parks, we estimate that 85% of visitors will agree to participate. This equals 20 visitors at TC and a collective 400 visitors at the WAC (n=208) and DVC (n=192). We also estimate, based upon previous NPS research, that 95% of visitors that refuse will agree to answer the non-response bias questions, and that the remaining 5% will completely refuse to participate.

	Initial	Acceptance	Non-respondents (Soft refusals)	Non-response survey	Hard Refusals
Location	Contacts	85%	15%		
Tattler Creek (TC)	24	20	4	4	0
Wilderness Access Center (WAC)	245	208	37	35	2
DENA Visitor Center (DVC)	225	192	33	32	1
TOTAL	494	420	74	71	3

For WAC/DVC visitors, based on the survey sample sizes for this research, there will be 95 percent confidence that the survey findings will be accurate to within 5 percentage points. With that, the proposed sample size should be adequate, but will not be used to produce results that will be generalizable beyond the scope of this collection. The sample will suffice for bivariate comparisons and more sophisticated multivariate analysis. For dichotomous response variables, estimates will be accurate within the margins of error and confidence intervals will be somewhat larger for questions with more than two response categories.

# (E) Strategies for dealing with potential non-response bias:

The number of refusals will be recorded, reported, and screened for non- response bias using the following non-response questions in addition to observational information (i.e., time of contact, gender, observed mode of transportation or activity, group size, number of adults and children in group, potential language barrier).

# TC Non-response Question:

Can you describe what influenced you to visit Tattler Creek?

# **WAC/DVC Non-response Question**

• Please rate how aware you are about Denali's fossil resources.

Data from the study will be analyzed for non-response bias by comparing participating groups' characteristics to non-participating groups' characteristics gathered on the corresponding surveyor's log sheets. Any implications of non-response bias for park planning and management will be reported.

## (F) Description of any pre-testing and peer review of the methods and/or instrument:

This research uses similar methods and questions that have been used in other visitor use studies, and questions specifically from the Pool of Known Questions, though adapted for appropriate context at DENA and in regards to paleontological resources. The questions included in the survey instrument were designed, reviewed and pretested by the following: PI, research staff and graduate students, scientists in the Recreation, Park, and Tourism Management Department at Pennsylvania State University with expertise in social science research, and DENA staff. Pre-testing for clarity and estimated burden time was conducted with graduate and undergraduate students at Pennsylvania State University.

## **BURDEN ESTIMATES:**

Overall, we plan to approach a total of 494 individuals across all sites during the sampling periods. The overall combined respondent burden for this collection is estimated to be 51 hours (TC hikers 10 hours and WAC/DVC visitors 41 hours). Among which we anticipate that 420 individuals (WAC/DVC visitors n=400; TC hikers n=20) will agree to participate and complete a survey or interview. We expect that 74 visitors will refuse to participate and for those individuals, we will conduct a short non-response bias survey and record their reason for refusal.

#### **TC Hikers**

For the hiker survey, we expect that 85% (n=20) of all the visitors contacted in the TC area will agree to complete the interview. After the initial contact (1 minute) it is estimated that it will take an additional 30 minutes to complete the entire interview (20 respondents x 31 minutes = 10 hours). The remaining 15% (n=4) that refuse to participate in the study will be asked the non-response bias check questions and their reason for refusal (4 respondents X 1 minute=< 1 hours)

Respondents	Responses	Completion Time * (minutes)	Annual Burden Hours
On-site Contacts	20	31	10
Non-respondents	4	1	<1

Total burden requested under this	24	Contact time added to	10
ICR:		completion time	

#### **WAC/DVC Visitors**

Of the 470 visitors we plan to approach at the WAC/DVC, we anticipate that 85% (n=400) will agree to complete the on-site survey. We expect that the initial contact time will take one minute and it will take an additional five minutes complete the survey (400 respondents X 6 minutes = 40 hours). We expect that of the 15% (n=70) that refuse to participate in the study 85% (n = 67) will agree to answer the non-response survey questions (67 respondents X 1 minute = 1 hour). For those individuals, we will record their reason for refusal and ask their responses to the non-response questions.

Respondents	Responses	Completion Time * (minutes)	Annual Burden Hours
On-site Contacts	400	6	40
Non-respondents	67	1	1

Total burden requested under this ICR:	467	Contact time added to completion time	41
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## **REPORTING PLAN:**

- 1. Analyze data and prepare reports: September 2018 December 2018
  - a. Product: draft reports with visitor frequencies, descriptive statistics, and coding themes
  - b. Product: compiled final draft report for DENA management, reviewed by colleagues and DENA staff.
- 2. Write final report to DENA Management Team: March, 2019
  - a. Product: final report to DENA management staff
  - b. Product: Presentation of questionnaire and interview results

### **NOTICES**

#### **Privacy Act Statement**

General: This information is provided pursuant to Public Law 93-579 (Privacy Act of 1974), December 21, 1984, for individuals completing this form.

Authority: National Park Service Research mandate (54 USC 100702)

**Purpose and Uses:** This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service.

Effects of Nondisclosure: Providing information is mandatory to submit Information Collection Requests to Programmatic Review Process.

#### **Paperwork Reduction Act Statement**

We are collecting this information subject to the Paperwork Reduction Act (44 U.S.C. 3501) and is authorized by the National Park Service Research mandate (54 USC 100702). This information will be used by The NPS Information Collections Coordinator to ensure appropriate documentation of information collections conducted in areas managed by or that are sponsored by the National Park Service. All parts of the form must be completed in order for your request to be considered. We may not conduct or sponsor and you are not required to respond to, this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number. OMB has reviewed and approved The National Park Service Programmatic Review Process and assigned OMB Control Number 1024-0224.

#### **Estimated Burden Statement**

Public Reporting burden for this form is estimated to average 60 minutes per collection, including the time it takes for reviewing instructions, gathering information and completing and reviewing the form. This time does not include the editorial time required to finalize the submission. Comments regarding this burden estimate or any aspect of this form should be sent to the Information Collection Clearance Coordinator, National Park Service, 1201 Oakridge Dr., Fort Collins, CO 80525.

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