Improving communication about wildlife habituation and related processes

Lauren Barish
Biological Resource Management Division
National Park Service
Overview of Presentation

- Getting to this Point
- Examining Key Mandates
- Understanding Habituation
- Proposed Language
- Study Methods
- Results
- Conclusions
The Road to the Habituation Question

- A shift in attitudes regarding human-wildlife interaction
- Confusion of language within the NPS community
  - Habituation vs. Food Conditioned
- NPS identifies a need to assess the phenomena of habituation
The Road to the Habituation Question

Not a New Problem
Preserving for the Future

The National Park Service Mission

“...promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”
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Understanding Habituation

- Learning is a process
- Textbook definition: “relatively permanent waning of a response as a result of repeated stimulation which is not followed by any kind of reinforcement. It is specific to the stimulus (Hinde 1970).”
- Anthropogenic disturbances
- Responses to habituation in wildlife
  - Physiological
  - Behavioral
Purpose of Study

Develop more concise language

Understand the Usage of Habituation

Offer Suggestions for Guidance to Support the National Park Service’s Mission
You say habituation I say...
You say habituation I say...
You say habituation I say...
Content Analysis Methods

- Searched performed on Web of Science
  - Key words, “habituation,” “wildlife,” and “disturbance”
  - Other criteria for articles
- Articles were coded on ATLAS.ti
  - Every incident of “habituate” or “habituated”
- Coding scheme
  - Species
  - Type of Document
  - Stimulus or disturbance
  - Behavioral Learning process
  - Response
Results

- Coded 93 articles
- 143 occurrences of behavioral process
- 57% used habituation as defined in the conceptual framework
46% of the articles incorrectly used the term habituation
Discussion

- Confusion in the scientific literature
  - Consequences of misidentification
- Understanding the way learning occurs
  - Habituation vs. food conditioning
- Conceptual framework can assist in future research and improve communication amongst managers
  - Inform management directed toward wildlife
  - Improve education and outreach programs
Thank you for your attention

National Park Service
U.S. Department of the Interior