Appendix A.

Questionnaire: Assessing Deer Impact in NPS Units in the Northeastern U.S.

The Biological Resource Management Division of the National Park Service (NPS) and the Human Dimensions Research Unit at Cornell University are collaborating to study human dimensions of white-tailed deer (*Odocoileus virginianus*) management in NPS units in the northeastern U.S. (for background on this effort, please read more <u>about us</u>). Our first step is to identify the extent and general nature of deer impacts in NPS units of the northeastern U.S.

We are requesting your help in determining whether deer issues affect your park, if at all. (*Note: even if you have not had and do not anticipate attention to deer management, we'd like your input*). Many park service units have, to varying degrees, considered or pursued actions to address impacts associated with deer. Still others are contemplating management of deer. Research and experience indicate that deer management issues, like other public issues, develop through phases, a process referred to as an <u>issue-evolution cycle</u>.

Eventually, we would like to examine the development of deer management strategies for a variety of NPS units in various phases of the issue-evolution cycle. We hope to gain understanding of how these situations have been approached, especially with respect to the public engagement and human dimensions of management. It is assumed that the collective experience of NPS units is a rich source of insight into deer management in parks. As our project progresses, we will seek representation of parks facing different management situations and with different management mandates (cultural, natural, etc.).

In this early stage of our project we need to determine the scope of deer management issues throughout NPS units in the northeastern U.S. We request your cooperation by sharing just a few pieces of information concerning deer management in your park. This brief questionnaire (just 7 questions) will help us gain an initial understanding of NPS management perspectives on deer management issues. It is being distributed only to natural resource managers in parks throughout the northeastern U.S.

Before we move to the 7 questions, please provide the following background information:

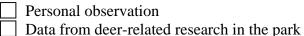
Your name:	
Your e-mail address:	
Name of your park:	
Your current position at park:	

1. Generally, which of the following statements best describes your opinion of your park's current situation with respect to deer? *(Check one)*

I believe that deer are having some negative impact on our park resources, visitor safety, or park relations with adjacent landowners. (*Continue with questions 2-5.*)

I do not believe that deer are having any perceptible negative impact on our park resources, visitor safety, or park relations with adjacent landowners. (*Skip to question 6.*)

2. *How* have you determined there is negative impact caused by deer? (*Please check all that apply.*)



- Reading scientific literature about deer and their impacts
- Complaints from visitors

Complaints from local community members

- Complaints from other state/federal agencies
- Other (*Please specify*):
- **3.** Please indicate which aspects of park management are being negatively affected as a result of impacts caused by deer: (*Please check all that apply.*)
 - Natural resources
 - Cultural resources
 - Health and safety
 - Our relationship with park visitors
 - Our relationship with neighboring communities and landowners
 - Our relationship with other state/federal agencies
 - Other (please specify):
- 4. Are impacts caused by deer keeping you from meeting any park management objectives?

Yes
No

If you answered *YES*, which specific objectives are being impacted? Please identify the planning document that is the source of each listed objective.

5. Which of the following statements *best* describes your current activity with respect to negative deer impacts and park response? (*Please check only one response*)

We have begun to notice negative impacts from deer but have not yet initiated any response.

We have begun to define issues, goals and objectives related to deer impact on our park.

We are collecting data to determine whether deer negatively impact management objectives.

We have a planning process underway to develop a strategy for deer management in our park.

We are currently implementing deer management activities at our park.

We believe deer impact our park, but are not sure where we fall in the above list.

[Skip to question 7.]

6. Do you anticipate experiencing any impacts from deer within the next 2 years?

Yes
No

7. Do you have any general observations you'd like to share regarding deer management in national parks? (*Please enter your comments in the space provided below.*)

Thank you for your input!

If you have any questions, please <u>contact us</u>.

Appendix B.

Guiding Questions for Discussions with Managers About Human Dimensions of Deer Issues.

- 1. Please describe the history of deer issues and interest in deer management at your park as it has evolved to date.
- 2. Please describe your experiences with deer management with the National Park Service, at your park and elsewhere.
- 3. How do you believe deer affect park management at your park?
- 4. What do you think are the primary concerns of local community members with respect to deer at your park?
- 5. What types of differences do you see in community member perceptions of deer as a focus of management compared to NPS employee perceptions of deer management at your park?
- 6. What management alternatives do you believe would be feasible to implement at your park?
- 7. How do the public (e.g. local community or interest groups, national interest groups, etc.) influence deer management activities at your park? At other parks?
 - a. Which groups are most/least successful and why?
- 8. How does public engagement in management planning affect the effectiveness of deer management at your park? in National Parks in general?
- 9. What types of communication/education/outreach efforts has your park designed to address deer management? What about other parks?
 - a. Which of these do you consider to be the most successful and why? What are the management objectives these public engagement efforts serve to achieve?
 - b. What doesn't seem to work? Why?