

Human Dimensions of Wild Bison: Attitudes of Gateway Community Residents



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Introduction

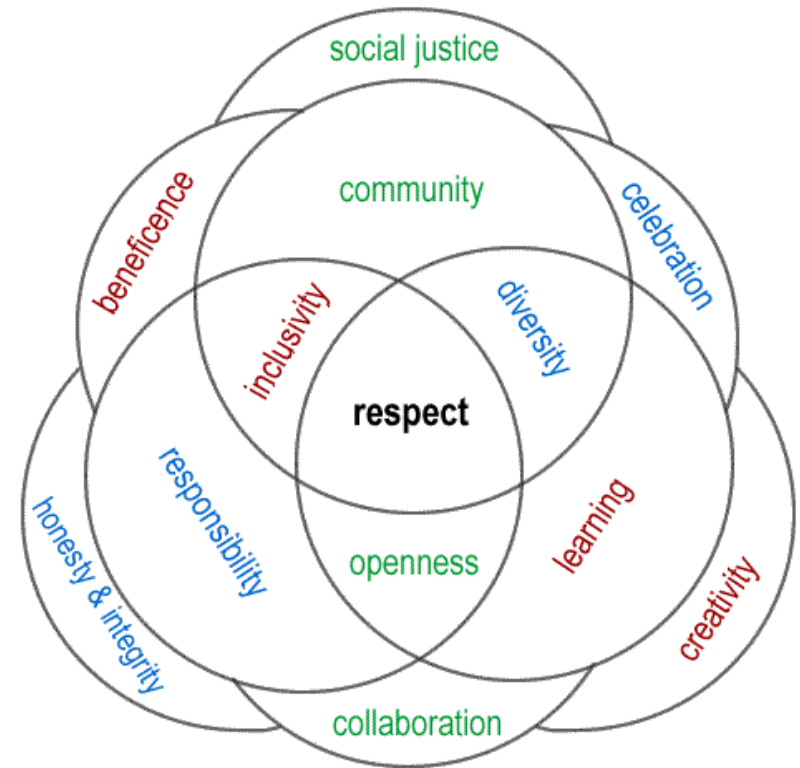
- Human dimensions of natural resources and wildlife
- Social and psychological influences on perceptions of management actions
 - Social tolerance
- Pragmatic approach to research
 - Theoretically diverse; multiple methods
- Strong link to management/application
 - Conclusions/analysis to inform outreach & extension

Guiding principals?

- Most people want to do the “right thing”
 - Many variables inform behavior: values, balance among values, attitudes, information, ability, regulation, etc.
- How do YNP goals fit within gateway communities values/attitudes?
- What obstacles can we help YNP and gateway communities overcome?
- Work *with* YNP and communities to achieve mutual goals
 - More effective
 - More lasting
 - Based on a true understanding and partnership

Values

- “An enduring belief that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end state” (Rokeach, 1973)
- Personal values provide an internal reference for what is good, beneficial, important, useful, beautiful, desirable, constructive, etc.



Attitudes

- A learned, predisposition to respond in a consistently favorable or unfavorable manner with respect to some object
- They are covert (unobservable, internal reactions), rather than directly observable behavior



Difference between values and attitudes

1. Single, stable belief individuals use as a standard for evaluating attitudes and behaviors
2. Values transcend objects, situations, and issues
3. Central component of a person's belief system- difficult to change
4. Values are limited in number; attitudes are numerous

The Cognitive Hierarchy Model of Human Behavior

Behaviors

Behavioral Intention

Attitudes & Norms

Value Orientations
(Basic belief pattern)

Values

Numerous
Faster to change
Peripheral
Specific to situations

Few in number
Slow to change
Central to beliefs
Transcend situations



Why do care about attitudes and values?

- We want to understand why people behave the way they do
- Attitudes are learned (through experience or information) rather than innate
- Values used to explain differences in attitudes toward wildlife, natural resources, etc.
- Useful in developing communication strategies
- Understand conflicts surrounding natural resource issues

Wildlife values



- Gradual shift away from traditional wildlife values
- Shift in values contributes to:
 - Stakeholder conflict on wildlife issues
 - Hunter participation rates
 - Growth in NGO's that emphasize nontraditional views
- Stakeholder intervention of wildlife policies (ballot initiatives)



Wildlife value orientations (Manfredo et al.)

- Utilitarian/Domination Orientation
 - Wildlife used and managed for human benefit
 - “The needs of humans should take priority over fish and wildlife populations”
 - “People who hunt should be provided the opportunity to do so”
- Mutualism Orientation
 - Human and wildlife should co-exist or live in harmony
 - “I view all living things as part of one big family”
 - “I care about animals as much as I do people”

Wildlife Values in the West

- Found four distinct value groups (utilitarian, mutualist, pluralist, distanced)

- Montana:

- 47% utilitarian
- 19% mutualism
- 27% pluralist
- 7% distanced





HUMAN DIMENSIONS OF WILD BISON

Study Objectives and Goals

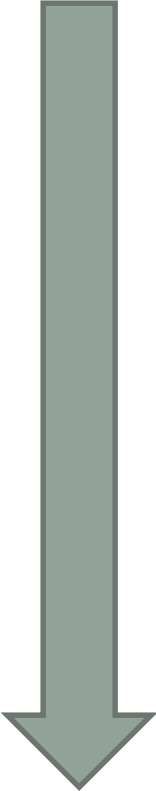


- Provide NPS with understanding of gateway community residents attitudes towards bison
- Assist with outreach strategies in upcoming planning efforts
- Provide an opportunity for local residents to express their bison experiences
- Initiate relationship building with YNP and communities
 - “Build social capacity” for management actions

Survey Methods

- Qualitative vs. Quantitative?
- Or “mixed method” approach

Qualitative	Quantitative
Allows full understanding of issues; from people	Allows quantification of measures
Builds trust between professionals and people	Allows generalizations
Takes time (interview, analyze)	Costs money – proportional to sample size
More nuanced conclusions	Easy to analyze
Provides “truer” story	More directly informs management decisions

Mixed Method Approach

- 
- Inform study with “key-informants”
 - Including everyone in the room
 - Other key players/representatives?
 - Conduct in-depth interviews
 - Check back with key-informants
 - Conduct quantitative assessment
 - Combined narrative and numerical analysis/modeling informs management steps

Key Informant Interviews

- Individuals from agencies, NGO's, citizen action groups, tribes, and others
- Inform questions for qualitative interviews
- Help researchers understand the social climate for asking questions



Gateway Communities

- Represent communities and local interests
- Interested in communities with bison on the landscape
- Want to hear from a diversity of stakeholders

	Ranchers/ landowner	Elected Officials	Local Residents	Local Businesses
Gardiner Basin	3	3	3	3
West Yellowstone	3	3	3	3
Cody	3	3	3	3
Jackson	3	3	3	3
TOTAL	12	12	12	12

Examples of Interview Questions

- Experiences with bison
 - How bison impact residents, private property and communities
 - Differences in perceptions of bison by season
- Opinions of how bison are being managed by YNP
 - Safety and private property concerns
- Evaluation of outreach and communication strategies
 - What works? What doesn't?
 - What else is needed?



KEY INFORMANT INTERVIEW RESULTS

Agency transparency increases public tolerance for management

- Agencies often too slow to share with public and local government about management decisions and the rationale for such decisions
- This lack of knowledge leads to suspicion of agency motives and action, erodes public trust
- Open engagement and accessibility
 - tours of facilities improves public understanding and patience, and diffuses tension.

Concerns for human safety and property can be addressed

- People who live close to bison learn how to adapt their behavior to minimize conflict
- Appears to be less of a concern in the Hebgen basin where bison have been leaving the park for 40 years
- Efforts by local NGO's and FWP to fence property to prevent damage appears is building tolerance
- Presence of FWP officer in Gardiner seen as beneficial for social tolerance

Risk perception of brucellosis still a challenge

- Repeatedly identified as the top challenge to bison conservation in GYE
- Public misunderstanding of the true risk of transmission and the science of transmission is a significant challenge
- Elk have changed this discussion dramatically
- Designated Surveillance Area (DSA) has released pressure as transmission of brucellosis no longer threatens entire state

Symbolic fight over the future of the West

- Bison represent the divide between two social-economic systems competing to shape the landscape of the Intermountain West and Great Plains
- Traditional Livestock economy... "The Old West": Bison perceived as a threat to their traditional way of life, independence and freedom
- Amenity economy... "The New West": Bison represent abundant wildlife, ecological health, and social well-being through recreational lifestyles and economies...that is a way of life

Signs of success

- Prevented the spread of brucellosis from bison to cattle
- Initiated public discussion about bison conservation and their future on the landscape
- Tribal hunts have benefited tribal people both in sustenance and cultural renewal
- Adaptive Management portion of IBMP has been utilized
- Multiple agencies have learned to work reasonably well together to implement the plan – (good communication cited).
- Repeatedly heard: I can't believe how far we've come from the late 1990s

Future Plans

- Waiting game with Office of Management and Budget
- Concerns about being a controversial study
- Need to re-work interview guide and re-submit
- Interviews with residents will start in the fall
- Regional or statewide survey??

Questions?

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