

APPENDIX C: HUMAN-BISON INTERACTION SURVEY

Introductory Script for Bison Survey

Hello. I am _____ (name) and am working for the University of Montana in cooperation with Yellowstone National Park. We are doing a survey of visitors stopping at Old Faithful Geyser and Snow Lodge. Would you be willing to answer some questions?

The Paperwork Reduction Act requires approval of all federal government surveys by the Office of Management and Budget. This survey has been approved under this Act. The Office of Management and Budget control number and expiration date is available at your request. Additional information about this survey and its approval is available at your request.* The questions on this survey will take about **20 minutes** to complete. All of your answers are voluntary and anonymous.

Thank you.

***Additional Information Provided upon Request.**

OMB Approval number:

Expiration Date:

Person Collecting and Analyzing Information: *Dr. Wayne Freimund
Department of Society and Conservation
College of Forestry and Conservation
University of Montana
Missoula, MT 59812
(406) 243-5184*

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. No action may be taken against you for refusing to supply the information requested. No personal data will be recorded.

You may direct comments on the number of minutes required to respond, or on any other aspect of this survey to:

John Sacklin
Yellowstone National Park
307-344-2020
John_Sacklin@nps.gov

Human-Bison (Buffalo) Interaction Survey

[Reviewers—please note: Questions #1-#7 will be conducted as an interview. The interviewer will ask the questions and record the answers. Question seven has two parts. First the interviewer will ask the participant to characterize the bison encounters they have had up to that point in the trip by using the list of bison responses in questions seven and checking all that apply. From this data, the interviewer will be able to discern whether the visitor perceived whether bison were altering their behavior due to the encounter. If the visitor identifies one of the last five encounter descriptors, the interviewer will ask the visitor to describe in detail an encounter that demonstrated that result. If the visitor did not check one of those descriptors, they will be asked to describe the interaction that had the greatest effect on their experience. While the respondent continues with the survey, the interviewer will ensure a detailed description of the encounter is recorded. Questions 8-12 will be referenced to the encounter described in question seven.]

1. What type of group are you with on this trip? (check all that apply).
 - alone
 - family
 - friends
 - outfitter/guide group
 - organization or club (name of organization/club) _____

2. During your visit to the Yellowstone area, how many days will you recreate within Yellowstone National Park? _____

3. Will you engage in the following activities during your visit to Yellowstone National Park? (please circle yes or no for each activity)

a. snowmobiling	YES	NO
b. cross-country skiing	YES	NO
c. snowshoeing	YES	NO
d. snowcoach touring	YES	NO

4. Which of the following best describes your **primary** activity while in Yellowstone national Park?
 - cross-country skiing
 - snowcoach touring
 - snowshoeing
 - snowmobiling
 - other: _____

5. While on your trip to the Yellowstone area, will you also do the following activities in other areas (such as nearby National Forest lands or National Parks)?:

<u>Activity</u>	<u>Number of days</u>
snowmobile	_____
cross-country ski	_____
down-hill ski	_____
snowshoe	_____

About Bison Encounters

We are interested in visitors' experiences and observations watching bison (also known as buffalo) from oversnow vehicles. Please respond to the following questions about your experiences observing bison.

6. When traveling by snowcoach/snowmobile in the park today, did you see bison?
Yes ____ No ____

If yes, on how many different occasions: ____ [fill # of occasions]

[Instruction to interviewers: An occasion is defined as encountering either a lone bison or a group of bison in a specific location at a specific time. Encounters with single bison or groups of bison that are separated by both time and space represent different occasions.]

7. Which of the following best describes the bison's response to the presence of you and/or the other visitors during the time you watched them? (**check all that apply**).
- None, the bison did not seem to notice the humans/oversnow vehicles
 - The bison appeared to look up or notice, but resumed their activity
 - The bison appeared alarmed and vigilant
 - The bison traveled apparently to get farther away from the humans/oversnow vehicles, but appeared unhurried
 - It appeared that the bison's desired movement was blocked
 - It appeared that the bison's movement was hurried by the encounter
 - It appeared that the humans put the bison to flight (at some point the bison ran)
 - It appeared that the bison were defensive and charged or seemed ready to charge humans/vehicles
 - Other: _____

INTERVIEWER: *If respondent saw bison only once*, please ask him/her to respond to the following questions (#8-#13) about that experience.

INTERVIEWER: *If respondent indicates that they saw a significant response from bison (bottom six plus "other" category) above*, please ask him/her respond to the following questions (#8-#13) based upon the experience in which **the bison** _____ (**most significant action**)

INTERVIEWER: *If the respondent indicates that they saw more than one of the earlier choices*, please respond to the following questions (#8-#13) based upon **the interaction that had the greatest effect on their experience**.

8. What made this experience the one that stands out in your mind?

INTERVIEWER: *If respondent checked more than one answer in #7:*

8. Which one of the bison reactions you checked had the greatest effect on your experience?

8a. What made this experience one that stands out in your mind?

**Please answer Questions #9 through #13 for the bison encounter you listed in #8.
End of interview, visitor completes the following questions (#9-#24)**

About Your Bison Encounter

9. Where were the bison when you saw them? (*Please check only one*).

- At least some bison were on the road
- At least some bison were within 10 ft of the road, but none were on the road
- At least some bison were more than 10 ft from road, but still within 100 yards
- All the bison were more than 100 yards from the road

10. Which of the following best describes what most of the bison were doing when you first saw them? (*Please check only one*).

- Don't remember
- Walking
- Feeding/drinking/plowing snow aside to get to forage
- Laying down
- Interacting with each other
- Interacting with other wildlife
- Interacting with people
- Other: _____

11. What sorts of responses did you see among humans (including your group and other groups) in relation to the bison? (*Please check all that apply*).

- Stopped, but remained on/in snowmobile/snowcoach
- Dismounted snowmobile/exited snowcoach, but remained near vehicle
- Approached bison to get a better look or better picture
- Snowmobiles/snowcoaches weaved through/around bison on road to get past them
- A snowmobile/snowcoach hit a bison
- Other: _____

12. For each of the word pairs below, please check the box that best represents your impression of the bison during the experience you describe above.

	Very	Somewhat	Neither	Somewhat	Very	
Healthy	•	•	•	•	•	Unhealthy
Agitated	•	•	•	•	•	Calm
Active	•	•	•	•	•	Inactive

13. For each of the word pairs below, please check the box that best represents your impression of the interaction between bison and visitors described above.

	Very	Somewhat	Neither	Somewhat	Very	
Appropriate	•	•	•	•	•	Inappropriate
Bad	•	•	•	•	•	Good
Well Managed	•	•	•	•	•	Poorly Managed
Acceptable	•	•	•	•	•	Unacceptable

15. For each of the word pairs below, please check the box that best describes the bison at YNP.

	Very	Somewhat	Neither	Somewhat	Very	
Wild	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tame
Restricted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Free
Dangerous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Safe
Authentic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Artificial
Stressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Peaceful
Entertaining	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Boring
Passive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Active

Beliefs about Bison

16. Below are statements that represent a variety of ways people feel about bison and Yellowstone National Park. Please indicate the extent to which you disagree or agree with each statement: *(Check one box for each statement.)*

	Strongly Disagree	Moderately Disagree	Neither	Moderately Agree	Strongly Agree
Bison are given too much prominence in park planning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that bison be respected as wild creatures in Yellowstone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not I would get to see bison, it is important to me that they exist in Yellowstone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel a strong emotional bond to bison.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bison are an important part of American identity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that Yellowstone always have an abundant bison population.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bison have spiritual importance to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bison are an important part of Native American heritage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to maintain bison populations in Yellowstone so future generations can enjoy them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bison should be managed so as to remain wild in Yellowstone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If we did not have bison in Yellowstone, we would lose an important part of our cultural heritage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visitor access should take priority over the protection of bison.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me to know that there are healthy populations of bison in Yellowstone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bison deserve protection, but snowmobiles/snowcoaches do not seem to bother them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. For each of the word pairs below, please check the box that best represents your impression of the winter setting at Yellowstone National Park.

	Very	Somewhat	Neither	Somewhat	Very	
Pristine	•	•	•	•	•	Polluted
Loud	•	•	•	•	•	Quiet
Appropriate	•	•	•	•	•	Inappropriate
Acceptable	•	•	•	•	•	Unacceptable
Dissatisfying	•	•	•	•	•	Satisfying

About You

18. What is your gender? (check one) • Female • Male

19. What is your age? _____

20. What is the highest level of education you have completed? (check one box)

- 8th grade or less
- Some high school
- High school graduate or GED
- Some college, business or trade school
- College graduate
- Some graduate school
- Master's, doctoral or professional degree

21. In which of the following kinds of places did you spend the most time while growing up (to age 18)? (check one box)

- On a farm or ranch
- Rural or small town [under 1,000 population]
- Town [1,000 - 5,000 population]
- Small city [5,000 - 50,000 population]
- Medium city [50,000 - 1 million population]
- Major city or metropolitan area [over 1 million population]

22. In what type of community do you now live? (check one box)

- On a farm or ranch
- Rural or small town [under 1,000 population]
- Town [1,000 - 5,000 population]
- Small city [5,000 - 50,000 population]
- Medium city [50,000 - 1 million population]
- Major city or metropolitan area [over 1 million population]

20. Do you live in the United States? (Check one box and fill in the appropriate blank.)

- Yes (What is your zip code? _____)
- No (What country do you live in? _____)